ABIS

The Academy of Business in Society

Futures of Business Education in 2055

June 2024

Authors: Karolina Sobczak, Katarina Haluskova, Antonino Mangano, Ivo Matser, Giulia Lizzi

How to cite this report: Sobczak, K., Haluskova, K., Mangano, A., Matser I., Lizzi, G., Futures of Business Education in 2055, 2024, doi: 10.5281/zenodo.11477656

Executive Summary

We live in a world with significant uncertainties and undergoing multiple transitions. Business schools and their stakeholders are at the heart of these dynamics. While the role of business education has been called into question due to the consequences of corporate leadership and behaviour on society, it seems like an impossible mission for business schools to develop and implement forward-looking strategies in a context where reality is constantly changing.

ABIS - The Academy of Business in Society aims to support business schools and companies in fulfilling their role in society and has therefore taken the initiative to develop relevant scenarios for business education development and for the collaboration between business schools, companies, and other stakeholders.

A scenario building process from foresight studies has been used, and extensive research was conducted with the involvement of multiple stakeholders. Four alternative scenarios for business education in 2055 have been built upon intelligence from more than 30 experts from academia policy, civil society and industry. The scenarios vary considerably, provide starting points for responsive and adaptive strategies and policies, and offer insights to develop flexibility in the process of continuously developing and improving these strategies.

The target groups for using these scenarios are decision-makers and academic leaders within business schools as well as policy makers and professionals within other relevant organizations and stakeholders with responsibilities in Research & Innovation, Sustainability, Human Resource Development, Talent Development, and Learning & Development.

The context of the scenarios is given by political, economic, social, technological, legal, and environmental macro factors combined with the higher education sector, and more specifically with business education. These scenarios are essential for effective policy implementation, strategy development and innovation in business schools' research, teaching and institutional practices. By imagining possible future realities and pathways, decision-makers and stakeholders have the opportunity to be better prepared, understand the key challenges and opportunities that might arise and inform strategy development and decision making to support action in the present for desired futures to happen.

Following this report, there will also be a next stage of the scenario building process. ABIS will follow up by developing a matching Scenario Exploration System, thanks to which interested and relevant participants will be able to explore and compare such scenarios in an interactive, serious game format.

Table of contents

List of figures

List of tables

List of abbreviations and acronyms

ABIS	The Academy of Business in Society
AI	Artificial Intelligence
ESG	Environmental, Social and Governance
EU	European Union
GDP	Gross Domestic Product
GHG	Greenhouse gases
HEI	Higher Education Institution
IT	Information Technology
KPI	Key Performance Indicator
NGO	Non-Governmental Organization
PESTEL	Political, Economic, Social, Technological, Environmental, and Legal
RDG(s)	Regenerative Development Goal(s)
SDG(s)	Sustainable Development Goal(s)
SES	Scenario Exploration System
UN	United Nations
USA	United States of America
WSA	World Sustainability Agency

How to read this report

- **Do you only have a few minutes?**

Read the Executive summary (page 1), which briefly describes the background and outcomes of the report. You can also read pages 13 and 14, which showcase the scenarios and summarize the four narratives.

- **Do you have 30 minutes?**

Start with the Executive summary (page 1), then read the Context (page 6) and the section on Issue/concern (page 8) which present the aims of the Futures of Business Education 2055 initiative and provide an understanding of the question addressed by the report. Next, you can read pages 13 and 14, which showcase the scenarios and summarize the four narratives and dive deeper into the Synopsis tables on pages 40-45. We also recommend reading the Conclusions on page 39

- **You have more time, but you are mostly interested in the Business Education Developments?**

Start with the Executive summary (page 1), then continue with the Context and Methodology (pages 6-14), which present the aims of the Futures of Business Education initiative 2055 and explain the step-by-step process followed, as well as showcase and summarize the four scenarios. Then, feel free to only read the Business Education Development sections under each scenario.

- **You have more time, but you are mostly interested in the key social, economic and political developments in Europe?**

Start with the Executive summary (page 1), then continue with the Context and Methodology (pages 6-14), which present the aims of the Futures of Business Education initiative 2055 and explain the step-by-step process followed, as well as showcase and summarize the four scenarios. Then, feel free to only read the Key developments in Europe sections under each scenario.

- **To read the full report**

Starting with the Executive summary (page 1), the Context and Methodology (pages 6-14), and the 4 scenario narratives (pages 15-36). You can choose to follow the order of the report. You can also choose to focus on specific decades in each scenario to better understand the key differences across scenarios. Lastly, you can also choose to focus on one scenario at a time and dive deep into the Business Education Developments and refer back to the related Key developments in Europe, or vice versa. Refer to the Value and use, Limitations and Conclusions (pages 37-39) to explore the relevance of the report and to the Annexes for more extensive materials and list of experts involved.

Context

The drastic changes we have been experiencing with Covid-19, escalating climate change, geopolitical conflicts, biodiversity crisis, among the others, call for reflection and urgent changes in our economy and society. Inevitably business education is facing a sea change to build the capacity for societies to engage in a sustainable transition and for current and future leaders to be a force for good. Business schools are in fact still quite traditional, and while some improvements have been made in terms of core courses and programs on sustainability or increase in sustainability-related research and journals, they need and have the responsibility to do much more.

For these reasons, in May 2022 the Academy of Business in Society (henceforth ABIS) decided to embark on the journey of a scenario building process to understand how the system of business education could change over the next 30 years. True to its mission, ABIS believes that more than ever business schools need to take responsibility for the mindsets, frameworks, and management theories they teach and to transform their practices, curricula and research as laid out into our related position paper (Teerikangas et al., 2022). The aim of this initiative is to offer original, novel insights and solutions to foster pedagogical innovation and dialogue around management theory as well as institutional transformation in business education. ABIS approached the topic through the lens of futures studies and foresight.

By imagining possible future realities and alternative pathways, key decision-makers and stakeholders have the opportunity to be better prepared for such futures, understand the key challenges and opportunities that might arise and inform strategy development and decision making to support action in the present for desired futures to happen.

With these aims, ABIS calls for a long-term vision where:

- business managers and leaders are skilled in addressing social and environmental challenges;
- business schools are sustainable and learning organisations themselves;
- business research and education is more relevant and is providing new, effective direction to the new emerging lifestyles and systems;
- citizens are more aware of relevant economic, political, and environmental trends and provided with useful tools to conduct responsible daily life choices.

Current mindsets and ways of working will not help us get there. There is a need for a long-term vision and systematic approach. Academic leaders need to authentically integrate critical understandings and insights informed by their research, values and relevant academic and civic experience. In this context, they also need to anticipate future developments to be prepared for them and understand the barriers to be overcome in order to foster the capacity to think long-term and to build desired futures.

By embarking on this two year-long, forward-looking stakeholder engagement journey and creating this report, our goal is for academic leaders from the ABIS network and beyond, as well as relevant policymakers and business leaders, to both understand and anticipate the consequences of a paradigm shift in business education as well as support action in the present. The scenarios that we developed can provide insights and directionality to shaping policies and strategies for better education for sustainable development.

Methodology

This section introduces the process and logic followed by ABIS in this foresight exercise, aimed to develop future scenarios of how business education could evolve by 2055.

Foresight is a systematic participatory process, creating collective intelligence about the medium- to long-term future, and one of the main foresight techniques is the development of scenarios. The technique identifies relevant drivers of change of the system being considered and analyses the interplay between such drivers. This facilitates a deep understanding of the logic of various possible future developments. The scenarios depict multiple, plausible, and alternative combinations of developments of a system.

More specifically, this foresight initiative is based on the work of the Joint Research Centre and the Competence Centre on Foresight of the European Commission, and the scenario process methodology presented by the Institute for Futures Research in their "Workshop on Scenario Planning" in August 2021. The figure below represents the steps of the scenario building process, which are described in detail in the following sections.

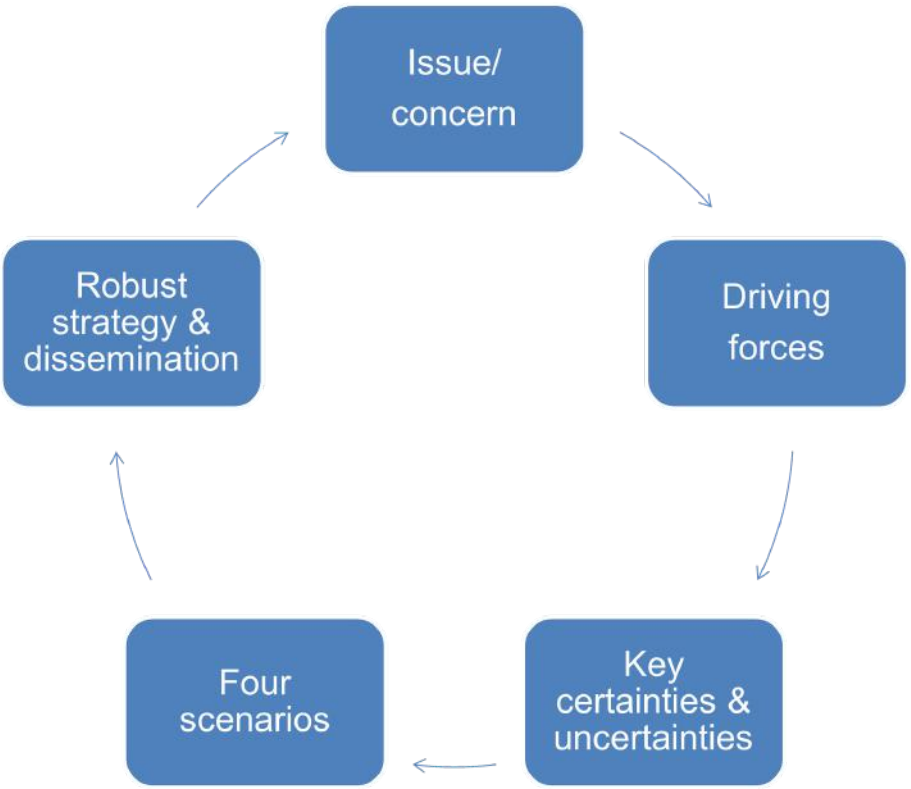

Figure 1. Steps of a scenario process (adapted from Roux, 2021)

1. Issue/Concern

The exercise fully draws on ABIS' mission to advance the role of business in society through research and education. This mission has been most recently pursued in the network's engagement with the Scenario Exploration System as well as the 2022 position paper on Transforming business education for sustainability (Teerikangas et al.). One of the main critiques to the current business and management education models is that they have been perpetuating problematic paradigms from the industrialization era. There is a disjunction between what business education claims to be advancing and what are the actual outcomes, with business bearing responsibility for many crises we are facing as a society. At the same time, business is a key engine and driver of innovation and needs specific skills and capabilities. Given this tension, it is important to identify the new trajectory for business, business schools and society in the 21st century. Therefore, the issue that the authors aimed to address is: **"What needs to be changed in business education and how so that we accomplish sustainable development?".** Sustainable development was connoted and described as a guiding principle for development encompassing environmental quality, economic prosperity and social equity to the benefit of current and future generations (Kirchherr et al., 2017).

The issue of concern was further narrowed down specifying the time horizon, geographic scope, and the most relevant stakeholders impacted by the issue and to be involved in the scenario building:

a. **Time horizon**: the authors selected a **30-year period**, rounding up to year 2055[1]
b. **Geographic scope**: while the issue of concern is highly relevant across the world and systemic in nature - both affecting and being affected by the global context and a variety of trends -, the focus is on **Europe and its higher education system**;
c. **Stakeholders** that were identified as most relevant to the issue of concern included **deans, academic and non-academic staff, policymakers, business professionals and students**. Employing a participatory action research methodology in a spirit of co-creation, all stakeholder groups were engaged throughout the scenario process and took part to at least one of the three participatory workshops over the course of 2022 and 2023. The full list of participants is available in the Annex I.

2. Driving forces

As a second step in the scenario building process, the authors defined the driving forces impacting the issue of concern, which can be defined as the underlying and impacting forces that make changes possible, set the patterns of events and determine outcomes in the environment and timescale considered. The driving forces were identified via a participatory stakeholder workshop, that took place in Brussels in May 2022 at the ABIS Knowledge Into Action Festival on "Futures of Business Education".

During the highly interactive, in-person session, participants from the ABIS business-academic network and beyond reflected on and uncovered what key factors and events will shape the curricula, research and institutional practices in business schools in order to better contribute to meeting the United Nations Sustainable Development Goals (SDGs). Participants represented higher education institutions and businesses, but also policy, civil society and youth organisations.

[1]Originally, the reference period was until 2050. Given the qualitative nature of the initiative, the 30 years perspective in the report and the official publication in mid-2024, the authors adopted 2055 as final year.

For the first workshop, 10 participants representing the stakeholder groups mentioned in step 1.c discussed the abovementioned issue of concern, further articulated through the following sub questions:

- **What and how will be taught in business schools' curricula in 30 years?**
- **What kind of research will be conducted and how in 30 years?**
- **How will business schools function and be organized in 30 years?**

In order to harvest these insights, the workshop featured a brainstorming session using the **PESTEL framework** focused on uncovering the Political, Economic, Social, Technological, Environmental and Legal factors affecting the future of business education. Two groups of 5 participants were formed and each was tasked with defining 3-5 drivers across the 6 PESTEL dimensions. With this method, around 50 drivers in total were gathered and discussed and their definitions explained thoroughly.
On the same day, further perspectives, and nuances on transforming business education were gathered via the Three Horizons approach by Bill Sharpe of International Futures Forum (2006). While this method is not an integral step of foresight process followed, the resulting, complementary insights were infused in the scenarios.
After the first stakeholder workshop, the list of driving forces was reviewed by the ABIS team according to consistency and comparability criteria, removing duplicates and merging similar phenomena. 31 specific socio-political, legal, economic, technological and environmental developments that will affect business schools in the next 30 years were identified. The full list is available in the Annex II.

3. Key certainties and uncertainties

The next step in the scenario process pertained the identification of the so-called key certainties (also referred to as "known knowns") and **key uncertainties** (also referred to as "known unknowns"). The latter, in particular, represent those variables most relevant to a particular issue and with the highest impact potential (be it an opportunity or a threat).

For this purpose, we invited the relevant stakeholders from step 1.c to a second participatory workshop, which took place online on June 15, 2022. The aim of the session was to find an answer to the question: **"What are the most impactful and uncertain driving forces that will influence business education in 30 years?"**. This was accomplished by presenting the previously defined 31 driving forces and gathering insights to map them according to the level of certainty with respect to their direction from low (known knowns) to high (known unknowns) and the level of impact from low to high. The intersection of most impactful, unrelated key uncertainties would define the 4 scenarios.

A two-round simple voting procedure was used. First, participants selected drivers according to the question: **"What are the driving forces having the most impact on business education in 30 years?"**. The most voted driving forces were:

1. Digitalization and AI in teaching methods,
2. Open science and commons of knowledge,
3. Paradigm shift in economy,
4. Lifelong learning,
5. Sustainability regulation,
6. Diversity and inclusion of talent,
7. Emerging societal dynamics,
8. Shifting scope of education,
9. Shift in ideology from neoliberalism to pluralism.

During the second voting round, participants were invited to reflect on and vote according to the question: **'Which ones, among the most impactful factors, are the most uncertain?"**. This led to the identification of the two most important key uncertainties defining the future developments in business education:

- **Paradigm shift in the economy** towards circular, regenerative, and collaborative practices, or lack thereof: the two extreme ends were identified as "Circular Economy" in the case of actualization of such a shift versus "Linear economy" in case of continuation of the status quo and business as usual;

- **Emerging societal dynamics**, characterized at a macro level by a shift away from globalization and at individual level by a shift in mentality from "citizen of the world" to "proud member of one's community/region", or lack thereof. After careful examination, for the sake of simplicity and for maintaining the two key uncertainties independent from one another, this uncertainty was renamed **Globalization/Localization**. The two extreme ends were identified as "Global context" and "Local context".

The intersection of these two key uncertainties as horizontal and vertical axes led to the first 2x2 matrix determining 4 distinct scenarios of business education represented in Figure 2.

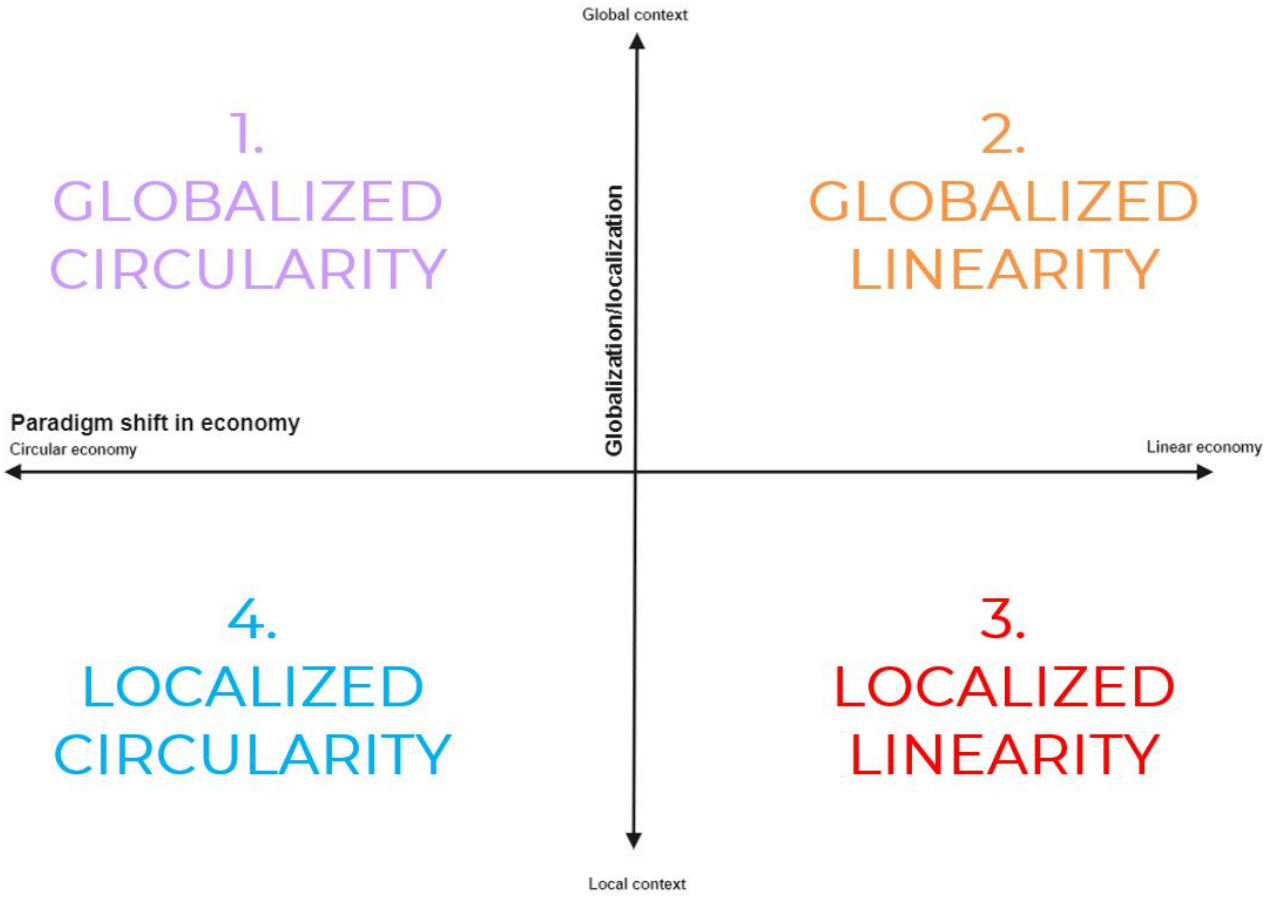

Figure 2. Initial scenarios of business education in 2055

4. Four scenarios

Four initial labels were created to identify the four scenarios:

- **Scenario 1: Globalized Circularity**, characterized by a paradigm shift towards circular economy and increasing globalization
- **Scenario 2: Globalized Linearity**, characterized by a business as usual, linear economy paradigm and increasing globalization
- **Scenario 3: Localized Linearity**, characterized by a business as usual, linear economy paradigm and increasing localization
- **Scenario 4: Localized Circularity**, characterized by a paradigm shift towards circular economy and increasing localization

During the final part of the second stakeholder workshop, the participants were asked to brainstorm and share some initial keywords that could characterise each scenario as defined by the two axes and to start developing initial narratives. The results can be seen in figure 3.
The ABIS team then worked internally on further defining the storylines of the 4 scenarios. Most importantly, in each scenario the authors tried to envision not only the business education perspective, but also the context in terms of political, economic, societal, technological and environmental aspects (PESTEL framework).

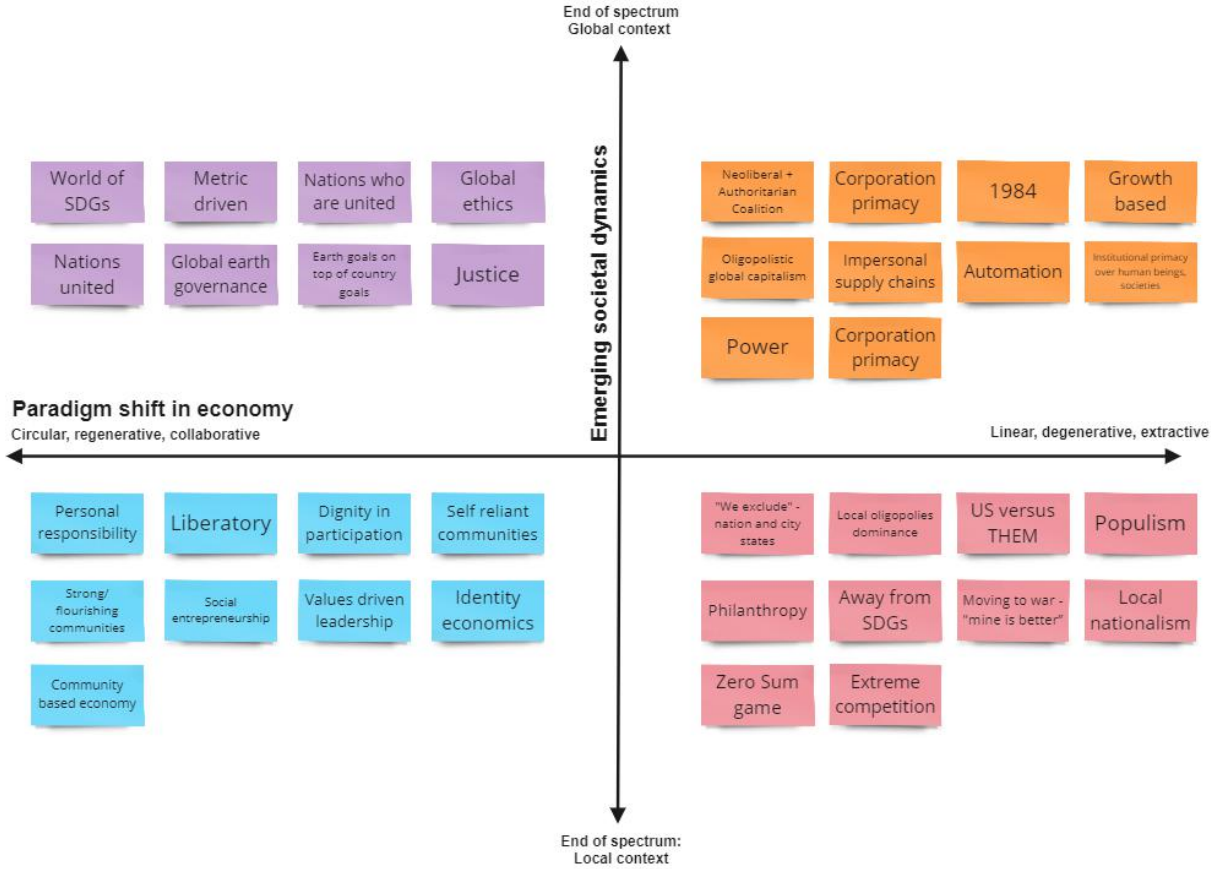

Figure 3. Initial keywords characterizing the four scenarios of business education in 2055

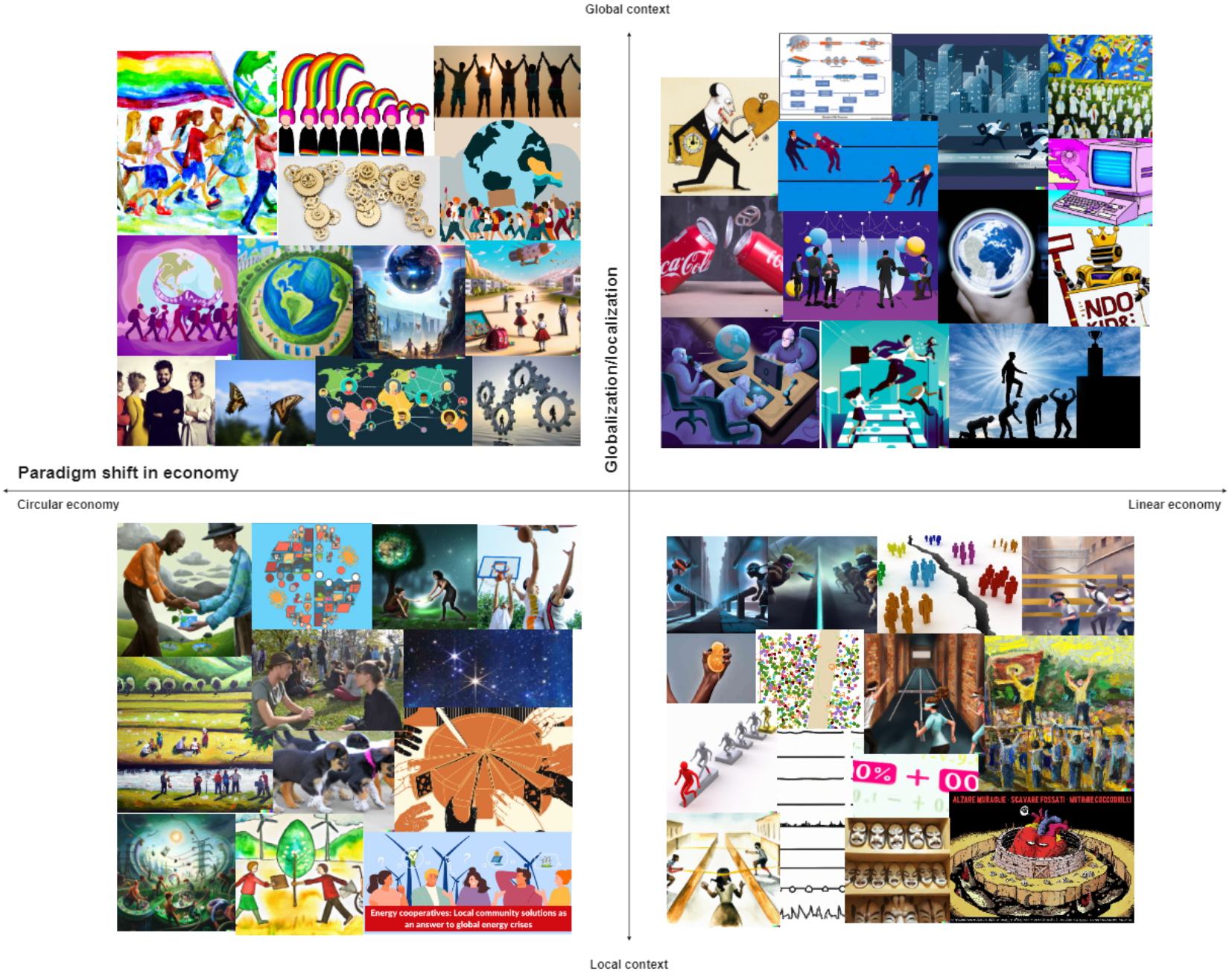

Figure 4. A visualization of the scenarios of business education in 2055

The authors also used online image search as well as the OpenAI picture generator DALL.E2 to explore their understanding of the 30-year scenarios in a more illustrative, visionary, and imaginative way. The visuals are available in Figure 4.

The scenarios were validated during the third stakeholder workshop, which took place online on April 3, 2023. The audience consisted of the relevant stakeholders identified in step 1.c, most of whom were participants to the previous workshops. The final workshop featured the presentation by the ABIS team of the four refined alternative futures for business education. Feedback and further inputs by participants were elicited to finalise the scenario narratives, specifically encouraging participants to reflect on plausibility and consistency criteria.

The participants' insights were harvested by the ABIS team and integrated in the further developments of the scenario narratives, which built on the team's collective intelligence and underwent several iterations. Before publication in Spring 2024, the draft paper received final feedback by the participating experts. This report is based on the recommendations and comments received and further work of the authors. The final scenarios are showcased in the Figure 5 and briefly described in the following page.

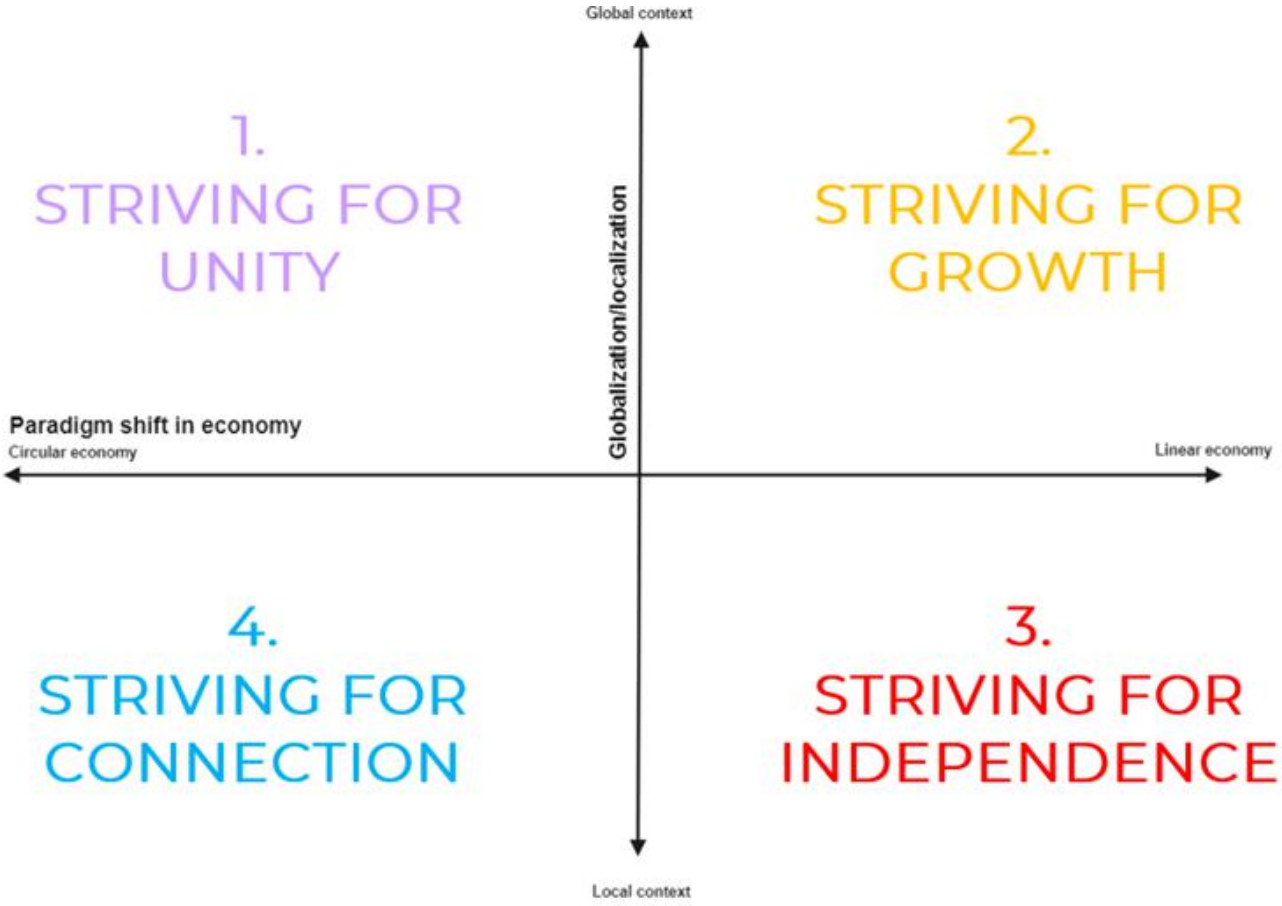

Figure 5. Scenarios of business education in 2055

- **Scenario 1: "Striving for unity":** Increasing globalization and a clear shift towards sustainability and circular economy take place. The EU and nation states lead the transformation, supporting more circular production and sustainable consumption. While some industries decline, global corporations embrace circularity. Global challenges and geopolitical tensions are managed through strong international collaboration, fostering a sense of unity. Technology transfer and AI adoption advance resource efficiency and societal well-being. Business education transforms towards circularity and values-based learning, emphasizing collaboration and practical skills, leading to the rise of pluriversities addressing transdisciplinary, real-world challenges.

- **Scenario 2: "Striving for growth":** Global economic ties deepen, and conventional production and consumption patterns do not change from the business-as-usual of the 2020s. Nations and corporations maintain their focus on economic growth and technological innovation. Sustainability efforts are sidelined by economic interests, with circular principles used mainly for efficiency gains. Business education prioritizes job readiness, rewarding top academic performers and encouraging students to embrace innovation and entrepreneurialism. Hyper-competition and self-centred attitudes develop, reinforcing profit-driven corporate behaviours and contributing to worsening environmental conditions and societal disconnection.

- **Scenario 3 "Striving for independence":** Geopolitical tensions rise due to resource scarcity, environmental degradation, and climate challenges. Globalization weakens, prompting protectionist policies in nation states and self-reliance within communities. Sustainability goals falter without effective international collaboration or regulation, hindering widespread adoption of circular economy. Renewable energy investments increase, yet climate measures remain insufficient, fostering activism and local innovations. Business education becomes politicized, with highly regulated curricula emphasizing technical studies and regional specialization.

- **Scenario 4 "Striving for connection":** A shift towards community-focused priorities and widespread adoption of circular economy take place. National economies become less interdependent as larger political entities like the EU dissolve. Economic investments prioritize local development and sustainable production. Local solutions to social, environmental and climate issues emerge, while citizen empowerment and sustainability gain prominence: Communities tackle challenges with decentralized, participatory approaches fostering altruism, work-life balance, and knowledge-sharing. Business education emphasizes active citizenship, integrating campuses with society and promoting responsible use of AI tailored to community values.

5. Robust strategy and dissemination

ABIS plans to communicate the report to a broad audience interested in future developments of business education, including **deans, academic and non-academic staff, policymakers, students, and business professionals**. Most importantly, the scenarios will be further disseminated via a **new tailored version of the Scenario Exploration System (SES)**, a gaming and foresight tool developed by the European Commission. This tool was initially designed to support policy makers and engage them in long-term visions of different scenarios in an interactive and systemic manner, while taking on a societal role to take actions, invest and collaborate with other stakeholders to achieve these future realities.

ABIS has pioneered the application of the tool within academia. With the new tailored **Futures of Business Education SES**, we aim to engage academic executive teams to build their organisational capacity for long-term, strategic thinking and stakeholder engagement; to explore uncertainty, change and interconnectedness; and ultimately to further develop their sustainability strategies and action plans. The tool will be used in SES workshops within and across institutions throughout Europe and virtually, providing participants with the mandate, motivation, and confidence to change practices towards sustainability. The workshops will be launched in late 2024 and 2025.

The next sections dive deep into the four scenario narratives, detailing developments until 2055 decade by decade. In each scenario the socio-political-economic context is presented first, while business education follows.

Scenario 1: Striving for unity

1.1 Key developments in Europe

Overview

This scenario is characterised by a h**igh degree of interconnection and interdependence** between national economies, financial markets and trade flows. Growing risks and consequences of environmental degradation, climate change and resource dependency, as well as increasing social movements, lead to a **reorientation of economic interests in service of nature and society. Circular economy models** of production and consumption take hold. The European Union (EU) and nation states have played a key role in the process, regulating and adopting **strong measures to incentivize the reduction, reuse and recycling** of existing products and materials, and introducing conditionalities to less sustainable activities. **International organisations** such as the UN **gain more recognition and power**.

While some industries decline, such as fossil fuels energy, fast fashion, electronics appliances and traditional automotive manufacturing, **global corporations keep operating across borders and seize the opportunities of circular models** by implementing circular design and innovations in their products, business models and supply chains. Global competition and geopolitical tensions are managed through strong international collaboration and broad coalitions, reducing polarization and fostering a sense of unity.
As globalisation makes technology transfer easy, we see the growth and adoption of connecting technologies and efforts are made to ensure equitable access to information and knowledge. Educational institutions collaborate globally, sharing best practices and research findings to foster innovation and progress. **The use of AI is widespread and leveraged for the advancement of societal wellbeing**. In combination with the adoption of open science, it further facilitates the **implementation of resource-efficient, circular production processes.**

10 years (2025 - 2035)

The scenario begins in a context of growing resource scarcity, increasing prices of raw materials and rising societal concerns over the sustainability of existing business and economic models within planetary boundaries. During the first decade, national governments and the **EU strengthen their efforts to reach the carbon neutrality goal by 2050 and follow through on the Circular Economy Action Plan**. In particular, new policies and legislation is adopted on the production of more sustainable and bio-based products, use of raw materials, clear labelling to promote reuse and recycling, the extension of product life cycles and specific policies for key value chains (e.g. electronics, textiles, and packaging). The EU also takes on a leading role in strengthening international cooperation. Coordinated policies and agreements are reached on the management of natural resources and circular economy objectives are included in free trade agreements and external funding policies. Countries prioritise collaboration to tackle shared challenges, and geopolitical tensions are addressed through diplomacy, dialogue, and multilateral agreements. Efforts are made to foster the flow of knowledge, ideas, people, and goods, fostering interconnectedness and cultural exchange. **Multilateral cooperation becomes a cornerstone of decision-making processes**, ensuring diverse perspectives and inclusivity in shaping global policies. As a continuation of the UN SDGs, in 2030, governments worldwide ratify the new framework of the UN Regenerative Development Goals (RDGs) and the Agenda 2050. In order to keep countries on track on this goal, a global regulatory body for sustainability - the World Sustainability Agency (WSA) - is created.

Increased global collaboration, efforts to reduce raw materials dependence and more ethical relations between developed and developing countries have led to **considerable growth and improvement of living standards in Third World economies.**

Following the policy push towards circularity and technological advancements in AI and data-driven manufacturing, **companies start developing more resource-efficient and sustainable production processes, exploring cross-cutting supply chain areas, and implementing open innovation models.** Global collaborations and market opportunities are sought. The favourable policy and economic conditions **consolidate the corporate value and financial power of big multinational corporations,** which nevertheless progress on incorporating sustainable practices into their operations.

Renewable energy is becoming commonplace, with heavy global investments in infrastructure, utilising wind, solar, hydro, and biomass sources based on geographical suitability and research advancements. Fossil-fuel giants face trials over climate crimes and are obligated to pay climate reparations. Preservation of ecosystems, biodiversity and natural and cultural heritage gains momentum.

Consumers are changing and reducing their consumption patterns and embracing more sustainable and healthier lifestyles, prompting businesses to provide sustainable products and services. **Traditional 9-to-5 work hours are replaced by more flexible and hybrid arrangements, with remote working** becoming dominant in most sectors. This change results in reduced commuting and better work-life balance for employees and reduced need for office space for companies, contributing to environmental sustainability.

20 years (2035 - 2045)

In the next two decades, significant developments to fulfil a circular economy, equitable wellbeing and citizen empowerment take place. **The EU achieves climate neutrality by 2045** (5 years before the target date) as the urgency from migration pressures and climate-related extreme weather events pushed for quick policy developments and implementation. Due to technological advances and the development and mainstreaming of efficient circular models, global **CO2 emissions start to decrease without compromising corporate profits**. The mining industry declines as recycling and the use of waste as secondary materials in the EU fulfils the demand for new materials for circular business models.

Efforts are made by governments worldwide to **address inequalities** and foster social cohesion. The strong focus on international cooperation in the past and the development of legally binding laws by the recently established World Sustainability Agency sets the ground for proactive and significant actions. **Global average temperatures surpass above pre-industrial levels, however they are stabilized below 1,7 degrees Celsius[2].**

Building on the longstanding search for alternatives to the growth-based model, international consensus is found on an **alternative indicator to GDP and the new Earth Wellbeing index is launched**, taking into account a wide variety of factors – including mental and physical health, education and learning, "green" infrastructure, volunteering, community work and care economy. The departure of the United Kingdom from the EU served as a wake-up call, leading to **continued efforts to strengthen the EU**. After years of negotiations, a key agreement among EU Member States is struck on the harmonisation of tax regimes, aiming to create more consistency, economic stability, and equity. Concurrently, the G20 countries agree to increase the global minimum tax charge, making it harder for large multinational corporations to shift profits to low-tax jurisdictions. **Governments worldwide ban fossil fuels as renewable energy sources become the standard**. They also invest in sustainable transport infrastructure, including smart and efficient regional public transport systems and encourage the use of environmentally friendly modes of transportation.

[2]In 2015, the Paris Agreement set a long-term temperature goal to keep the rise in global surface temperature to well below 2°C above pre-industrial levels and pursue efforts to limit it to 1.5°C above pre-industrial levels. To keep global warming to no more than 1.5°C, GHG emissions need to be reduced by 45% by 2030 and reach net zero by 2050. At the time when the Paris Agreement was signed, the world was projected to reach the 1.5°C threshold by 2045 (over a 30-year time frame, the standard reference period to define climate as determined by the World Meteorological Organization). Starting from this data point and based on the developments in each scenario, the authors imagined an estimation of global warming at the end of the second decade (by year 2045) compared to the 1.5°C benchmark.

Generation Z, born and raised in a digitalized world, reaches key positions in corporate and political decision-making. This further strengthens global sustainability efforts while balancing social equity and wellbeing concerns. **New technologies and AI generated solutions are leveraged** in the development of circular supply chains and models and influence the daily life of citizens. The **four-day workweek gains momentum**. Citizens are actively involved in research, science, and decision-making processes, with their voices and ideas being valued and implemented. AI and open science bring changes in many sectors, from education to health, leading to significant advancements in disease prevention and treatment.

At the end of the decade, the UN recognize the right for all people to have free access to the internet worldwide and agree to work on improving infrastructure to bridge the digital divide. International collaboration enables the development of ethical use of AI to combat misinformation and ensure that accurate and reliable information is accessible to all.

30 years (2045 - 2055)

As a result of the significant changes that have occurred at EU and global level, **circularity is the dominant paradigm in economic policy and business**, allowing a comfortable lifestyle for most EU citizens while decreasing negative environmental impacts and dependence from the use of natural resources. Thanks to the application of circular economy, **the soil, air and water are well preserved** compared to 2035 levels and remain vital, resilient and productive. Old and new challenges require careful attention and management.

The shift in the educational paradigm two decades ago bears its fruits with consistent investments in sustainable consumption, responsible production, and nature conservation in the EU. **The ecological footprint of production and consumption in Europe decreases significantly** due to the circularization of supply chains and rapid advancement in technologies like carbon capture and storage. High digitalization, big data, and AI streamline work processes, leading to increased efficiency**. Transparent governance and accountability frameworks are established**, ensuring the responsible use of technology, and protecting democratic values and human rights. Creative industries thrive, while routine tasks are automated. Professional development emphasises talent and meaning, and there is space for creativity and social entrepreneurship.

Geopolitical tensions related to the control of natural resources diminish as **international collaboration continues** and **urban mining and refurbishing become the primary sources of materials**. The wellbeing gap between the Global North and Global South is shrinking, decreasing conflicts and migration driven by survival needs. At the same time, the USA loses its dominant position. This starts a new multipolar order, redefining power relations and potentially reforming international institutions in order to maintain global stability. Western-driven international efforts might face opposition due to the growing weight of **emerging economies, indigenous traditions and ethnic interests requiring proper representation**.

Internally in the EU, the strong focus on circularity and the pride with the progress achieved by this European model lead to a sharp **increase in societal trust**. However, this hides some discontent and marginalisation of critical voices, left-behind groups and actors struggling with the transition. The EU circular model leads to a society with limited space and psychological freedom for businesses and people who do not meet the implicit ethical standards, creating layoffs, potential dropouts, polarised minorities with different perspectives and interests and sabotaging movements. In an effort to address this, the **EU introduces the provision of some basic resources such as Wi-Fi, education and healthcare to all citizens**. Some national governments follow suit, by approving legislation on basic income, paving the way to a new era of social innovation and fuelling further efforts towards unity.

1.2 Business education developments

Overview

In this scenario, business education undergoes a considerable transformation in how it is structured and delivered. In the first phase, in alignment with circularity and sustainability goals, **research outputs and education programs in circular economy increase**. Following a **general reform towards values-based education** and improved sharing of best practices, **collaboration skills** are taught as core subjects in business schools' curricula, which also adopt transformational learning models involving cognitive, affective and practical skills (**head-heart-hand approaches**). Such openness leads to closer partnerships and joint initiatives with industry and societal stakeholders, with business schools developing into more **horizontal, participatory, and networked organisational structures**. The scope of the societal challenges that need to be addressed gives rise to more and more international and transdisciplinary research and educational paths. Thanks to advancements in digital technology and AI, education is provided in virtual environments and on-demand, substantially increasing accessibility and personalized learning. Eventually, this paves the way to business education being part of pluriversities, tertiary education learning environments making use of relevant societal infrastructure (industrial parks, hospitals, public sector spaces etc.). **Pluriversities act as application-based learning spaces**, where students from different backgrounds can come together in transdisciplinary teams and peer groups to tackle real-world challenges.

10 years (2025 - 2035)

Recognizing the key role of education, a global, transformative, values-based education reform is developed and launched. Education systems at all levels are rethought and reconstructed to go beyond skills and knowledge acquisition in favour of developing the necessary values to achieve the UN RDGs (the successors of the SDGs). As a result**, business schools introduce** new subjects integrating **the development of the mind, heart, and character. Intercultural sensitivity, conflict management, ethics, relating and collaborating skills become core subjects** across business schools' curricula, recognizing the importance of these competencies in a globalised world. Business schools also become larger and maintain an international focus.

Students increasingly have the freedom to choose their courses independently, with personalised **education tailored to** their **individual learning needs**. This approach fosters interest in self-development and allows students to pursue and specialise in areas of their interest. Practical learning, collaboration and networking opportunities are promoted, connecting students with industry professionals and alumni networks. Evaluation methods become more flexible, accommodating different learning styles and encouraging creativity.

The **empowerment of the researcher community** is emphasised as a key driver of global cooperation and progress on sustainability and circularity commitments. EU and national **research funding increases**, helping researchers' role in fostering innovation, and finding solutions to complex challenges. **Academic freedom is highly valued**. A public, open-access, international database is created to facilitate communication and collaboration among researchers. Research assessment was reformed to recognise a diversity of contributions to science and to include incentives for researchers to engage in **citizen and open science**. As a result, the traditional publishing industry is forced to review its operating practices, business models and margins. Research outputs in different publishing avenues, as well as educational programs in circular economy increase, providing knowledge and skills to implement circular business models.

This translates into closer collaboration between business schools and big enterprises through **joint labs and acceleration hubs**, enabling access to the latest technologies, bridging the gap between research and practical application, aiding the commercialization of applied research and promoting the uptake of startups. The sharing of best practices and knowledge among business schools themselves facilitates the identification and adoption of innovations in their infrastructure, operations as well as research and educational programs.

20 years (2035 - 2045)

In response to evolving societal, political and economic needs as well as technological advancement, business education adapts. New organisational structures, virtual learning environments, interdisciplinary approaches, and a focus on purpose-centred careers emerge. Technological advancements and inclusive learning systems contribute to enhanced access, collaboration, and the development of talents with a global mindset.

Business schools increasingly adopt more **horizontal, participatory, and networked structures. Decision-making processes become more inclusive**, involving faculty representatives, students, and trade unions, drawing from wisdom from the collective to deal with environmental challenges which threaten our way and standard of life. Open science and open innovation practices are encouraged, promoting interdisciplinary research and partnerships. **Affordability and accessibility are prioritised**, with reduced fees, scholarships, and expanded financial aid programs for students from diverse backgrounds. This transformation in governance, research, and delivery models leads to **radical reforms in international accreditation standards and rankings,** now centred on ESG criteria.

Technological progress is unprecedented, challenging education to consider both risks and opportunities. **Virtual educational environments emerge**, accommodating learners from diverse locations. Virtual reality and AI enhance even more the learning experience by providing immersive environments and facilitating content assimilation. **Distributed learning systems** improve access to education, bridging infrastructure gaps and reaching even remote areas. Business education becomes more integrated with other societal institutions, commonly offering interdisciplinary joint-degree programs.

The need for standalone campuses gradually decreases, as students primarily engage in online learning or are encouraged to work on projects at different stakeholders' premises. Students form **international teams** to address global complex challenges, fostering collaboration and cross-cultural understanding. More attention is given to learners' perspectives and needs, which increasingly influence curriculum development. Stronger cooperation between universities leads to the establishment of transnational research institutes, transcending political borders and in collaboration with the UN University.

Lifelong learning and professional development are emphasized, with upskilling and reskilling becoming a priority for business schools. Certifications, credentials and bootcamps are co-designed with other training providers (employers, industry associations and trade unions). These solutions support a wide variety of learner profiles and career pathways and are more responsive to the evolving business landscape. A **shift towards purpose-centred careers** is observed among students, indicating a growing emphasis on making a positive impact and aligning personal goals with societal needs.

30 years (2035 - 2045)

In this last decade, several changes occur in the higher education landscape. **Academia** in general **gains importance and influence**, with academic leaders participating in political and business decision-making processes. A well-established, open science framework as well as continued funding supports research and innovation, in particular dedicated to addressing the current social challenges. The use of AI applied as a learning tool is commonplace.

The complexity of circular economy implementation and the need to manage the associated challenges and trade-offs give the final push towards the development of **transdisciplinary research and educational institutions. Universities are transformed into pluriversities** making use of relevant and available societal infrastructure (industrial parks, hospitals, public sector spaces etc,.); business education is therefore provided within these new institutions. Pluriversities serve as makerspaces and application-based learning spaces, fostering transdisciplinary collaboration and real-world problem-solving. Students from various backgrounds come together in teams to work on key subjects they are passionate about. Pluriversities adopt **rotating leadership approaches** based on diversity and inclusion standards. The governance structure of such institutions includes faculty representatives, student unions, trade unions, and other stakeholders.

Grades become less important as on-demand learning expands, allowing instant knowledge acquisition through various sources such as e-learning, e-peer-to-peer learning, e-mentorship, and e-guidance. If evaluation occurs, students are assessed collectively as part of their teams. The emphasis on on-demand learning and evaluation within teams reflects a shift away from traditional grading systems. Overall, the future of education features inclusive leadership, innovative learning environments, and a focus on transdisciplinary collaboration and real-world applications.

Scenario 2: Striving for growth

2.1 Key developments in Europe

Overview

The scenario portrays a future characterised by intensifying **interconnection among national economies, financial markets, and trade flows** as well as **dominance of business-as-usual production and consumption** patterns. Despite the worsening effects of environmental degradation and adverse climate events, sustainability commitments fail to be implemented, international agreements and standards are highjacked by economic interests and circular principles are only applied as technical fixes for efficiency gains**.**

Economic investments and political decisions, heavily influenced by the double-edged sword of technological innovation, are undertaken to **prioritise innovation, economic growth and the interests of nation states and companies** by leveraging global opportunities. In this scenario, the global market becomes a catalyst for economic progress, encouraging the development of new products, technologies, and industries, underemphasizing efforts to mitigate the effects of climate change and resource scarcity as well as social justice and equity issues.

While old threatening global challenges are addressed and quieted by the **unquestionable belief that "technology will save us all"**, the growth imperative keeps being pursued by and, in turn benefits, most companies. Large corporations, especially in the fossil fuels, mining, and technology sectors, ensure their profits from resource extraction and overconsumption within an essentially **free market economy. Global supply chains are increasingly integrated, deliver products very fast and are constantly optimized** by advanced technological infrastructure, while AI pushes **citizens to consume ever growing quantities of products.**

While people are mainly valued as "performing assets" both in the professional sphere and personal sphere, wellbeing comes second to technology's rules and developments and a power-and-efficiency culture predominates. This leads to hyper-competitive and self-centred attitudes at individual level as well as to oligopolies, authoritarian institutional models, and the pursuit of power at organizational and macro levels, eventually resulting in **political inertia and impersonal societies.**

As an industrialist and extractivist paradigm is perpetuated, irrespective of product life cycles, production levels, externalities and social implications, and profitability stands in the way of circularity, the occurrence of extreme weather events increases, continuing the trend of the early 21st century and becoming more constant phenomena.

10 years (2025 - 2035)

In the first decade, **international efforts on the sustainability agenda fail to bring about much progress** as the EU and national governments focus on other priorities, such as national security and defence. Economic and political decisions prioritise innovation and economic growth, while trying to attract foreign economic investments. International trade and exchanges are alive and dynamic, and focused on strengthening interconnections among States and fostering a competitive, global market economy. Countries compete for export markets, inward foreign direct investment, and leadership in technology-intensive industries.

Large corporations dominate internal and external economic relations. Companies in the fossil fuels and mining industries maintain leading positions as they keep feeding a growing demand for energy. Financially driven and cost-effective multinationals pursue growth leveraging standardised and automated operations. Translated into data, the market capitalization for the top 50 firms passes from 28% of the global GDP in 2020 to 51% in 2035[3]. A few **large tech companies, particularly based in Asia, stand out** and are capable of altering the behaviours of producers and consumers, therefore influencing the trends of the global economy, increasing competition between Europe and new emerging powers.

The narrative of green growth, based on decoupling from resource use and technological breakthroughs, **starts cracking** and its actual implementation is inconsistent and contradictory across countries. The EU Taxonomy for Sustainable Activities and the Net-Zero Industry Act fail to provide the benefits they aimed for, creating frustration, and decreasing societal trust in progress on sustainable development. In reality, **sustainability and circularity are pursued only to the extent to which they are financially convenient**. While rich nations appear to decouple GDP from domestic raw material use, imports of materials from international trade increase. The EU's dependency on certain countries for critical raw materials and technologies is managed via international trade agreements and long-term contracts, however risks and vulnerabilities are exposed during regular price shocks and crises.

The belief in technological salvation diminishes the sense of urgency to drastically curb emissions. Companies adopt more energy and resource efficient solutions and circular models only for efficiency gains and cost savings, and they also heavily engage in reputation management and lobbying. As a result, in 2035 only 5% of used materials, compared to 7.2% of the decade before, are cycled back into economies after use.

As technology is increasingly seen as "the saviour from all evil", **AI and machine learning-based systems are mainstreamed** in all industrial sectors. Traditional, manual and easy-to-automate jobs are substituted by machines and AI-based robotics, while the digital know-how of big corporations makes fields like digital marketing and advertising expand. Most productive sectors have fully integrated computing and digital technologies and governments keep spending a larger portion of their GDP into investments in digitalisation, data, and robotics. New regulations try to set limits on technological use and abuse. However, the social consequences of unlimited economic growth led by technological innovation remain unchecked. **Unemployment has increased** due to smaller companies failing to adapt and the uneven income distribution leads to **increased inequalities and social fragmentation**. Moreover, market volatility and new technologies leads to higher pressure and stress at work and less healthy working environments. Aggravated by a new attitude of considering people as assets, this favours a rise of workaholic culture, negatively affecting people's well-being.

Despite the heavy exploitation of natural resources and worsening social and environmental conditions, thanks to technology development **some virtuous solutions in waste management, energy storage, carbon capture, hydrogen, and electrical mobility, among the others, emerge**. Additionally, although business-as-usual lifestyles still dominate, consumers start changing some consumption patterns, for example towards more plant-based foods. In order to meet these changing dietary preferences, the use of agricultural land has continued expanding. The growth in the world population in general increased the **pressure on natural resources supplying energy and food**.

20 years (2035 - 2045)

As much as the EU had declared to turn carbon-free and lead the world to lower emissions, the consequences of no outstanding political signals, significant financial investments and weak international cooperation on sustainability goals are made evident by 2045. **Plans for decarbonized reindustrialization fall apart** in the face of geopolitical uncertainty and dependency on foreign critical minerals. The growth of clean energy technology reveals to be insufficient to meet the energy demand, causing continued reliance on fossil fuels. Circular models fail to be implemented. The global economy continues with its **business-as-usual** pattern, with governments and corporations unable to meet sustainability targets set in previous decades and acting regardless of them.

The global market is increasingly dominated by few big multinational corporations, after many companies failing to survive in a highly competitive environment go bankrupt. This power shift, coupled with the existing wealth inequalities, aggravates workers' conditions as some tech companies adopt **automation-driven business**

[3]The original data point from 2020 is from a study by Bloomberg Economics (source: Orlik et al., 2021). Starting from this data point, and based on the developments in this scenario, the authors imagined an estimation of the market capitalization of the top 50 firms with respect to GDP compared to the 2020 benchmark.

models (allowing them to scale up without much additional workforce) and thus only need employees in low-paid jobs. By the end of the decade, the median profit margin for top 50 firms has more than doubled compared to 2020 (40% vs 18,2% in 2020[4]). Sustainability departments are downscaled and **sustainability-oriented companies and ESG funds fail to provide adequate shareholder returns and crash,** resulting in a wave of **layoffs of sustainability professionals**. Consumers in general are not incentivized to adopt more sustainable lifestyles. As technological developments have exceeded expectations**, big enterprises turned their office environments into meta offices,** where employees can spend 100% of their time as they can find all that is necessary for work and pleasure at one place. At the same time, due to blurred boundaries between personal and working life, **the higher pressure on individual performance causes** many to develop **physical and mental health issues**, including sleep deprivation, anxiety and depression. Intense competition, hyper pressure, and workaholism lead to a generation of burnouts.

The belief that technology will save the world is now deeply rooted into society, with **algorithms setting trajectories of connections between people**. This extreme digitisation, facilitated by improvements of virtual reality, AI, and robots, and the use of the internet for education and working purposes, leads to **severing of real life, community-based links and to isolation of individuals.**

Technological innovation is also happening in the health sector, with AI-driven algorithms diagnosing diseases and recommending treatments with greater accuracy and speed; however, data privacy, security risks and fairness concerns are widespread. Artificial augmenting of vision, developing hearing and cognitive abilities are now available, but many people invest in these alterations even at the expense of being in debt.

Individual efforts and the indecisive sustainability strategies at political level made in the previous decade are not enough to manage the aggravated impacts of climate change. As governments have not followed upon on commitments to achieving the environmental standards set in the first quarter of the 21st century, **GHG emissions have increased, with the global average temperature close to being more than 3 degrees Celsius above pre-industrial levels**. With the failure to achieve the UN SDGs and the Paris Agreement in the previous decade, the world is suffering more frequent and severe weather events which are affecting the most vulnerable people. **The inequalities in society are rising** as some people are left without homes and savings in the aftermath of **extreme weather events and environmental disasters. As a result, people start rioting** to demand more support from governments as well as urgent action on climate adaptation and mitigation.

30 years (2045 - 2055)

Despite efforts to gain economic and political power, the EU has lost its importance on global scale, while a climate disaster has forced the **UN to relocate their headquarters to southern China**, confirming the geopolitical shift in power to Asia. **Competition among States and conflicts triggered by increasing resource scarcity** have intensified worldwide, sometimes leading to **economic embargoes** to be overcome by international diplomatic missions, counterbalanced only partially by the unceasing positive slope of the globalisation growth curve and consequent exchange of people and goods.

With technological innovations leading to less pressure on scale, big multinationals downsize into big and medium. Although domestic banking assets and profits of emerging countries have outgrown those of G7 countries, reducing the historic gaps between developed and developing countries, the will of power of nations brings all of them to a more aggressive resource use and exploitation. As political institutions and companies are goal and profit oriented, in both cases leaving little space for personal development and fulfilment, **individuals start experiencing feelings of alienation, generalised depression and dissatisfaction.**

Increased security vulnerabilities and overall IT expenditures force companies to increase costs for cyber breaches. Meanwhile, implants improving physical and cognitive capabilities are cyber-attacked, transferring wrong information or erasing memories of political events or conflicts.

[4]The original data point from 2020 is from a study by Bloomberg Economics (source: Orlik et al., 2021). The 2045 estimation was imagined by the authors compared to the 2020 benchmark.

The Earth's human population has reached 9.7 billion, causing global unrest over lack of resources and displacement of people. Freshwater availability has further been strained, with over 40% of the global population projected to be living in areas under severe water stress. As a result of environmental inaction, biodiversity has decreased considerably, mainly due to land use and infrastructure development required by globalisation, as well as pollution and climate change.

At the end of the decade, **major polar melting catastrophes and the resulting sea level rise** in coastal regions all around the world have caused a massive downturn of the global economy, several blackouts, loss of tech infrastructure and the relocation of residents to higher grounds, revealing the ultimate cost of overexploitation of natural resources and policies of unmitigated economic growth carried out in the last decades.

A global coalition made of a new generation of corporate leaders and heads of governments is launched for "Restoring the Earth", with the inclusion of representatives of affected communities, sustainability professionals previously laid off, and proponents of alternative economic systems.

2.2 Business education developments

Overview

In this scenario, business education has moved away from a talent development and leadership-focused approach to an employability-driven one, heavily funded by corporations. Business schools emphasize technology and engineering, leading to an increase in technical degrees, with international strategy, technology management, data analytics and computing as core subjects and focus on rewarding academic overachievers and best performers. High pressure for performance leads to exclusivity, with many students struggling to keep up. Sustainability receives less and less attention in business schools' curricula and research, with little ethical inquiries on AI and technology use. Efficient and highly digitised teaching approaches leave little space to personal and social intelligence development of students. The global competition among business schools increases due to internationalisation and funding from companies going only to top-ranked academic institutions. The corporate influence can be seen also in international rankings, accreditation institutions and academic publishing. Students are encouraged to think globally, to embrace innovation and prioritize economic goals and to excel in practical, technology-driven skills. This approach fosters a results-oriented mindset with little room for ethical or sustainability implications.

10 years (2025 - 2035)

Business education has gradually distanced itself from a managerial approach with leadership and decision making at its core. Increasingly economy-driven instead of socially driven, business schools have started receiving considerably more **funding from big corporations**, whom they collaborate with on academic and extracurricular activities. **Private business schools** gain market share and come to **dominate the global "Top 200 Universities"** in **new company-led rankings**. Alongside, the interest of the funding enterprises in the best and most hard-working talents intensifies **competition within and among business schools**, **universities, and research centres.** Due to this dependence, **employability represents the key driver** of business education, while progress on the sustainability agenda in research, teaching and institutional practices slows down.

Business education maintains an international focus and tuition fees are defined by market prices depending on brand reputation. Both research and education follow a neoliberal paradigm based on a rational, homo economicus approach. **Research on traditional business studies, with an emphasis on technology, dominates**.

The numbers of technical universities and double-degree programs merging business and engineering increase. At operational level, **international virtual schools** have developed on a global scale, with **students learning remotely with little to no say on their studies** - passive followers of dictating teachers and educational

institutions. Students spend most of their time in schools, feeling under pressure and isolated. Teaching occurs through practical learning, while lecture materials are only available online; coding and computing become core subjects of curricula. Fundamentals of software development, machine learning, data analytics and cybersecurity are also taught, shaping the managers of tomorrow with **technical and engineering skills**. In essence, there is a commercial response to AI and technology advances with little ethical concerns and implications for education.

20 years (2035 - 2045)

The leading business schools are predominantly driven by technology, economics and employability, in alignment with political and business priorities. They strengthen their educational offer on operations management, international supply chains, technology and digitisation management, international finance, and compliance. Conversely, programs and **modules on sustainability do not attract the minimum number of students** and disappear from the market. Business schools who fail to adapt to this new reality either become small niche players or are absorbed by competitors.

Multinational corporations become the main sponsors, as well as target market, of business education. They fund augmented and virtual reality, cloud computing, and machine learning projects to make education more hands-on; they launch "Best in class", **a new international accreditation** for business schools **recognizing operational excellence, technological skills, and financial savviness;** and acquire academic A* journals, **increasing the competition among researchers** to publish their studies subject to high standards of academic rigour and relevance for business practice. This results in a publishing system which ultimately serves the purpose of economic growth and the benefits of a minority. A divide emerges in the research community between scholars who adapt to the new system and sustainability and circular economy scholars resisting and refusing to comply with the status quo.

Business schools' students and alumni - many of whom in leading positions in multinational companies - have an increasingly technological background. **AI and machine learning-based systems are fully integrated in research, teaching and organizational practices**. This facilitates more interdisciplinary research and open science and leads to a reskilling of administrative staff, researchers and educators and massive changes in pedagogies, with **students expected to login in the metaverse for at least 10 hours a day**.

30 years (2045 - 2055)

In the wake of the "Best in class" accreditation and other incentives provided by multinational corporations in the previous decades, high pressure for academic performance and future profit maximization has led to a **more exclusive, elite-addressed business education** system. Bigger companies essentially took over some business schools and turned them into their own educational institutions as part of their career development programs. Many **students cannot keep up with the rhythm and expectations of academic life and start** abandoning classes and **dropping out** from studies.

In the aftermath of de-mergers and down-scaling processes of multinational tech corporations, **mid-size companies become the most prominent economic actors, influencing** and turning into the main target market of **business education**. As a sought-after skill in the recruitment processes, **technological know-how remains an essential subject** to be taught in business studies to students. On the same line, the understanding of IT, AI and cybersecurity has become crucial also for professions in the public sector, as means to keep political and economic advantage over foreign competitors.

The limits of a business education paradigm fostering a shortsighted economic model become apparent, manifesting in the rapid deterioration of the eco-social context and exacerbating frustration within the academic community and society. Alongside the rising global societal movement to restore and regenerate the planet, many business education institutions face a **backlash from students, faculty members, activists and previously laid off sustainability professionals**, who ask for immediate changes. Massive protests, boycotts and acts of civil disobedience and resistance take place.

Scenario 3: Striving for independence

3.1 Key developments in Europe

Overview

The scenario portrays a future characterised by intensifying geopolitical tensions driven by natural resource scarcity, environmental degradation, overexploitation, and adverse climate events. The drawbacks of globalisation and the failure of international agreements to progress on sustainability goals result in **decreased international collaboration and trade**, prompting nation states to adopt protectionist policies and individuals to organize in self-sufficient communities.

Due to the instability of international cooperation, absence of political leadership at global level, and lack of accountability mechanisms for multinational organisations, the SDGs are not achieved, and **sustainability policies go largely unfulfilled. Circular economy models struggle to gain widespread adoption**. The EU and nation states do not prioritize regulating and incentivizing sustainable practices. Few conditionalities are imposed on less sustainable activities, allowing industries to continue with business-as-usual practices. However, as communities start relying on their own strengths and knowledge, local innovations and adaptations flourish, fostering entrepreneurship.

The few efforts to combat climate change and protect the environment remain fragmented and localised. A worthwhile development is heavy investments in developing renewable energy infrastructure in some countries. Advances in organic farming and precision agriculture also take place. Stricter regulations on the movement of goods and people lead to decreased mobility and lower carbon emissions.

The Schengen Area loses significance, retaining only a few members by 2040. Following the departure of the United Kingdom and subsequent exits by other countries, **the EU dissolves by 2055**. Anger intensifies among disadvantaged communities, and **technology is exploited for manipulation and erosion of democracy**. Environmental measures prove inadequate in mitigating climate change impacts, leading to widespread anxiety and activism. Far-right political groups gain dominance, exacerbating hostility between nations.

10 years (2025 - 2035)

The scenario unfolds in a context of **weakened international relations**, **geopolitical tensions**, **rising raw materials prices** driven by growing resource scarcity and **societal polarisation** leading to a decline in trust. In the first decade, the **UN SDGs fail to be achieved** and an agreement on further sustainability-oriented goals does not materialise. Similarly, the EU Taxonomy for sustainable activities falls short of its intended benefits, as it only reorientates the transport and energy sectors of the economy, leaving others to business as usual patterns. The EU fails to strengthen efforts to reach carbon neutrality goals and is far behind the milestones of the Circular Economy Action Plan by 2050. Amidst this, and as worldwide competition for natural resources intensifies, **governments worldwide recognize the need for sustainable management and protection of natural resources under their control**. They invest heavily in renewable energy infrastructure, utilising wind, solar, hydro, and biomass sources based on geographical suitability and research advancements.

As countries focus more and more on domestic policies and solutions to increase local supply to internal demand, the level of international trade and cooperation declines. Stricter rules for movement of people, goods, and services result in multiple countries leaving the Schengen Area, with the EU gradually losing power. As right-wing political groups gain prominence, some protectionist policies are endorsed by governments, leading to cooler and inimical relations among nations. **Increasing wealth inequalities emerge within countries**, with marked **disparities between urban** (home for the political and financial power) **and rural areas** (with untapped human capital and skills). Coupled with an increasingly manipulative use of technology by governments, **democracy is undermined**, **and frustration** among disadvantaged communities **intensifies**.

Environmental measures prove inadequate in mitigating climate change, which leads to **widespread anxiety and activism,** causing people to gather, riot and go on long-term strikes as their concerns go unheard.

Managing information flows becomes a struggle for nations, as fake news, propaganda, and unethical use of AI abound. **Governments attempt to control knowledge** within their own territories, leading to limited information access. Accurate information becomes a privilege of the affluent or those with influential connections.
As a consequence, **people begin organising themselves into communities sharing similar values, cultural backgrounds, and demographics**, further emphasising their differences from others. Striving for self-sufficiency, relying on their own strengths, resources and knowledge, these communities seek to find solutions to local problems, boost productivity, reduce unemployment and poverty.

While some local and regional communities make **efforts to combat climate change impacts and preserve the environment**, these actions **remain fragmented and localised.** The **limited sharing of knowledge and collaboration** hinder peer-to-peer learning and prevent a widespread adoption of best practices. In some countries, policies on quality food, organic and precision agriculture are introduced as a significant step toward protecting remaining forests and halting biodiversity decline. However, broader environmental initiatives, **global coordination and a systemic approach are lacking**.

To promote economic growth and resilience, businesses and professions shift their focus toward local design, innovation, and user-centred solutions. Creative adaptations and the use of local strengths and resources are harnessed, fostering entrepreneurship, and creating job opportunities. Consequently, **local products gain more value than foreign alternatives**, which are losing appeal for the average consumer.

Consumers remain largely resistant to changing their consumption patterns and continue to prioritise convenience and cost over sustainability. Businesses do not feel the pressure to provide sustainable products and services, resulting in minimal progress in reducing environmental footprints. They still **focus on short-term profits and fail to incorporate circularity into their operations**. Big corporations continue with traditional, resource-intensive production models, and their corporate value and financial power are unaffected by sustainability concerns. Traditional 9-to-5 work hours remain the norm, with limited adoption of flexible and hybrid work arrangements. Remote working remains limited in most sectors, leading to continued commuting and a poor work-life balance for employees.

20 years (2035 - 2045)

In the next 10 years, frustration arises from unfulfilled sustainability policies from the past. The EU climate neutrality goals fall through, and no coordinated international efforts are made to address the effects of global warming, overexploitation of natural resources and inequitable distribution of wealth, while climate-related extreme weather events severely impact different regions around the world.

Governments at national, regional, and local levels prioritise policies to support the local economy and competitiveness, providing subsidies to local companies with little consideration for their broader environmental impacts. Fossil-fuel and mining companies, for instance, keep operating with no restrictions. Public incentives and funding for sustainability and circular economy initiatives decrease, discouraging businesses to invest in more sustainable models and circular solutions. This perpetuates the continuation of business-as-usual practices. Recycling rates and the use of waste as secondary material show limited, mainly local improvements and circular models and systems do not gain enough traction.

Following the precedent set by the UK's withdrawal from the EU in 2020, several countries followed suit in the next decades. **By 2040, the EU dissolves** due to growing tensions, national interests, diminished motivations for collaboration and social polarisation. Simultaneously, **geopolitical tensions and conflicts escalate worldwide**

[3]The original data point from 2020 is from a study by Bloomberg Economics (source: Orlik et al., 2021). Starting from this data point, and based on the developments in this scenario, the authors imagined an estimation of the market capitalization of the top 50 firms with respect to GDP compared to the 2020 benchmark.

as nations vie for control over territories rich in natural resources. International organisations and trade alliances become less active and some of them cease to exist.

On the other hand, **local entrepreneurship thrives,** leveraging and developing short supply chains and collaboration with local distributors. Key industries hold significant positions within their respective regions and communities, serving as vital job providers. However, intense local competition (within nations and regions) prevails among businesses as they strive for market share and to attract top talent, embracing a "survival of the fittest" mentality.

Deepening inequalities within and among resource-rich and poor countries breed mounting tensions within society, leading to increased mistrust and hindering cooperation, ultimately fostering intolerance, and creating further separations, estrangement among communities and tensions. Hierarchies are reinforced to maintain societal order and control. Global migration is a challenging issue as climate and economic refugees face widespread rejection.

Geopolitical tensions result in a halt in international and work-related travel, as limited international cooperation renders such travel unnecessary. This significantly **decreases CO2 emissions from transportation as well as pollution levels** compared to previous years. Additionally, as interactions between countries decline, **local tourism flourishes.** That is not enough and the **world´s average temperature has risen 2.5 degrees Celsius warmer** than the preindustrial levels.

Ongoing advancements in technology and AI take place, although unevenly across countries depending on the availability of minerals, infrastructure, and technical skills. Governments aim to control the dissemination of information and knowledge, retaining key data and intelligence for reasons of security and public interest. Accurate and reliable information accessible only to those who have the financial means or personal connections to people in power, disempowering citizens and leading to **abuses of power, corruption, and other illegal activities.**

In some nation states and region, as part of cost saving, climate mitigation and environmental efficiency strategies, and after the development of efficient renewable energy structures, governments seek to develop smart and efficient regional public transport infrastructure and biking lanes, providing these services free of charge to registered community residents. However, the effects of degradation of environment, increasing adverse climate events, increased dependence on raw materials and unsustainable production practices is causing fear, climate anxieties and increased mental health issues in the population.

30 years (2045 - 2055)

As a result of the developments in the last two decades, **growth-oriented and resource-intensive business practices dominate** and investments in more sustainable consumption and production, nature conservation and social equality remain limited and fragmented. This leads to **unsettling levels of environmental deterioration**, causing some regions to become inhabitable, which cause a widespread sense of fear and deep polarisation within society. Subject to pervasive manipulation, **people across borders elect far right and populist political groups**, which now dominate governments at national, regional, and local levels. International hostility and conflicts related to control of natural resources escalate, to the point of resembling a new Cold War and in many cases resulting in wars and armed conflicts. The flow of climate refugees intensifies, but acceptance rates remain low, posing significant challenges for successful integration. At the same time, in response to the turmoil caused by inequality and environmental disasters, new fiscal havens emerge as socially and environmentally secure spaces for the wealthy to escape to.

As very few countries remain in the Schengen area by 2055, **tech-intensive border controls are re-introduced** and, as a result of increased migration flows, climate-related factors, economic challenges and conflicts, **some countries even resort to building physical walls, denying the right to cross borders.**

Despite some regulatory efforts by governments to address climate change, these measures are insufficient to mitigate its effects. Growing anger mounts in communities heavily affected by adverse climate events, soil degradation and exhaustion of natural resources. Circular models remain at experimental and/or local level due to limited material flows, policy incentives and funding, and financial, human or technical resources.

Considering the geopolitical tensions, limited international cooperation, and increased control of information, technology becomes a tool for manipulation, misinformation, and the erosion of democracy and human rights. On the other hand, cyber criminality and information leaks happen on a regular basis. **New hacktivist (activist hackers) collectives are formed all around the world to fight the system and expose wrongdoings against the people and the planet**.

Given the increasingly authoritarian governments on one side, and the progress of information technology and AI in generating, collecting and analysing data on the other, **citizens have become puppets in the hands of governments**, **highly vulnerable to the whims of those in power.** People are increasingly critical of the state of society, they start forming groups fighting against limited freedoms and misuse of technology as well as deteriorating liveability conditions.

3.2 Business education developments

Overview

Business education becomes highly politicised, with increased fees and a focus on more technical and scientific subjects at the expense of arts and humanities. Political instability intensifies competition among business schools, targeting national student populations and building stronger links and KPIs with local/regional businesses. Students' career paths are determined by high-pressure exams and evaluations. Curricula become strictly regulated by ministries of education, emphasising traditional economic theory. The focus of business research and education is steered towards local problems and needs, aimed to develop knowledge and skills to be used and applied for the benefit of local communities. Hyper-specialisation takes place based on regional industry and business requirements. The importance of international rankings and accreditations decreases. Tuition fees increase and, as a result, only the wealthy and well-connected can afford complete high education degrees. As little knowledge and best practices are shared between communities, innovation and progress is hindered and academic freedom diminishes, ultimately leading to protests and demands for more openness and freedom in education and society.

10 years (2025 - 2035)

Higher education systems drastically reduce their internationalisation efforts and increase their **focus on national markets**, often being strongly influenced by prevailing political powers. **Many HEIs more actively target local/regional student populations, but are forced to increase tuition fees**, as they cannot rely anymore on international students and external funding. **Financial instability and competition among business schools intensify**, resulting in closures, takeovers and fewer and larger HEIs. This also results in voluntary **redundancies of academic and administrative staff** as well as layoffs.

Business education **curricula predominantly follow a theoretical and traditional seat-time-based approach, rooted in the dominance of finance and economics and neglecting the value of collaboration, intercultural skills and arts and humanities.** There is a **greater emphasis on technical and scientific subjects**, which are perceived as directly contributing to productivity, driving economic growth, and benefiting local communities. In this regard, entrepreneurship is fostered and encouraged.

Under this system, **students have limited freedom** in choosing their courses and specialisation in areas of their interest. They face top-down teaching in mostly physical classrooms, increasing competition and are evaluated

based on very rigid assessment criteria and theoretical knowledge. Their future career paths are determined by high-pressure national or local exams and evaluations, leaving little room for flexibility or alternative paths.

Research funding is limited to national funds and international collaboration is hindered by barriers to the flow of knowledge across nations, political influences on academic publishers and little attention to open science initiatives. The role of research in fostering innovation, knowledge exchange, and addressing challenges related to sustainability and circularity is hampered. International collaboration with other institutes and multinational companies withers, decreasing adoption of efficient innovations and applied research globally. **The use of AI is very uneven and situational**, depending on the institutional and national context.

20 years (2035 - 2045)

Curricula become highly regulated, aligning with local needs as prescribed **by ministries of education.** Learning objectives are closely monitored through control systems driven by local employability needs and career development opportunities. While there is more focus on applied research on a local level, **open science and open innovation are not encouraged**, preventing international collaboration and knowledge exchange. Solutions developed at local level are not disseminated in other contexts, hindering the development and adoption of innovations. The importance of technical subjects becomes paramount.

As a result of increasing fees, **higher business education can be afforded only by political and business elites**. Complete bachelor's and master's degrees are only accessible to the wealthy, while students from different backgrounds can only access limited courses. Students do not have opportunities to interact with international colleagues or work with students from other disciplines, causing strong groupthink and lack of holistic and global mindsets.

Business schools continue to **operate in silos, with no incentives for interdisciplinary endeavours**. Organisational structures remain hierarchical, and traditional campus-based learning remains prevalent. **The application of AI in learning environments remains limited**. Decision-making processes in business schools remain in the hands of top-management, who are heavily influenced by local business and political interest and hardly take account the inputs of faculty representatives, students, trade unions or NGOs.

Business schools **build stronger links and KPIs with local/regional businesses.** The focus of business research and education is increasingly steered towards addressing local problems and meeting local needs. This entails the development of knowledge and skills applicable for the benefit of local communities, such as digital skills, analytical skills, and negotiation skills. **Hyper-specialisation takes place**, catering to regional industry requirements, with different business schools developing expertise in certain domains. In time, international accreditations and rankings for business schools lose relevance and fade.

30 years (2045 - 2055)

Education in Europe is highly regulated and aligned with prevailing political powers at national level, which affects business education in particular. As international dialogue and knowledge sharing are severely weakened, **academia in general struggles to play a significant role in society**. Academic leaders do not have power to influence political and business decision-makers, and their involvement often serves to put up a facade.

With the exception of the field of security and defence, **research and innovation receive limited funding and support.** The complexity and global scale of environmental and societal crises is not addressed by the guidelines of ministries of education. Business education remains disconnected from broader societal needs and traditional grading systems and evaluations continue to be used. As technical studies have become more and more important, while **the last active faculty of liberal arts in Europe closes** by the end of the decade.

Transdisciplinary research and educational institutions do not emerge and progress on key systemic pressures is hindered. Academic freedom diminishes and more and more frequent climate emergencies lead to **strong protests by progressive scientists, scholars and students** demanding more openness and freedom in science and education and push for deep systemic political and economic changes.

Scenario 4: Striving for connection

4.1 Key developments in Europe

Overview

This scenario is characterized by a double change of course both in terms of convergence of economic and social priorities to more community-focused, as well as steady adoption of circular economy practices. **The interdependence among national economies and trade flows diminishes**, while larger political entities such as the EU dissolve. In reaction to social and environmental concerns, policymakers, businesses and citizens increasingly choose to developsolutions at local level, shaping a world in which **local communities gain decisional and executive power** and **circular economy is implemented to meet local demands** and possibilities. This lays down the conditions for economies which are less global, but more mindful of citizens' needs and quality of life.

Economic investments and political decisions, driven by the opportunities and challenges of smaller communities, aim to support local development **incentivizing the reduction, reuse and recycling of existing products and materials**. The world experiences a **clear shift away from profit-oriented growth,** instead rewarding **social entrepreneurship, community-led innovation and shared responsibility** among local stakeholders for meeting local demands with more sustainable production processes.

Global challenges such as climate change, resource scarcity, and socio and economic inequalities are addressed by the growing **belief in the power and resilience of communities and cities**. Coupled with the development of circular supply chains and sustainability-oriented entrepreneurship models, this leads to **more decentralised and local, participatory political structures and increased feelings of connection.**

The empowerment of communities and self-sufficiency lead to altruistic attitudes and a change in social beliefs and working culture towards citizens' well-being and work-life balance. **Voluntary and unpaid care work gains recognition**. Individuals are valued as their whole selves both in the professional and personal sphere and, as opposed to an industrialist and productivist paradigm, are free to pursue their interest and inclinations. Social groups are focused on their internal needs and leverage their capabilities; knowledge-sharing and cooperation among communities occur, although in a fragmented and uncoordinated way.

10 years (2025 - 2035)

The complexity of globalisation, which in the past was managed to some extent by financial deregulation and political *laissez-faire* typical of free-market capitalism, **starts undermining the world's stability from 2023 on.** The risks and limitations of international interdependence, with inequalities among countries and injustices unanswered by multilateral agreements, lead **communities to become more self-serving and self-sufficient.** The EU takes further steps towards regional and urban development and the Circular Cities and Regions Initiative, launched in 2020, now includes 300 projects in all EU countries (compared to the 12 pilot projects). Nations implement policies aimed at **delegating more powers to local administrators and involving citizens in decision making** regarding public expenditure for common goods. As a consequence, communities develop **contrasting feelings about** their sense of **belonging to supranational bodies** such as the EU, as their interests often diverge.

Geographically close companies operate in **industrial symbiosis** with diverse organizations re-using residual materials (i.e., waste and byproducts), water and energy of production process as inputs of other processes, fostering eco-innovation, local employment, and community wellbeing.

Consumers and producers progressively share the same purpose, i.e. the development and wellbeing of the community they belong to. This alignment softens the relation between workers and employers into a more "human" one. **Leisure time and personal relationships acquire a higher recognition** by employers, laying the foundations for a **structural change in the working environment**. Outside the office, people increasingly volunteer and support the community, carrying out activities such as tending communal gardens, taking care of the elderly, and climate volunteering.

As a more community-based and citizen-friendly civic sense makes its way within societies, larger groups and organisations are pushed to organise themselves into smaller ones able to make a difference at local level. The values of such communities, such as **cross-sector collaboration** between different actors to provide the needed resources and services, **help shorten the gaps between neighbourhoods.** Later, the **differences between bigger cities and smaller towns also fade**. Volunteer work becomes highly valued, while social enterprises and cooperatives gain significant reputation.

While people move towards more meaningful ways of living their lives, the use of technology is aimed at keeping them connected. Especially those people who are professionally engaged in sustainability state: "The sustainability revolution is all about people, not technology. Tech can only serve what people decide to pursue". Since citizens start to live community life to the fullest, getting engaged in activities happening within limited geographical perimeters, **demand for long-distance mobility diminishes**. Specifically, **the reduction of air travel** for vacations and business purposes **leads to positive impacts on climate change** by reducing carbon footprint and noise pollution while increasing air quality. Carbon emissions also decrease thanks to new technologies mainstreaming the use of hybrid (hydrogen and electricity) means of transport. Meanwhile, public institutions and the private sector collaborate on second-generation investments on renewable energy.

20 years (2035 - 2045)

As well-being of citizens is considered a priority, **urban planning becomes one of the first areas of public spending**, with the aim of **making cities more equal, inclusive, and circular**. Online community engagement platforms for participatory budgeting are created with the aim of providing communities with the power, tools and information to submit proposals and make informed decisions about local development, including green infrastructure, zero-waste initiatives and sustainable innovations. While at local level democratic processes are carried out to respond to local needs, decisions at higher levels are made via diplomatic meetings and *open fora* among communities, countering the **loss of importance of international bodies and the EU as originally conceived**. As communities work mostly locally, cross-continental trade and cooperation decrease significantly.

Companies are smaller and develop into decentralised and co-owned to adjust to transforming consumer and market demands for local products and services. **SMEs and small startups play a pivotal role in mainstreaming circular business models**. Changes towards more sustainable consumption as well as circular bioeconomy production models reduce the global competition for natural resources and a shrinking gap between rural and urban areas. Local energy cooperatives and distributed energy resources become a common solution to global energy shortages. The **world's average temperature** exceeds pre-industrial times, but it **is kept within 2°C above that level**.

Bigger companies move their HQs from cities/premium locations to specialised clusters in countryside or lake-towns, made more appealing by better salary to cost-of-living ratios and well-connected public services. The **well-being of workers is highly valued,** with policies implemented to allow them to enjoy a good balance between personal and working life. **The 4-day working week is adopted and becomes the norm** in most economic sectors.

Technological advancements continue to enable sustainable solutions for local problems, fostering communication among individuals and sharing of best practices among communities. **New AI technologies are now fully embedded into political and economic processes**. Leveraging strong collaboration and incentivizing

investments of the private sector, smart urban transport networks, water supply and waste disposal facilities, lighting and heating systems for buildings become commonplace. The public's growing access to AI and new technologies is also aiding cities in their efforts to communicate with their citizens, while gridlocks on several policy issues are alleviated by online *fora* and soliciting of citizen inputs. Due to steady attention to and education about the opportunities and risks of new technology, **digital literacy levels of communities now capable of keeping the pace and facing technological innovation.** If on one side individuals leverage technology to create and maintain digital networks of relationships around the world, on the other they very much nurture and learn through relationships with others in the real world.

Environmentally responsible actions, aiming to reduce the reliance on carbon-based systems and protecting the ecosystem and its biodiversity, are implemented in different forms. Policy efforts under the jurisdiction of local administrators lead to the i**ntegration of circularity into municipal policies** and to ambitious goals to keep environments within their borders healthy. Green surfaces, rooftop architecture, and reuse of leftover construction materials are widespread. Communities focus on the **regeneration of underutilised or distressed urban areas**, investing massive financial resources in the provision of new green spaces, the improvement of walking and cycling routes and the renewal of derelict lands. Although extensive land use for agricultural purposes still threatens ecosystems, technologically enabled real-time updates on weather, soil conditions, crops availability and the sharing of best practices support farmers to optimise their activities in greater harmony with nature. However, several wild areas once under the control of international bodies are now left to their fate, with no effective intervention outlined by local strategies.

30 years (2045 - 2055)

The decentralisation of political power and the care given to local dynamics increase the democratic participation of citizens into community life, ultimately making them more involved in decision making and implementation processes. Since local communities become autonomous and self-sufficient, they acknowledge the lack of relevance and failure of existing international and supranational institutions. As a matter of fact, the **EU undergoes a slow dissolution.**

The production paradigm has shifted from market based-profit seeking **to community-based self-sufficiency.** As a result of continuous improvements in circular practices and product refurbishing, **urban mining and recycling become the main source of materials**, leading to a decrease in raw material demand. **Supply chains become much shorter and more localized,** aiming to better respond to market needs and to produce and ship locally, **as well as more circular**, leveraging closed and open-loops and industrial symbiosis.

The **focus on employees' wellbeing and personal freedom** induces the shaping of a **flat-structured, informal working environment.** As many people after graduating from universities throw themselves into entrepreneurial experiences offering sustainable solutions to local needs, community-based legal, regulatory, and fiscal frameworks are in turn established to support their success. While dependence and reliance on work loses its original connotation, across many communities volunteerism and unpaid care work become fully recognized professional activity providing essential resources and services to citizens.

Higher life quality standards and work-life balance gives people the chance to fully enjoy their leisure time. **Universal Basic Services**, including healthcare, education, basic food supply, public transport, **start to be offered** in order to free citizens from the burden of chasing, paying, and working for satisfying primary needs. Although endorsed at national level and funded by the central government, the implementation of the above is the responsibility of local administrators.

AI is embedded into people's daily lives. Nonetheless, thanks to high levels of digital literacy and high standards of ethics and responsibility, the fast pace of technological development does not undermine a wise use of technology and the estrangement from the over consumerism and overuse of new hi-tech items, which in turn allows the reduction of waste, the diminishment of air pollution and the dependence on very expensive natural resources (minerals, metals, rare earths etc.).

Building on the previous local decisions aiming to better use renewable energies and restore the environment, communities work on improving the protection of biodiversity in a more significant and effective way than in the past. **The rate of biodiversity loss has significantly decreased compared to 2020**. Communities see the return of some endemic and endangered species restoration of degraded land, improving local sustainable forest management practices, soil carbon and water availability. The wide use of AI-enabled tools helps local communities reduce climate change risks and negative impacts, even if every local entity chooses its own way to enact eco-friendlier approaches to territorial management.

Despite these successes, **while local actions are successfully implemented**, also thanks to the collaboration of different stakeholders, **they often struggle to scale up** due to a **lack of coordination** among different contexts and communities. Although the sense of belonging remains deeply rooted among individuals of the same community, **the need for more alignment among communities and a broader, common goal starts to emerge**, with people feeling called to tackle global challenges in a more coordinated way

4.2 Business education developments

Overview

In this scenario, business research and education gain increasing importance, forging stronger links with local society and industry, in a continuous exchange of know-how and mutual support. Midsized and smaller business schools with strong local community ties become prevalent, fully integrating sustainability and circular economy research into curricula. Business education balances theoretical and practical knowledge. Participatory and active learning approaches emphasize critical thinking and holistic management, leave abundant space for personal development and reward the socially engaged, solution-oriented students. Aligned with a community-based society, the goal of business education becomes fostering and enabling citizens' active participation into community life and contribution to local economy: as a result, university campuses are fully integrated into society, with students in business studies learning their subjects in hospitals, governmental premises, and companies' offices. The use of AI is gradually embedded within educational institutions and steered by communities through a bottom-up and localized approach, with particular attention to a responsible use of new digital tools, mindful of each community's ethics and beliefs.

10 years (2025 - 2035)

Many midsized, regional and smaller business schools, with tighter links with local communities, **are active** in the market and target more local student populations. Research in sustainability and circular economy is raising and applied to local level solutions. It also steadily informs business education curricula and integrated in teaching.

The importance of building up relations with local/regional businesses rises. The **exchange of know-how among business schools and companies** starts to become integrated in day-to day activities and best practices. Companies increasingly make their data available for research purposes. They also invite students to attend practical classes or job experiences at their premises, investing in scouting campaigns that ease the work of finding future employees fitting companies' value and culture and result in lower unemployment in society.

The increased value given to human capital influences **business schools to cooperate with other faculties, communities and families in developing students' soft and hard skills**. New connections are generated across disciplines, linking the job-market with academia and promoting more relevant research and educational programs. The figure of *career counsellors* acquires more and more importance in advising and reflecting with students on their personal and professional inclinations. This **increasing attention to students' sense of purpose and wellbeing** allows them to take the most suitable decisions for themselves and their future. Even families are involved in the process, which boosts feelings of connection within families and the relations between business schools, universities and the community.

As the use of AI is integrated into educational activities, a careful watch on its use brings HEIs to focus on the importance of students' critical thinking and holistic development. For this reason, psychology, civic education and philosophy classes are integrated in the curricula.

20 years (2035 - 2045)

The importance given by society to personal development leads business schools to indulge the natural inclination of students and researchers by **equally valuing technical, scientific and humanistic subjects** including art, culture and music, which are now integrated into curricula. **Business schools, and HEIs in general, design their activities to address global challenges by focusing on local impacts** and fostering development at local level. As such, business education aims at developing leaders engaged in solving local sustainability challenges.

As business schools are smaller and more integrated in local societies, **networks** with municipalities, other public bodies, and private companies **become easy to weave**, and are financially supported by public funds, crowdfunding initiatives, and small local investors.

Informal teaching methods train students to develop critical and creative thinking, practising both their soft and hard skills, enabling a 360-degrees personal and professional growth of each individual. The role of faculty members has changed from teachers and lecturers to moderators and facilitators of learning processes. **Interdisciplinary and transdisciplinary collaboration at local level** facilitates the emergence of various, innovative models in which business education is increasingly integrated with other disciplines and provided within social science and humanities departments. A myriad of more local, smaller publishing avenues for academic research emerge, challenging the operating models and margins of the traditional publishing industry.

Traditional grading metrics are replaced by collective evaluations rewarding innovative practical solutions to local issues. **Representatives of local institutions, academia and civil society create councils where projects by students are evaluated** based on the impact on the quality of life and the usefulness for the community. The councils also serve as a job forum as local companies are encouraged to recruit candidates and prospects for future job offers among the participating students, strengthening the ties between business schools and the job market. Due to an increasing fragmentation, diversity of approach and business education targeting community needs, **international accreditation bodies, leagues, and ranking tables become a thing of the past** and cease to exist.

30 years (2045 - 2055)

Tighter relations between geographically proximate companies and academic institutions lead to enhanced mutual understanding and better responses of markets to the outcomes of academic research. Companies are more inclined to invest in research that they perceive can address their challenges, and academia can better grasp their needs and communicate more effectively the practical implications of research. They find it easier to share and exchange knowledge, which results in the exploration and application of new research-based circular economy solutions and scientific and cultural advances in general.

While campuses and traditional educational buildings have disappeared, **classes are now spread throughout local communal and social aggregative environments**: classes are taught in public administration's premises, in small enterprises, or outside/open air etc. This leads to the **emergence of many nuanced and specialized clusters** offering transdisciplinary, locally focused education and entrepreneurship, which makes the concept of international standardization obsolete. Local/regional standards and accreditations develop.

Education is public and free. Teachers, professors, practitioners, and students decide on, implement and work together on entrepreneurial and societally impactful projects which are relevant to their communities. This creates a balance between theoretical and practical education, improving satisfaction of students and giving them the chance to acquire relevant professional skills and practical experience. **All graduates have a solid understanding of sustainability** and are equipped to contribute to equally to economic, social and environmental goals.

Education is attentive to the needs and natural vocations of students. **Curricula mix different subjects from a variety of disciplines**, which supports individual freedom in choosing the most suitable path towards growth. The ability to shape unique learning experiences contributes to community development thanks to the coexistence of many, diverse academic backgrounds, experiences and original visions for the future.

AI and new technologies play an important role in education, but their integration follows a human-centred ethics. Knowledge and responsible use of new technologies allows students to create new work models, career paths and means of civic participation, but they are also educated about the risks of abuse or over reliance on such tools.

Value and use

The concept and use of scenarios is increasingly adopted in a variety of contexts and sectors, from management studies and consulting to climate and environmental science, to policymaking and regulation, among the others. To the authors' knowledge, this report represents one of the first attempts to leverage scenario thinking in the context of business education.

The four identified scenarios can help to examine the complex interplay of political, economic, social environmental, technological and legal factors affecting business education today and in the future, fostering a holistic understanding of the potential for transformation in research, teaching and organizational practices.

This scenario building process, as well as the development of the Futures of Business Education SES and related workshops, provide a wealth of knowledge, insights and inspiration that can challenge current ways of thinking and bring about transformative actions with respect to educational, research and institutional dimensions of business education. The value lies both in the aims and content and the approach itself.

In terms of aims and content, the scenarios described:

- build internal organizational capacity **for strategic thinking within business schools;**
- form a useful basis for generating longer-term strategy, and disruptive **innovations;**
- are a powerful **systemic tool** that can be used to help explore uncertainty, change, and interconnectedness of a number of factors affecting business education;
- give decision-makers and any other involved stakeholders a mandate, the motivation, and the confidence to **change current practices**, so that they are more sustainable;
- challenge existing norms and put them into perspective.

In terms of approach, transforming business education necessitates the adoption and implementation of qualitative methods that engage a wide range of stakeholders. The development and application of interactive scenarios is one of the few techniques from the field of future studies which enable **broader participation and engagement of stakeholders** and create a **safe space for dialogue** among individuals with multidisciplinary backgrounds, within and outside business schools, in different sectors and roles.

Limitations

In this report, the authors presented four plausible futures of business education. The authors followed a systematic scenario building process involving multiple stakeholders and leveraging their collective intelligence. While the previous section highlights the value of developing and using such scenarios within the context of business education, admittedly, there are also some disclaimers and limitations to the scenarios described and the overall approach which are worth noting.

First, the scenarios are fictional descriptions of alternative futures. They should not be read as predictions nor as a reflection of ABIS´ position on the future of business education. They are aimed to serve as a **basis for a reflective, change-oriented and solution-seeking process** which remains in the hands of any reader of this report (and/or future participant of the SES workshops).

Some of the limitations that were identified are:

- the chosen scenario building approach is qualitative in nature and, therefore, it does not provide specifics about the actual probability and quantitative impacts of the envisioned scenarios;
- due to the key uncertainties (vertical and horizontal axes) selected by the stakeholders - *Paradigm shift in the economy* and *Globalization/localization* -, some scenarios are less preferable than others. While the authors aimed to remain objective and neutral in developing the narratives, the scenarios may be influenced and biased by individual authors' opinions and beliefs;
- the pace of change might be different in future decades, in some cases featuring exponential developments which are difficult to predict and might lead to very different pathways and outcomes;
- linked to the point above, our reflections are based on AI as we know it today, not on its possible evolution and disruptive innovations. A similar observation applies to the use of terms such as sustainability, circular economy, life-long learning, work environments etc.,
- while the scenarios are meant to be explorative rather than prescriptive, there certainly are many more possible scenarios in addition to the four scenarios highlighted by the framework;
- Despite efforts to remain objective, the scenarios are affected by the authors' and participants' individual opinions, beliefs, and cultural backgrounds. The report underscores how these scenarios would unfold in Europe, however global developments that may shape them are also addressed. The authors acknowledge that the underlying assumptions and statements might exhibit a Western-centred bias.

Conclusions

The contemporary landscape of business leadership and behaviour raises significant identity and strategic concerns for business schools, which are faced with a legitimacy crisis in a world in transition.

Business schools must critically reassess and proactively reshape their purpose. At ABIS, we believe that leveraging foresight and imaginative approaches and considering a variety of future scenarios can provide the starting insights to help business schools in this endeavour.

Amidst the complexity and interdependence of the systemic issues affecting and being affected by business education, one of the most striking insights that emerged in writing the final report is that of **directionality and leadership**. This does not refer exclusively to business schools: all four scenarios in fact depict the significance and impact of choosing – or not - a specific direction be it at policy, business or education level, and the ability to pursue it through committed decision-making.

A **variety of new models of business education will emerge**, likely characterized in some way or form by elements from all four scenarios we created, but even more likely very different from those that we know today. These new models will of course require experimentation, and ongoing adaptation to the new challenges that society will face well beyond 2055. Our hope at ABIS is that the direction chosen and pursued by leaders within key institutions – including governments, businesses and academic institutions – will focus on value creation that addresses both economic and social needs. For business schools in particular, we hope that their leaders and decision-makers will shift towards innovative management education that addresses broader societal challenges, serves a wide range of stakeholders and honours the humanity of individuals.

In conclusion, we invite business education leaders to rethink their dual focus on “school” and “business”, be willing to innovate and transcend the known identities and systems, and use their ability to help redefining the role of business and its contribution to society.

Synopsis of scenarios by decade

10 years (2025 - 2035)

	S1. Striving for unity	S2. Striving for growth
P	· The EU follows through on its carbon neutrality and circular economy goals · Multilateral collaboration becomes a cornerstone of international relations · The UN Regenerative Development Goals are ratified · The World Sustainability Agency is created	· International sustainability efforts fail · Internal policies are implemented by national governments to prioritise security and defence · Economic and political decisions focus on innovation and economic growth · New regulations try to set limits on technological use and abuse
E	· Companies start developing more resource-efficient and sustainable production processes, seeking global market opportunities and collaboration · The value of multinational corporations increases · Flexible and remote working as well as hybrid arrangements become dominant	· Challenging the sustainability and green growth narrative, a linear growth paradigm keeps being pursued by nation states and companies · Financially driven and cost-effective multinationals dominate the market · Technological innovation leads to standardised and automated business operations · Few large tech companies, mainly based in Asia, stand out
S	· Consumers start changing and reducing their consumption patterns and levels embracing more sustainable lifestyles · Businesses provide more sustainable products and services · Changes in working conditions lead to a better work-life balance	· A growing attitude of considering people as assets favours the rise of a workaholic culture · Uneven income distribution leads to increased inequalities and social fragmentation · The growth in the world population increases the pressure on natural resources
T	· Technological advancements in AI and data-driven manufacturing are leveraged by companies to increase efficiency and implement open innovation	· Technology is increasingly seen as “the saviour from all evil” · Artificial Intelligence and machine learning become mainstream · Governments invest heavily in digitalisation, data, and robotics
EN	· Renewable energy is becoming commonplace, as are climate trials and climate reparations · Preservation of ecosystems, their biodiversity, and natural and cultural heritage gains momentum	· Exploitation of natural resources leads to environmental degradation · Only 5% of used materials, compared to 7.2% of the decade before, are cycled back into economies after use
BE	· A global, transformative, values-based education reform is launched · Intercultural sensitivity, conflict management, and collaborating skills become core subjects across curricula · Academic freedom is highly valued and science and research are supported · Research and education programs in circular economy increase, as well as closer collaboration with big enterprises · Business schools adopt innovations in their infrastructure and operations	· There is a move away from a managerial approach with leadership and talent development at its core · Business schools start to depend on funding from private companies and private schools gain market · Employability is the key driver of business education · International virtual schools have developed on a global scale · Hyper pressure, stress, and isolation characterize students’ lives

Legend: P = Policy and legal, E = Economy, S = Society, T = Technology, EN = Environment, BE = Business Education

10 years (2025 - 2035)

S3. Striving for independence	S4. Striving for connection	
· UN SDGs fail to be achieved and the EU is far behind carbon neutrality and circularity goals · No further agreements and policies on sustainability-oriented goals take place · Investing in renewable energy infrastructure · Far right political groups gain traction	· The EU takes steps towards regional and urban development · National governments implement policies to delegate more powers to local administrators and involve citizens in decision-making · Communities become more self-serving and self-sufficient as their interests often diverge from the EU's	**P**
· Solutions are sought to increase local supply to internal demand, fostering local innovation and entrepreneurship · International trade and cooperation decline · Stricter rules for movement of people, goods and services are introduced. The EU gradually loses its power · Businesses keep business-as-usual practices and traditional, resource-intensive production models	· Consumers and producers progressively share the same purpose to support the wellbeing of the community they belong to · The increased value of time outside of work leads to a structural change in the working environment. People volunteer and support the community · Cross-sector collaboration between actors becomes paramount to develop solutions communities need	**E**
· People start organising into communities · Wealth inequalities and disparities between urban and rural areas increase · People are resistant to changing consumption habits other than opting for locally sourced or manufactured goods · Increasing frustration among disadvantaged communities; widespread anxiety and activism arise	· Leisure time and personal lives are increasingly valued · Citizens gather into smaller groups and organisations to make the difference at local level · Voluntary and unpaid care work, social enterprises and cooperatives gain significant reputation and become recognized as a professional employment	**S**
· Manipulative use of technology by governments emerges; governments attempt to control knowledge, leading to limited information access.	· Technology is aimed to keep people connected · There is the belief that "the sustainability revolution is all about people, not technology. Technology can only serve what people decide to pursue"	**T**
· Localised and fragmented efforts to preserve the environment and combat climate change impacts prove inadequate · Organic and precision agriculture is introduced · There is lack of global coordination and broader-scope environmental initiatives	· Long-distance mobility diminishes, having positive impacts on climate change · Carbon emissions decrease also thanks to the new technologies mainstreaming the use of hybrid (hydrogen and electricity) means of transport	**EN**
· HEIs reduce internationalisation and increase focus on national markets, thus becoming more influenced and aligned with political powers · Competition between HEIs intensifies, leading to increasing tuition fees · Curricula follow traditional, theoretical approaches, emphasizing technical skills at the expense of soft skills and liberal arts · Research funding becomes limited to national funds. Collaboration among researchers is hindered by barriers flows of knowledge	· Educational institutions cooperate with families and civic societies to develop soft and hard skills of students · New connections linking the job-market with academia are generated, promoting a more harmonious growth of societies · AI is slowly integrated into teaching modules	**BE**

20 years (2035 - 2045)

	S1. Striving for unity	**S2. Striving for growth**
P	· The EU achieves climate neutrality by 2045 · International cooperation and the binding acts of the World Sustainability Agency accelerate action towards sustainability · Agreements are finalised on harmonization of tax regimes within the EU, a global minimum tax charge and ban on fossil fuels · Efforts are made by governments worldwide to address inequalities and foster social cohesion	· Plans for decarbonized reindustrialization fall apart · Governments are unable to meet sustainability targets set in previous decades · No outstanding political signals are sent and international cooperation on sustainability weakens
E	· Consensus is found on an alternative to GDP - the new Earth Wellbeing index · The use of waste as secondary materials in the EU fulfills the demand for new materials for circular business models · Efficient circular models become mainstream	· Few multinational corporations dominate the market · ESG funds fail to provide adequate shareholder returns and crash · Sustainability departments are downscaled, and sustainability professionals laid off · High competition and pressure lead to burnouts and mental health issues of employees
S	· Generation Z reaches key positions in corporate and political decision-making, further strengthening global sustainability efforts. · The four-day workweek gains momentum · AI and open science bring changes across sectors, while citizens engagement rises · The UN recognizes the right for all people to have free access to the internet worldwide and agree to work on improving infrastructure to bridge the digital divide	· Algorithms set trajectories of connections among people · Extreme digitisation leads to severing of real-life, community-based links and to isolation of individuals · Inequalities in society are rising · People start rioting to demand more support from governments as well as urgent action on climate adaptation and mitigation
T	· New technologies and AI generated solutions are leveraged in the development of circular supply chains and models and influence the daily life of citizens. · International collaboration leads to rules around ethical use of AI and access to accurate and reliable information	· Technological innovation takes place across sectors, including in the health sector · Automation-driven business models become mainstream
EN	· Global CO2 emissions start to decrease, as renewable energy sources become the standard · Global average temperatures surpass above pre-industrial levels, however they stabilize below 1,7°C · Progress is made on more sustainable transport infrastructure and the use of environmentally friendly modes of transportation	· GHG emissions increased, with the global average temperature more than 3°C above pre-industrial levels · Extreme weather events and environmental disasters take place · Aggravated impacts of climate change on communities
BE	· Business schools increasingly adopt more horizontal, participatory, and networked structures integrated with other societal institutions · Virtual, inclusive learning environments emerge enhancing access, collaboration, and the development of talents with a global mindset. · Open science and innovation are encouraged, promoting interdisciplinary research and partnerships · Lifelong learning is emphasized, and many continuous education programs and certifications are offered · A shift towards purpose-centred careers is observed among students	· Business schools focus on operations and technology management, international supply chains and finance · Multinational corporations become the real sponsors and target market of business education · “Best in class”, a new accreditation for business schools recognizing operational excellence, technological skills, and financial savviness, is launched · AI and machine learning-based systems are integrated in research, teaching and organizational practices · A divide emerges in the research community between scholars who adapt and who resist to the new system

20 years (2035 - 2045)

S3. Striving for independence	S4. Striving for connection	
· EU climate neutrality goals fall through · International organisations and trade alliances become less active, and no coordinated international efforts to address the effects of global warming are pursued · Governments prioritise policies to support the local economy and competitiveness · The EU dissolves as several member states leave · Geopolitical tensions escalate worldwide	· Urban planning becomes a major destination of public spending, aiming to make cities more equal, inclusive and circular · Democratic processes at local level address local needs and challenges · The EU and international bodies lose importance · Local administrators lead policy efforts on circular economy and environmental protection	**P**
· Governments subsidise local companies with little regard for broader impacts · Local entrepreneurship thrives thanks to short-circuit supply chains and collaborations with local distributors · Competition among industries increases · Decreased public funding and incentives discourage businesses to invest in more sustainable models	· Cross-continental trade and cooperation decrease · Sustainable consumption and production models reduce the global competition for natural resources · Companies are smaller, decentralised and co-owned · SMEs and startups play a key role in circular models · The 4-day working week is adopted · The well-being of workers is highly valued	**E**
· Mounting tensions within society leading to increased mistrust and hindering cooperation, fostering intolerance and further separations among communities · Hierarchies are reinforced · Migration is a challenging issue; climate and economic refugees face rejection · Inequalities between resource-rich and resource-poor countries are increasing, which leads to more tensions	· Big corporations move their HQ to specialised clusters, where living is more affordable and pleasant than in cities/premium locations · Social digital networks are facilitated by technological innovation, but individuals keep nurturing real-life relationships · Cities leverage technology to engage their citizens in local development, including green initiatives	**S**
· Ongoing advancements in technology and AI take place, although unevenly distributed across countries · Governments aim to control information for security and public interest reasons, leading to corruption and abuses of power · Governments develop smart and efficient regional public transport infrastructure and biking lanes, providing them free of charge to registered community residents	· Technological advancements continue to enable sustainable solutions for local problems · Smart urban transport networks, water supply and waste disposal facilities, lighting and heating systems become commonplace · New AI technologies are embedded into political and economic processes, enabling public participation in decision-making	**T**
· The effects of environmental degradation and adverse climate events cause fear, climate anxiety and increased mental health problems · Geopolitical tension halt international and work-related travel, leading to decreased CO2 emissions and pollution · The global average temperature has risen 2,5°C warmer than the preindustrial levels	· Environmentally responsible actions are implemented at local level; coordination at global level is lacking · Communities focus on the regeneration of urban areas · Extensive land use for agricultural purposes still threatens ecosystems, and farmers receive support · The global average temperature is kept below 2°C above pre-industrial levels	**EN**
· Curricula become highly regulated, aligning with local needs as prescribed by ministries of education. · International collaboration, open science and innovation are discouraged · Technical studies become paramount as the last faculty of liberal arts closes. · Higher business education can be afforded only by elites · Business schools remain hierarchical and operate in silos. Traditional campus-based learning prevails · Research focuses on local needs and hyper-specialisation takes place	· Business schools and universities aim to address global challenges by focusing on local impacts and fostering local development · Technical, scientific and humanistic subjects are equally valued; natural inclinations as well as personal development are supported · Informal teaching methods train students in critical and creative thinking; collective evaluations are introduced · Business schools are smaller, integrated in local networks and funded by public funds, small local investors and crowdfunding	**BE**

30 years (2045 - 2055)

	S1. Striving for unity	S2. Striving for growth
P	· After progress on circularity, the EU takes stronger action on social sustainability by providing access to basic resources to all citizens. · International collaboration continues as geopolitical tensions related to control of natural resources diminish · A new multipolar geopolitical order rises due to the growing weight of emerging economies, indigenous traditions and ethnic interests	· Globalization continues · The EU loses importance due to global competition and increasing resource scarcity · Geopolitical power shifts to Asia · A climate disaster has forced the UN to relocate their headquarters to southern China
E	· Circularity is the dominant paradigm in economic policy and business. Circular supply chains and technologies like carbon capture and storage dominate · Creative industries thrive, while routine tasks are automated · Professional development emphasises talent and meaning, leaving space for creativity and social entrepreneurship	· Multinational enterprises downsize into big and medium · Domestic banking assets and profits of emerging countries have outgrown those of G7 countries · Aggressive resource use and exploitation by governments and companies continues · Massive downturn of the global economy towards the end of the decade due to natural disasters
S	· Sustainable consumption and production lead to a comfortable lifestyle for most EU citizens while decreasing negative environmental impacts · Societal trust increases · Greater attention is dedicated to critical voices and left-behind societal groups · The wellbeing gap between the Global North and Global South is shrinking	· The Earth's human population has reached 9.7 billion, causing global unrest over lack of resources and displacement of people · Individuals start experiencing feelings of alienation, generalised depression and dissatisfaction · A global coalition made of a new generation of corporate leaders and heads of governments is launched for "Restoring the Earth"
T	· High digitalization, big data, and AI streamline work processes, leading to increased efficiency · Transparent governance and accountability frameworks are set up to ensure the responsible use of technology and protection of democratic values and human rights	· Increased security vulnerabilities and overall IT expenditures force companies to increase costs for cyber breaches · Implants improving physical and cognitive capabilities are cyber-attacked, erasing memories or transferring wrong information
EN	· Due to the application of circularity in the economy, the soil, air and water are well preserved compared to 2035 levels and remain vital, resilient and productive	· Freshwater availability is further strained · Biodiversity has decreased considerably · Major polar melting catastrophes occur, resulting in sea level rise in coastal regions all around the world and causing loss of life and social and economic disruption
BE	· Academia gains importance, with academic leaders influencing political and business decision-making · Transdisciplinary research and collaboration and real-world problem-solving are fostered · Universities are transformed into pluriversities making use of relevant and available societal infrastructure; business education is provided by these new institutions · Rotating leadership and inclusive governance based on diversity and inclusion standards are adopted · On-demand learning and evaluation within teams mark a shift away from traditional grading systems	· Business education has become an exclusive and elite-addressed system driven by profit maximization · Mid-size companies replace MNCs as the main sponsors and target market of business education · Technological know-how remains an essential subject · Unable to keep up with the high pressure, students abandon classes and drop out from studies · Business schools face a backlash from students, faculty members, activists and previously laid-off sustainability professionals, who ask for immediate changes

30 years (2045 - 2055)

S3. Striving for independence	S4. Striving for connection	
· Far right and populist political groups are elected · International hostility and conflicts related to control of natural resources escalate · Efforts and measures to address climate change are insufficient to mitigate its negative effects · Very few countries remain in the Schengen area by 2055, border controls are re-introduced, and some countries resort to building physical walls	· The decentralisation of political power and the care given to local dynamics increase the democratic participation of citizens into community life · As local communities are autonomous and self-sufficient, the EU slowly dissolves · While local actions are successfully implemented, they struggle to scale up due to a lack of coordination; the need for more alignment emerges	**P**
· New fiscal havens emerge as environmentally and socially and secure spaces for the wealthy to escape to · Growth-oriented and resource-intensive business practices dominate · Circular models remain at experimental and/or local level due to limited material flows, policy incentives and funding and financial, human, and technical resources	· The production paradigm has shifted to community-based self-sufficiency · Urban mining and recycling become the main source of materials; supply chains are shorter and more circular · Flat structures and informal working environments develop · Volunteerism and unpaid care work become fully recognized productive activities	**E**
· The flow of climate refugees intensifies, but acceptance rates remain low · Growing anger mounts in disadvantaged communities. · Many people succumb to climate anxiety and depression · Environmental groups and activists emerge to protest and advocate for change	· Higher life quality standards and better work-life balance gives the chance to fully enjoy leisure time · Universal Basic Services start to be offered to citizens at local level	**S**
· Technology becomes a tool for manipulation, misinformation and erosion of democracy and human rights · Cyber criminality and information leaks happen on a regular basis · Hacktivist (activist hackers) collectives are formed all around the world to fight the system and expose wrongdoings against people and planet	· AI is embedded into people's daily lives · Thanks to investments in digital literacy and high standards of ethics and responsibility, the fast pace of technological development does not undermine a wise use of technology · AI helps local communities reduce climate change risks	**T**
· Unsettling levels of environmental deterioration, levels of pollution and extreme weather events causing some regions to become inhabitable. · This causes a widespread sense of fear and exacerbates polarisation within society	· The rate of biodiversity loss has significantly decreased compared to 2020 due to local sustainable forest management practices and restoration of degraded land · Local communities choose their own eco-friendlier approach to territorial management	**EN**
· Academia struggles to play a significant role in society and academic leaders have little decision-making power · Traditional grading systems and evaluations continue to be emphasised. · Research (apart from increased military and security efforts) receives limited funding · Transdisciplinary research and educational institutions do not emerge and innovation and progress on key systemic pressures is hindered. · Academic freedom diminishes, leading to strong protests by progressive scientists and students demanding more openness and freedom	· Tighter relations between companies and academia help explore research-based circular solutions · Campuses and traditional educational premises have disappeared, classes are spread throughout local communal and social aggregative environments · Specialized clusters offering transdisciplinary, locally focused education and entrepreneurship emerge · Graduates have a solid understanding of sustainability · Faculty, students and practitioners work together on entrepreneurial and societally impactful projects · Education is public, free and attentive to student needs and natural vocations	**BE**

References

ABIS - The Academy of Business in Society, *The Scenario Exploration System: An overview* (2023), https://www.abis-global.org/blog/scenario-exploration-system-ses-2023-overview-report

Bauwens, T., Hekkert, M., & Kirchherr, J. (2020). *Circular futures: what will they look like?* Ecological Economics, 175, 106703.

Bontoux L., Bengtsson D., Rosa A., Sweeney J. A., (2016), *The JRC Scenario Exploration System – From Study to Serious Game*, Journal of Futures Studies 20(3): 93-108

Bontoux, L., Sweeney, J. A., Rosa, A. B., Bauer, A., Bengtsson, D., Bock, A.-K., Caspar, B., Charter, M., Christophilopoulos, E., Kupper, F., Macharis, C., Matti, C., Matrisciano, M., Schuijer, J., Szczepanikova, A., van Criekinge, T., & Watson, R. (2020). A Game for All Seasons: Lessons and Learnings from the JRC's Scenario Exploration System. *World Futures Review*, *12*(1), 81-103. https://doi.org/10.1177/1946756719890524

Engelhardt, K., (2022), *Re-imagine school education beyond Covid-19*, 2022 European Schoolnet Webinar Series, Brussels, Belgium

European Commission, Scenario Exploration System official website: https://knowledge4policy.ec.europa.eu/foresight/tool/scenario-exploration-system-ses_en

Forum for the Future, EU Innovate, (2012), *Citizens bringing the future forward*

Fritsche, U., Brunori, G., Chiaramonti, D., Galanakis, C., Matthews, R. and Panoutsou, C., (2021), *Future transitions for the Bioeconomy towards Sustainable Development and a Climate-Neutral Economy - Foresight Scenarios for the EU bioeconomy in 2050*, Borzacchiello, M.T., Stoermer, E. and Avraamides, M. editor(s), Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-28413-0, https://doi:10.2760/763277, JRC123532.

International Commission on the Futures of Education (2021), *Reimagining our futures together: a new social contract for education*, UNESCO, https://doi.org/10.54675/ASRB4722

Kirchherr J., Reike D., Hekkert M., (2017), *Conceptualizing the circular economy: An analysis of 114 definitions*, Resources, Conservation and Recycling, Volume 127, 221-232, https://doi.org/10.1016/j.resconrec.2017.09.005

Leppänen J., Neuvonen A., Ritola M., Ahola I., Hirvonen S., Hyötyläinen M., Kaskinen T., Kauppinen T., Kuittinen O., Kärki K., Lettenmeier M., Mokka R., (2013), *Scenarios for Sustainable Lifestyles 2050: From Global Champions to Local Loops*. Retrieved from UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP) at https://www.cscp.org/wp-content/uploads/2016/05/Scenarios-for-Sustainanle-Lifestyles_2050.pdf

OECD, Multinational enterprises in the global economy, (2018), https://www.oecd.org/industry/ind/MNEs-in-the-global-economy-policy-note.pdf

OneDayin2050 (2021), *365 news from 2050*, https://www.oneday2050.org/participants

UK Research and Innovation (2021), *How air travel could look in 2030*, https://www.ukri.org/news/how-air-travel-could-look-in-2030/

Vesnic-Alujevic, L., Muench, S., Stoermer, E. (2023), *Reference foresight scenarios: Scenarios on the global standing of the EU in 2040*, Publications Office of the European Union, Luxembourg, https://doi:10.2760/490501, JRC132943

Publications Office of the European Union. *The Strategic foresight report 2023* (2023), https://commission.europa.eu/system/files/2023-07/SFR-23-beautified-version_en_0.pdf

UN Global Pulse, The Future of Data Governance. Scenarios 2050. (2023) https://foresight.unglobalpulse.net/wp-content/uploads/2023/05/UNGP_Future-of-Data-Governance_Scenarios-2050.pdf

References

Orlik T., Jimenez J. and Sam C. (2021), *World-Dominating Superstar Firms Get Bigger, Techier, and More Chinese*, Bloomberg, https://www.bloomberg.com/graphics/2021-biggest-global-companies-growth-trends/?embedded-checkout=true

Pinyol Alberich J., Sobczak K., Haluskova K., Suárez Eiroa B., (2023), *Techniques of Futuring: Portfolio of techniques and critical reflections*, http://explicit-se.net/wp-content/uploads/2023/07/ExPliCit_D1.1.pdf

Roux A., (2021), *Institute for Futures Research Workshop on Scenario Planning*
Schindler T., and Guadarrama Baena G., (2021), *Stories from 2050*, https://www.stories from2050.com/

Sharpe B., and Hodgson T., (2206) *UK Foresight Programme, Intelligent Infrastructure Futures Technology Forward Look*, https://assets.publishing.service.gov.uk/government/uploads/system/ uploads/attachment_data/file/300337/06-520-intelligent-infrastructure-technology.pdf

Starkey, K. and Tempest, S. (2008), *A clear sense of purpose? The evolving role of the business school*, Journal of Management Development, Vol. 27 No. 4, pp. 379-390. https://doi.org/10.1108/02621710810866732

Starkey K. and Thomas H., (2019), *The future of business schools: shut them down or broaden our horizons?*, https://www.globalfocusmagazine.com/the-future-of-business-schools-shut-them-down-or-broaden-our-horizons/

Teerikangas S., Painter M., Matser I.., Haluskova, K., Sobczak K., (2022), *Transforming business education for sustainability*, https://www.abis-global.org/blog/transforming-business-education-for-sustainability

UK Research and Innovation (2021), *How air travel could look in 2030*, https://www.ukri.org/news/how-air-travel-could-look-in-2030/

Vesnic-Alujevic, L., Muench, S., Stoermer, E. (2023), *Reference foresight scenarios: Scenarios on the global standing of the EU in 2040*, Publications Office of the European Union, Luxembourg, https://doi:10.2760/490501, JRC132943

Publications Office of the European Union. *The Strategic foresight report 2023* (2023), https://commission.europa.eu/system/files/2023-07/SFR-23-beautified-version_en_0.pdf

UN Global Pulse, The Future of Data Governance. Scenarios 2050. (2023) https://foresight.unglobalpulse.net/wp-content/uploads/2023/05/UNGP_Future-of-Data-Governance_Scenarios-2050.pdf

Annexes

I. Participants to the stakeholder workshops

Kleio Akrivou	Professor of Business Ethics and Moral Development	Henley Business School, University of Reading	EN
Cedric Bachellerie	Managing Director	Sustainamics	FR
Laurent Bontoux	Senior Foresight for Policy Expert	European Commission Joint Research Centre	BE
Danielle Bouwman	Project leader business honours programme	Rotterdam University of Applied Sciences Business School	NL
Manuela Brusoni	Dean's Delegate for Accreditation	SDA Bocconi	IT
Adriana Burlea-Schiopoiu	Professor	University of Craiova	RO
Jason Chang	Innovation and Business Specialist (former)	ABIS – The Academy of Business in Society	NL
Mela Chupungco	Assistant Dean, Teaching and Learning	Asian Institute of Management	PH
Alessia Coeli	Head of Education, Business connection & development	ALTIS Università Cattolica del Sacro Cuore	IT
Aline Frankfort	Founder	Shapership	BE
Chris Fuggle	Global Head of Sustainability Services	Mazars	UK
Lucy Gill-Simmen	Senior Lecturer in Marketing	Royal Holloway University of London, School of Management	UK
Clive Holtham	Professor	Bayes Business School	UK
Thomas Jorgensen	Director Policy Coordination and Foresight	European University Association	BE

Marise Lehto	Lecturer Corporate/ Business Communication	Turku School of Economics	FI
Sophie Lismonde	Founder	Consensa	BE
Jonathan Martens	Head of Sustainability	ISS Facility Services	BE
Loyin Olotu-Umoren	Head of School Operations	Nottingham Business School, Nottingham Trent University	UK
Josep Pinyol Alberich	Researcher and Consultant	Ramboll Management Consulting	BE
Konstantina Skritsovali	Senior Lecturer	Liverpool John Moores University	UK
Monika Sońta	Assistant Professor	Kozminski University	PL
Catherine Spellman	Assistant Professor	Durham University Business School	UK
Joanna Sullivan	Founder	Conscience consulting	BE
Evelien Verschroeven	Founder	Innovation OIC	BE
Sigrun Wagner	Head of Department	Royal Holloway University of London, School of Management	UK
Łukasz Więch	Healthcare Studies Leader	Kozminski University	PL
Habeeb Yahya	Doctoral researcher	Turku School of Economics	FI
David Zorn	Executive Director, Sustainable Leadership Initiative	IESE Business School	ES

II. Full list of driving factors

	Description
Access to business education	Issues of equity, discrimination, access to and affordability of business education
Access to digital technology	Investment in digital infrastructure, as well as in technical and financial skills to utilise available technology
Decolonization of curriculum	Creation of spaces and resources for a dialogue on how to envision all cultures and knowledge systems in the curriculum and to reflect wider global and historical perspectives.
Democratisation of society	Democratic systems persist versus raise of authoritarian regimes
Digitalization and AI in teaching methods	The use of digital and AI tools in teaching methods across curricula
Digitally enabled and distributed business models	Leveraging digital tools in creating and developing greener and more inclusive business models
Diversity and inclusion of talent	The make-up corporate organisation and how well presence and perspectives of different groups of people are valued and integrated
Dominant economic policy	Type of government actions that influence the economy (Neoliberal vs social)
Emergence of circular economy	Emergence of a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing, and recycling existing materials and products as long as possible
Emerging societal dynamics	Societal dynamics shifting from affiliation to global context to collective individualization (from a citizen of the world to proud member of one's community/region
Geopolitical shifts	Global balance of power shifting to Asia, marked in particular by the rise of China and India
Inequality	Widening differences among societal groups in terms of social, political, and economic opportunities
Lifelong learning	Practice of continuing to learn throughout one's entire life, especially outside of or after the completion of formal schooling.
Migration flows	Displacement of populations due to wars, economic difficulties and climate-related extreme events and disasters
Mobility	Movement of people across the globe including all modes of transport
Multi-stakeholder collaboration	Coalitions and partnerships between governments, business, academia, third sector actors and more
Open science and commons of knowledge	Scientific research and high-quality knowledge available and accessible to all levels of society

	Description
Paradigm shift in economy	Paradigm shift in the economy towards circular, regenerative and collaborative practices
Political governance	Type of political decision-making processes (more local autonomy vs centralization)
Public funding/spending	Government expenditure on higher education
Regulation of Higher Education	Regulations, legislation, data reporting, and other policies related to higher education
Shift in ideology from neoliberalism to pluralism	Economics as a discipline embraces economic pluralism integrating different schools of thought and other social sciences
Shifting scope of education	Shifting scope of education from knowledge to competence-based
Societal polarisation	The process of society becoming split into clusters based on income, social status, political opinions, cultural values etc. also due to disinformation on social media.
Structural change towards transdisciplinarity	Focus on transversal education and more holistic understanding of real-world challenges
Sustainability demands by society	Societal expectations for businesses to be more socially and environmentally sustainable
Sustainability regulation	Development and enforcement of sustainability-related rules and regulations by government and international organisations
Tolerance to uncertainty	Levels of societal tolerance or comfort for ambiguity, uncertainty and unstructured situations
Trust in institutions	General belief in the reliability and relevance in public institutions (including political, education bodies, judicial system etc.)
Trust in technology	General belief in the power of technology to solve pressing societal challenges
Types of democracy	Forms of democratic representation (representative vs. participatory)

Acknowledgements

This report is the result of a truly collaborative exercise in which every participant had a specific and indispensable role. The authors would like to thank all the participants (listed in Annex I.) and in particular those who engaged in the final review of the report: Kleio Akrivou (Henley Business School), Manuela Brusoni (SDA Bocconi), Adriana Burlea (University of Craiova), Konstantina Skritsovali (Liverpool John Moores University) and Łukasz Więch (Kozminski University). Lastly, we would like to thank Laurent Bontoux (European Commission's Competence Centre on Foresight, Joint Research Centre) for the trust in the team and his continuous guidance and support as well as Tommaso Calzolari (University of Sheffield) for his constructive feedback and contribution in reviewing and editing the report.

About ABIS

ABIS - The Academy of Business in Society is a business-academic network working to advance the role of business in society through research and education. Our ambition is to make a significant contribution to the debate and the practice involved in equipping current and future business leaders with the knowledge, skills and capabilities for the long-term success of business in society.