

Hong Kong Actuaries

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Council & Committee Updates

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Feature Articles

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- We've made it across the line but how can the HK Insurance industry gain value from IFRS 17 and RBC?
- Artificial Intelligence in the insurance industry
- Actuary Interview

Call for Articles or Views for the next issue of Newsletter!

While all articles are welcome, we would especially like to receive articles for the Feature Articles and Knowledge Sharing sections. If you have written any inspiring articles or have read any interesting articles from other actuarial organisation(s), please feel free to let us know. We will try to reprint them in our newsletter. Welcome to email your articles or views at info@actuaries.org.hk.





Message from the Editors

Dear Readers,

Welcome to the second ASHK newsletter for 2024.

On behalf of the Membership and Communications Committee, we are honored to introduce this latest issue. This new release would not have been possible without the tremendous and selfless voluntary contributions of our dedicated Committee members.

We are thrilled to announce an exciting transformation for our flagship publication - the ASHK Newsletter will soon be rebranded as the Magazine. To celebrate this exciting transformation, we invite all ASHK members to participate in our "What's in the name" prize competition. More information can be found in the section of feature articles.

Over the past few months, the actuarial profession in Hong Kong has continued to evolve and adapt to the rapidly changing business landscape. In this edition, we aim to provide you with timely updates, insights, and thought-provoking perspectives on the key trends and developments impacting our industry. Some of the highlights in this newsletter include the sharing of unlocking value from IFRS 17 and RBC in Hong Kong and the key challenges of implementing AI in the insurance industry.

In addition, we're pleased to publish the fifth issue of "Actuary Interview" with you. We're very honoured to interview Piet Maree. He will share his journey from being an actuary to becoming an architect.

Last but not least, you are highly recommended to attend the upcoming events: the ASHK Networking event on 27 August and our flagship event, i.e. Asian Actuarial Conference 2024 on 22 -25 October 2024 – all our events details are nicely summarized with the latest updates in the ASHK website. We intend to bring the experts to you so that you can benefit from their insights while fulfilling your CPD requirement.

Happy reading!

Best Regards, ASHK Newsletter Editorial Team













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"When I grow up," said the ASHK newsletter, "... I want to be a magazine."

For many years now, the ASHK has shared news through our quarterly newsletter. This has included updates from Council and the various committees, market news, details of new members and qualifiers; and it has also included various technical articles covering a range of topics like Covid, RBC and now (increasingly) AI.

But when members read through the dozens of pages each time, and appreciate the effort that goes into this so-called newsletter, often holding on to back-copies as useful reference material, it is clear that this is



more worthy of the label "magazine" that just "newsletter".

And so we've decided to re-brand! From next edition onwards, this will become the "Magazine of the Actuarial Society of Hong Kong".

This aligns with how the ASHK itself has been upgrading in recent years, with the introduction of HK -based exams, for example. A professional magazine for a professional profession!

What's in a name?

We could call our magazine "The Actuary", but that doesn't reflect our uniqueness nor the multicultural nature of our members.

So we're going to hold a competition ... looking for ideas from you as to what we'll call our magazine. And the rules are simple:

- Any member of ASHK can enter (as many times as you want)
- Yes, you can get help from ChatGPT
- The magazine will have both an English and a Chinese name (and they don't have to be related to each other, although they might)
- Suggestions to call it "The Actuary" will be ignored

So put on your thinking caps and email your suggestions to <u>info@actuaries.org.hk</u> by 30th September, Monday. There will be \$150 vouchers for the best submission for each of English and Chinese names.

To get the ball rolling, the Membership & Communications Committee has got a few ideas already ...

English: Actuzine, Actufocus, Actupedia

Chinese: 精誌,精粹,精薈,精通,精品,精明,保紙

- Do you like any of the ideas in particular?
- Do you think it's better if the English & Chinese names match?
- Can you create better wordplay than we could?

Let us know, we look forward to your ideas!

We've made it across the line – but how can the HK Insurance industry gain value from IFRS 17 and RBC?

am sitting here and writing this article on 1 July 2024, the date when Hong Kong's first Risk Based Capital (RBC) regime is officially implemented. This momentous occasion has been a long time coming. In a previous life and quite a number of years ago, I worked with the Office of the Commissioner of Insurance (OCI) to help investigate the kind of RBC regime we should develop for Hong Kong. In the time that followed, then under the guidance of the Insurance Authority (IA), Hong Kong's RBC regime took shape – which leads me back to today's significant milestone.

When we add IFRS 17 into the mix (and even though it's been around for longer, many companies will only recently have completed the first external audits) – it's certainly easy to say that for the Hong Kong insurance industry, this has been a period of tremendous change.

For the intrepid readers of this article – and I am mostly focusing on Actuarial teams and Finance functions here – I would suggest you are in one of around three camps. First, you may have crawled over the line and are struggling to imagine how you can ever get into a 'business as usual' mode for RBC and IFRS 17. Second, you might have reengineered your processes, but each month / quarter may be pretty much full of reporting activities, and precious little time for 'value adding' work.

The holy grail is to join those insurers – are there any? – in the third group. This is the group where Finance teams can quickly and efficiently produce IFRS 17 and RBC numbers, where technology is utilized to cut down process time and manual work, and where Finance professionals actually do the work they are fundamentally paid to do – validate, experience-check, spot the emergence of trends – and add true value to the businesses they work within.

Technology and Data – no more limitations

Even in the last 12 months, we have all seen technology move forwards. And that's before any talk of AI. What I'm focused on here, is the timeless search for efficiency. I think there

genuinely was a time when technology (and its cost) was a limiting factor to actuaries and finance teams in general – when the tools were available to handle high quantities of data efficiently, but the skills needed and the cost to implement were just too high for sustainable investment. But folks, that time – if it ever existed – is over.

There is simply no excuse and no place – in today's world – for mindless hours (and weekends) of data crunching.

From what I have experienced over the recent couple of years, there are two main reasons why I say this. Firstly, our people are better skilled and more equipped than ever. University and actuarial qualifications now bring very strong data skills as standard — which means that the graduates and students in our teams have the necessary skills to overcome the data challenges that exist today. For those companies that are lucky to employ data science professionals too, there is an even greater potential to be unleashed.

Secondly, technology itself is no longer a limiting factor. Costs have come down, accessibility and understanding has gone up. For many companies, you simply don't need to invest in external tech to gain an advantage – I have recently seen several examples of solid actuarial/finance data skills using a straightforward SQL database solution, and tapping directly into source data (no more need for 'IT reports' or lengthy periods waiting for fixed reports to be generated). In one extreme, I have seen a report that used to take 6 weeks to produce, cut down to 2 working days – all through the direct and clever use of source data, automated data flows, and production visually-attractive automated of dashboards.

Of course, it's not possible to change overnight. My point is that the obstacles to change are no longer limiting factors, and that the future really is in your own hands.

Mindset and Value-adding Teamwork – the keys to success

Once we have unlocked the power of slick dataflows, we need to unlock the memories of our actuarial and finance teams. Especially for those teams where data processing has taken up a high proportion of time, we need to bring the focus back to value-adding activities.

And there's no better time! Particularly under IFRS 17 and RBC, there are many new and intuitive data points which deserve to be investigated – to learn new rules of thumb – and to identify trends and areas of insight that are valuable for our businesses.

For Finance teams that have cut through the silos of the past, I can make a clear argument that these will be the most successful teams of the future. To be lived and breathed most effectively, IFRS 17 and RBC need actuaries to work seamlessly with finance professionals and business leaders, for a holistic financial picture to be generated and managed.

One approach that I have seen work well, is to inject a data skillset into finance teams more generally – and to run a finance team model where both actuaries and other finance colleagues with particular skills in data management, drive a more holistic change to the way data is managed. You could extend this model to Finance and IT – and fundamentally, my point is that streamlined data processes are now part of the bedrock of Finance.

We owe it to invest in our teammates

In closing, I remind all readers that actuarial and finance professionals have worked tirelessly to bring IFRS 17 and RBC to reality. Acknowledging this huge effort, and enabling these teams and individuals to truly reap the business benefits of this industry change – would leave a wonderful legacy and platform for future generations of Finance. I wish you good luck!

May I humbly suggest that a cross-industry working party, or some collaboration between ASHK and other Finance bodies in Hong Kong – could look into sharing good practice with a wide audience?



Martin Noble *FASHK*CFO, Zurich Insurance Hong Kong



How insurers can manage the risks of Al and stay ahead of regulatory developments

November 2023



The rapid development of artificial intelligence (AI), including generative AI and machine learning, has brought many advantages for the insurance industry, but has also introduced risks.

Global insurers are now allocating significant resources to implementing AI technology: in the Hong Kong (SAR), for example, a major insurer has invested HK\$20 million in AI to improve its technology and services, which has helped shorten the claims processing time from days to just five minutes¹.

But while the adoption of AI brings many benefits, there are also concerns about areas including data privacy, traceability, bias in algorithms, and potential conflicts of interest. With the rise in AI adoption, understanding how to manage these risks will become a top priority for both regulators and insurers.

"Generative AI is an increasingly hot topic in boardrooms, with leaders looking to better understand its potential and how to implement this technology in their business strategies. The challenge is spending the money in the right places and having the right skills to fully exploit the opportunities it presents."²

Lisa Heneghan

Global Chief Digital Officer, KPMG International

KPMG global surveys show organisations are investing in Al

According to the KPMG 2023 CEO Outlook² and Global Tech Report³, insurers are increasingly embracing emerging technology and AI is considered to be one of the most important emerging technologies.

Buy-in for emerging technology

Increase from 10% to 38%

Technologies positively impacting profitability and performance

Data and Analytics

66%

Al and Automation

64%

Public cloud and Xaas technologies

63%

Common benefits of AI for businesses include its ability to:

Enhance customer engagement



Provide new upsell/cross-sell opportunities



Add new features to existing products



Support new business development



Raise employee satisfaction levels



Al use cases for the insurance sector

According to a KPMG survey of executives from the financial services sector in the US⁴, more organisations will be experimenting with AI in the next 12 months. Respondents plan to focus on:



Fraud detection



Risk management



Chatbots and virtual assistants



Sales and distribution



Al-enabled marketing: By analysing market trends, customer preferences and branding guidelines, Al can help insurers identify leads as well as tailor sales scripts and marketing materials that can better target potential customers.

Optimisation of affordability and suitability assessments: All can enable the provision of comprehensive insights and tailored suggestions on products that align with customers' financial capabilities, life targets, risk tolerance and preferences.



Chatbots improving customer experience: The availability of chatbots can allow insurers to answer clients' inquiries from anywhere and at any time.



Automation of repetitive tasks: Al can automate policy administration processes by extracting relevant information from application forms, validating data and generating policy documents. This helps to save costs and reduce manual errors.

Policy administration

Customisation of policies: By analysing real-time data, AI can help tailor-make policies with optimal costs and values — offering the lowest premium with the maximum coverage — for better customer outcomes.



Precise fraud detection: Al can detect potential claims fraud precisely and efficiently by performing pattern and image analysis, helping to mitigate fraud risks and reduce financial losses.

management

More accurate claims estimations: All algorithms can match claims details against policy coverage, and more efficiently and accurately determine the eligible amount to be claimed and reserved based on policy limits, deductibles and exclusions.



Driving innovation: All can support agile product development by identifying gaps and suggesting new product concepts, with the capability to analyse market trends, customer feedback and other data sources.



Al-powered model risk management: Forecasting accuracy can be improved by using Al for model risk management (e.g. back-testing and model validation) and stress testing, optimising the variable selection process and enabling richer data segmentation.

Ethical and regulatory challenges are key concerns in deploying AI at scale

Although global CEOs are keen to press ahead with their investments in AI, they also recognise that such emerging technologies can introduce risks that should be addressed, according to the KPMG 2023 Global CEO Outlook².

57%

Proportion of respondents who cited ethical challenges as the top concern when it comes to implementing generative AI, followed closely by a lack of regulation

Reacting to the associated risks and challenges, governments and regulators across the world are becoming more proactive in developing requirements and guidelines to govern the use of AI, including in Hong Kong.

Regulatory developments on AI application in Asia

In the **Chinese Mainland**, the Cybersecurity Administration of China (CAC) published the Interim Measures for the Management of Generative AI Services' in July 2023⁵

In India, the Ministry of Electronics and Information Technology indicated in May 2023 that AI regulations will be forthcoming

In **Singapore**, the Monetary Authority of Singapore (MAS) released the Veritas Toolkit version 2.0 in June 2023 to help organisations test the compliance of their Al frameworks⁷

Regulatory development on AI application in Hong Kong

The Hong Kong Monetary Authority (HKMA) issued high-level guiding principles with respect to the use of big data analytics and AI in 2019⁸

The CEO of the Securities and Futures Commission (SFC) highlighted the importance of addressing risks associated with AI models in a speech in June 2023⁶

In the Hong Kong Insurance Authority's (HKIA) May 2023 'Conduct in Focus' publication, the need to mitigate cybersecurity risks, incorporate ethical considerations, address legal implications, and leverage existing guidelines and principles to ensure the responsible and regulated use of AI was emphasised⁹

While the HKIA has not yet issued specific requirements for the use of AI, existing guidelines (GL) already give guidance that is relevant for insurers using AI:

- Per definition in GL20 Cybersecurity¹⁰, it applies to AI based on transmission, storage, use, or processing of data transmitted, stored and retrieved by electronic means
- Corresponding cyber requirements are also included in Section 7 of GL21 Enterprise Risk Management¹¹

The use of AI should therefore be covered in insurance firms' existing cybersecurity strategy and governance framework, and the risks and controls of using AI should be identified, assessed and monitored.

Compliance with these requirements is crucial to the use of AI and helps insurers to have a robust foundation in addressing Hong Kong-specific regulatory challenges.



The International Association of Insurance Supervisors (IAIS) issued a report on fintech development in December 2022¹². It proposed a number of regulatory next steps based on the safe, fair and ethical adoption of AI and machine learning (ML), and the use and governance of data. The report specifically noted the need for regulators to address policies and weaknesses regarding appropriate fairness metrics, including:

Having policies and guidelines in place to support and further safeguard the use of AI and ML, by analysing existing guidance or providing new guidance

Address the lack of maturity in detecting and mitigating discriminatory biases, to assure the appropriate monitoring of ethics and fairness of using AI and ML

Given these proposals from the IAIS as well as other industry developments, it is expected that upcoming regulatory requirements on using AI in the insurance sector will focus on 12:

Risk management and governance

 around the design, use and deployment of Al



Fairness/customer harm — *under* existing regulations



Purpose limitations and data minimisation — *limitations on data* access and use



Getting ahead of regulatory requirements on AI applications

We have outlined ten core principles¹³ that will enable insurance firms to fulfil current requirements on AI and prepare for the likely regulatory developments in the near future. These cover areas including framework, controls, processes and tools for designing, as well as building and deploying AI safely.

1. Fairness

Help enable models to be free from bias and remain equitable

2. Explainability

Help enable the understanding and documentation of AI algorithms

3. Accountability

Help establish mechanisms to drive ownership and responsibility



Safeguard against unauthorised access, prompt injection, data poison and corruption, and other attacks

5. Transparency

Drive responsible disclosure, ensuring stakeholders have a transparent understanding of the AI lifecycle and its ···· (8).... impact.

6. Safety

Safeguard against a negative impact on humans, property and the environment

7. Data integrity

Help embed trust with data quality, governance and enrichment steps

8. Reliability

Help ensure AI systems perform at the desired level of precision and \sim consistency

9. Privacy

Solutions should be designed to comply with applicable privacy, data prote tion laws and regulations

10. Sustainability

Solutions should be designed to be energy efficient, reduce carbon emissions, and support a cleaner environment.

This article was originally published by KPMG in November 2023



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From Building Models to Modelling Buildings



An interview with Piet Maree, Fellow Actuary (and part-time architect)

ASHK: Firstly Piet, can you please tell us about yourself?

A PM: I am a Fellow of the Actuarial Society of South Africa, and I've been living in HK for 4 and a half years now. I've been a specialist health actuary for more than 20 years, and earlier this year I set up an independent health consulting business. This gives me more flexibility to follow my passion one day a week.

Q ASHK: Passion?

A PM: Yes, I'm also a Visiting Scholar at the School of Design at SUSTech in Shenzhen, the Southern University of Science and Technology.

ASHK: Really? How does an actuary end up in architecture and design? At the same time??

A PM: Since I was young, I've had a strong interest in design, primarily architecture, and the study of the impact that our physical environment has on our wellbeing, and on society in general.

ASHK: So you're actively working in this area where architecture and health overlap?

A PM: Correct – I dedicate about a day a week to research in this field.

ASHK: Aren't creative design and technical actuarial science at total odds with each other?

A PM: Not really. In fact, I'm working in an area specifically to use my quantitative actuarial skills to enhance and influence sustainable design and architecture.

ASHK: How did your interest in architecture develop?

PM: My initial exposure came from my father who was an architect. I grew up with an early appreciation for the field through his work. Despite this early influence, he encouraged me to pursue a career in actuarial science, which I did for the first part of my career. However, my interest in architecture never waned, leading me to return to university in my late 20s to study architecture. After completing my undergrad in architecture and working in the industry for a short while, I returned to the actuarial profession, focusing on health insurance, where I have been ever since. It was only recently that I began to engage with architecture again, through my parttime role at SUSTech. This opportunity has allowed me to revisit and integrate my architectural interests from a fresh perspective.

ASHK: What does your research at the School of Design entail?

A PM: It's about how patterns around us impact on our thinking and, consequently, our physical and mental health.

Q ASHK: Interesting! Tell us more.

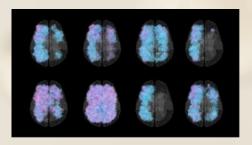
A PM: My research involves evaluating the mathematical and geometric properties of our urban surroundings through image analysis. The goal is to uncover patterns that can be applied in design to enhance wellbeing and efficient cognition. By measuring this, I aim to develop a set of design principles that are grounded in data and can inform more effective architectural practices.

Q ASHK: So it is mathematical!

A PM: Definitely. The key lies in finding the mathematical properties in our surroundings that correlate with better health outcomes. This could pave the way for further research to understand and quantify the existence and direction if any cause-and-effect relationships. In this sense, my actuarial training provided me with valuable mathematical, coding and modelling skills, as well as experience in longitudinal mortality and morbidity analysis.

ASHK: This might seem a bit theoretical to some. Could you provide a day-to-day example?

A PM: We can use image analysis to quantify geometric patterns in images. For example, we might calculate the fractal dimension of a photograph of a street with buildings. We then utilise biomarkers like heart rate variability (HRV) or electroencephalography (EEG) to monitor how these images affect stress in people. For instance, an increase in certain brainwaves is often associated with relaxation and reduced stress. Our hypothesis is that we could one day provide empirical data to support design choices that promote better mental health and overall wellbeing.



ASHK: What is a "fractal dimension"?

A PM: Fractal dimension is a measure used to describe the complexity of an object. Perhaps you've seen the Mandelbrot set? Or imagine a typical coastline seen from above. Unlike traditional geometric shapes (like squares or cubes that have integer number of dimensions, like 2 or 3 respectively), fractals can have non-integer dimensions, (like 1.43, say), which is an objective measurement of an image's "roughness" or level of complexity at different scales.

ASHK: Do you think that one day we will see properties of the built environment being incorporated as a rating factor in insurance policies?

A PM: There are studies that show that some features in buildings, for example, green spaces, can improve wellbeing and reduce stress. However, I believe there's still a lot of work to be done before these factors can be used as rating factors in insurance policies. Initially, the application in the insurance sector will likely focus on illness prevention and improving employee wellbeing only. Maybe over time, these features may be used to assess risk and determine insurance premiums, following the precision we aim for in traditional actuarial risk assessment.

ASHK: Is this where you ultimately see your research heading towards?

A PM: Developing rating factors could be an interesting route to explore, particularly if a strong enough impact on health is demonstrated. However, I think I would prefer focusing on developing guidelines for design. This will ensure that positive features become a standard consideration in all future architectural work. My goal is to help remove health risks from environments, rather than ensuring we can price these risks accurately.

ASHK: You have had some significant changes during your career, from actuarial science, to architecture, and back to being a health actuary. What made you move back into actuarial science?

A PM: My return to actuarial work was partly due to the architectural profession's lack of emphasis on designing in harmony with nature and lack of prioritising the human experience. There was, and still is, an overwhelming tendency, especially in academia, to adhere to abstract theoretical thinking without really questioning what makes "good" architecture. For me, "good" architecture is about creating places that improve the health and wellbeing of those who live in them, aiming to leave them better off than they were before. This is the essence of what I hope to achieve through my research and professional career alike.

ASHK: How do you see your role as health actuary align with this objective?

A PM: As health actuaries, we don't merely aim to quantify risk but also implement risk management strategies to lower overall risk. My work in architecture seeks not only to measure the impact of design on health but also to remove those risks from the environment. By doing so, not only do we improve living conditions but also potentially reduce healthcare costs significantly. In both fields, I hope I can help, even in some small way, to create more sustainable and health-promoting environments.

Joint Regional Seminar - Kevin Lee

2024 Joint Regional Seminar - Hong Kong, 29 May 2024



The Joint Regional Seminar is an event co-organised by the Institute and Faculty of Actuaries and Actuaries Institute Australia and supported by local actuary societies. ASHK successfully hosted the Hong Kong seminar and over 160 attendees convened at the Alexander Hotel.

We were thrilled that a panel of CEOs was able to join us to explore the strategies and best practices to harness the potential of cross-border collaborations, enabling us to thrive in an increasingly interconnected global economy. A big thanks to Clement Lam of Sun Life; Lawrence Lam of Prudential Hong Kong; Wilson Tang of BOC Group Life and Sherry Du, our organising committee member, for moderating.

Artificial intelligence is another transformative force that is revolutionising the actuarial field. The Innovation Panel delved into the practical applications of AI in actuarial practice, exploring its benefits, limitations, and the pivotal role of actuaries in harnessing its potential while ensuring ethical and responsible implementation. It was great to have Allan Wong of Coherent; Eddie Lau of RGA; Jackie Chu of Deloitte; and Chris Tam, our organising committee member, for moderating the panel.

In the realm of par fund management, we recognise the importance of striking a delicate balance between stable returns and long-term sustainability. Nasir Khan and Calvin Kha from Oliver Wyman shared some insight into this. The implementation of IFRS 17 also poses significant challenges and opportunities for the actuarial profession. Andrew Waters and Aya Seng from Moody's presented on what happens after implementation.

A big appreciation must also be given to our sponsors, ConnectedGroup, Conning, Reinsurance Group of America and Swiss Re for their generous support. Click here for the photos of the event.

Joint Regional Seminar - Kevin Lee





Committee member; Clement Lam, CEO from Sun Life Nasir Khan, Senior Principal from Oliver Wyman Hong Kong; Kevin Lee, JRS HK Organising Committee Chair; Lawrence Lam, CEO from Prudential Hong Kong; Wilson Tang, CE from BOC Group Life Assurance

Panellists (from L to R): Sherry Du, JRS HK Organising Speakers (from L to R): Calvin Kha, Senior Manager and





Panellists (from L to R): Christopher Tam, JRS HK Speakers (from L to R): Andrew Waters, Regional Spark, Coherent; Eddie Lau, Head of Operations & Moody's Analytics Strategy Client Digital Solutions, Asia from RGA; Jackie Chu, Partner from Deloitte

Organising Committee; Allan Wong, Head of R&D from Practice Leader, Insurance and Aya Seng, Director from

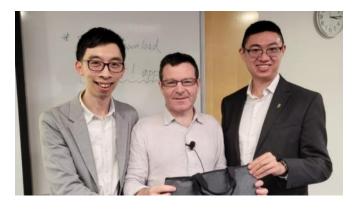
Professional Development Committee - Patrick Au & KP Wat (Dr)

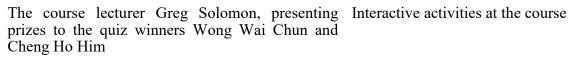
2024 ASHK Certificate Equivalent Course



Over 100 FASHK members have now completed the ASHK Certificate Equivalent Course (Course). The one-day course, which included lectures, quizzes, and group discussions, proved to be extremely popular.

Due to tremendous demand, the Course's April and June intakes were fully booked before the enrolment deadline. There are still a few GI spots available for the course on September 3; if you are interested in enrolling, please contact the ASHK office. More courses are planned for early 2025, please keep a lookout in your inbox.







Professional Development Committee - Patrick Au & KP Wat (Dr)

Below are some FAQ about the ASHK Certificate Equivalent Course.

Why is this course being introduced?

The Insurance Authority (IA) will introduce new requirements for actuaries. All applicants for Long-Term Appointed Actuaries and General Insurance Certifying Actuaries will need to be an FASHK and demonstrate their local market knowledge, this is expected to become effective on 1 July 2024.

ASHK is offering this course to provide another route for grandfathered FASHK (with current valid membership) to demonstrate their knowledge of the local market.

I am a grandfathered FASHK; is there an alternative route to demonstrate my local knowledge?

Yes. You may pass the examinations of the ASHK Certificate in Hong Kong Insurance Markets and Regulations. As the course will only be offered for a limited period, once it is no longer available, this examination will be the only way to demonstrate your local market knowledge in future.

I am based overseas and am not a Hong Kong resident; how can I attend a course?

Applicants are required to provide information from their Hong Kong Identity Card for admission assessment and student records purposes. To see if alternative arrangements can be made, please contact the ASHK office at info@actuaries.org.hk

Professional Matters Committee - Flora Chan & Ronald Tse

ASHK Professionalism Webinar, 3 July 2024

The professionalism webinar provides members with an opportunity to reflect on what it means to be a professional. It is designed to enhance members' awareness of the professional standards that should guide their conduct as actuaries.

In the webinar, two case studies that actuaries may face were presented for members to discuss. (Picking up the Slack - delivering a project with a tight deadline while remaining professional; and Lying A.I.s – facing conflicting interests from the company, individuals, and remaining professional.)

We're thrilled that approximately 200 participants attended the webinar. A big thank you to Ronald Tse, the panel moderator, Flora Chan, Roddy Anderson, and Rockson Leung for leading the discussions.



Panellists (from L to R): Flora Chan, Deputy Chief Actuary of Manulife Financial Asia; Roddy Anderson, PMC member; Rockson Leung, Hong Kong and North Asia CFO of Chubb Life; Ronald Tse, Chief Actuary, Generali Hong Kong

Curriculum Exam Taskforce & Professional Development Committee — Patrick Au & KP Wat (Dr)

2024 June Exam results announcement

Congratulations to the below ASHK members who have passed the ASHK Exam in June 2024:

Core Paper		
AO Leandro Yan Ching	DAVE Mehul	QIU Shuang
BAKER Verne	DONG Stephen	SHIM Benedict Muel Keen
BIZOUARD Yacine	FANG Xuan	SHU Tong, Lucien
CAI Delvin Duo Duo	FANG Shu Yuan, Cathy	TSE Tsz Wah, Valerie
CHAN Tsz Lam	FONG Tin Long	WANG Shaodi, Eddie
CHAN Dominic Jo Yee	HO Chi Yan	WANG Yining
CHAN Kwun Pan	KHAN Nasir	WONG Chi Yee Davey
CHANG Kam On Karen	LAM Wing	WONG Kai Lok Fernando
CHEN Liujia	LEE Cheuk Him	XIE Junfeng
CHEN LuLu	LEONG Chou Chio	YUAN Fang
CHEUNG Kai Pong, Edward	LIAO Laura	ZHANG Yong
CHEW Samantha Shiaw Yun	LIU Barnaby	ZHANG Yan
CHOO En Lun	LIU Weichen	ZHOU Rui
CHOW Ka Yin Kevin	LU Hoi Ching, Catherine	ZHU Yuanli, Karen

Life Insurance Paper	General Insurance Paper	
AO Leandro Yan Ching	BAKER Verne	LIAO Laura
CHAN Dominic Jo Yee	BIZOUARD Yacine	LIU Weichen
CHEN Liujia	CAI Delvin Duo Duo	WONG Kai Lok Fernando
CHEUNG Kai Pong, Edward	CHANG Kam On Karen	ZHANG Yong
HO Chi Yan	CHEN LuLu	CHEN XinYing
LIU Barnaby	CHEW Samantha Shiaw Yun	YEUNG Chi Yan
QIU Shuang	DAVE Mehul	ZHU Yuanli, Karen
SHIM Benedict Muel Keen	DONG Stephen	
SHU Tong, Lucien	FANG Xuan	
WANG Shaodi, Eddie	FANG Shu Yuan, Cathy	
WONG Chi Yee Davey	LAM Wing	
XIE Junfeng	LEE Cheuk Him	
YUAN Fang	LEONG Chou Chio	

Passed the ASHK Examination - What's Next?

Congratulations! Once you have passed the ASHK Examination (both Core Paper and one of the Elective Papers), you may apply for ASHK Fellow membership right away to enjoy the privileges and benefits if you have also fulfilled all the requirements listed on the membership page here. A fellowship certificate will be awarded to you once your membership is activated.

Student Corner - Prepare for Your Actuarial Career: Introduction to Insurance Products in Hong Kong Market



Welcome to this exclusive section prepared for our student members!

In this volume, we will introduce to you different insurance products in the Hong Kong market. We have learnt a lot about calculations of insurance valuation in university education. However, product features is a topic that we rarely encounter.

Here we introduce 5 major types of life insurance products in Hong Kong's flourishing insurance market:

- 1. Life Insurance: It pays proceeds to the beneficiary when the life assured passes away or the policy matures. Life insurance could be further classified into participating or non-participating life insurance.
 - Participating: It pays sum assured, reversionary bonus, and terminal bonus as death benefit. Policyholders could also choose to withdraw money from the accumulated cash value of their policy, usually by means of bonus encashment, policy loan, or reduced paid-up (available cash value be used to purchase insurance for which no further premiums are required).
 - Non-participating: For non-participating term products, there is no cash value accumulation, merely paying sum assured as death benefit but requires a much lower premium. For non-participating endowment products, a guaranteed cash value (e.g., 105% of the total premium paid) would be paid when the policy matures (e.g., 8 years).
 - Hong Kong's insurance market is dominated by participating products with high non-guaranteed bonuses. There is also a trend of higher illustration in view of the fierce market competition. This boosts policy value but increases the company's risk exposure.
- 2. **Annuity**: It turns retirees' savings into life-long streams of regular income. Apart from private schemes developed by different insurance companies, there's also a public scheme issued by HKMC Annuity Limited and spearheaded by the government. The main differences among them are:
 - ♦ **Public Annuity:** The main purpose is to provide basic financial security to all members of society, especially those who may not have sufficient savings or other sources of retirement income.
 - Private Annuity: It generally provides higher retirement income than public annuities, however, the benefit paid is more affected by investment and market conditions.
 - ♦ Policyholders' choices between public and private annuities should depend on personal financial situation and retirement goals.
- 3. **Critical Illness**: It pays proceeds to life assured in case of critical illness diagnosis (such as heart attack, cancer, and stroke). Some have participating features similar to saving-oriented life insurance. The benefit could be either single- or multi-paid.
 - Single-pay: In the early product development stage, the policy would be terminated once the critical illness benefit is paid.
 - ♦ **Multi-pay:** With keen market competition and medical technology advancement in later years, critical illness products become dominated by the multi-pay type, in which claims for disease treatment can be made as long as the benefit limit has not been exhausted.

- 4. **Medical Reimbursement**: It reimburses for outpatient and inpatient medical expenses. In Hong Kong market, there are two major types voluntary health insurance scheme (VHIS) and high-end medical insurance.
 - ♦ VHIS: It's developed for the mass market, with benefit schedules, terms and conditions following the standard plan certified by the Health Bureau.
 - High-end Medical: It targets the affluent segment, providing higher coverage and annual limits. There are also advanced features apart from standard requirements, such as supplementary benefits and value-added services.
- 5. **Investment-linked**: Different from participating products sharing company's profit in the form of bonuses, premiums of investment-linked products would be invested in a portfolio chosen by the policyholder. Linked products are suitable for policyholders who are willing to take higher risks to achieve potentially higher returns. Common types of linked products include investment-linked assurance scheme (ILAS) and protection linked plans (PLP).
 - ♦ **ILAS:** There's limited death protection with death benefit, usually referring to a certain percentage (i.e., 105%) of the policy account value.
 - ♦ **PLP:** It's recently introduced by the Insurance Authority and the industry, which provides higher life protection component and more transparent fee structure.

When you work on quantitative valuation, don't forget to explore more about the qualitative side of insurance – product features!

The article was contributed by Wendy Lai, ASHK Membership & Communications Committee.

EVENTS HIGHLIGHTS

28 May 2024

Joint Regional Seminar — Regional Webinar



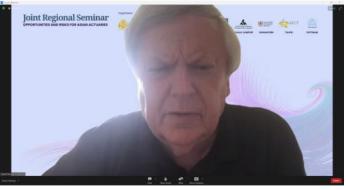
Opening Remarks: David Whittle, President, Actuaries Institute



Closing Remarks: Kalpana Shah, President, Institute and Faculty of Actuaries



Speaker: Choi Ka Hei, Partner, Deloitte



Speaker: David Piesse, CRO, Vulcain AI



Speakers (L to R): Dr. SiNing Zhao, Regional Medical Director, RGA Asia Pacific ; Queenie Choi, Chief Commercial Officer, Asian Markets, RGA



Speakers (L to R): Hengchang Pan, Chief Pricing Actuary APAC, Partner Re; Dr. Peter Lau - Consulting Medical Officer, Partner Re

OTHER UPDATES

Members on the move

We're very proud to share with you the following ASHK members who have advanced to top management positions at their companies.

• Ka Chun Cheung *FASHK*, Chief Executive Officer, Hang Seng Insurance

Congratulations to them for their great achievements in their careers!



UPCOMING EVENTS

27 Aug 2024

ASHK Networking Event – Generative Al for actuaries

Details

27 September 2024

ASHK Certificate exam – Sept diet

Details

3 September 2024

ASHK Certificate Equivalent Course

<u>Details</u>

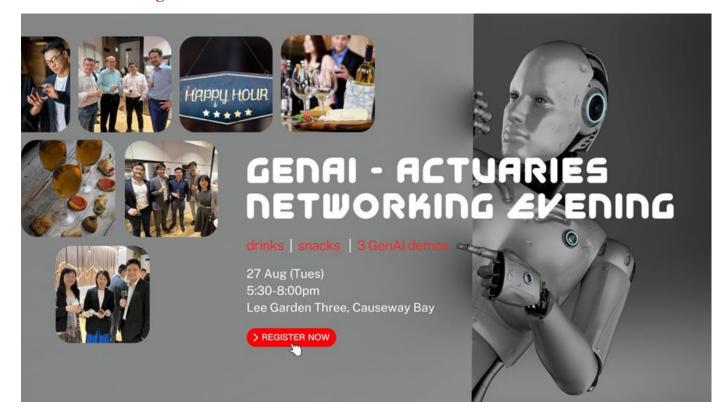
22-25 October 2024

Asian Actuarial Conference

Details

Actuarial Innovation Committee - Iris Lun & Sean Deehan

ASHK Networking Event – Generative AI for actuaries



Come and join ASHK council members to meet new acquaintances and connect with old friends. It's a great chance to build your professional network, develop opportunities, or just grab a drink and some snacks. You will also have the chance to listen to some members who will share their current work in AI.

1. Automated workflow for experience analysis/valuation where cashflow results can be sent to ChatGPT for initial draft of commentary towards the end of the workflow

Roger Chan, WTW

2. Prompt engineering – Tips to get the most out of a GPT

Chadwick Cheung, Oliver Wyman

3. Function calling – Large Language Model working with other software tools

Allan Wong, FWD

Don't miss out on this exciting opportunity! Join us to exchange ideas and connect with the most innovative actuaries and experts in the region.

The venue capacity is limited so registration is first-come-first-served, so Book Now! < here>

Special thanks to WTW for sponsoring the event.

New Members

Associate		
Yacine Denys Francois BIZOUARD	Insurance Authority	Associate Member
Zhen Zhou CHANG	China Pacific Insurance Co. (HK) Ltd.	Associate Member
Liujia CHEN	SCOR Reinsruance	Associate Member
Kwan Lok CHENG	AIA International Ltd.	Associate Member
Lok Chun CHEUNG	AIA International Ltd.	Associate Member
Samantha Shiaw Yun CHEW	Bupa (Asia) Limited	Associate Member
Ka Yin Kevin CHOW	Chubb Life Hong Kong	Associate Member
Xuan FANG	Bank of China Group Insurance Co. Ltd.	Associate Member
Shuyuan FANG	Bershire Hathaway Specialty Insurance	Associate Member
Ping HUANG	Munich Re Beijing Branch	Associate Member
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Cheuk Him LEE	PWC	Associate Member
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Yee Lam LEUNG	AXA HK	Associate Member
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Kai Lok Fernando WONG	KPMG (Advisory) HK Limited	Associate Member
Junfeng XIE	-	Associate Member
Zhe ZHANG	AIA International Ltd.	Associate Member
Yuanli ZHU	Fusure Reinsurance	Associate Member

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Sze Yin CHAN	The University of Hong Kong	University Student Member
Wai Yu CHAN	The University of Hong Kong	University Student Member
Yin Kei CHAN	The University of Hong Kong	University Student Member
Rui CHEN	The University of Hong Kong	University Student Member
Yixuan CHEN	Dalhousie University	University Student Member
Yiyang CHEN	City University of Hong Kong	University Student Member
Kin San CHU	City University of Hong Kong	University Student Member
Yanshu CUI	The Hong Kong Polytechnic University	University Student Member
Jintao DENG	The University of Hong Kong	University Student Member
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Tin Long FONG	The Hong Kong University of Science and Technology	University Student Member
Jiayu FU	Purdue Uinversity	University Student Member
Lok Tin HAU	The University of Hong Kong	University Student Member
Rui HUANG	The University of Hong Kong	University Student Member
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Ling JIANG	Illinois State University	University Student Member
Yui Sing KONG	City University of Hong Kong	University Student Member
Tsz Kong KWONG	The University of Hong Kong	University Student Member
Ying Chu LAM	The University of Hong Kong	University Student Member
Cheuk Ling LAU	The University of Hong Kong	University Student Member
Hui Chung LEUNG	The University of Hong Kong	University Student Member
Xiang LI	City University of Hong Kong	University Student Member
Kwun Yuen LI	The University of Hong Kong	University Student Member

New Members

Student		
Xiang LI	The Hong Kong Polytechnic University	University Student Member
Cheuk Fung Ll	The University of Hong Kong	University Student Member
Daoming LI	The University of Hong Kong	University Student Member
Xiasi LIN	The Hong Kong Polytechnic University	University Student Member
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Haoquan LUO	The Unviersity of Hong Kong	University Student Member
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Vojin RADOVANOVIC	City University of Hong Kong and University of Edinburgh	University Student Member
Meining SHAN	The Hong Kong Polytechnic University	University Student Member
Yee Nok Isaac TSE	The University of Hong Kong	University Student Member
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Yichen ZHANG	The Hong Kong Polytechnic University	University Student Member
Yong ZHANG	Asia Pacific Property & Consulting Co Ltd	Ordinary Student Member
Hengruixiang ZHANG	The University of Hong Kong	University Student Member
Zihan ZHOU	The Hong Kong Polytechnic University	University Student Member
Xingchen ZHOU	University of Toronto	University Student Member

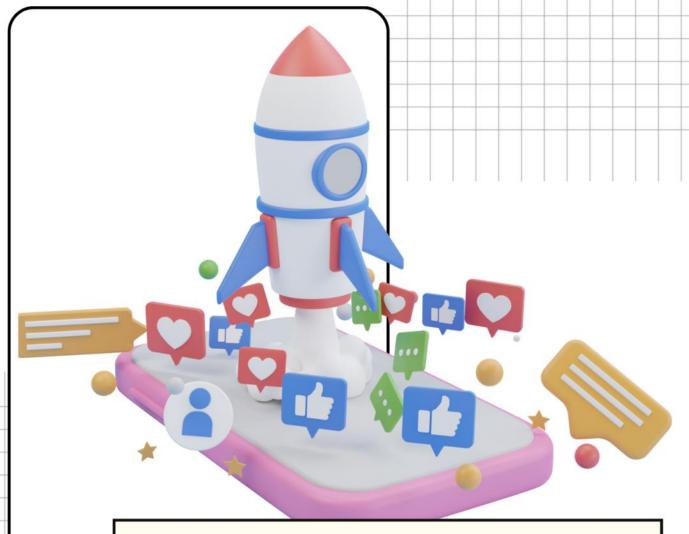
Reinstated Members

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Delvin Duoduo Cai CAI	PwC	Associate Member
Kelvin Ka Chun CHAN	AIA International Ltd	Associate Member
Edward Kai Pong CHEUNG	KPMG	Associate Member
Chi Yan HO	-	Associate Member
Logan HO	AIA International Ltd	Associate Member
Barnaby LIU	SwissRe	Associate Member
Chin Yee WONG	Chubb Life Insurance	Associate Member
Junfeng XIE	-	Associate Member

HSBC	Ordinary Student Member
AIA International Ltd	Ordinary Student Member
AIA International Ltd	Ordinary Student Member
	AIA International Ltd



CORPORATE ADVERTISEMENT



The ASHK will accept corporate advertisements in the ASHK
Newsletter provided that the advertisements do not detract from the
actuarial profession. Acceptance and positioning of advertisement
will be at the editor's discretion.

File Formats

Advertisers have to supply the artworks which should be created in MS Word/PowerPoint/JPEG/PDF formats.

Advertising Rate

One issue

Whole Year (4 issues)

Full page (A4-size)

HK\$6,000

HK\$5,000 each

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ACTUARIAL SOCIETY OF HONG KONG'S
Newsletter

Summer Volume



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