Inclusive AI For Social Protection
Challenges, Opportunities, and Strategic Roadmap

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Toward Inclusive AI for Social Protection

- Key Benefits:
  - Precise Targeting
  - Improved Service Delivery
  - Real-Time Insights
  - Localized Solutions
  - Sustainability

- Core Challenges:
  - Infrastructure Barriers
  - Data Quality and Privacy
  - Equity and Ethical Concerns

Guiding Framework for Inclusive AI

- Four Core Approaches:

    1. **Strategic Readiness**: Strengthen Foundational Infrastructure
    2. **Talent Development:** Build Local Skills and Workforce
    3. **Ethical and Inclusive AI**: Develop Localized Responsible AI Policies
    4. **Collaboration**: Foster Partnerships and Resource Mobilization

- Goal:

    - Achieve sustainable, inclusive growth in social protection by leveraging AI responsibly and ethically across regions.
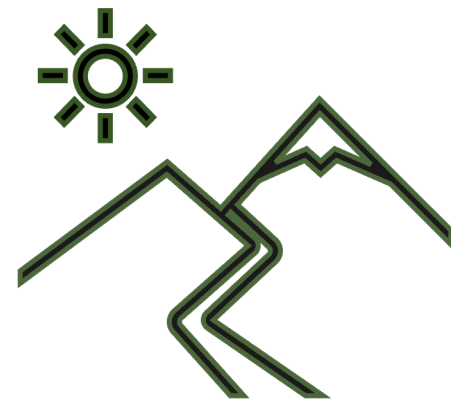
An AI Strategic Roadmap for Social Protection

- Short-Term Road Map:
  - Begin with pilot projects
  - Establish data systems
  - Create initial policies for AI use.

- Long-Term Road Map:
  - Scale AI applications
  - Enhance digital and AI skills
  - Continuously refine governance practices.

Future of Social Protection with AI
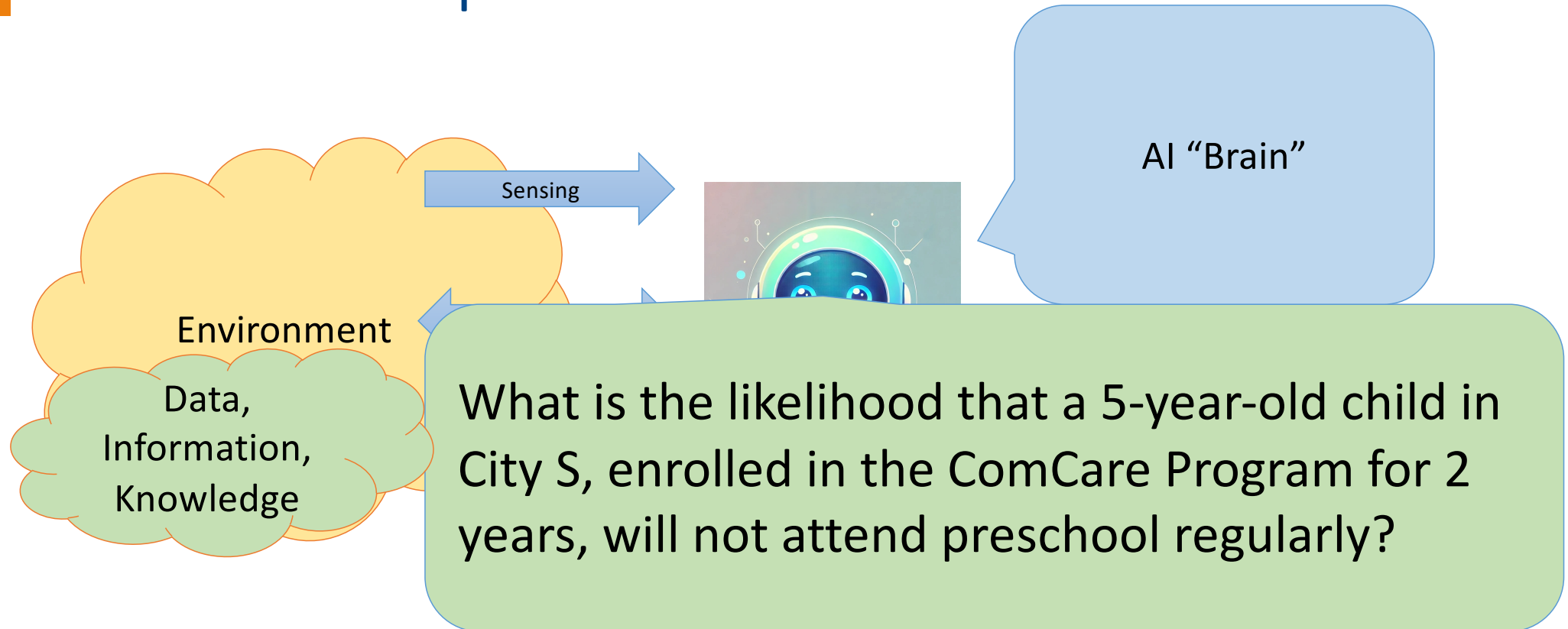

Graphics generated by: ChatGPT 4o-DALL-E

Cooperative AI!

THE STRAITS TIMES

How can AI help?

Only 26% of low-income families on ComLink+ scheme send kids to pre-school regularly

- Incentives:
  - S$500 one-off, S$200 per month top up every three months

- Concerns:
  - Cannot catch up with peers

- Solutions:
  - Human "befrienders"
  - Special programs

Source: the straits times https://www.straitstimes.com/singapore/only-26-per-cent-of-children-in-low-income-families-on-comlink-scheme-attend-pre-school-regularly

AI for Social Protection

AI: Core Capabilities

Environment

Sensing

AI "Brain"

Data, Information, Knowledge

What is the likelihood that a 5-year-old child in City S, enrolled in the ComCare Program for 2 years, will not attend preschool regularly?
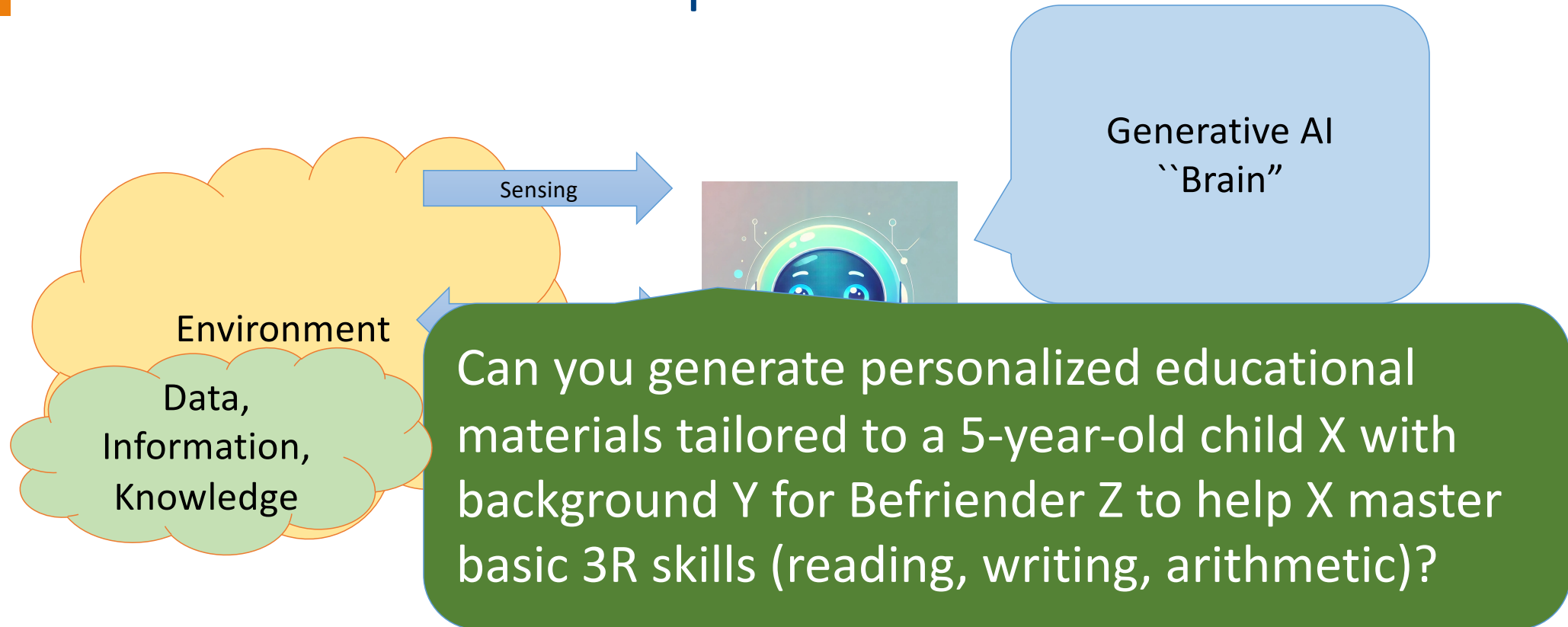
Agent graphics source: ChatGPT4o, accessed 8 Aug 2024

What is Generative AI?

- Key Features of Modern Generative AI
  - General Intelligence
    - Versatile across various tasks, adaptable to specific applications.
  - Learning from Data Patterns
    - Analyzes extensive data to understand and create innovative outputs.
  - Original Content Creation
    - Goes beyond traditional AI to produce new text, images, and ideas.

AI: Generative Capabilities

Sensing

Environment

Data, Information, Knowledge

Generative AI ``Brain"

Can you generate personalized educational materials tailored to a 5-year-old child X with background Y for Befriender Z to help X master basic 3R skills (reading, writing, arithmetic)?

Agent graphics source: ChatGPT4o, accessed 8 Aug 2024

Human-AI Value Alignment in Social Protection

- Shaping Decisions
  - Guide AI to balance fairness, transparency, and inclusivity.
  - Align decisions with societal priorities and accountability.
  - Examples:
    - Chain-of-Thought (CoT)
    - Reinforcement Learning with Human Feedback (RLHF)

Example:
Working with Large Foundational Models ...

Was this response better or worse?   Better   Worse   Same   ✕

Source: ChatGPT4o, accessed 13 October 2024

Human-AI Value Alignment in Social Protection

- Shaping Decisions
  - Guide AI to balance fairness, transparency, and inclusivity.
  - Align decisions with societal priorities and accountability.

- Reducing Bias
  - Teach AI fairness, privacy, and cultural relevance.
  - Embed ethics in data, design, testing, and oversight.

Key Questions in AI4SocialProtection

- **Fairness and Equity**
  - How can AI models in social protection be designed to prioritize vulnerable and marginalized groups in benefit eligibility and resource allocation?

- **Transparency and Trust**
  - What steps can be taken to make AI-driven social protection decisions transparent, accessible, and easy for beneficiaries to understand and trust?

- **Cultural Sensitivity and Local Relevance**
  - How can AI-generated content, such as social assistance or support materials, be adapted to align with local languages, customs, and cultural values to ensure accessibility?

Key Questions in AI4SocialProtection

- ## Community Feedback and System Adaptability
    - How can beneficiaries actively provide feedback on AI-based social protection services, and how can AI systems be modified to reflect community needs and insights?

- ## Data Privacy and Security
    - What data governance standards should be implemented to protect sensitive beneficiary information, particularly for vulnerable groups, and how can these standards ensure data security and confidentiality?

- ## Human Oversight and Responsible Governance
    - How can human oversight be integrated into AI-driven social protection systems to review, validate, and adjust AI decisions, especially in critical areas like financial aid, healthcare and social insurance access, and emergency support?

Challenges in Human-AI Cooperation

- Over-Reliance (Automation Bias):
  - Users overly trust AI, ignoring their judgment.
  - Leads to uncritical acceptance of false positives or negatives.

- Under-Reliance (Algorithm Aversion):
  - Users distrust AI and ignore useful suggestions.
  - Reduces the system's effectiveness and utility.

- Opacity of Judgments:
  - Difficulty assessing AI decision reliability.
  - Lack of transparency hinders optimal use of insights.

Ref: Riverberi 2022

Toward Responsible Generative AI

- How should we govern and regulate Generative AI systems and use?

- Analogous to the Vehicle and Transportation Rules
  - Vehicle design and manufacturing
  - Vehicle imports and sales
  - Traffic lights and traffic rules
  - Rules for drivers - Driving licenses
  - Rules for passengers – Seat belts
  - Guidance for good pedestrian behavior

- Education is key!

Conclusion and Call to Action

- Summary:
  - Inclusive AI can be a transformative tool for social protection, but careful planning and responsible considerations are essential.

- Next Steps:
  - Leverage guidance from the authoritative frameworks, e.g., Singapore&Rwanda's AI Playbook, ADB/GIZ, OECD, ISSA guidelines for public and social protection, to build effective foundational AI capabilities.

- Encouragement:
  - Communities and governments should collaborate to drive responsible, impactful, cooperative AI deployment in social protection.

Thank you!

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