

Faculty of Design

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Bias in Emerging Technology: How to Make Artificial Intelligence More Equitable (Synthesis Map)

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BIAS IN EMERGING TECHNOLOGY

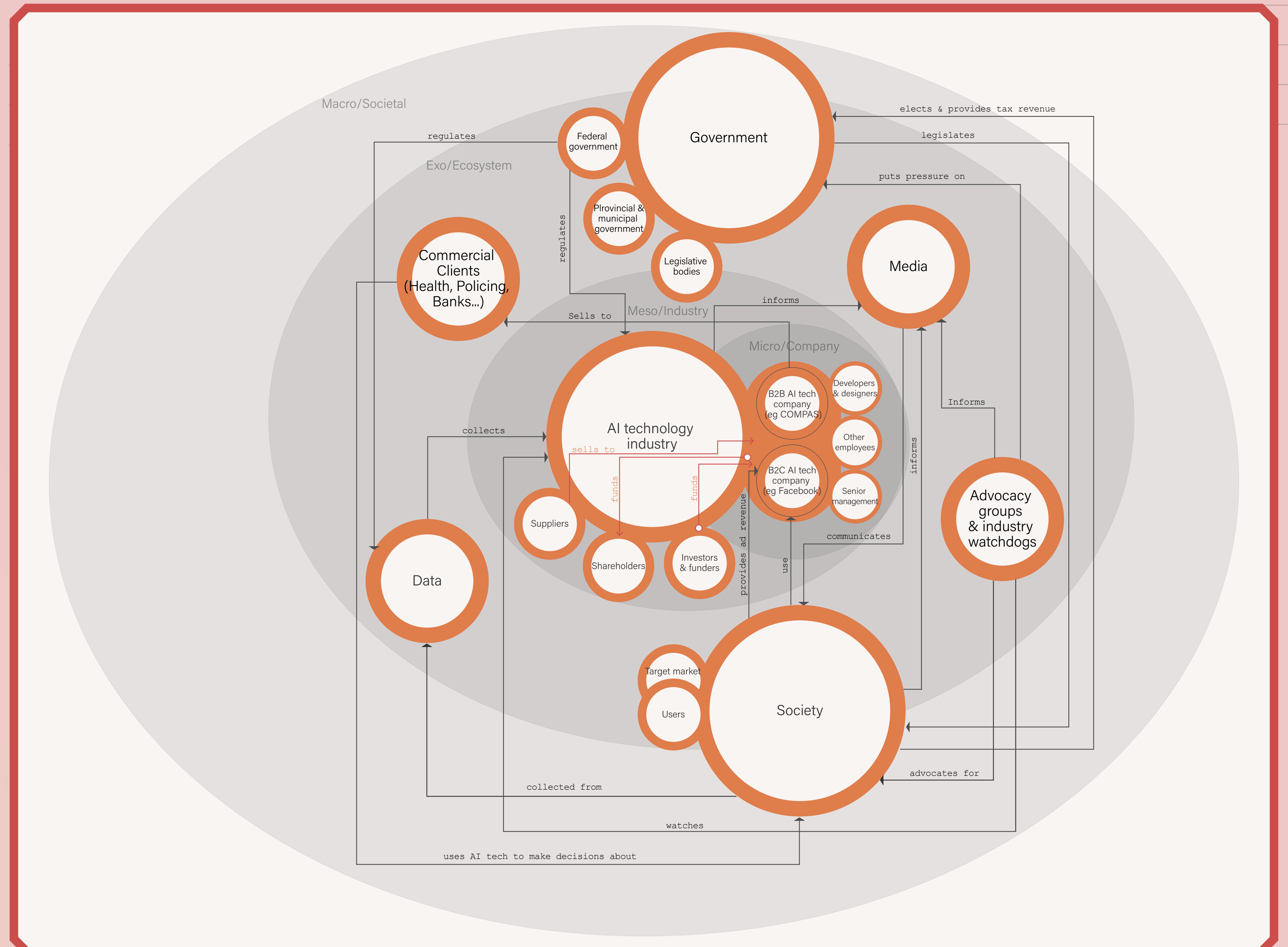
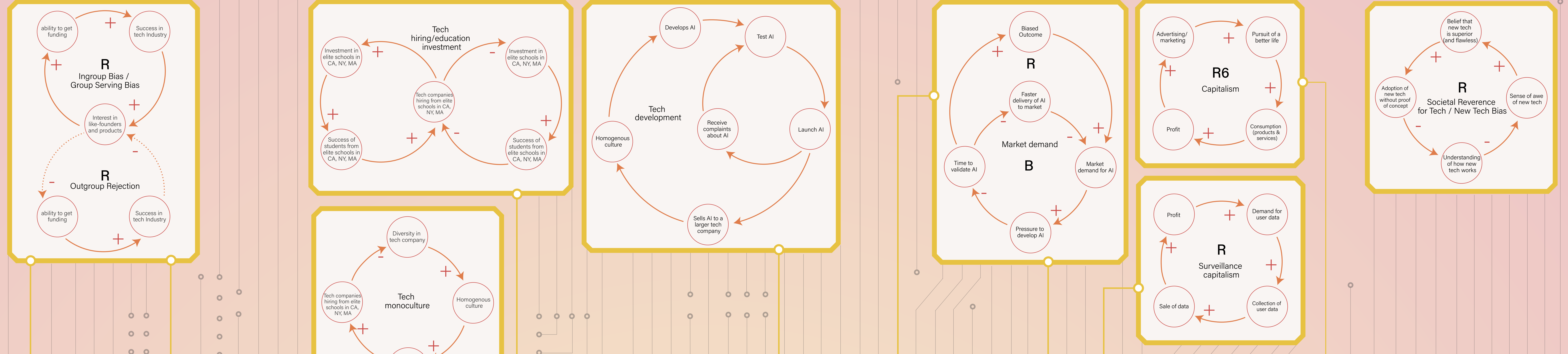
HOW TO MAKE ARTIFICIAL INTELLIGENCE MORE EQUITABLE

Bias in Artificial Intelligence technology is increasingly pervasive, and impacts society in ways which can be invisible. AI technology created today is at risk of having implicit human biases unintentionally embedded into them in various ways.

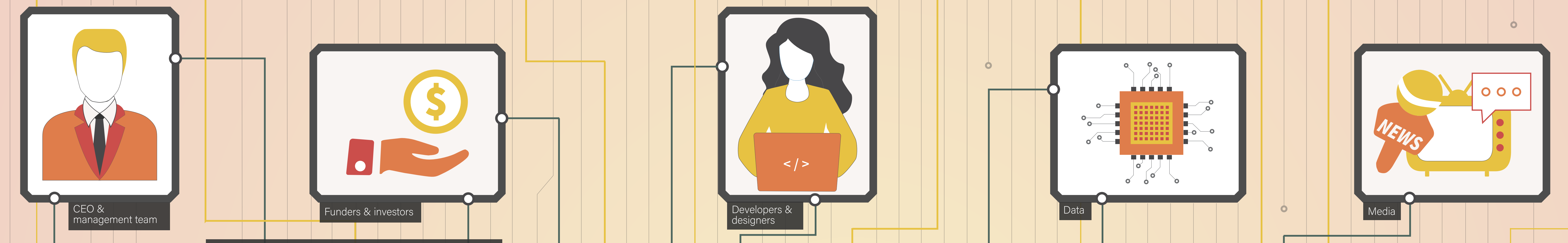
This Synthesis map outlines the most prominent ways AI technology and algorithms become biased, and highlights potential intervention spaces.

It also explores the causal loops behind these biases, the actors involved and the system of influence between the various stakeholders

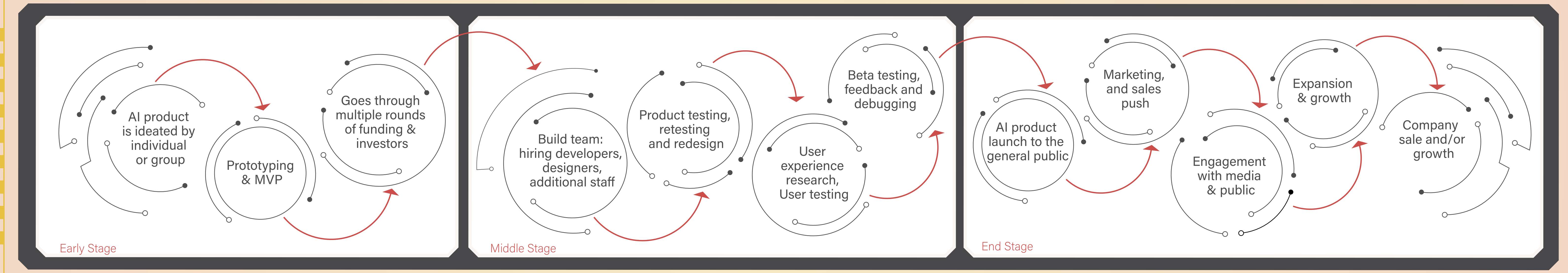
CAUSAL LOOPS: LIFECYCLE SYSTEMS RELATIONSHIPS & ACTIVITIES



ACTORS



AI PRODUCT LIFECYCLE



Early Stage: Funding Layer: Exo/Ecosystem

Intervention: Private and public impact investing, goals/incentives tied to societal values, diversify investors

Middle Stage: Hiring & Culture Layer: Micro/Company

Intervention: Seeking out and hiring diverse talent, retaining diverse talent

End Stage: Ethics Review Association Layer: Meso/Industry

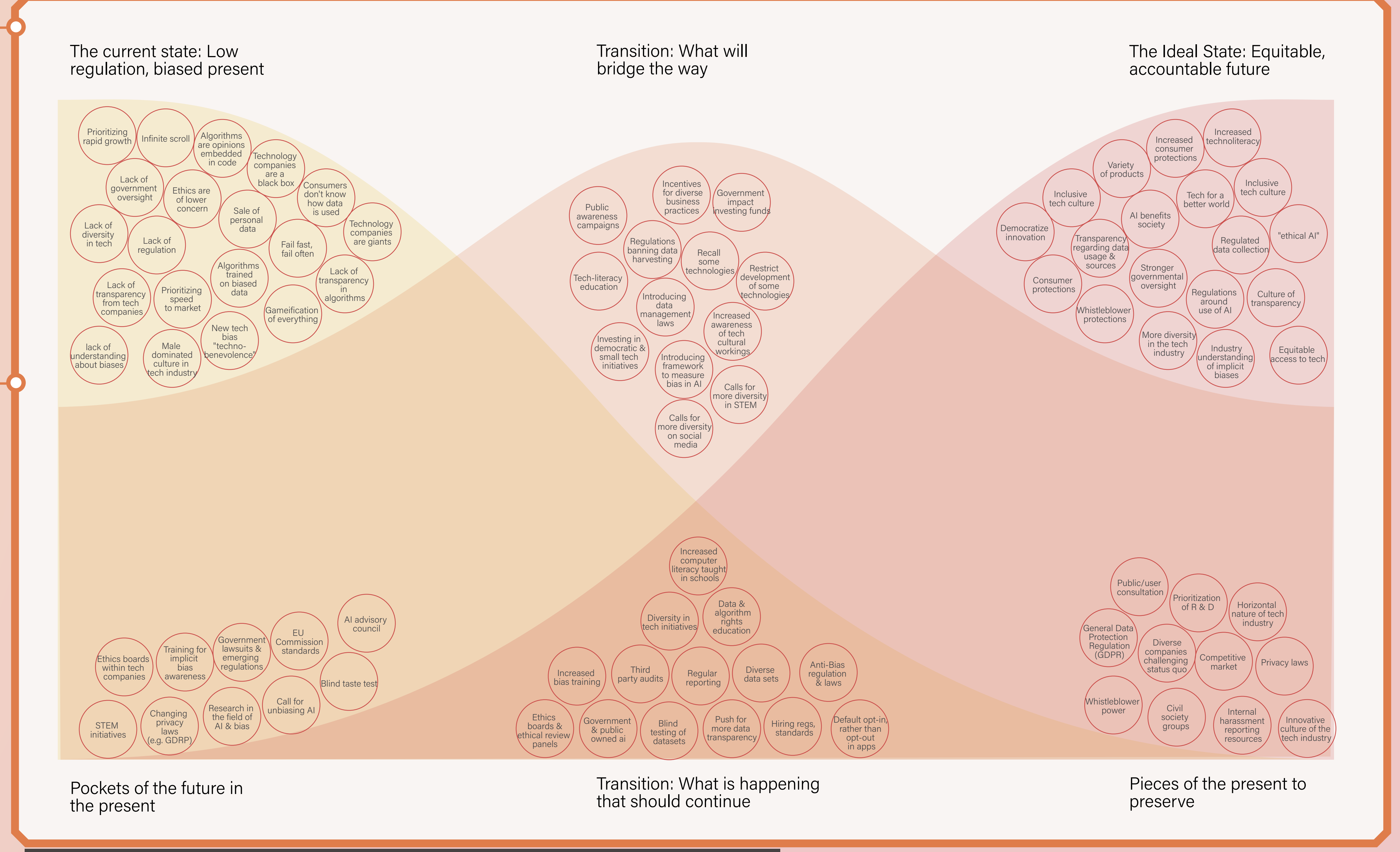
Intervention: Industry led association coming together to create a framework of AI ethical standards that new technology would need to meet

Public Awareness Campaign Layer: Macro/Societal

Intervention: Public awareness campaign on emerging technology biases

INTERVENTION STRATEGIES

Using the Three Horizons method, we see how the problematic, biased present can transform into the ideal state: a more equitable, ethical future for AI. In present, we see current systemic factors such as organizational culture, lack of diversity and lack of regulation, which are contributing to the introduction and perpetuation of bias in AI. We also see pockets of the future in legal challenges and equity initiatives which are emerging. By cultivating these pockets and challenging what's happening, we show how we can move towards the ideal future, where AI is regulated to ensure inclusive and equitable outcomes.



THREE HORIZONS: A PATHWAY TO ETHICAL AI

