

# GOVERNING ARTIFICIAL INTELLIGENCE

Managing business risks in a digital world

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# INTRODUCTION

*accelerated AI deployment* *COVID-19 implications:*

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1 Forbes. (2020). Roundup of Machine Learning Forecasts and Market Estimates, 2020. Retrieved October 12, 2020, from <https://www.forbes.com/sites/louiscolombus/2019/03/27/roundup-of-machine-learning-forecasts-and-market-estimates-2019/#29b08337695a>

# COVID-19 implications: accelerated AI deployment

that perhaps 40 percent of companies worldwide

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in helping businesses facilitate a safe return to the

2

businesses to introduce automated solutions for

2 Marsh & McLennan Advantage. (2020). Digital Health Surveillance — A Balancing Act for Business. [https://www.mmc.com/content/dam/mmc-web/insights/publications/2020/august/Digital-Health-Surveillance\\_Final.pdf](https://www.mmc.com/content/dam/mmc-web/insights/publications/2020/august/Digital-Health-Surveillance_Final.pdf)

3 Wall Street Journal. (2020). Tech Workers Fear Their Jobs Will Be Automated in Wake of Coronavirus. Retrieved October 12, 2020, from <https://www.wsj.com/articles/tech-workers-fear-their-jobs-will-be-automated-in-wake-of-coronavirus-11590571801>

# **INTRINSIC RISKS IN AI TECHNOLOGY**

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## UNDERSTANDING ENDURING REPUTATIONAL RISKS

important decision-making processes such as credit-

algorithm-based decision processes and their output

political

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5

candidates or when chatbots used racist and anti-

<sup>6</sup> This is exacerbated when historical

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t

Chatbot

in the use of artificial intelligence

h

to protect digital

in our society

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4 TechGenix. (2019). AI cyber risks: What to look out for when deploying AI technology. Retrieved October 12, 2020, from <http://techgenix.com/ai-cyber-risks/>

5 United Nations Interregional Crime and Justice Research Institute. (2019). Artificial Intelligence and Robotics for Law Enforcement. Retrieved October 12, 2020, from [http://www.unicri.it/news/article/Artificial\\_Intelligence\\_Robotics\\_Report](http://www.unicri.it/news/article/Artificial_Intelligence_Robotics_Report)

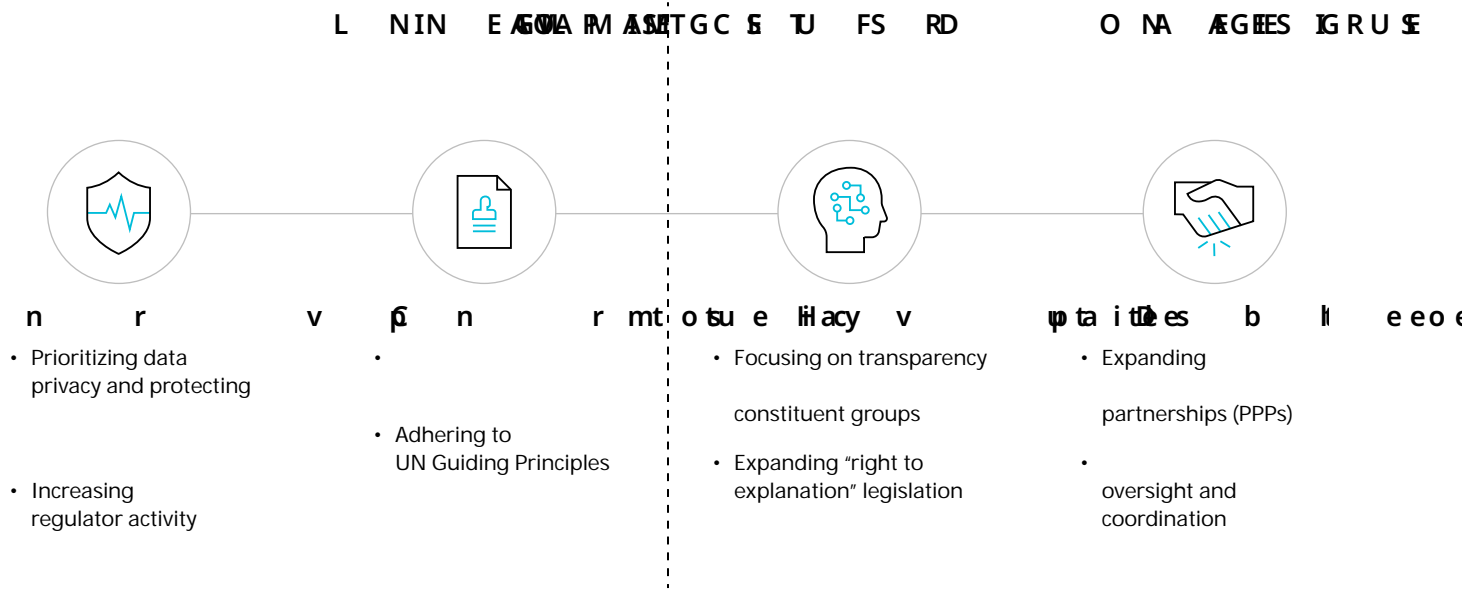
6 Reuters. (2018). Amazon scraps secret AI recruiting tool that showed bias against women. Retrieved October 12, 2020, from <https://www.reuters.com/article/us-amazon-com-jobs-automation-insight/amazon-scraps-secret-ai-recruiting-tool-that-showed-bias-against-women-idUSKCN1MK08G>

7 The Guardian. (2019, April 17). Disastrous lack of diversity in AI industry perpetuates bias, study finds. Retrieved October 12, 2020, from <https://www.theguardian.com/technology/2019/apr/16/artificial-intelligence-lack-diversity-new-york-university-study>

# EXTERNAL PRESSURES FROM THE BROADER PUBLIC AGENDA

## IMPLEMENTING SOCIETAL SAFEGUARDS TO PROTECT THE PUBLIC INTEREST

Exhibit 2: Public governance agenda overview



Source: Marsh & McLennan Advantage

algorithms can be reconstructed and intellectual

such

12

algorithm-based decision-making and also the potential

### OVERSEEING AI USAGE IN AN EVOLVING BUSINESS LANDSCAPE

<sup>10</sup> This

academic institutions on the one hand to more formal

sales

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f , p d , t twp wld d t to e dta oe ia y

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8 Virtu. (2020). Infographic: Data Privacy Law Momentum at the State Level. Retrieved October 12, 2020, <https://www.virtu.com/education/data-privacy-law-infographic/>

9 CNET. (2019). Amazon and Google are listening to you: Everything we know. Retrieved October 12, 2020, <https://www.cnet.com/how-to/amazon-and-google-are-listening-to-your-voice-recordings-heres-what-we-know/>

10 Global Future Council on Human Rights 2016-2018. (2018). How to Prevent Discriminatory Outcomes in Machine Learning. World Economic Forum. [http://www3.weforum.org/docs/WEF\\_40065\\_White\\_Paper\\_How\\_to\\_Prevent\\_Discriminatory\\_Outcomes\\_in\\_Machine\\_Learning.pdf](http://www3.weforum.org/docs/WEF_40065_White_Paper_How_to_Prevent_Discriminatory_Outcomes_in_Machine_Learning.pdf)

11 IBM. (2019). IBMS Principles for Data Trust and Transparency. Retrieved October 12, 2020, <https://www.ibm.com/blogs/policy/trust-principles/>

12 Milli, S., Schmidt, L., Dragan, A. D., & Hardt, M. (2019). Model reconstruction from model explanations. In Proceedings of the Conference on Fairness, Accountability, and Transparency (pp. 1-9). <https://dl.acm.org/doi/abs/10.1145/3287560.3287562?download=true>

13 Select Committee on Artificial Intelligence of the National Science and Technology Council. (2019). The National Artificial Intelligence Research and Development Strategic Plan: 2019 Update. <https://www.whitehouse.gov/wp-content/uploads/2019/06/National-AI-Research-and-Development-Strategic-Plan-2019-Update-June-2019.pdf>



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14 Towards Data Science, Medium. (2019). Looking at AI-focused Case Studies. Retrieved October 12, 2020, <https://towardsdatascience.com/looking-at-ai-focused-case-studies-139e0bb98f5>



# AI GOVERNANCE

process for maintaining

## TOWARDS RESPONSIBLE AI DEPLOYMENT AND USE

Growing awareness of the pitfalls and societal impacts

**TRANSPARENCY:** Companies should ensure that their

*A review of published AI*

*governance frameworks*

60 publications against the intrinsic risks and external

critical

**INTENT:**

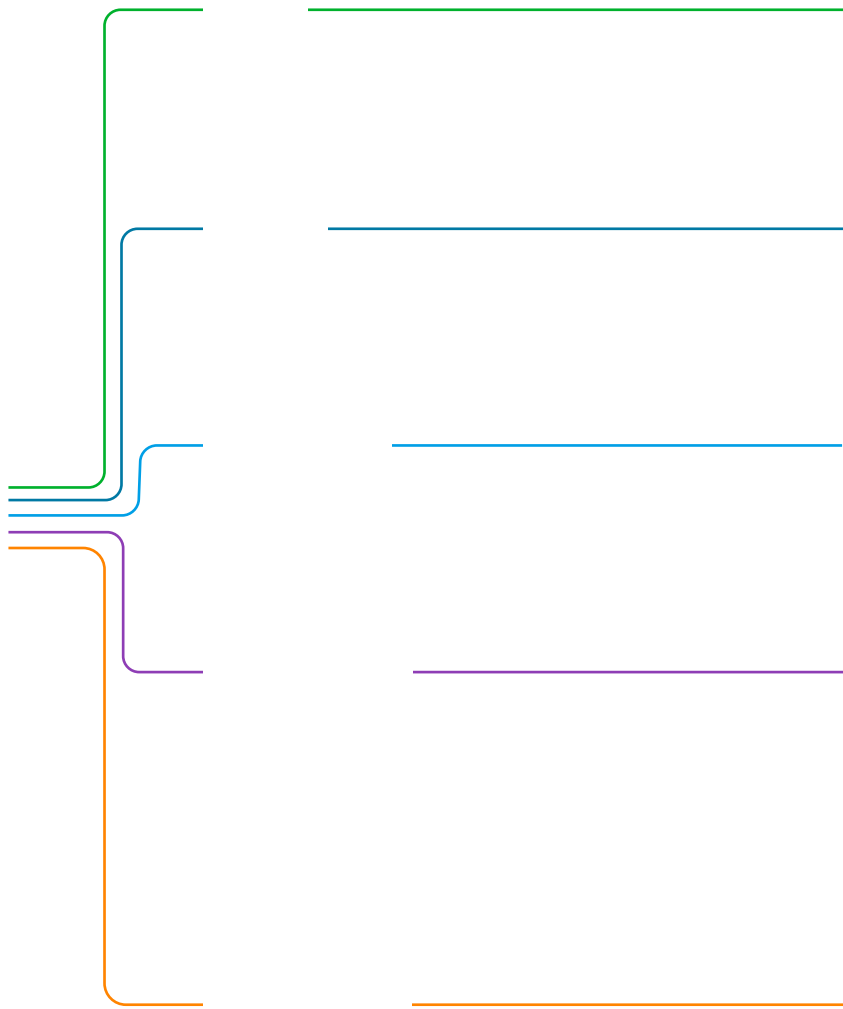
be better positioned to manage risks and execute their

**FAIRNESS:** Companies need to ensure that the processes

Exhibit 3: Summary of governance frameworks


their

Exhibit 4: A holistic approach to effective governance



	Imperative	Why it matters
<b>INTENT</b>	aligned with expressed purpose	<ul style="list-style-type: none"> <li>logic</li> <li>models</li> <li>data</li> </ul>
<b>FAIRNESS</b>	Promote equal access and similar groups	<ul style="list-style-type: none"> <li>Mitigates the risk of unfairness</li> <li>Fosters public trust</li> <li>mechanisms</li> </ul>
<b>TRANSPARENCY</b>	Generate predictable and reproducible outputs	<ul style="list-style-type: none"> <li>Facilitates internal compliance</li> <li>adoption</li> <li>stakeholder acceptance</li> </ul>
<b>SAFETY/SECURITY</b>	Manage data assets in a holistic fashion to information	<ul style="list-style-type: none"> <li>Safeguards customer rights and builds trust and reputation</li> <li>Minimizes legal</li> <li>function as intended</li> <li>data</li> </ul>
<b>ACCOUNTABILITY</b>	Clear enforcement mechanisms	<ul style="list-style-type: none"> <li>outputs</li> <li>standards</li> <li>agenda</li> </ul>

## ACTIVATING GOVERNANCE

**data and systems taxonomy** should be established to

expected

**oversight committee** independent of the

tiers of



clients.

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Research Manager

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