FINEOS

White Paper

An Industry Perspective

‘Challenge to Change’

Opportunities and Challenges for the Insurance Industry

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Despite the global economic downturn, long term growth forecasts remain optimistic.

Introduction

Over the next decade and beyond, a combination of forces will transform the world as we know it. Global economic advantage is being redistributed and several economic certainties from as recent as 2007 now seem extremely distant. Rising life expectancy is rapidly altering the calculations of product and service providers as well as impacting the face of tomorrow's workforce. Rapidly evolving social attitudes, enabled and at times underpinning technological innovation are changing the needs, wants and expectations of customers and employees alike. As a result, the business landscape and the boundaries of the 'new normal' are being rewritten by intense competition, disruptive and at times enabling technologies and new entrants with surprising business models.

Global Outlook

Despite the global economic downturn, long term growth forecasts remain optimistic, especially for those markets currently termed 'emerging'/ HSBC [1](2011) predicts that by 2050, the emerging world will have increased five-fold and will be larger than the developed world. Indeed by that date, 19 of the top 30 economies by GDP are predicted to be countries that we currently describe as 'emerging'. Developed markets and emerging markets, totaling approximately $26 Trillion and $9 Trillion respectively in 2010, could reach $48 and $55 Trillion by 2050.

However, the issue of future growth contribution needs to be looked at more closely than just the emerging/mature market dichotomy. Some 600 cities are expected to generate 65 percent of global growth to 2020 notes McKinsey.[2] However, the most dramatic story within the City 600 involves just over 440 cities in emerging economies; by 2025, the Emerging 440 will account for close to half of overall growth. As a result of this, even closer market segmentation to the city level will be required in the future, especially when dealing with diverse cities in large emerging economies.

Business Outlook

However, there is ample evidence to suggest some of the world's largest companies are ill prepared for this seismic shift. In 2010, 100 of the world's largest companies headquartered in developed economies derived just 17 percent of their total revenue from emerging markets[3]. However those markets accounted for 36 percent of global GDP and are likely to contribute more than 70 percent of global GDP growth between now and 2025. As a result of this growth, Global Industry Analysts (GIA) forecasts the global insurance industry to grow to $6.1 Trillion by way of insurance premiums by 2015[4]. In addition, McKinsey suggests global insurance assets already total $23 Trillion. As a result of the two speed economic growth and low market penetration in many fast growing economies, non-life insurance premiums to 2021 in emerging markets are foreseen to grow more than twice as fast as in industrialized countries according to Swiss Re[5](2011). Life premiums are also expected to outpace those in industrialized countries. Allianz cites predictions that 25% of the global insurance growth will come from China over the next ten years[6]. Such growth has implicit opportunities but

[1] Source: HSBC, 2011 http://www.research.hsbc.com/midas/Res/RDV?ao=20&key=ej73gSSJVj&n=282364.PDF

[2] Source: McKinsey, 2012 http://www.mckinsey.com/insights/mgi/research/urbanization/urban_world_cities_and_the_rise_of_the_consuming_class

[3] Source: McKinsey, August 2012 http://www.mckinsey.com/features/30_trillion_decathlon

[4] Source: PR Web, 2012 http://www.prweb.com/releases/auto_health_insurance/life_non_life_insurance/prweb9128564.htm

[5] Source: Swiss Re, November 2011 http://www.swissre.com/media/news_releases/nr_20111220_emerging_markets.html

[6] Source: Allianz, reprinted in 4 Traders.com, February 2012 http://www.4-traders.com/ALLIANZ-SE-436843/news/Allianz-SE-Solid-underlying-results-in-difficult-market-environment-14046486/

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challenges are also hinted at. 30% of respondents to a 2012 PwC survey[7] believe new emerging market insurers will move into the developed world to become global insurers whilst 28% foresee truly global markets. Whilst this does not suggest an expectation of an imminent increase in competition, the possibility clearly exists. The uneven distribution of economic growth between the developed and emerging markets creates different scenarios for insurance industry competitive dynamics[8].

'The insurance industry as a whole could become more globalized as countries harmonize regulations, standardize practices and distribute products across borders. This could lead to greater market share for global insurers, as well as economies of scale and scope that drive the globalization of the insurance value chain.

Conversely, twin-track growth and the loss of the developed world's authority in the wake of the financial crisis could result in greater protectionism by countries or regions.

In between these two extremes, developed market insurers could increase their attempts to find growth in emerging markets, and or emerging market players could expand into developed markets for know-how and talent.'

People

Aging is a global phenomenon – China is set to reach one million centenarians before the United States[9]. However, there can be little doubt that it is the developed economies that will age the fastest relative to overall population levels. The UN's medium variant scenario is that the global population will rise from 7 billion at the end of 2011[10] to hit around 7.7 billion in 2020 and 9.3 billion by 2050[11]. However, the Harvard School of Public Health suggests the developed world may only be responsible for 3 percent of this growth[12].

HSBC notes that in the coming decade, average GDP growth should be 1.5 percent higher in the US than in Japan based on the divergent demographic situation alone. India's GDP growth should be more than 2.5 percent higher than Japan's for this reason. To 2050, Japan's workforce could shrink by 37 percent. Malaysia, India, and Indonesia will all see strong growth in their workforce while the US, despite aging, could see an increase of those of working age of some 15 percent or so[13]. Thanks, in part, to this potential demographic dividend, 4.2 billion people could belong to the 'consuming class' by 2025, up from 2.4 billion in 2010[14]. Such growth will create new markets and help fuel several current ones. A report by consultants IHS Automotive forecasts that the global vehicle market will exceed 100m units by 2017 and around 108m in 2020, up 44 percent over 2011 total. China, India and other emerging economies could account for 63 percent of global sales in 2017, up from 58 percent in 2011[15]. Global construction meanwhile could

[7] Source: PwC, 2012 http://www.pwc.com/en_GX/gx/insurance/pdf/insurance-2020-turning-change-into-opportunity.pdf

[8] Source: PwC, 2012 http://www.pwc.com/en_GX/gx/insurance/pdf/insurance-2020-turning-change-into-opportunity.pdf

[9] Source: Economist, 2011 http://www.economist.com/blogs/dailychart/2011/07/demography

[10] Source: Grist, 2011 http://www.grist.org/population/2011-05-03-world-population-projected-to-hit-7-billion-on-oct.-31-says-un

[11] Source: United Nations, Department of Economic and Social Affairs, Population Division (2011): World Population Prospects: The 2010 Revision. Medium Variant Scenario http://esa.un.org/unpd/wpp/unpp/panel_population.htm

[12] Source: International Business Times, 2011 http://www.ibtimes.com/articles/189522/20110729/population-growth-billion-developing-2050.htm

[13] Source: HSBC: The World in 2050: Quantifying the Shift in the Global Economy, January 2011 http://www.research.hsbc.com/midas/Res/RDV?ao=20&key=ej73gSSJVj&n=282364.PDF

[14] Source: McKinsey, August 2012 https://www.mckinseyquarterly.com/Winning_the_30_trillion_decathlon_Going_for_gold_in_emerging_markets_3002

[15] Source: Just Auto, 2012 http://www.just-auto.com/news/global-vehicle-market-to-reach-100m-by-2017_id121301.aspx

Business leaders need to choose partners that will help them to implement the changes effectively over time. It is no longer viable to implement new technologies simply to benefit from short term efficiency gains.

grow by 67 percent from $7.2 trillion in 2010 to $12 trillion by 2020. China, India and the US could account for over half of the predicted $4.8 trillion rise. Seven countries – China, US, India, Indonesia, Canada, Australia and Russia could account for two thirds of growth in global construction to 2020[16]. Such precipitous growth only bodes well for equally dramatic growth in business for all forms of insurance firms.

Technology

Part of the challenge in reaching out to these new consumers will be centered on technology. Personalization and immersive technologies are going to transform the way we view and interact with information and applications. Mobile devices such as tablets and smartphones are expected to become our primary mechanism for internet access and conducting much of our work. Cisco[17](2011) forecasts that by 2015, there will be nearly one mobile device for every person on the planet - and that we'll be creating 26 times as much mobile data traffic as in 2010.

Carsten Bruhn, Executive Vice President, Ricoh Europe[18] says that '...at the heart of this change, a business must make sure its processes connect people with information, enable greater collaboration and encourage knowledge sharing. Business leaders need to choose partners that will help them to implement the changes effectively over time. It is no longer viable to implement new technologies simply to benefit from short term efficiency gains.'

According to estimates by Cisco[19], by 2016 there will be 10 billion mobile Internet devices in use globally by a forecast population of 7.3 billion. Growth in mobile devices is expected to drive smartphone traffic to 50 times the size it is in 2012 by 2016. Indeed, Cisco reported in February 2012 that there will be so much traffic generated between 2015 and 2016 by smartphones, tablets, and laptops that the amount of Internet data movement added for that year alone will be three times the estimated size of the entire mobile Internet in 2012.

Consumerization of IT

Using Q3 2011 sales projections from Gartner on tablets and current PC shipment estimates from IDC, by 2015 the tablet market will be 479 million units and the PC market will be only just ahead at 535 million units[20]. In effect tablets alone are going to have effective parity with PCs in just 3 years. The impacts for marketing and communication channels are clear enough, but one often underreported issue is related to the issue of employee use of technology. An August 2011 IDC survey sponsored by Unisys showed that 40 percent of devices used to access business applications are personally owned, up 10 percentage points from 2010[21]. The cultural implications of this are significant, as JP Rangaswami, chief scientist at BT Group suggests, '...the enterprise has to learn to design for loss of control[22].' More than 40 percent of insurers have no official social media policy, which could result

[16] Source: Oxford Economics, 2011 http://multivu.prnewswire.com/mnr/prne/gcp/47613/

[17] Source Thing, 2011 http://www.thinq.co.uk/2011/2/1/one-mobile-every-person-earth-2015/

[18] Source: Economist Intelligence Unit 2012 http://www.managementthinking.eiu.com/sites/default/files/downloads /EIU_Agent%20of%20change_WEB_FINAL.pdf

[19] Source: Pew Internet, March 2012 http://pewinternet.org/Reports/2012/Future-of-Apps-and-Web/Overview.aspx

[20] Source: ZdNet, October 2011 http://www.zdnet.com/blog/hinchcliffe/the-big-five-it-trends-of-the-next-half-decade-mobile-social-cloud-consumerization-and-big-data/1811

[21] Source: Computer World, August 2011 http://www.computerworld.com/s/article/9219149/Consumerization_of_IT_Lessons_for_enterprise_applications

[22] Source: Internet Evolution, June 2010 http://www.internetevolution.com/author.asp?section_id=466&doc_id=193218

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in compliance risk and limit opportunities to capitalize on technology. Furthermore, a quarter of agents under 40 use LinkedIn to communicate with specific underwriters at their insurers, which is twice as many as those over 40[23]. The need for firms to become social organizations appears compelling. McKinsey suggests that the revenue growth of social businesses is 24 percent higher than less social firms[24].

Social

It is also estimated that widespread business use of social technologies could yield $1.3 trillion per year of new value into the economy[25]. Two-thirds of that value could come from improved social collaboration within or between companies, which will translate into a 20 percent to 25 percent improvement in the productivity of knowledge workers. Interestingly, for professional services, 98 percent of its value could be derived from improved social collaboration within or between companies. Indeed, those with large client facing activities could stand to benefit significantly if they so choose to invest in their human resources and social processes behind them. The industries with the highest percentage of interactive workers have the highest spread of profits per employee.

Forrester Research says the sales of software to run corporate social networks will grow 61 percent per year and be a $6.4 billion business by 2016[26]. Despite this growth Gartner estimates that '...only 25 percent of businesses will routinely use social network analysis to improve performance and productivity through 2015[27].' PwC have posited that social will have a deep impact on how general insurance in particular operates. Changes include:

- Customers predominantly seeking face-to-face interactions with intermediaries
- Distribution disruption, where multiple channels compete for customer interaction and where integrated multichannel interaction is the norm
- Distribution destruction, where customers buy directly from carriers and self-forming groups of customers negotiate bulk purchases from from carriers.

No longer might carriers gather the pool over which we and they share the risk.

Data Growth

Improvements in both will be needed if insurers are to benefit to the fullest extent from the rapid escalation in data production. It is estimated that over 35 Million petabytes of data will be generated by 2020, a 35 fold increase over today's levels[29]. The growth of internet connected devices and sensors, projected to reach 50 billion by 2020, will have a huge impact on availability of real-time information[30]. It is estimated by Celent that over 50% of the top

[23] Source: Insurance Networking, 2011 http://www.insurancenetworking.com/news/novarica-social-media-distribution-channel-josefowicz-30675-1.html

[24] Source: ZdNet, October 2011 http://www.zdnet.com/blog/hinchcliffe/the-big-five-it-trends-of-the-next-half-decade-mobile-social-cloud-consumerization-and-big-data/1811

[25] Source: McKinsey Global Institute pdf, July 2012, 'The Social Economy: Unlocking value and productivity through social technologies.'

[26] Source: USA Today, May 2012 http://www.usatoday.com/money/economy/story/2012-05-14/social-media-economy-companies/55029088/1

[27] Source: Computing, February 2010 http://www.computing.co.uk/ctg/news/1840835/social-networking-replace-email-2014

[28] Source: PWC January 2012: http://www.pwc.com/en_GX/gx/insurance/pdf/insurance-2020-turning-change-into-opportunity.pdf

[29] Source: Forbes, June 2012 http://www.forbes.com/sites/reuvencohen/2012/06/22/a-unstructured-future-for-cloud-computing

[30] Source: PwC, 2012 http://www.pwc.com/en_GX/gx/insurance/pdf/insurance-2020-turning-change-into-opportunity.pdf

[31] Source: Celent, January 2012 http://www.celent.com/reports/telematics-based-insurance-has-its-time-finally-arrived

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UK and US insurers already have a telematics insurance program in place[31]. Big data brings with it the possibility of increasing ROI on such rapidly assembled datasets and may also be able to address business problems that existing techniques have been unable to solve. McKinsey[32] identifies five broad ways in which big data can create value.

1. By making information transparent and usable at much higher frequency.
2. Allowing organizations to collect more accurate and detailed performance information on everything from product inventories to sick days, and therefore expose variability and boost performance.
3. Allowing ever-narrower segmentation of customers.
4. Sophisticated analytics can substantially improve decision-making.
5. Used to improve the development of the next generation of products and services.

Life insurers, such as Aviva in the US, are already testing new ways to predict life expectancy by mining personal information. Looking at 60,000 applicants, Aviva found that a new, predictive modelling system, based partly on consumer-marketing data, was 'persuasive[33].'

Despite the 25 fold increase in data, the number of people available to manage this growth is expected to increase by 1.4 fold[34]. Given the potential bounty for insurers from big data, securing talent pipelines and offering innovative remunerative and benefits packages could become a key part of the organization's strategic outlook.

Allied to big data, which could completely overrun an organization's server capacity is the notion of the cloud. It is expected to grow 19 percent in 2012 alone, growing to a $109 billion industry from a $91 billion market in 2011 says Gartner's Ed Anderson, and by 2016, it's expected to be a $207 billion industry[35]. Reasons for such growth include the perception of increased business agility, vendor choice, and access to next-generation architectures[36]. It is also possible that cloud use could lower the relative cost of technologies such as telematics which could itself be a €50 billion industry by 2020[37].

Work

As a result of these technologies and their social underpinnings, the workplace of tomorrow is likely to differ in a number of key ways. A 2010 Economist Intelligence Unit survey found that by 2020:

- 67 percent of respondents expect a growing proportion of roles to be automated - only 7 percent expect a growing proportion to be staffed;
- 62 percent expect a growing proportion of workers to be contract-based while just 12 percent expect a growing proportion to be permanent staff;
- 61 percent expect a growing proportion of functions to be outsourced against 13 percent that expect a growing proportion to be brought in-house.

[32] Source: McKinsey, May 2011 http://www.mckinsey.com/insights/mgi/research/technology_and_innovation/big_data_the_next_frontier_for_innovation

[33] Source: Wall Street Journal, November 2010 http://online.wsj.com/article/SB10001424052748704646804575620750998072986.html

[34] Source: Forbes, June 2012 http://www.forbes.com/sites/reuvencohen/2012/06/22/a-unstructured-future-for-cloud-computing

[35] Source: CIO, 2012 http://www.cio.in/news/gartner-cloud-putting-crimp-traditional-software-hardware-sales-284692012

[36] Source: ZdNet, October 2011 http://www.zdnet.com/blog/hinchcliffe/the-big-five-it-trends-of-the-next-half-decade-mobile-social-cloud-consumerization-and-big-data/1811

[37] Source: PR Newswire, May 2012 http://www.prnewswire.com/news-releases/global-telematic-insurance-market-to-overtake-50-billion-by-2020-150584575.html

'...the core value that people add is not in the processes that can be automated, but in non-routine processes, uniquely human, analytical or interactive contributions...'

Gartner believes we will witness a gradual "De-routinization" of work, whereby '...the core value that people add is not in the processes that can be automated, but in non-routine processes, uniquely human, analytical or interactive contributions that result in words such as discovery, innovation, teaming, leading, selling and learning[38].' As a result of this and the emergence of a truly global talent pool thanks to advancing communications tools, more possibilities emerge for organizing where and how work is done. For example, If those who wanted to telecommute (about 80 percent) were allowed to do so, businesses in the US could save $124 billion and increase productivity by more than $235 billion[39].

Work swarms, characterized by a flurry of collective activity by anyone and everyone conceivably available and able to add value, represent one such possibility. Ubiquitous connectivity facilitates such swarming but also suggests the emergence of networks of networks, as seen with open collaboration. This necessitates '...a push for more work to occur in both formal and informal relationships across enterprise boundaries, and that has implications for how people work and how IT supports or augments that work[40].' These emerging forms support the notion of an increasingly virtual workplace, while for some the physical place becomes the home, or another third space.

Indeed, internet access, emerging cloud applications, economic turbulence and international competition for jobs have '...created a huge shift toward flexible and location independent work[41].' It is predicted that by 2020, some 40 percent of the US workforce will be contract based while an estimated 83 percent of millennials view freelancing as a part of their career strategy. In a similar way, Virgin Business Media found that 58 percent of people in the UK think the traditional office will be extinct by 2021.

At the same time, the composition of the workforce is set to change. Of the 3.5 billion that comprise the global labor force of 2030, there are predicted to be some 38 to 40 million fewer workers with tertiary education than employers will need. This is equivalent to 13 percent of the demand for such workers. Aging will likely add 360 million older people to the world's pool of those not participating in the labor force, including 38 million college-educated workers, whose skills will already be in short supply[42.]

Insurers of the Future

The ability to add value will be increasingly sought as an employee skill. Professional services are becoming increasingly commoditized because clients increasingly see the outcome of a service as standard[43]. With this, service becomes both the comparative advantage and key driver of business model design. A 2012 global survey of more than 4,000 senior managers by the Economist Intelligence Unit[44] found that the majority (54 percent) favored new business models over new products and services as a source of future competitive advantage. EIU analysts concluded that '...the overall message is clear: how companies do business will often be as, or more, important than what they do.'

[38] Source Upside Learning, November 2010 http://www.upsidelearning.com/blog/index.php/2010/11/08/the-future-of-work-as-gartner-sees-it/

[39] Source: Environmental Leader, July 2010 http://www.environmentalleader.com/2010/07/14/telecommuting-could-save-small-to-mid-sized-u-s-businesses-124b/

[40] Source Upside Learning, November 2010 http://www.upsidelearning.com/blog/index.php/2010/11/08/the-future-of-work-as-gartner-sees-it/

[41] Source: Gigaom, July 2011 http://gigaom.com/collaboration/study-58-of-uk-workers-expect-the-office-to-be-extinct-by-2021/

[42] Source: McKinsey, 2012 http://www.mckinsey.com/Insights/MGI/Research/Labor_Markets/The_world_at_work

[43] Source: Plantes Company, September 2011 http://www.plantescompany.com/blog/business-model-strategy-framework/professional-service-firms-need-business-model-innovation-too/

[44] Source: MIT Sloan Review, 2012 http://sloanreview.mit.edu/the-magazine/2012-spring/53310/creating-value-through-business-model-innovation/

‘…many insurers have taken first steps, such as integrating claims adjuster calendars with those of outside service providers. The most significant improvements, however, are realized when everyone involved in the claims process has immediate access to all information necessary to service the claim.’

In our view, there are three main issues that insurers need to be cognizant of that could help innovate the whole area of claims and of communication to customers more generally. The first is mobility. The current mobile transformation shows little sign of abating, and thus many customers have in essence, invested in both a new sales and service channel. However many organizations’ offerings lag the expectations and norms to which customers now expect.

Collaboration is also important. Accenture[45] (2011) suggests that with mobile apps, ‘…many insurers have taken first steps, such as integrating claims adjuster calendars with those of outside service providers. The most significant improvements, however, are realized when everyone involved in the claims process has immediate access to all information necessary to service the claim.’

With big data looming on many organizations’ horizon, the role of analytics will evolve even beyond its current multiple roles in improving claims processing efficiency and lowering costs. As an underwriting tool and a key part of claims checking, analytics could help define the most successful insurers of tomorrow. Underlying these three main issues is the need to modernize core business systems and processes. Flexibility, personalization and anytime, anywhere access to data will be key in allowing insurers to add value and customers to help shape their experience. This not only suggests a need for standardized data but for insurers to adapt their cultural approach to work. For many, it is this, rather than implementing new technology or ways of working, that will be key as insurers seek to innovate their offerings in the next decade and beyond.

About FINEOS

FINEOS is a market leading provider of core software solutions for Insurance and Government Accident Compensation Insurance. Our flagship product, FINEOS Claims, is the insurance industry’s best-in-class solution for all, Life, Disability, Property & Casualty and Government Compensation Insurance. Established in 1993, the company delivers innovative solutions to a global market and has customers, employees and established bases in North America, Europe, Africa and the Asia Pacific markets. For more information, visit www.FINEOS.com

About David Smith

David is recognized as a leading strategic futurist who combines a 35 year IT and business career with strategic visioning to help organizations better prepare for the future. His career has spanned European and US corporations and he has worked in commercial and financial markets. He recognizes the importance of embracing new business models and technologies as they present themselves and understands the challenges that these present to large corporations in particular.

Before establishing Global Futures and Foresight, an independent futures research firm, he created and ran the Unisys Global Future Forum. Prior to this he was head of strategic marketing for their $2bn global financial services business. He is an international keynote speaker and author of many works on embracing change and the drivers of change. He has advised the UK and European Union governments on strategic investment decisions and recently addressed the European Parliament on the strategic direction they should pursue in leveraging Social Media for economic and jobs growth.

[45] Source: Michael Costonis, Accenture, writing in Insurance Technology, July 2011 http://www.insurancetech.com/claims/231000534