CASE: Future of the universities

# RETHINKING THE ROLE OF UNIVERSITIES

## Fabric of the future world of work and learning – inspired by the White Paper of the St. Gallen Symposium 2022

**Preparing is high on the agenda: Universities play a crucial role in preparing the ground for the future. They must prepare their students to be collaborative and, therefore, competitive. This requires new skills and, very importantly, a new mindset. Universities must prepare and educate the next generation for huge global challenges.** They must also prepare themselves for a world where not only information but, increasingly, knowledge is becoming a commodity. This CASE is to be understood as a shortened version of the Joint White Paper of the HSG/St. Gallen Symposium 2022 (Gassmann et al. 2022): Rethinking the Role of Universities in the Future of Work and Learning.

The future of learning is equally at the top of mind for all generations: With 75 percent of Leaders of Tomorrow and nearly 65 percent of Senior Leaders viewing the future of education and training systems as urgent or very urgent, it's their second highest common priority in the 2022 Voices of the Leaders of Tomorrow Report, developed jointly by the St. Gallen Symposium and the Nuremberg Institute for Market Decisions (see exhibit 1).

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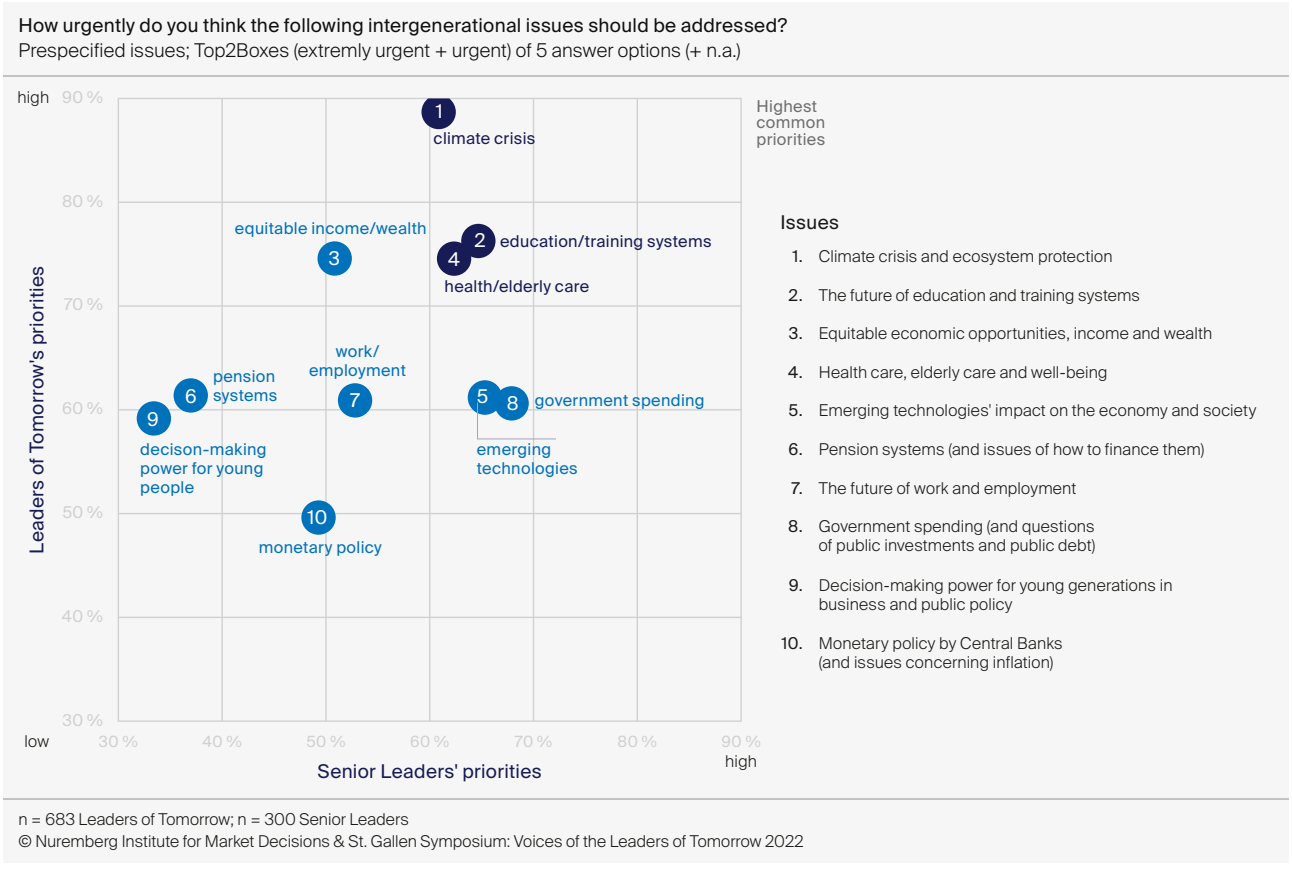


n = 683 Leaders of Tomorrow; n = 300 Senior Leaders


**Exhibit 1:** The future of education is a shared priority across generations

### Collaborative advantage in education

Core trends driving: The pandemic accelerated the globalisation of the knowledge industry and revealed knowledge clusters around lighthouses. Aside from other core trends, such as the rising importance of open science, these past years highlighted the bottleneck of public financing in education. The half-life of knowledge continues to shorten, and many businesses are emphasising specific skills instead of certificates and degrees. This is especially true for big tech and data-driven companies in the information technology industry. For instance, Apple and Google both launched innovative programmes to teach students and adults to code and promote other tech-oriented skills. The lack of a four-year degree is by no means a deal-breaker (Eadicicco 2020).

## CASE introduction

Considering these trends, the role universities play in society and the economy will need to change. Many industries including mobility and retail have experienced radical changes due to disruptive innovation. If universities continue not to act, then they too may be disrupted by new entrants in the education sector such as MOOCs (massive open online courses) and EdTech companies like EdX, Udacity, or Coursera. These challenges are profound and reflect broader societal issues. For instance, universities will need to play a vital role in supporting societal and environmental development as envisioned by the UN Sustainable Development Goals.

**To fully exploit our collaborative advantage, we must develop innovative models of collaboration within the ecosystem of higher education. How can universities co-create value for students, businesses, and society and educate the next generation of responsible leaders?**

Undoubtedly, the COVID-19 pandemic accelerated digitisation both in business and in how we work, learn, and interact with each other. After spending nearly two years in front of their computers and rapidly adopting digital solutions such as Zoom in education and teaching, we are now finally welcoming students back on campus to pursue higher education in person.

To fully exploit our collaborative advantage, we must develop innovative models of collaboration within the ecosystem of higher education. How can universities co-create value for students, businesses, and society and educate the next generation of responsible leaders?

The perspectives offered on the future role of universities came across three main building blocks:

- **Open Individuals** – Empowering students to become the next generation of responsible leaders.
- **Open Organisations** – Co-creating value across disciplines, cultures, and sectors.
- **Open Societies** – Serving as independent and trusted knowledge advisor.

## CASE discussion

To gather diverse viewpoints, discussions drew on expertise from the private sector, academia, next- generation leaders, and the public sector.

Two pivotal questions guided the discussion and are highly relevant to this CASE:

- Through which innovative models of collaboration within the ecosystem of research and education can universities co-create value with students, businesses, and society?
- In which key areas will a collaborative approach allow universities to prepare students and employees for the future of work?

### Cross generation roundtable

This White Paper explores how universities can remain at the forefront of higher education in a fast-changing and interconnected world.

It draws on expert recommendations and insights from a cross-generational roundtable at the 51 ˙ ‘St. Gallen Symposium on 6 May 2022: HSG/St. Gallen Symposium (2022): Rethinking the Role of Universities in the Future of Work and Learning. Joint White Paper.

### St. Gallen Symposium

The St. Gallen Symposium is one of the world’s leading initiatives for cross-generational dialogue on economic, political and social themes and developments. For more than 50 years, established leaders and visionaries have been brought together with extraordinary young talents in St. Gallen and at global locations, as well as in digital formats. Together, they address the chances and challenges of our time and work on finding solutions. The Symposium is a student initiative. Under the strategic guidance of the St. Gallen Foundation for International Studies, the International Students’ Committee – a team comprised of about 30 students from the University of St. Gallen (HSG) – drives the dialogue between generations. During the symposium, 500 HSG students support the exchange of ideas. The event 2022 was co-hosted by the St. Gallen Symposium and the Institute of Technology Management (ITEM-HSG) at the University of St. Gallen which was founded in 1989 with the support of the „Foundation for the Promotion of Technology Management, Technology Policy and Technology Transfer“.

### Open Individuals: Empowering students to become the next generation of responsible leaders

Up to this day, universities focus largely on teaching domain-specific knowledge and facts. To prepare students for a complex and agile future of work, universities should provide students with more phenomenon- based problem-solving and collaboration competencies, as well as leadership and soft skills necessary to become the next generation of responsible leaders.

Multiple unforeseen and dramatic crises have disrupted our economic and political systems in recent years – including a global pandemic, the war in Ukraine, and current supply chain disruptions. The climate crisis is accelerating and will require new modes of production, consumption, and mobility. All of this, combined with the rising demand for technology- and data-driven jobs, gives rise to an ever-increasing need for critical thinking and reflection. Rather than focusing on fixed skills or hard facts, universities should encourage students to develop an entrepreneurial mindset, and the knowledge acquisition necessary to solve

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> ***Kamali Rajesh,*** *global head of people and organization development, Syngenta*

Problem-solving in an academic setting should aim to help students develop their ability to approach complex problems in a pragmatic, flexible way. "During school, young talent are forced to think in very linear ways. They expect a solution for each problem or that someone tells them what the solution is going to look like," said Lisa Marie Fassl, Co-Founder and CEO of Female Founders. "That is unrealistic because we hire well-educated people to give them freedom and encourage them to come up with the solutions themselves. Otherwise, we can do it ourselves". She added that many graduates lacked capacities to deal with complexity and narrow down big problems into smaller ones – thus making them manageable.

For universities, this means they need to provide more pedagogical instruments like experimentation in a safe learning environment where individuals can make mistakes, learn from them, and cultivate pragmatic problem-solving competencies they'll need in the "real world".

> *"It's not about learning very specific skills and hard facts, but it's actually more about learning how to gain the knowledge to address complex problems in the world."*
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A potential remedy for the current gap between the need for agile leadership skills and the kinds of competencies university students take away from their studies could be 'phenomenon-based learning': Students work on projects, either alone or as a team to address complex challenges as a part of guided learning. By engaging with colleagues from different backgrounds and experiences, individual members of such interdisciplinary teams share their expertise and work collaboratively. Phenomenon-based learning is crucial to developing better problem solvers, critical thinkers, and team players. It enables learners to think outside the box and look at the big picture. The approach stems from Finland's highly successful school system and has been shown to improve students' collaboration skills, academic engagement, motivation

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to learn, and self-efficacy. In engineering, Stanford and Aalborg are known for their problem-centric learning approaches, while in management, Harvard Business School is famous for its problem-centric case teaching method (Drew 2020).

### Self- and shared leadership

In an increasingly volatile, fast-changing world, the need for agility is leading to "flatter", de- structured organisations. The future of work will be based on challenges, tasks, and projects rather than on functional domains like finance, IT, or marketing. This will increasingly require adaptive self- and shared leadership to respond to growing complexity. Due to increased interconnectivity, education needs to adapt to the changing job requirements shifting from technical, domain-specific knowledge to collaborative and soft skills.

Employers look for such attributes in candidates as emotional intelligence, resilience, integrity, curiosity, adaptability, and for them to display growth potential. Furthermore, working in teams is already and will become even more important going forward.

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### Open Organisations: Co-Creating value across disciplines, cultures, and sectors

In an age of ecosystems, collaborating with partners to share complementary assets is becoming the new normal. Like other sectors, universities will flourish most if they leverage their existing and craft new partnerships across the public, private, and non-profit sector to co-create value.

To ensure shared and collective values are beneficially experienced by everyone in the higher education ecosystem, both collaboration and co-creation will become the highest valued attributes among students, business, and society (Plewa/Galán-Muros/Orazbayeva 2018).

Ecosystems as a relatively new concept of value co-creation have gained significant relevance in recent years in research as well as practice. They are so relevant because the collaboration of three or more parties creates added value that one partner alone could not produce, and industry boundaries can be crossed.

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Over the last several decades, university- industry partnerships with the goal of transferring technological knowledge from universities into practice have become quite commonplace. Typically, these relationships and their supporting organisations, such as incubators or purposefully established technology-transfer offices, are focused on the translation of research insights into marketable products (Villa-

ni/Rasmussen/Grimaldi 2017). University-industry collaboration with the goal of transferring practitioner insights into the higher education context are a relatively new phenomenon.

Clearly, one of the most important stakeholders of universities' value creation through education and life-long learning are employers – in the private and public sector. Universities shape the skills, mindsets, and experiences which graduates will ultimately bring to companies and public and non-profit sector organisations.

Next to the many ways in which universities impact the personal development, knowledge, and skills of graduates, they also serve an important function of reducing information for potential employers. As Prof. Sascha Spoun, President of Leuphana University Lüneburg noted, employers depend on universities to certify students' domain-specific expertise and problem-solving competencies.

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Directly linked to individual education opportunities and outcomes are company investments into their employees' education. According to Nat Ware, Founder of Forte and 180 Degrees Consulting, current labour market trends of decreasing tenure at a single employer ("People jump from company to company") reduce the incentive for corporations to allocate resources to training and education. Thus, a realignment of incentives is in order. He suggested a model where: "[…] the people who fund the education get back a percentage of the increase in income taxes for a set number of years into the future. So, it could be they get back 20 percent of the increase in income taxes for 20 years, or 30 percent for 10 years, or 50 percent for five years, et cetera."

Universities provide the foundations for start-ups along three essential lines: creating networks, shaping an entrepreneurial mindset, and enabling the transfer of research knowledge.

Through group and project work, tight-knit bonds and trusted groups form, eventually leading to friendships. These groups often go on to found new ventures. Perhaps the most famous example is the symbiosis of the ICT sector and Stanford University. There are of course numerous other institutions that feature similar value co-creation. In jocular terms we might describe universities as a business partner dating agency. Jeremy Thompson, Executive Vice President of Huawei Europe, delineated: "There is not a single tech company out there without connection to a university." He also mentions Israeli and London universities as advanced business incubators: "They're turning out business ideas and innovation or even almost fully formed, operating businesses."

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Research suggests that across countries university graduates are more likely to start a new business than those without a university education (Bosma et al. 2021).

Similarly, Forbes' profiles of young innovators and entrepreneurs also show that most individuals are university graduates (Houser 2015). Consequently, university degrees can be an essential steppingstone to improved outcomes.

Furthermore, universities represent a profound force for driving start-up creation and support (Jahanian 2018). The research conducted at higher education institutions has proven to be fertile ground for the establishment of new companies

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and jobs due to their unique ability to bring together highly qualified people from varied backgrounds in an area where experimentation and risk-taking are encouraged (Houser 2015). Academic research and knowledge spill overs, particularly start-ups and spin-offs of large research universities, empower the diffusion of innovation (Audretsch/Feldman 1996). In this context Jeremy Thompson also noted the reverse effect as highly relevant. Exchanges with practitioners might inform research approaches and inspire new models.

### Open Societies: Providing an inclusive, independent space for expertise and discourse

Universities' expertise and knowledge arbitration are in high demand, given the complex nature of contemporary challenges such as global pandemics, climate change, and a technology-driven transformation of the world of work. This central role will come with opportunities but equally with unique challenges. For universities to assume their role and contribute actively to open societies, independence, professional communication, and inclusivity will be key.

Next to their role in educating the next generation and advancement of humanity's frontiers of knowledge through foundational research, university researchers have a prominent role as public experts. Academic freedom and independence are at the core of universities' unique societal role as knowledge advisors and arbitrators. For public universities in particular, independence from profit concerns allows for a special role in society.

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This also means that universities have a delicate balance to strike between independence and interdependence. While an orientation towards the skills and competencies needed by employers as well as politically and societally relevant challenges is important for universities' social legitimacy, they need to concurrently reaffirm their position of independence from which they pursue both foundational and applied research. As Prof. Ehrenzeller put it: "Businesses apply critical thinking to make profit, universities enable students to think critically."

To fulfil this role, universities will need to invest far more in communicating their accumulated knowledge to the rest of society – and to empower researchers to engage in public, at times polarised, debates.

To address the coming challenges facing society – from climate change to future pandemics – education must be accessible to all. Such inclusive access to higher education depends on well-funded education and university systems. This is a particularly pressing issue in light of the economic crisis related to the COVID-19 pandemic and the Russian invasion of Ukraine, as public funding for universities in Europe may be under increasing pressure due to future austerity measures.

At the same time, the technology-driven transformation of the world of work will usher in a highly elevated role for lifelong learning. While professional education does play a growing role, European education systems can do more to accommodate these new demands and use opportunities related to the need for continuing education and re-skilling. Systems which leverage sufficient public funding to ensure equitable access, take into account differing needs of learners to harness their diversity, and constructively support and challenge learners to ensure an inclusive experience will be best equipped to address the challenges of the future.

## CASE conclusions

The higher education sector will undergo a massive transformation in the coming decades. The rapid growth of knowledge, changing work practices in a global economy, new digital technologies, and altered expectations of both employees and employers demonstrate that where, how, and what we learn and teach will be different from today.

- Overall, the future of work and learning will dramatically shift the role of universities as an independent "Denkplatz".
- Within a fast-changing and interconnected world, universities will need to adopt an interconnected mindset of collaborative problem-solving to actively enable – and not merely react – to such developments.
- Universities will need to more proactively connect with diverse economic and societal stakeholders and realise partnerships through new models to create significant and sustainable value going forward.
- Like other sectors in the age of value creation within ecosystems, the future of higher education is collaborative. By focusing their efforts on the three building blocks of open individuals, open organisations, and open societies, universities will be able to rethink and assert their unique role in a world plenty of challenges and opportunities.

> *"Universities need to be the space for understanding the world, for discourse and open debate and exchange of arguments – beyond our institutional borders."*
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Overall universities have to think big, start small, and learn faster. They should be the institution where the speed of learning is greater than the speed of change in the environment. ■

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