



1. Introduction — The Human in Human-Centred AI

Human-centred AI has become an important aspiration in AI governance and ethics. It places people, rather than technology alone, at the centre of how AI systems are designed, developed and deployed. Yet an important question sits within that aspiration: how do we understand the “human” in human-centred AI?

This question matters for older persons. Older age is not a single or uniform stage of life. It may extend across several decades and encompass widely different circumstances, identities, relationships, capacities, aspirations and support needs. People also arrive in older age with different life histories and with advantages and disadvantages that may have accumulated over time. An AI system can therefore appear human-centred while relying on assumptions about ageing, treating older persons as a single demographic group, or overlooking aspects of life that matter for the continued realisation of human rights in older age.

The challenge is consequently not only to make older persons visible in AI governance and ethics, but to make the realities of older age visible. Doing so requires more than adding age to datasets, testing AI with older users or identifying older persons as a population requiring particular safeguards. It requires a way of understanding older persons as diverse rights-holders and of examining what AI means for the lives they are living.

This paper explores how a human rights principles framework grounded in older age can provide such a lens for AI governance and ethics. It does so by applying the Age Knowble Human Rights Principles Framework to the Human-centricity principle of the ASEAN Guide on AI Governance and Ethics. The ASEAN Guide provides a useful case study because Human-centricity explicitly seeks to ensure that people benefit from AI throughout its design, development and deployment. It refers to human well-being, benefit for all, vulnerable individuals, user interaction and negative outcomes, varied backgrounds and demographics, and the effects of AI on labour and job prospects.

These are important human-centred aspirations. They are also concepts whose meaning is not necessarily self-evident. What constitutes human benefit? What does well-being encompass? When is a person vulnerable? Who is captured by “all”? What needs to be understood about a user and the consequences of an AI output? What constitutes beneficial transformation of work? How these concepts are interpreted can materially affect the way AI is designed, deployed and governed.

The paper uses a two-stage approach. First, relevant Age Knowble human rights principles are used as an interpretive compass to give meaning to each concept in relation to older persons and life in older age. Second, the Framework's three dimensions are applied to examine what that interpretation could mean in practice — for the realisation of rights in everyday life; for Convention and State application; and for rights-enabling transformation of systems and environments. The distinction is deliberate. Interpretation establishes what the principle means in the context of older age; application examines what acting on that understanding could require in an AI context.

Through six AI imperatives drawn from ASEAN's Human-centricity principle, the analysis examines how an older-age human rights lens changes both the questions asked of AI and the outcomes considered relevant. It moves the inquiry beyond whether older persons are included as users or demographic groups toward whether AI recognises their personhood, diversity and agency; sustains relationships and participation; responds appropriately to protection and support needs; and keeps choices and possibilities open throughout older age.

The proposition explored in this paper is therefore broader than the ASEAN case study:

Human-centred AI requires more than placing an abstract “human” at the centre. Applying a human rights principles framework grounded in older age can help make older persons and the realities of older age visible in AI governance and ethics, and translate that understanding into the design, deployment and governance of AI.

2. Why an Older-Age Human Rights Lens Matters

Human-centred AI starts from an important premise: AI should serve people. Translating that premise into practice, however, requires attention to the people whose lives AI affects. While human-centred language may be universal in aspiration, concepts such as benefit, well-being, vulnerability, participation, safety and choice need to be understood in the context of the people whose lives AI affects. How these concepts are understood shapes what AI systems are designed to achieve, which risks are recognised, whose experiences are considered, and which outcomes are regarded as beneficial or harmful.

This matters in the context of older age. Older persons may be recognised in AI governance through age categories, datasets, user testing or references to groups requiring particular attention. These forms of visibility are important, but they do not necessarily provide an understanding of older persons as rights-holders or of life in older age. Without that understanding, assumptions about ageing can enter apparently neutral concepts—for example, equating benefit with safety, vulnerability with older age, well-being with health or functioning, or later life with diminishing possibilities.

2.1 Older age is diverse

There is no single experience of older age. It may extend across several decades, and the circumstances of a person at 70 may be very different from those of a person at 90 or 100. Chronological age alone also says little about the circumstances of any particular individual. People of the same age may differ substantially in their health, capacities, resources, relationships, aspirations, cultural identities, living arrangements, digital experience and support needs.

Diversity in older age also reflects intersectionality and experiences accumulated over a lifetime. Different identities, structural conditions, opportunities and disadvantages can interact with age and shape circumstances in later life. An AI system that recognises “older persons” as a single demographic category is not truly age-inclusive if it fails to recognise significant differences among the people within that category.

An older-age human rights lens shifts the inquiry from simply asking whether age is represented to asking whether the diversity of older persons and their circumstances is understood and whether their rights are realised equitably across that diversity.

2.2 Older persons remain persons with evolving lives

Older age is also sometimes approached through what has changed or may decline: health, functioning, employment, income or the need for support and care. These may be important realities, but they do not define the person or the entirety of life in older age.

Older persons continue to have will and preferences, relationships, identities, aspirations and roles in their families and communities. They may continue to work, learn, create, care, contribute, form relationships, pursue new interests and change direction. Some may require significant support while continuing to exercise agency and make decisions about their lives.

This is consequential for AI. Predictive and decision-support systems can make assessments about risk, capacity, health, employment prospects or future needs. If those assessments are interpreted through assumptions of inevitable decline or fixed trajectories, AI can do more than predict a future: it can influence which futures remain available to the person.

A human rights lens therefore asks not only whether AI responds to present needs, but whether it respects continuing personhood and self-determination and keeps possibilities and choices open as lives evolve.

2.3 Human lives are relational

Human-centred approaches can also risk conceptualising the human primarily as an individual user interacting with a system. Yet people's lives are lived through relationships, families, communities and wider social, cultural, economic and civic environments.

This relational dimension can be particularly important when AI is introduced into care, health, communication, financial services, employment or other areas of life. An AI application may improve efficiency or even achieve its intended individual outcome while changing human contact, relationships, participation or the person's connection with their community.

The relevant question is therefore not only “*Did the AI system work for the user?*”, but also: “*What did the use of AI mean for the person's relationships, participation, belonging and place in the world around them?*” This expands the assessment of AI outcomes beyond the immediate interaction between person and technology.

2.4 Support and protection should not erase agency

AI may offer important opportunities to enhance safety and provide support in older age—from detecting fraud and health risks to supporting mobility, care and independent living. At the same time, protection can become restrictive when risk reduction is treated as the overriding objective.

This creates a particularly important human rights question. An older person may experience circumstances that increase exposure to harm or require support without ceasing to be a person with will, preferences, agency and rights. Older age, disability, dependency or cognitive change should not automatically become proxies for incapacity or justification for transferring control to others.

An older-age human rights lens therefore makes it possible to consider protection and agency together: recognising genuine risks and support needs while asking how safeguards can enable rather than unnecessarily restrict rights, voice, choice and participation.

2.5 From demographic visibility to human rights visibility

Taken together, these realities point to a distinction that is central to this paper.

Demographic visibility asks whether older persons are present—in data, testing, consultation, impact assessment or policy.

Human rights visibility asks a deeper set of questions: whether older persons are understood as diverse and equal rights-holders; whether their will and preferences matter; whether relationships and participation are sustained; whether support enables rather than displaces agency; whether different circumstances and inequalities are recognised; and whether possibilities remain open throughout older age.

Both forms of visibility matter. But the first does not necessarily produce the second. This is where a human rights principles framework can play a strategic role. Rather than adding a separate checklist of “older-person issues” after an AI principle has already been interpreted, it can operate upstream as an interpretive compass. It can help clarify what concepts such as human benefit, well-being, vulnerability and inclusion mean when applied to older persons and life in older age. It can then provide a basis for translating that interpretation into practical application.

The question for human-centred AI is therefore not simply whether older persons have been included. It is:

What becomes visible when the human at the centre of AI is understood as a rights-holder living a diverse, relational and evolving life in older age?

The ASEAN Human-centricity principle provides a concrete setting in which to examine that question.

3. ASEAN Human-centricity as a Case Study

3.1 The ASEAN Guide on AI Governance and Ethics

The [ASEAN Guide on AI Governance and Ethics](#) provides practical guidance for organisations in the region on the responsible design, development and deployment of AI. The Guide seeks to support trustworthy AI while recognising differences among ASEAN Member States and enabling greater alignment in approaches to AI governance and ethics.

The Guide sets out seven guiding principles: Transparency and Explainability; Fairness and Equity; Security and Safety; Human-centricity; Privacy and Data Governance; Accountability and Integrity; and Robustness and Reliability. These principles seek to foster trust in AI and guide the ethical design, development and deployment of AI systems while considering their broader societal impacts. The Guide therefore provides an established AI governance and ethics instrument through which to examine how an older-age human rights principles framework can contribute to interpretation and application.

3.2 Why focus on Human-centricity?

This paper focuses deliberately on the Guide's Human-centricity principle.

Human-centricity begins from an explicitly people-oriented proposition. The Guide states that AI systems should respect human-centred values and pursue benefits for human society. People should benefit from AI design, development and deployment while being protected from potential

harms, and AI systems should promote human well-being and **“ensure benefit for all.”** Where AI systems make decisions about people or assist them, they should be designed with human benefit in mind and should not take advantage of vulnerable individuals.

The Human-centricity principle is extended throughout the AI system lifecycle. It calls for understanding how users interact with AI systems, how those systems are perceived and whether negative outcomes arise from their outputs. It gives as one example testing an AI system with users from varied backgrounds and demographics and incorporating their feedback. It also extends Human-centricity to the potential disruption of labour and job prospects as AI is deployed at scale.

This combination makes Human-centricity particularly useful for the present analysis. The question is not whether the ASEAN Guide is sufficiently human-centric or sufficiently attentive to older persons, nor is the purpose to evaluate the Guide against the Age Knowledge Human Rights Principles Framework. Rather, the analysis starts with the Guide's own human-centred aspirations and asks:

How can these concepts be interpreted in relation to older persons and life in older age, and what does an older-age human rights principles framework make visible?

This is an important methodological choice. Human-centricity already places human beings and human outcomes at the centre of the principle. Applying an older-age human rights lens therefore allows the analysis to examine what becomes visible when that human-centred aspiration is interpreted specifically in relation to older persons and life in older age.

3.3 Six AI imperatives within Human-centricity

For the purposes of this analysis, six concepts or AI imperatives were drawn from the Human-centricity text. Each expresses an intended human outcome or consideration whose interpretation in the context of older persons and life in older age can shape how Human-centricity is applied.

AI imperative drawn from Human-centricity	Older-age interpretive question
1. Human benefit	What constitutes benefit for an older person, and who determines it?
2. Well-being	What does well-being encompass in older age without reducing it to health, functioning, safety or another externally determined measure?
3. Vulnerable individuals	How should vulnerability be understood without treating older age itself as synonymous with vulnerability?
4. Benefit “for all” / varied demographics	What does “for all” mean in the context of the heterogeneity within older age, beyond including older persons as a demographic category?
5. Understanding users, perception and negative outcomes	What needs to be understood about how diverse older persons experience AI, and what constitutes a negative outcome in the context of their lives?
6. Labour and job prospects	How should AI-driven changes to work be understood across longer and more diverse working lives?

These six imperatives are analytical constructs derived from the Guide's text on Human-centricity. They provide a structured way to bring the Human-centricity principle into the context of older persons and life in older age.

The six imperatives also approach the human-centred aspiration from different directions. Human benefit and well-being concern the outcomes AI is intended to advance. Vulnerable individuals and “for all” raise questions about how people and their circumstances are understood. User interaction, perception and negative outcomes bring attention to people's experiences of AI and its consequences. Labour and job prospects extend the inquiry to the effects of AI-enabled change within a significant domain of human life.

Together, they provide a substantive basis for examining what an older-age human rights lens contributes to the interpretation and application of an established Human-centricity principle. The next section introduces the Age Knowble Human Rights Principles Framework and the features that enable it to serve first as an interpretive compass and then as a framework for application.

4. The Age Knowble Human Rights Principles Framework

4.1 Purpose and strategic role of the Framework

The [Age Knowble Human Rights Principles Framework \(Version 3.0\)](#) provides a principle-based approach for framing, interpreting and applying human rights in the context of older age and emerging issues affecting human rights of older persons. It starts from the premise that the development and application of human rights principles for older persons should be grounded in the realities of older age and the lived experiences of older people.

The Framework was developed, tested and refined through an iterative process. It is lived experience-based, consultation-derived, iterated through United Nations engagements and practical application, with the aim of remaining relevant and responsive over time.

It first took shape through Age Knowble's submission to the April 2026 call for input on the conceptual basis, general principles and structure of a Convention on the Rights of Older Persons. It was refined through submissions to the UN Independent Expert addressing dependency in older age and older persons with cognitive impairment. These applications have provided opportunities to test how the principles can help reinterpret rights in older age and translate them into practical guidance for Convention standards, law, policy and practice.

This grounding is important for the present analysis. The Framework does not begin with AI or with a particular technology. It begins with the older person, life in older age and the conditions required for human rights to remain real across longer lives. The Framework recognises older persons as equal rights-holders throughout older age and seeks to ensure that human rights remain responsive to changing realities.

This gives the Framework a strategic role when applied to an established AI governance and ethics instrument. Its architecture enables the same human rights principles to perform two related but distinct functions.

First, the definition of the principle provides an interpretive compass. They bring an understanding of older persons and life in older age to the interpretation of concepts already contained within an AI

governance and ethics instrument. They help make visible aspects of the person and of life in older age that matter when concepts such as benefit, well-being, vulnerability, participation or choice are interpreted.

Second, the three dimensions of the principle provide a pathway for application. Once an AI concept has been interpreted through the relevant principle definitions, the dimensions allow the analysis to consider what that interpretation could mean for the person's everyday experience, for Convention and State application, and for the broader transformation of systems and environments needed to enable rights.

The distinction between these two functions is deliberate. The Framework is not being used to replace or evaluate the ASEAN Human-centricity principle, nor to add a parallel set of requirements to it. Rather, it provides an older-age human rights lens through which an established AI principle can first be interpreted and then applied.

4.2 An interconnected architecture of eight principles

The Framework comprises eight interconnected human rights principles. Together they form an architecture that “starts with the person, moves through the lived experience of older age and finally extends to the systems and future conditions that support the realisation of rights in everyday life.”

The architecture progresses through four connected parts:

Part I — The Person: Who I am and my inherent human worth

1. Dignity and Equal Worth — inherent and equal human worth throughout older age.
2. Personhood and Self-Determination — continuing personhood, agency and the ability to direct one's life according to one's will, preferences and values.
3. Equality and Non-Discrimination — equal standing and substantive equality across the diverse circumstances of older age.

Part II — Living a Human Life

4. Participation and Relational Belonging — continued participation, connection and belonging within relationships and communities.
5. Protection and Security — protection, safeguards and supports that enable older persons to live safely and securely while upholding rights, voice and autonomy.
6. Possibilities and Choice — continuing opportunities and choices through which older persons can pursue the lives they value.

Part III — The Systems Around Me

7. Accountability and Rights-Realising Systems — laws, institutions, services, environments and remedies that work together to make rights real.

Part IV — Across Time

8. Future Readiness and Enduring Relevance — ensuring that human rights remain responsive to changing circumstances and emerging realities while retaining their enduring foundation.

Applied together, the eight principles provide a coherent framework for understanding and realising human rights in older age.

4.3 Three complementary dimensions

In addition to the definitions, each principle is further developed through three complementary dimensions to support application.

Dimension A — Rights Realisation in Everyday Life grounds the principle in the lived experience of the older person. It asks what realisation of the principle looks and feels like in everyday life.

Dimension B — Convention and State Application translates the principle into implications for Convention standards and State implementation, including laws, policies, institutions, services, safeguards and other arrangements through which rights can be realised.

Dimension C — Rights-Enabling Ecosystem Transformation identifies the wider shifts needed to move from current realities toward environments and systems that enable rights in practice.

Together, the dimensions create movement across three levels — the person's everyday experience of rights → the systems and actions needed to realise them → the broader transformation needed to create rights-enabling environments. The three dimensions provide a structured way to explore what the older-age human rights interpretation means for AI governance and ethics in practice

4.4 A living and applied framework

A further characteristic is particularly relevant to AI. The Framework is conceived as living and applied: informed by lived experience and refined through practical application and emerging issues, with the aim of remaining relevant as the realities of older age evolve.

This matters because AI governance and ethics will continue to evolve alongside AI technologies, capabilities and uses. A principles-based human rights framework does not need to anticipate every development. Instead, it provides a foundation for interpreting emerging concepts and circumstances through the realities of older age.

5. Analytical Method — From Interpretation to Application

The analysis applies the Age Knowble Human Rights Principles Framework to six AI imperatives derived from the ASEAN Guide's Human-centricity text through two distinct stages:

Stage 1 — Interpretation: Relevant Age Knowble principle definitions provide an interpretive compass for understanding each AI imperative in the context of older persons and life in older age.

Stage 2 — Application: The three dimensions of the relevant principles are used to explore what the resulting interpretation means for AI governance and ethics in practice.

Keeping the stages separate avoids moving directly from an AI concept to its practical implications for older persons. It first establishes what the concept means in the realities of older age and then explores what that interpretation means for AI governance and ethics in practice.

5.1 Stage 1 — Principles as an interpretive compass

The analysis begins with the ASEAN Human-centricity text and an older-age interpretive lens for each AI imperative. Relevant Age Knowble principles are selected according to the substance of their definitions, not their titles, and only where they make a distinct contribution to interpretation.

The analytical sequence is — ASEAN Human-centricity text → AI imperative → older-age interpretive lens → relevant Age Knowble principle definitions → older-age human rights interpretation

The principles therefore vary across the six imperatives. The purpose is not to apply every principle, but to identify those that genuinely inform how the particular AI concept should be understood in older age.

The output is an older-age human rights interpretation of each AI imperative.

5.2 Stage 2 — Dimensions as a pathway to application

Stage 2 takes the AI imperative as interpreted in the context of older age and examines it through the three dimensions of the relevant Age Knowble principles. The dimensions extend the analysis from interpretation to what the AI imperative could mean in practice.

Dimension A — Rights Realisation in Everyday Life considers what the interpreted AI imperative could mean for older persons encountering or experiencing AI in everyday life.

Dimension B — Convention and State Application considers what it could mean for laws, policies, institutions, safeguards and systems through which rights are realised. In the context of AI, this may generate implications for areas such as design, deployment, data, testing, accessibility, participation, human oversight, monitoring and remedy.

Dimension C — Rights-Enabling Ecosystem Transformation considers the broader changes in AI-enabled systems and environments that could support the continued realisation of rights in older age.

The analytical sequence is — interpreted AI imperative → application through Dimensions A, B and C → implications for AI in practice → derived implications for AI in practice.

5.3 Applying the method across the six imperatives

The same two-stage method is applied across all six AI imperatives, while allowing the substantive analysis to vary. Different imperatives may engage different Age Knowble Human Rights Principles and generate different implications through the three dimensions.

This provides a consistent analytical method without predetermining the human rights analysis or its outcomes.

Stage	Purpose	Primary source within Age Knowble	Output
1. Interpretation	Understand the AI imperative in relation to older persons and life in older age	Relevant principle definitions	Older-age human rights interpretation
2. Application	Explore what the interpreted AI imperative means for AI in practice	Dimensions A, B and C of the relevant principles	Derived implications for AI in practice

The detailed application of this method to each of the six imperatives is provided in Appendix C. The main paper draws out the most significant results and patterns emerging across the six analyses.

5.4 What the method is intended to explore

The exercise does not assess ASEAN Human-centricity against the Age Knowble Human Rights Principles. ASEAN already establishes a substantive Human-centricity principle addressing human benefit, well-being, protection from harm, user experience and broader societal effects across the AI system lifecycle.

Rather, the method explores what happens when an established AI governance and ethics principle is interpreted and applied in the context of older persons and life in older age through a human rights principles framework.

It considers two questions:

Can the principle definitions serve as an interpretive compass that makes older persons and life in older age more fully visible within an established AI principle?

Can the three dimensions carry that interpretation into AI practice while preserving the underlying human rights principles?

6. Applying the Lens — Six Human-Centricity Imperatives

Applying the two-stage method to the six imperatives shows what becomes visible when the Human-centricity principle in the *ASEAN Guide on AI Governance and Ethics* is interpreted through the *Age Knowble Human Rights Principles Framework*, and what that interpretation may mean for AI in practice.

This section presents the principal findings. The complete Stage 1 and Stage 2 analyses are provided in Appendix C.

6.1 Human Benefit

The ASEAN Guide on AI Governance and Ethics (ASEAN Guide) states that people should benefit from AI design, development and deployment and that systems making or supporting decisions about people should be designed with human benefit in mind.

The Age Knowble Human Rights Principles Framework (Age Knowble framework) make visible that benefit cannot simply be determined for an older person. The person's will, preferences, values, circumstances and aspirations matter. Protection, support and safety may form part of benefit, but should enable rather than unnecessarily diminish self-determination, participation and choice.

This changes what needs to be considered in AI application. An outcome that improves safety, monitoring or risk reduction may not be beneficial if it unnecessarily restricts the person's agency, choices or possibilities.

The resulting question is:

What constitutes benefit for this older person, who has a role in determining it, and does the AI-enabled outcome support protection and well-being while respecting self-determination and keeping meaningful choices and possibilities open?

6.2 Well-being

The ASEAN Guide states that AI systems should promote human well-being.

The Age Knowble Framework makes visible that well-being in older age is multidimensional. It includes self-determination and what gives life meaning; relationships, participation, belonging and contribution; protection and security; and continuing opportunities, aspirations and choices.

An AI system may improve a particular indicator, such as physical safety or loneliness, while diminishing choice, relationships, participation or other aspects of the life the person values.

Applying the three dimensions therefore broadens assessment beyond whether an AI system achieves its intended outcome to what its use means across the person's life.

The resulting question is:

What constitutes well-being for this older person, and how might AI affect the different dimensions of the life through which they experience and pursue it?

6.3 Vulnerable Individuals

The ASEAN Guide states that AI systems should not **“take advantage of vulnerable individuals.”**

The Age Knowble Framework makes an important distinction: older age itself should not be treated as synonymous with vulnerability. Older persons remain people of equal dignity and worth, with continuing personhood, agency and rights across diverse circumstances.

At the same time, particular circumstances or disadvantages may expose a person to exploitation or harm. Where these arise, safeguards and support may be needed without diminishing the person's equal status, rights, voice or self-determination.

Applied to AI, this means looking at individual circumstances rather than relying on age-based assumptions when identifying risk or determining protective responses.

The resulting question is:

What circumstances or disadvantages may expose an older person to exploitation or harm, and how can these be addressed while preserving equal status, agency and rights?

6.4 Benefit “for all” and Varied Backgrounds and Demographics

The ASEAN Guide states that AI should “ensure benefit for all” and gives testing with users from “varied backgrounds and demographics” as an example of applying Human-centricity.

The Age Knowble Framework makes visible that including older persons as one demographic category does not capture the diversity within older age. Circumstances in older age are shaped by accumulated lifetime experiences, structural inequalities and intersecting identities. Chronological age alone is therefore insufficient to represent these realities.

The Framework also distinguishes demographic representation from meaningful participation. Older persons should have opportunities not only to be included as users or test subjects, but to influence decisions affecting AI systems.

Applied to AI, this brings attention to diversity within older populations, unequal effects and barriers, accessibility and accommodation, and meaningful participation in design, implementation and review.

The resulting question is:

Does “for all” recognise diversity within older age, and are older persons across diverse and intersecting circumstances able not only to be represented but also to participate and influence what AI is intended to benefit and how?

6.5 Understanding Users, Perception and Negative Outcomes

The ASEAN Guide calls for action throughout the AI system lifecycle to understand how users interact with AI systems, how those systems are perceived and whether negative outcomes arise from their outputs.

The Age Knowble Framework extends this inquiry beyond the immediate interaction between a person and an AI system. Understanding older persons as users also requires considering what the system and its outputs mean within their lives, including effects on self-determination and decision-making, relationships and participation, protection and security, and continuing choices and possibilities.

An AI output may therefore be technically accurate or usable while still adversely affecting the person's life. Applying the three dimensions also brings attention to whether older persons can meaningfully influence AI systems that affect them.

The resulting question is:

How do diverse older persons experience the AI system and its outputs, and what consequences do those interactions and outputs have for their rights, relationships, participation, security, choices and possibilities in everyday life?

6.6 Labour and Job Prospects

The ASEAN Guide states that AI adoption and deployment at scale should not “unduly disrupt labour and job prospects without proper assessment.” It encourages consideration of how jobs can be redesigned to incorporate AI and how employees can be supported to adapt.

The Age Knowble Framework brings longer and more diverse working lives into this analysis. Work can remain connected to self-determination, participation, contribution, economic security, learning and personal development in older age. Older persons may wish to continue working, learn new skills, change roles or pursue different forms of contribution.

Applied to AI, the issue is therefore not simply whether older workers can adapt to technological change. It includes their participation in workplace transformation, access to work, learning and technology, economic security, and whether age-based assumptions unnecessarily narrow their opportunities and choices.

The resulting question is:

How does AI-enabled transformation of work affect older persons' ability to choose, participate, contribute, remain economically secure, continue learning and pursue evolving working trajectories?

6.7 What the Six Applications Reveal

Each imperative raises a different issue, but together they reveal a consistent pattern. An older-age human rights lens brings greater attention to:

- the person, rather than the demographic category;
- the diversity of older age, rather than chronological age alone;
- the person's will, preferences and what matters to them, rather than externally determined outcomes alone;
- protection that enables rights and agency, rather than risk reduction alone;

- the consequences of AI within a person's life, rather than the immediate user-system interaction alone;
- meaningful participation and substantive inclusion, rather than demographic representation alone; and
- continuing possibilities across longer lives, rather than assumptions based on present circumstances or fixed later-life trajectories.

These findings do not replace the Human-centricity concepts in the *ASEAN Guide on AI Governance and Ethics*. They show what becomes visible when those concepts are interpreted through the *Age Knowble Human Rights Principles Framework* in the context of older persons and life in older age.

7. What Becomes Visible Through an Older-Age Human Rights Lens

Taken together, the six applications reveal recurring ways in which an older-age human rights lens changes what is seen, whose perspective matters and what outcomes become relevant in AI governance and ethics.

These findings do not suggest that Human-centricity in the *ASEAN Guide on AI Governance and Ethics* lacks a human focus. They show what becomes visible when its human-centred concepts are interpreted through the *Age Knowble Human Rights Principles Framework*, grounded specifically in older persons and life in older age.

7.1 The “human” becomes a person, not an abstraction.

Across the six imperatives, the analysis repeatedly brings the inquiry back from the human in general to the person living a particular life.

Human-centred concepts can be framed at population or societal level. The *Age Knowble Human Rights Principles Framework* makes visible that AI ultimately affects individual rights-holders whose lives, circumstances and experiences provide the context in which its effects are felt.

This changes the point of reference for the analysis. It asks:
What does this mean for this person as a rights-holder?

7.2 Older age becomes a diverse human reality, not simply a demographic category.

The analysis distinguishes making age visible from understanding the realities of older age. Including age in data, impact assessments or user testing does not by itself capture the diversity of older persons. Older age may span decades, and people's circumstances are shaped by accumulated lifetime experiences, structural inequalities and intersecting identities.

An AI system may therefore appear to work for “older users” while producing different experiences or outcomes among older persons in different circumstances.

The older-age human rights lens makes diversity within older age part of the analysis rather than treating chronological age as sufficient.

7.3 Benefit and well-being become person-centred, not externally determined.

Human benefit and well-being are central to Human-centricity in the *ASEAN Guide on AI Governance and Ethics*. The analysis shows that they cannot be determined solely through externally selected outcomes or measures.

Safety, health, functioning and support may all contribute to benefit and well-being. The Age Knowble Human Rights Principles Framework broadens the picture to include what the person values: their will and preferences, relationships, participation, contribution, enjoyment, learning, aspirations and continuing possibilities.

An AI system may therefore improve a particular measure while diminishing other aspects of the life the person values.

The finding is not that benefit and well-being are entirely subjective, but that the older person's perspective is part of determining what constitutes a beneficial outcome or living well.

7.4 Protection and agency can be pursued together.

Across several imperatives, the analysis exposes a recurring tension between protection and control.

AI may help identify risks and provide valuable safeguards and support. Yet protective interventions can also restrict choice, increase surveillance or transfer decision-making away from the person. The *Age Knowble Human Rights Principles Framework* shows that protection and agency need not be opposing objectives. Protection can address risk while preserving rights, voice and self-determination, with safeguards proportionate to the circumstances.

The question therefore becomes:

How can risk be addressed without unnecessarily restricting the person's rights and agency?

7.5 AI outcomes extend beyond the AI output.

The analysis widens what counts as an AI outcome.

An AI system may function as intended while its output has wider consequences for the person's everyday life. A recommendation or intervention may affect decision-making, privacy, relationships, participation, security, economic circumstances, learning, opportunities or choices.

Assessment therefore needs to consider not only whether an AI output is accurate, safe or usable, but also —What happens in the person's life because that output is produced and acted upon?

The older-age human rights lens thus extends analysis from the immediate interaction with an AI system to the consequences of AI within the person's life.

7.6 Participation moves upstream – from inclusion to influence.

The analysis distinguishes being included in AI from having influence over AI. Older persons may be represented in datasets, user testing, consultations or feedback processes. These forms of inclusion matter, but the *Age Knowble Human Rights Principles Framework* brings a stronger conception of meaningful participation: the opportunity to contribute and influence decisions.

Applied to AI, this means considering whether older persons in diverse circumstances can meaningfully influence design, decisions, implementation and review, rather than participate only as data subjects, users or test populations.

For Human-centricity, placing people at the centre therefore involves more than their presence. It includes their ability to shape AI systems and decisions that affect them.

7.7 Time and future possibilities become part of the analysis.

The analysis also brings time and continuing possibilities into view.

Older age should not be understood as a fixed or progressively narrowing trajectory. Aspirations can evolve, learning and development can continue, and older persons may seek new forms of work, participation, relationships, contribution and personal fulfilment.

AI-enabled decisions and environments can affect those possibilities. The relevant question is therefore not only what AI protects, provides or enables now, but what opportunities and choices it keeps open or closes off as people live through older age.

This gives future possibilities a place within present AI governance and ethics.

7.8 Human-centered AI becomes rights-centred as well as user-centered AI.

Taken together, the findings reveal a broader contribution.

User-centred approaches can focus on whether AI is accessible, understandable, usable and responsive to user needs. Human-centred approaches can extend to human well-being, values and societal impacts.

An older-age human rights lens adds a further point of reference — Does the AI-enabled environment enable older persons, in their diversity, to continue enjoying and exercising their human rights?

This does not replace Human-centricity in the *ASEAN Guide on AI Governance and Ethics*. The *Age Knowble Human Rights Principles Framework* brings a rights-based lens grounded in the person and the realities of older age to its interpretation and application.

8. Advancing Rights-Realising Artificial Intelligence

The findings in Section 7 point to broader implications for AI governance and ethics. The ASEAN Guide on AI Governance and Ethics provides the case study, but the exercise demonstrates how a human rights principles framework grounded in older persons and life in older age can contribute more broadly to the interpretation and application of established AI governance and ethics principles.

These implications are not proposed as a new set of AI principles or as requirements derived directly from the ASEAN Guide on AI Governance and Ethics. They reflect what the analysis suggests about how older-age human rights considerations can be brought into AI governance and ethics.

8. Implications for AI Development, Implementation and Governance

The findings in Section 7 point to broader implications for AI development, implementation and governance. The ASEAN Guide on AI Governance and Ethics provides the case study, but the exercise demonstrates how a human rights principles framework grounded in older persons and life in older age can inform how established AI principles are interpreted and carried into practice.

These implications are not proposed as a new set of AI principles or as requirements derived directly from the ASEAN Guide on AI Governance and Ethics. They reflect what the analysis suggests about how older-age human rights considerations can inform AI development, implementation and governance.

8.1 Bring the human rights lens into interpretation, not only implementation

A central implication is that when the human rights lens is applied matters.

If concepts such as benefit, well-being, vulnerability, inclusion or negative outcomes have already been defined before older-age human rights considerations are introduced, subsequent measures may improve the inclusion of older persons without reconsidering the assumptions underlying those concepts.

For an established AI governance and ethics instrument, a human rights principles framework can operate upstream as an interpretive compass. It can bring older persons and life in older age into the meaning of existing principles before moving to practical application.

This matters because interpretation shapes application. A different understanding of benefit, well-being, vulnerability or inclusion can change what outcomes are sought, what risks are recognised and what questions are subsequently asked of AI.

8.2 Carry the interpretation through AI development, implementation and governance

Interpretation has practical value when it informs how AI is developed, implemented and governed. The six applications show how an older-age human rights interpretation can change what becomes relevant in areas such as design, data and testing, accessibility, impact assessment, safeguards, participation, human oversight, monitoring and remedy.

The particular implications will depend on the AI principle and context. The purpose is not to create a predetermined checklist for older persons, but to ensure that the human rights meaning established through interpretation carries through into AI practice.

This can affect, for example, whether data and testing recognise diversity within older age; whether assessments follow AI consequences into the person's life; whether safeguards protect without unnecessarily restricting agency; and whether participation enables older persons to influence decisions rather than simply be represented.

Human rights considerations therefore need not enter only at the end as safeguards or corrective measures. They can inform the assumptions, objectives and decisions that shape how AI is developed, implemented and governed.

8.3 Use human rights principles as enduring anchors in a changing technological environment

AI technologies, applications and governance approaches will continue to change. The lives and circumstances of older persons also continue to evolve.

A principles-based human rights framework offers a form of future readiness that does not depend on anticipating every technological development. Its value lies in providing enduring points of reference through which changing technologies and circumstances can be interpreted and addressed.

This also introduces a temporal dimension. An AI-enabled intervention or decision that is appropriate at one point may become restrictive or inappropriate as circumstances, aspirations or possibilities change. Development, implementation and governance may therefore need to account for continuing effects and changing circumstances rather than treating initial determinations as permanent.

The *Age Knowble Human Rights Principles Framework* illustrates how enduring human rights principles can provide an interpretive compass, while the three dimensions provide a structured pathway into application.

The technology may change, the context may change and the application may change, but the human rights foundation endures.

8.4 From human-centred orientation to rights-realising practice

The broader implication is not that Human-centricity should be replaced by a human rights framework. They perform different but complementary functions.

Human-centricity in the *ASEAN Guide on AI Governance and Ethics* provides an important orientation: AI should serve people and society. An older-age human rights principles framework contributes a further question — What must remain true about the person and their rights when that aspiration is translated into practice?

The analysis shows how answering that question can affect the interpretation of benefit, well-being, vulnerability, inclusion, user outcomes and work, and how those interpretations can in turn inform AI development, implementation and governance.

Human rights can therefore provide a bridge between human-centred aspiration and rights-realising practice. The contribution is not simply to make older persons more visible, but to help ensure that AI development, implementation and governance recognise them as diverse rights-holders and support the continued realisation of their rights throughout older age.

9. Conclusion — From Human-Centred to Rights-Realising AI

This paper began with a question embedded within the aspiration of human-centred AI: how do we understand the “human” in human-centred AI?

Using Human-centricity in the *ASEAN Guide on AI Governance and Ethics* as a case study, the analysis explored how the *Age Knowble Human Rights Principles Framework* can contribute to the interpretation and application of an established AI governance and ethics principle.

The exercise shows the value of beginning with interpretation. The principle definitions bring older persons and life in older age into the meaning of established AI concepts. The three dimensions then provide a structured way to explore what that interpretation could mean for AI in practice.

Across the six imperatives, this lens makes visible the person behind the demographic category, diversity within older age, person-centred understandings of benefit and well-being, protection that enables agency, consequences within everyday life, meaningful influence and continuing possibilities across longer lives.

The contribution of a human rights principles framework is therefore not simply to add safeguards or considerations for older persons after AI systems have been developed. It can provide an interpretive compass that helps shape how existing AI principles are understood and a pathway for carrying that understanding into application.

As AI continues to evolve, human rights frameworks do not need to anticipate every technology or every effect it may have. Their enduring value lies in providing a foundation through which emerging circumstances can be interpreted while keeping the person and their rights at the centre.

The movement is therefore not away from human-centred AI, but toward making its human-centred aspiration more meaningful: understanding the person at the centre as a rights-holder and ensuring that AI-enabled environments support the continued realisation of rights throughout older age.

The question for the future is therefore not only whether AI will be human-centred, but whether, as AI becomes increasingly embedded in human life, people can continue to live with rights throughout the full course of their longer lives.

Appendix A — ASEAN Guide on AI Governance and Ethics

The ASEAN Guide on AI Governance and Ethics (2024) is a practical guide for organisations seeking to design, develop and deploy AI responsibly. It identifies seven guiding principles: Transparency and Explainability; Fairness and Equity; Security and Safety; Human-centricity; Privacy and Data Governance; Accountability and Integrity; and Robustness and Reliability.

This paper focuses on Human-centricity. The Guide states that AI systems should respect human-centred values and pursue benefits for human society, including human well-being; that people should benefit from AI while being protected from potential harms; and that AI systems should promote human well-being and ensure benefit for all. Where AI systems make decisions about humans or aid them, they should be designed with human benefit in mind and should not take advantage of vulnerable individuals.

Human-centricity is to be incorporated throughout the AI system lifecycle, from design through development and deployment. The Guide calls for understanding how users interact with AI systems, how systems are perceived, and whether negative outcomes arise from their outputs. It gives testing with users from varied backgrounds and demographics and incorporating their feedback as one example.

The Guide also addresses malicious, deceptive and manipulative uses of AI, including dark patterns, and extends Human-centricity to the effects of AI adoption at scale on labour and job prospects. It encourages impact assessment and consideration of how jobs can be redesigned as AI is introduced.

For the complete Guide and its wider governance framework, see: [ASEAN Guide on AI Governance and Ethics](#). For analytical purposes, the Human-centricity text is organised into six AI imperatives. These six imperatives are analytical constructs derived from the Guide's Human-centricity text. They are not presented by ASEAN as six separate principles. They provide a structured way to bring the Human-centricity principle into the context of older persons and life in older age.

	AI imperative	Older-age question opened by the Guide's language
1	Human Benefit	What constitutes benefit for an older person, and who determines it?
2	Well-being	What does well-being encompass in older age, and who determines what living well means?
3	Vulnerable Individuals	How should vulnerability be understood without treating older age itself as synonymous with vulnerability?
4	Benefit “for all” / Varied Backgrounds and Demographics	What does “for all” require when older age itself is highly diverse?
5	Understanding Users, Perception and Negative Outcomes	What needs to be understood about older persons' interactions with AI, their perceptions of it, and the outcomes it produces in their lives?

	AI imperative	Older-age question opened by the Guide's language
6	Labour and Job Prospects	What does AI-enabled transformation of work mean for older persons' continued participation, contribution, choice and possibilities across longer working lives?

Appendix B — Age Knowble Human Rights Principles Framework

The Age Knowble Human Rights Principles Framework, Version 3.0 (June 2026) was developed to bring the realities of older persons and life in older age into thinking about the human rights of older persons. Its principles-first approach provides normative direction that can help inform the interpretation, development and application of human rights in diverse and changing contexts.

The Framework is broader than the principles used in this paper. For this analysis, six principles were strategically selected from the Framework: Dignity and Equal Worth; Personhood and Self-Determination; Equality and Non-Discrimination; Participation and Relational Belonging; Protection and Security; and Possibilities and Choice.

These six were selected because, taken together, they provide a particularly relevant human rights lens for the questions raised by Human-centricity in the ASEAN Guide. They bring into view:

- the older person as a person of inherent and equal worth;
- continuing personhood, agency, will, preferences and self-determination;
- diversity within older age, including accumulated lifetime experiences, structural inequalities and intersecting identities;
- participation, relationships, belonging and contribution;
- protection and security that enable rather than unnecessarily displace rights, voice and autonomy; and
- continuing possibilities, aspirations and choices throughout older age.

The selection is therefore purposeful rather than exhaustive. It does not suggest that these six constitute the entire Age Knowble Framework, nor that other principles within the Framework are unimportant. They were selected because their content most directly provides an interpretive compass and pathways for application for the six Human-centricity imperatives examined in this paper. For the complete Framework and its full set of principles and content, see: [Age Knowble Human Rights Principles Framework — Version 3.0](#).

How the selected principles are used in this analysis

The Age Knowble Framework is not used to replace, rewrite or add principles to the ASEAN Guide on AI Governance and Ethics. Rather, selected principles are applied as an older-age human rights lens to examine what Human-centricity means when older persons and life in older age are brought explicitly into view.

The analysis uses two distinct stages.

Stage 1 — Interpretation. Relevant principle definitions operate as an interpretive compass. They are used to examine how concepts within Human-centricity can be understood in relation to older persons and life in older age.

Stage 2 — Application. The three dimensions of the selected principles are applied to examine what application could look like in practical terms for AI. Relevant content from each dimension is identified and applied to the particular AI imperative. Each substantive element of the derived AI application should be traceable to the Age Knowble dimension content from which it is derived.

The principles engaged are determined imperative by imperative. Not all six selected principles are applied to every imperative. A principle is used where its content makes a substantive contribution to understanding or applying the particular Human-centricity concept. Appendix C documents these selections and their application.

This approach also illustrates a broader potential role for an older-age human rights principles framework: it can operate upstream as an interpretive compass in the case of an established instrument, while its dimensions can help translate that normative direction into practical application in emerging contexts such as AI.

For further background on the principles-first approach and the development and strategic purpose of the Age Knowble Framework, see: [Principles First: Laying the Foundations for the Human Rights of Older Persons](#)

Appendix C — Detailed Analysis of the Six Human-Centricity Imperatives

This appendix provides the detailed analysis underlying Section 6 of the paper. The six AI imperatives are analytical constructs derived from the **Human-centricity** text of the ASEAN Guide on AI Governance and Ethics. They provide a structured way to bring the Human-centricity principle into the context of older persons and life in older age.

Each imperative is examined through the two-stage method described in Section 5.

Stage 1 — Interpretation draws on relevant definitions from the Age Knowble Human Rights Principles Framework as an interpretive compass for understanding the ASEAN concept in the context of older persons and life in older age.

Stage 2 — Application applies the three dimensions of those principles to identify what application could look like in practical terms for AI.

C1 — Human Benefit

In the ASEAN Guide on AI Governance and Ethics, the Human-centricity principle establishes that people should benefit from AI design, development and deployment and, particularly where AI systems make decisions about or aid people, that systems should be designed with human benefit in mind.

Older-age interpretive question: What constitutes benefit for an older person, and who determines it?

C1.1 Stage 1 — Interpretation

Age Knowble Human Rights Principles Framework principles engaged:

Personhood and Self-Determination | Protection and Security | Possibilities and Choice

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Human Benefit
Personhood and Self-Determination	Older persons remain full persons and rights-holders throughout older age, including where disability, dependency or cognitive change is present. They are entitled to direct their lives according to their will, preferences and values and to continue pursuing meaning, relationships, contribution, work, service, creativity, learning and personal development.	Benefit cannot simply be determined for an older person. The person's will, preferences, values and life direction are relevant to determining whether an AI-enabled outcome is beneficial.
Protection and Security	Older persons are entitled to the protection, safeguards and supports necessary to live safely and securely throughout older age. These should uphold dignity, self-determination, participation, wellbeing and security. Protection should never diminish rights, voice, autonomy or community connection.	Protection and safety can form part of benefit, but benefit should not be equated with risk reduction alone. An intervention intended to protect may cease to be rights-enabling if it unnecessarily diminishes rights, voice, autonomy or community connection.
Possibilities and Choice	Human rights should keep possibilities open throughout older age. Older age should never be treated as a barrier to continued learning, relationships, creativity, contribution, enjoyment, exploration, spirituality or personal fulfilment. Older persons should remain free to shape their own paths according to their aspirations, circumstances, values and preferences.	Whether AI is beneficial also depends on what it does to the person's choices and possibilities. An outcome that addresses an immediate problem but unnecessarily closes opportunities may not constitute benefit when considered within the person's wider life.

Older-age human rights interpretation

Human Benefit in older age should be understood in relation to the older person as a full rights-holder whose own will, preferences, values, circumstances and aspirations matter. Benefit may include protection, support and safety, but these should enable rather than unnecessarily diminish self-determination, participation and choice. Whether an AI-enabled outcome is beneficial therefore also requires consideration of what it enables or constrains in the life the person seeks to live.

Interpretive shift

From: *What outcome would benefit the older person?*

Towards: What constitutes benefit for this older person, who has a role in determining it, and does the AI-enabled outcome support protection and well-being while respecting self-determination and keeping meaningful choices and possibilities open?

C1.2 Stage 2 — Application

Stage 2 applies the three dimensions of the selected Age Knowble principles to explore what their application could look like in practical terms for AI in relation to Human Benefit.

The middle column identifies selected relevant content from the Age Knowble Framework. The third column applies that content to the AI context. Each substantive element of the derived AI application is therefore traceable to the Framework content in the preceding column.

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
A. Rights Realisation in Everyday Life	Personhood and Self-Determination: “control over daily lives, routines, and priorities”; “respect for will and preferences”; “support to make personal decisions where needed.” Protection and Security: “support that preserves dignity, choice, privacy, and relationships”; “safety without loss of voice, autonomy, or community connection.” Possibilities and Choice: “opportunities to pursue new interests, aspirations, and experiences throughout older age”; “freedom to imagine and pursue new goals and aspirations throughout older age.”	Examine whether AI-enabled decisions and interventions preserve the older person's control over daily life and reflect their will and preferences; whether decision-making support is available where needed; whether AI-enabled protection preserves dignity, choice, privacy, relationships, voice and autonomy; and whether AI enables or unnecessarily restricts activities, aspirations and possibilities that matter to the person.
B. Convention and State Application	Personhood and Self-Determination: “recognise equal legal agency and decision-making rights”; “require supported decision-making guided by will and preferences”; “prohibit age- or diagnosis-based exclusion from decisions”; “protect free and informed consent”; “ensure communication and decision supports where needed.” Protection and Security: “require least restrictive, lawful, necessary, and proportionate measures where intervention is needed”; “establish accessible complaints, advocacy, oversight, and remedies mechanisms.” Possibilities and Choice: “remove unnecessary age-based barriers that limit possibilities and life choices”; “ensure equitable access to opportunities”; “invest in accessible environments, information, transport, technology, and services that expand possibilities throughout older age.”	In AI-enabled decisions affecting older persons, provide for recognition of decision-making rights, supported decision-making, communication support and free and informed consent where applicable. Protective AI interventions should be lawful, necessary, proportionate and no more restrictive than required, with accessible opportunities for complaint, advocacy, oversight and remedy. AI governance should also identify and remove unnecessary age-based barriers to AI-enabled opportunities and technologies.
C. Rights-Enabling Ecosystem Transformation	Personhood and Self-Determination: “substituted control → supported self-determination.” Protection and Security: “protection as control → rights-enabling support”; “risk elimination → dignity of risk.” Possibilities and Choice: “age-	Orient AI-enabled systems away from making decisions for older persons, pursuing protection primarily through control, or eliminating risk by restricting activity. Instead, use AI to support self-determination, enable proportionate approaches to risk,

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
	based limitation → lifelong possibilities”; “prescribed pathways → expanded opportunities and choices.”	and expand rather than prescribe or narrow opportunities and choices throughout older age.

Practical AI illustration

Consider an AI-enabled monitoring system intended to help an older person remain safely at home. It detects movement patterns and recommends restrictions on certain activities because they are associated with increased fall risk. Viewed narrowly, the benefit may appear clear: reduce falls and improve safety.

Applying **Rights Realisation in Everyday Life** asks whether the person retains control over daily routines and priorities, whether their will and preferences are respected, and whether the AI-enabled safety measure preserves voice, autonomy, privacy, relationships and opportunities to pursue activities that matter to them.

Applying **Convention and State Application** brings attention to whether any resulting restriction is lawful, necessary, proportionate and least restrictive; whether the person has appropriate communication and decision-making support; and whether there are accessible ways to question or challenge an AI-enabled decision.

Applying **Rights-Enabling Ecosystem Transformation** changes the direction of the response itself: from **risk elimination toward dignity of risk**, and from protection as control toward rights-enabling support.

The AI question therefore becomes more than: *Did the system reduce the person's risk of falling?* It also becomes: *Did the system help the person live more safely while preserving their ability to direct their life and pursue the activities, relationships and possibilities they value?*

What this imperative reveals

An older-age human rights lens makes visible that Human Benefit is not simply an outcome delivered to an older person. Applying the three dimensions shows what this can mean in practice: AI-enabled benefit should support the person's decision-making and everyday agency, provide protection without unnecessary restriction, and enable rather than narrow choices and possibilities throughout older age.

C2 — Well-being

In the ASEAN Guide on AI Governance and Ethics, the Human-centricity principle states that AI systems should respect human-centred values and pursue benefits for human society, including human beings' well-being, and that AI systems should be used to promote human well-being.

Older-age interpretive question: What does well-being encompass in older age, and who determines what living well means?

C2.1 Stage 1 — Interpretation

Age Knowble Human Rights Principles Framework principles engaged:

Personhood and Self-Determination | Participation and Relational Belonging | Protection and Security | Possibilities and Choice

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Well-being
Personhood and Self-Determination	Older persons remain full persons and rights-holders throughout older age. They are entitled to direct their own lives, express their will and preferences, make personal decisions, and continue pursuing meaning, relationships, contribution, work, service, creativity, learning and personal development.	Well-being cannot be determined solely through externally selected measures or outcomes. The person's will, preferences, values and what gives their life meaning are relevant to understanding what well-being means for them.
Participation and Relational Belonging	Older persons have the right to participate meaningfully in family, community, civic, cultural, economic and public life and to remain connected, recognised and included in the relationships and communities through which dignity, identity, wellbeing, citizenship and contribution are sustained. Meaningful participation includes opportunities to contribute, influence decisions, maintain valued relationships and continue belonging throughout older age.	Well-being has relational and participatory dimensions. Relationships, belonging, participation, identity and contribution can be integral to well-being rather than considerations separate from it.
Protection and Security	Older persons are entitled to protection, safeguards and supports necessary to live safely and securely throughout older age. These should uphold dignity, self-determination, participation, wellbeing and security across social, economic, housing, care and relational aspects of life. Protection should never diminish rights, voice, autonomy or community connection.	Safety, security and support form part of well-being, but they should not define it exclusively or be pursued at the expense of self-determination, participation or community connection.
Possibilities and Choice	Human rights should keep possibilities open throughout older age. Older age should never be treated as a barrier to continued learning, relationships, creativity, contribution, enjoyment, exploration, spirituality or personal fulfilment. Older persons should remain free to shape their own paths according to their aspirations, circumstances, values and preferences.	Well-being includes the ability to continue developing, enjoying, contributing, exploring and pursuing aspirations. It cannot be reduced to maintaining present functioning or meeting existing needs.

Older-age human rights interpretation

Well-being in older age encompasses more than health, functioning, safety or the meeting of care needs. It includes the person's self-determination and what gives their life meaning; relationships, participation, belonging and contribution; protection and security that

uphold rights; and continuing opportunities, aspirations and choices. What constitutes well-being should therefore be understood in relation to the person and the life they value.

Interpretive shift

From: Does AI promote the well-being of the older person?

Towards: What constitutes well-being for this older person, and how might AI affect the different dimensions of the life through which they experience and pursue it?

C2.2 Stage 2 — Application

Stage 2 applies the three dimensions of the selected Age Knowble principles to explore what their application could look like in practical terms for AI in relation to Well-being.

The middle column identifies selected relevant content from the Age Knowble Framework. The third column applies that content to the AI context. Each substantive element of the derived AI application is therefore traceable to the Framework content in the preceding column.

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
A. Rights Realisation in Everyday Life	Personhood and Self-Determination: “control over daily lives, routines, and priorities”; “respect for will and preferences”; “opportunities for meaning, purpose, growth, and contribution.” Participation and Relational Belonging: “meaningful contact with family, friends, peers, and trusted networks”; opportunities to work, volunteer, mentor, care, learn, worship, create and contribute where desired; support to participate despite disability, language, mobility, sensory or digital barriers. Protection and Security: “support that preserves dignity, choice, privacy, and relationships”; “safety without loss of voice, autonomy, or community connection.” Possibilities and Choice: opportunities to pursue new interests, aspirations and experiences; continue learning, growing, creating and discovering; and participate socially, culturally, recreationally and in community life.	Examine how AI affects the different aspects of everyday life through which well-being may be experienced. This includes whether AI supports or diminishes control and respect for will and preferences; meaningful relationships and participation; safety alongside choice, privacy and autonomy; and opportunities for meaning, growth, contribution, learning, enjoyment and new experiences.
B. Convention and State Application	Personhood and Self-Determination: supported decision-making guided by will and preferences; free and informed consent; communication and decision supports where needed.	In the design, deployment and governance of AI intended to promote well-being, enable older persons to participate meaningfully and influence decisions, design, implementation

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
	Participation and Relational Belonging: meaningful participation of older persons in decision-making, design, implementation and review; consultation through which views genuinely influence outcomes; protection of relationships and community living; age-friendly digital environments. Protection and Security: least restrictive, lawful, necessary and proportionate measures where intervention is needed; accessible complaints, advocacy, oversight and remedies. Possibilities and Choice: removal of unnecessary age-based barriers; equitable access to opportunities; investment in accessible technology and services; recognition that aspirations, goals and interests continue to evolve; support for diverse pathways for living well.	and review. Provide communication and decision support where needed and protect free and informed consent. AI interventions should be lawful, necessary, proportionate and least restrictive where intervention is needed, with accessible oversight and remedies. AI-enabled opportunities and technologies should also be accessible and equitable and support diverse and evolving ways of living well.
C. Rights-Enabling Ecosystem Transformation	Personhood and Self-Determination: “decline narratives → continuing personhood and development”; “passive dependency → continued agency, purpose, and contribution.” Participation and Relational Belonging: “isolation cultures → belonging ecosystems”; “ageing at the margins → active social citizenship.” Protection and Security: “protection as control → rights-enabling support”; “risk elimination → dignity of risk.” Possibilities and Choice: “age-based limitation → lifelong possibilities”; “fixed life expectations → evolving aspirations”; “one model of ageing well → many ways of living a valued later life.”	Orient AI-enabled systems away from assumptions that well-being in older age primarily means managing decline, dependency, isolation or risk, or conforming to a predetermined model of ageing well. Instead, use AI in ways that support continuing agency and development, belonging and citizenship, rights-enabling protection, evolving aspirations and diverse ways of living a valued later life.

Practical AI illustration

Consider an AI-enabled companion introduced to support an older person experiencing loneliness. The system provides conversation, reminders and personalised interaction. Measures of engagement increase and a loneliness indicator improves.

On those measures, the AI may appear to have promoted well-being.

Applying **Rights Realisation in Everyday Life** widens what is examined. Does the AI support meaningful contact with family, friends and trusted networks or begin to substitute for it? Does it enable participation and new interests? Does the person retain control over how the technology is used? Does the system preserve privacy, choice and relationships?

Applying **Convention and State Application** asks whether older persons have meaningful opportunities to influence how such systems are designed and used; whether consent, communication and decision support are available; whether the technology and associated services are accessible; and whether appropriate oversight and remedies exist where its use adversely affects rights.

Applying **Rights-Enabling Ecosystem Transformation** raises a broader question about the direction in which AI is taking the person's environment: toward a belonging ecosystem or toward technologically mediated isolation; toward continuing agency, purpose and possibilities or toward a predetermined model of what ageing well should look like.

The assessment therefore does not stop at: *Did the loneliness indicator improve?* It also asks: *What did the use of AI mean for the person's relationships, participation, agency, security, opportunities and their own way of living a valued life?*

What this imperative reveals

An older-age human rights lens makes visible that well-being is multidimensional and cannot be reduced to a single outcome or predetermined model of ageing well. Applying the three dimensions shows that AI intended to promote well-being should be considered in relation to the person's everyday life, the structures governing its use, and whether the wider AI-enabled environment supports diverse ways of living a valued later life.

C3 — Vulnerable Individuals

In the ASEAN Guide on AI Governance and Ethics, The Human-centricity principle states that, particularly where AI systems are used to make decisions about people or aid them, systems should be designed with human benefit in mind and “do not take advantage of vulnerable individuals.”

Older-age interpretive question: How should vulnerability be understood without treating older age itself as synonymous with vulnerability?

C3.1 Stage 1 — Interpretation

Age Knowble Human Rights Principles Framework principles engaged:

Dignity and Equal Worth | Personhood and Self-Determination | Equality and Non-Discrimination | Protection and Security

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Vulnerable Individuals
Dignity and Equal Worth	Dignity and worth are inherent, universal and unconditional and do not depend on age, productivity, health status, disability, dependency, cognitive change, income or social role. The need for	Circumstances that may increase exposure to harm do not diminish the person's human worth or status as an equal

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Vulnerable Individuals
	support or care must never diminish equal status, rights, respect or recognition.	rights-holder. Vulnerability should therefore not imply diminished human status.
Personhood and Self-Determination	Older persons remain full persons and rights-holders throughout older age, including where disability, dependency or cognitive change is present. They are entitled to direct their own lives, express their will and preferences and make personal decisions, with appropriate support where needed.	Vulnerability, support needs or cognitive change should not automatically be understood as incapacity or loss of agency. Protection from exploitation needs to remain consistent with continuing personhood and self-determination.
Equality and Non-Discrimination	Substantive equality requires fair, responsive and inclusive measures that remove barriers, address disadvantage across the diverse circumstances of older age, and recognise each older person as an individual rather than through assumptions, stereotypes or generalisations.	Older persons should not be categorised as vulnerable simply because of age. Vulnerability needs to be considered in relation to the person's actual and diverse circumstances rather than through age-based assumptions or generalisations.
Protection and Security	Older persons are entitled to the protection, safeguards and supports necessary to live safely and securely throughout older age. These should uphold dignity, self-determination, participation, wellbeing and security. Protection should never diminish rights, voice, autonomy or community connection.	Rejecting the assumption that older age itself means vulnerability does not remove the need for protection. Where circumstances create exposure to exploitation or harm, appropriate safeguards and support are required while preserving rights, voice and autonomy.

Older-age human rights interpretation

Vulnerability should not be attributed to older age itself. Older persons remain persons of equal dignity and worth, with continuing personhood, agency and rights across diverse circumstances. Vulnerability may arise from particular circumstances or disadvantages that expose a person to exploitation or harm. Where these occur, protection, safeguards and support may be required without diminishing the person's equal status, rights, voice or self-determination.

Interpretive shift

From: *Are older persons a vulnerable group requiring protection?*

Towards: *What circumstances or disadvantages may expose an older person to exploitation or harm, and how can these be addressed while preserving equal status, agency and rights?*

C3.2 Stage 2 — Application

Stage 2 applies the three dimensions of the selected Age Knowble principles to explore what their application could look like in practical terms for AI in relation to Vulnerable Individuals.

The middle column identifies selected relevant content from the Age Knowble Framework. The third column applies that content to the AI context. Each substantive element of the derived AI application is therefore traceable to the Framework content in the preceding column.

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
A. Rights Realisation in Everyday Life	Dignity and Equal Worth: “being seen, heard, and taken seriously”; “support without shame, pity, or loss of standing.” Personhood and Self-Determination: “respect for will and preferences”; “support to make personal decisions where needed”; “being listened to in healthcare, housing, financial, care, and family matters.” Equality and Non-Discrimination: “decisions based on individual circumstances rather than stereotypes”; “barriers removed where systems create or reinforce disadvantage.” Protection and Security: freedom from abuse, neglect, violence, coercion, abandonment and degrading treatment; “support that preserves dignity, choice, privacy, and relationships”; “safety without loss of voice, autonomy, or community connection”; access to trusted help, advocacy and remedies when harm occurs.	Where AI identifies or responds to vulnerability, examine the person's individual circumstances rather than relying on age-based assumptions or stereotypes. Ensure that AI-enabled support or protection takes the person's will and preferences seriously, provides decision support where needed, addresses barriers or circumstances that create disadvantage or exposure to harm, and preserves dignity, choice, privacy, relationships, voice and autonomy.
B. Convention and State Application	Dignity and Equal Worth: affirm inherent dignity and equal worth in all settings; provide accessible remedies where dignity is violated; challenge ageist and devaluing narratives in laws, institutions, services and society. Personhood and Self-Determination: recognise equal legal agency and decision-making rights; require supported decision-making guided by will and preferences; prohibit age- or diagnosis-based exclusion from decisions; protect free and informed consent; ensure communication and decision supports where needed. Equality and Non-Discrimination: prohibit direct, indirect, multiple and intersectional age discrimination; require accessibility, accommodation and barrier removal	AI governance should not use age or diagnosis as an automatic basis for excluding an older person from decisions or diminishing their decision-making rights. Where AI is used to identify or respond to heightened risk, provide appropriate decision and communication support and ensure protective interventions are lawful, necessary, proportionate and least restrictive. AI governance should also address discriminatory barriers and provide accessible oversight, complaints, advocacy and remedies where AI-enabled decisions or interventions cause harm.

Framework dimension	Selected relevant content from the Age Knowledge Framework	Derived AI application
	where needed; address ageism in institutions, markets and services. Protection and Security: prevent, investigate, punish and remedy exploitation and coercion; require least restrictive, lawful, necessary and proportionate measures where intervention is needed; establish accessible complaints, advocacy, oversight and remedies mechanisms.	
C. Rights-Enabling Ecosystem Transformation	Dignity and Equal Worth: “dependency stigma → dignity across interdependence”; “institutional convenience → person-centred respect.” Personhood and Self-Determination: “substituted control → supported self-determination”; “speaking for older persons → listening to and being guided by older persons”; “passive dependency → continued agency, purpose, and contribution.” Equality and Non-Discrimination: “formal equality → substantive equality”; “neutral rules with unequal effects → fair and responsive systems”; “exclusion by design → inclusion by design.” Protection and Security: “protection as control → rights-enabling support”; “risk elimination → dignity of risk”; “passive recipients of protection → rights-holders entitled to safe, secure, and supported lives.”	Orient AI-enabled systems away from treating dependency or support needs as reasons for diminished standing, substituted control or exclusion. Instead, design and use AI to support self-determination, respond fairly to different circumstances, enable inclusion, and provide protection and support in ways that preserve agency and recognise older persons as rights-holders rather than passive recipients of protection.

Practical AI illustration

Consider an AI-enabled financial service that identifies customers considered at heightened risk of fraud. An older customer's age, transaction patterns or use of assistance from another person may contribute to a risk assessment that triggers additional intervention. The protective objective—preventing exploitation—is legitimate. Applying the three dimensions, however, changes how that protection is approached.

Rights Realisation in Everyday Life asks whether decisions are based on the person's individual circumstances rather than stereotypes, whether the person's will and preferences are respected, and whether protection preserves choice, privacy and autonomy.

Convention and State Application asks whether age or diagnosis is being used to exclude the person from decisions; whether communication or decision support is provided where needed; whether protective intervention is lawful, necessary, proportionate and least restrictive; and whether accessible mechanisms exist to challenge an AI-enabled decision.

Rights-Enabling Ecosystem Transformation asks whether AI is moving the system toward substituted control or supported self-determination, toward protection as control or rights-enabling support, and toward exclusion or inclusion by design.

The relevant AI question therefore becomes more than: *Has the system identified someone who may be vulnerable to fraud?* It also becomes: *What circumstances indicate a risk of exploitation for this person, and can AI-enabled protection respond to that risk while preserving their standing, decision-making, agency and rights?*

What this imperative reveals

An older-age human rights lens separates vulnerability from older age itself. Applying the three dimensions directs AI away from age-based assumptions and substituted control and toward individual circumstances, substantive equality, supported self-determination and rights-enabling protection where genuine risks of exploitation or harm exist.

C4 — Benefit “for all” / Varied Backgrounds and Demographics

In the ASEAN Guide on AI Governance and Ethics, The Human-centricity principle states that AI systems should be used to promote human well-being and “ensure benefit for all.” In addressing Human-centricity throughout the AI system lifecycle, the Guide also calls for action to understand how users interact with and perceive AI systems and gives the example of testing an AI system with users from “varied backgrounds and demographics” and incorporating their feedback.

Older-age interpretive question: What does “for all” require when older age itself is highly diverse?

C4.1 Stage 1 — Interpretation

Age Knowble Human Rights Principles Framework principles engaged:

Dignity and Equal Worth | Equality and Non-Discrimination | Participation and Relational Belonging

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Benefit “for all” / Varied Backgrounds and Demographics
Dignity and Equal Worth	Every older person has inherent and equal worth. Dignity and worth are inherent, universal and unconditional and do not depend on age, productivity, health status, disability, dependency, cognitive change, income or social role. (ageknowble.com)	“For all” begins with the equal worth of every older person. Differences in age, health, disability, dependency, income or social role should not determine whose benefit counts or whose experience matters.

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Benefit “for all” / Varied Backgrounds and Demographics
Equality and Non-Discrimination	Older persons are entitled to equality in dignity, rights, opportunities and participation throughout older age. Substantive equality requires fair, responsive and inclusive measures that remove barriers, address disadvantage across the diverse circumstances of older age, and recognise each older person as an individual rather than through assumptions, stereotypes or generalisations. The principle recognises that ageing is shaped by “ accumulated lifetime experiences, structural inequalities, and intersecting identities. ” (ageknowble.com)	“For all” cannot mean treating older persons as one homogeneous demographic category. It requires attention to diversity within older age , including how accumulated lifetime experiences, structural inequalities and intersecting identities shape people's circumstances and their experience of AI.
Participation and Relational Belonging	Older persons have the right to participate meaningfully in family, community, civic, cultural, economic and public life. Meaningful participation includes opportunities to contribute, influence decisions, maintain valued relationships and continue belonging throughout older age. Participation must be accessible, supported and inclusive of diverse circumstances, including disability, language, culture, geography, digital access and socio-economic position. (ageknowble.com)	Including older persons among “varied backgrounds and demographics” is not sufficient if they are simply represented as users or test subjects. Their diverse circumstances need to be reflected, and meaningful participation includes opportunities to contribute and influence decisions.

Older-age human rights interpretation

Benefit “for all” requires more than including older persons as a demographic group. Older age is itself diverse, and older persons should be recognised as individuals of equal worth whose circumstances are shaped by accumulated lifetime experiences, structural inequalities and intersecting identities. Meaningful inclusion therefore requires attention to diversity within older age and opportunities for older persons in diverse circumstances to participate and influence decisions that affect them.

This also means that chronological age alone is insufficient to represent the realities of older age. A person in their seventies and a person in their nineties may have very different circumstances, experiences, relationships, opportunities and support needs; people of the same chronological age may likewise experience older age very differently.

Interpretive shift

From: *Are older persons included among varied backgrounds and demographics?*

Towards: Does “for all” recognise diversity within older age, and are older persons across diverse and intersecting circumstances able not only to be represented but also to participate and influence what AI is intended to benefit and how?

C4.2 Stage 2 — Application

Stage 2 applies the three dimensions of the selected Age Knowble principles to explore what their application could look like in practical terms for AI in relation to Benefit “for all” / Varied Backgrounds and Demographics.

The middle column identifies selected relevant content from the Age Knowble Framework. The third column applies that content to the AI context. Each substantive element of the derived AI application is therefore traceable to the Framework content in the preceding column.

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
A. Rights Realisation in Everyday Life	Dignity and Equal Worth: “being seen, heard, and taken seriously”; “equal respect in services, workplaces, families, institutions, and communities”; recognition of contributions and life experience. Equality and Non-Discrimination: “decisions based on individual circumstances rather than stereotypes”; “equal access to services, opportunities, information, and participation”; “reasonable accommodation and accessibility where needed”; “barriers removed where systems create or reinforce disadvantage.” Participation and Relational Belonging: opportunities to participate in decisions that affect daily life; opportunities to work, volunteer, mentor, care, learn, worship, create and contribute where desired; support to participate despite disability, language, mobility, sensory or digital barriers; respect for cultural, spiritual and relational identities. (ageknowble.com)	Examine whether older persons in different circumstances can access, use and benefit from AI and participate in AI-enabled decisions affecting their lives. AI should respond to individual circumstances rather than stereotypes, provide accessibility and accommodation where needed, and avoid creating or reinforcing barriers to services, opportunities, information and participation. The ways older persons interact with AI should also allow for different cultural, relational and other circumstances rather than assuming a single older-user experience.
B. Convention and State Application	Dignity and Equal Worth: affirm inherent dignity and equal worth in all settings; require respect for dignity across health, care, justice, employment, housing, social protection and digital environments; challenge ageist and devaluing narratives in laws, institutions, services and society. Equality and Non-Discrimination: prohibit direct, indirect, multiple and intersectional age discrimination; require accessibility, accommodation and barrier removal where needed; require age-disaggregated data and equality impact assessment; address ageism in institutions, markets and services. Participation and Relational Belonging: require meaningful participation of older persons in decision-making, design, implementation and review;	AI governance should examine impacts within older populations rather than treating older persons as a single category. Age-disaggregated data and equality impact assessment can help identify unequal effects, while accessibility, accommodation and barrier removal can address exclusion. Older persons and their representative organisations should participate meaningfully in AI design, implementation and review, with their views able to influence outcomes rather than participation being limited to demographic representation or testing.

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
	ensure consultation through which views genuinely influence outcomes; require accessible civic, cultural, digital and public environments; recognise and support older persons' organisations and representative bodies. (ageknowble.com)	
C. Rights-Enabling Ecosystem Transformation	Dignity and Equal Worth: “age-based devaluation → equal worth at every age”; “invisibility → recognition and visibility”; “institutional convenience → person-centred respect.” Equality and Non-Discrimination: “formal equality → substantive equality”; “neutral rules with unequal effects → fair and responsive systems”; “exclusion by design → inclusion by design”; “age-blind systems → age-responsive systems.” Participation and Relational Belonging: “token consultation → meaningful influence”; “ageing at the margins → active social citizenship”; “isolation cultures → belonging ecosystems.” (ageknowble.com)	Move AI-enabled systems from simply treating everyone the same or adding older persons to existing processes toward age-responsive and inclusive-by-design systems that recognise unequal effects and respond to diverse circumstances. Move participation from representation or token consultation toward meaningful influence by older persons in shaping AI-enabled systems and environments.

Practical AI illustration

Consider an AI-enabled public service platform that is tested before deployment with users from different demographic groups, including a group of people aged 65 and older. The system performs satisfactorily for the older-user group, and the organisation concludes that older persons have been included among the “varied backgrounds and demographics” envisaged by the ASEAN Guide.

Applying **Rights Realisation in Everyday Life** asks whether people in different circumstances within older age can actually access, use and benefit from the system. An aggregate result for people aged 65+ may not reveal barriers experienced by people with different accessibility needs, languages, cultural circumstances, digital access or other circumstances.

Applying **Convention and State Application** makes the analysis more systematic. Age-disaggregated data and equality impact assessment can help reveal unequal effects rather than treating “older persons” as one analytical category. Accessibility, accommodation and barrier removal can respond where disadvantage is identified. Meaningful participation also asks whether older persons and their organisations can influence design, implementation and review rather than simply participate in testing.

Applying **Rights-Enabling Ecosystem Transformation** changes the direction from age-blind systems toward age-responsive systems, from exclusion by design toward inclusion by design, and from token consultation toward meaningful influence.

The question therefore becomes more than: *Were older persons included in the test group?* It becomes: *Whose experiences within older age are represented, who may still be excluded or disadvantaged, and are diverse older persons able to influence how the AI-enabled system is designed and works?*

What this imperative reveals

An older-age human rights lens makes visible that “for all” cannot be established simply by including older persons as one demographic category. Applying the three dimensions requires attention to diversity within older age, unequal effects and barriers, accessibility and accommodation, and meaningful participation and influence. The movement is from demographic inclusion toward substantive inclusion in AI-enabled systems.

C5 — Understanding Users, Perception and Negative Outcomes

In the ASEAN Guide on AI Governance and Ethics, the Human-centricity principle states that Human-centricity should be incorporated throughout the AI system lifecycle, from design through development and deployment. Actions should be taken to understand how users interact with the AI system, how it is perceived, and whether negative outcomes arise from its outputs. The Guide gives testing with users from varied backgrounds and demographics and incorporating their feedback as one example.

Older-age interpretive question: What needs to be understood about older persons' interactions with AI, their perceptions of it, and the outcomes it produces in their lives?

C5.1 Stage 1 — Interpretation

Age Knowble Human Rights Principles Framework principles engaged:

Personhood and Self-Determination | Participation and Relational Belonging | Protection and Security | Possibilities and Choice

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Understanding Users, Perception and Negative Outcomes
Personhood and Self-Determination	Older persons remain full persons and rights-holders throughout older age, including where disability, dependency or cognitive change is present. They are entitled to direct their own lives, express their will and preferences, make personal decisions and continue pursuing meaning, relationships, contribution, work, service, creativity, learning and personal development. (ageknowble.com)	Understanding an older person's interaction with and perception of AI requires more than determining whether they can operate or understand the system. It includes whether AI affects their ability to direct their life, express will and preferences, make decisions and pursue what matters to them.
Participation and Relational Belonging	Older persons have the right to participate meaningfully in family, community, civic, cultural, economic and public life and to remain connected, recognised and included in the relationships and	How an older person experiences AI may depend on diverse circumstances and on what the technology does to their participation, relationships and belonging.

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Understanding Users, Perception and Negative Outcomes
	communities through which dignity, identity, wellbeing, citizenship and contribution are sustained. Participation must be accessible, supported and inclusive of diverse circumstances, including disability, language, culture, geography, digital access and socio-economic position. (ageknowble.com)	Understanding users therefore extends beyond the individual-system interaction to how AI affects participation and connection within the person's life.
Protection and Security	Older persons are entitled to protection, safeguards and supports necessary to live safely and securely throughout older age. These should uphold dignity, self-determination, participation, wellbeing and security across social, economic, housing, care and relational aspects of life. Protection should never diminish rights, voice, autonomy or community connection. (ageknowble.com)	A negative outcome is not limited to immediate technical failure or physical harm. An AI output or intervention may also have negative implications where it diminishes voice, autonomy, participation, relationships or other dimensions of security and well-being.
Possibilities and Choice	Human rights should keep possibilities open throughout older age. Older age should never be treated as a barrier to continued learning, relationships, creativity, contribution, enjoyment, exploration, spirituality or personal fulfilment. Older persons should remain free to shape their own paths according to their aspirations, circumstances, values and preferences. (ageknowble.com)	Understanding negative outcomes also requires attention to what happens to the person's choices and possibilities. An AI output may appear successful within its intended function while restricting opportunities or pathways the person values.

Older-age human rights interpretation

Understanding older persons as users requires attention not only to how they interact with or perceive an AI system, but to what the system and its outputs mean within their lives. This includes effects on self-determination and decision-making, relationships and participation, protection and security, and continuing choices and possibilities. These effects may differ across the diverse circumstances of older age.

Interpretive shift

From: Can older users interact successfully with the AI system, how do they perceive it, and does it produce negative outcomes?

Towards: How do diverse older persons experience the AI system and its outputs, and what consequences do those interactions and outputs have for their rights, relationships, participation, security, choices and possibilities in everyday life?

C5.2 Stage 2 — Application

Stage 2 applies the three dimensions of the selected Age Knowble principles to explore what their application could look like in practical terms for AI in relation to Understanding Users, Perception and Negative Outcomes.

The middle column identifies selected relevant content from the Age Knowble Framework. The third column applies that content to the AI context. Each substantive element of the derived AI application is therefore traceable to the Framework content in the preceding column.

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
A. Rights Realisation in Everyday Life	Personhood and Self-Determination: “control over daily lives, routines, and priorities”; “respect for will and preferences”; “support to make personal decisions where needed”; being listened to in healthcare, housing, financial, care and family matters. Participation and Relational Belonging: opportunities to participate in decisions affecting daily life; meaningful contact with family, friends, peers and trusted networks; support to participate despite disability, language, mobility, sensory or digital barriers; respect for cultural, spiritual and relational identities. Protection and Security: “support that preserves dignity, choice, privacy, and relationships”; “safety without loss of voice, autonomy, or community connection”; access to trusted help, advocacy and remedies when harm occurs. Possibilities and Choice: opportunities to pursue new interests, aspirations and experiences; continue learning, growing, creating and discovering; make meaningful choices about how to live; and pursue new goals and aspirations throughout older age. (ageknowble.com)	When examining older persons' interactions with AI and outcomes arising from its outputs, look beyond whether the system is usable or produces its intended result. Examine whether AI affects control over daily life, will and preferences and decision-making; participation and relationships; dignity, choice, privacy, voice and autonomy; and opportunities, aspirations and meaningful choices. Account for barriers that may affect how different older persons participate in or experience the AI system.
B. Convention and State Application	Personhood and Self-Determination: supported decision-making guided by will and preferences; free and informed consent; communication and decision supports where needed; accessible remedies where autonomy or decision-making rights are violated. Participation and Relational Belonging: meaningful participation of older persons in decision-making, design, implementation and review; consultation through which views genuinely influence outcomes; accessible civic, cultural, digital and public environments; protection of relationships and community living. Protection and Security: prevention, investigation and remedy of exploitation, coercion and other harms; least restrictive, lawful, necessary and proportionate measures where intervention is needed; accessible complaints,	Across AI design, deployment and review, enable older persons to participate meaningfully and influence decisions about systems affecting them, with accessible communication and decision support where needed. Assessment of AI outcomes should be capable of identifying impacts on autonomy, relationships, protection and access to opportunities, with accessible complaints, oversight and remedies where harm occurs. Barriers that prevent older persons from accessing or participating in AI-enabled environments should also be identified and addressed.

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
	advocacy, oversight and remedies. Possibilities and Choice: removal of unnecessary age-based barriers; equitable access to opportunities; investment in accessible technology and services; recognition that aspirations, goals and interests continue to evolve. (ageknowble.com)	
C. Rights-Enabling Ecosystem Transformation	Personhood and Self-Determination: “substituted control → supported self-determination”; “speaking for older persons → listening to and being guided by older persons.” Participation and Relational Belonging: “token consultation → meaningful influence”; “isolation cultures → belonging ecosystems”; “ageing at the margins → active social citizenship.” Protection and Security: “protection as control → rights-enabling support”; “risk elimination → dignity of risk.” Possibilities and Choice: “age-based limitation → lifelong possibilities”; “prescribed pathways → expanded opportunities and choices”; “fixed life expectations → evolving aspirations.” (ageknowble.com)	Move AI-enabled systems from treating older persons primarily as users whose behaviour and feedback are observed toward listening to and being guided by older persons and enabling meaningful influence. Orient assessment of AI outcomes toward whether systems support self-determination, belonging, rights-enabling protection and continuing possibilities rather than reinforcing control, isolation or prescribed pathways.

Practical AI illustration

Consider an AI system used to support decisions about the level of assistance an older person receives at home. The system analyses information about health, mobility and daily activities and recommends an increase in automated monitoring and a reduction in some forms of in-person support.

From a system perspective, the output may appear successful: the AI has processed the relevant information and generated the intended recommendation.

Applying **Rights Realisation in Everyday Life** asks what that output means in the person's life. Does increased monitoring affect privacy or control over daily routines? Does reduced in-person support affect relationships or community connection? Is the person's will and preferences reflected in decisions about the support they receive? Does the resulting arrangement expand or narrow meaningful choices?

Applying **Convention and State Application** asks whether the older person can participate meaningfully in decisions about the AI-enabled system and its recommendations; whether communication and decision support are available where needed; and whether accessible oversight, complaints and remedies exist if the resulting decision adversely affects their rights.

Applying **Rights-Enabling Ecosystem Transformation** asks whether the system is moving toward speaking for older persons or being guided by them, toward substituted control or supported self-determination, and toward prescribed pathways or expanded opportunities and choices.

The assessment therefore does not stop at: *Did the AI system produce an accurate or usable recommendation?* It also asks: *What happened in the older person's life because the recommendation was made and acted upon?*

What this imperative reveals

An older-age human rights lens expands understanding of users and negative outcomes beyond the immediate interaction between a person and an AI system. Applying the three dimensions makes visible the consequences that AI outputs may have in the person's life—including for self-determination, relationships and participation, protection and security, and continuing choices and possibilities—and the importance of older persons having meaningful influence over AI systems that affect them.

C6 — Labour and Job Prospects

As an extension of Human-centricity, the *ASEAN Guide on AI Governance and Ethics* states that the adoption and deployment of AI systems at scale should not “unduly disrupt labour and job prospects without proper assessment.” Deployers are encouraged to undertake impact assessments and consider how jobs can be redesigned to incorporate AI, including helping employees embrace AI and move towards higher-value tasks.

Older-age interpretive question: What does AI-enabled transformation of work mean for older persons' continued participation, contribution, choice and possibilities across longer working lives?

C6.1 Stage 1 — Interpretation

Age Knowble Human Rights Principles Framework principles engaged:

Personhood and Self-Determination | Participation and Relational Belonging | Protection and Security | Possibilities and Choice

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Labour and Job Prospects
Personhood and Self-Determination	Older persons remain full persons and rights-holders throughout older age. They are entitled to direct their own lives, express their will and preferences, make personal decisions, and continue pursuing meaning, relationships, contribution, work , service, creativity, learning and personal development. (ageknowble.com)	AI-enabled changes to work should not assume that an older person's working trajectory, role or desire to continue working is determined by age. Work can remain part of self-determination, meaning, contribution and personal development in older age.

Age Knowble principle	Relevant content from the principle definition	What this means for interpreting Labour and Job Prospects
Participation and Relational Belonging	Older persons have the right to participate meaningfully in family, community, civic, cultural, economic and public life. Meaningful participation includes opportunities to contribute and influence decisions and recognises older persons as active citizens, contributors, caregivers, workers, volunteers, leaders and community members. (ageknowble.com)	Labour and job prospects concern more than income or employment status. Work can be a form of economic and social participation, contribution and belonging. AI-enabled labour transformation can therefore affect older persons' continued participation and contribution.
Protection and Security	Older persons are entitled to protection, safeguards and supports necessary to live safely and securely throughout older age. These should uphold dignity, self-determination, participation, wellbeing and security across social, economic, housing, care and relational aspects of life . (ageknowble.com)	Disruption to labour and job prospects can have implications for economic security as well as participation and well-being. Assessment of AI-enabled labour change therefore needs to recognise the security implications of changes to work.
Possibilities and Choice	Human rights should keep possibilities open throughout older age. Older age should never be treated as a barrier to continued learning, relationships, creativity, contribution, enjoyment, exploration, spirituality or personal fulfilment. Older persons should remain free to shape their own paths according to their aspirations, circumstances, values and preferences. (ageknowble.com)	AI-enabled labour transformation should not narrow possibilities on the assumption that older workers are approaching the end of their working lives or are less able to learn or adapt. Older persons may wish to continue working, learn new skills, change roles or pursue different forms of contribution.

Older-age human rights interpretation

AI-enabled transformation of labour and job prospects should recognise older persons as continuing rights-holders whose working lives, aspirations and forms of contribution may evolve in different ways. Work can be connected to self-determination, participation, contribution, economic security, learning and personal development. Assessment of disruption should therefore consider whether AI-enabled change expands or restricts older persons' ability to continue working, adapt, learn, choose and contribute according to their circumstances, aspirations and preferences.

Interpretive shift

From: How can jobs be redesigned so older workers can adapt to AI?

Towards: How does AI-enabled transformation of work affect older persons' ability to choose, participate, contribute, remain economically secure, continue learning and pursue evolving working trajectories?

C6.2 Stage 2 — Application

Stage 2 applies the three dimensions of the selected Age Knowble principles to explore what their application could look like in practical terms for AI in relation to Labour and Job Prospects.

The middle column identifies selected relevant content from the Age Knowble Framework. The third column applies that content to the AI context. Each substantive element of the derived AI application is therefore traceable to the Framework content in the preceding column.

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
A. Rights Realisation in Everyday Life	Personhood and Self-Determination: “control over daily lives, routines, and priorities”; “respect for will and preferences”; “opportunities for meaning, purpose, growth, and contribution.” Participation and Relational Belonging: opportunities to “work, volunteer, mentor, care, learn, worship, create, and contribute where desired”; opportunities to participate in decisions that affect daily life; support to participate despite disability, language, mobility, sensory or digital barriers. Protection and Security: access to income and material resources sufficient for a secure life; protection from exploitation and coercion; support that preserves dignity and choice. Possibilities and Choice: opportunities to pursue new interests, aspirations and experiences throughout older age; continue learning, growing, creating and discovering; make meaningful choices about how to live; pursue new goals and aspirations throughout older age. (ageknowble.com)	Examine how AI-enabled changes to work affect an older person's ability to continue working and contributing where desired, exercise choice over their working life, participate in decisions affecting their work, access sufficient income and material resources, overcome barriers to participation, continue learning and pursue new roles or aspirations.
B. Convention and State Application	Personhood and Self-Determination: recognise equal legal agency and decision-making rights; protect free and informed consent; ensure communication and decision supports where needed. Participation and Relational Belonging: require meaningful participation of older persons in decision-making, design, implementation and review; ensure consultation through which views genuinely influence outcomes; require accessible civic, cultural, digital and public environments. Protection and Security: guarantee adequate income and social protection; prevent, investigate, punish and remedy exploitation and coercion; establish accessible complaints, advocacy, oversight and remedies mechanisms. Possibilities and Choice: remove unnecessary age-based barriers that limit possibilities and life choices; ensure equitable access to education, work, culture, recreation, technology, travel and community life; invest in	In assessing and governing AI-enabled labour transformation, enable older workers to participate meaningfully in decisions, design, implementation and review affecting their work. Remove unnecessary age-based barriers to work, learning and technology; provide accessible environments, information and technologies; support equitable access to education and work; and ensure accessible complaints, advocacy and remedies where AI-enabled labour decisions adversely affect older workers. Economic and social protection should also address circumstances in which AI-enabled labour disruption affects income security.

Framework dimension	Selected relevant content from the Age Knowble Framework	Derived AI application
	accessible environments, information, transport, technology and services that expand possibilities throughout older age; recognise that aspirations, goals and interests continue to evolve. (ageknowble.com)	
C. Rights-Enabling Ecosystem Transformation	Personhood and Self-Determination: “decline narratives → continuing personhood and development”; “passive dependency → continued agency, purpose, and contribution.” Participation and Relational Belonging: “ageing at the margins → active social citizenship”; “token consultation → meaningful influence.” Protection and Security: “precarity and insecurity → reliable protection and support”; “crisis response → prevention and preparedness.” Possibilities and Choice: “age-based limitation → lifelong possibilities”; “fixed life expectations → evolving aspirations”; “prescribed pathways → expanded opportunities and choices”; “one model of ageing well → many ways of living a valued later life.” (ageknowble.com)	Orient AI-enabled labour transformation away from assumptions of decline, fixed later-life working trajectories or age-based limitation and toward continuing development, contribution and evolving aspirations. Older workers should have meaningful influence over workplace transformation, while AI-enabled changes should expand opportunities and choices and anticipate rather than merely respond to economic insecurity or exclusion.

Practical AI illustration

Consider an employer introducing AI that automates part of an existing role and redesigns the remaining work around new digital tasks. Employees are expected to undertake training and move into the redesigned roles. The organisation may assess whether the redesign improves productivity and whether employees can acquire the necessary skills.

Applying **Rights Realisation in Everyday Life** asks what the change means for older workers' ability to continue working and contributing where desired, participate in decisions affecting their work, maintain economic security, access training and technology, and pursue evolving work aspirations.

Applying **Convention and State Application** asks whether unnecessary age-based barriers affect access to redesigned jobs, training or technology; whether older workers meaningfully participate in decisions about workplace change; whether environments, information and technologies are accessible; and whether complaints and remedies are available where AI-enabled employment decisions adversely affect them.

Applying **Rights-Enabling Ecosystem Transformation** challenges assumptions that older workers are nearing the end of a fixed working trajectory or are less suited to learning and change. It instead points toward continuing personhood and development, lifelong possibilities, evolving aspirations and expanded opportunities and choices.

The assessment therefore does not stop at: *Can older workers adapt to the AI-redesigned job?* It also asks: *Does AI-enabled transformation of work enable older persons to continue participating, learning, contributing and choosing their working paths, or does it narrow those possibilities on the basis of age or assumptions about later life?*

What this imperative reveals

An older-age human rights lens makes visible that AI-driven labour transformation is not simply a question of whether older workers can adapt to technological change. Applying the three dimensions brings into view continued agency and contribution, meaningful participation in workplace change, economic security, equitable access to work and learning, and the importance of keeping working possibilities and choices open across longer lives.

Appendix D — Crosswalk of the Six Human-Centricity Imperatives

This crosswalk synthesises the detailed analysis in Appendix C. It shows, across the six analytical imperatives derived from the Human-centricity principle of the *ASEAN Guide on AI Governance and Ethics*, what an older-age human rights lens makes visible and what application of the selected Age Knowble Human Rights Principles Framework principles contributes in practical AI terms.

The crosswalk does not introduce a further stage of analysis. It draws together the findings from Appendix C to make the contribution of **interpretation** and **application** visible across the six imperatives.

ASEAN Human-centricity imperative	Older-age issue made visible	Age Knowble principles engaged	What interpretation adds — Stage 1	What application adds — Stage 2
1. Human Benefit	Who determines what constitutes benefit? An outcome intended to help an older person is not necessarily beneficial simply because it improves safety, efficiency or another predetermined outcome.	Personhood and Self-Determination; Protection and Security; Possibilities and Choice	Human Benefit is understood in relation to the older person as a full rights-holder whose will, preferences, values, circumstances and aspirations matter. Protection and safety can be part of benefit, but should enable rather than unnecessarily	Examine whether AI preserves control over daily life, respects will and preferences, provides decision support where needed, and provides protection without unnecessarily diminishing dignity, choice, privacy, relationships, voice or autonomy. At governance level, protective

ASEAN Human-centricity imperative	Older-age issue made visible	Age Knowble principles engaged	What interpretation adds — Stage 1	What application adds — Stage 2
			diminish self-determination, participation and choice. Benefit also requires attention to what AI enables or constrains in the life the person seeks to live.	interventions should be lawful, necessary, proportionate and least restrictive, with accessible avenues for challenge and remedy. At ecosystem level, move from protection as control → rights-enabling support and risk elimination → dignity of risk , while keeping possibilities and choices open.
2. Well-being	What constitutes living well? Well-being in older age can be narrowed to health, functioning, safety or meeting care needs, obscuring other dimensions of a person's life.	Personhood and Self-Determination; Participation and Relational Belonging; Protection and Security; Possibilities and Choice	Well-being encompasses self-determination and what gives the person's life meaning; relationships, participation, belonging and contribution; protection and security; and continuing opportunities, aspirations and choices. What constitutes well-being is understood in relation to the person and the life they value.	Examine how AI affects the different aspects of everyday life through which well-being may be experienced—not only the outcome the system is designed to improve. Older persons should meaningfully influence AI decisions, design, implementation and review; interventions should respect consent and rights; and AI-enabled opportunities should be accessible and equitable. At ecosystem level, move away from AI built around decline, dependency or one model of ageing well toward continuing agency, belonging, evolving aspirations and many ways of living a valued later life .
3. Vulnerable Individuals	Older age is not synonymous with vulnerability. Treating older persons as a vulnerable category can obscure individual circumstances and turn	Dignity and Equal Worth; Personhood and Self-Determination; Equality and Non-	Older persons remain persons of equal dignity and worth with continuing personhood, agency and rights. Vulnerability may arise from circumstances or	AI should respond to individual circumstances rather than age-based assumptions or stereotypes. AI-enabled protection should respect will and preferences and

ASEAN Human-centricity imperative	Older-age issue made visible	Age Knowble principles engaged	What interpretation adds — Stage 1	What application adds — Stage 2
	protection into restriction or substituted control.	Discrimination; Protection and Security	disadvantages that expose a person to exploitation or harm; where these occur, protection and support may be required without diminishing equal status, voice or self-determination.	preserve dignity, choice, privacy, relationships and autonomy. Governance should protect decision-making rights and ensure interventions are lawful, necessary, proportionate and least restrictive. At ecosystem level, move from substituted control → supported self-determination, formal equality → substantive equality , and protection as control → rights-enabling support .
4. Benefit “for all” / Varied Backgrounds and Demographics	Older persons are not one demographic group. Inclusion of an “older” category can still obscure substantial diversity within older age—including differences between people at different points of older age and differences shaped by accumulated lifetime experiences, structural inequalities and intersecting identities.	Dignity and Equal Worth; Equality and Non-Discrimination; Participation and Relational Belonging	“For all” requires more than including older persons as a demographic category. It requires recognition of diversity within older age and opportunities for older persons across diverse circumstances to participate and influence decisions affecting them.	Examine whether older persons in different circumstances can access, use and benefit from AI, with accessibility and accommodation where needed. AI governance should examine effects within older populations, including through age-disaggregated data and equality impact assessment, and enable older persons and their organisations to meaningfully influence design, implementation and review. At ecosystem level, move from age-blind → age-responsive systems , exclusion by design → inclusion by design , and token consultation → meaningful influence .
5. Understanding Users, Perception and	The relevant outcome extends beyond the user-system interaction. An AI system may function as intended while its	Personhood and Self-Determination; Participation and Relational Belonging;	Understanding older persons as users requires attention not only to whether they can interact with or understand an AI system, but to	Assessment should examine what happens in the person’s life because an AI output is produced and acted upon. Older persons should

ASEAN Human-centricity imperative	Older-age issue made visible	Age Knowble principles engaged	What interpretation adds — Stage 1	What application adds — Stage 2
Negative Outcomes	outputs have wider consequences for the person's everyday life and rights.	Protection and Security; Possibilities and Choice	what the system and its outputs mean within their lives—including effects on self-determination, decisions, relationships, participation, security, choices and possibilities.	meaningfully influence systems affecting them, with communication and decision support and accessible oversight and remedies. At ecosystem level, move beyond observing older persons as users toward listening to and being guided by older persons , and from token consultation → meaningful influence .
6. Labour and Job Prospects	Later-life work is not a fixed or ending trajectory. AI transformation can be approached on an assumption that older workers need merely to adapt, obscuring continued choice, learning, contribution and evolving working lives.	Personhood and Self-Determination; Participation and Relational Belonging; Protection and Security; Possibilities and Choice	Work can remain connected to self-determination, participation, contribution, economic security, learning and personal development throughout older age. AI-enabled labour transformation should recognise diverse and evolving working trajectories rather than assume that age determines a person's role, capacity to learn or desire to continue working.	Examine whether AI-enabled workplace change enables older persons to continue working and contributing where desired, participate in decisions, access training and technology, maintain economic security and pursue evolving aspirations. Remove unnecessary age-based barriers to work and learning and provide accessible avenues for remedy. At ecosystem level, move from assumptions of decline and fixed later-life trajectories toward continuing development, lifelong possibilities, evolving aspirations and expanded opportunities and choices .

Cross-cutting findings

Looking across the six imperatives, several recurring contributions of the older-age human rights lens become visible.

First, the person becomes the point of reference. Human Benefit and Well-being are not simply outcomes that AI designers, deployers or institutions determine on behalf of an older person. Will, preferences, values, aspirations and the life the person seeks to live become relevant to assessing what AI is doing.

Second, older age becomes visible as diverse rather than categorical. The analysis moves away from treating “older persons” as a single demographic or inherently vulnerable population. It brings into view individual circumstances, different points within older age, accumulated lifetime experiences, structural inequalities and intersecting identities.

Third, the field of impact becomes wider. AI assessment moves beyond technical performance or the immediate user-system interaction to consider consequences for everyday life: decision-making, relationships, participation, privacy, security, economic circumstances, learning, contribution, opportunities and choices.

Fourth, protection is reframed. Across several imperatives, the Framework exposes a recurring tension between protecting a person and controlling them. Its dimensions point toward rights-enabling support, supported self-determination, proportionality and dignity of risk rather than protection through unnecessary restriction.

Fifth, participation moves from presence to influence. Including older persons in a test group or consultation is not the endpoint. The Framework repeatedly directs attention toward whether older persons in diverse circumstances can meaningfully influence design, decisions, implementation and review.

Sixth, older age remains future-facing. Across well-being, Human Benefit and labour especially, the Framework makes visible continuing development, aspirations, learning, contribution, possibilities and choice. AI governance therefore needs to consider not only what AI protects or preserves today, but what futures it enables or closes off for people as they live through older age.

Overall contribution

Taken together, the crosswalk shows that applying an older-age human rights principles framework does more than add older persons to an existing AI governance analysis. It can change what is looked for, whose perspective matters, how impacts are understood, and what direction AI-enabled systems should take.