Wider Fields

The South African Experience
What is an actuary?
Exploring the concept in the context of the wider fields

Actuarial Society of South Africa
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Singapore

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President
Actuarial Society of South Africa
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Agenda

1. Introducing the SA Actuarial Profession
2. Why transformation is fundamental
3. Transformation: Are we winning in SA?
4. Taking stock of the profession’s strategic positioning
5. Our path towards the Banking Fellowship
6. Key Drivers
Introducing the South African Actuarial Profession

A brief history

- Some highlights
  - First fellow [FIA] 1883 [130 years]
  - First SA fellow [FFA] 1921
  - Actuarial society 1948 [42 actuaries]
  - Mortality tables 1966
  - Professional conduct 1986
  - AIDS Committee 1987
  - CPD scheme 1996
  - Casualty convention 1998
  - Mentorship programme 2000 [University based]
  - Actuaries on the move 2002 [Immediate success]
  - Education system 2010
  - CERA Awarding Status 2011
  - Hosted International Actuarial Education Seminar in early September 2013
Introducing the South African Actuarial Profession
2013 Snapshot

- Members 2,938
- Fellows 1,049
- Practice areas 10

- Including micro-insurance, ERM and banking
- Life/Pensions 46%
  - A significant number of these are in executive roles [recently recognised as a major wider field]
  - This proportion was 76% just 15 years ago…

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Why transformation is fundamental

○ Critical ingredients
  ○ Seeking diversity …developing 360 degree vision
    ○ Resisting, Tolerating, Managing, Seeking diversity
  ○ Avoiding complacency …staying relevant to changing client needs
    ○ Adapt or die
  ○ Sensitive to change …becoming more “street-wise”
    ○ Keeping abreast of the big picture

○ Key requirements
  ○ Awareness of “the burning platform” set alight by accelerating change
  ○ Developing smart partnerships …being accountable and networked
## Transformation: Are we winning in SA?

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Developing 360 degree vision</strong></td>
<td></td>
<td></td>
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<tr>
<td><em>Fellows</em></td>
<td>408</td>
<td>1 049</td>
</tr>
<tr>
<td>Women</td>
<td>5.9%</td>
<td>20%</td>
</tr>
<tr>
<td>Black</td>
<td>2.2%</td>
<td>15%</td>
</tr>
<tr>
<td><em>African</em></td>
<td>1.2%</td>
<td>5.5%</td>
</tr>
<tr>
<td><strong>Staying relevant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>All members</em></td>
<td>1 064</td>
<td>2 938</td>
</tr>
<tr>
<td>Traditional component</td>
<td>76%</td>
<td>46%*</td>
</tr>
<tr>
<td>Wider fields</td>
<td>24%</td>
<td>54%**</td>
</tr>
<tr>
<td>Banking subcomponent</td>
<td>0.0%</td>
<td>5-6%***</td>
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### Becoming more “street-wise”

- *This is in spite of growing at an average rate of about 4% pa*
- **As a result of a growth rate in excess of 15% pa; 71% of net growth has come from the wider fields**
- ***Fellowship level banking curriculum and exams in late stages of development**
- ****Unprecedented level of member interest and the establishment of 5 different streams, including the Environment, Infrastructure Projects and Private Equity**

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Taking stock: Generic strengths

Never had it so good

- “Best” job
- Top recruits
- Sweet spot: Supply/demand
  - “0%” unemployment
  - High levels of remuneration
  - Substantial capability in quantitative analysis
  - Expertise in risk analysis
Taking stock: Generic weaknesses

Broader requirements becoming hygiene factors

- Business acumen: risk taking, not just risk management
  - Not seen as being business savvy
- People skills: incl. interpersonal communication, negotiation etc.
  - Not perceived as having much EQ
  - Unable to come out of the stratosphere!
- Decision-supporting/decision-making capability
  - Unwilling to commit ourselves beyond our calculations
- Proactive problem-solving attitude
  - Tend to use our specialist knowledge only reactively

…thankfully more anecdotal than real these days

Nevertheless greater effort is required in managing our professional brand
Taking stock: Supply-side threats

Clouds on the horizon

- Less freedom to exercise actuarial judgement
  - More detailed rules and more prescriptive environment
- Lower attractiveness of the profession/s
  - Society is striking back at the poor showing of professions they trusted: Enron, Financial crisis etc.
  - Reduced scope to apply professional judgement
- Diminishing challenge for top talent
  - Increased risk of boredom…
  - …despite the many interesting roles in traditional areas
Taking stock: Demand-side threats

More clouds on the horizon

- Increasing commoditization…
  - …and therefore more extensive automation…
  - …and higher risk of substitution by cheaper resources
- Reduced statutory exclusivism
  - …eg SII reference to Actuarial Function vs Actuary
Taking stock: SA Opportunities

- Addressing systemic risks
  - Understanding, modelling, communicating and managing them

- Trusted advisor role in respect of long term national policy
  - Direct challenges from Cabinet Ministers

- Economy-wide ERM roles
  - …promoting the CERA designation

- Participation in implementing Twin Peaks at The Reserve Bank
  - …around 130-150 new specialist roles in multi-disciplinary teams

- Unexpected demand from high growth sectors
  - Local mobile network company recently said: “Give us 30 actuaries!”

- Data analytics
  - Making sense of Big Data

- Banking
  - Client profitability, product- and value-added services development
A live case study:
South African Actuaries in Retail Banking

- Many “natural” opportunities for actuaries
- Most of these currently relate to risk management - all aspects, including credit, market, liquidity, operational and business risks
- Each has many specific sub-components in which actuarial skills can be applied
- Our members also drive almost all quantitative aspects of the capital management work that takes place across the industry
Actuarial roles in banking: Skill set

**Hard aspects**
- Exceptional quantitative skills
- Working knowledge of the nature and pricing of financial and derivative-based products
- Strong asset-liability modelling expertise

**Soft aspects**
- Very well developed communication and negotiation skills
- Curiosity in seeking opportunities to apply actuarial expertise – we can do much more than we are already doing
- Willingness to prove oneself rather than presume that everyone in the world has an obligation to value actuaries
The road to the Banking Fellowship: High level milestones

2006: Establishment of interest group covering Banking, Finance and ERM
2007: Initial involvement in banking work with the SARB
2011: Separation of Banking and Finance from ERM
2011: First draft of professional framework
2011: Initial work on a proposed Fellowship Exam in Banking
2012: Official endorsement from Council
2014: Completion of curriculum, mock exam papers and logistical infrastructure
2015: Target date for first exam sitting
The Banking Fellowship: Strategy

- **Council**
  - Permitted the formal introduction of a fellowship level banking subject
  - Regularly exercises its mind over the strategic question: “What is an actuary and What do we want an actuary to be?”

- **Banking and Finance Practice Area**
  - Led courageousely and passionately by Zimbabwean-born investment banking actuary
  - Initiation and full ownership of strategy and implementation
  - Responsible for delivery of content

- **Education Board**
  - Broader input into curriculum development and tuition aspects
  - Providing quality control capacity

- **PR, Brand and Media**
  - Drip-feeding the idea of “actuarial sign-off” within banking
  - Positioning actuarial expertise more broadly than in the past
The Banking Fellowship: Implementation

- Banking practitioners
  - Developing the course material
  - *Will provide tuition and mentoring support*
  - *Will mark exam scripts*
  - *Will provide independent external assessment*
  - *Will develop the requisite professional guidance*

- Strategic partnerships
  - Cooperation agreement with the Actuaries Institute of Australia
  - Syllabus development with international expert in banking

- Stakeholder champions
  - Disseminating information about actuarial involvement in banking
  - Generating demand for actuaries in retail banking
  - Networking with the major banking-related stakeholders
  - *Will eventually be making the content available more widely*
Key Drivers

- South African risk-assessing/risk-taking pioneers
  - Dread disease policy
    - Crusader Life
  - AIDS modelling
    - Peter Doyle
  - New generation medical aid plans
    - Adrian Gore

- Constant examination of the question: What is an actuary?
  - “Management” is the biggest wider field for South African actuaries
  - “Have toolbox, will use it” attitude vs “permit-driven” paradigm

- Growing appreciation of quants following the financial crisis

- Elements of good fortune
  - Early involvement with the Reserve Bank [as far back as 2007]
  - Respect from key entrants to wider fields [e.g. 2IC at a “big four” bank]
  - Fortuitous choice in honorary members

- Undoubted access to the brightest and best

- Genuine skills gaps in a developing economy
Why Banking?

- Our driver was employer demand and the threat of losing members…
- There is however a far more compelling strategic motivation in respect of the critical importance of the global banking system:
  - Inherent asset-liability mismatching
  - High speed and huge volume of transactions
  - Largely unquantified cross-subsidisation across portfolios
  - Enormous exposures and intricate connectedness
- Offers the biggest opportunity for growing an actuarial presence in key roles within a single sector and its regulation: in order of probable ease of entry…
  - Balance sheet management
  - Enterprise risk management
  - Product design and pricing
  - Technical troubleshooting
  - Project management
  - Strategy development
Considerations on how to make it happen

Key lessons
- Stay attractive to the top talent
- Follow the pioneers
- Watch where the consultants are working
- Seek out the complex tasks

Winning attitudes
- Regularly benchmarking our skill set with real competition
- Believing in our superior training…while avoiding presumption risk
- Scanning beyond roles protected by legislation
- Being realistic about the value we are adding to any process

End results
- Realisation of the full benefits of a vibrant and more sustainable actuarial profession into the future
Thank you

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