Geneva Research Lab for Digital Impact

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SHAPING GENEVA'S DIGITAL FUTURE:

Skills or Governance?

Geneva Research Lab for Digital Impact
University of Geneva

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The **Geneva Research Lab for Digital Impact (GRL)**, a joint initiative of the University of Geneva's Competence Center for Innovation & Partnerships and Giga – a UNICEF-ITU partnership – accelerates school connectivity and advances digital inclusion through cutting-edge research, innovative learning, and global multi-stakeholder collaboration.

The Competence Center for **Innovation & Partnerships (I&P)** develops systematic research to catalyze innovation, grow learning-based partnerships, and disseminate ideas to create impact and address the Grand Challenges.

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FRAMING GENEVA'S DIGITAL FUTURE

As the digital world evolves at an unprecedented pace, the question of how to best prepare tomorrow's leaders grows increasingly urgent. For Geneva, a city renowned for its international policy expertise and global governance leadership, the challenge lies in balancing its existing strengths with the demands of a rapidly advancing technological landscape. Should Geneva prioritize developing technical skills in coding, data science, and cutting-edge technologies to remain globally competitive? Or should it double down on its expertise in digital ethics, policy, and regulation, where it already holds considerable influence?

These questions lie at the heart of Geneva's strategic dilemma, as cities worldwide grapple with cultivating the skills and knowledge required for sustainable growth in a technology-driven future. Addressing these issues is essential not only for Geneva's long-term relevance but also for its potential to shape the global conversation on the responsible and inclusive development of technology.

Geneva is at a digital crossroads.

In this context, the annual Innovation Debate, organized by the Geneva Research Lab for Digital Impact (GRL) at the University of Geneva's Center for Innovation & Partnerships, in collaboration with Giga (a UNICEF-ITU initiative connecting every school to the Internet) and the Geneva Innovation Movement, provided a platform to tackle these pressing questions head-on. This year's provocative motion - *"Geneva's strength in the next decade will be enhanced by fostering technological expertise rather than prioritizing digital ethics, policy, or regulatory knowledge"* - invited diverse perspectives on how Geneva should navigate its digital future.

The debate brought together four leaders in digital transformation to represent both sides of the motion. Over the course of the discussion, they challenged one another's perspectives, identified trade-offs, and framed actionable insights on Geneva's potential pathways forward. The event served as a forum for reconciling extreme positions, exploring nuanced solutions, and identifying the priorities needed for Geneva to thrive as a global hub in the digital age.

This white paper captures the key arguments, insights, and recommendations from the debate, offering a roadmap for Geneva's strategic direction. By synthesizing the perspectives shared, it aims to

contribute to the ongoing dialogue about how Geneva - and cities alike - can successfully balance technological innovation with ethical governance, ensuring a sustainable and inclusive digital future.

THE DEBATE: MOTION & PERSPECTIVES

The debate revolved around the following motion:

GENEVA'S STRENGTH IN THE NEXT DECADE WILL BE ENHANCED BY FOSTERING TECHNOLOGICAL EXPERTISE RATHER THAN PRIORITIZING DIGITAL ETHICS, POLICY, OR REGULATORY KNOWLEDGE.

ARGUMENTS FOR THE MOTION

Proponents of the motion emphasized the transformative potential of prioritizing technological expertise and innovation to ensure Geneva's global relevance. Their arguments included:

Economic Opportunities

Investing in technical skills and fostering innovation would enable Geneva to remain globally competitive, attract startups, and position itself as a leader in emerging technological fields such as artificial intelligence, blockchain, and biotechnology.

> ***If you focus too heavily on governance and processes, you discourage the creative thinking necessary for progress.***
>
> Alexandre Robert-Tissot, *ART Computer*

Leverage Existing Assets

Geneva already possesses world-class institutions like CERN and is geographically close to EPFL, providing a solid foundation for developing a thriving technological ecosystem. By capitalizing on these assets, Geneva could expand its role in the global tech landscape.

> *Geneva is a place where technology meets humanity. But this isn't just a branding proposal – it should be a self-fulfilling prophecy.*
>
> *We cannot have leadership in digital governance if we do not have deep technical expertise. Without it, we risk becoming obsolete in shaping the future of global innovation.*
>
> Deborah Mattatia, *KollectiveLabs*

Autonomy and Leadership

Developing homegrown technologies would reduce dependency on external innovations and allow Geneva to play a stronger role in shaping global digital governance. Local expertise could provide the autonomy needed to influence how emerging technologies are developed and used.

Skills come first, and governance comes after – Uber is the perfect example of how innovation leads, and regulation follows.

Alexandre Robert-Tissot, *ART Computer*

If we want to shape the digital world ethically and effectively, we must first have a seat at the table – and that requires hard skills.

Deborah Mattatia, *KollectiveLabs*

ARGUMENTS AGAINST THE MOTION

Opponents of the motion countered by emphasizing Geneva's unique strengths in governance and diplomacy, and the potential risks of shifting focus toward technology. Their arguments included:

Geneva's Core Strengths

Geneva's long-standing reputation as a leader in diplomacy, trust-building, and ethical governance distinguishes it globally. These assets, difficult to replicate elsewhere, should remain Geneva's primary focus.

Geneva's true strength is not in coding, but in fostering trust. It must remain human-centric to shape the future of technology in a way that serves society.

Sebastian Buckup, *World Economic Forum*

Debaters engage in a dynamic discussion on Geneva's digital future. (Photo: GRL / Geneva Innovation Movement)

Collaboration Over Competition

Rather than competing with other Swiss tech hubs like Zurich or Zug, Geneva should complement these regions by continuing to focus on its governance expertise and fostering collaboration across the broader Swiss ecosystem.

Over-Regulation Risks

A tech-first approach might lead to over-regulation or misaligned policies, potentially stifling innovation and collaboration. Opponents cautioned against pursuing technological advancements at the expense of Geneva's ability to serve as a trusted hub for inclusive governance.

> ***Geneva's strength isn't just in developing technology, but in creating trust around it. Without governance, even the best innovations risk becoming harmful.***
>
> Carmen Hett, *UNHCR*

The debate highlighted the complex trade-offs between fostering technological expertise and maintaining Geneva's global leadership in diplomacy and ethics, with both sides presenting compelling perspectives.

> *Geneva doesn't need to be a leading tech hub to spearhead technology-conscious policies – just as it didn't need to be a business hub to lead the public-private partnerships movement.*
>
> Sebastian Buckup, *World Economic Forum*

> *Geneva already has all the building blocks for leadership in digital governance. We don't need to be the center of tech development, but we must ensure technology serves society responsibly.*
>
> Carmen Hett, *UNHCR*

> *Technology alone cannot solve global challenges – it must be interdisciplinary, multifaceted, and guided by robust ethical policies and governance.*
>
> Carmen Hett, *UNHCR*

> *We don't need coders to write the rules. Geneva must be technology-conscious, not technology-centric, if it wants to remain trusted and relevant.*
>
> Sebastian Buckup, *World Economic Forum*

KEY THEMES AND INSIGHTS

Balancing Innovation and Governance

Geneva's future lies at the intersection of innovation and governance. Technological advancements must be guided by robust ethical frameworks and policies to ensure they benefit society sustainably and inclusively. Striking this balance is essential for Geneva to maintain its relevance in the global digital landscape.

Challenges of Cost and Talent

Switzerland's high costs were identified as a significant barrier to attracting startups and entrepreneurs. While this presents a challenge, participants discussed potential solutions:

- Implementing financial incentives and targeted programs to support tech startups and attract global talent.
- Leveraging Switzerland's political stability, established reputation, and access to world-class institutions to overcome cost-related obstacles.

Role of Education and Skills

Developing a skilled workforce was seen as vital to Geneva's digital future. However, participants emphasized the importance of a holistic approach:

- Technical skills, such as coding and data science, should be complemented by soft skills like leadership, collaboration and critical thinking.
- Early education systems should emphasize entrepreneurship and creativity, fostering a problem-solving mindset to prepare future leaders for complex challenges.

Global Leadership through Trust

Geneva's ability to foster trust and collaboration was highlighted as its most significant asset. This trust, built over decades of diplomatic and governance excellence, gives Geneva a unique competitive advantage. Participants underscored the need to sustain this trustworthiness by:

- Continuing to champion human-centered policies and governance frameworks.
- Positioning Geneva as a platform for inclusive, ethical leadership in digital innovation and regulation.

These themes emphasized the need for Geneva to adopt a multifaceted, forward-looking approach to sustain its leadership in digital governance and innovation.

RECOMMENDATIONS FOR GENEVA'S DIGITAL FUTURE

To position itself as a global leader in the digital era, Geneva must adopt a strategic approach that balances innovation, governance, and collaboration. The following recommendations provide a roadmap for short-term, medium-term and long-term actions.

SHORT-TERM ACTIONS

Create Incentives for Innovation

Launch acceleration programs, fellowships, and startup funds to attract global talent and entrepreneurs. These measures will help build a thriving ecosystem of innovators and foster economic growth.

Leverage Existing Assets

By strengthening ties between international organizations, leading tech institutions, and startups, Geneva can create a cohesive ecosystem that integrates governance and technological expertise. This approach capitalizes on existing resources like CERN, EPFL, and other regional assets.

MEDIUM-TERM ACTIONS

Foster Education for the Future

Integrate coding, ethics, and interdisciplinary learning into its education to prepare future leaders. These efforts will ensure that emerging generations are equipped with the technical and soft skills required to navigate complex challenges.

Promote Visibility

Highlighting Geneva's successes in tech-driven humanitarian innovation is essential to enhancing its global brand. Showcasing initiatives that merge technological advancements with ethical governance will attract talent, investment, and partnerships.

LONG-TERM VISION

Position Geneva as the Intersection of Tech and Humanity

Develop a vision where technology and ethics converge. By leading global conversations on sustainable and inclusive innovation, the city can strengthen its reputation as a center for both technical excellence and ethical governance.

Strengthen Cross-Sector Collaboration

Partnerships between public, private, and academic sectors are essential for addressing complex global challenges. Geneva should actively facilitate collaboration across these sectors to foster innovative, scalable solutions that align with its values of trust and diplomacy.

CALL TO ACTION

The debate underscored Geneva's unique position at the intersection of diplomacy and technology. By leveraging its established strengths in trust-building and ethical governance while embracing innovation, Geneva can solidify its role as a global leader in sustainable and inclusive digital governance.

To achieve this vision, stakeholders from public, private, academic, and civil society sectors must collaborate to define Geneva's strategic direction. By fostering trust, promoting collaboration, and prioritizing human-centered innovation, Geneva can navigate the challenges and opportunities of the next decade, ensuring a future where technology and governance thrive in harmony.

Participants engaging with Nadine, a social robot by Miralab (University of Geneva), as she provides inputs on the motion.
(Photo: GRL/Geneva Innovation Movement)

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