



The Role of Wearables and Digital Health Engagement in Insurance

SAS Health & Retirement Conference 2017

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AGENDA

The background image shows the silhouettes of four business professionals in a modern office. Two men are shaking hands on the left, while another man stands in the center talking on a mobile phone. A woman is partially visible on the right. They are standing on a reflective floor, and their reflections are clearly visible. In the background, there are large windows looking out onto a city skyline with several skyscrapers under a bright sky.

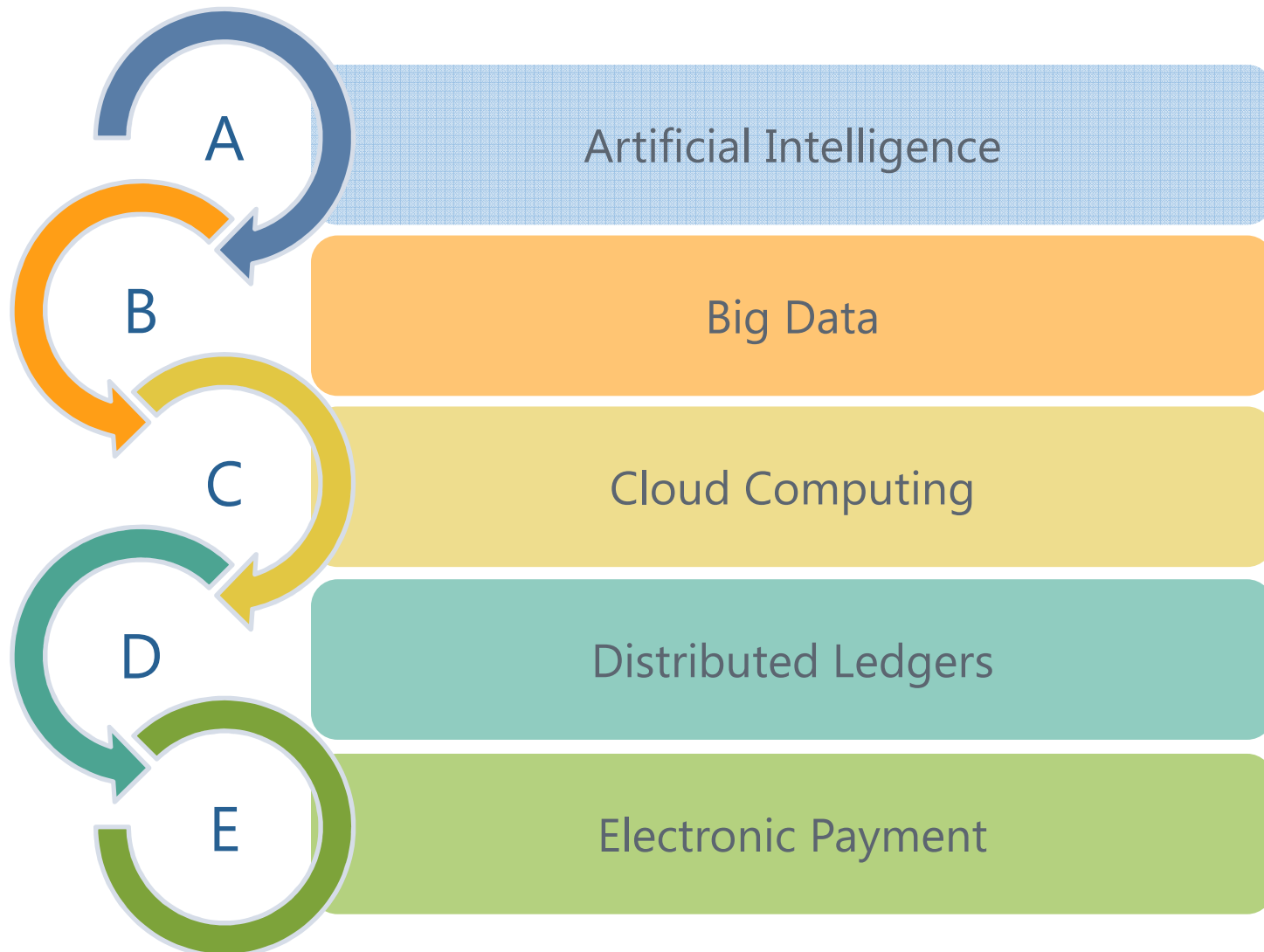
01 Our Digital World

02 Aging Singapore Population

03 Managing Health Insurance

04 Role of Wearables and Digital Health Engagement

The “A-E” of today’s digital world



InsurTech: 'Kodak moment' looming for non-digital insurance players



By Ahmad Zaki | 27 Apr 2017



"Insurance is approaching its 'Kodak' moment," said Mr George Kesselman, founder of InsurTech Asia, a vehicle created to drive positive impact through the much needed changes in insurance, focused on Asia. "Change is coming and it's coming quickly."

Speaking on the first day yesterday at the inaugural Asia InsurTech Summit in Singapore, Mr Kesselman opened the day's proceedings by urging the insurance industry to not let tradition block the future of the industry or otherwise it would go the way of Kodak or the London taxi service. While it is an accepted fact that InsurTech start-ups will lead the way in innovation and finding the value proposition to the customer, the incumbent insurer is still vital to the future success of the industry.

FUTURE OF INSURANCE

Blockchain adoption will strengthen

03 TIME TO BLOW AWAY THE DUST AND COBWEBS

Insurers are at last shedding their staid image and embracing change

04 TRACK DRIVERS TO CUT POLICY COSTS

Will consumers buy products based on the Internet of things?

10 IMPROV AND SEI

Techno Improv



Machines assess risk and detect fraud

Machines that learn from data have the potential to transform insurance processes and counter fraud

MACHINE-LEARNING GIVEWAY

A formal branch of artificial intelligence, machine-learning builds systems that learn directly from the data they are fed and effectively program themselves to analyse that data and make accurate predictions. Having already helped



MOVING WITH THE TIMES: WHY LIFE INSURERS MUST ADAPT

Insurers must harness technology to offer customers more and better insurance options, says **Ross Campbell**, chief underwriter of the Life-Health Research and Development Unit at Gen Re

Gen Re.

The insurance industry is not the only business to struggle with understanding its data. But the sheer volume of information hitting insurers' desktops on a daily basis means it cannot ignore the importance of acting now to embrace the latest technology in order to get to grips with the issue.

Disruption and innovation will also establish business models reliably. We understand this since reinsurance was itself born out of innovation. As specialist product providers and managers of biometric risk, Gen Re makes a significant contribution to the structure of today's global reinsurance markets. We recognise the way we go about things must fit the times.

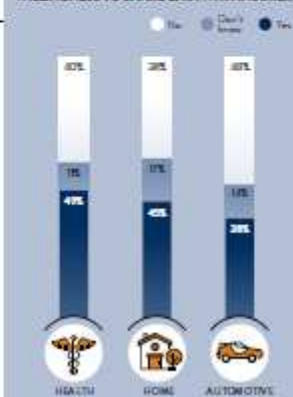
Life insurers will soon find themselves in a technological-shaped future that is customer-centric. Life insurance is not a simple transaction which perhaps explains why so many don't bother with it. However, if the industry makes better use of technology, it will make life insurance accessible for large numbers of people who have none or too little

“If the industry makes better use of technology, it will make life insurance accessible for large numbers of people who have none or too little

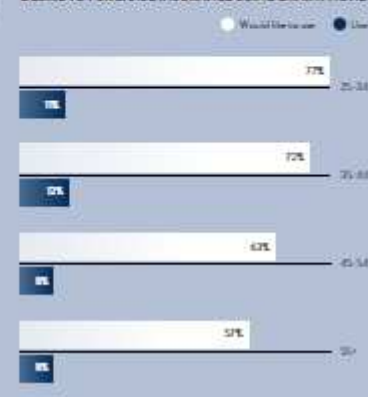
stay relevant. How we behave and interact with people must give customers easier access, greater transparency, and more integrated and flexible solutions. Customer experience and behavioural economics play a role. Among other things, this means working with modern customers' demands for products that are geared around their preferences and how they live their lives.

For example, we recognise fitness wearables have a part to play in maintaining good health. It's also an

WILLINGNESS TO SHARE DATA WITH INSURER



DESIRE TO PURCHASE INSURANCE USING SMARTPHONE



Source: Gen Re and Deloitte Center of Insurance Innovation (October 2015)

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Enhancing Custom

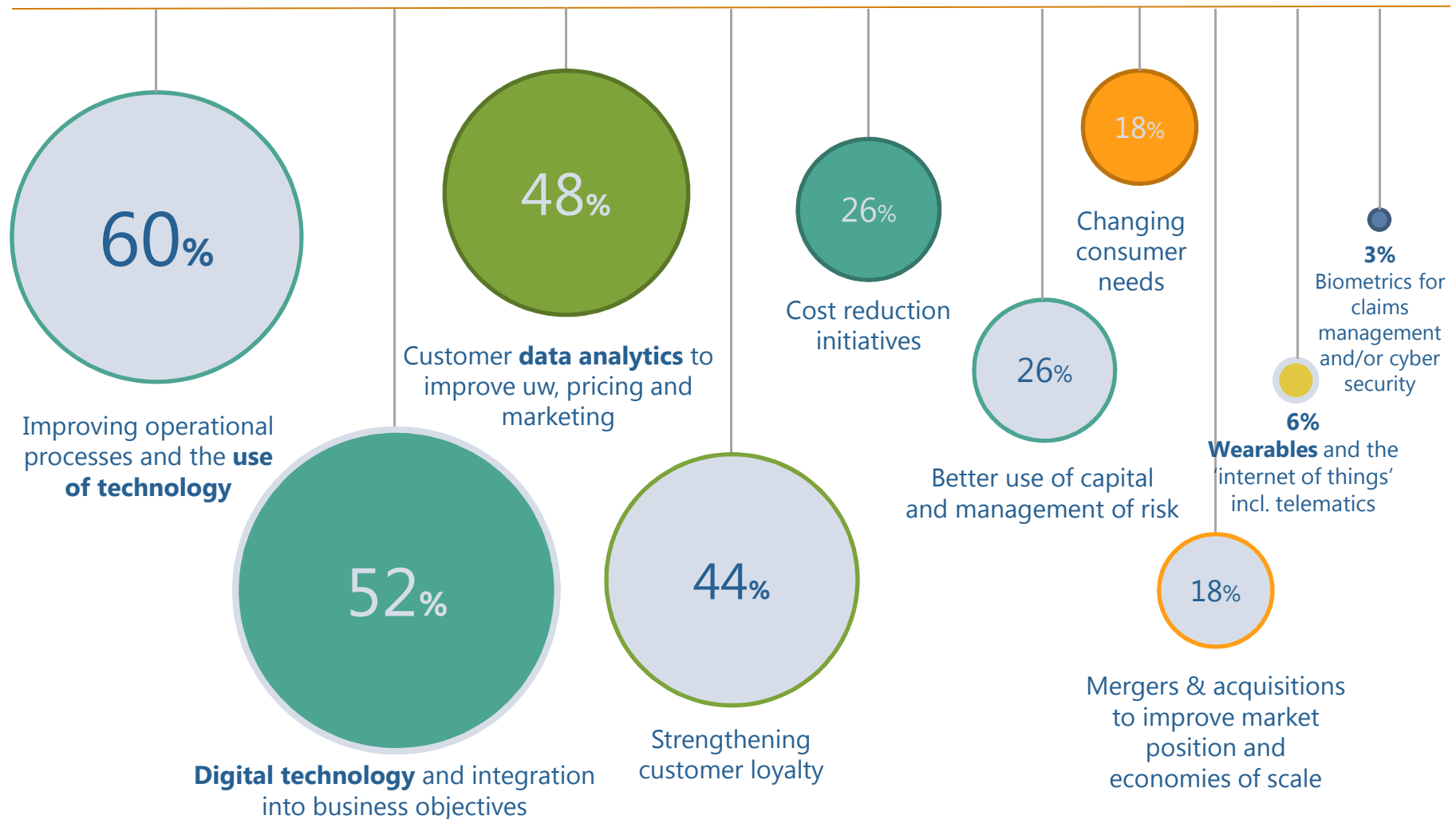
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Biggest opportunities in the next 2 years?



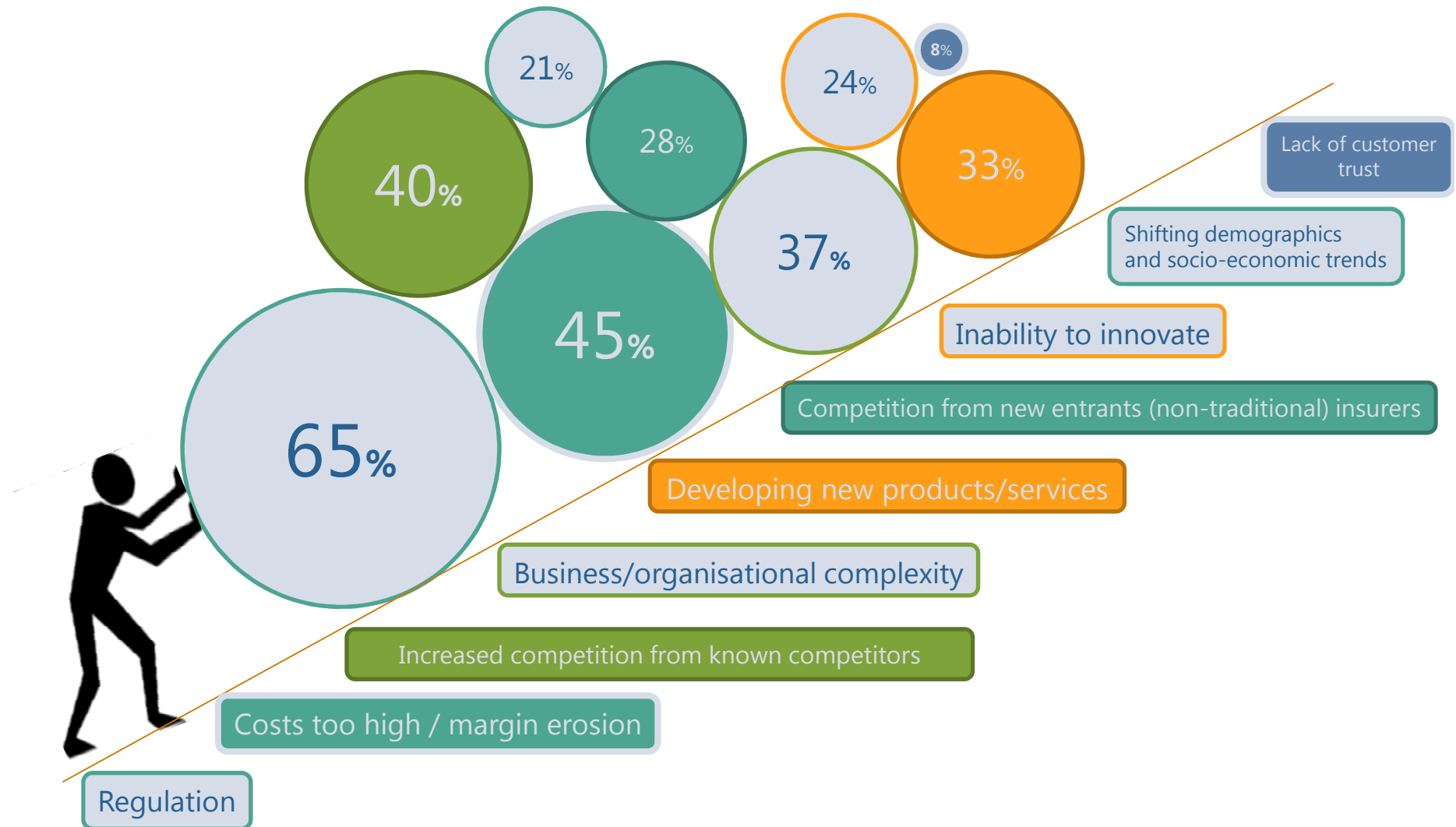
Source: A new world of opportunity, KPMG. 280 insurers world-wide; 25% L/H, 29% Composite, 23% P&C, 23% Other



Biggest challenges in the next 2 years?



Source: A new world of opportunity, KPMG. 280 insurers world-wide; 25% L/H, 29% Composite, 23% P&C, 23% Other

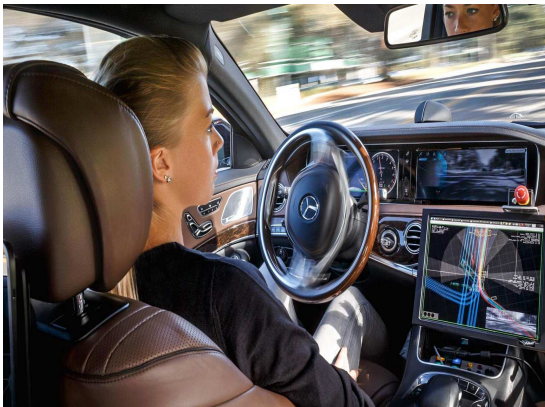


Need to transform



Fixing existing inefficiencies is **not** disruptive innovation

Risks are changing



Customers are changing



They have the answer



Transformation through entire organisation....



Reimagine and digitize entire customer journey

Digitisation and value deliverables



- **New** digital products (or **new** channels or **new** target segments)
- Digital marketing (high-quality **prospects**)
- Transforming **digital shopping experience** (also enable “advisor of the future”)
- Transforming pricing through **analytics**
- Creating on-demand **personalised products**
- Creating **frictionless** uw **process**
- **Seamless enrollment** process through partner connectivity
- **Omni-channel servicing** capabilities
- Accelerating **data-driven claims management**
- Building **predictive analytics** for up-selling and retention management

Based on: McKinsey & Company



Disrupt, be disrupted or partner

- Insurance platforms
 - **Bima** (microinsurance), PAYG life insurance, 24 million customers
 - **Datebao** (health insurance), digital offering with external health management, 7 million customers
- Customer retention & wellbeing
 - **Babylon Health** (video access to doctors)
 - **Optalitix** (IT solutions for customer retention)
 - **Yuanjian** (management of diseases)
- Wearables
 - **dacadoo** (mobile technology, gamification and big data)
 - **Fitsense** (data analytics to personalise insurance)
- Biological age
 - **Haola**
 - **Mediage** (> 2 million customers)
- Claims
 - **Monsenso** (for mental health patients)
 - **Precire** (speech analysis to verify level of motivation)
- Other
 - **Consent** (codify data –sharing)

Embracing Digital in Insurance Sales in China



众安保险

ZhongAn Insurance

Alipay launches free health insurance service for users

Life insurers will soon find themselves in a technological-shaped future that is customer-centric.

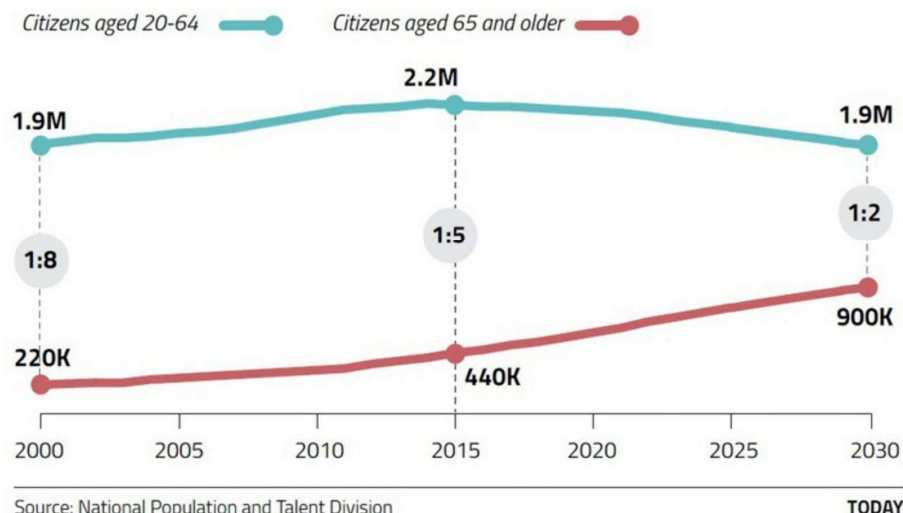


How we behave and interact with people must give customers
easier access, greater transparency,
and more integrated and flexible solutions

Singapore feeling impact of rapidly ageing population



Number of working-age citizens has peaked



Source: Today, published 1 July 2015

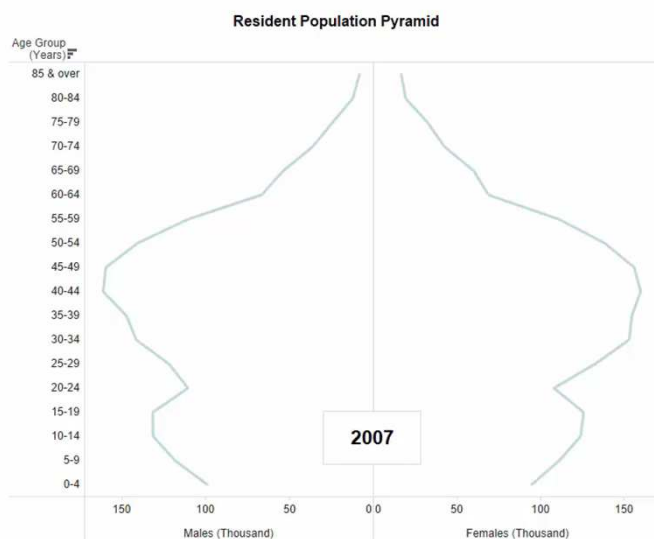
SINGAPORE — Stressing how demographics would define the country's destiny, Prime Minister Lee Hsien Loong said yesterday that the ageing population would cause profound problems for the country and that the impact is already being felt today.

Speaking at the seventh annual Ho Rih Kwa lecture organised by the Singapore Management University, Mr Lee said: "Based on trends, if we project into 2050, even with immigration, the population pyramid will be inverted ... We are going to be growing old faster than any society in the world."

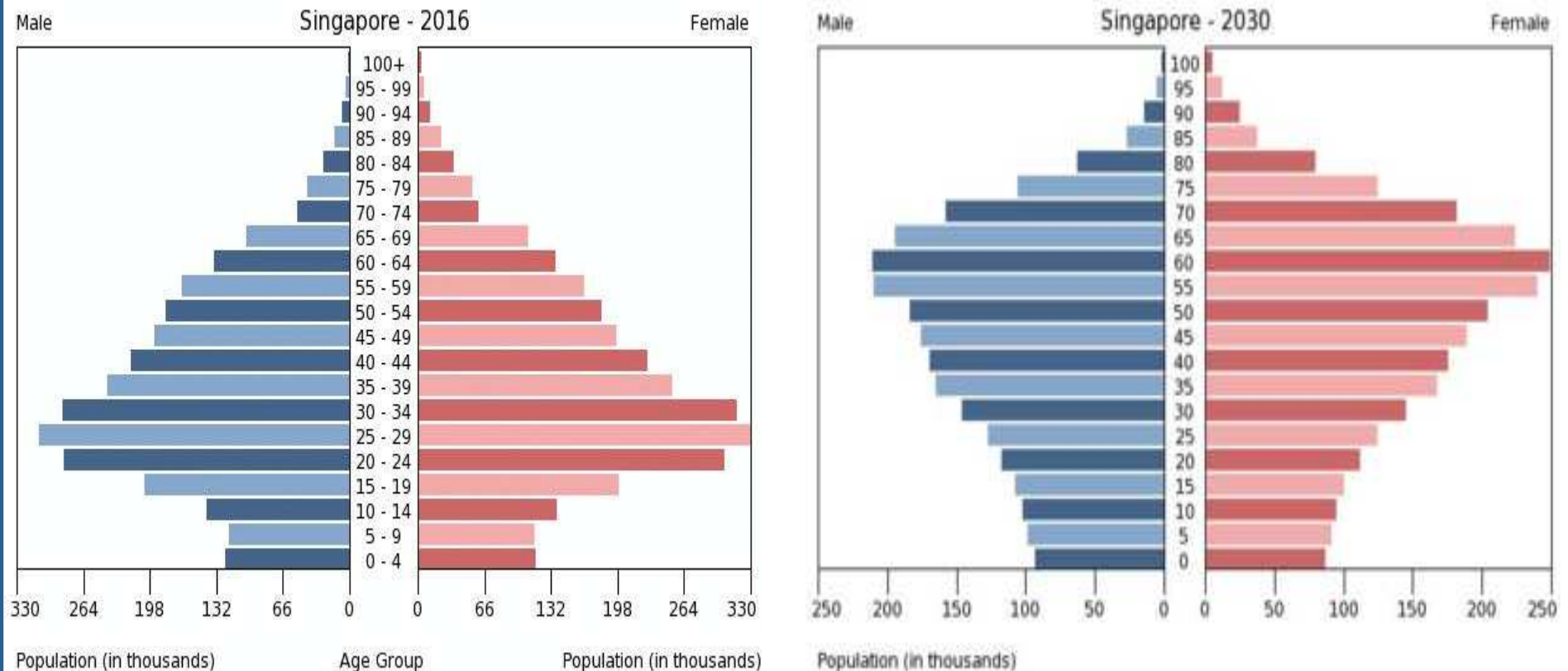
He added: "Who will pay the taxes, to spend on whom? How do we keep (the economy) prosperous, vibrant and forward looking? Who will man the Singapore Armed Forces and defend us? We can't be the Dad's Army."

Mr Lee noted that the Republic had enjoyed "favourable" demographics for the past five decades, with a post-war baby boom. Fortunately, the nation was able to educate the baby boomers, create enough jobs for them and make them "valuable assets" contributing to Singapore, he said.

"Had we not been able to do that, they might have ended up (as) migrant workers abroad, working in tough jobs with low wages, because the alternative of staying at home was even worse."



Singapore ageing population



- Proportion of resident age 65 years and older has increased from 8.5% in 2007 to 13% in 2017
- Old-age support ratio falling from 7.7 in 2007 to 5.1 in 2017

Source: http://www.indexmundi.com/singapore/age_structure.html
Statistics Singapore – Population trends

Aging – the good, the bad, the evil



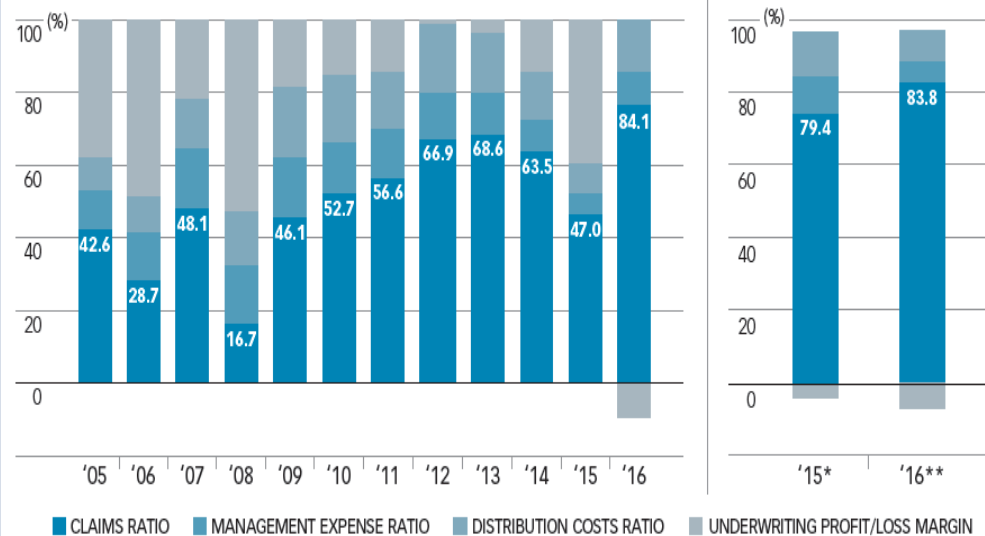
- Increasing life expectancy
 - WHO: Singapore 3rd in the world for life expectancy
 - Average life expectancy 83.1 years (Japan 83.7 years, Switzerland 83.4 years)
 - Female: 86.1 years, Male: 80.1 years
 - Source: World Health Statistics 2016, WHO
- Healthy life expectancy
 - Singapore 73.9 years (Japan 74.9 years, South Korea 73.2 years)
- Reducing birth rate
- Increase dependency ratio
- Increasing demand for services such as healthcare

Six IP insurers stung by underwriting losses as claims surge

WED, SEP 06, 2017 - 5:50 AM

Industry's combined ratios

IP insurers face rising claims



Note: 2008 ratios were distorted by a large reinsurance item in Income's filings, 2015 ratios were distorted by a large reinsurance item in AIA's filings and 2016 ratios include AXA, which started sales in May

*2015 ratios excluding AIA **2016 ratios excluding AIA and AXA

Faint pulse

IP underwriting profits/losses (\$m)

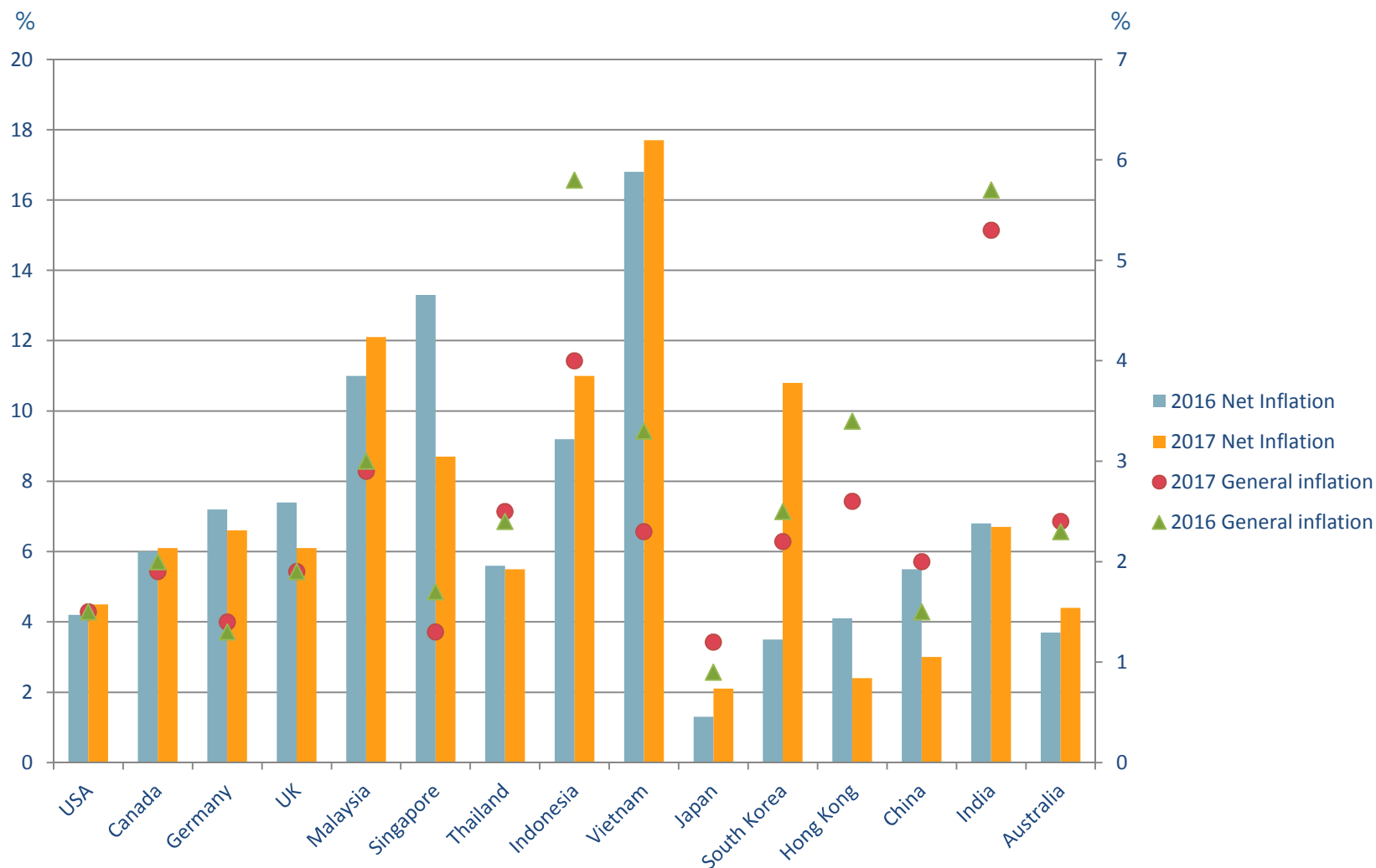
YEAR	AIA	AVIVA	AXA	GREAT EASTERN	INCOME	PRUDENTIAL
2005	55.9	-0.1	-	2.8	14.6	0.2
2006	66.5	5.2	-	5.2	18.3	0.6
2007	39.9	4.8	-	6.6	-15.7	6.6
2008	36.4	0.3	-	10.8	69.2*	11.8
2009	46.9	0.4	-	-2	6.2	2
2010	34.3	-8.6	-	21.2	9.9	1.6
2011	28	-7.2	-	17.5	9.6	17.2
2012	11.6	-8.6	-	-6.2	-5.7	14.9
2013	41.8	-26.4	-	-0.04	-0.5	11.1
2014	142.1	-5.2	-	-3.9	4.9	6.2
2015	700.5*	-10.5	-	11.8	-14	-12.3
2016	-29.2	-7.3	-5.1	-11.5	-26.8	-18.7

*Income's 2008 spike in profit was distorted by a large reinsurance item, while AIA's was distorted in 2015

Note: AXA only started selling IPs and riders in May 2016

Source: The Business Times, 6 September 2017

Healthcare costs continue to increase faster than inflation



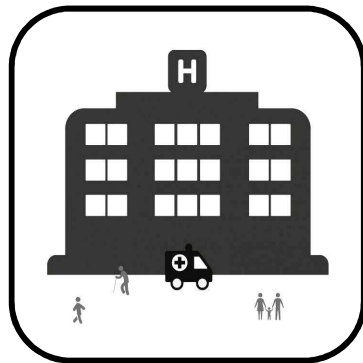
Source: 2017 Global Medical Trend Rates, Aon Hewitt

The Four-Way Game: Who's in it?



Health Insurance

Healthcare Providers



Insured



Insurance Company



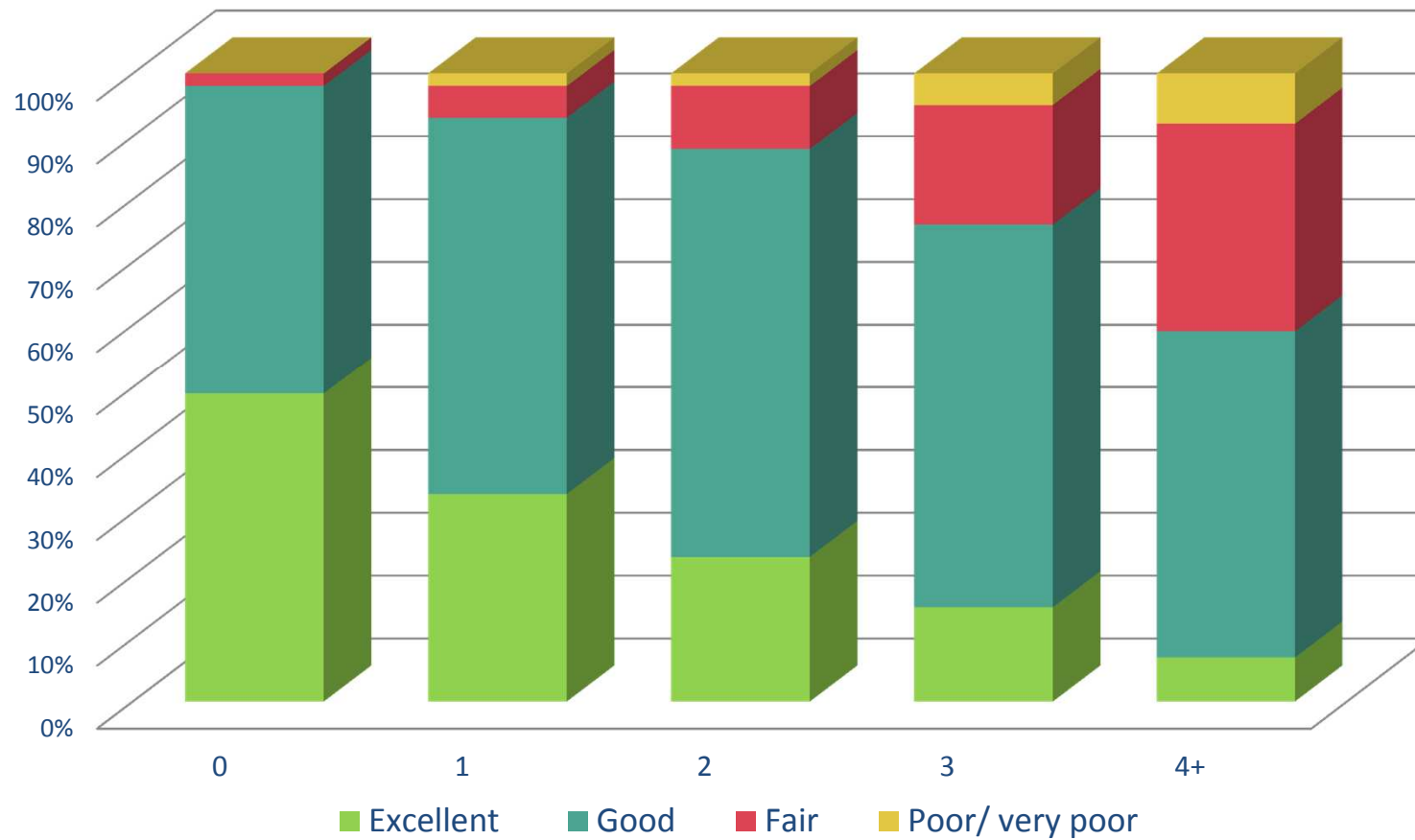
Agents



How would you rate your health?



Correlation between perception of health and risk factor prevalence



Source: Britain's Healthiest Workplace

Encourage responsible (healthy) behaviour

The “nudge” theory



The empowered and informed customer of the ~~future~~ today !

Personalised medical care

Electronic health records

Consumer genetics tests / genomics in medicine

Everyday health data
Exercise, sleep, mood, diet, heart function,...

Social networks
Peer-to-peer insurance pools



Wearable Technology in Wellness Program



Fitbit



Fitbit is a leading manufacturer of activity trackers and wireless-enabled wearable devices that measure data such as the number of steps walked, quality of sleep, and other personal metrics.

AIA Vitality members can enjoy 25% discount off the recommended retail price of selected Fitbit fitness devices.

What You Need to Know

You can enjoy 25% discount off the recommended retail price on selected Fitbit fitness devices purchased through aiavitality.com.sg. This discount does not apply to Fitbit purchases made at retail stores or through any other websites.



Earn up to 100 AIA Vitality Points each day

For workouts tracked using Fitbit

Source: AIA Singapore's Vitality website

Wearable Technology in Health Insurance



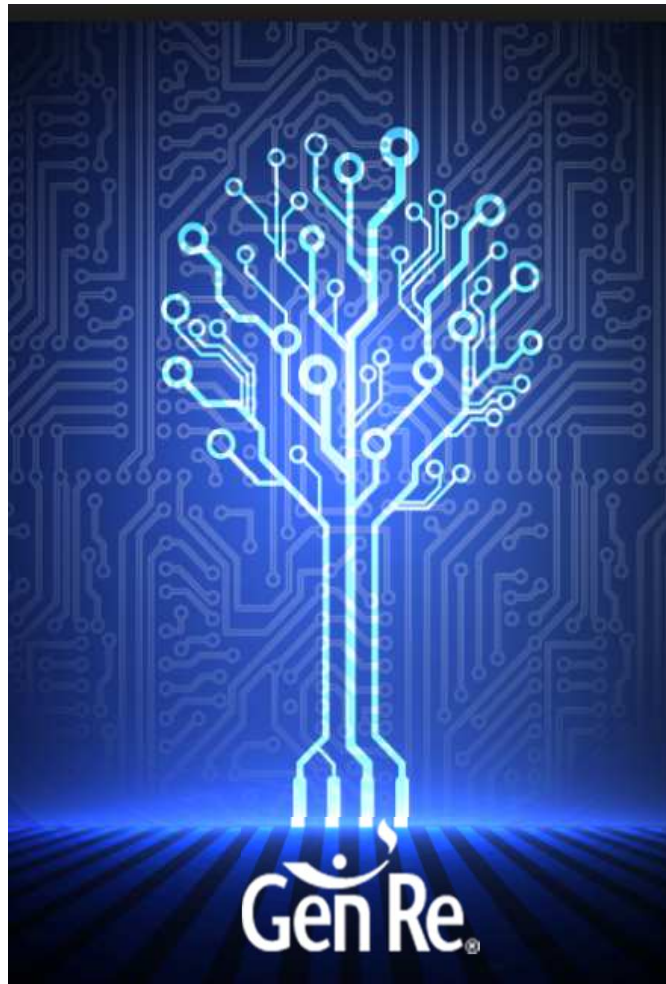
- US Health Insurer (Oscar)
 - Sets daily exercise targets for insureds using fitness tracker synced to an app and giving them Amazon gift vouchers in return

Sync your steps with the Oscar app and start earning \$1 a day when you meet your daily step goal. You can track your steps using your phone or favorite fitness tracker. Just tap the steps icon in the Oscar app to get started. Once you've reached \$20, cash out for an Amazon code and start shopping. You earned it.

Source: Oscar website



The future of Life & Health insurance



**The future is about offering
choice and
multiple pathways to the
future exist.**

**The one rule to follow is:
Be Fit for Change!**



Thank You

[Irene Ng]
[Irene.ng@genre.com]

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