



NEXTGEN NETWORK

KEY TAKEAWAYS: PARIS, FRANCE | JULY 10, 2019

BUILDING THE FUTURE: ADDRESSING THE OPPORTUNITIES AND CHALLENGES OF AN AI-ENABLED WORLD

The Aspen Institute's International Partners launched a global effort, with support from Microsoft, to build a network of NextGen leaders from the public, civic, academic and social sectors to engage in open discussion about one of the most pressing concerns for the present and future: artificial intelligence (AI).

The NextGen Network aims to provide a new outlook from the NextGen perspective on how AI and technology affect our society today, the opportunities it creates, as well as the challenges humanity might face in the near future. Furthermore, it brings the topic closer to the local context. The first workshop was held in October 2018 in Mexico City, Mexico, followed by Berlin, Germany, Prague, Czech Republic and New Delhi, India. The fifth edition of the workshop series was held in Paris, France in July 2019.



The Institut Aspen France, in collaboration with the Aspen Institute International Partners and Microsoft, hosted the fifth workshop with the NextGen Network in July 2019, bringing together twenty young leaders from the public and private spheres whose work engages with the ethical, technological, and policy questions of artificial intelligence. The workshop was moderated by Tyson Barker, Program Director for Transatlantic and Digital at Aspen Germany.

PRINCIPLES ON ETHICAL AI POLICY IN FRANCE, EUROPE AND GLOBALLY

Before delving into the granular details of contemporary debates around artificial intelligence (AI), participants took a step back to discuss the ground rules and basic values that should shape an approach to AI. Participants recognized that the rules and values remain contested and may vary significantly between national contexts. Fundamentally, whether AI appears as a risk or an opportunity depends on the bias, background, and perspectives of those making the decisions and policy and crafting the algorithms. Participants agreed that more confident assessments of AI's possibilities found in such gatherings may be a function of participants' general positions on the winning side of these developments.

Data privacy evokes particularly strong ethical debates and dilemmas, with the health space cited as a central example. For example, larger data samples help identify causes of disease and inform effective safety policies and regulation. In such cases, data-sharing should be encouraged, but on the individual level it remains a risky prospect. The questions of privacy and regulation require a delicate tradeoff between public and private, individual and society-level interests. Unfettered data-accumulation by private interests will simply result in increasing wealth concentration and disparity.

Easily exploitable data should therefore be considered as much as possible a public good in order to share benefits and level the playing field of a data-science economy.

Participants referenced France's national health data hub as an example but agreed that France needs a model of governance for a third-party that can manage data for all as a public good. Those wishing to then access and use this data should be required to pay or prove the value of what they seek to provide. The question of access is therefore a key foundational principle. However, participants agreed that "the devil lies in the details" when it comes to, for example, ownership of a site accessible to all, access to deep learning, adversarial learning, or quantum computing. Alongside the question of access and ownership is that of responsibility, especially when something goes wrong. Examples included instances such as: the Chicago Stock Exchange flash crash when two algorithms collided, or the Parcoursup system, where the French government gave university selection to an algorithm. How will the public react when a real AI is undertaking public decision-making, and who will be held responsible? Other key principles included frugality – that AI should be used because it's needed and necessary, not simply arbitrarily – and neutrality – that AI will have a global economic impact with the potential to increase and exacerbate great imbalances, and therefore conversations must include and provide support for the developing world.



The debate also centered around what differentiates this era from previous moments of great technological change. In what ways does AI represent an evolution, revolution, or transition? Some participants argued that the destructive nature of AI requires a complete reexamination of the fundamentals. Others proposed that the specificities of the challenge lie in the minutiae; that data can mean everything and nothing. The question of scale remains a significant factor, with the danger of looking at a scale that is too large, when in fact much of the disruption will be more short-term, on a five to ten-year time frame. Those who pushed back against the notion of revolution argued that AI represents an evolution, acceleration, and new step for algorithms and previously existing processes that go back centuries. A transition point necessarily generates uncertainty and fear. The current automation wave echoes previous ruptures, even those as recent as the ATM and attendant fears that it would eliminate bank workers.

Participants pointed to examples like call centers, where jobs have in fact not been disrupted or depressed. Others noted that the jobs debate may not be particularly new, just an indicator of greater awareness of mass unemployment and the desire to mitigate its ill effects. Where was the debate about upskilling farmers during the Industrial Revolution? The widespread reaction to AI is also a question of public perception and messaging, since bots that appear to the general public often give AI a bad reputation. The vocabulary used by decision-makers, authorities, and experts often clouds rather than clarifies the contours of the issue, meaning there is a responsibility that comes with shaping the public discussion on AI to avoid misperceptions or hysteria. Fundamental questions remain, especially for public authorities managing these perceptions, around where humans will be needed in the future and how we should value each other.

Attuned to the larger context of discussion taking place across national boundaries and contexts, participants attempted to distinguish what differentiated the French debate, for example the emphasis on defining and evaluating first principles. The moderator also noted that a focus on bias and the background of those making the decisions had not occurred in other discussions. Political culture impacts the approach to public policy and regulation, whether between countries in the EU or around the world, especially regarding the precautionary principle. France's AI strategy is still very national. Without a continent-wide focus, however, it will be difficult to implement large data sets. Looking forward, in the uncertain context of Brexit, France also could benefit from the return of many startups that were based in London, a scenario that could also lead to fragmentation. Whether AI is actually being applied in everyday circumstances continues to vary widely by country.

POLICY EFFORTS ON THE DIGNITY AND FUTURE OF WORK

Moving away from general principles, the second session opened with the observation that not only does AI concern employment, but that the quality of future work is also in question. The AI transformation will have unpredictable effects on work. Productivity and workers are decoupling, a phenomenon not strictly limited to blue-collar employment. AI will affect what jobs exist and how people will be trained. The example of medicine again illustrates the disparate effects of AI across professions. Very little is known about how the body works, even while new technologies are making significant inroads in traditional fields and diagnostics and even causing complete ruptures, as in immuno-oncology. A high-level medical research specialist may not see their job threatened, while the average doctor might be.

Automation offers the prospect of liberating people from dehumanizing work. The time and money saved can be used to help upskill workers and provide a better life. Yet with every previous transformation, humanity has ended up working more, meaning we should be skeptical of claims that AI will replace work with freedom and leisure for all. AI is potentially creating a rift, pushing some to the pinnacle of skilled labor and others in the direction of unskilled

and repetitive work, while it fails at assessing the ambiguity between the two in terms of quality. A key example is the rise of temporary workers and the gig economy. Public policy efforts should force companies to raise the quality of these jobs and to enable upward mobility. The traditional model of advancement - from temp worker to manager and onward up the ladder - is broken. April 2019 figures from the OECD show that in France it will take six generations to advance above the mean, undermining this incremental model.¹ In terms of Maslow's hierarchy of needs, this type of economy creates bifurcation between two types of citizens - those who still have to proceed according to the outdated incremental model, and those who proceed right to self-actualization, creating two types of citizen and the attendant problems of division and racism. Continual focus on a narrative of upward mobility, despite naïve best intentions, may have deleterious consequences regarding psychological perspectives on work amidst this transition.

Education and reskilling could therefore be an insufficient panacea for larger structural changes. In the French system, not enough is done to encourage the development of soft skills like communication and collaboration. However, it may be too difficult to change the national education model at the current pace of technological change, especially as skills expire quickly. From an international economic perspective, would some factories relocate back to France, but this time with fully automated workforces? What will this mean for national economies and international dynamics? Adjusting education to meet current demands is an issue that societies have faced through history. Mandatory schooling was not introduced in France until 1882,² more than four centuries after the invention of the printing press, and reskilling programs also failed in the past to help displaced workers adapt to a new economy. Will it take France four centuries now to catch up to the processes behind Amazon's Alexa? Who are the masters of the art of designing the algorithm? De-mystifying AI needs to occur within the education space, as many professors' first questions are whether they will be replaced by AI. Participants particularly emphasized mathematics education, and noted that math teachers should be more highly valued and remunerated. France still produces very top-level researchers, but the legacy institutions need to broaden their investment in training. US tech giants also invest six times more in AI startups than their French counterparts, and imbalances will continue to increase if investment is not flowing, especially for medium-sized companies.

PARTICIPANTS IDENTIFIED CENTRAL NEEDS FOR WORKERS WITHIN THIS CHANGING ENVIRONMENT

1. The need to be proud of and own one's work even as AI risks increasing the distance between work and impact;
2. The need to be treated fairly (hence the focus on algorithm bias);
3. The right to organize and defend rights, and;
4. The ability to innovate; and the freedom to do the job you want and move easily.

Some participants proposed ownership of personal data and increased cooperation between different skill sets as potential solutions to problems posed by AI, and underlined the need to effectively communicate these principles to the public. The current moment provides a great opportunity to redesign tasks and reimagine what gives dignity to work, offering the chance to avoid the alienation and inequality from the Industrial Revolution. Key elements for France to emphasize include: a connection to impact and a feeling of being part of a value-chain; continuous learning, such as new skills, soft skills, and emotional quotients with capacities for coaching and organizing; receiving and learning from feedback, which can be augmented by AI feedback loops; and empowerment from their work.

In the post-war period, workers often served on company boards and participated in the shareholder general assembly, a key point of democracy within firms. Today, workers need a contract to access stock options, and freelance or temp workers are shut out of such systems. Revenues are rising but wages remain stagnant. A solution to the economic problems related to automation could thus be stock options for all as a way to extend the shareholder mechanism. Within firms, the Chief Information Officer (CIO) and the person in charge of company social responsibility (CSR) or social impact rarely interact. Participants pointed out that unions were not represented at the workshop, and that AI can be more inclusive by ensuring those who are directly impacted have input. By incorporating the feedback of those adversely affected by automation, disenfranchisement and inequality in society could be avoided. It is critical that global companies change this to ensure that tech innovation is tied closely to social impact and consider how it could negatively disrupt society.

¹ <https://www.oecd.org/eco/surveys/France-2019-OECD-economic-survey-overview.pdf>

² <https://www.gouvernement.fr/en/secularism-and-religious-freedom>

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