



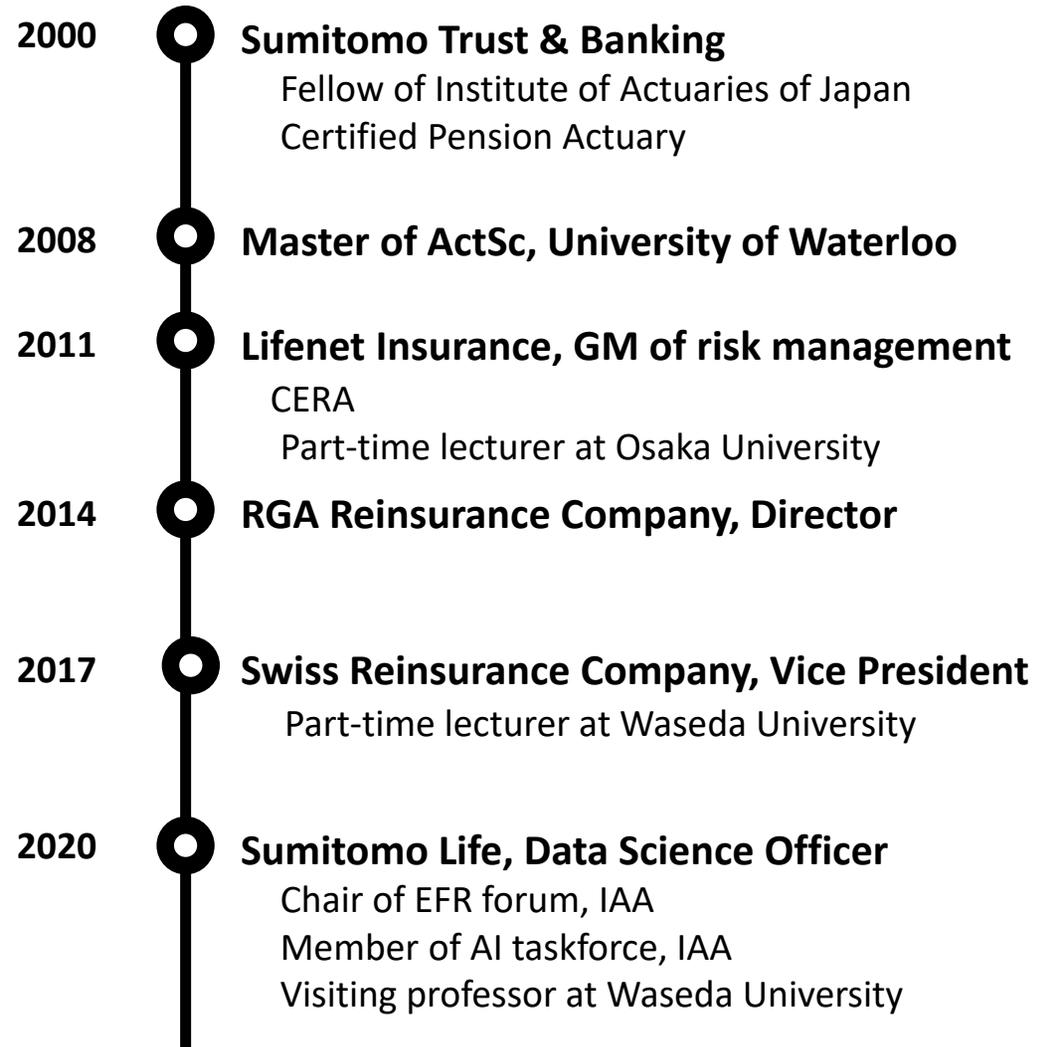
AI and the Future of Life Insurance

Yosuke Fujisawa

Introduction

Yosuke Fujisawa

FIAJ, CERA, Certified Pension Actuary



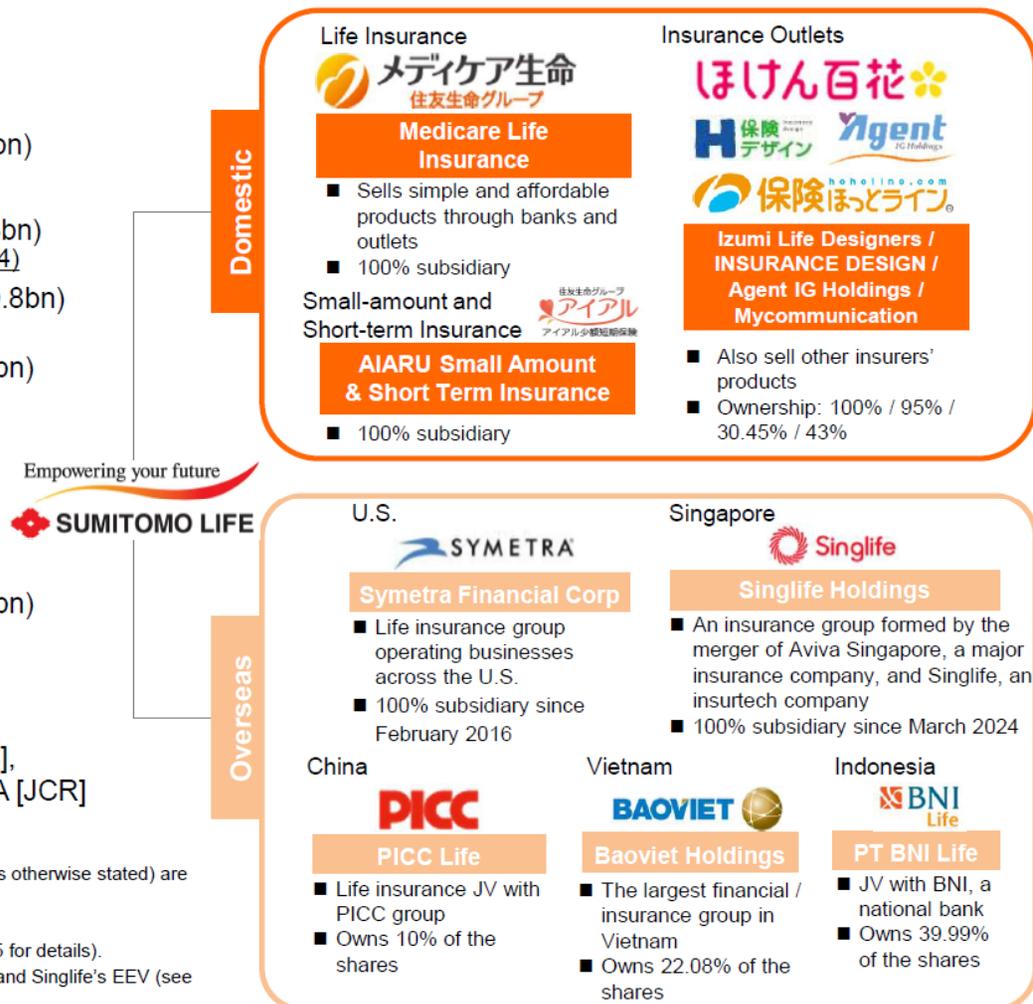
Company Overview

■ Established:	May 1907
<u>Key Figures¹ – 1H FY2025 (as of Sep 2025)</u>	
■ Premium income:	JPY 1.76tn (USD 11.8bn) (JPY 3.37tn in FY2024)
■ Core business profit ² :	JPY 196.5bn (USD 1.3bn) (JPY 379.8bn in FY2024)
■ Total assets:	JPY 49.25tn (USD 330.8bn)
■ Annualized premiums from policies in force ³ :	JPY 3.65tn (USD 24.5bn)
■ Solvency margin ratio:	668.6%
■ Economic value-based solvency ratio :	184%
■ Embedded value ⁴ (EEV):	JPY 6.41tn (USD 43.0bn)
■ Number of sales representatives(tied agents):	31,825
■ Insurer financial strength rating ⁵ :	A+ [S&P], A1 [Moody's], A+ [Fitch], AA [R&I], AA [JCR]

Source: Company disclosure.

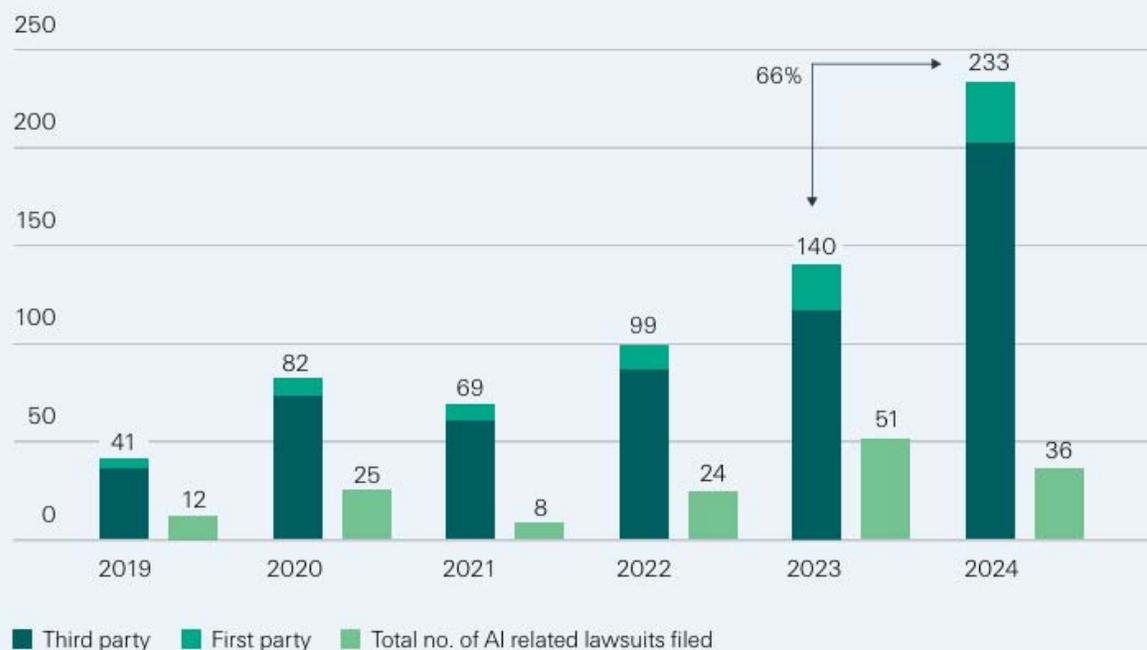
1. Consolidated figures. USD amounts in parentheses in this presentation (except as otherwise stated) are translated from JPY using USD1 = JPY148.88, as of September 30, 2025.
2. Core business profit of the group (see page 6 for details).
3. Figures for individual life and individual annuity for domestic business (see page 5 for details).
4. Combined figures of Sumitomo Life's EEV, Medicare Life's EEV, Symetra's EEV and Singlife's EEV (see page 8 for details).
5. As of October 31, 2025.
6. As of September 30, 2025 on ownership

Group Overview⁶



- AI-related incidents are increasing, with reported cases rising by more than **60% between 2023 and 2024**.
- As AI adoption expands across **individuals and organizations**, a further increase in litigation is expected.
- In particular, lawsuits related to **intellectual property infringement and defamation** have surged, including cases linked to large language models (LLMs) such as ChatGPT.

Figure 5
Number of AI incidents



Note: Swiss Re Institute's classification of incidents into first or third party; total incidents is the sum of first- and third-party incidents. Source: AI Incident Database, AI Litigation Database

Source: Swiss Re SONAR report 2025

Major Categories of AI Risks

Figure 7
Loss drivers

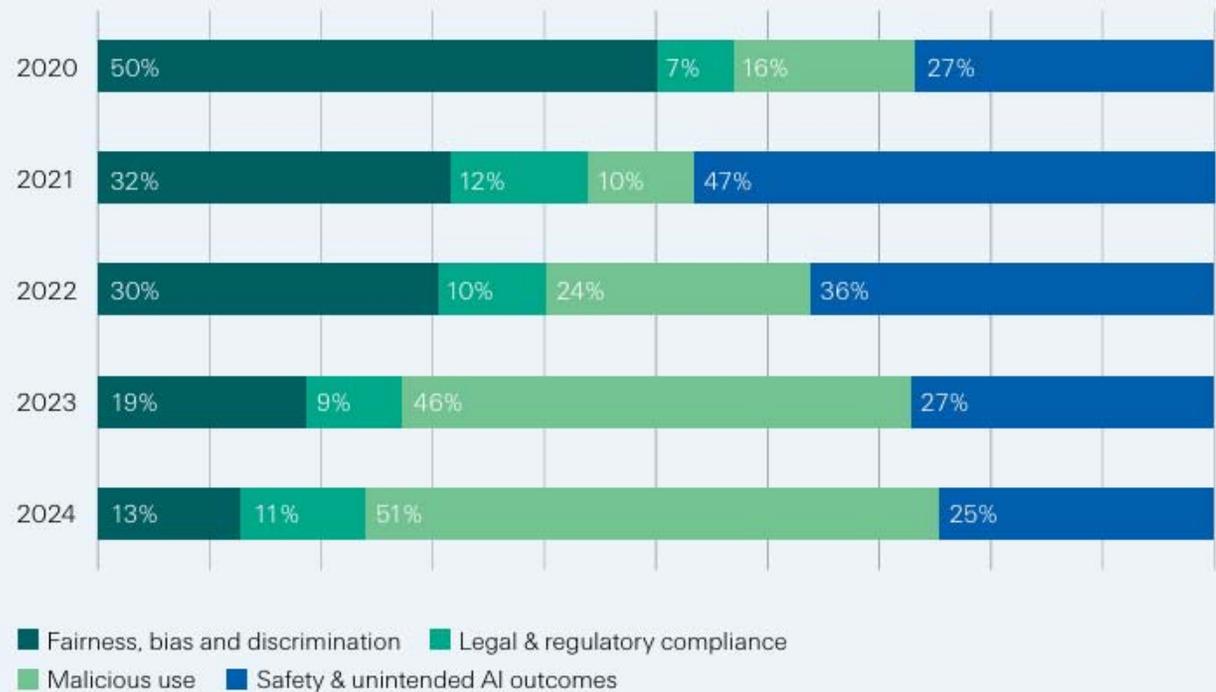


Source: AI Incident Database, AI Litigation Database

- While incidents related to fairness, bias, and discrimination are decreasing as a proportion of total AI incidents, **malicious use–related incidents** continue to increase.

Figure 6

Loss categories' share of total losses



Source: AI Incident Database, AI Litigation Database

Horizontal vs. Vertical Principle/Guideline

Horizontal

- Rules that apply to the use of AI in any sector.

Examples:

- 1. Social Principles of Human-Centric AI** (Cabinet Office, Government of Japan, 2019)
 - The Human-Centric Principle
 - The Principle of Education/Literacy
 - The Principle of Privacy Protection
 - The Principle of Ensuring Security
 - The Principle of Fair Competition
 - The Principle of Fairness, Accountability, and Transparency
 - The Principle of Innovation
- 2. AI Guidelines for Business ver1.1** (Ministry of Internal Affairs and Communications & Ministry of Economic, Trade and Industry, 2025)

Vertical

- Rules tailored to a specific industry, reflecting its unique risks and social responsibilities.

Examples:

- 1. AI Discussion Paper** (Financial Services Agency, 2025)
- 2. Generative AI Guidelines for Financial Institutions** (Financial Data Usage Association, 2024)
- 3. AI Governance Framework** (International Actuarial Association, 2025)

Agenda

1

AI Discussion Paper (Financial Services Agency, 2025)

2

Generative AI Guidelines for Financial Institutions (Financial Data Utilization Association, 2024)

3

AI Governance Framework (International Actuarial Association, 2025)



**Our company and
Japanese
experience**

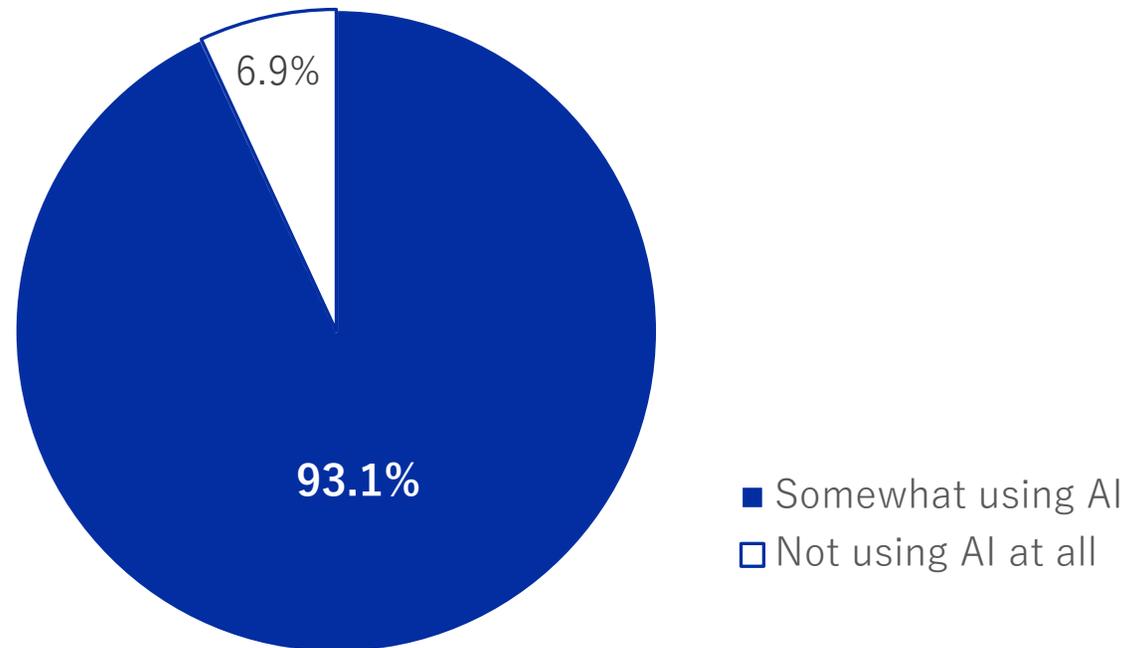
AI Discussion Paper

Summary

- Generative AI's dramatic performance improvements are driving a societal transformation.
- Looking ahead, AI is expected to greatly improve efficiency and convenience across industries, including finance, and in various aspects of daily life, contributing to improved living standards and national economic development.
- However, the utilization of complex AI, particularly generative AI, presents challenges and emerging risks, such as misuse leading to crime and the spread of misinformation.
- While the financial sector is actively exploring AI adoption, concerns about risks and regulatory hurdles are causing some hesitation.
- **Recognizing the "risk of inaction"** - the potential for long-term decline in high-quality financial services due to technological stagnation - we encourage initiatives that emphasize customer convenience and operational efficiency.
- Therefore, the FSA has published this Discussion Paper to provide strong support for the sound use of AI and to contribute to constructive dialogue with business operators in the future.

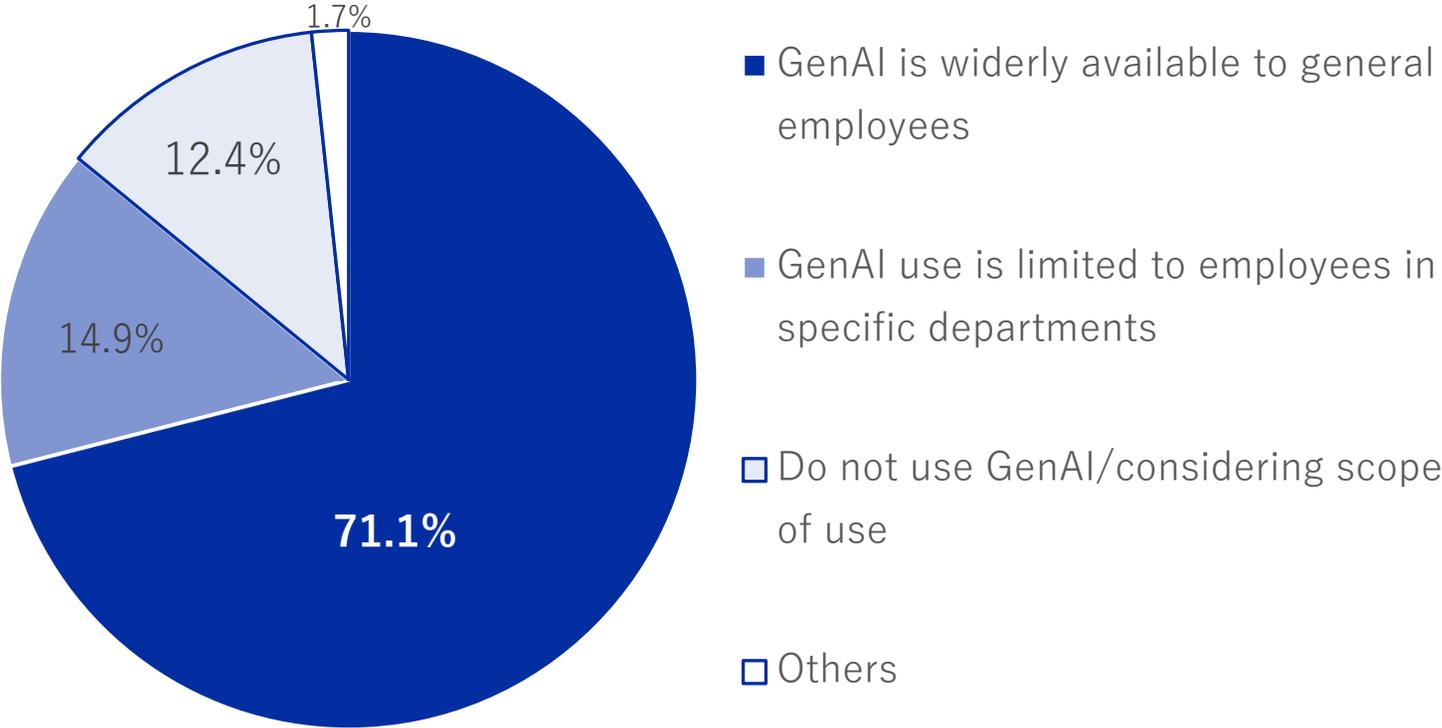
AI Discussion Paper

- Questionnaire Survey on the Status of use of AI by Financial Institutes (40.0% for banks, 16.9% for securities firms and **11.5% for insurance companies**)
- **Over 90%** of respondents already use conventional AI or generative AI.



AI Discussion Paper

- **Approximately 70%** of Financial Institutions broadly allow the use of generative AI for general employees.
- Utilization is expanding through internal study sessions and idea contests.



AI Discussion Paper

Internal use

- Currently, many financial institutions remain here.
- Use cases such as **document summary/translation, editing and evaluating of documents, internal FAQs, and system development/testing.**
- More than half of respondents said that they would consider using it for customer services in the future.

Indirect utilization in customer service

- A considerable number of companies have already introduced generative AI into customer-facing services. However, due to risks, GenAI outputs are generally not presented directly to customers, and most use cases involve human judgment.
- Use cases such as **call center operations support, preparation of documents, and draft of external documents.**

Direct utilization in customer service

- This is **very limited** due to risks such as hallucination.

AI Discussion Paper

Specific examples of initiatives towards widespread internal use and application of GenAI

- To provide an environment where employees can use generative AI daily, a personable GenAI assistant was added to Slack, the main internal communication tool. Equipped with practical capabilities to support tasks, it is also used as a casual advisor. Instead of web page that needs to be opened every time, the GenAI functionality was embedded in the collaboration tool to improve usability. It is used for research, translation, transcription, etc.
- The Financial Institute utilizes not only general-purpose AI functionalities but also deploys a document-referencing GPT that generates draft answers based on internal documents. It has also introduced an add-in that enables GenAI access from document creation applications, across the entire organization.
- A GenAI chatbot was introduced on a vendor-provided platform, allowing users to interactively ask questions about administrative procedures. AI summarizes the content of the bank's administrative manual and responds along with the source of the information.

AI Discussion Paper

Common challenges for conventional AI and GenAI

- Data preparation
- Collaboration with external vendors and risk management
- ROI (Return On Investment)

Issues made difficult by GenAI

- Accountability and Fairness/bias
- Development and operation of AI systems, and model/risk management
- Protection of personal information/Information Security and Cybersecurity
- Hiring of AI experts and training of employees

New challenges created by GenAI

- Hallucination
- Misuse of generative AI for financial crime
- Other issues concerning financial system stability

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Our company or Japanese experience

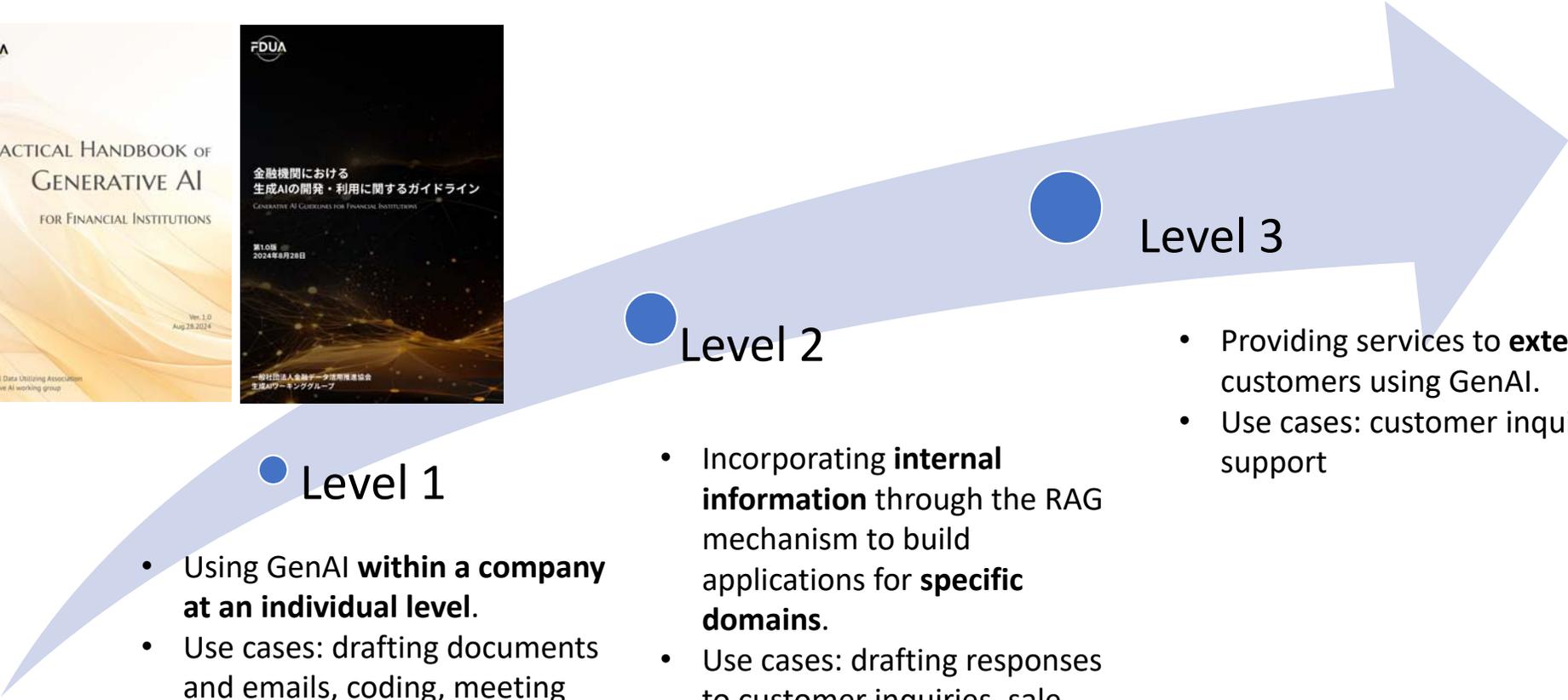
Generative AI Guidelines for Financial Institutions

- **The Financial Data Utilization Association (FDUA)** is a Japanese industry association that promotes the effective and responsible use of financial data.
- FDUA supports financial institutions by developing **guidelines and best practices** on data governance, analytics, and the use of emerging technologies such as GenAI, with a strong focus on risk management and social trust.
- Organizes data competitions to promote innovation, talent development, and real-world use of financial data.
- Develops practical guidelines and shares best practices for the responsible use of GenAI in the financial sector.



- Purpose: This guideline aims to promote the innovative yet responsible use of GenAI in financial institutions. This provides guidance tailored to the financial sector, complementing Japan's national AI guidelines and other industry standards.
- Scope: The guideline classifies GenAI adoption into three levels:
 1. **Individual use** of GenAI tools for internal productivity
 2. **Enterprise use**, such as RAG-based applications leveraging internal use
 3. **Customer-facing services**, which require the highest level of governance and risk control.

Generative AI Guidelines for Financial Institutions



- Level 1**
- Using GenAI **within a company at an individual level.**
 - Use cases: drafting documents and emails, coding, meeting minutes, etc.

- Level 2**
- Incorporating **internal information** through the RAG mechanism to build applications for **specific domains.**
 - Use cases: drafting responses to customer inquiries, sale support, etc.

- Level 3**
- Providing services to **external** customers using GenAI.
 - Use cases: customer inquiries support

Source: Practical Handbook of Generative AI for Financial Institutions

Use Cases

- Using GenAI within a company at an individual level.

あなたの未来を強くする

住友生命 **NEWS RELEASE**

2023年7月13日
住友生命保険相互会社

生成系 AI を活用した新たな顧客価値創造や生産性向上の取組み

～ 1万人の職員に導入 「人」と「デジタル」の融合で
ウェルビーイングサービスの創出へ向けて加速～

住友生命保険相互会社（取締役 代表執行役社長 高田 幸徳、以下「住友生命」）は、生成系 AI チャットシステム（Sumisei AI Chat Assistant、以下「本システム」）を、7月18日より本社・グループ会社の職員約1万人を対象に運用開始予定です。本システムを通じて日常業務の生産性向上を図るほか、お客さま向けサービスの開発・更なるレベルアップに活用していきます。

住友生命は、「住友生命グループ Vision2030」の中で掲げる全てのステークホルダーの「ウェルビーイング^{※1}」実現に向け、従来の保険会社の姿に留まることなく、“住友生命「Vitality」をはじめとした、さまざまなよりよく生きるサービス「WaaS（Well-being as a Service）^{※2}」を創出・提供することを目指しています。職員がデジタル・ITに関する知識やスキルを身に付け、さらに生成系 AI システムを活用することで、新たなウェルビーイングサービスの創出に向けた取組みを加速していきます。

<本システムのデモ画面：プロンプトの事例>

モデル: GPT-3.5 | Temp: 0.7 | ☰

👤 #命令書
あなたはビジネスコミュニケーションの専門家です。以下のメールまたは文章を読み、操作に従い作業をしてください。

#制約条件
- 文章の順番に変更を加えない
- 文章を省略しない。

#入力する文章
[メールまたは文章を入力]

#操作1
- 誤字脱字、タイプミス、言葉の表記のばらつきがあった場合は全て指摘してください。
- 慣用語やことわざの表現に誤りがあると考えられる場合は全て指摘してください。
- 文脈に合わない単語が使われている場合は誤りを全て指摘してください。
- 主語と述語の組み合わせが間違っている場合は全て指摘してください。
- 句読点の打ち方に不自然な点がある場合は全て指摘してください。

#操作2
- 指摘事項を全て修正した正しい文章を出力してください。

操作1⇒操作2

Source: Sumitomo Life

Use Cases

Challenges

- Simply providing tools does not lead to adoption by frontline staff.

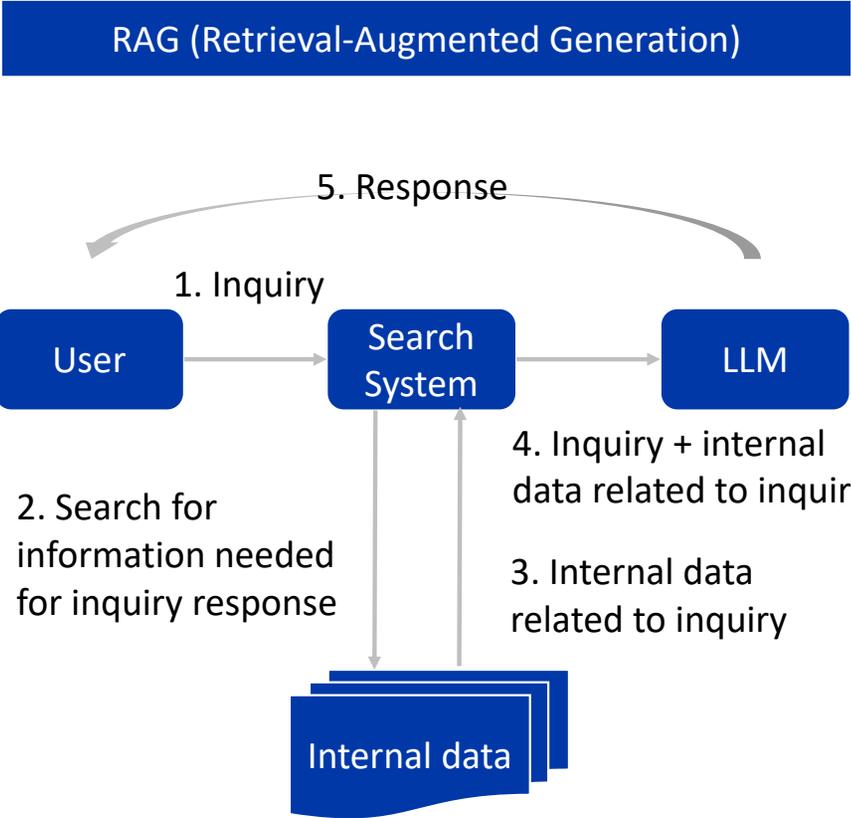
Action Taken

- Held an executive briefing one month before the company-wide rollout.
- Held a company-wide training session one month after the rollout. Prepared 30 business-ready prompts and introduced the 3R framework (Role, Rule, and Reference)
- Afterward, conducted interviews with individual departments in advance and held tailored training sessions to address their specific challenges.
- Conducted one-on-one training sessions for executives.

-
- The cos-effectiveness is difficult to visualize

- Calculated that the initial investment would be recovered within 3 months and reported this to management.
- Continuously improved and redefined the model over time.

Use Cases



- RAG is a technology that enhances the quality and accuracy of outputs by adding relevant information to the input for LLMs.
- Key considerations when implementing RAG include:
 - Ensuring the accuracy of the added information
 - Confirming that the added information is not outdated
 - Considering search algorithms that can retrieve appropriate responses to questions, etc.

Source: Practical Handbook of Generative AI for Financial Institutions

Use Cases

<ロープレ実施画面イメージ>



- Sumitomo Life has upgraded its AI-based role-playing system for tied agents as part of its broader AI-driven workforce transformation initiative.
- The upgraded system uses GenAI-driven avatars to enable unscripted, realistic conversations that simulate real customer interactions. Tied agents can train across an entire consultation flow, including understanding customer needs, responding flexibly, deepening discussions, and securing follow-up appointments. After each session, the AI provides immediate, objective feedback, helping to standardize guidance and improve training efficiency.

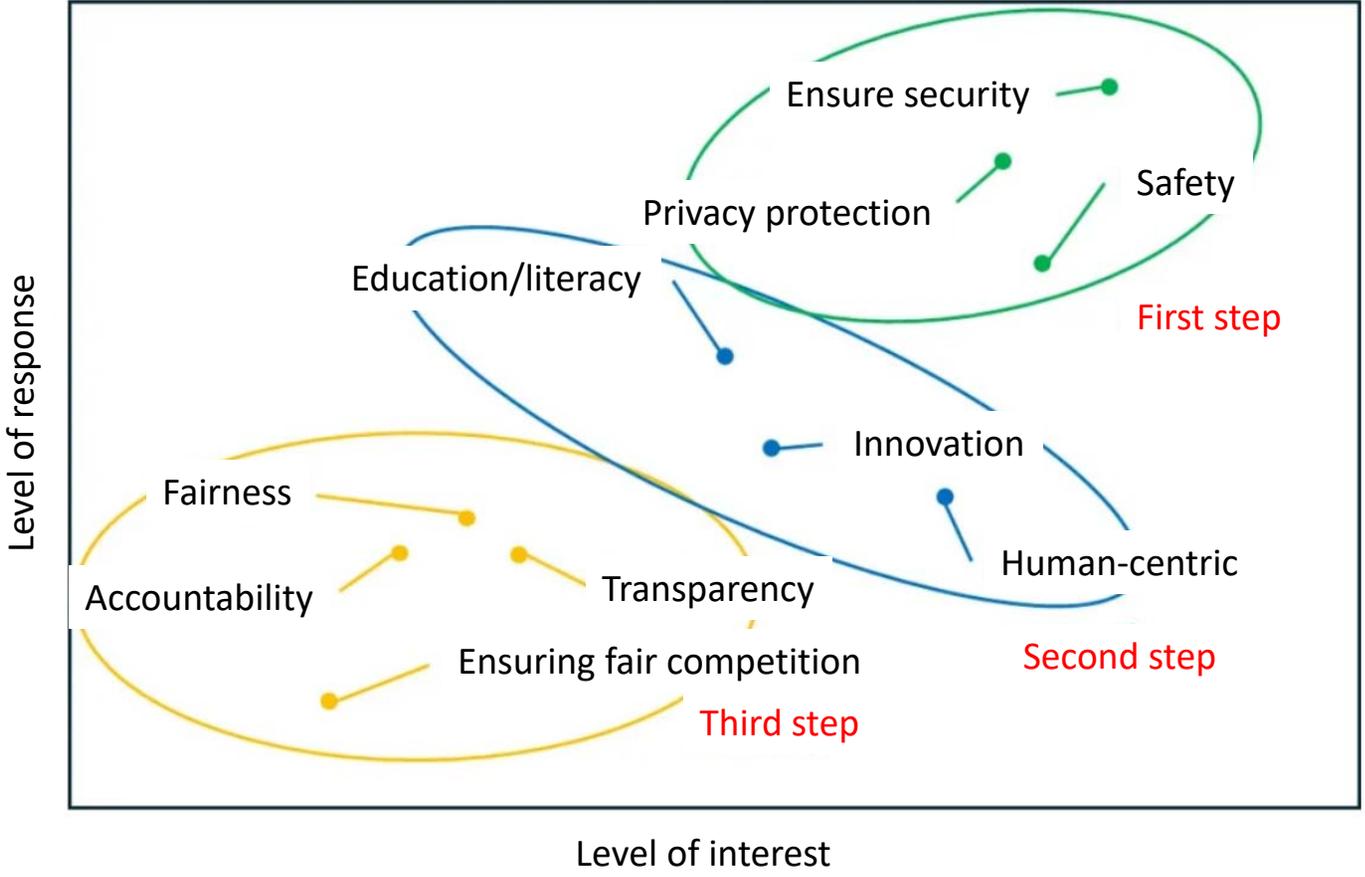
Potential use cases



- Disease prediction model using Vitality data was released in 2023.
- Capable of assessing risk for diabetes, stroke, cardiovascular disease, kidney disease, and cancer.
- Scores vary on a weekly basis.
- Combining Machine Learning and Actuarial Science.
- Logic-based generation of comments for health, but generative AI could be used to generate more personalized comments.
- This is one of the ideas for future level ups.

Source: Sumitomo Life

Generative AI Guidelines for Financial Institutions



Source: Results of FDUA member survey

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AI Governance Framework (International Actuarial Association, 2025)



**Our company or
Japanese
experience**



International Actuarial Association
Association Actuarielle Internationale

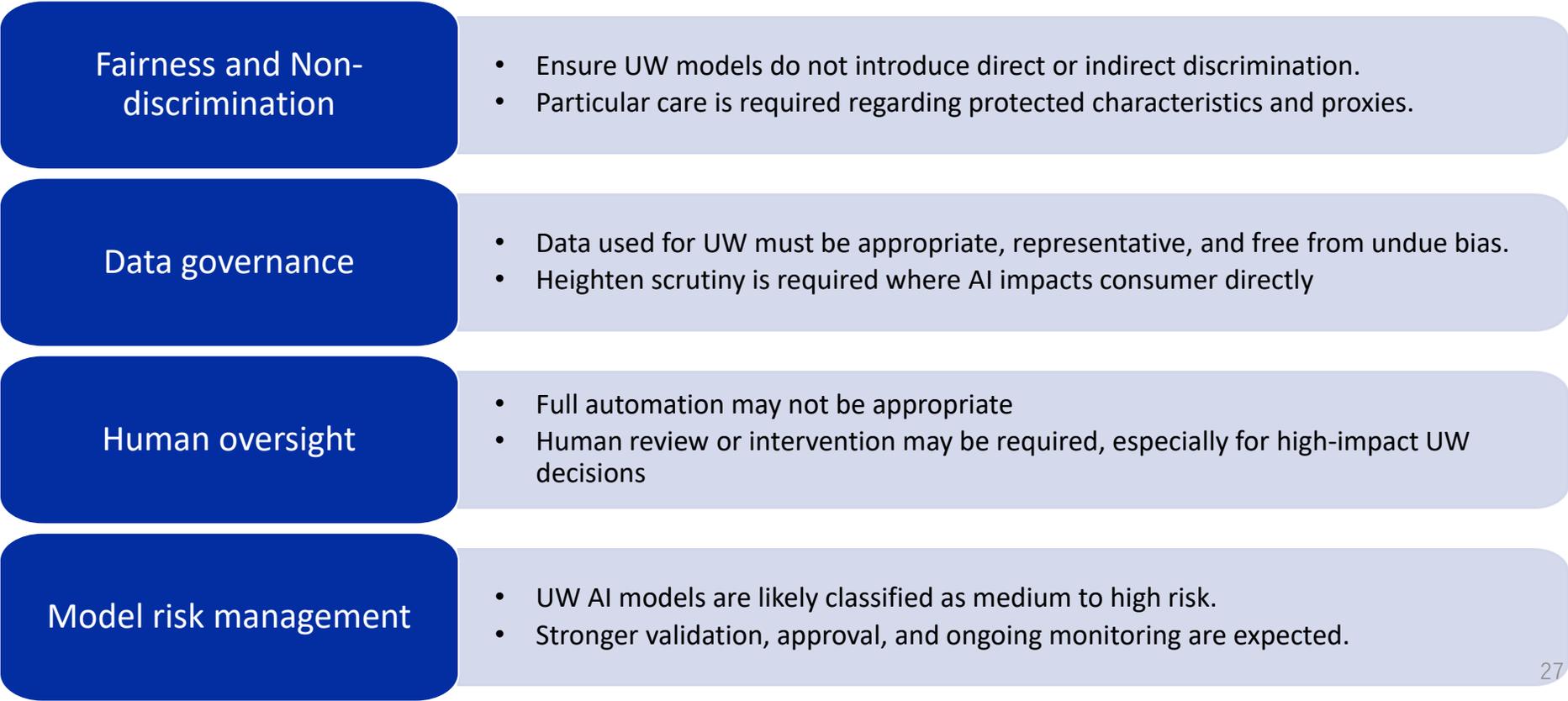
Artificial Intelligence Governance Framework

AI Task Force
November 2025

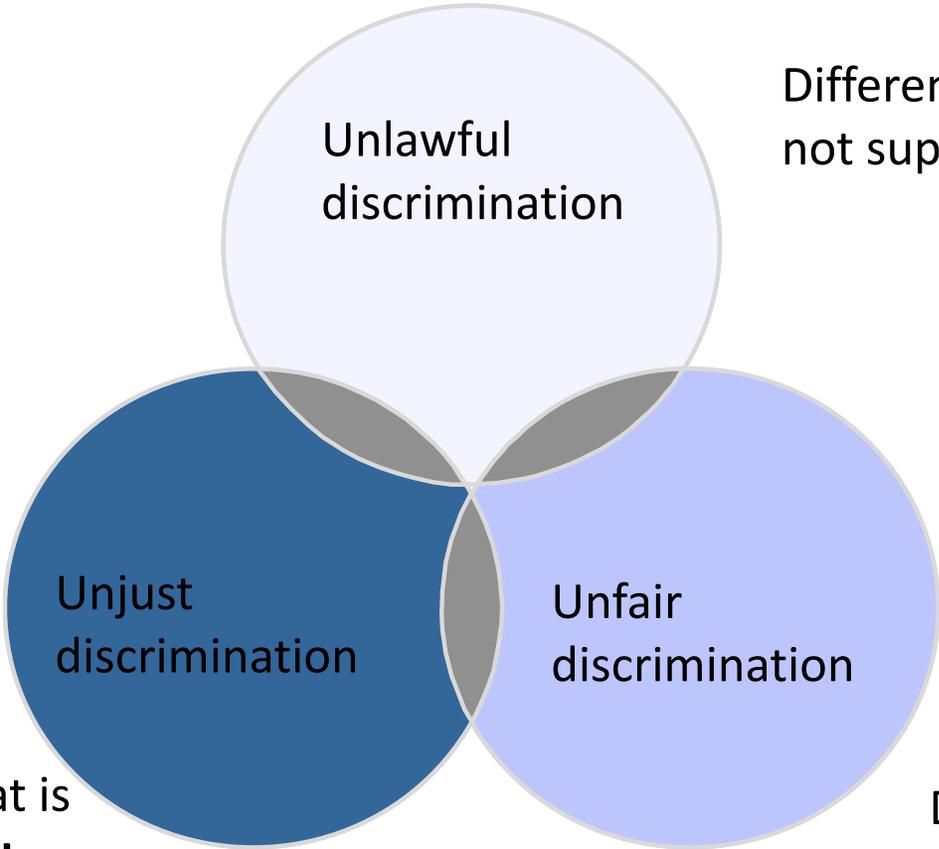
- Purpose: To provide educational guidance to support the responsible design, development, implementation, and the use of AI in actuarial tasks
- Scope:
 1. Applies to actuaries in actuarial work using AI.
 2. Covers AI models and AI systems across the full lifecycle.
 3. Applicable to both internally developed and third-party AI systems.
 4. Intended for use across industries (not limited to insurance)
 5. Serve as an educational supplement to existing model governances, data governances, and international AI governance frameworks.

AI Governance Framework

- AI is increasing used in underwriting decision support and automation
- UW directly affects customers and therefore tends to be high-risk.



AI Governance Framework



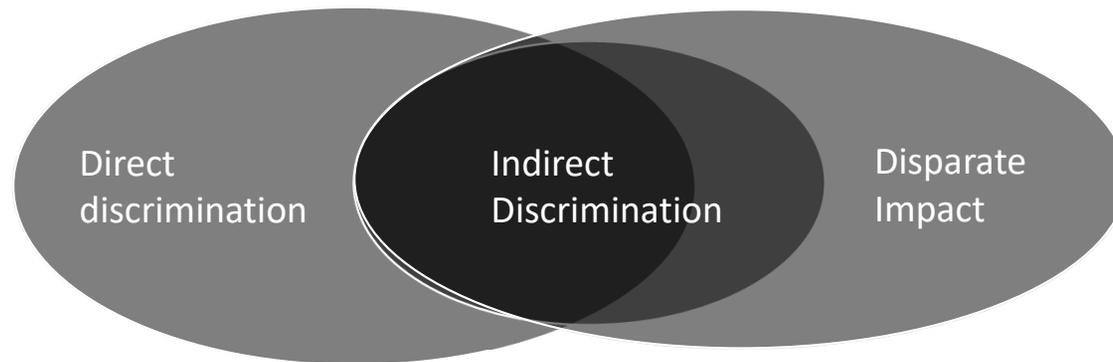
Different treatment that is not supported by **law**

Different treatment that is not supported by **society**

Different treatment that is not supported by **statistics**

AI Governance Framework

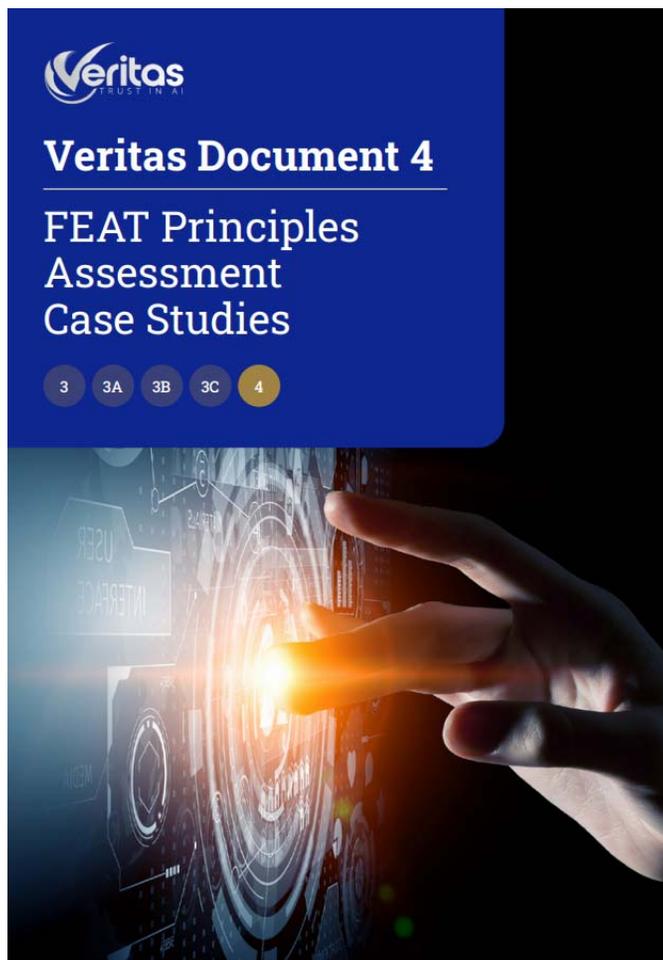
- **Direct discrimination** : Intentional and unlawful discrimination in which individuals belonging to protected characteristics (e.g. race, gender) are treated differently from others explicitly because of those characteristics.
- **Indirect discrimination** : Discrimination arising from practices that appear neutral but, in practice, disadvantage individuals with certain protected characteristics. This may occur through the use of proxy variables (e.g. residential location, occupation, purchasing history) rather than the protected characteristics themselves.
- **Disparate impact** : A situation where facially neutral policies or practices unintentionally result in disproportionate adverse effects on individuals with certain protected characteristics, even in the absence of discriminatory intent.



Use cases

- Several Japanese life insurance companies use AI in UW, not to replace underwriters, but **to support and enhance underwriting decisions**.
- This cautious approach reflects the high risk associated with AI-driven UW particularly in terms of fairness and discrimination, data governance, human oversight and model risk management.
- A key challenge is the lack of established monitoring methodologies for underwriting AI. Monitoring needs to cover not only model accuracy, but also fairness and bias.
- One potential solution is provided by the monitoring approach adopted in Singapore, which offers a more structural framework for ongoing AI oversight.

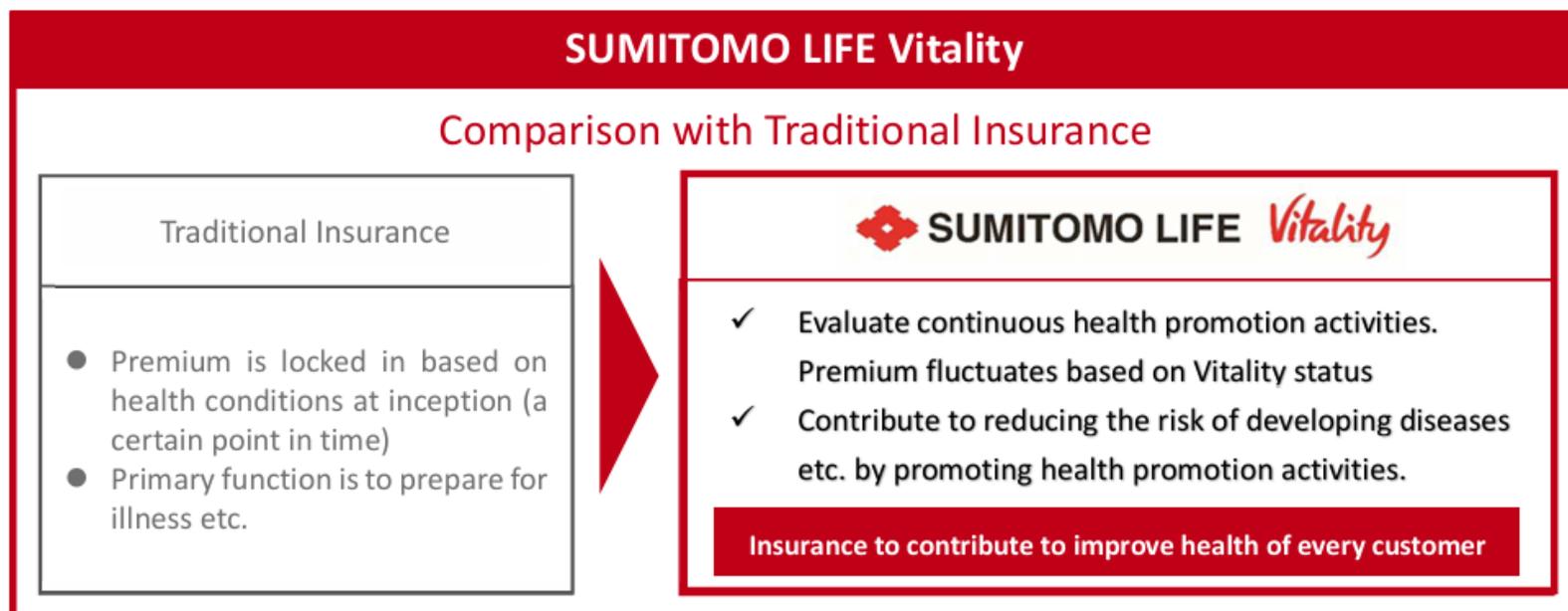
Use cases

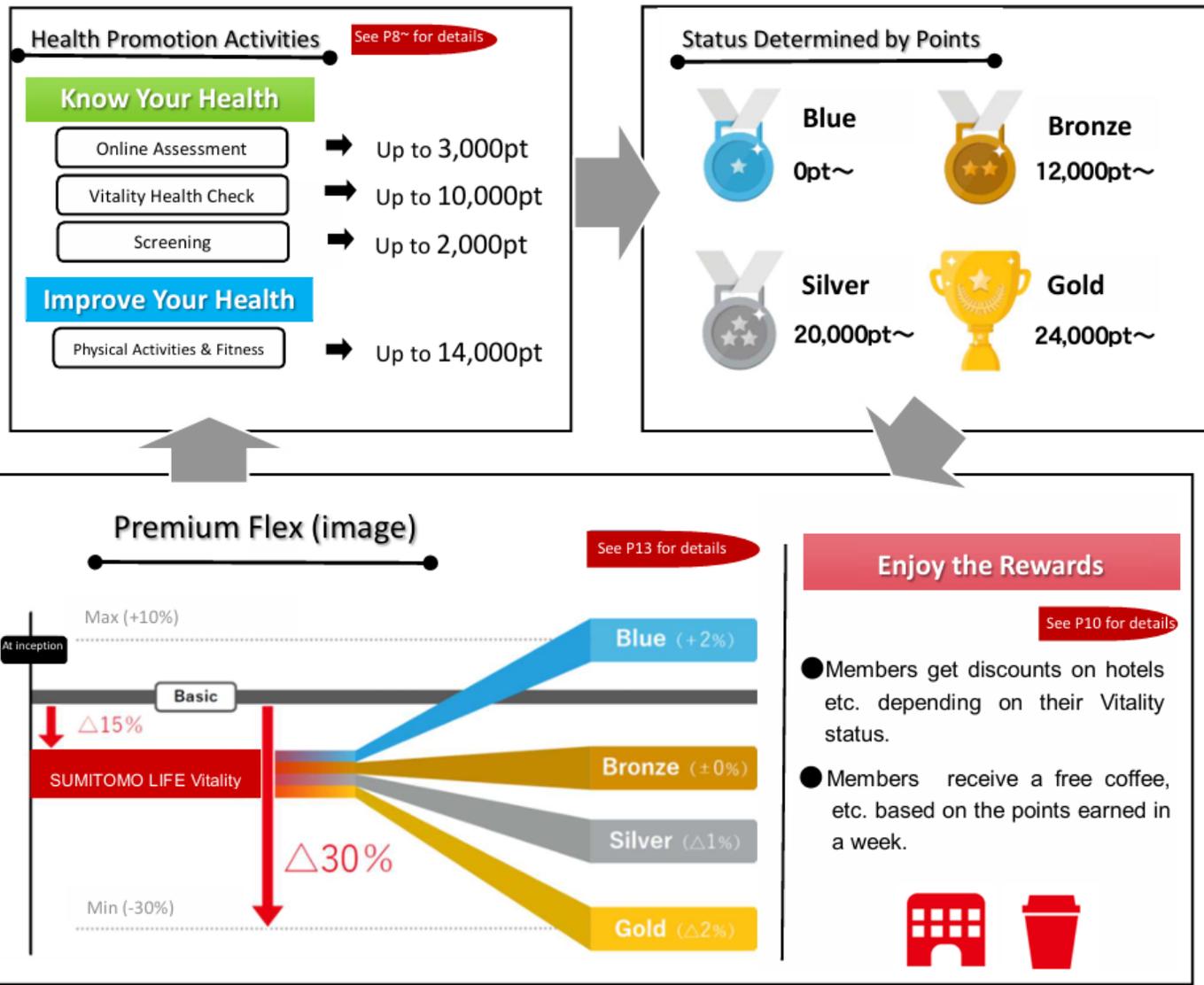


- On 4 February 2022, the Monetary Authority of Singapore (MAS) announced the publication of five white papers that set out assessment methodologies for the FEAT Principles (Fairness, Ethics, Accountability and Transparency) to guide financial institutions in the responsible use of AI.
- The white papers were published by the Veritas Consortium, an industry group comprising 27 industry participants.
- The Consortium also released an open-source toolkit to support adoption of the methodologies, including practical implementation of fairness and transparency assessment.

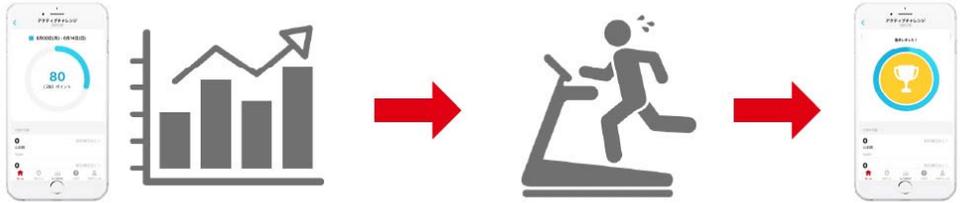
Source: Monetary Authority of Singapore

AI and the Future of Life Insurance





AI and the Future of Life Insurance



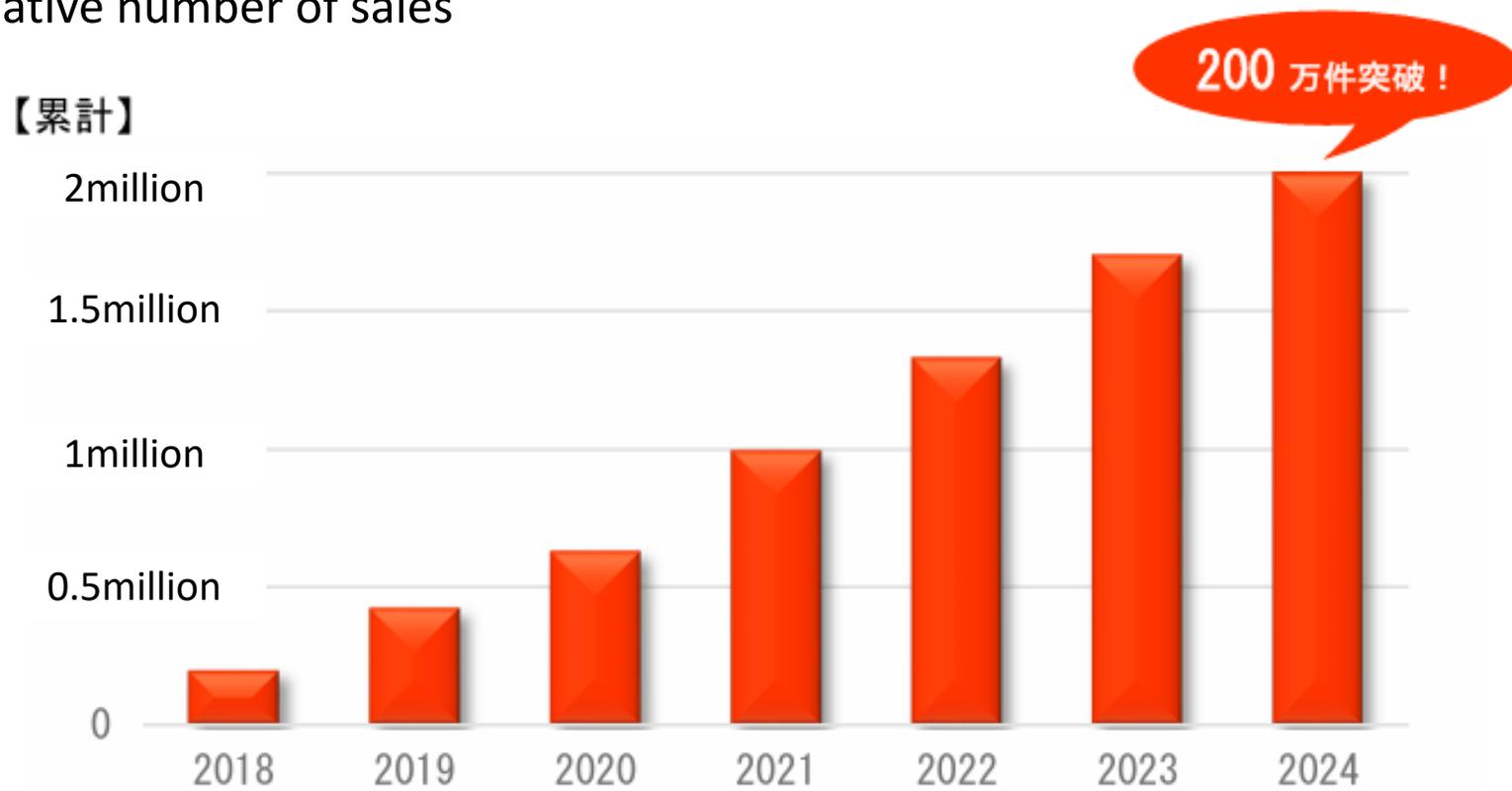
1. Automatic Setting of Exercise Point Goals
By launching the "Active Challenge" feature in the Vitality app, weekly point goals are automatically set.

2. Work Toward Achieving Goals
Engage in physical activities to aim for achieving the set goals.

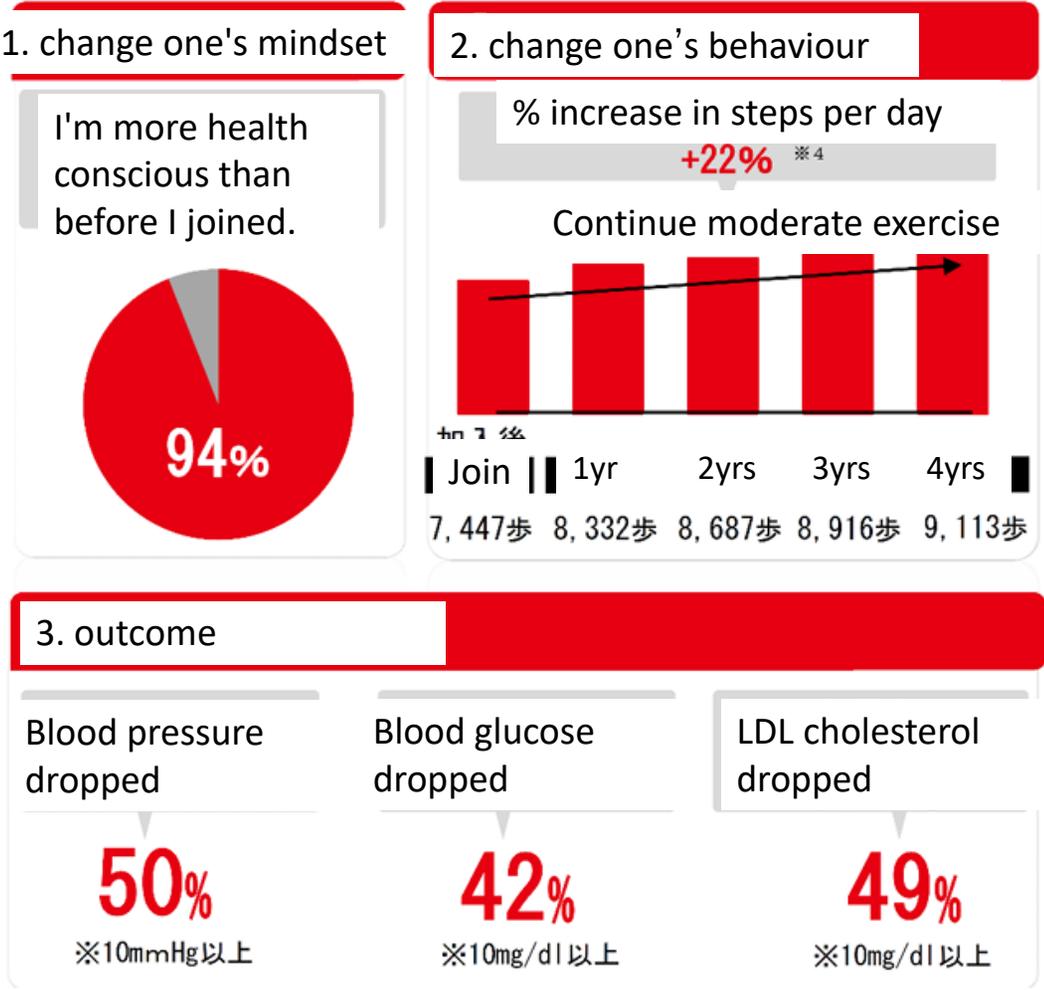
3. Earn Rewards by Reaching Exercise Point Goals
Enjoy various rewards such as drinks. You can also choose to make a donation instead of receiving drinks or other rewards.

AI and the Future of Life Insurance

Cumulative number of sales



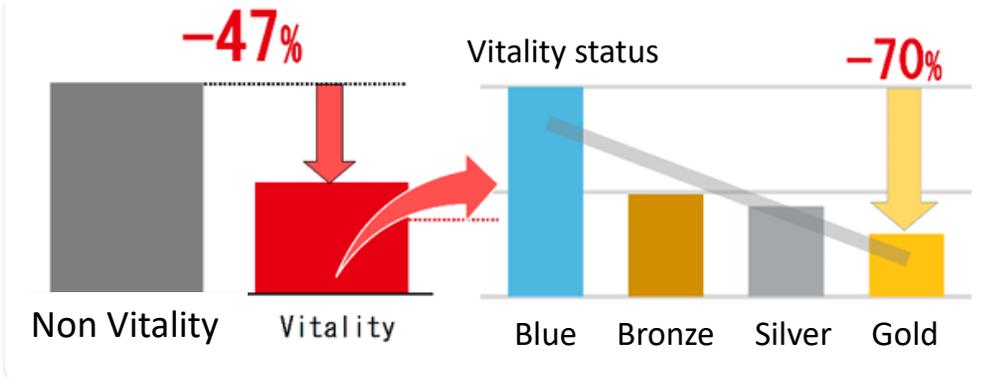
AI and the Future of Life Insurance



AI and the Future of Life Insurance

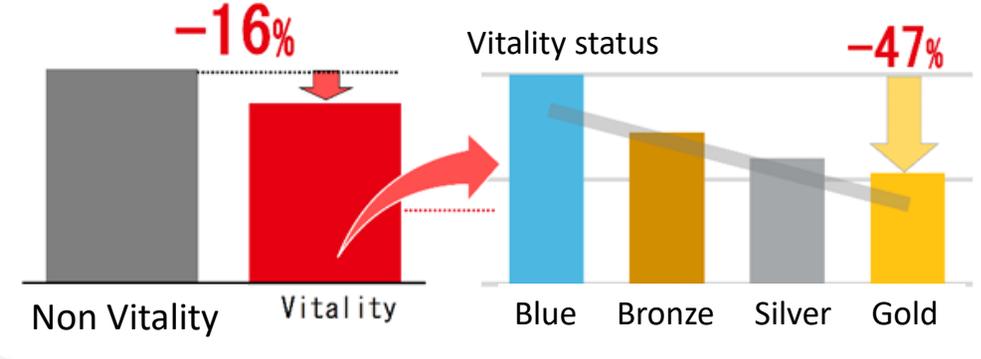
Mortality

Vitality has 47% lower mortality rate than Non Vitality



Hospitalization rate

Vitality has 16% lower hospitalization rate than Non Vitality



AI and the Future of Life Insurance



Vitality AI

**Vitality AI, developed with Google,
is transforming insurance by
empowering millions worldwide to
live healthier longer lives.**

Until now, delivering health improvements at scale has been difficult, with recommendations often being too generic to be effective. Vitality AI changes that by setting a new standard through **personalized, actionable, data-driven** health insights; and in turn creating a step-change for how health and life insurers can increase customer engagement and improve actuarial outcomes.

<https://www.vitalitygroup.com/vitality-ai/>