



AI & Partners

Amsterdam – London - Singapore

The European Union Artificial Intelligence Act

AI for Social Outcomes

Bolstering Trustworthy AI Ecosystems for Social Advancement

October 2024

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— Contents

Foreword	(Slide 4)
Executive Summary	(Slide 5)
Introduction	(Slide 6 – 7)
Case for AI for Social Outcomes	(Slide 8)
Key Role of Facilitators	(Slide 9)
Challenges for AI Deployment	(Slide 10)
Drivers for Success	(Slide 11)
Key Trustworthy AI Ecosystem Recommendations	(Slide 12)
Policy & Regulatory Concerns	(Slide 13)
Conclusion	(Slide 14)

— Significant potential to catalyse our world

With great power, comes great responsibility

Artificial intelligence (AI) has significant potential to catalyse our world, addressing some of the most important global challenges and transforming lives in a myriad of ways. Notwithstanding, with the promise of the technology brings about acute risks. AI can amplify social inequalities and negatively impact our environment if not developed, used, deployed and interacted with in a trustworthy manner.

This being the case, and to ensure that AI supports fundamental rights, especially people in underrepresented communities worldwide, AI & Partners and its strong community of partners have conducted an AI for Social Outcomes initiative to spotlight how EU AI Act compliant AI solutions can deliver on their important role, address its inherent risks and support the AI roadmap to make AI targeted for impact.

AI enterprises are currently at the precipice, evidencing environmentally, socially responsible, and trustworthy deployment of AI. These are the world-leaders who prioritize purpose over profit, who aspire every day resolute to make a difference. In their use of this technology, they show how AI can be a powerful tool, showing us what is possible when technology is supported by trustworthy principles and a goal to serve.

This broader initiative comes at a crucial time; AI is rapidly developing, and we must ensure it is used in a trustworthy manner. Our vision is clear: we want AI to serve global communities and unlock AI's full potential for societal good, ensuring that its development and deployment are guided by the EU AI Act's key principles of Human agency and oversight; Technical robustness and safety; Privacy and data governance; Transparency; Diversity, non-discrimination, and fairness; Societal and environmental well-being; and Accountability.

This report outlines how enterprises and business leaders can align with AI innovators to maximize AI's potential and help create a just, prosperous society. It highlights the crucial role of intermediaries in bridging the gap between enterprises and AI innovators and is a call to action to all in the trustworthy AI ecosystem to join us in this mission. Together, we can harness the power of AI to make a lasting, positive impact globally.



— Growing concerns around AI’s environmental and social implications must be addressed

Multiple opportunities exist from a technical perspective

The revolutionary potential of AI is widely lauded. With data from the World Economic Forum (WEF) revealing that employees who deploy machine learning can realize up to 30% in efficiency gains and findings that the technology has the potential to automate up to 70% of activities that take up employees’ time, it is no surprise that this technology is being embraced by industry.

A portion of 42% of 8,000+ companies surveyed under the IBM Global AI Adoption Index report that they have deployed AI to improve efficiency in customer care, information technology (IT) and marketing sales functions. Moreover, an additional 40% report that they have begun exploring the use of the technology within their enterprises. Equally, 66% of survey respondents think that AI will significantly affect their lives over the next three to five years.

While AI holds great potential for economic growth, it is vital to recognize the growing fears surrounding the technology’s environmental and societal implications. Some data suggests that more than a third of all employees worry about losing their jobs due to AI, with divergences by occupation and geography.



Growing calls for strong public governance and policies

These fears generate urgency for strong public governance and policies. But they also create the need to showcase positive examples of how AI can benefit people and society – especially for marginalized groups at risk of losing out on the economic benefits of AI. AI innovators are at the forefront of this, providing tangible examples of AI being applied for positive impact.

Their proximity to core humanity challenges in their communities provides multiple opportunities from a technology perspective:

- it enables them to deploy AI solutions tailored to community needs, particularly for underrepresented communities
- moreover, they are in a position to influence the future development of the technology towards positive impact through their experience and insights.

Notwithstanding, to scale the adoption of AI for impact, these AI firms rely on collaboration with and the support of companies, facilitators, impact investors and public-sector stakeholders. Combined, they form the ecosystem supporting the impactful adoption of AI by AI innovators. This ecosystem provides the resources, expertise and infrastructure necessary for AI innovators to grow their AI solutions effectively.

As well as increasing the sheer scale of support for AI innovators, it is crucial to design specific programmes tailor made to the needs of the communities that AI innovators ultimately serve. AI innovators and facilitators envisaged for this highlight the need for collaboration when designing programmes to ensure that interventions truly address widespread social issues. This could include, for example, “wraparound” support for recipients of AI training, e.g. childcare during training hours, transport to the training venue or basic AI skills training under Article 4 as a prerequisite. Such curated and robust programme design is permissible only with the input of AI innovators and facilitators working towards social goals.

Social inequalities may be perpetuated without careful oversight

Global interest and investment in AI, particularly generative AI, has exponentially grown recently, and venture capital (VC) investments alone in AI totalled more than US\$290 billion in 2019–2024. The public sector has not been left trailing, with a marked increase in policies on the technology and legislative mentions of AI expanding 100% from 2022 to 2023. Organizations and industries seeking to optimise their productivity have also begun integrating the technology into their process. In the financial sector as an example, 91% of financial services firms have either thought about or are already using AI, or report that they are using it in their firms to increase innovation, improve operational efficiency and enhance customer experiences – with 97% of companies planning to invest more in AI technologies in the near future.

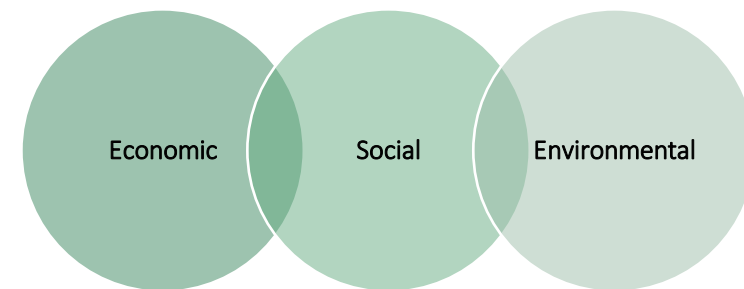
The divergence of opinion over AI concentrates on its potential to boost productivity across industries, overshadowing the potential negative effects of the technology. The development and deployment of AI can amplify social inequities if not carefully managed, particularly when it comes to issues including data privacy and the displacement of jobs, with some studies suggesting job losses of up to 50%, driving fears and concerns about the potential social disruption arising from this technology. Moreover, the datasets for algorithms are mainly sourced from high-income countries and regions, with the United States, China, the European Union and the United Kingdom emerging as the leading sources of AI models. These datasets can amplify biases, resulting in harmful social outcomes when applied in dissimilar contexts. In addition, gender gaps remain,

Large energy consumption of general-purpose AI models demands better understanding of trustworthy AI use

both upstream, with women consisting 30% of the AI education and talent pool, and in AI usage, with only 25% of women-led social enterprises adopting the use of AI. Of equivalent concern is the energy and natural resource consumption of AI models, particularly large-scale machine learning systems, which can be significant. These systems contribute to carbon emissions and amplify climate change. Research data suggests that larger training models can emit up to 350 tonnes of CO₂ per year and require up to 34% more water when deploying AI models than when not.

In the context of social and environmental risks connected with AI, it is required to bring forward use cases that provide a better understanding of how trustworthy AI can be harnessed, ensuring that its benefits are widely spread across society. AI innovators are uniquely positioned to use AI's trustworthy features in a manner that extends much beyond commercial pursuits and have begun to demonstrate forward-thinking, trustworthy deployment of the technology.

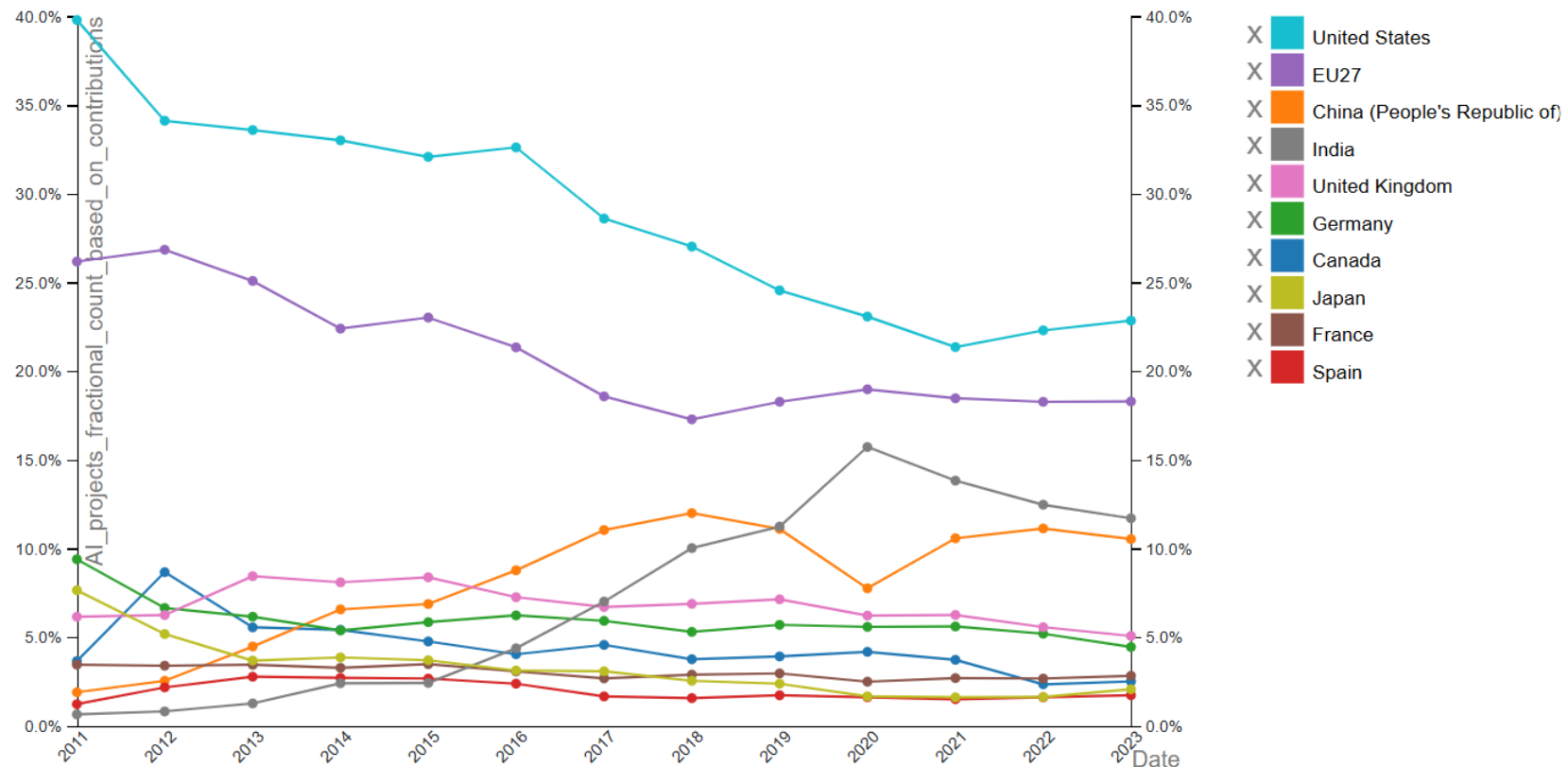
Figure 1: Key aspects of AI for Social Outcomes



— AI innovators at the forefront of AI applications that drive forward social outcomes

Software development contributions to public AI projects, in terms of AI production, commercialisation, and international collaboration, play a critical role in informing strategies for developing and implementing AI software solutions that can satisfy social outcomes

Figure 2: Contributions to public AI projects by country and project impact (Source: [OECD.AI \(2024\)](#))



— Vast potential to address societal challenges + proving environmental benefits

Private-sector support necessary to drive economic and social progress

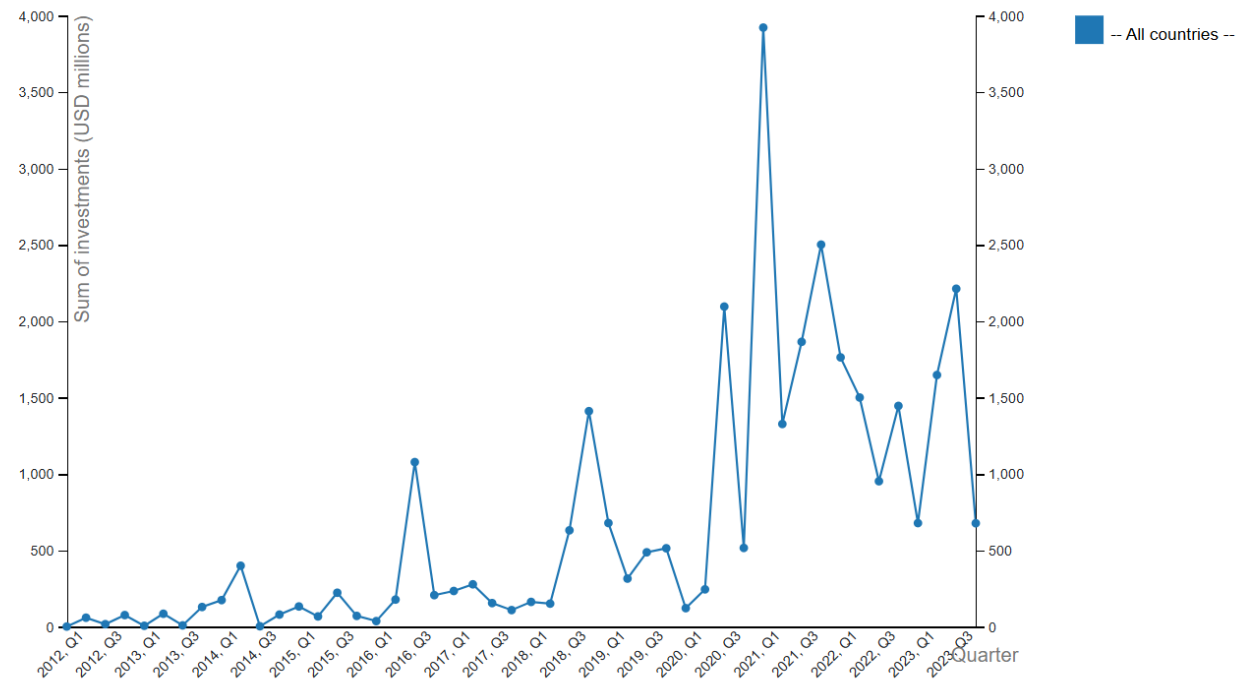
AI's revolutionary potential to address global challenges is great. With the technology, AI entrepreneurs can develop innovative, scalable and efficient solutions within their firms or as a core part of their product and service offerings, driving significant social impact at scale.

While year-on-year global corporate investment in AI across the past four years (2019 – 2023) has fluctuated, the overall investment in the sector has shown a significant increase over the past decade, with an all-time high of USD 4.000M (sum of investments) in Q1 2021 (See Figure 2). This increase supports the technology's potential to optimise industries and drive economic and social progress.

Notwithstanding, the social impact ecosystem for AI faces potential neglect. Regardless of growing interest and the capital flowing into AI, investment in AI for impact initiatives is expected to constitute a small percentage of the total investment.

Worldwide venture capital (VC) investments in AI and data start-ups help drive ecosystems designed to support social outcomes.

Figure 3: Worldwide VC investments in AI and environmental sustainability (Source: [OECD.AI \(2024\)](#))

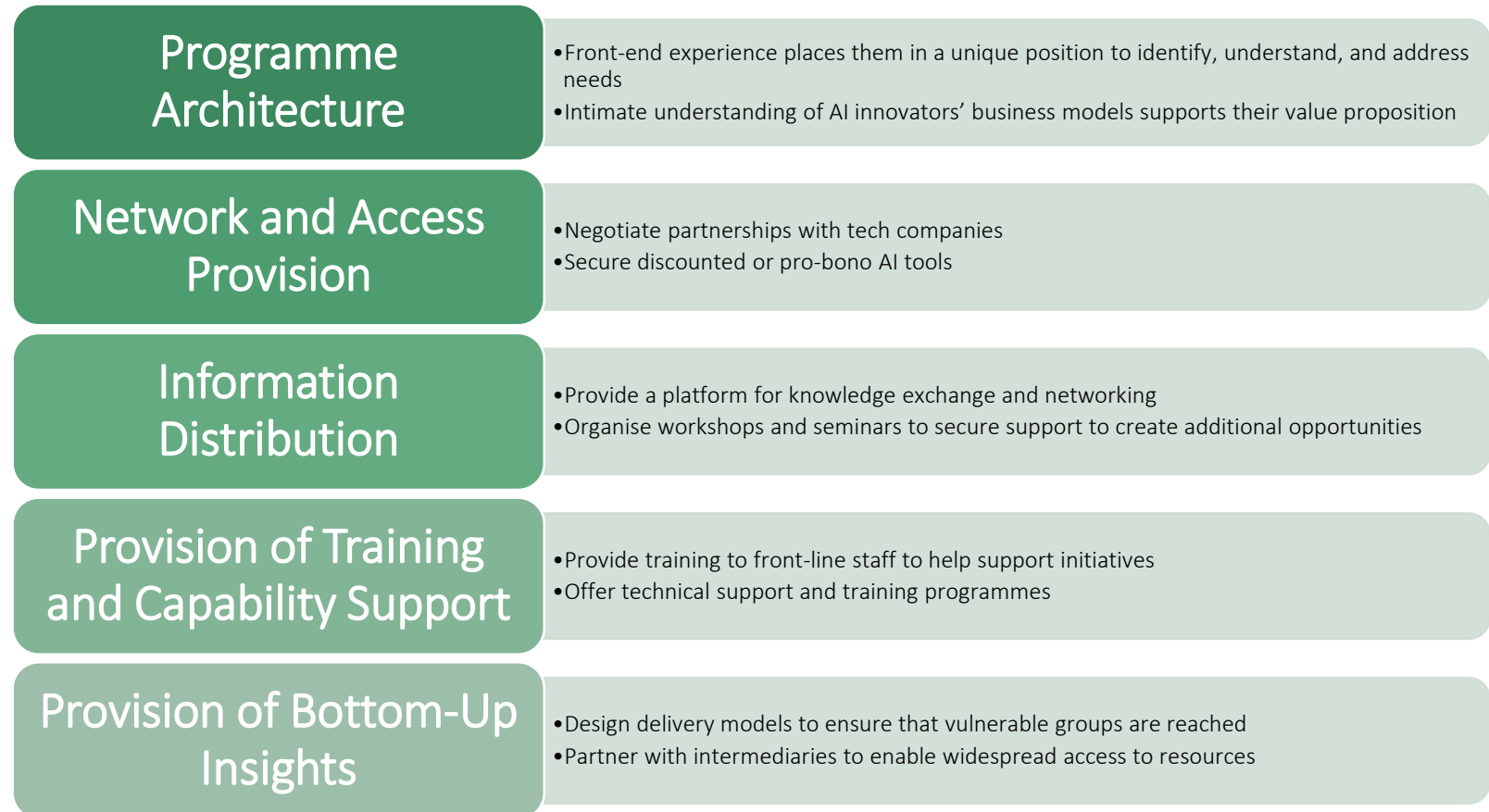


Key allies in enabling trust and transparency

Facilitators are key allies in enabling transparency and trust because they possess the data, insights and networks required to help tech organizations understand local contexts and impacts. They can serve as conduits between technology companies and communities, giving valuable feedback and facilitating collaborations that ensure AI initiatives are not only inclusive but also serve their intended recipients. Technology organizations can use local expertise and connections to customise their initiatives, accurately report on their outcomes and demonstrate a pledge to responsible innovation.

Facilitator include incubators, accelerators and non-profit organizations. They give essential support and resources tailored to the often bespoke needs of AI entrepreneurs focused on social outcomes and the communities they serve. They are also well positioned to provide bottom-up insights into the key skills gaps that exist and the resources needed by AI innovators to deploy AI for Social Outcomes. Their expertise and network are invaluable in the following ways:

Figure 4: Value-added capabilities of facilitators



— Combination of internal, external, and structural barriers hinder resource mobilisation

Key challenges in AI deployment straddle all aspects of the business model, showcasing the depth of the problem as well as the rich potential for viable solutions

Figure 5: Key challenges for AI deployment



— Key factors for successful implementation set by technology firms

Drivers for success focus heavily on both collaboration and collective action across the AI value chain, showcasing the need for multifaceted stakeholder commitment that aligns with regulatory underpinnings

Figure 6: Drivers for success



Modular and Scalable Approach:

- Diverse technological readiness among social innovators requires adaptable AI solutions.
- Co-creation with deploying organizations enhances confidence and impact.

Collaboration and Cross-Sectoral Partnerships:

- Engaging a broad range of stakeholders is essential for success.

Executive Support:

- Senior-level sponsorship is crucial for sustaining AI initiatives.

Mission Alignment and Strategic Integration:

- Aligning AI initiatives with business goals is critical for success.

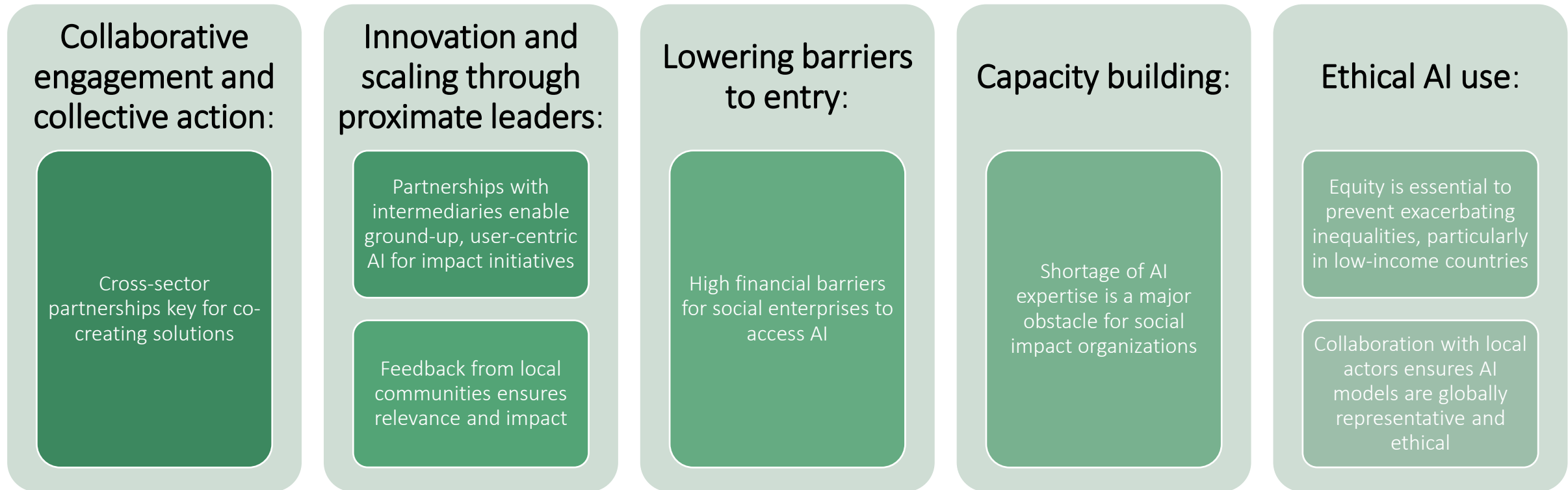
Strong Fundamental Demand:

- High demand for AI initiatives among social innovators underscores the need for training, organizational support, and affordable technology access.

— Strategic and intentional approaches strengthen the appropriate support structures

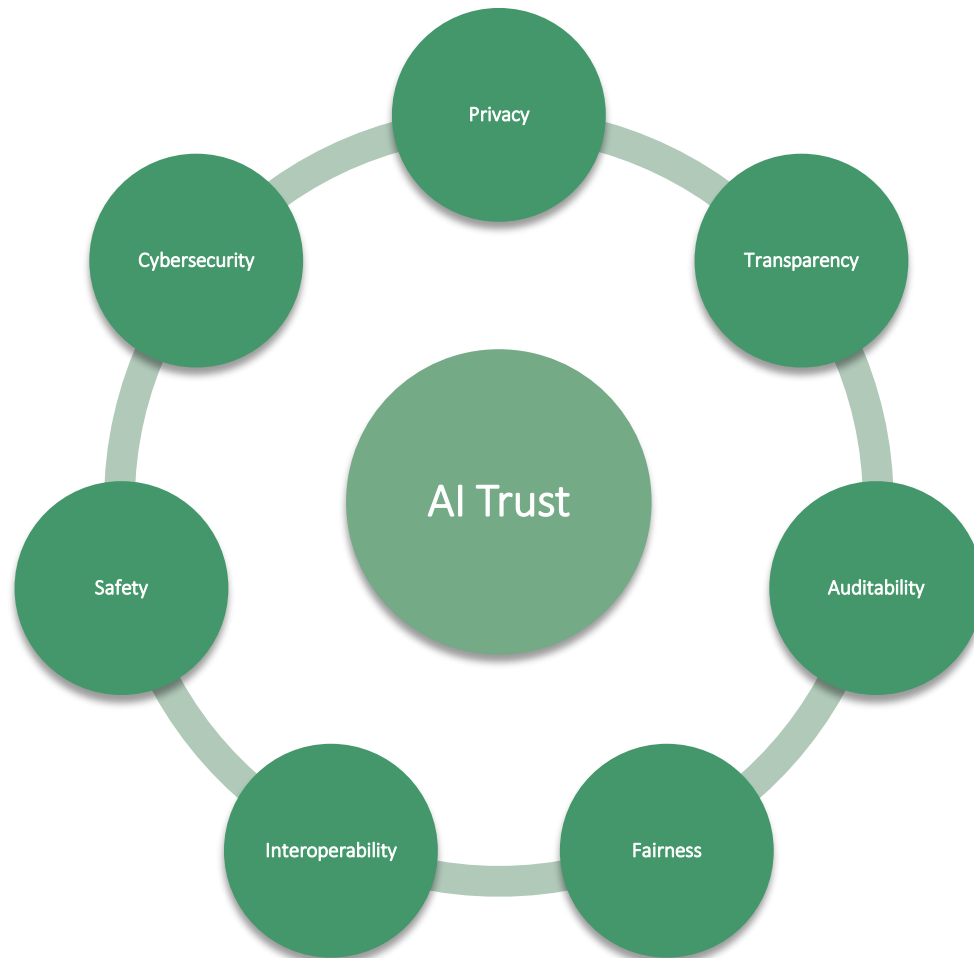
Key trustworthy AI ecosystem recommendations concentrate on capability building as well as execution, highlighting the importance of trustworthy AI aspects being factored in at all stages of the AI lifecycle to maximise the resulting impact

Figure 7: Key trustworthy AI ecosystem recommendations



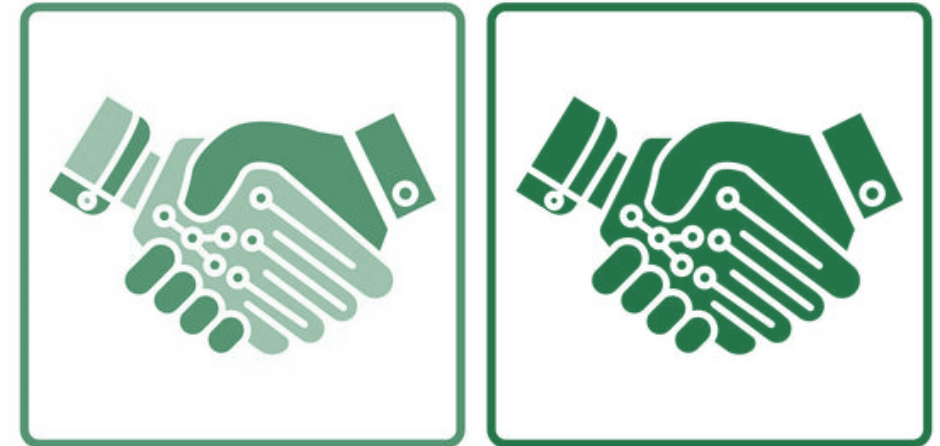
— Governments play a key role in creating a conducive environment to mitigate safety risks

Figure 8: AI Trust Framework



Policy incentives and regulation are key to fostering trustworthy AI

Governments play a key role in enabling AI for good by constructing what trustworthy AI means and fostering trustworthy AI usage. This can be achieved using a mix of measures – including policy incentives and regulation, such as the EU AI Act. Clear ethical guidelines, compliance frameworks and policies aligned with international standards can facilitate greater global collaboration and innovation while tailoring regulations to address local needs and contexts.



— Strong support and partnerships across AI value chain helps AI achieve social outcomes

A key objective of AI for Social Outcomes is to drive meaningful change for society at large.

Trustworthy AI delivers change

This report showcases the revolutionary potential of AI in tackling global social and environmental challenges, with the private sector playing a key role. As AI continues to scale rapidly, its deployment by AI innovators remains crucial for achieving scalable and sustainable impact. Collaboration among organizations, social enterprises and intermediaries is essential to overcoming barriers and ensuring the ethical and equitable use of AI. Notwithstanding, existing AI for impact initiatives fall short of fulfilling demand, structurally addressing access issues and driving a way forward that works for all communities. Concentrated collaboration and increased funding for AI for impact initiatives are needed to ensure they increase their share of financing beyond measured budgets allocated to AI implementation received today.

Engage in capacity building

Key strategies for success include creating cross-sectoral partnerships, enhancing data access, providing financial and non-financial support to AI innovators and prioritizing trustworthy AI practices. With its significant resources and expertise, the private sector can support significantly to building a supportive ecosystem for AI for Social Outcome initiatives – not just by providing funding and technology access but also by assisting with capacity-building efforts for AI innovators and creating opportunities for reverse learning from these innovators to support inclusive and trustworthy AI deployment.

The role of facilitators is key in bridging the gap between organizations and AI innovators. By facilitating access to AI tools, providing training and ensuring that initiatives are aligned with social outcomes objectives, facilitators can help drive effective AI adoption. Moreover, they play a key role in addressing biases and ensuring that AI solutions are inclusive and equitable.

Leverage regulatory frameworks

Public–private partnerships are an additional important component of building comprehensive support systems for AI entrepreneurs. Governments can contribute by leveraging supportive regulatory frameworks (e.g. EU AI Act), investing in research and fostering an environment conducive to AI for Social Outcomes. International coordination and flexible regulatory mechanisms, such as AI Regulatory Sandboxes under the EU AI Act, help AI innovators keep pace with rapid AI advances and ensure sustainable and impactful deployment.

In essence, the success of AI for Social Outcome initiatives rests on collaborative engagement, strategic integration and a commitment to trustworthy practices. Using AI, AI innovators, supported by the private sector and facilitators, can create innovative solutions that drive meaningful social and environmental change. Continuing efforts to build an inclusive and supportive AI ecosystem will be key in shaping an equitable AI-powered future.

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