REMOBILISE

SCENARIO PLANNING: Next Mobility Generation

Training Session: Fernando Machado

7 December 2022

Co-funded
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ClusterXchange


REMOBILISE
REGrouping MOBILIty clusters to develop Skills and Exchange
REMOBILISE
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by the COSME programme
of the European Union


Scenarios Scenario
Planning
Scenario Development
Scenario Building
Scenario Thinking

VOLATILITY

UNCERTAINTY

VUCA

COMPLEXITY

AMBIGUITY

Scenario Planning

Learning to deal and make **decisions** in highly **uncertain** environments

Strategic Concepts

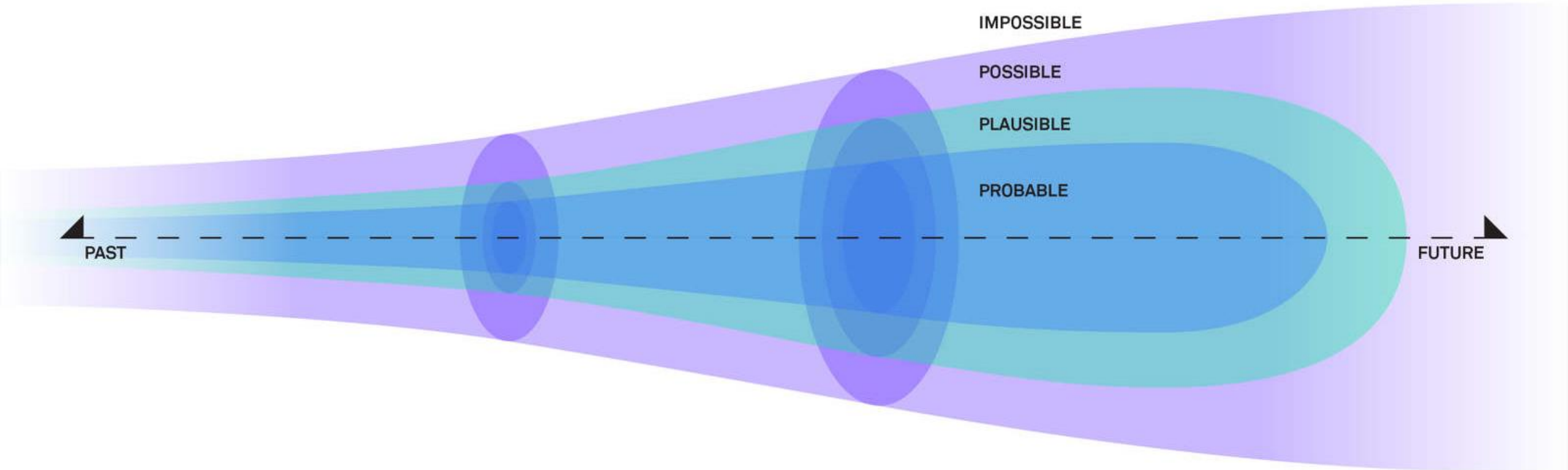
Strategic Focus	Time Horizon	Trends
Megatrends	**FORESIGHT & SCENARIOS**	Weak Signals
Wildcards		Uncertainties
Systems & Heuristics	Scenarios	Vision & Strategic Intent

FUTURE

FUTURES

REMOBILISE

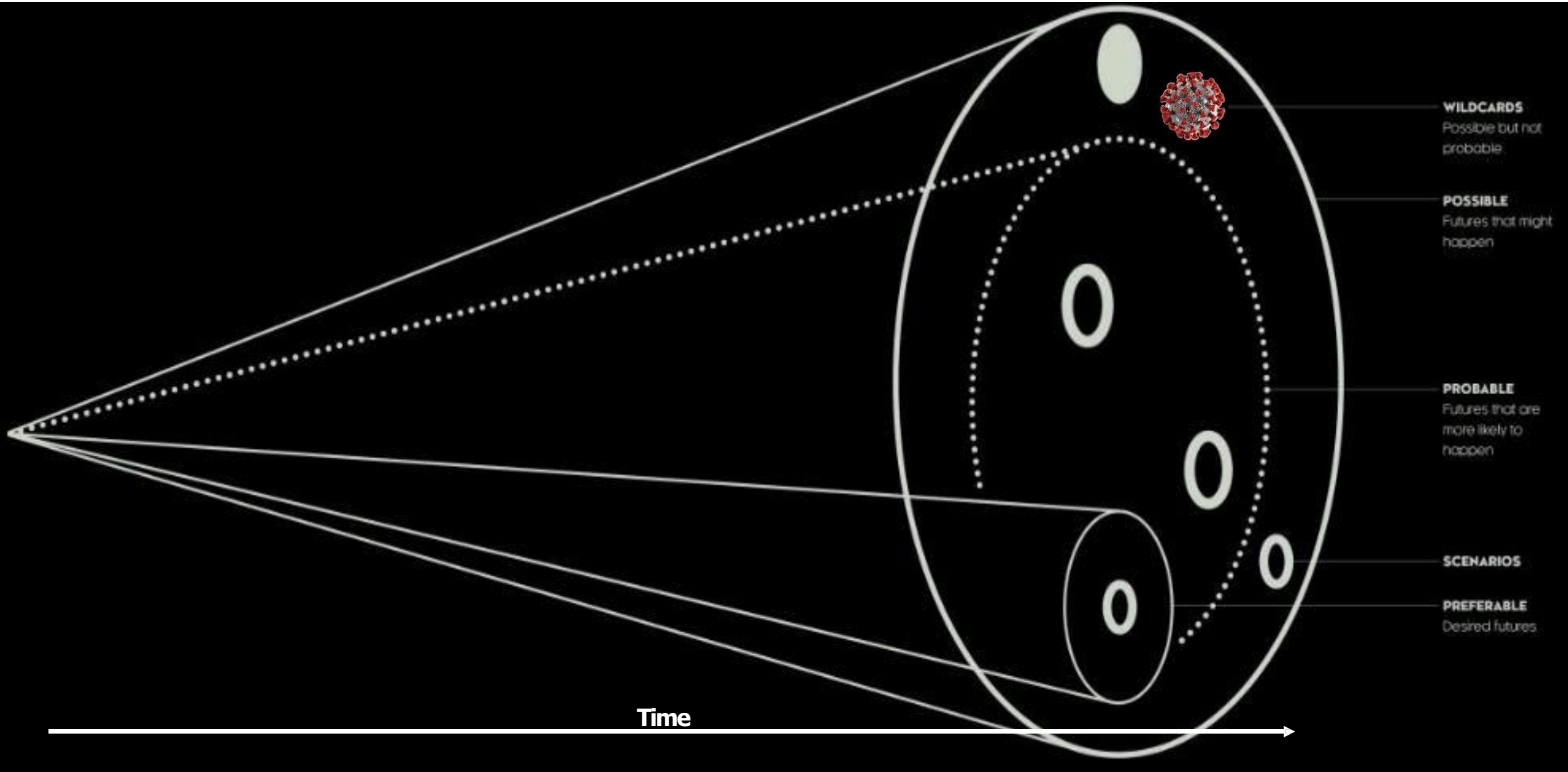
NARRATIVE FUTURES CONES



We can't **Predict** the Future

We can think about Alternative **Future(s)**

We have our Assumptions about the Future

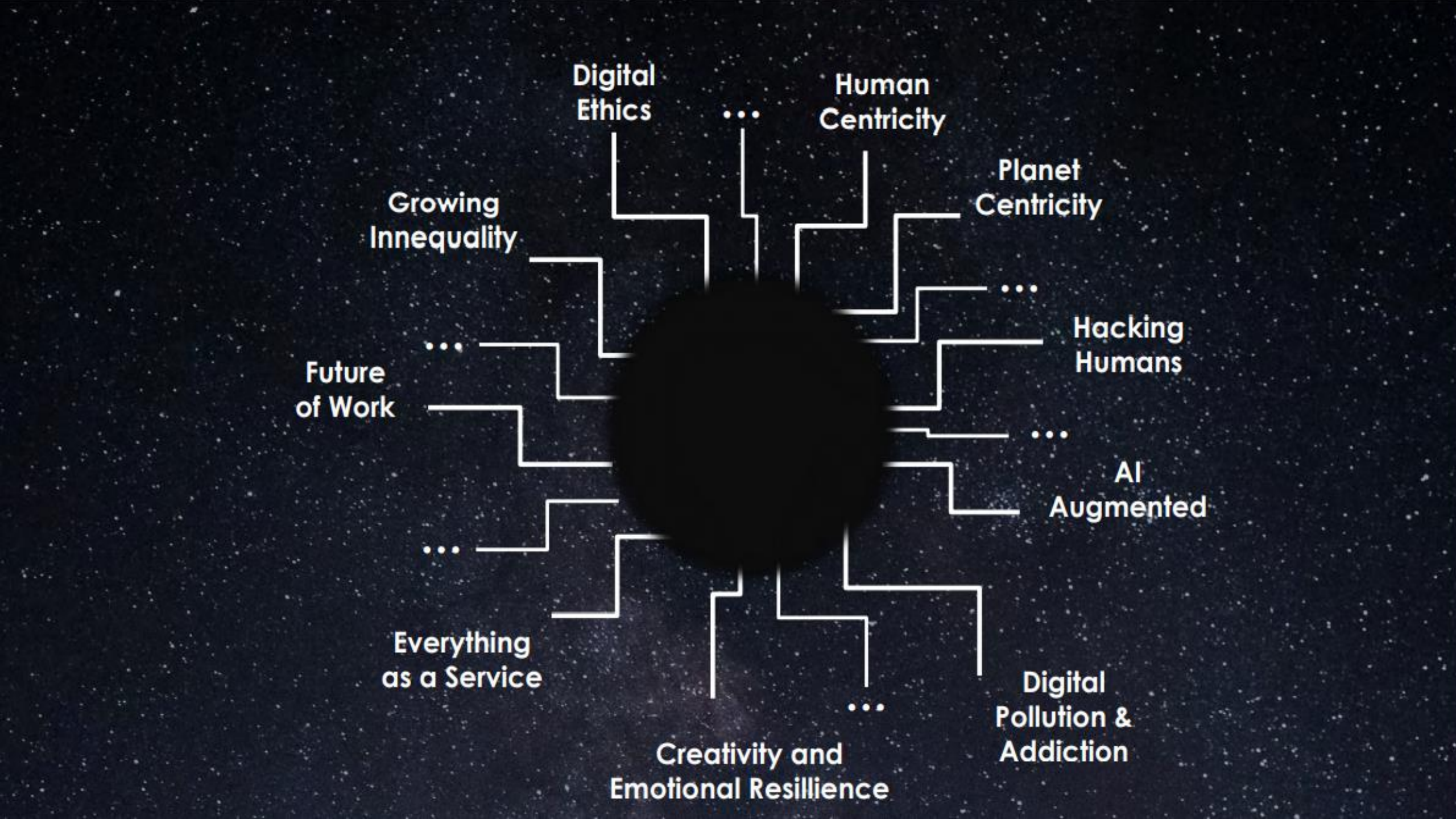


Strategic foresight

Changes in climate, digital technologies and geopolitics are having a profound effect on the lives of Europeans. These transformations are taking place at all levels, from grassroots politics to global power structures. President von der Leyen has mandated Vice-President Šefčovič to lead the Commission's efforts to embed strategic foresight into its work by ensuring that the Commission makes full use of the knowledge, information, and research to future-proof our policies, as well as strengthen our culture of preparedness and evidence-based anticipatory policy-making. This is crucial in supporting the work on the transitions to a green, digital and fair Europe.

SCANNING

COLLIDING SPACES


Digital Ethics
Human Centricity
Growing Innequality
Planet Centricity
Hacking Humans
Future of Work
AI Augmented
Everything as a Service
Creativity and Emotional Resillience
Digital Pollution & Addiction

Constellation of Driving Forces

REMOBILISE

DIVERGING GLOBAL POPULATION TRENDS

- Global population growth
- Shifting migration patterns
- Changing age structures: Ageing and shrinking populations in Developed Countries; Growing Population and baby boom in some Developing Countries

NEW PATTERNS OF MOBILITY

- Globally, mobility increases
- Transport infrastructures are upgraded/extended
- New vehicle concepts – new drive technologies

GLOBALISATION

- Shift to Asia (China and India) and a new role for the West
- Global strategies, customised to places and regions
- Globalised Flow of Capital, (+ goods, services, people, information)

TECHNOLOGY ACCELERATION AND CONVERGENCE

- Information and nanotechnology to be key drivers of convergence
- Stimuli in many areas of application (medical science, energy, materials)
- NBIC-convergence

DIGITAL LIFESTYLE

- Web 2.0: New media find their way into our everyday lives
- Digital lifestyle: Virtual reality becomes real
- Virtual business worlds

THE DIGITAL TRANSFORMATION

- Digital networking in everyday life
- New opportunities through "big data"
- The establishment of IoT paradigms
- Breakthroughs in the fields of artificial intelligence and robotics
- The vulnerability of critical infrastructure
- IT-revolution continues

KNOWLEDGE-BASED ECONOMY

- Education and learning as a basis
- Innovation as a key driver and competition factor
- New global knowledge elite – the creative class

BUSINESS ECOSYSTEMS

- New interface markets
- Expansion of the platform economy
- Sharing as a business model
- The flexibilisation of production systems
- Shared values as a new paradigm
- Open systems and networks: Limits of industries, markets, and businesses dissolve

CHANGES IN THE WORK WORLD

- Advances in automation (from the sector of production to the sectors of service and knowledge)
- Highly flexible working practices (anytime, anywhere)
- Flexible, interactive work structures

ENERGY AND RESOURCE REVERSAL

- Strategic resource scarcities (fossil fuels, freshwater, minerals, metals)
- Use of alternative sources of energy and renewable resources
- Revolution in energy efficiency
- Decentralised energy supply

NEW CONSUMPTION PATTERNS

- The Third World participates in economic wealth (Bottom of the Pyramid)
- Catch-up luxury in China, India, and Russia
- Sustainable consumption in the West (Eco Chic, Moral Commerce)

CLIMATE CHANGE AND ENVIRONMENTAL IMPACTS

- CO_2-discharges and global rise of temperatures
- Increase of environmental problems in emerging and developing countries
- Clean technologies
- Corporate responsibility increases

URBANISATION

- Megacities grow strongly
- Development of adapted infrastructure solutions
- New forms of residence, living, and participation

CULTURAL DIVERSITY

- Plural ways of life between tradition and today
- Value systems compete globally
- Emergence of hybrid culture

BIOTECH TRANSFORMATION

- Development of modified and synthetic organisms
- Improvement of human abilities
- Smart materials and new construction principles
- Existential risks

DIFFERENTIATED LIFEWORLDS

- Weakening of traditional gender roles
- New forms of individuality
- Dynamic biographic developments
- Complex identity formation
- "Glocal" patterns of consumption
- Sophisticated consumption

WATER CHALLENGES

- Only a small fraction is freshwater
- Aggravation by consequences of climate change + Urbanisation and water shortage
- Water recycling ("Zero discharge")
- Measurement of water quality
- Advanced water treatment
- Intelligent Waters Grids?

NEW POLITICALWORLD ORDER

- China and India join the ranks of world powers
- Crisis of Western democracies
- Russia's renaissance
- Africa awakes

GROWING THREATS TO INTERNATIONAL SECURITY

- Global risk society
- Festering cultural conflicts & failed states
- Global terrorism
- Proliferation of weapons of mass destruction

NEW INDIVIDUALITIES

- Women are integrated into the working world
- "Female" soft skills become more important
- Participation as market actors: Defining influence on product and service standards
- Work-life balance

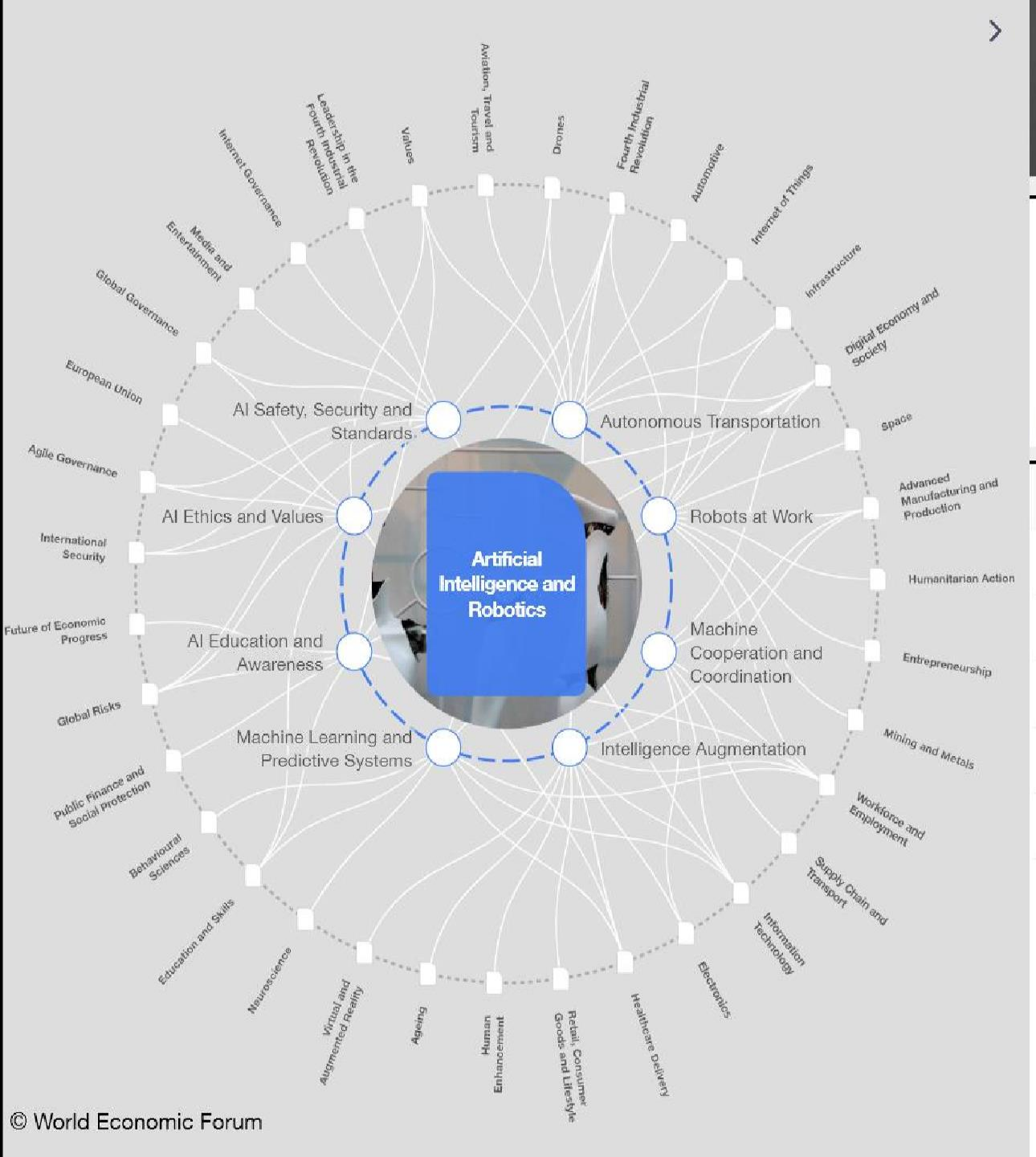
Strategic Intelligence

Strategic insights and contextual intelligence from the World Economic Forum

Explore and monitor the issues and forces driving transformational change across economies, industries, and global issues

Watch Video

Highlights



Artificial Intelligence and Robotics

Global Issue

Co-curated with: University of Cambridge

Summary

Robots and artificial intelligence were once used only for dull and difficult work on factory floors. Today, automation is everywhere - powering drones, cars, and surprisingly-realistic humanoids. Robots are ready to get more social, and some of latest models can even cross the "uncanny valley" by convincing us they are really human. Meanwhile the increasingly-sophisticated artificial intelligence powering popular entertainment and social media platforms is raising questions about whether it not only better engages audiences, but also helps spread

Read more

Publications

Videos

Data

Events

Initiatives

Stakeholders

Showing "All Articles"

AI is transforming cybercrime. Here's how we can fight back
Wed, September 25, 2019, 4:01 PM
World Economic Forum

Your robot surgeon will see you now
Wed, September 25, 2019, 2:51 PM
Nature

The future of electronic health records
Wed, September 25, 2019, 2:51 PM
Nature

An AI boost for clinical trials
Wed, September 25, 2019, 2:51 PM
Nature

The emerging world of digital therapeutics
Wed, September 25, 2019, 2:50 PM

WORLD ECONOMIC FORUM

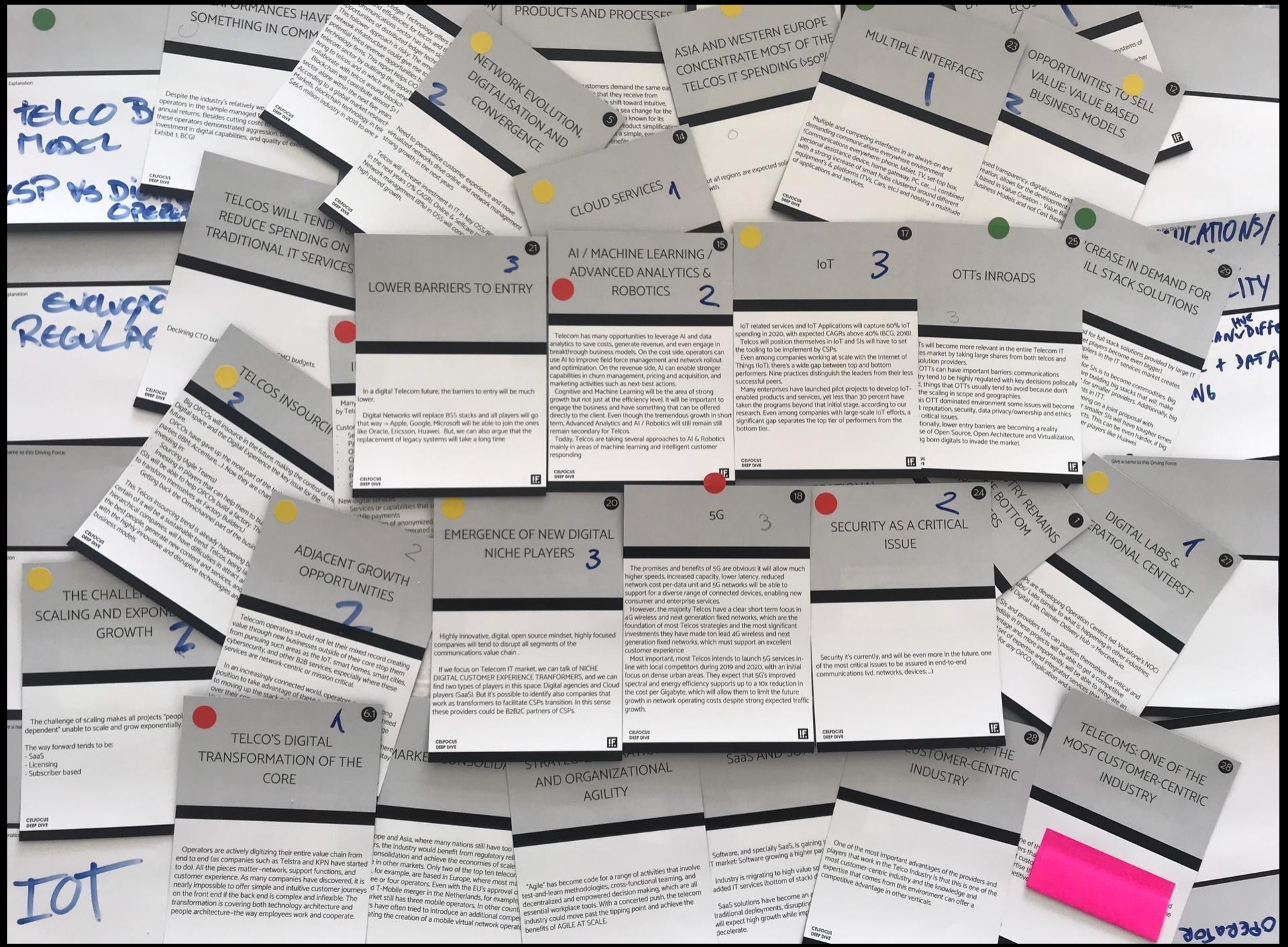
COMMITTED TO IMPROVING THE STATE OF THE WORLD

Automotive Industry
Dynamic Briefing

Generated 18 June 2021 for Fernando Machado

REMOBILISE


SCANNING
DASHBOARD
DEMOGRAPHICS
Technology enabled consumption
DATA - ENABLED BUSINESS & NEW
TECHNOLOGIES (DIGITAL)
DIGITAL LIFESTYLE TRANSFORMATIO
Threats to Int Security
jobs in Tourism
management Global Risk
TERRORIST ATTACK
Growing threats to International Security
EARTHQUAKE
DEMOGRAPHICS AND CONSUMER PATTERNS
NEW CONSUMPTION PATTERNS / PT TOURISM SEGMENT
ATTRACT TALENT
ENVELHECIM/ MÃO OBRA
Millennials travel boom
More travelling less tourist
ADAPT THE OFFERS TO NE CULTURES/NE
Personalized tourism
SUSTAINED GROWTH INTERNATIONAL TRAVEL
FREQUENT TRAVELLERS
UPDATE CONS INTERACTIONS
Standing & Visibility
FOCUS
Growth in International Level
DIGITAL LIFESTYLE
Portugal perceived Safe country
Safe country
attack in PORTUGAL
New world order
Save Plac
OPENESS OF PORTUGAL
openess of Portugal
PORTUGAL AS A SAFE COUNTRY
BUSINESS MODELS
SMALL ENTREPRENEURSHIP
ATRAÇÃO TALENTOS PT TURISM
PORTUGAL AS A HUB FOR ENTERING EUROPE
Portugal as a privileged partner to PALOP's
SUSTAINABILITY
CULTURAL SINGULARITY
investment needs on infrastructure
GOVERNMENT PROVIDING BETTER INTERNET INFRASTRUCTURE
DIRECT LINKS TO NEW MARKETS
INCREASING DIVERSITY OF TOURISM OFFERS
PRESSÕES SOBRE INFRAESTRUT.
EVENTUAIS BARREIRAS À MOBILIDADE (CHINA; ÍNDIA)
DIGITAL PAYMENT's CAMPAIGN
EMERGING MARKETS
CLIMATE CHANGE AND SUSTAINABILITY
CLIMATE CHANGE & ENV. IMPACTS


TELCO'S DIGITAL TRANSFORMATION OF THE CORE
Operators are actively digitizing their entire value chain from end to end (as companies such as Telstra and KPN have started to do). All the pieces matter–network, support functions, and customer experience. As many companies have discovered, it is nearly impossible to offer simple and intuitive customer journeys on the front end if the back end is complex and inflexible. The transformation is covering both technology architecture and people architecture–the way employees work and cooperate.
THE CHALLENGE OF SCALING AND EXPONENTIAL GROWTH
The challenge of scaling makes all projects "people dependent" unable to scale and grow exponentially.
The way forward tends to be:
- SaaS
- Licensing
- Subscriber based
ADJACENT GROWTH OPPORTUNITIES
Telecom operators should not let their mixed record creating value through new businesses outside of their core stop them from pursuing such areas as the IoT, smart homes, smart cities, cybersecurity, and other B2B services, especially where these services are network-centric or mission critical.
In an increasingly connected world, operators position to take advantage of these moving up the stack over their
TELCOS INSOURCING
Big OPCOs will insource in the future, making the control of the Digital space and the Digital Experience the key issue for the future. OPCOs have gave up the most part of the Digital space and the Digital Experience the key issue for the parties (IBM, Accenture, ...). Now they are changing investing in:
- Insourcing (Agile Teams)
- Investing in players that can help them to build a factory (SIs will be able to help OPCOs build a factory. They to transform themselves as factory Builders.)
Getting back the Omnichannel part of the
This Telcos insourcing trend is already happening certain of it will be a sustainable trend. Telcos, being hierarchical companies, will have difficulties in attract the best people, generate new content and services, with the highly innovative and disruptive technologies business models.
TELCOS WILL TEND TO REDUCE SPENDING ON TRADITIONAL IT SERVICES
Declining CTO budgets.
NETWORK EVOLUTION, DIGITALISATION AND CONVERGENCE
Need to personalize customer experience and move virtualized networks drive online and network management
Telcos will increase investment in IT in key OSS/BSS in the next years (7% CAGR). Online & Selfcare Network management (8%) in OSS will continue high paced growth
CLOUD SERVICES
ASIA AND WESTERN EUROPE CONCENTRATE MOST OF THE TELCOS IT SPENDING (>50%)
MULTIPLE INTERFACES
Multiple and competing interfaces in an always-on and demanding communications everywhere environment (Communications everywhere: phone, tablet TV, set-top box, personal assistance device, home gateway, PC, car, ...) combined with a strong increase device, home gateway, PC, car, ...) combined equipment's & platforms (TVs, Cars, etc.) and hosting a multitude of applications and services.
OPPORTUNITIES TO SELL VALUE: VALUE BASED BUSINESS MODELS
based transparency digitalization and reation, allows for the development based in Value Creation – Value Ba Business Models and not Cost Base
LOWER BARRIERS TO ENTRY
In a digital Telecom future, the barriers to entry will be much lower.
Digital Networks will replace BSS stacks and all players will go that way → Apple, Google, Microsoft will be able to join the ones like Oracle, Ericsson, Huawei. But, we can also argue that the replacement of legacy systems will take a long time
AI / MACHINE LEARNING / ADVANCED ANALYTICS & ROBOTICS
Telecom has many opportunities to leverage AI and data analytics to save costs, generate revenue, and even engage in breakthrough business models. On the cost side, operators can use AI to improve field force management and network rollout and optimization. On the revenue side, AI can enable stronger capabilities in churn management, pricing and acquisition, and marketing activities such as next-best actions.
Cognitive and Machine Learning will be the area of strong growth but not just at the efficiency level. It will be important to engage the business and have something that can be offered directly to the client. Even though the tremendous growth in short term, Advanced Analytics and AI / Robotics will still remain still remain secondary for Telcos.
Today, Telcos are taking several approaches to AI & Robotics mainly in areas of machine learning and intelligent customer responding
IoT
IoT related services and IoT Applications will capture 60% IoT spending in 2020, with expected CAGRs above 40% (BCG, 2018).
Telcos will position themselves in IoT and SIs will have to set the tooling to be implement by CSPs.
Even among companies working at scale with the Internet of Things (IoT), there's a wide gap between top and bottom performers. Nine practices distinguish the leaders from their less successful peers.
Many enterprises have launched pilot projects to develop IoT-enabled products and services, yet less than 30 percent have taken the programs beyond that initial stage, according to our research. Even among companies with large-scale IoT efforts, a significant gap separates the top tier of performers from the bottom tier.
OTTs INROADS
Ts will become more relevant in the entire Telecom IT es market by taking large shares from both telcos and olution providers.
OTTs can have important barriers: communications ry tend to be highly regulated with key decisions politically . things that OTTs usually tend to avoid because don't the scaling in scope and geographies.
is OTT dominated environment some issues will become : reputation, security, data privacy/ownership and ethics critical issues.
tionally, lower entry barriers are becoming a reality se of Open Source, Open Architecture and Virtualization, g born digitals to invade the market.
'CREASE IN DEMAND FOR ILL STACK SOLUTIONS
d for full stack solutions provided by large IT- pliers in the IT services market creates for SIs is to become commodities. Big re building big stacks that will make for smaller providers. Additionally, big nts in IT?. ening on a joint proposal with r smaller SIs will have tougher times cts. This can be even harder, if big er players like Huawei.
EMERGENCE OF NEW DIGITAL NICHE PLAYERS
Highly innovative, digital, open source mindset, highly focused companies will tend to disrupt all segments of the communications value chain .
If we focus on Telecom IT market, we can talk of NICHE DIGITAL CUSTOMER EXPERIENCE TRANFORMERS, and we can find two types of players in this space: Digital agencies and Cloud players (SaaS). But it's possible to identify also companies that work as transformers to facilitate CSPs transition. In this sense these providers could be B2B2C partners of CSPs.
5G
The promises and benefits of 5G are obvious: it will allow much higher speeds, increased capacity, lower latency, reduced network cost per-data unit and 5G networks will be able to support for a diverse range of connected devices, enabling new consumer and enterprise services.
However, the majority Telcos have a clear short term focus in 4G wireless and next generation fixed networks, which are the foundation of most Telcos strategies and the most significant investments they have made ton lead 4G wireless and next generation fixed networks, which must support an excellent customer experience
Most important, most Telcos intends to launch 5G services in-line with local competitors during 2019 and 2020, with an initial focus on dense urban areas. They expect that 5G's improved spectral and energy efficiency supports up to a 10x reduction in the cost per Gigabyte, which will allow them to limit the future growth in network operating costs despite strong expected traffic growth.
SECURITY AS A CRITICAL ISSUE
Security it's currently, and will be even more in the future, one of the most critical issues to be assured in end-to-end communications (vd. networks, devices: ...).
DIGITAL LABS & ERATIONAL CENTERST
are developing Operation Centers (vd. Vodafone's NOO labs / Labs (similar to what is happening in other industries: Digital Lab, Daimler Delivery Hub → Mercedes.io
SIs and providers that can position themselves as critical and edible in these projects will be able to get a competitive ntage and, more importantly, will be able to integrate an set of expertise and integrated services for any OPCO (replication and
TELECOMS: ONE OF THE MOST CUSTOMER-CENTRIC INDUSTRY
AND ORGANIZATIONAL AGILITY
"Agile" has become code for a range of activities that involve test-and-learn methodologies, cross-functional teaming, and decentralized and empowered decision making, which are all essential workplace tools. With a concerted push, the telecom industry could move past the tipping point and achieve the benefits of AGILE AT SCALE.
SaaS AND
Software, and specially SaaS, is gaining T market: Software growing a higher pac
Industry is migrating to high value so added IT services (bottom of stack)
SaaS solutions have become an traditional deployments, disruptin will expect high growth while imp decelerate.
CUSTOMER-CENTRIC INDUSTRY
One of the most important advantages of the providers and players that work in the Telco Industry is that this is one of the most customer-centric industry and the knowledge and expertise that comes from this environment can offer a competitive advantage in other verticals.
IOT
REMOBILISE

STRATEGIC FOCUS

THE VALUE OF THE STRATEGIC FOCUS AND THE TIME HORIZON

Decisional

Emergence of what is **relevant**

Creates a platform for **discoveries** and **explorations**

Allows you to "**Anchor**" the **discussion** and **questions**

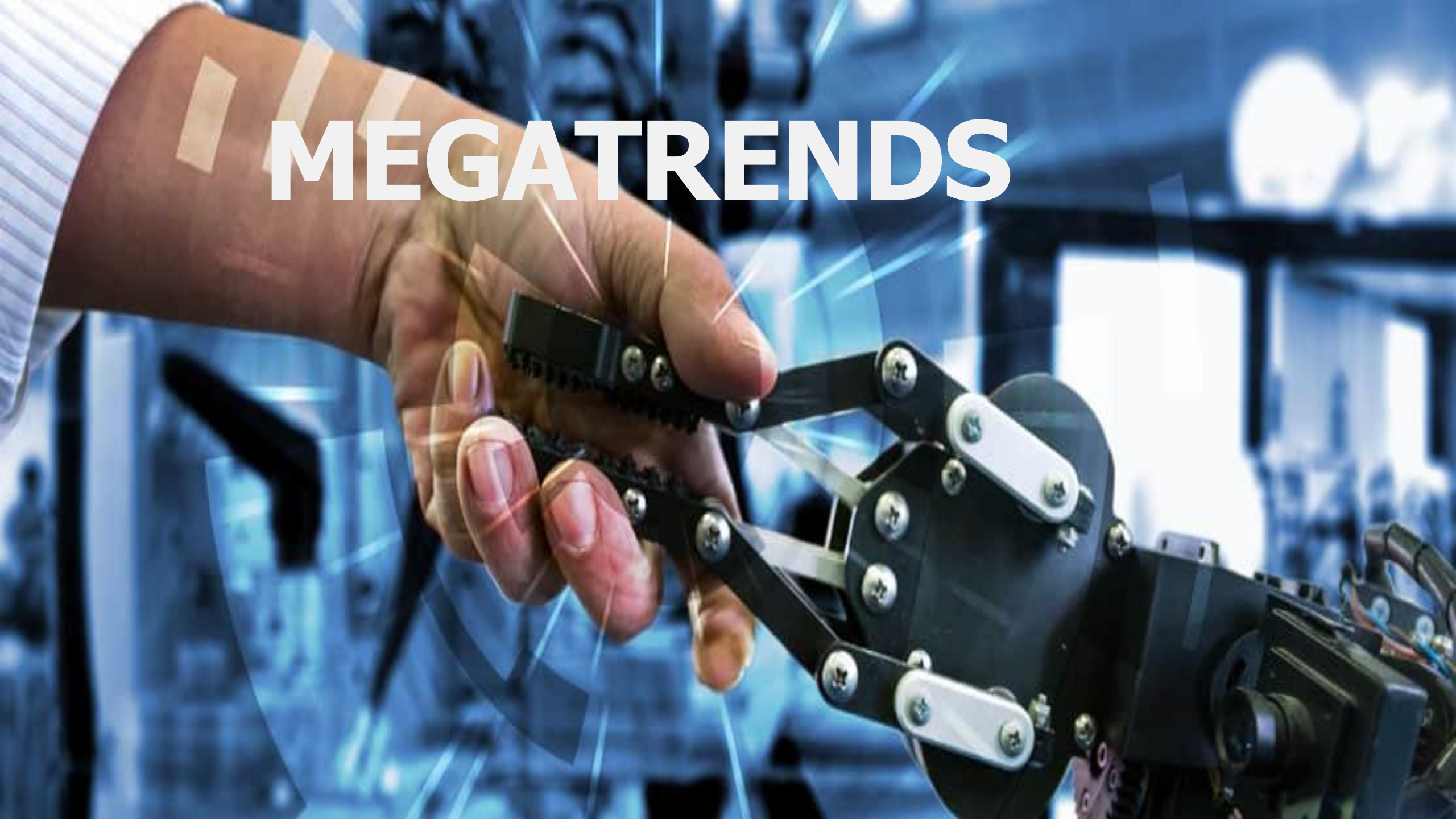
REMOBILISE

TIME HORIZON

THE CHOICE OF THE TIME HORIZON

- The Time horizon is "Negotiable"
- One rule: consider the long term as the time frame necessary for changes in historical relationships and trends to take place.
- The ideal time horizon is the "Horizon of Disruption / Discontinuities". However, this is not always identifiable, and in certain situations there is a succession of micro-ruptures that could lead to a new dynamic.

MEGATRENDS
TRENDS
WEAK SIGNALS
WILDCARDS
UNCERTAINTIES


MEGATRENDS

MEGATRENDS

- Drivers of global change and strong impact that affect a system during a long period of time.
- Megatrends are driving paradigm shifts within areas of **basic need**. This leads to the emergence of **new growth areas** and **value creation opportunities** (Z_Punkt).
- But far-reaching **conflict lines** in society and politics are also recognizable against the background of the megatrends in question (Z_Punkt).


DIVERGING GLOBAL POPULATION TRENDS
NEW PATTERNS OF MOBILITY
GLOBALISATION
TECHNOLOGY ACCELERATION & CONVERGENCE
DIGITAL LIFESTYLE
DIGITAL TRANSFORMATION
KNOWLEDGE-BASED ECONOMY
BUSINESS ECOSYSTEMS
CHANGES IN THE WORK WORLD
Megatrends
ENERGY AND RESOURCE REVERSAL
NEW CONSUMPTION PATTERNS
CLIMATE CHANGE AND ENVIRONMENTAL IMPACTS
URBANISATION
CULTURAL DIVERSITY
BIOTECH TRANSFORMATION
DIFFERENTIATED LIFEWORLDS
WATER CHALLENGES
NEW POLITICALWORLD ORDER
GROWING THREATS TO INTERNATIONAL SECURITY
NEW INDIVIDUALITIES

THE GLOBAL GOALS

For Sustainable Development


TRENDS

TRENDS

It is a statement of the direction of change. It is usually a **gradual** and **long-term** shift in the forces shaping the future of an organization, a region, a nation, an industry or the society.

(Z_punkt)

Weak Signals

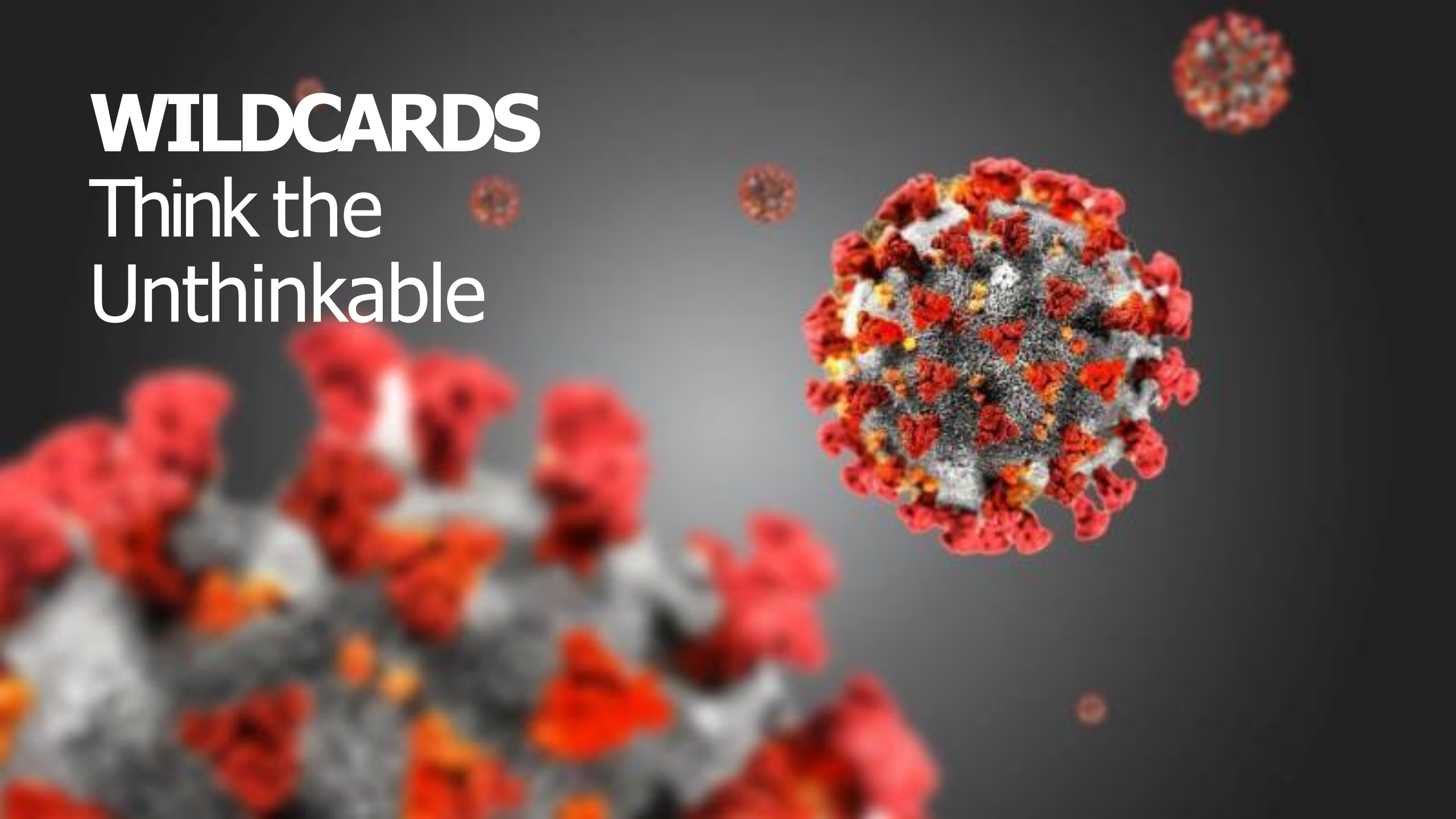
WEAK SIGNALS

Weak signals are those ambiguous and controversial bits of information about the competitive environment that are typically hidden among the "noise" of the prevailing sense making paradigm and that gradually coalesce to form a pattern of intelligence that alerts sensitive leaders that it may be time to change their game.

WILDCARDS

Think the Unthinkable

WILDCARDS
Think the Unthinkable



WILDCARDS

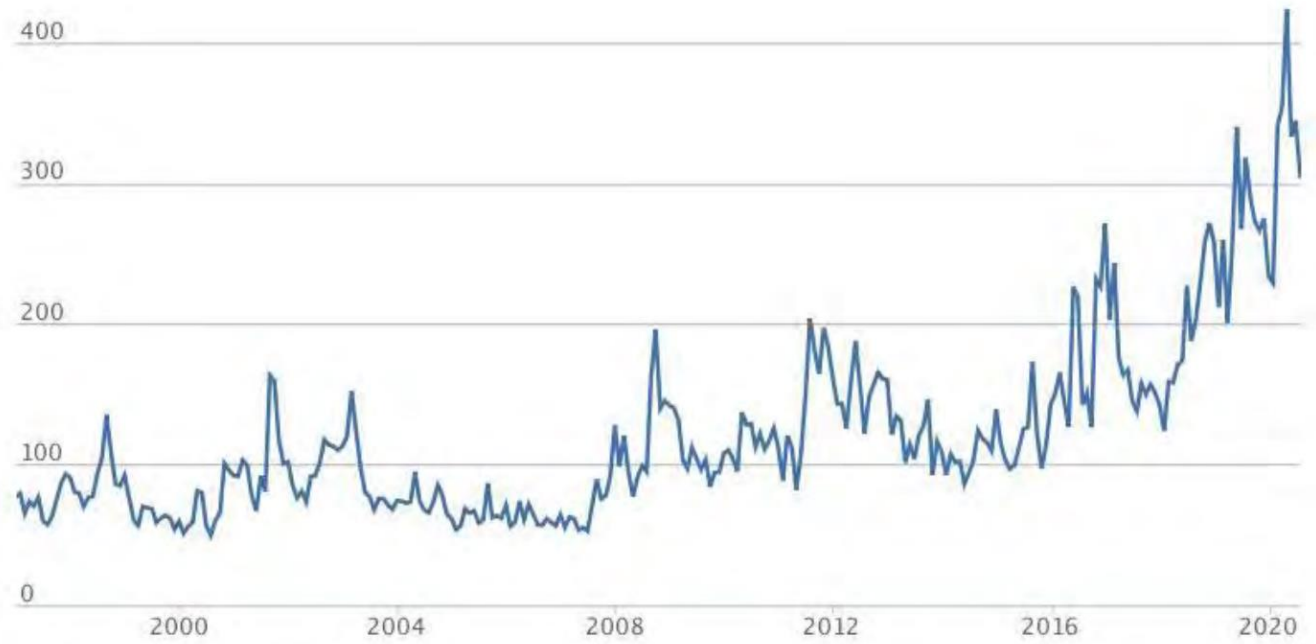
Discontinuities and sudden events with a low probability of occurrence, high impact and unexpected character.

UNCERTAINTIES

UNCERTAINTY

Uncertainties are driving forces that point to alternative and contrasting evolutions.

Global Economic-Policy Uncertainty Index,
2000-2020



REMOBILISE

CRUCIAL UNCERTAINTIES

Importance/Relevance (strong potential impact) to the FOCUS

Relative Independence

High level of Uncertainty

Critical forces with a high level of uncertainty and strong impact in the strategic focus. Crucial Uncertainties are the basis for the construction of Scenarios.

THE SCENARIO DEVELOPMENT PROCESS

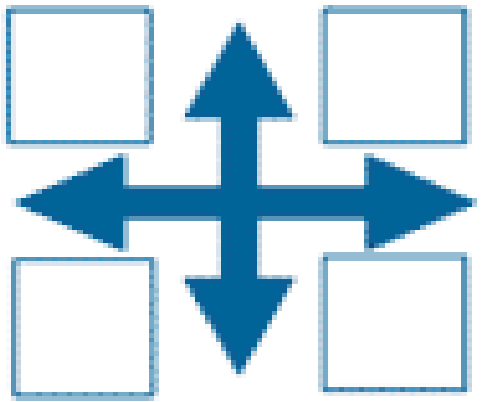
Define Focal Issue, Question, or Decision and Relevant Timeframe

Review Past Events & Alternative Interpretations

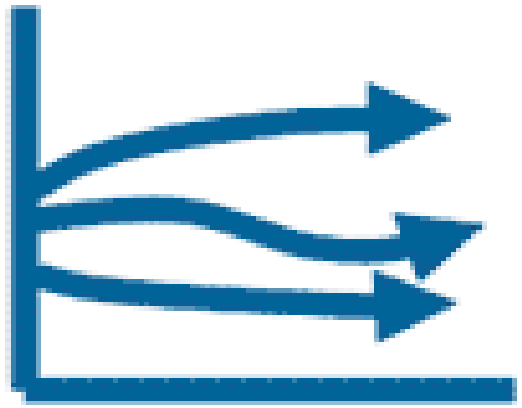
Identify Driving Forces

Identify Critical Uncertainties

Develop Plausible Scenarios

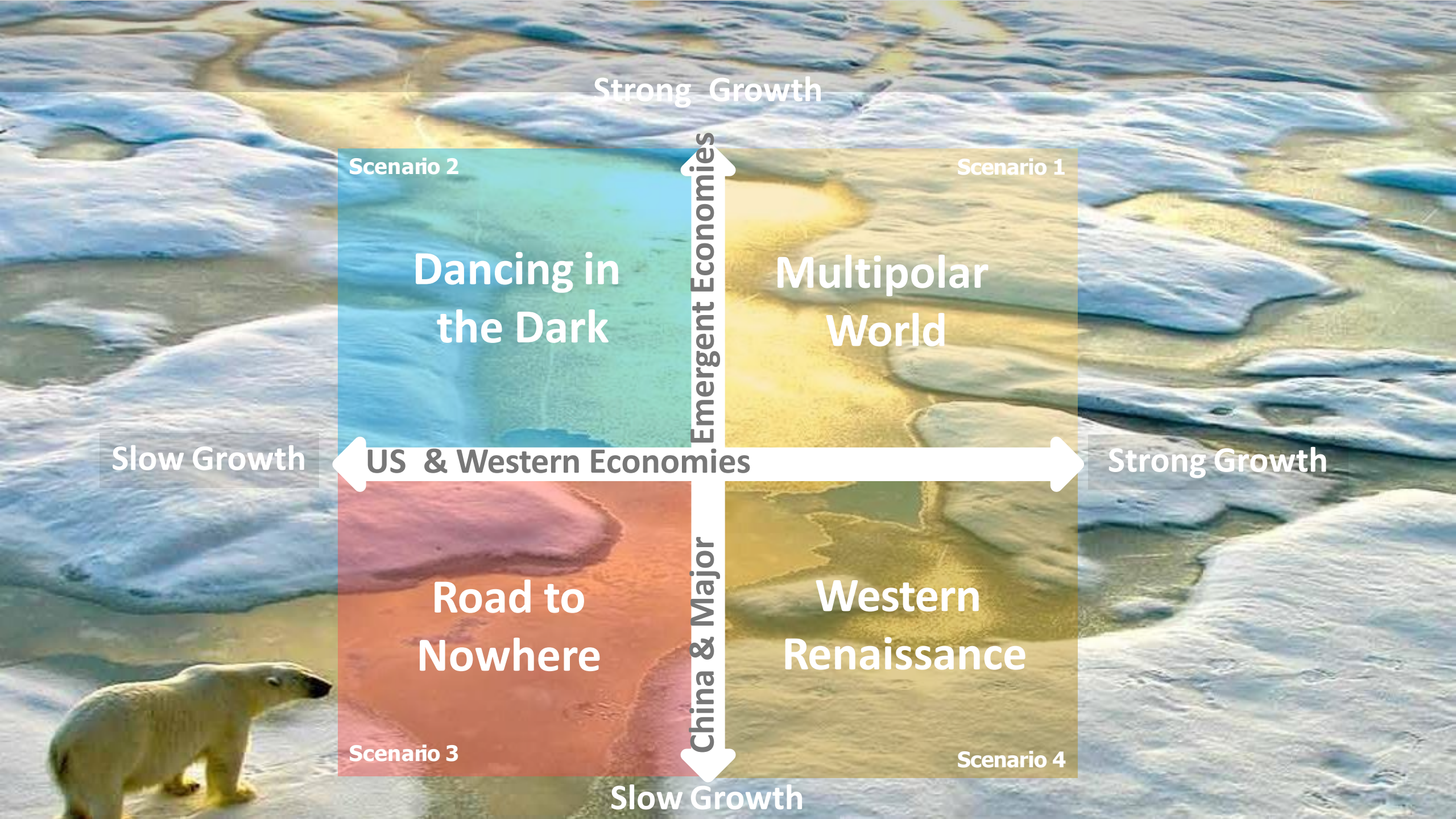


Discuss Implications & Paths



SCENARIOS STRUCTURE

Scenario 2 **WHAT ARE THE DISTINTIVE FEATURES OF THIS SCENARIO.**	**Scenario 1** **WHAT ARE THE DISTINTIVE FEATURES OF THIS SCENARIO.**
WHAT ARE THE DISTINTIVE FEATURES OF THIS SCENARIO. **Scenario 4**	**WHAT ARE THE DISTINTIVE FEATURES OF THIS SCENARIO.** **Scenario 3**


Strong Growth
Scenario 2
Dancing in the Dark
Scenario 1
Multipolar World
Emergent Economies
Slow Growth
US & Western Economies
Strong Growth
Road to Nowhere
Scenario 3
China & Major
Western Renaissance
Scenario 4
Slow Growth

Short Description

...
...

Keywords

...
...

Key Players

...
...

Key Indicators

...
...

Key Trends & Insights

(Technology, Ecosystem, Business Models, Talent, …)

...
...

Implications

(What are the most important Implications of this Scenario?)

...
...

Timeline (Building a story: Possible newspaper news headlines; Actors (current and potential); Events; Chronology, …)

... ...
... ...

2020 2025 2030

‘Scenarios are stories about the future,
but their purpose is to make better
decisions in the present.’

REMOBILISE

OUR STRATEGIC FOCUS

The Future of Mobility in 2030

Connected

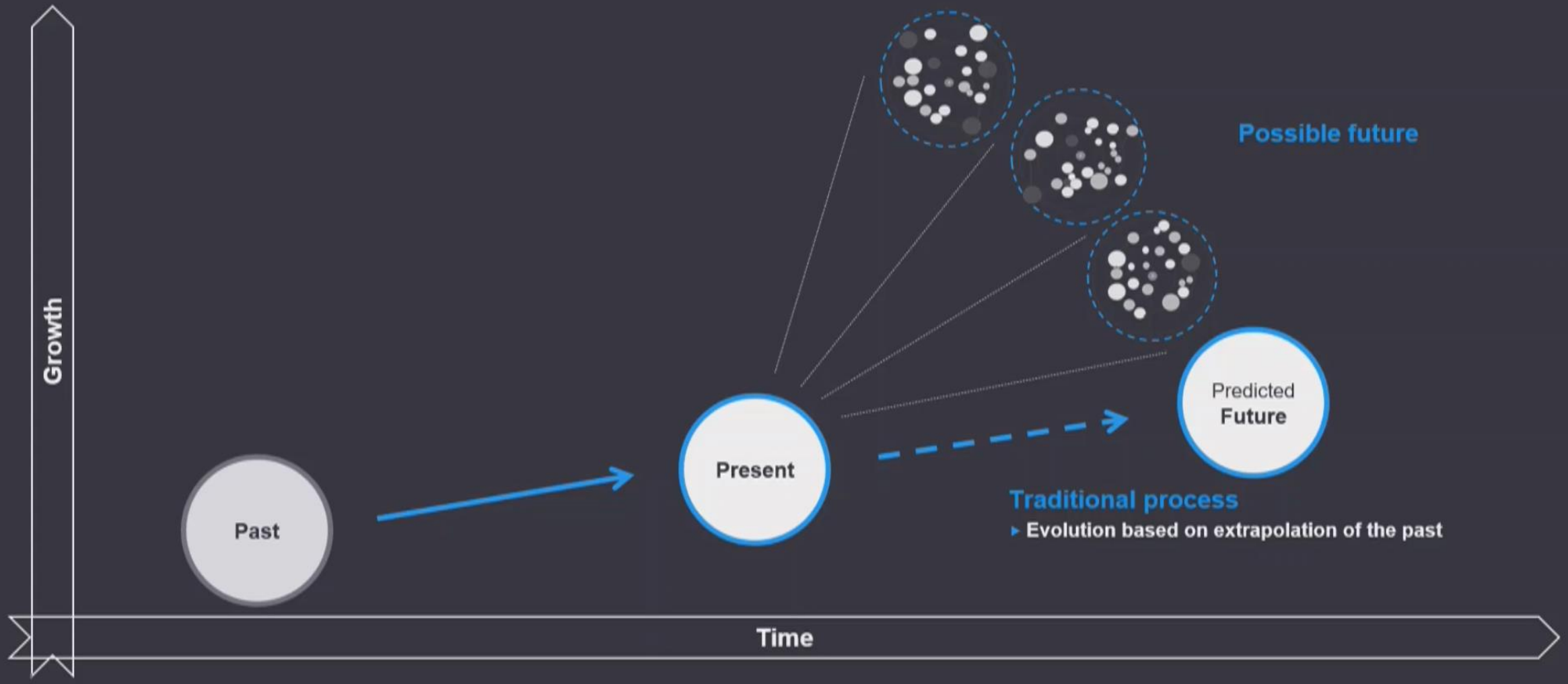
Autonomous

Shared

Sustainable

mage on Motor 24, smartcities, emobilitysimplified

Overview of the underlying scenario approach



What main uncertainties are impacting the future of mobility?

Electrification adoption rate

High

Image on motortrend

Charging capacity installed

On-demand

Car ownership

Shared

Public transport system capacity

Minimum ⟷ Maximum

Image on global opportunity explorer

Role of regulation

Lagging ⟷ Leading

Degree of transport interoperability

Inarticulation | Reduced interoperability | Extended interoperability | Perfect integration

Extreme situation

Extreme situation

Unarticulated transport system

Perfectly integrated transport system

Images on Municipio de Proença-a-nova and Lisbon travelling with Nikki

Level of concentration in urban centers

Urban exodus | Reduced concentration | Moderate concentration | Urban concentration

Extreme situation

Extreme situation

Low concentration in urban centers

High concentration in urban centers

What scenarios for the future of mobility could we expect?

Urban concentration

Old normal Scenario 4

Big jump Scenario 1

4 Scenario

1 Scenario

Inarticulation — x-axis: degree of transport interoperability — y-axis: level of concentration in urban centers — x-axis: degree of transport interoperability — Perfect integration

3 Scenario

2 Scenario

Digital rural Scenario 3

Personalization Scenario 2

Urban exodus


Main Challenges

Urban traffic management

Transportation infrastructures and networks optimization

Alternative mobility solutions

Urban traffic management

- **Induce positive behaviors** e.g., congestion charges, pollution charges, rush hour lag
- **Implementing new urban planning concepts** e.g., "15-minute cities", intermodality
- **Reshaping urban logistics** e.g., decentralization of logistics centers

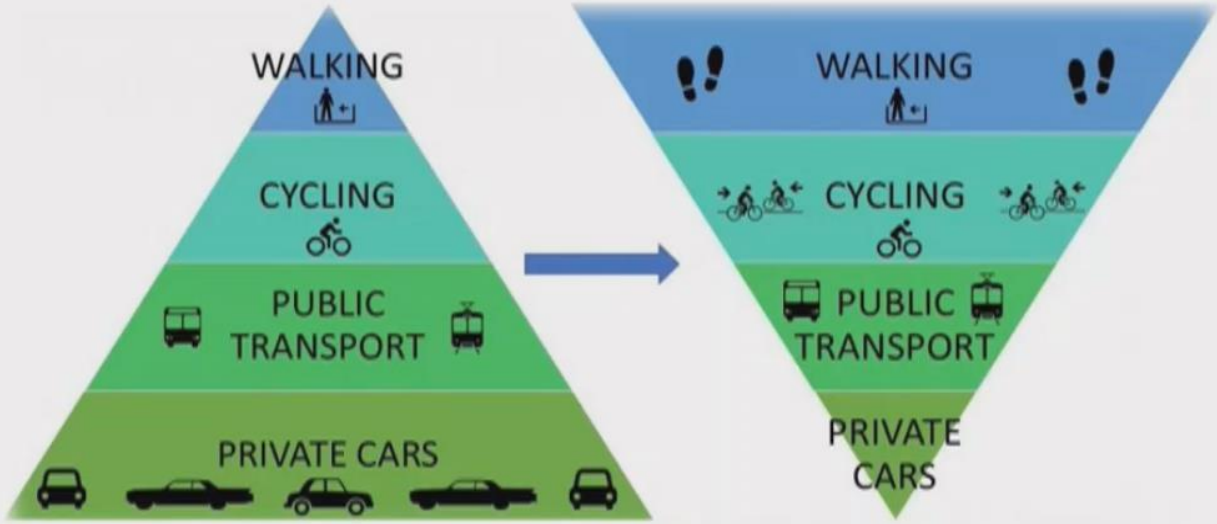


Image on tomorrow.city

Image on sharedmobility.news

Transportation infrastructures and networks optimization

- **Electric charging infrastructure** e.g., incentives for electric mobility
- **Transport infrastructure** e.g., level of coverage of soft modes, condominium managers: new ecosystem partners, multimodal parks

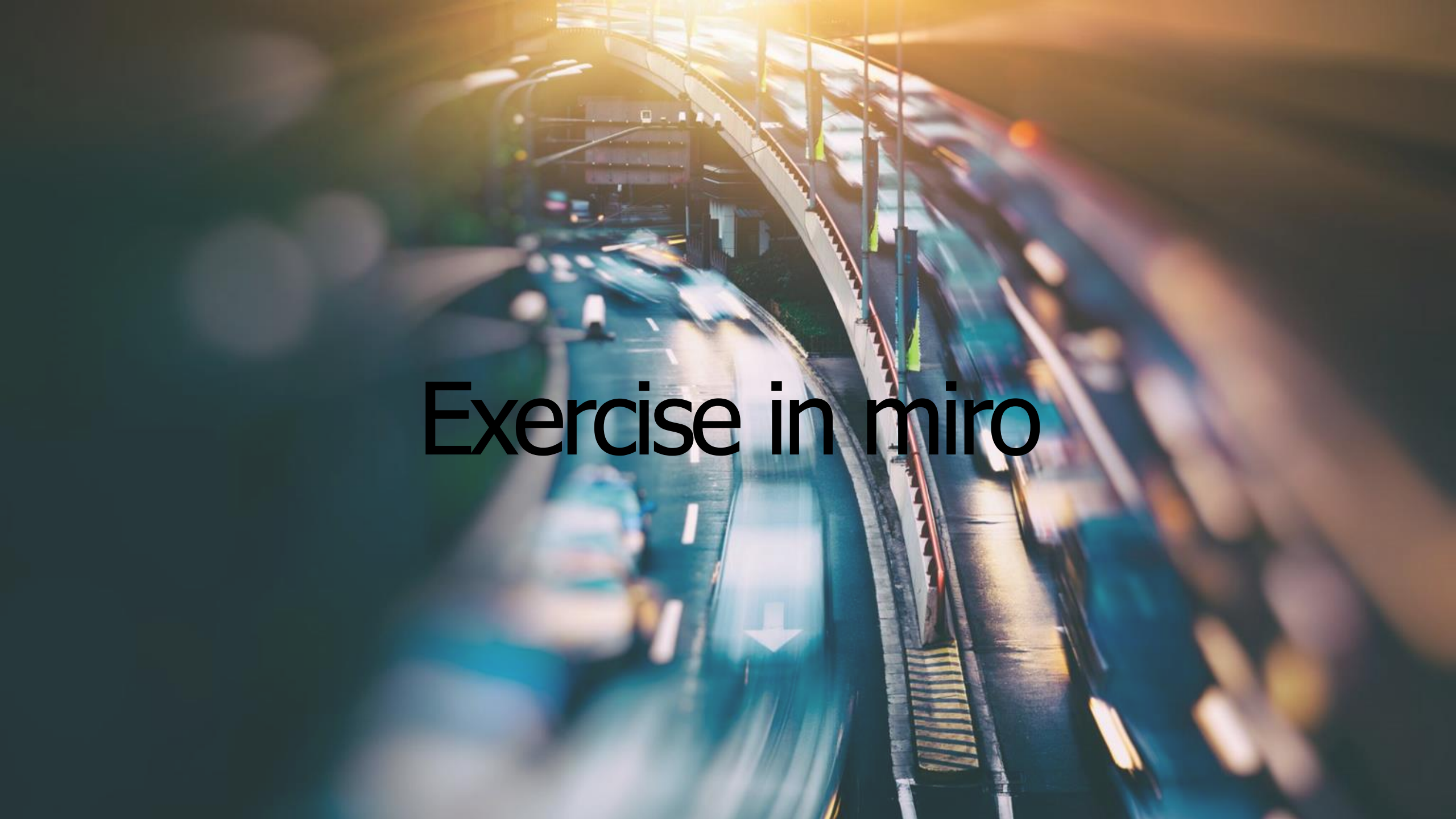
Alternative mobility solutions

Collaborative solutions:

- **Alignment of multiple players in the ecosystem** e.g., entity managing national mobility
- **Portugal: privileged place for experimentation** e.g., autonomous mobility
- **Intersection with other sectors** e.g., drones for the distribution of small goods

Image on amazon

Scenarios for the future of mobility


Exercise in miro

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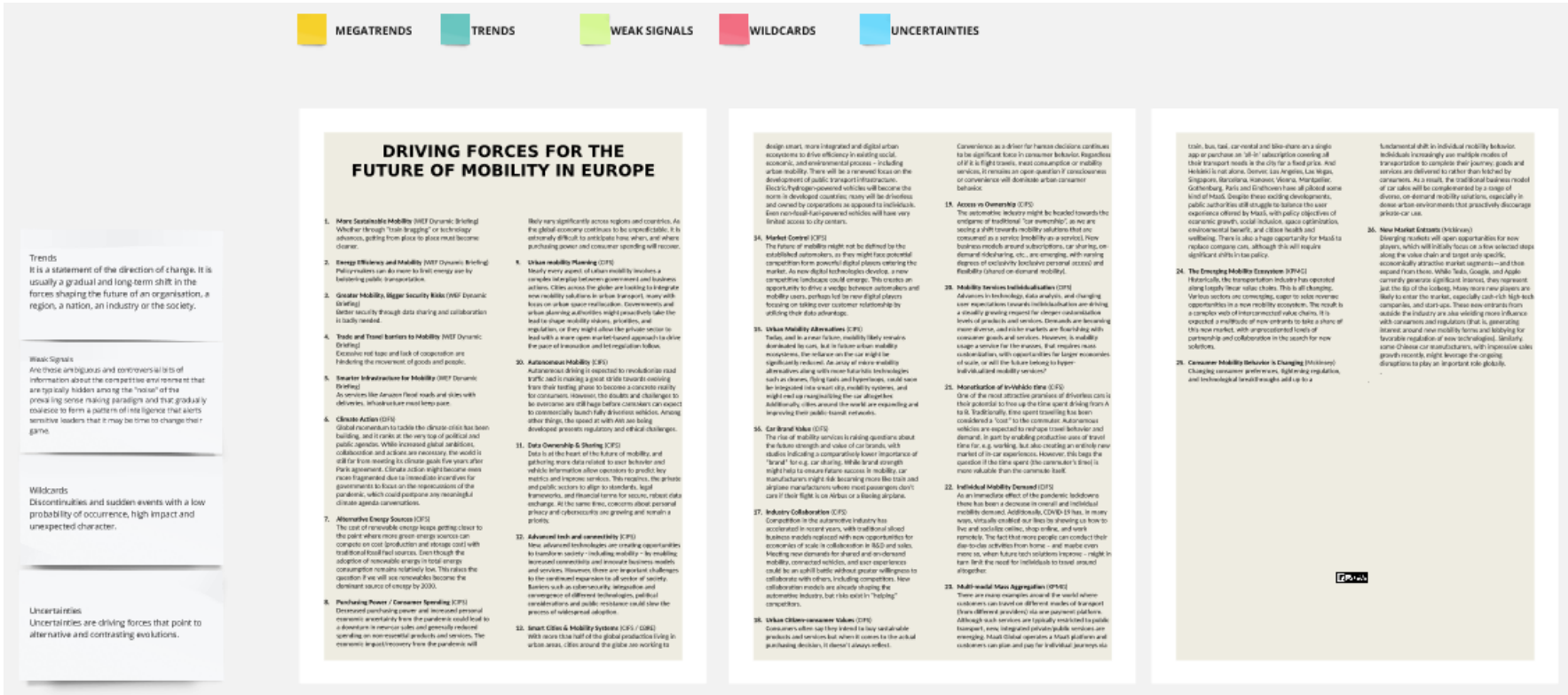

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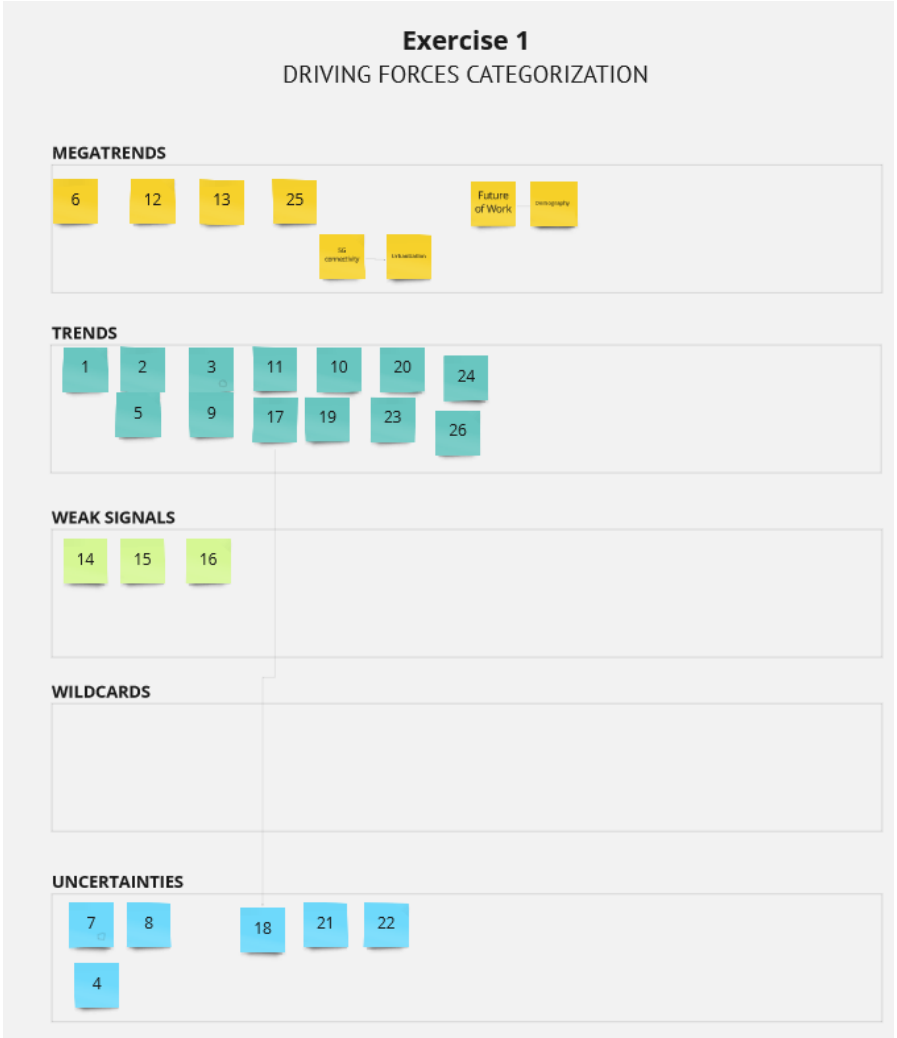

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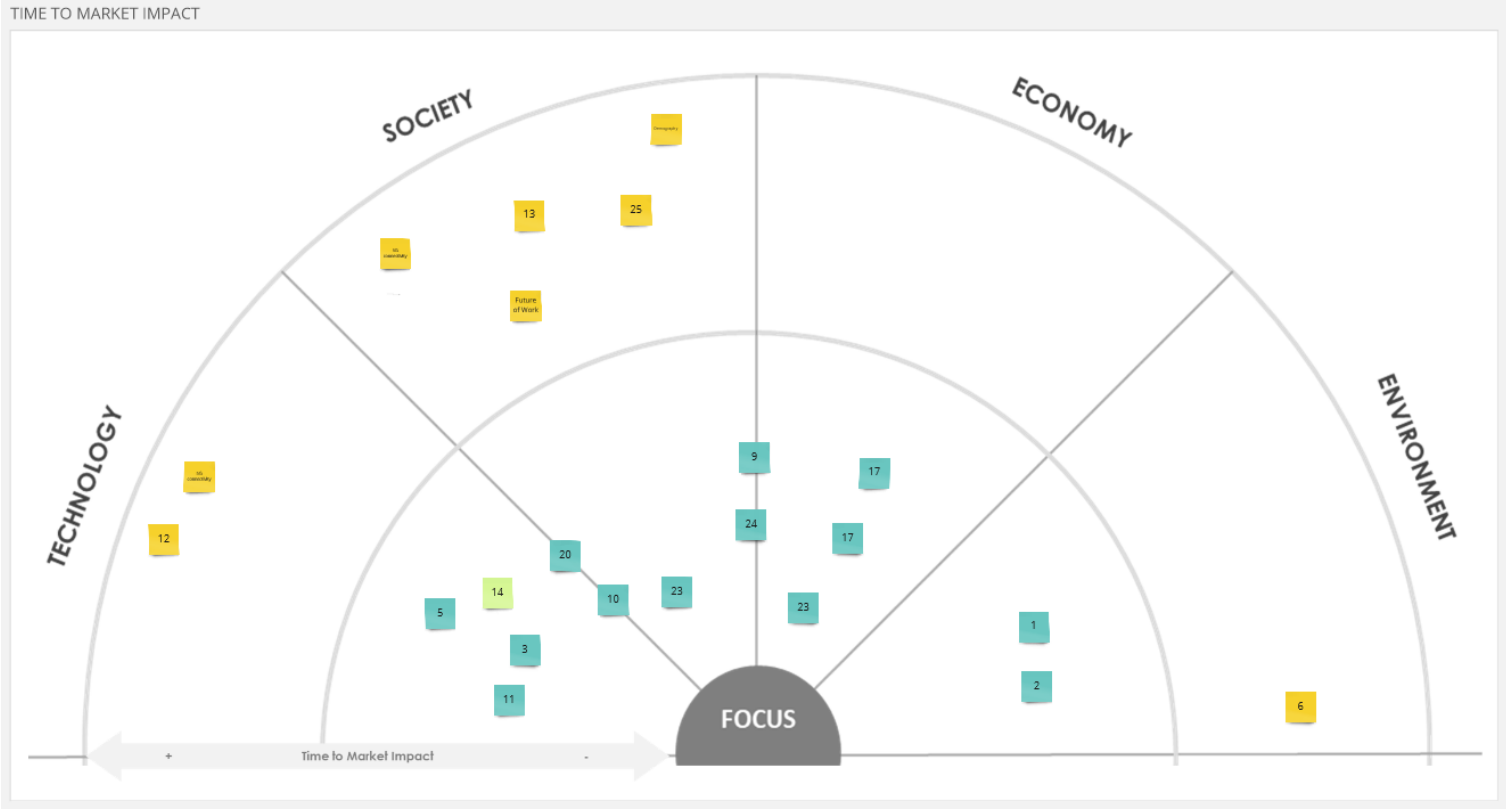

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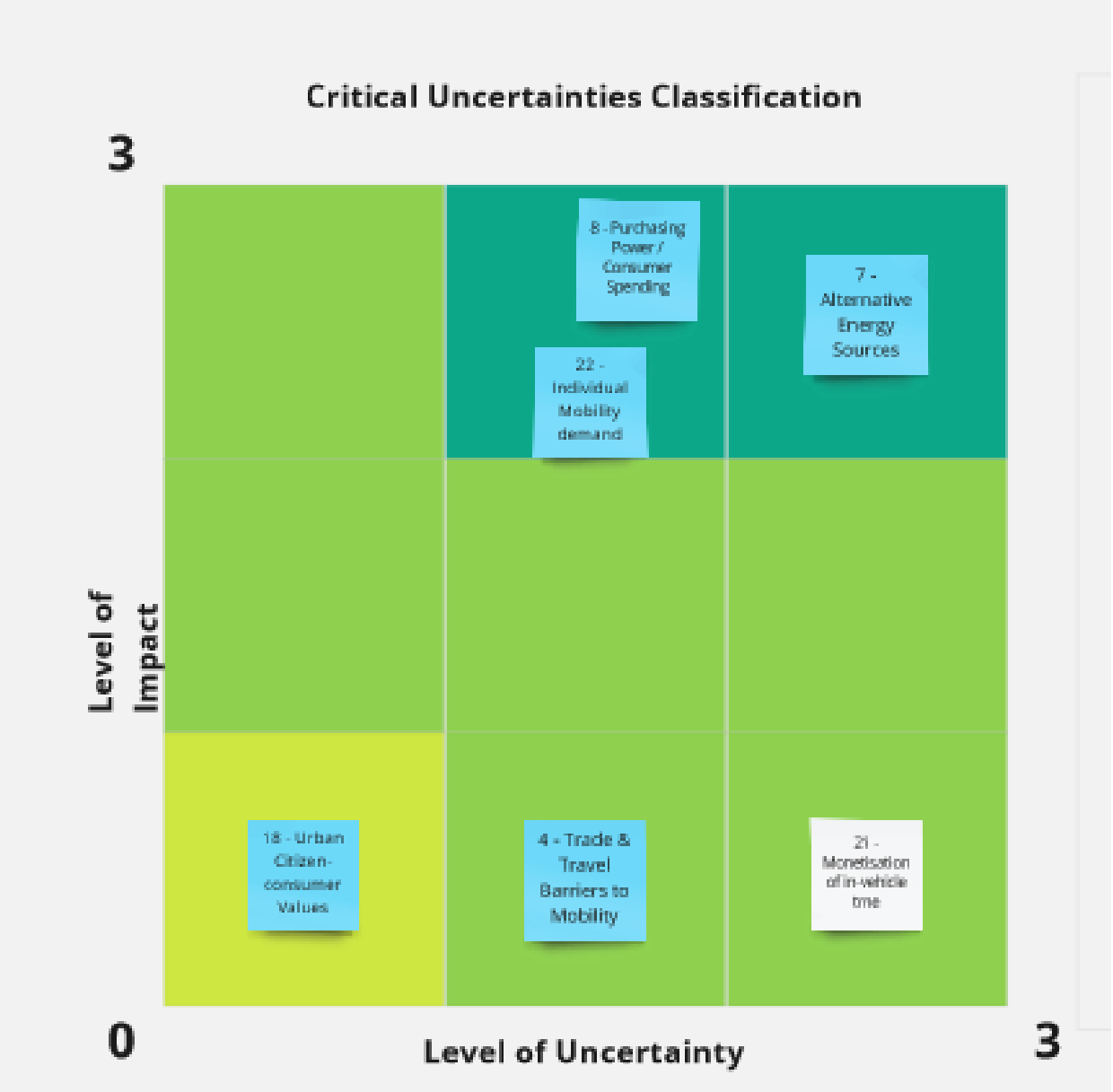

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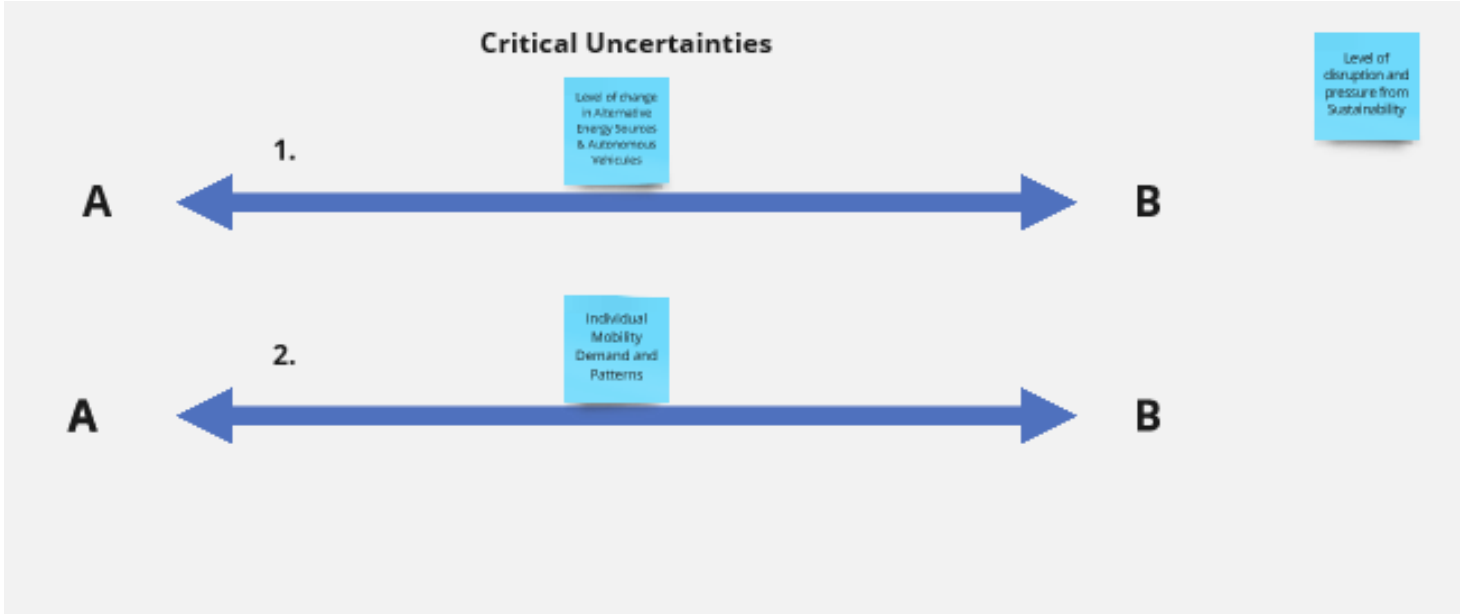

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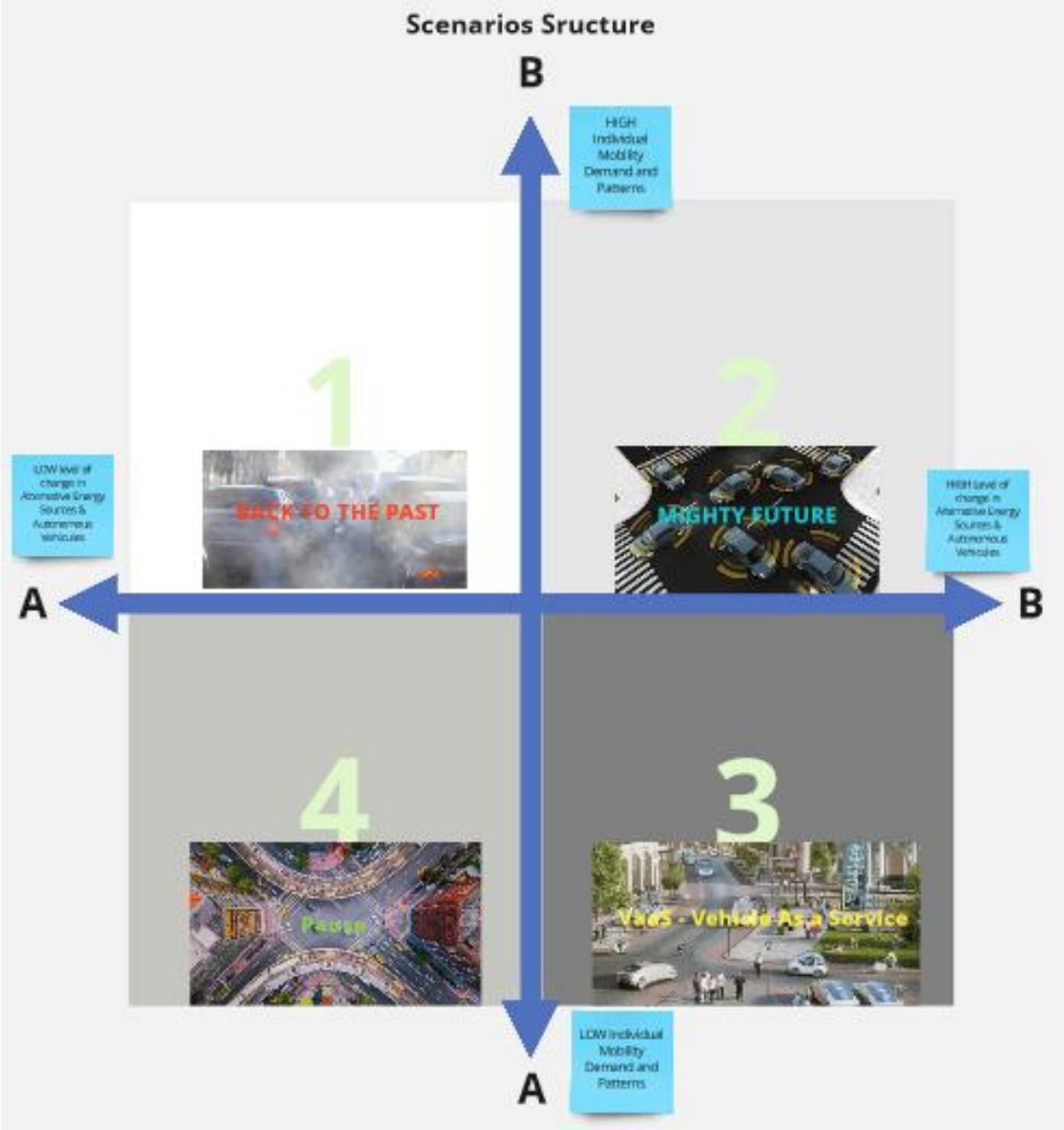

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Scenario 1

Short Description

- The Covid-19 pandemic did not have a long term effect on human lives and people went back to their "normal" ways of living (2019 style)
- People go back to work on a regular basis and commute as frequent as they would have done in 2019 with a similar usage of private car.
- Not much progress observed on the transition towards alternative energy sources (still only 11% of global primary energy comes from renewables)
- ADAS/road infrastructure did not manage to reach the level of expected security and failed to receive approval from regulators in US and major EU/Asia markets. Low uptake.

Keywords

Back to the past
2019 style
Fossil fuel rocks
I love my private car
No to autonomous vehicles
No risk

Key Trends & insights (Technology, Ecosystem, Business Models, Talent,...)

Owned
Stand-alone -> connected
Combustion
Driver

Key Players

Car manufacturers on a B2C approach
Regulatory entities
Aftermarket retailers (service shops)
Petrol related companies
Banks and insurance companies (for financing and private car insurance)

Key Indicators

1.35M fatalities on road traffic accidents
Transport represents 25% CO2 emissions -> Road Traffic 72% (18% 6,7 bn)
23 hours a day that a car is parked in average
In 2019, around 11% of global primary energy came from renewable technologies
number of private cars per inhabitants increasing -> 1.4bn cars (7.5bn population) -> aprox. 1 car/5p

Timeline (Building a story. Possible newspaper news, headlines; Actions (currente and potential); Events; Chronology,...)


The Daily
Back to the past

Miro board - https://miro.com/app/board/uXjVP7mlTho=/?share_link_id=266175992683

Scenario 2

Short Description

- Major transition from fossil fuels to alternative energy sources
- Mass adoption for autonomous and electric or hydrogen powered vehicles
- Ownership of a private car still prevails when compared to shared or mass transport solutions
- Increase of road traffic

Keywords

Hello electric and hydrogen powered cars
Autopilot
Connectivity
Congestion
B2C Business Model prevails
Cybersecurity
IoT
Blockchain
M&A

Key Players

Software companies (Tesla, Waymo/Google, Apple, Lucid, Nio, Canoo)
Sensoring industry
Semiconductor industry (TSM)
Battery manufacturers
Lithium exploitation companies
Insurance companies
Battery recycling industry
Regulatory entities / infrastructure managers

Key Trends & insights

Owned
Stand-alone
Combustion -> Electric
Driver -> Autonomous

Key Indicators

Connected mobility is expected to reduce Road Traffic accidents by 70%

Timeline (Building a story. Possible newspaper news, headlines; Actions (currente and potential); Events; Chronology,...)


The Daily
Sunday, August 30, 2030
Mighty Future
Major transition from fossil fuels to alternative energy sources. Mass adoption for autonomous and electric or hydrogen powered vehicles. Ownership of a private car still prevails when compared to shared or mass transport solutions. Increase of road traffic.

Miro board - https://miro.com/app/board/uXjVP7mlTho=/?share_link_id=266175992683

Scenario 3

Short Description

- Major transition from ownership of a private car into shared vehicles or even shared ownership. -
- New business model regarding vehicle usage (e.g.: shared ownership, tokenization, ridership revenue shared, etc...).
- New business possibilities (e.g.: connecting private retailers to car user, monetization of in vehicle time).
- Shifting from a traditional sales model (B2C) into a as service model or a B2B or B2B2C model.
- High acceptance of alternative energy and autonomous vehicles. Politics and regulations favorable of this transition.

Keywords

VaaS
B2B
Green Energy
Connectivity
Investissements
Flying taxis
drones
Intermodal
maas
Software
IOT
Cybersecurity

Key Players

Software companies (Tesla, Waymo/Google, Apple, Lucid, Nio, Canoo)
Semiconductor industry
Semiconductor industry (TSMI)
Battery manufacturers
Lithium exploitation companies
Insurance companies
Battery recycling industry
Retail companies
Micromobility industry (new types of vehicles)
Investissements / infrastructure managers

Key Trends & insights (Technology, Ecosystem, Business Models, Talent,...)

Owned -> Shared
Stand-alone -> connected
Combustion -> Electric
Driver -> Autonomous

Mobility hubs for intermodality
big investments in infrastructure
Predictable behavior and routine with Artificial Intelligence
New paradigm for shopping (e.g.: drones)
Regulation pro alternative energy sources
Charging infrastructure is critical
New contracts for Mobility
high interoperability and digital focus

Key Indicators

Connected mobility is expected to reduce Road Traffic accidents by 70%
90% less traffic with shared autonomous driving integrated into public transport

Timeline (Building a story. Possible newspaper news, headlines; Actions (currents and potential); Events; Chronology,...)


The Daily
Vans: Vehicles as a service

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Scenario 4

Short Description

- Prolong the agony of the Covid-19 pandemic and its impacts on user behavior
- Mobility demand reduced to the minimum necessary
- Home office leads people to not wanting to own a private car
- Economy in a downtrend which leads to lack of investment
- Uncertainty in schedule...

Keywords

Uncertainty
Fear
Bear (market)
Petrol and other fossil fuel
Public investments

Key Players

Governmental entities
Banks
Large companies & lobbyists

Key Trends & insights (Technology, Ecosystem, Business Models, Talent,...)

B2C
Remote software development
Challenging sustainability ambitions

Owned -> Shared
Stand-alone -> connected
Combustion
Driver

Key Indicators

- 30% increase on mobility resident areas
- less 30% of deslocations to work (65% in lockdown period)

Timeline (Building a story. Possible newspaper news, headlines; Actions (currents and potential); Events; Chronology,...)


The Daily
Mobility pause

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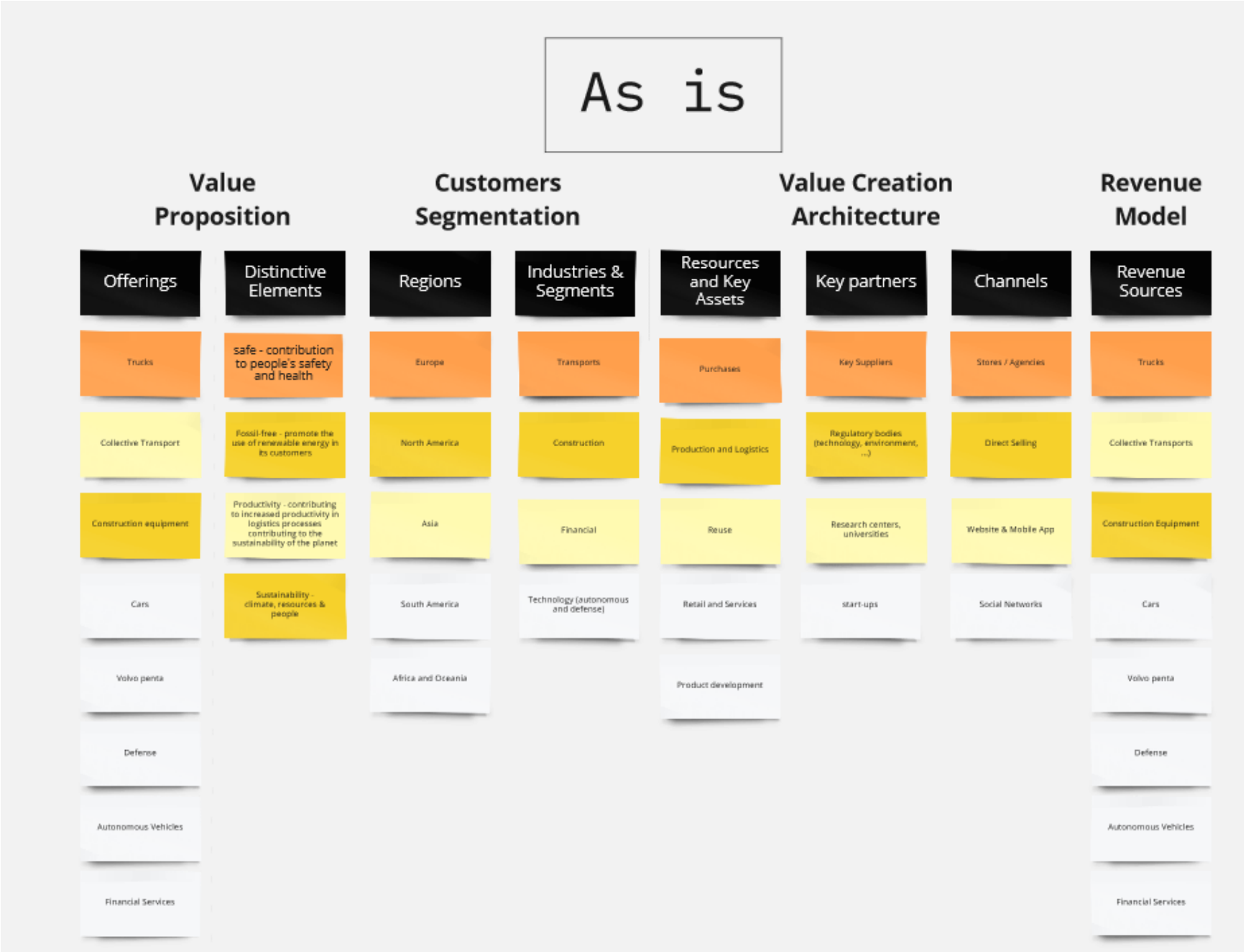

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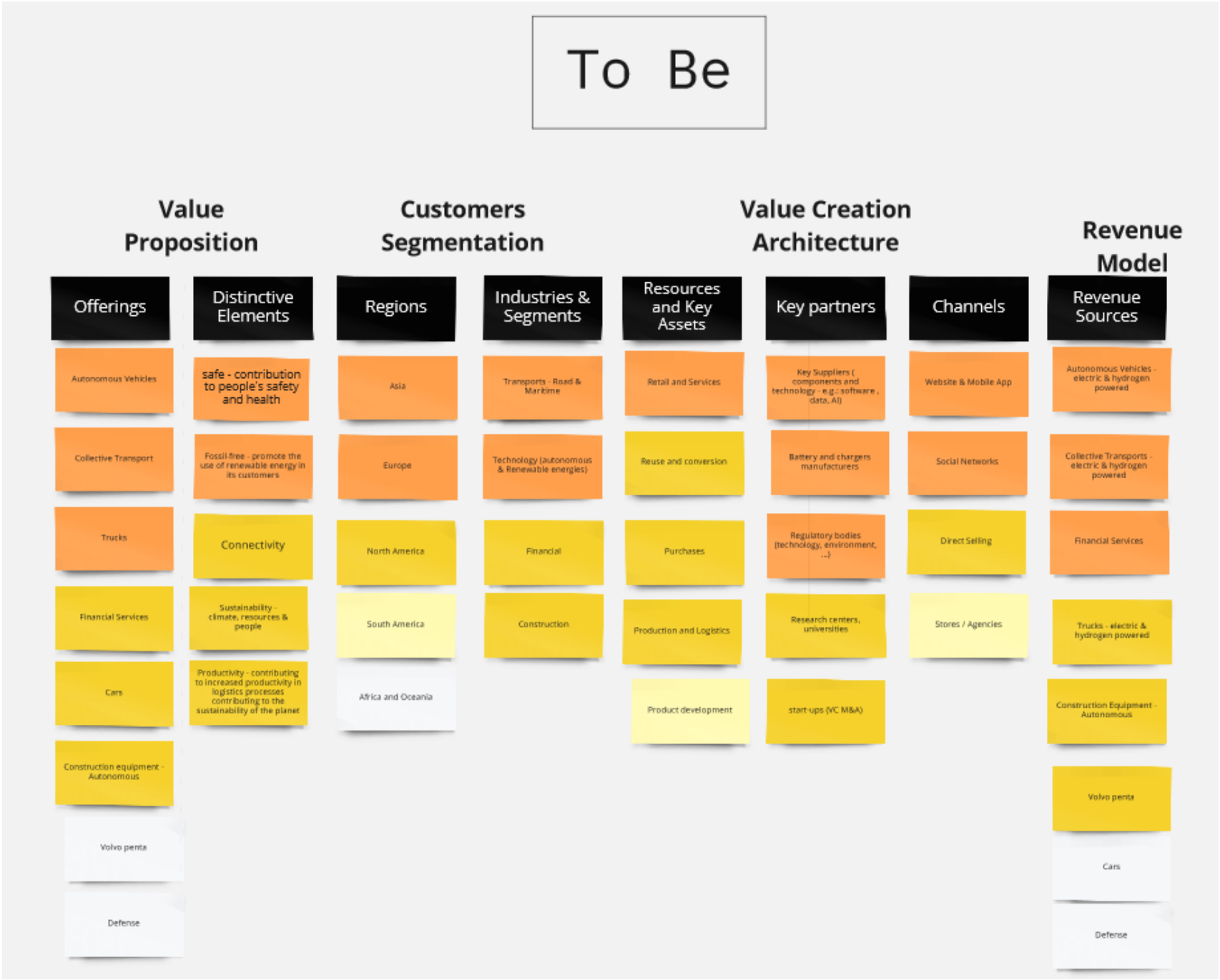
To Be



Thank you for your attention

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