



CARIBBEAN ACTUARIAL ASSOCIATION



Accredited as a Full Member
of the International Actuarial Association

"Crossing the Boundaries of Tradition"

19th Annual CAA Conference

Rose Hall Resort and Spa, a Hilton
Resort in Montego Bay, Jamaica.

December 3-4, 2009



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Broader Roles for Actuaries: Opportunities Outside the Box

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FSA, CERA, FIA, MAAA**

SOA President

December 4, 2009

Today's Agenda

- An Actuarial Contract
- A Mortality Study
- Predictive Modeling
- Customer Value
- ERM
- Actuarial Skills
- Pioneers



An Actuarial Contract

An Actuarial Contract

- High initial acquisition cost, including sales commission, bonus; intangible asset recovered out of future profits
- Recurring fees over several years
- Contract subject to mortality, lapse, replacement, time value of money
- Fee on early termination
- Various plans are available (size, term); extra features available at added cost
- Price guarantees typical



A Mortality Study

A Mortality Study

- Natural gas utility
- Pipes, valves installed, maintained, removed
- Needed to estimate depreciation costs based on average lifetime
- Accurate records available back to 1902
- Performed a mortality study, using actuarial methods
- Alternative approach: rust pit depth method

Predictive Modeling

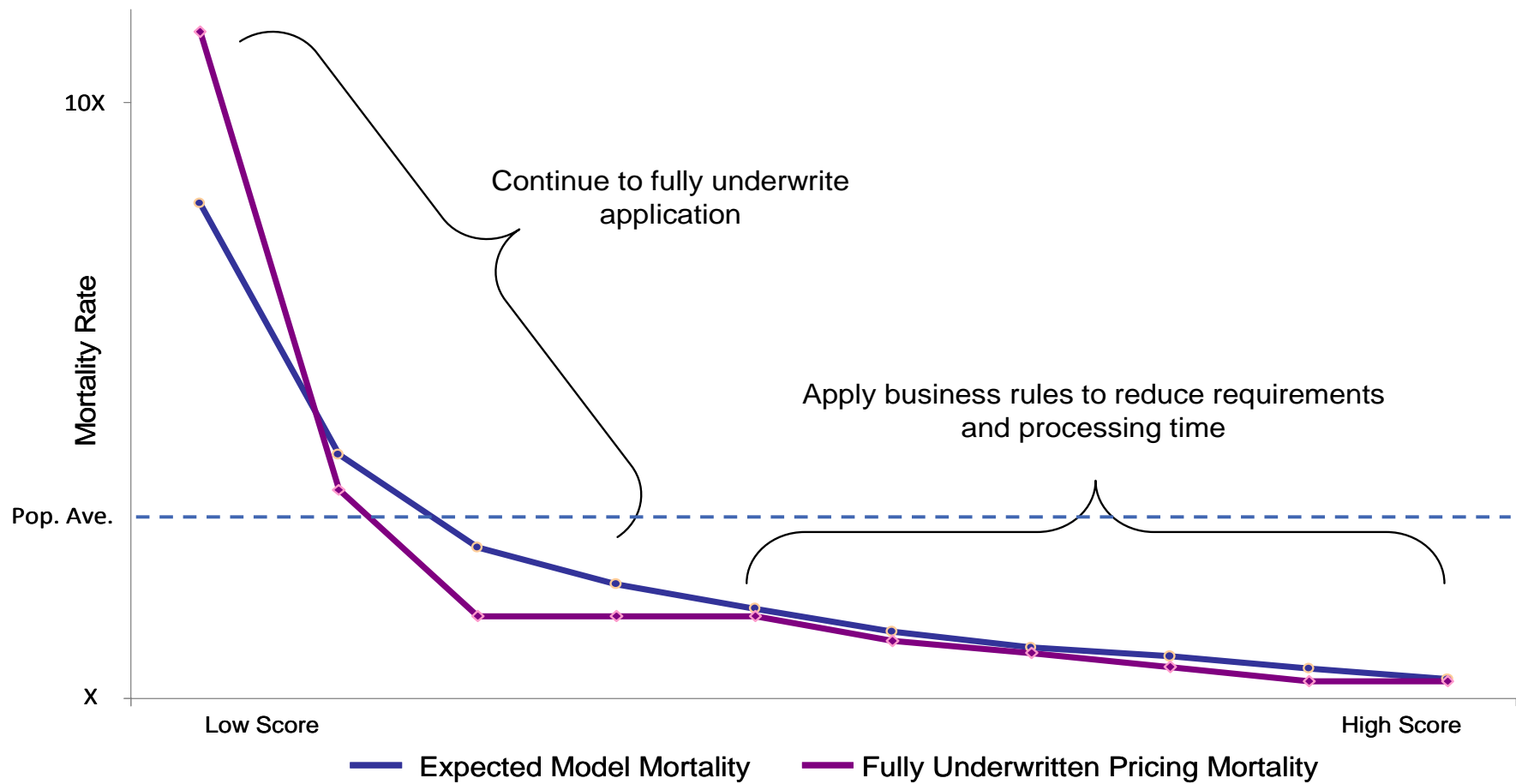
Predictive Modeling

- P&C claims & underwriting
- Life underwriting
- Life retention
- Marketing
- Workforce safety

Life Underwriting Data

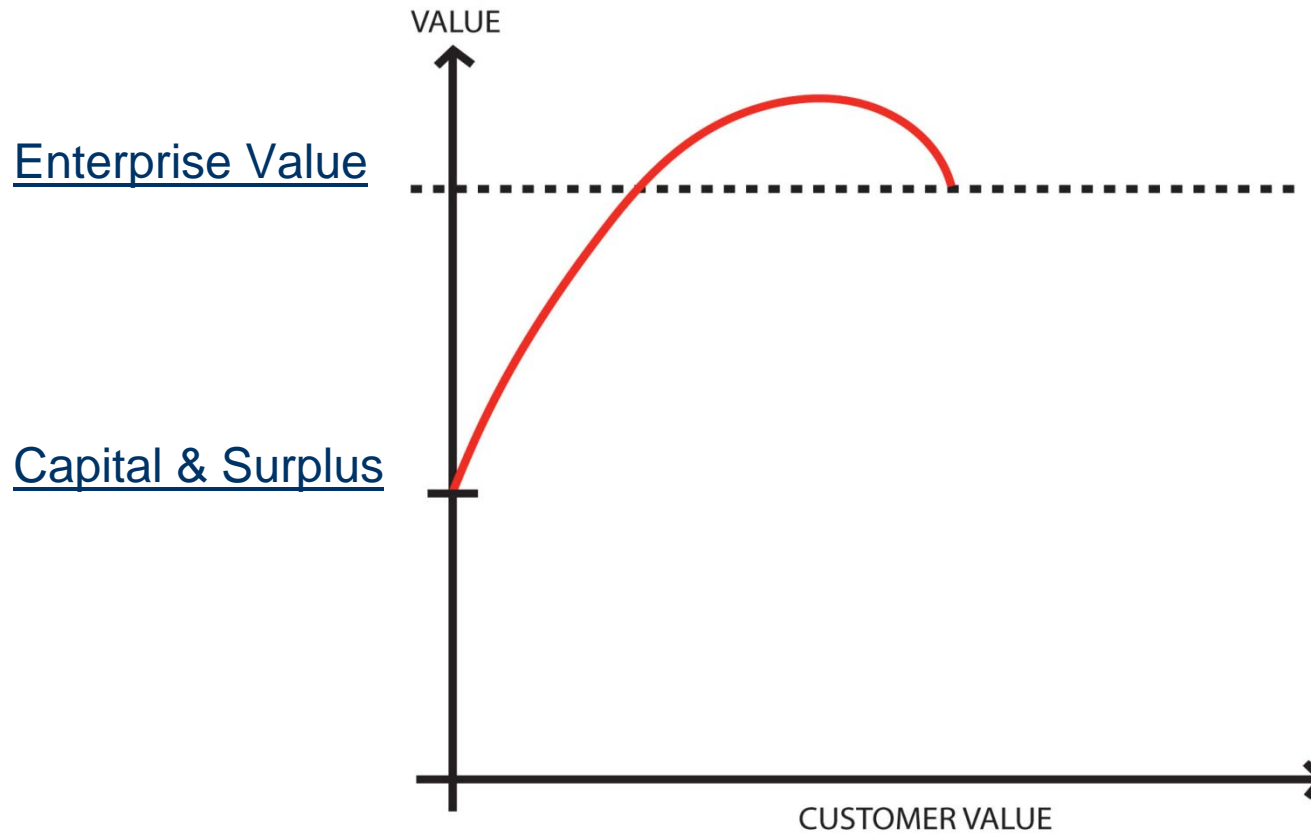
- Basic demographic/ID
- Medical, family history
- Paramed exam/build/fluids
- Interview, treadmill
- Driving record
- Household demographics
- Occupation, education
- Income, net worth, investments
- Lifestyle, hobbies
- Inactivity
- Small area demog

Underwriting Model Segmentation



Customer Value

Enterprise Value = Sum of Customer Values



Enterprise Risk Management

Enterprise Risk Management

Enterprise Risk Management is the discipline by which an organization in any industry assesses, controls, exploits, finances and monitors risks from all sources for the purpose of increasing the organization's short- and long-term value to its stakeholders.

Actuarial Skills

Actuarial Skills

- Expense Analysis (functional, ABC)
- Sports statistics
- Airline pricing
- Operations research

Actuarial Skills

- PMO (Project Management Office)
- Written, Oral presentation
- Team building
- Meeting facilitation
- Storyboarding

Pioneers



Pioneers



Laura Bennett, FSA

CEO and founder of Embrace Pet Insurance



Mark Franzen, FSA, MAAA

Managing Director and founder of IntelliScript



Nooruddin (Rudy) S. Karsan, FSA

CEO and founder of Kenexa Corp.



Carol Proffer, FSA, MAAA

Partner, Capstone Partners

Questions?

Thank You