Instituto
de Tecnologia
& Sociedade
do Rio

Inteligência Artificial & Regulação

Carlos Affonso Souza
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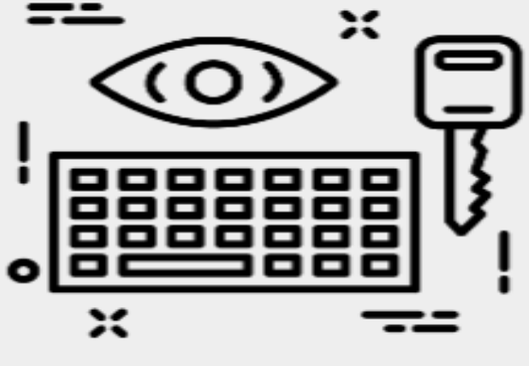
áreas de pesquisa

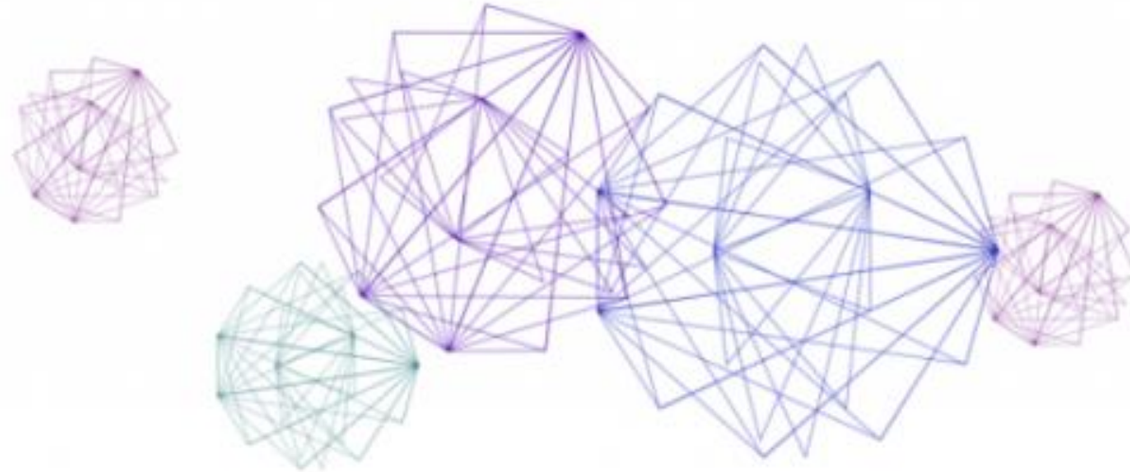
direitos e tecnologia



educação

repensando inovação

democracia e tecnologia



GLOBAL NETWORK OF **INTERNET AND SOCIETY** RESEARCH CENTERS

Artificial Intelligence & Inclusion Symposium

https://aiandinclusion.org/

Full Session Videos

Reading List

GLOBAL SYMPOSIUM

ARTIFICIAL INTELLIGENCE & INCLUSION

Event Website

DotPlot, An interactive visualization that shows the global perception of AI & inclusion from the participants

Write-ups about the event:

- Charting a Roadmap to Ensure Artificial Intelligence (AI) Benefits All, *Berkman Klein Center*
- The real danger of Artificial Intelligence is not what you think, *João Duarte*
- Bibi Reisdorf at the Global AI & Inclusion Symposium in Rio de Janeiro, *Bianca Reisdorf*
- Global Symposium on Artificial Intelligence & Inclusion, *Lucas Anjos and Odélio Porto Júnior*
- Top takeaways from the Global Symposium on AI and Inclusion, *Aparna Ashok*

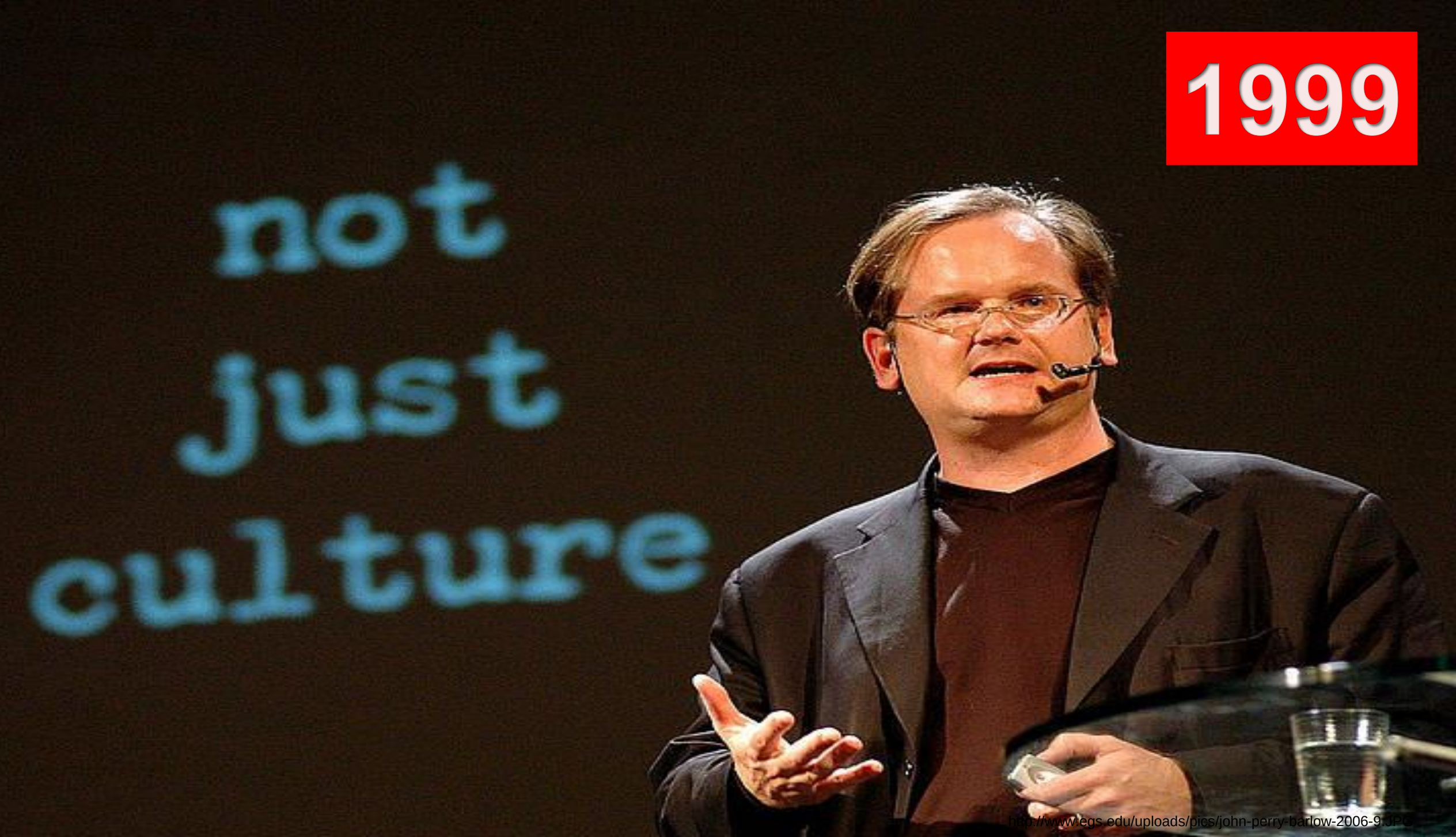
ITS

BERKMAN KLEIN CENTER

Museu do Amanhã

O papel da Regulação no futuro da IA

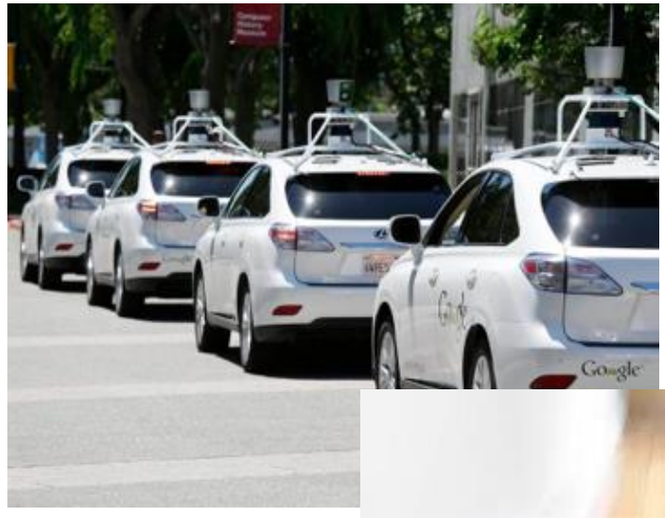
1. IA é **multifacetada**: Direito, Sociedade, Economia e Tecnologia
2. Ferramenta para legisladores e **administradores** serem mais eficientes
3. Aumento da **assimetria** de informação
4. Discussão precisa ser **multissetorial**
5. Levar em consideração diferentes **jurisdições** e **estratégias** nacionais
6. O ordenamento jurídico brasileiro já traz elementos importantes sobre **responsabilidade** e **proteção de dados**
7. Regulação pode nortear o uso de IA para ter **impacto social positivo**
8. Mas só se for acompanhada por discussão sobre a **Ética** que deve nortear o avanço da IA



http://www.egs.edu/uploads/pics/john-perry-barlow-2006-9.JPG

1. IA é multifacetada

2. Ferramenta para maior eficiência no setor privado e público



Educação

Segurança Pública

3. Aumento da assimetria de informação

PROFILING THE UNEMPLOYED IN POLAND:

SOCIAL AND POLITICAL IMPLICATIONS OF ALGORITHMIC DECISION MAKING

Based on the final score an algorithm decided which category should be given to the unemployed. The final calculation determines the scope of assistance which person can apply for. According to statistics profile I covers 2% of the unemployed in Poland, profile II – 65%, and profile III – 33%.

The first profile covers mainly the active and mobile individuals, who have appropriate professional qualifications and interpersonal skills. It is considered that they do not have any serious life problems that would make it impossible for them to find a job. Unemployed from this profile are offered 13 types of assistance – for example, funds to open a business, vouchers for trainings, refunds of costs of transportation or job search services.

On the other hand, profile II typically includes persons who have certain professional skills, but unfortunately are redundant on the labour market or worked for a very long time in only one company. They are seen as lacking ideas on how to solve their problems or self-presentation skills. 29 forms of assistance are reserved for profile II, like job placement or activation allowance.

Profile III comprises of individuals with serious life problems or those who do not want to cooperate with the employment office. In theory, they do qualify for one of 10 types of forms of assistance and special programmes. In practice, theses forms of support are too costly and difficult to organise, so job centres often simply do not offer them. According to the statistics 38% of labour offices cannot offer any kind of support to the persons assigned to the third profile.

4. Discussão precisa ser multissetorial

Urs Gasser Follow

Executive Director @BKCHarvard - Professor of Practice @Harvard_Law

Jan 21 · 7 min read

The Ethics and Governance of AI: On the Role of Universities

supply open resources
access and accountability
impact assessment
engagement and inclusion
translation

5. Diferentes jurisdições e estratégias nacionais

House of Commons

Science and Technology Committee

Robotics and artificial intelligence

Fifth Report of Session 2016–17

Report, together with formal minutes relating to the report

Ordered by the House of Commons to be printed 13 September 2016

PREPARING FOR THE FUTURE OF ARTIFICIAL INTELLIGENCE

Executive Office of the President

National Science and Technology Council

Committee on Technology

October 2016

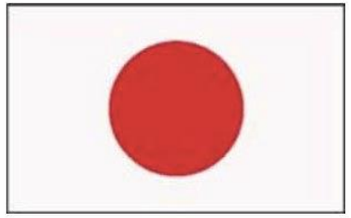
New Robot Strategy

Japan's Robot Strategy

- Vision, Strategy, Action Plan -

The Headquarters for Japan's Economic Revitalization

10/2/2015



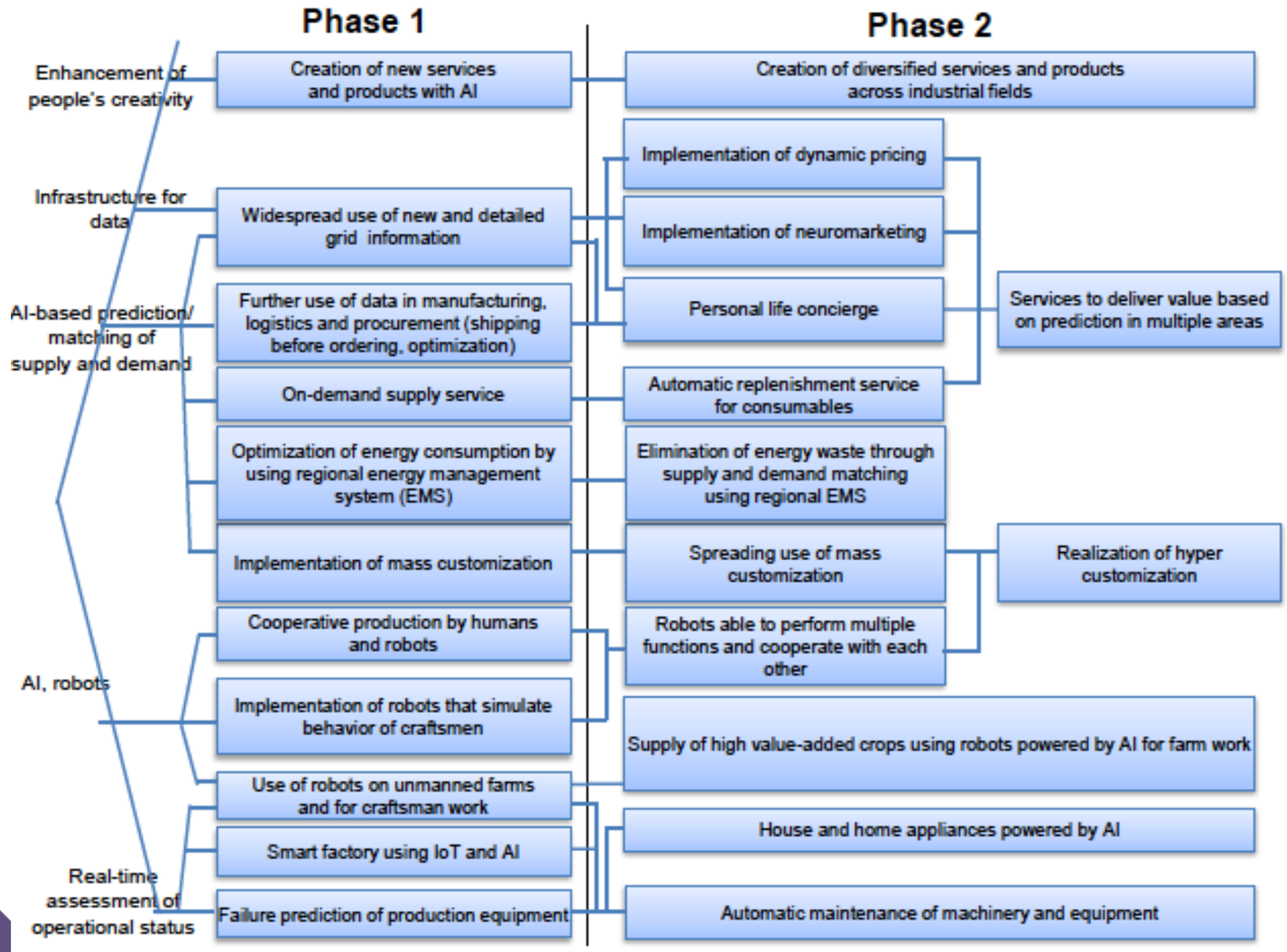
Subsection 1 Japan as a robotics superpower

Robots have become rapidly common in Japan since the 1980's primarily in the manufacturing sector. In particular, the automobile, electric and electronic industries showed a significant growth against the backdrop of greater labor productivity in line with the full-fledged employment of robots as the major destination for supply of robots. It goes without saying that these industries have played an active role for Japan to usher in an era of *Japan as No. 1* driven indeed by the utilization of robots.

In addition, robots have always been in the spotlight in Japan for diverse potentials and there have been noteworthy innovative achievements such as pet-like robots aiming to provide comfort and surprise to human or world-leading research and development on human-shaped robots and study of service robots.

Once a "robot barrier-free society" comes true, there will be routine collaboration between robots and human of all ages from children to seniors. Robots will help release human from cumbersome tasks and enrich interaction for a higher quality of life than ever. In addition, taking full advantage of robots for greater safety, comfort and attractiveness of a community will contribute to the formation of a highly attentive and convenient community that human alone may not come by.

Industrialization Roadmap (Productivity)



State Council Notice on the Issuance of the Next Generation Artificial Intelligence Development Plan

Completed: July 8, 2017
Released: July 20, 2017

First, by 2020, the overall technology and application of AI will be in step with globally advanced levels, the AI industry will have become a new important economic growth point, and AI technology applications will have become a new way to improve people's livelihoods, strongly supporting [China's] entrance into the ranks of innovative nations and comprehensively achieving the struggle toward the goal of a moderately prosperous society.

Second, by 2025, China will achieve major breakthroughs in basic theories for AI, such that some technologies and applications achieve a world-leading level and AI becomes the main driving force for China's industrial upgrading and economic transformation, while intelligent social construction has made positive progress.

Third, by 2030, China's AI theories, technologies, and applications should achieve world-leading levels, making China the world's primary AI innovation center, achieving visible results in intelligent economy and intelligent society applications, and laying an important foundation for becoming a leading innovation-style nation and an economic power.

EMMANUEL MACRON TALKS TO WIRED ABOUT FRANCE'S AI STRATEGY

The key driver should not only be technological progress, but human progress. This is a huge issue. I do believe that Europe is a place where we are able to assert collective preferences and articulate them with universal values. I mean, Europe is the place where the DNA of democracy was shaped, and therefore I think Europe has to get to grips with what could become a big challenge for democracies.

In the US, it is entirely driven by the private sector, large corporations, and some startups dealing with them. All the choices they will make are private choices that deal with collective values. That's exactly the problem you have with Facebook and Cambridge Analyticaor autonomous driving. On the other side, Chinese players collect a lot of data driven by a government whose principles and values are not ours. And Europe has not exactly the same collective preferences as US or China. If we want to defend our way to deal with privacy, our collective preference for individual freedom versus technological progress, integrity of human beings and human DNA, if you want to manage your own choice of society, your choice of civilization, you have to be able to be an acting part of this AI revolution . That's the condition of having a say in designing and defining the rules of AI. That is one of the main reasons why I want to be part of this revolution and even to be one of its leaders. I want to frame the discussion at a global scale.

FOR A MEANINGFUL ARTIFICIAL INTELLIGENCE

TOWARDS A FRENCH AND EUROPEAN STRATEGY

Building a Data-Focused Economic Policy

In this area AI heavyweights, such as China and the US, and emerging AI powers, such as the UK Canada and Israel, are developing extremely different approaches. Thus, France and Europe will not necessarily take their place on the world AI stage by creating a "European Google", instead they must design their own tailored model.

Promoting Agile and Enabling Research

The French academic research is at the forefront of worldwide exploration on mathematics and artificial intelligence, but the country's scientific progress does not always translate into concrete industrial and economic applications. The country is hit by the brain drain towards US heavyweights, and training capabilities on AI and data science fall well short of requirements.

Ethical Considerations of AI

Recent AI-led progress across a number of sectors (self-driving cars, image recognition, virtual assistants) and its increasing influence on our lives are driving public debate on the issue. This debate included extensive analysis of the ethical challenges raised by the development of artificial intelligence technologies and more broadly speaking by algorithms. Far from the speculative considerations on the existential threats of AI for humanity, the debate seems to focus on algorithms that are already present in our daily lives and that can have a major impact on our day-to-day existence.

Inclusive and Diverse AI

Artificial intelligence must not become a new way of excluding parts of the population. At a time when these technologies are becoming the keys to opening the world of the future, this is a democratic requirement. AI creates vast opportunities for value creation and the development of our societies and individuals, but these opportunities must benefit everyone across the board.

SUMMARY OF THE 2018 WHITE HOUSE SUMMIT ON *ARTIFICIAL INTELLIGENCE FOR AMERICAN INDUSTRY*

*"We stand at the birth of a new millennium, ready to **unlock the mysteries** of space, to free the Earth from the miseries of disease, and to **harness the energies, industries** and **technologies of tomorrow.**"*

– President Donald J. Trump

- **Supporting the national AI R&D ecosystem.** America is blessed with a unique R&D ecosystem that taps into the limitless bounds of American ingenuity. Attendees discussed our free market approach to scientific discovery that harnesses the combined strengths of government, industry, and academia and examined new ways to form stronger public-private partnerships to accelerate AI R&D.

- **Developing the American workforce to take full advantage of the benefits of AI.** AI and related technologies are creating new types of jobs and demand for new technical skills across industries. At the same time, many existing occupations will significantly change or become obsolete. Attendees discussed efforts to prepare America for the jobs of the future, from a renewed focus on STEM education throughout childhood and beyond, to technical apprenticeships, reskilling, and lifelong learning programs to better match America's skills with the needs of industry.

- **Removing barriers to AI innovation in the United States.** Overly burdensome regulations do not stop innovation – they just move it overseas. Participants in this session addressed the importance of maintaining American leadership in AI and emerging technologies, and promoting AI R&D collaboration among America's allies. Participants also raised the need to promote awareness of AI so that the public can better understand how these technologies work and how they can benefit our daily lives.

- **Enabling high-impact, sector-specific applications of AI.** Finally, attendees organized into industry-specific sessions to share the novel ways industry leaders are using AI technologies to empower the American workforce, grow their businesses, and better serve their customers.

EUROPEAN
COMMISSION

Brussels, 25.4.2018
COM(2018) 237 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Artificial Intelligence for Europe

{SWD(2018) 137 final}

Artificial Intelligence for Europe

Embracing change

1) EU initiative on AI

- Boost the EU's technological and industrial capacity and AI uptake across the economy
- Prepare for socio-economic changes
- Ensure an appropriate ethical and legal framework

- Stepping up investiments
- Strengthening research and innovation
- Supporting AI research, testing and experimentation
- Bring AI to small business and potential users

2) Joining Forces

- Engaging member states
- Engaging stakeholders: setting up a European AI aliance
- Monitoring AI development and uptake

European Parliament
2014-2019

Committee on Legal Affairs

2015/2103(INL)

31.5.2016

DRAFT REPORT

with recommendations to the Commission on Civil Law Rules on Robotics
(2015/2103(INL))

Committee on Legal Affairs

Rapporteur: Mady Delvaux

(Initiative – Rule 46 of the Rules of Procedure)

G. whereas many basic questions of data protection have already become the subject of consideration in the general contexts of the internet and e-commerce, but whereas further aspects of data ownership and the protection of personal data and privacy might still need to be addressed, given that applications and appliances will communicate with each other and with databases without humans intervening or possibly without their even being aware of what is going on;

K. whereas European industry could benefit from a coherent approach to regulation at European level, providing predictable and sufficiently clear conditions under which enterprises could develop applications and plan their business models on a European scale while ensuring that the EU and its Member States maintain control over the regulatory standards to be set, so as not to be forced to adopt and live with standards set by others, that is to say the third states which are also at the forefront of the development of robotics and AI;

S. whereas the more autonomous robots are, the less they can be considered simple tools in the hands of other actors (such as the manufacturer, the owner, the user, etc.); whereas this, in turn, makes the ordinary rules on liability insufficient and calls for new rules which focus on how a machine can be held – partly or entirely – responsible for its acts or omissions; whereas, as a consequence, it becomes more and more urgent to address the fundamental question of whether robots should possess a legal status;

T. whereas, ultimately, robots' autonomy raises the question of their nature in the light of the existing legal categories – of whether they should be regarded as natural persons, legal persons, animals or objects – or whether a new category should be created, with its own specific features and implications as regards the attribution of rights and duties, including liability for damage;

31. Calls on the Commission, when carrying out an impact assessment of its future legislative instrument, to explore the implications of all possible legal solutions, such as:

f) creating a specific legal status for robots, so that at least the most sophisticated autonomous robots could be established as having the status of electronic persons with specific rights and obligations, including that of making good any damage they may cause, and applying electronic personality to cases where robots make smart autonomous decisions or otherwise interact with third parties independently;

5. Diferentes jurisdições e estratégias nacionais

1. Estratégias para fomentar **investimentos públicos e privados**
2. Impacto no setor **produtivo**, **saúde** e **mobilidade**
3. Transformações no **mercado de trabalho**
4. Incentivos para garantir **diversidade** no desenvolvimento de IA
5. Concessão de **vistos** para pesquisadores estrangeiros
6. Regime de **responsabilização** que equilibre **inovação** e **proteção**
7. Exigir mais **transparência** das empresas estrangeiras

6. Ordenamento jurídico brasileiro

Responsabilidade: (a) normas gerais de responsabilização (CDC, CC) e (b) normas específicas (Marco Civil da Internet e LGPD).

Lei 12.965/14

Art. 19. Com o intuito de assegurar a **liberdade de expressão** e impedir a censura, o provedor de aplicações de internet somente poderá ser responsabilizado civilmente por danos decorrentes de conteúdo gerado por terceiros se, após ordem judicial específica, não tomar as providências para, no âmbito e nos limites técnicos do seu serviço e dentro do prazo assinalado, tornar indisponível o conteúdo apontado como infringente, ressalvadas as disposições legais em contrário.

6. Ordenamento jurídico brasileiro

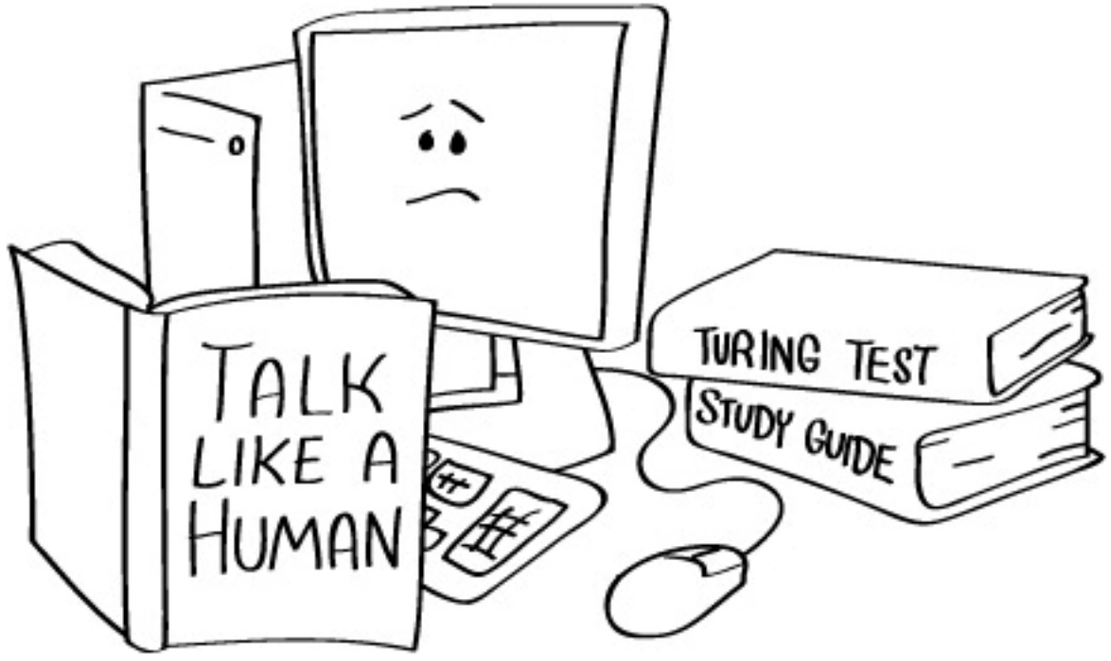
Proteção de dados:

Lei de proteção de dados atua grande parte das vezes na formação das bases de dados, mas pode também atingir a operação do algoritmo, como na exigência de revisão humana ou no chamado “direito à explicação”.

Direito do Consumidor

Assistentes pessoais cada vez mais inteligentes

Quando a ligação é automatizada existe algum dever de informação de que essa comunicação envolve um componente não humano?



7. Impacto social positivo

8. Qual ética para IA?

European Commission

High-Level Expert Group on Artificial Intelligence

1. Advise the Commission on next steps addressing AI-related mid to long-term challenges and opportunities through recommendations which will feed into the policy development process, the legislative evaluation process and the development of a next-generation digital strategy.
2. Propose to the Commission draft AI ethics guidelines, covering issues such as fairness, safety, transparency, the future of work, democracy and more broadly the impact on the application of the Charter of Fundamental Rights, including privacy and personal data protection, dignity, consumer protection and non-discrimination
3. Support the Commission on further engagement and outreach mechanisms to interact with a broader set of stakeholders in the context of the AI Alliance, share information and gather their input on the group's and the Commission's work.

COUNCIL OF EUROPE

CONSEIL DE L'EUROPE

Implications for human rights

The biennium 2018-2019 will see preparation of a comprehensive **Study of the concept of responsibility for AI decision-making systems, mapping legal and ethical considerations within the existing human rights framework.**

This work will be carried out by the inter-disciplinary Committee of experts on human rights dimensions of automated data processing and different forms of artificial intelligence (MSI-AUT). Experts are also working on the **capacity of algorithmic processes as powerful tools of manipulation**, with important **individual and societal impacts** on the formation of opinions on public discourse, the media and democratic processes. In addition, a recommendation to member states on how to prevent negative human rights impacts from algorithmic decision-making processes is being prepared.

O papel da Regulação no futuro da IA

1. IA é **multifacetada**: Direito, Sociedade, Economia e Tecnologia
2. Ferramenta para legisladores e **administradores** serem mais eficientes
3. Aumento da **assimetria** de informação
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Obrigado!

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