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Why U.S. Universities have more influence in the global debate on AI Governance and Regulation and how German Universities can reclaim their seat at the table. A workshop report

I. Introduction

In Mid-September 2023, a group of six academic researchers from Harvard Business School, The Wharton School, Warwick Business School, MIT Sloan School of Management, and three management consultants of the Boston Consulting Group published what has since become the third most-downloaded and quoted scholarly paper of 2023. "Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality," short, the "experiment," as some of the authors call it, is a first-of-its-kind randomized control trial with more than 750 BCG consultants worldwide as subjects.[1] It is the first study to test the use of generative AI in a professional services setting—through tasks that reflect what knowledge workers do every day. "This is important because understanding the implications of LLMs for the work of organizations and individuals has taken on urgency among scholars, workers, companies, and even governments," the authors explain.[2]

They were correct in that assumption: After only a few weeks, "Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality" has profoundly impacted, e.g., the U.K. government's thinking and decision-making.[3] Its conclusions have reached the "AI Safety Summit" that hosted 28 governments and numerous industry and civil society experts recently at Bletchley Park. The study, led by Karim Lakhani of Harvard Business School, has been discussed by C-suite executives worldwide and quoted numerous times in newspapers.[4]

When has a German or European scholarly research paper on AI last had this real-world impact? What is more, the report by Lakhani et al. is only the latest example of such impactful work with solid influence on companies and governments: the newest thinking coming out of the Belfer Center at Harvard Kennedy School on biosecurity on the age of AI by Janet Egan and Eric Rosenbach, published in early November 2023, is set to structure the debate on biological weapons and AI[5]. Similarly, the Yale Information Society Project at Yale Law School has been owning the discussion on free speech and social media for years now. Especially when it comes to digital policy and digital government, AI policy and regulation, and bio- and cybersecurity, U.S. academic institutions have long coined a very different style of research and teaching that has made them global thought leaders and, in fact, agenda-setters for governments and companies, on these digital topics. Even when it comes to such core European topics, like regulating AI, e.g. with the European AI Act, American voices coin the debate almost more than European voices: The letter demanding a moratorium on AI research for six months and strict regulation, signed by 30,000 experts, researchers, industry figures and other leaders in March 2023, among them Danielle Allen, Elon Musk, Geoffrey Hinton, and many other prominent voices, was published by the Future of Life Institute in California, led by Anthony Aguirre, the Faggin Presidential Professor for the Physics of Information at U.C. Santa Cruz.

[1] Dell'Acqua, Fabrizio und McFowland, Edward und Mollick, Ethan R. und Lifshitz-Assaf, Hila und Kellogg, Katherine und Rajendran, Saran und Krayer, Lisa und Candelon, François und Lakhani, Karim R., Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality (15. September 2023). Harvard Business School Technology & Operations Mgt. Unit Working Paper No. 24-013, see SSRN: https://ssrn.com/abstract=4573321 or http://dx.doi.org/10.2139/ssrn.4573321.

[2] Dell'Acqua, Fabrizio and McFowland, Edward and Mollick, Ethan R. and Lifshitz-Assaf, Hila and Kellogg, Katherine and Rajendran, Saran and Krayer, Lisa and Candelon, François and Lakhani, Karim R., Navigating the Jagged Technological Frontier: Field

Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality (September 15, 2023). Harvard Business School Technology & Operations Mgt. Unit Working Paper No. 24-0131, page 2.

[3] https://www.gov.uk/government/publications/frontier-ai-capabilities-and-risks-discussion-paper/future-risks-of-frontier-ai-annex-a.

[4] For a short summary of the results, please see https://www.bcg.com/publications/2023/how-people-create-and-destroy-value-with-gen-ai.

[5] https://www.belfercenter.org/publication/biosecurity-age-ai-whats-risk.

While this short "Werkstattbericht" or workshop report does not presume to explore every angle of the differences between U.S. and German, or more broadly, European academic institutions, when it comes to teaching and researching digital and technology policy, it nevertheless wants to shed light on some of the reasons why we so often find U.S. academic voices at the helm of these topics, steering the discussion, and not seldomly steering governments or international bodies like the European Union and United Nations. Let's give some concrete examples.

II. Not learning for school but for life

To begin with, three characteristics of the collaboration between Karim Lakhani and others with Boston Consulting Group make it a prime example to illustrate the enormous differences between U.S. academic institutions and German universities and academic institutions when it comes to researching and teaching the societal and policymaking implications of Artificial Intelligence, in particular Generative Artificial Intelligence, or short GenAI.

First, "Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality" was conceptualized first and foremost with practical applications and recommendations for corporates, policymakers, and only then other academic researchers in mind. Lakhani and his colleagues primarily answer an exceedingly timely and relevant question for corporates, namely whether or not it is worthwhile, from a cost-benefit perspective, to invest in a much-hyped but expensive and complex, potentially even dangerous technology, and if so, how to do it effectively. It is a question that is asked daily by C-suite executives worldwide: what implications does GenAI have for my strategic workforce planning?

Second, Boston Consulting Group, a strategy consulting firm that advises C-suite executives, found not only the perfect study object as a global company of 30,000 + employees with varying backgrounds, seniority levels, and abilities but also an ideal multiplier for the results. The same experiment in a purely academic setting done with university students would not have had the same impact or significance, as the authors acknowledge themselves: "A crucial feature of our experiment was the availability of our experimental subjects. Specifically, we tapped into a high human capital population, with participants who were not only highly skilled but also engaged in tasks that closely mirrored part of their professional activities".[6]

Furthermore, the experiment by Lakhani et al. deliberately highlights starting points to help policymakers gauge where they need to focus policy programs, which are supposed to help those negatively affected by the technology. The paper first gives fact-based and practical insights into who these people may be that require help and who the stakeholders may be that need to be brought to the table to tackle the problem: "An immediate danger emerging from these findings, for instance, is that people will stop delegating work inside the frontier to junior workers, creating long-term training deficits. Navigating the frontier requires expertise, which must be built through formal education, on-the-job training, and employee-driven upskilling."

Only as an afterthought do the authors want to contribute to a purely academic debate. But their first and foremost ambition is to shape the discussion in industry and governments.

These characteristics of "Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality," namely aiming for immediate practical application of the research in companies, picking strong business partners and leveraging them not just for research but also for marketing, and, lastly, very clearly stating the broader utility for governments, very much highlight and demonstrate the typical approach of the U.S. professional school. We might add a fourth one: working with practitioners, regardless of their academic references. While, for example, BCG has its research unit and internal think tank with the Bruce Henderson Institute, this is not an academic institution, nor does it claim or want to be. Yet its leaders, seasoned practitioners of AI and GenAI implementation in corporates, are equal co-authors of the scholarly paper - nothing you often see in German academic circles.

III. Characteristics of the U.S. Professional School

All of these characteristics are typical for U.S. professional schools. These schools, like Harvard Business School, but also its more policy-oriented sibling Harvard Kennedy School, or, a bit further south of the U.S. East Coast,

[6] Dell'Acqua, Fabrizio and McFowland, Edward and Mollick, Ethan R. and Lifshitz-Assaf, Hila and Kellogg, Katherine and Rajendran, Saran and Krayer, Lisa and Candelon, François and Lakhani, Karim R., Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality (September 15, 2023). Harvard Business School Technology & Operations Mgt. Unit Working Paper No. 24-013, p.17.

Yale Law School, or, to venture more to the U.S. West Coast, the Goldman School of Public Policy at the University of California Berkeley, are not well understood in Germany at all. There is not even an excellent German translation for the "Public Policy" discipline – it is certainly not "Politikwissenschaft."

The most significant differences – and secrets of success for why they have so much of a seat at the table in global discussions – to German universities of these U.S. professional schools can be found in their syllabi, in their teaching personnel, and (mainly as a consequence of the latter) their attitudes towards collaboration with private sector actors and governments.

Take, for example, the syllabus of Harvard Kennedy School, arguably the most famous and respected public policy school in the U.S., which has been the alma mater of presidents of the likes of Barack Obama, Ellen Johnson Sirleaf, Felipe Calderón, let alone dozens of ministers in any country of the world, U.S. congressmen and -women, as well as senators, and leaders of the World Bank, IMF, and United Nations. Despite its evident success, Harvard Kennedy School's syllabus would hardly get academic approval from a German university president. I have often experienced a slight haughtiness among German academics when it comes to Harvard Kennedy School classes like "policy analysis," "leadership," "negotiations," "and the making of a politician," and their curricula: efficient, little to no written homework of academic nature, almost no traditional teacher-centered "chalk-and-talk" teaching, but instead students are put, e.g., through real-time, real-stakes negotiation practices with peers, have to found companies or NGOs, write and pitch op-eds that are published in newspapers around the world, calculate budgets and make trade-offs – in short, student have to put themselves, their visions, and their arguments on the line in real-world situations that prepare them for the careers that they aspire to: diplomats, politicians, policymakers, agents of change in civil society organizations. Even lawyers: classical research or time in the library, as German undergraduate or master students still experience it for the majority of their classes, is not considered appropriate or sufficient to prepare for a career as a judge or attorney at internationally renowned institutions like Yale Law School, Harvard Law School or Columbia Law School. Any U.S. law school has at least a law clinic for students to act as legal counsel in real life and practice their skills. Classes are highly interactive and challenging rhetorically; they

mostly center around the latest news and case studies rather than theoretical frameworks.

This practical approach to a profession is particularly relevant regarding a fast-moving topic like digital and technology policy. Consider the fact that any book, even any paper or regulation, like that E.U. AI Act, that was written before November 2022, the release of ChatGPT 3.5 by OpenAI, has almost no relevance anymore for today's debate on AI, its governance or societal implications. And this is not the first time that technological progress outruns policymakers. In the U.S., governments - federal, state, and local – and universities have learned during the Cold War and its constant nuclear threat that they need to think and debate interdisciplinary if they want their debate to be able to keep up with technological progress. Furthermore, they need to be current and not recur to frameworks that may no longer be applicable.

Consequently, digital policy is taught differently in these schools than in Germany and Europe.

Firstly, in most U.S. universities, digital and emerging technology policy have their home in the professional school, i.e., in a policy or law school, often have dedicated study tracks and are always taught by an interdisciplinary team and in the case method, i.e., along a practical example of their application. Take, for instance, the new course "The Science and Implications of Generative AI" at Harvard Kennedy School: it is taught by three professors – one economist, one mathematician, and a public policy professor. They promise their students they will learn "through case studies, simulations, and project-based assignments to assess the advantages and risks of deploying generative AI. The curriculum underscores the significance of informed policymaking in this rapidly evolving field, seeking to ensure that HKS graduates can harness AI technology responsibly for the benefit of society."[7]

By contrast, only some European universities offer interdisciplinary teaching on AI or case methods. Oxford University, for example, focuses on the social science of the internet and digital technology at the Oxford Internet Institute, but through a very academic lens.

ETH Zurich in Switzerland interestingly houses interdisciplinary research on the societal implications of new technologies, including AI, in the Department of Humanities, Social and Political Sciences. But in the core European Union itself, despite the E.U. being the first mover on comprehensive legislation on AI with the E.U.

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[7]   https://www.hks.harvard.edu/courses/science-and-implications-generative-ai.

AI Act, only a handful of universities offer interdisciplinary classes on AI, among them Technical University of Munich in Germany, the KTH Royal Institute of Technology in Sweden, Delft University of Technology in the Netherlands, and University of Helsinki in Finland. But we have yet to see any of them have as broad and prominent a seat at the table as Harvard or Yale have regarding AI policy in Washington. Or a paper that is more broadly agenda-setting and globally discourse-dominating than the one from Harvard Business School.

Another huge difference is the formal qualification of teaching personnel and faculty: U.S. professional schools often care more about real-world experience than academic accolades. This goes for all disciplines, really:

Jacinda Ardern, former prime minister of New Zealand, is equally part of the Harvard faculty as was Ban Ki-moon, Secretary General of the U.N. Emma Sky, the founding Director of Yale's International Leadership Center, served as political advisor to the Commanding General of U.S. Forces in Iraq, as development advisor to the Commander of NATO's International Security Assistance Force in Afghanistan, and as political advisor to the U.S. Security Coordinator for the Middle East Peace Process. None have a Ph.D. or would qualify for a formal teaching position in Germany. Similarly, the current administrator for USAID, the U.S. Agency for International Development, and former United States Ambassador to the United Nations, Samantha Power, who is on leave from not one but two professorships, the Anna Lindh Professor of the Practice of Global Leadership and Public Policy at Harvard Kennedy School and the William D. Zabel '61 Professor of Practice in Human Rights at Harvard Law School, was a practicing journalist before she became one of the most popular professors at Harvard. She also has no Ph.D. degree in sport, let alone a habilitation.

In digital and emerging technology policy, picking the best person for the job today allows U.S. professional schools to attract the most seasoned practitioners as teachers, who bring their experience directly from the front and often still practice while teaching classes. In addition, they can also quickly and fast adapt to new topics.

Bruce Schneier, for example, likely the globally most renowned cybersecurity expert, who is a daily consultant to governments around the world, does not have a doctoral degree, which would probably take him out of the running for a faculty position in any German university or academic institution. But it makes him a highly sought-after teacher at Harvard who always contributes the latest insights to his students and decision-makers in Washington.

Similarly, Nick Sinai joined Harvard in 2014 from the White House, where he was the U.S. Deputy Chief Technology Officer. Sinai led President Obama's Open Data Initiatives, co-led the Open Government Initiative, and helped start the Presidential Innovation Fellow program. Before this, he played a key role in crafting the National Broadband Plan at the FCC. Today, he works as a senior advisor at a Venture Capital firm. However, he still teaches every spring at Harvard Kennedy School a highly practical class called "Tech and Innovation in Government.". Students there are paired with governments and public sector entities to solve real-world digital problems, like coding a database and designing a digital government solution.[8]

Consequently, these professional Schools have considerable advantages in contributing meaningful research and educating tomorrow's leaders who already have real-life experience coming out of university. A significant benefit, especially regarding fast-moving topics like Generative AI, is for both students and professors and companies and societies. At the same time, research by professors is, in turn, inspired by problems from the real world. The study by Lakhani et al. is the latest, but by far not the only example, of them setting the agenda for governments or companies.

This brings us to the last and likely most controversial difference between U.S. professional schools and their digital policy work compared to German or European programs: the highly contested topic of industry collaboration and sponsoring.

Stanford, Carnegie Mellon, MIT, Harvard and Yale have a long history of collaborating with big tech companies and corporations. Vice versa, Alphabet, the parent company of Google, collaborates with various universities globally through its subsidiaries like Google and DeepMind on AI research and projects. Meta, Microsoft, Amazon – all the large tech companies have university partnerships in the U.S. and their research labs. These collaborations might involve joint research projects, academic grants, fellowship programs, and other forms of scholarly engagement to advance the state of the art in AI and promote the responsible use and understanding of AI technology. OpenAI, still partially a non-profit organization, often collaborates with researchers from diffe-

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8   https://innovategovernment.org/.

rent institutions and may form partnerships with universities for particular projects or initiatives.

They accept money from big tech or other industry collaborations of different forms, e.g., with companies like Boston Consulting Group. It still sometimes raises eyebrows in the German academic community and with good reason. Debates around the economic implications of AI regulation, including its impact on innovation, competition, and market dynamics and discussions of AI's impact on labor markets and how law can address potential job displacement may be feasible in an ivory-tower setting. But questions around privacy and data protection, e.g., analyzing the sufficiency of existing privacy laws and how they apply to AI, and debating whether new privacy frameworks are needed, or issues of security and cybersecurity of LLMs, e.g., the unique security challenges posed by AI, and how regulation can mitigate risks such as adversarial attacks, or, indeed, a proper assessment of technical standards, e.g. the role of technical standards in AI regulation, and how academic research can contribute to the development of robust, widely-accepted standards – these topics cannot be discussed without collaboration with the developer companies themselves.

IV. Conclusion

While it is unlikely that we will see German academic institutions turn into full-on professional schools, besides the few existing initiatives like the Hertie School in Berlin, the Willy-Brandt-School, or the Bucerius Law School in Hamburg, and while we can even argue whether or not that might be sensible on the whole, I strongly believe that German and European academic research needs more of a seat at the table, when it comes to technology and digital policy and global debates around regulating technologies like Artificial Intelligence. And that this will only come about by opening up more to the practical, to practitioners as teachers, and to industry as collaborative partners. Besides, it means becoming faster in publishing well-founded statements in more accessible publications and giving in to more marketing, also through industry partners.

The example of the U.S. professional schools and their approach shows that these organizations often engage with policymakers, academics, technologists, and the public to foster a better understanding of technology's impact on individuals and communities and advocate for policies that ensure technology serves the broader public interest. They are crucial in informing and shaping the discourse around technology and society in the USA. Through their various programs and initiatives, they each seek to bridge the gap between academic research and policy practice and to foster a well-informed public discourse on critical global issues.

And that, after all, is what we need in Germany and Europe, too, when it comes to critical technologies like Artificial Intelligence. Furthermore, we need the next generation of academics to be better trained to bring their arguments into the public domain. With technology like GenAI that has so much potential to cause democratic destabilization and disinformation, it needs trusted voices that know how to communicate clearly and give practical advice to industry, society, and governments.

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Prior to joining BCG, Kirsten was senior digital policy advisor to German Chancellors Angela Merkel and Olaf Scholz and the Head of the Digital and Data Department at the Federal Chancellery of Germany for more than four years. In that role, she co-negotiated the EU AI Act, Data Act, and all other European digital regulation, and was responsible for Germany's strategic positioning and global investments in digital technology and infrastructure.

Before her work at the Federal Chancellery, Kirsten taught AI and compliance at Harvard Law School and ran a research group on autonomous vehicles at Harvard Kennedy School. Before that, she was a TV correspondent for the BBC and for German national TV ARD and its flagship news bulletin Tagesschau.