



# The **EMERGING** **AI-POWERED** Digital Workforce in Asia

By **GEORGIO MOSIS, PH.D., M.B.A.**  
Head of Innovative Technologies, AIA Group  
and  
**NORA LI, FSA**  
Marketing Innovation Actuary, AIA Group

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**T**he world's population has doubled in the last 50 years. Humans are continuing to evolve with the help of machines. Since the invention of the abacus around the second century BC, increasingly intelligent technology has assisted people with manual and cognitive work. Its significant legacy in saving us blood, sweat, and tears is apparent, especially in the agricultural and manufacturing revolutions of the 20<sup>th</sup> century. Currently, we are adopting more enterprise software that significantly increases productivity in the routine handling of paperwork, computational tasks, and business processes.

With the rise of an AI-powered digital workforce, we witness the introduction of a new era. The huge potential of such a digital workforce lies in its ability to recognize and visualize patterns in ways that exceed human capabilities. Given appropriate care and training, these machines will support cognitive labor. This will leave people free to progress in unprecedented ways—developing attributes beyond what technology offers, nurturing human relationships, and building a better future.

Within this evolving world and new era, Asia stands unique—in terms of geography as well as culture. As the largest continent—comprising 30 percent of the Earth's land area, Asia has been home to some of the world's oldest and greatest civilizations. Today over 4 billion people live in Asia—more than all the other continents combined. With 60 percent of the world's population, it is no surprise that Asia is seeing a growing movement toward this AI-powered digital workforce, to advance and meet ongoing demands. This article defines the digital workforce, overviews its use in Asia, and outlines possibilities for the insurance industry moving forward in this digital universe.

### **Smart Nations Reimagine the Workforce**

The AI-powered digital workforce transcends the idea of an “age of automation.” It is not simply AI for repetitive tasks and automated labor. It is AI capable of reinforced learning and improvement while interacting with human users. People have the cognitive ability to respond to input

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from our senses—through what we see, touch, hear, smell, and taste. We are equipped to analyze and interpret any subject or object, make judgements based on our experience and knowledge, and respond to or internalize that data. The AI-powered workforce is wired with a similar range of cognitive abilities to provide intellectual resources for a skilled human labor force.

It is already evident that AI-powered tools and applications can replace human-performed tasks. At a basic level, AI exists for tasks that are repetitive, and therefore easily automated. AI-powered tools demonstrate significant value and potential by doing these tasks faster and with fewer errors. However, the more interesting “cognitive” applications build off the same sensory inputs as humans—sight, hearing, etc.—identifying and processing these inputs based on the task.

One example is AI that cognitively internalizes using its sense of “sight” or visual recognition. In 2015 the Chinese Ministry of Public Security built the world's most extensive facial recognition database system. Its cameras measure distances between points on faces—e.g., width of jaw, between the eyes—to create “faceprints.” Because faces display unique codes of individual identity (similar to fingerprints), the system creates an identity database that connects the face to a name. This helps China to deter crime, find lost elderly citizens and children, and send warnings to the authorities. They also use this database for medical bill payments at a number of hospitals. Facial recognition verifies the registered user's ID for payment authorization and confirmation. The error rate for this AI-powered workforce can be as low as 8 out of 1,000 scans.

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In addition to visual perception, the AI-powered workforce assists through hearing and speech. iFlytek is a Chinese AI company that serves over 35 percent of China's population through popular apps such as the *Didi* ride-hailing app. Its voice assistant robot, Xiaoman, greets visitors and answers their questions in hospital lobbies. Xiaoman can assist 600 visitors a day, answering 2,000 questions—offering relief for overworked receptionists who, on average, can only respond to 600 inquiries a day.

Japan—one of the most advanced countries in robotic technologies—offers an example of a digital workforce application based on touch input. Partly in response to an increasing elderly population, they created Paro—a white seal robotic stuffed toy—to give emotional support to patients in hospitals and extended care facilities. This AI-powered workforce is providing animal-assisted therapy without any real pets on site. Paro recently starred in the Netflix TV show, *Master of None* in the episode named “Old People,” as Arnold's grandfather's

robotic pet. This interactive robot has five types of sensors to detect the environment around it, and it remembers how people interact with it. For example, if you repeatedly pet Paro in a certain spot, it will remember the spot and respond favorably to your touch.

The emergence of the AI-powered workforce in Asia is not limited to the superpowers of China and Japan. Take Singapore, for instance. For a country with only 279 square miles, its city planning is some of the best in the world. With limited usable land, detailed urban planning in conjunction with an AI-powered workforce are the key to sustainability and ongoing success. Singapore has embarked on a Smart Nation initiative to improve the quality of life for its citizens through open source and open experiments to produce a wide range of technology-enabled solutions. For a country so compact and heavily urbanized, transformations are not as confined to specific regions as with other larger countries. Singapore and other Asian countries will emerge as “smart” nations in the very near future.





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## Human Versus Machine

As more countries and companies begin to integrate this new AI, it will inevitably lead to the debate about machines replacing people in the workforce. The belief that machines will take over people's jobs has loomed large since the inception of AI over 50 years ago. The inflated expectation in the early days of AI has tempered some, based on the fundamental issues of AI's limitations, and the lack of practical proof.

The beauty of AI lies in its creation allowing for the betterment of our own intricate minds. In 2016, the AI computer program AlphaGo—developed by Alphabet Inc.'s Google DeepMind—beat a legendary master in the 3,000-year-old ancient Chinese board game, Go. Go has long been considered an intellectual challenge for both AI and humans. AlphaGo's victory might lead us to believe that its wisdom surpasses that of humans. However, fundamental issues other than intelligence have yet to convince us to accept AI beyond its hitherto narrow applications.

We see the limitations of AI, for instance, in self-driving cars. While multiple car manufacturers have rolled out auto-pilot functions—with the claim that the AI technology reduces accidents—Elon Musk of Tesla claims that autopilot will never really be perfect. We see fatal accidents due to AI's mistakes in delivering correct responses. AI in autonomous cars still lacks certain "human" instincts, such as perception of surroundings, making correct predictions, and planned reaction time. In order to integrate into our driving systems, they will need to learn how to be "assertive" without being "aggressive."

There is an influx of intelligent solutions where AI solves old problems in new ways. Data, advancements in computing power, and the Internet of Things give rise to the concept of digital twins. This refers to virtual replicas of patients that possess identical physiological and biometric qualities to their human counterparts. Using a digital twin, health professionals can virtually test medications and tailor more effective care by anticipating the varied responses of the individual patient.

Rather than seeing the problem as human versus machine, we should reimagine the solution and

incorporate the digital workforce in a meaningful way, to understand and solve complex problems.

## AI in Insurance

How might this digital workforce benefit the world of financial services? The aggregated tasks done by AI-powered tools have produced increasingly higher output and greater contributions. If these tools were not available, companies would need to hire more people to yield a similar level of productivity. Bots have taken over some tasks that may have required additional full-time employees—for example, the rise of digital avatars, chatbots, and other forms of user communication in order to extend customer service around the clock.

In the insurance industry in Asia, we focus our efforts on enhancing primary process efficiency and improving customer engagement with the help of this emerging digital workforce. As with other applications outside the industry, we initially assign this digital workforce the simple repetitive tasks, and then slowly build it up to cultivate relationships of trust with our customers and business partners. We are training the AI-powered digital workforce to make decisions and subsequently transfer its knowledge not only to consumers, but also to others in the workplace.

Currently, this digital workforce exists in the form of virtual assistants, enablers, and connectors throughout multiple countries across Asia, 24/7. Their contribution reduces traffic in service centers and increases the productivity of human agents, query capacities, and distribution bandwidths. In view of the increasing demand for speed, accuracy, service, and security in a growing market, financial services companies need to strategize about operational resources. Rather than investing in clunky legacy system upgrades that offer only piecemeal improvements, companies should focus on the digital workforce—one that will continually learn from the experiences of each individual company, and deliver specific solutions based on the needs of that company.

## Giving AI the Human Touch

When we augment the human workforce with AI capabilities, we reap the benefits of fusion skills—a blend of

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human and machine talents that are more efficient and effective. At the center of this is the way we use data. Fusion skills allow people in the workforce to acquire, analyze, and utilize data for better decision making.

As we look to the future, and train this digital workforce, maintaining human interaction is essential. AI-powered tools learn from people's existing talents and provide advanced analytics for supervised actions. This allows talented people to focus on transforming into the experts who in turn train the digital workforce. The insurance industry in Asia serves the needs of the largest population on earth. Handing off not only the repetitive tasks, but also the cognitive ones, to an AI-empowered workforce gives people more opportunity to build better communication and trusted relationships with customers. AI will always need the human touch.

In this new era of the digital workforce, people will have the privilege to grow and take on complicated tasks that require critical thinking and further development of social skills. These skills make us unique, and allow us to contribute differently from virtual systems. We will no longer measure productivity linearly, against service turnover, but in relation to intellectual utilization and creativity. Inexorably, humans will continue to advance through the reimagining, redesigning, and reengineering of the status quo. 🌐



## AIA — Proving the Power of the Digital Workforce

For its initiative and ongoing progress with the AI-powered digital workforce, AIA Group recently received the Celent Model Insurer of the Year award. The Celent Model Insurer is awarded for best practices of technology usage in areas critical to success in insurance. The initiative, titled *AIA Digital Workforce*, will be featured in an upcoming Celent report dedicated to their project.



**Georgio Mosis, Ph.D., M.B.A.**—Head of Innovative Technologies at AIA Group—spearheads digital transformation while adopting transformation technologies such as AI, blockchain, and cognitive computing. He leads an multidisciplinary innovation team focusing on making business impact through transformational solutions.

Prior to AIA, Dr. Mosis was Head of Innovation Management Asia for RGA, working with Asian business units and the RGA global network. He was part of the founding team of RGAX in Asia, and RGA's InsurTech business model for Reinsurance.

Dr. Mosis also worked for more than a decade at Philips Group Innovation as an inventor, pioneer, and innovator turning HealthTech ideas into market implementations in Europe, the United States, and Asia.

Dr. Mosis is a clinical epidemiologist, Health Informatics specialist, and innovation ecosystem leader of cross-functional and cross-industry teams creating innovative solutions at the intersection of health, insurance, and transformational technologies.



**Nora Li, FSA** works as an Innovation Actuary at AIA Group. Her experience in various life, health, and employee benefit insurance functions as an actuary enables her to easily understand and work to solve problems, specifically now with data scientists using AI and blockchain. She is a

Council member of the Actuarial Society of Hong Kong. She is the chairperson for the Professional Development Committee and the Exam Taskforce, responsible for the development of the Hong Kong's first local actuarial exam specifically on its market landscape. She actively participates in promoting the exams, lobbying with the Hong Kong Insurance Authority, and writing the exams. She can be reached at [nora.li@aia.com](mailto:nora.li@aia.com).

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