2023 INTERNATIONAL CONGRESS OF ACTUARIES

BRIDGE TO TOMORROW

28 MAY – 1 JUNE 2023 · SYDNEY

Actuaries Institute Australia

IAA AAI International Actuarial Association Association Actuarielle Internationale

The Evolving Role of the Actuary

Abstract

Recent events have acted as a time machine to the future, where ideas that a short time ago may have seemed far fetched have become reality and required working professionals, including actuaries, to quickly adapt.

Our presentation will address some of the key areas of change we see as needed for this transition to continue to occur, including:

- Actuarial “superjobs” and the requirements of such roles
- Differences between skills and capabilities
- Importance of creating the conditions in which actuaries are prepared for the future of work
- Roles for actuaries, employers and educators of actuaries
- Speed of change versus stakeholder expectations

Outline

- **Setting the stage with broad trends**
  - Workforce trends: Great exhaustion, great migration
  - Workplace trends: Hybrid
  - Work trends: a transforming actuarial function, actuarial superjobs

- **Talent, learning, development deep dive**
  - Skills vs. capabilities
  - Learning and development
    - Current challenges
    - Ways to address them - enhanced approach to actuarial development

A Global View of Workforce Trends

2020 and 2021 ushered in the "Great Exhaustion"…

SINCE MARCH 2020…

	MARCH 2021	MARCH 2022
Number of Meeting / Person	+135%	+288%
Chats / Person	+23%	+55%
Average After-Hours Work	+13%	+51%

Gen Z workers are the **least satisfied generation at work**, with only…

56% satisfied with work-life balance **AND** 59% satisfied with their job overall

Before the pandemic, **women** made up more than **50%** of the country's workforce,

SINCE THEN

3M women dropped out of the workforce, and…

1.6M of them still have not returned

A Global View of Workforce Trends

They hastened migration, creating the “Great Reshuffle”

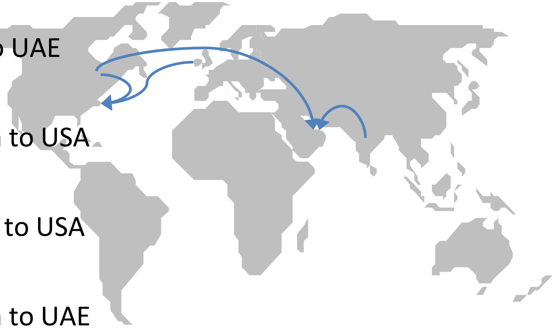
34% of US workers have **moved cities** since the start of COVID-19

A N D

47% of leaders are likely to **consider applying for jobs not near their homes** in the next year

Global workers are more willing to relocate[3]…

150%	India to UAE
124%	Canada to USA
105%	Ireland to USA
95%	Canada to UAE



Employee agency is on the rise and organizations are catering to the workforce

Jobs specified as **remote are receiving 300% more applicants** than those not listed as remote

56% of employees **ages 18-24** say they would **quit a job that prevented them from enjoying their lives**

77% of employers feel **employee mental health and wellbeing** is now a **top priority** for their company

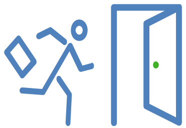
64% of workers will only consider working in a new job if it provides **flexible work hours**

A N D

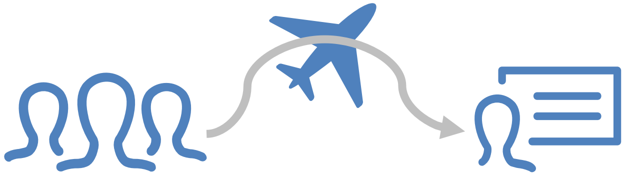
74% of businesses plan to transfer some of their workers to remote work permanently

…and led economists to coin the term the "Great Resignation", as well as the tensions between workforce sentiment and organizational perspectives

According to OECD, **about 20M fewer people are working** than before COVID-19 struck…



…of these, **14M have exited the labor market**



One third of all German companies were reporting a dearth in skilled workers in August. To make up for shortfalls across industries, the country would need to **import 400,000 skilled workers**[1]

The Future Forum report published in January found that:

53% of workers in France,

55% in Germany and Japan,

60% in the United Kingdom, and

64% in Australia are open to looking for new jobs in the next year[2]

Workforce sentiment
Workforce sensing shows that workers largely prefer to work in a flexible environment post-pandemic…

Employer sentiment
…but leaders are still struggling to relinquish the construct of an office-first culture

Hybrid? Return to office? The debate is over

According to the 2022 Deloitte Millennial and Gen Z Survey and the Deloitte Women @ Work Outlook

75% of millennials and Gen Z **AND** **65%** of women prefer hybrid work

… according to Nick Bloom, Stanford University economics professor, … **95% of companies he speaks to plan to be hybrid[3]**

EMPLOYEES EXPECT FLEXIBILITY

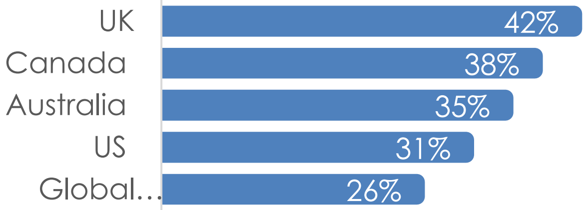
Nearly **10%** of job postings are for remote workers, almost **3x** the amount from before the pandemic

AND

Office occupancy remains low:

+ **42%** London
+ **41%** Chicago
+ **41%** DC
+ **40%** NYC
+ **38%** Philadelphia
+ **34%** San Francisco

% of workers who would look for another job if told to return to the workplace five days a week…



The debate you should be having now…..

WHAT WORKS WELL IN-PERSON

Idea generation

A CBS/GSB study of 1,500 engineers found that those who brainstormed face-to-face generated more creative ideas than those who worked together over videoconference

Growing a professional network

More than 75% of respondents —especially women and frontline workers—report that when not in-person, they are connecting with others less frequently, have smaller networks, and spend less time and effort on relationship building

Creative collisions

A study of 60,000 Microsoft employees found that remote work made people more likely to hunker down with their preexisting teams and less likely to have serendipitous conversations that could lead to new ideas

WHAT WORKS WELL REMOTELY

Idea prioritization

The same CBS/GSB study found that videoconferencing groups were no less effective when it came to idea selection and prioritization

Job satisfaction

A study of 1,600 coders, finance, and marketing professionals found that productivity was slightly higher in a remote setting, however, quit rates dropped by one third and employee job satisfaction was significantly higher[4]

Dedicated, 'heads down' time

Working from home is usually quieter, allowing for a better working environment for individual-focused activities

To translate these unique benefits to the hybrid model, leaders must re-establish bridging relationships that promote the flow of new ideas throughout the organization and create a digital workplace that is optimized for collaboration

Disruptors for Actuaries

The need for actuaries have never been greater with the rapidly changing landscape at work and workplace. As a result, employers should consider strategies to that help maximize the output of actuarial function and meet stakeholder expectations

Questions that need to be considered to improve their organization's resilience to the rapidly changing landscape

Cognitive technology is becoming more prevalent and affordable. **What are some tasks that could utilize artificial intelligence to yield new insights? Which processes can leverage technology to create capacity for actuaries to focus on higher value outcomes?**

Organizations are asking business units to do more with less and flexibility react to strategic priorities from leaders. **How do actuaries continue to meet expectations while managing costs?**

FASB LDTI, IFRS 17, PBR. Sweeping regulatory changes are demanding more from actuarial departments. **How can organizations learn to staff flexibly and effectively to still meet deadlines given the current and future impacts of workforce and workplace changes?**

With the workplace trend that requires actuaries to work and collaborate virtually. **How do organizations leverage the current situation to optimize the use of virtual and physical workplaces for employees? How do actuaries learn and train without the in-person interactions that they were accustomed to?**

Workforce | Workplace | Work

Work is Changing

4

out of 10 companies believe automation will have a major impact on jobs

44

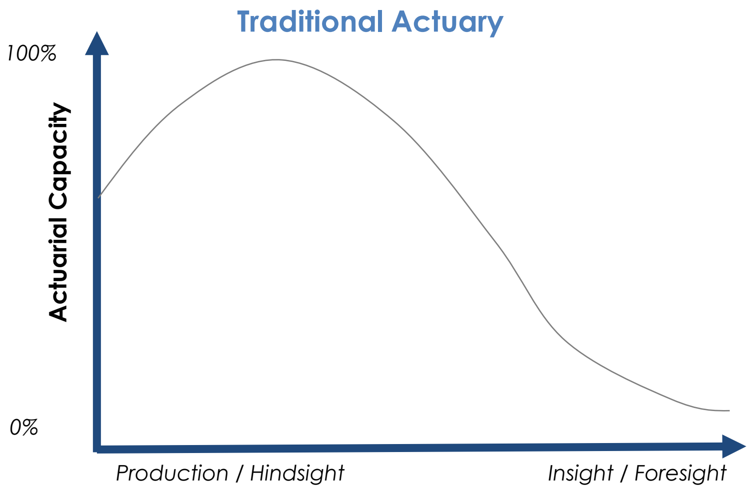
percent of companies believe face-to-face meetings will decrease in the next 3-to-5 years

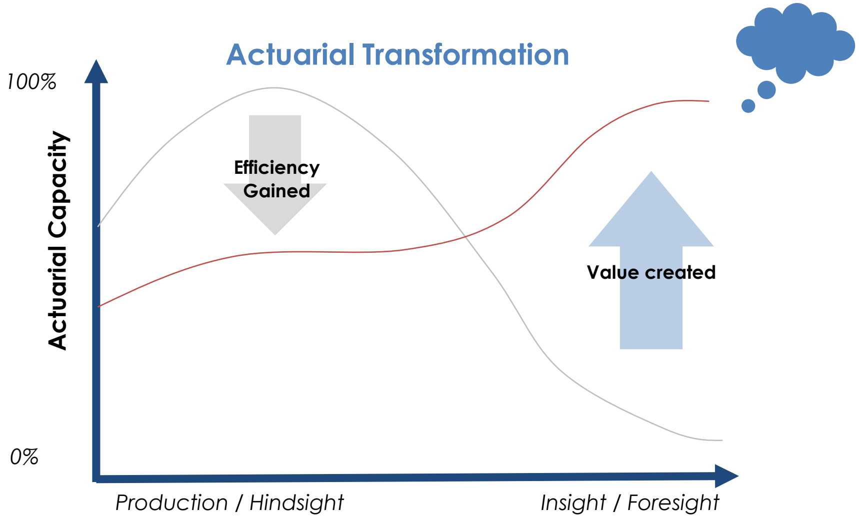
70

percent of companies believe they need a different mix of talent for the future

A Transforming Actuarial Function

The role of the actuary is shifting towards elevating insight and foresight capabilities to bring value as strategic business advisors





A Transforming Actuarial Function

As the motivators galvanize streamlined processes and automated data insights, actuaries are learning to expand their strategic perspective to generate better business insights, but there are still barriers…

MOTIVATORS

- *Rise of AI / data science capabilities*
- *Growth of analytics acumen in other functional areas*
- *Pressure from business leaders to provide more foresight – the why, and what next?*
- *Stronger multi-functional teaming in how work is done*

BARRIERS

Insufficient leveraging of unique capabilities:
- *Fluid workforce roles*
- *Personalized development programmes.*

Not yet adapted to the changing ways of work, such as optimizing how we collaborate, and creating purpose-driven hybrid models.

Superjobs for Actuaries

Actuarial Superjobs	Description	Learner Persona
Algorithm Auditor	Combine strategic thinking, professional judgment, and machine learning methods to validate AI algorithm design and output	**Investigator:** Enjoy learning systems, testing theories, and applying that knowledge and is motivated by being recognized as a subject matter expert in their field
AI Expert	Combine deep AI expertise and actuarial content knowledge to design and update AI bots	**Architect:** Prefer consistency, order, and discipline, and seeks a clear understanding of what is expected of them and how they can achieve the objectives of their role
Center of Excellence Content Lead	Oversee shared service function that serves across enterprise	**Explorer:** Seek out innovative, entrepreneurial roles where they can make impact and affect change; enjoys autonomy and freedom to create and/or build
Insurance Influencer	Connecting the dots across the insurance value chain and playing an integral part in the feedback loop to drive decision making	**Connector:** Look to engage with people and develop relationships and is a problem solver who likes connecting the dots; driven by the opportunity to build a collaborative culture
Portfolio Interpreter	Leveraging advanced analytics, advanced actuarial techniques, and insurance expertise to derive insights and recommend actions to management	**Striver:** Love a challenge and desires to become a senior leader in the organization; seeks career advancement and recognition

Talent, learning, development deep dive

Skills & Enduring Human Capabilities

Workforce Reskilling strikes a balance between skills and human capabilities

SKILLS

Tactical knowledge or expertise needed to achieve work outcomes within a specific context

HUMAN CAPABILITIES

Observable human attributes that are demonstrated independent of context

DIMENSIONS

SKILLS	HUMAN CAPABILITIES
KNOWLEDGE	ATTRIBUTES
APPLY/DO	MANIFEST/BE
TIME-BOUND	TIMELESS
TRAIN/LEARN	NURTURE/ CULTIVATE
ASSESS FOR PROFICIENCY	MEASURE FOR PRESENCE

Specific to a function

Business & Functional
Breadth to manage speed of environment

Technical & Scientific
Depth in domain and / or technologies

Easier to develop

Universally applicable

Innate
Within us, but can be cultivated and amplified

Nurtured
Developed over time through experience

Harder to develop

Organizations understand the need for reskilling to prepare their workforces to respond to constant disruptions.
But more importantly, they need to embrace, nurture, and cultivate enduring human capabilities to have a strategic advantage.
Their people will have the agility required to thrive in an environment of constant disruption.

Challenges with Current Actuarial Development Approaches

Actuarial functions must deliver relevant developmental programs and opportunities to empower their actuaries to build trust and succeed in strategic business advisor roles

Three Pillars for Actuarial Development

	Technical Development	Actuarial Judgement and Business Acumen	Leadership, Influencing, and Communication
Objectives	*Understand the foundational actuarial methodologies, techniques, and professional standards that underly core actuarial work (e.g., reserving, pricing)*	*Gain knowledge and experience to set assumptions, conduct relevant and accurate analyses, and produce meaningful results for stakeholders*	*Ability to communicate actuarial results to non-technical stakeholders, translate findings into advice for strategic business decisions, and lead and develop team members*
Current Development Mechanisms	• Technical series of 10+ standard exams leading to credentials and membership in the CAS, or other actuarial organization • Employer-specific actuarial student training • Periodic, broad based topical trainings and webinars	• Supported learning and on-the-job training from actuarial managers and peers • Rotational programs, formal or informal, that allow broader exposure to business, capabilities, and actuaries	• Enterprise-sponsored leadership programs, typically for hand-selected high performers • Opt-in learning courses and experiences, e.g., business writing, Toastmasters • On-the-job training and feedback on written and oral communications
Common Challenges	• Mismatch of demand and supply in skills development focus areas • On-demand learning catalogues not regularly curated and revitalized	• Exposure to new areas does not follow intentional career development paths • Managers have varying levels of coaching ability • Rotation opportunities limited by availability or logistics	• Lack of availability of programs offered by company • One-size-fits-all versus targeted offerings • Opt-in programs tend to be self-selecting, so not all actuaries get the learning needed

Actuarial development today is often lacking in targeted, focused development of business and leadership capabilities

Actuarial Development Challenges and Actions

Leadership & Teaming: Influencing Business Partners

Company Actions:
- ✓ **Job Shadows:** Provide Actuarial staff opportunities to shadow their business partner counterparts

Individual Actions:
- ✓ **"Change My Mind" -** Actuaries can ask questions of their business partners that could change their perspective

Business Skills: Communication and Storytelling

Company Actions:
- ✓ **Create Development Opportunities**

Individual Actions:
- ✓ **Audience Evaluation**
- ✓ **summarize "so-what" from every communication / presentation**

Capabilities: Leading Teams

Company Actions:
- ✓ **Training on Inclusivity Topics**

Individual Actions:
- ✓ **"Hunching"–** recognize the unique strengths and working styles that individuals bring to the team
- ✓ **Tailor Incentives –** drive desired behaviors through targeted motivational strategies

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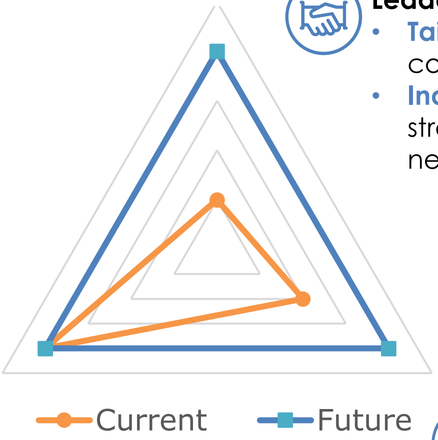
An Enhanced Approach to Actuarial Development

Beyond a common foundation, actuarial leaders can provide tailored developmental pathways to recognize an individual's unique strengths, gaps and career aspirations

Industry leading development programs balance investment in all three development pillars, with flexibility to match development activities to desired career paths and business needs



Leadership, Influencing and Communicating

- **Tailored programs with relevant content** for the cohorts of the actuarial workforce
- **Individualized learning plans** recognizing unique strengths, career ambitions, and coaching needs

Technical Development

- Augment traditional actuarial educational sources with company-specific **learning tied to regularly evaluated business needs and industry trends**

Actuarial Judgement and Business Acumen

- Robust **train-the-trainer** programs
- ***Micro-rotational opportunities*** that provide valuable experiences across the business
- **Formalized apprentice programs** that align actuaries to their desired career paths

Career Paths

The Old Way

Chief Actuary Career Progression
Traditional actuarial career progression was fairly linear and had a single end-point: chief actuary

Traditional Actuarial Roles
Actuaries spent the beginning of their careers in traditional pricing and reserving roles within the Actuarial function

Organizational Silos
Actuaries were relatively siloed from key stakeholders

The New Way

Non-Actuary Actuary
Actuarial talent has an opportunity to bring an actuarial skillset and deep expertise to other parts of the insurance ecosystem

Non-Traditional Rotations
Actuarial staff spend time in rotations outside of the core actuarial functions, increasing their broader business knowledge and building networks for cross-functional engagement

Cross-Functional Engagement
Actuaries engage cross-functionally and directly with business partners through agile teams and strong partnerships

Lifelong Learning

The Old Way

Exams
Early actuarial careers are focused on taking exams with entry level career programs tailored to exams and minimal focus on non-exam development programs

Continuing Education Credits
After exams, actuaries attended webinars and conferences to satisfy continuing education requirements

The New Way

Evolving Exams
Actuarial societies are evolving the content and they way they test required knowledge within their exam programs

Micro-Credentialing
Actuaries are finding additional designations to further their insurance and statistical knowledge, e.g. CPCU, iCAS

Functional Learning
Through company sponsored or external opportunities, e.g. Coursera, actuaries are exploring topics that interest them across a variety of disciplines

Workplace

The Old Way

In-the-Office
Actuaries worked primarily in the office at headquarter locations. Majority of their teams were local to their office

9-5 Schedule
Actuaries had set hours and limited flexibility in where, how, and when their work got done

Company Employment
Actuarial functions solely used full-time, on-shore employees

The New Way

Asynchronous Working
Actuaries are given flexibility to work when and how it works best for them, given achievement of business objectives

Hybrid Co-Location
Actuaries have options for remote, hybrid, and in-office work, co-locating for important interactions where needed

Spectrum of Employment
Actuarial functions utilize a mix of traditional full-time employment and off-shore employees, gig workers, and other flexible talent arrangements

Four Shifts to Consider…

JOBS TO SKILLS

Shift from viewing actuarial roles as static jobs to reimagining actuarial work as a landscape of tasks and skills that dynamically evolves with business priorities

EMPLOYEES TO WORKFORCE ECOSYSTEMS

More diverse and dynamic workforce ecosystems can achieve business objectives more effectively and efficiently but likely require revising management and talent practices

FLEX WORK TO FLEX EVERYTHING

Companies should move from a focus on engaging actuaries for the benefit of the company to creating value for actuaries as whole human beings and key stakeholders

FROM AUTOMATION TO AUGMENTATION

Shift from using technology to substitute actuarial work and replace employees to viewing the role of technology as enabling actuaries and driving human-machine collaboration to optimize strategic outcomes