

Actuaries and Top Managers in the Boardroom: Gaps we need to close, Opportunities we should grab

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Speaker for this session



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- CFO at Prima since 2019 (and Board member in 2021-2022)
- Previously at BCG, Oliver Wyman, KPMG UK and Aviva Group
- PhD in Actuarial Science at Sapienza University of Rome (2015); CFO programme at London Business School (2023)
- Scientific Committee at Italian Ordine Nazionale Attuari and Fellow of the UK Institute of Actuaries











- Leading InsurTech MGA focused on motor insurance
- € 1B+ gross written premiums and >3.2M customers
- Launched in Italy in 2015, also active in UK and Spain since 2022
- Key Shareholders are Blackstone, Goldman Sachs and Carlyle

2 major landscape (r)evolutions made actuarial skills a fundamental cornerstone for companies, with some risks

The landscape evolutions

Solvency II and IFRS 17 leading to riskbased, probabilistic view on value and strategic planning



Impact on Actuaries

- Technical skills are essential to lead a company
- Hyperspecialization on details
- Lower regulatory 'protection'
- for actuarial figures
- Technical excellence is a source of competitive advantage
 - Challenge to traditional
- business/actuarial models, with better equipped data scientists

Today we'll discuss about actuaries of a fifth kind, looking at:

- The rise of InsurTech 2.0
- Actuarial-driven finance & strategy
- Tips for actuaries
- in the Boardroom



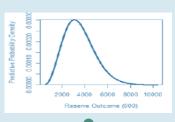


Recap: what do we mean by «actuaries of the 5th kind» 🗲 🧰



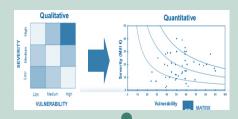


- CASUALTY ACTUARIES
- PROBABILISTIC APPROACHES



2005+

- ERM AND NON-FINANCIAL RISKS
- QUANTITATIVE RISK **MANAGEMENT**



XVII century

- FOCUS ON LIFE INSURANCE
- DETERMINISTIC METHODS

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x+1	9 p+ 11	q _{p+1+1}	 $q_{p+1+t+1}$	$q_{x_{+1},t}$	x+1+t

Late 1980s

- INVESTMENTS & ALM
- STOCHASTIC MODELS



2020+

- ADVANCED ANALYTICS
- RISK-BASED STRATEGY



Source: Buhlmann (1987); Embrechts (2005)

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THE RISE OF INSURTECH 2.0





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2 ACTUARIAL-DRIVEN FINANCE & STRATEGY



3 TIPS FOR ACTUARIES IN THE BOARDROOM



The rising and falling of InsurTech 1.0



Market context for InsurTech rising

Traditional insurance perceived as a wealthy but a bit "esoteric" / "boring" world

- 1.3Tr GWP with <1M employees in P&C Europe
- Old-fashion agencies/marketing, painful UX
- Sometimes perceived as a tax
- Comes to mind only in case of emergencies

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The (failed) promise InsurTech 1.0

A step change how customers perceive insurance

- Child's eye approach to deliver better UX
- E.g. Premium services for adverse events (Hippo)
- E.g. Give back in case things goes well (Lemonade)

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However, these players keep losing money, and as market turned, they are now worth almost nothing

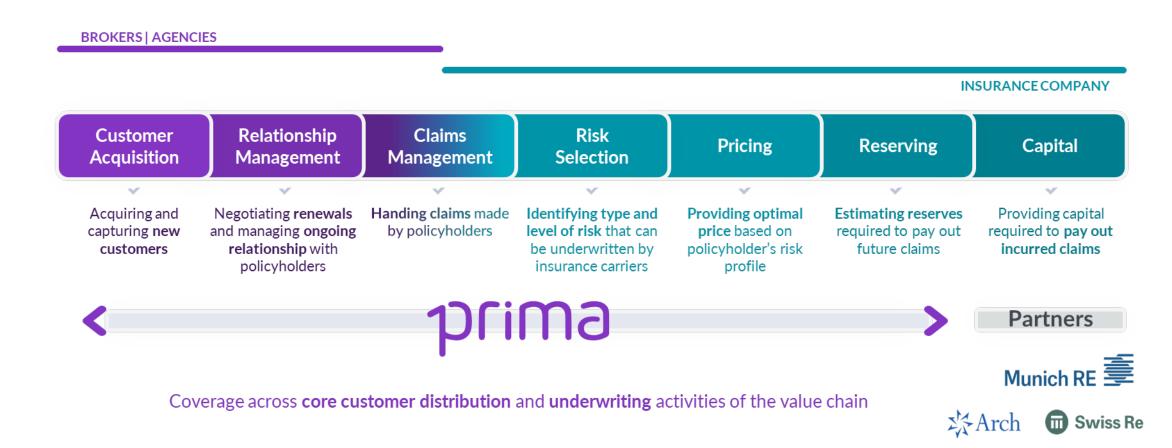
- Lemonade and Hippo are -89% and -95% vs. peak
- Wefox announced risk of insolvency



Too much focus on "Tech" (while forgetting the "Insur") calls for higher need for actuarial skills to deploy into Insurtech 2.0

In-house technology and data-driven focus to untap competitive advantage across the insurance value chain





The rise of InsurTech 2.0



Profitable growth with higher focus on technical performance



InsurTech 1.0 companies are primarily focused on digitalization and UX. In order to grow, significant marketing investments are required, implying significant cash absorption.

InsurTech 2.0 players like Prima focus on optimizing financials and loss ratio control leveraging on machine learning and data analytics. This enables profitable growth with limited cash absorbed.

Source: Public sources and Company Information.

Notes: (1) EBITDA for Prima considers Italy only and excluding extraordinary costs. 2023 for Lemonade and Hippo using Filling SEC 10k; for Prima, 2023 actual data. EUR / USD change at 1.1



THE RISE OF INSURTECH 2.0



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2 ACTUARIAL-DRIVEN FINANCE & STRATEGY





3 TIPS FOR ACTUARIES IN THE BOARDROOM



Actuarial approach to structure a brand-new CFO area



1



Value-based Corporate Finance

. . .

- Evaluate strategic/extraordinary initiatives looking at TSR
- Cultivate relationships with top tier investors



2



Partnering with the business to drive planning and management actions



- Steer the business plan and support the (top) mgmt to define/assess value creating initiatives
- Support the business on decision making looking at data



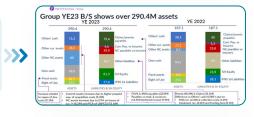
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Measuring value and market disclosures



- Real time performance monitoring
- High quality timely financial reporting
- Dedicated Tech team to ensure automation & data quality



4



Risk view and actuarial analytics

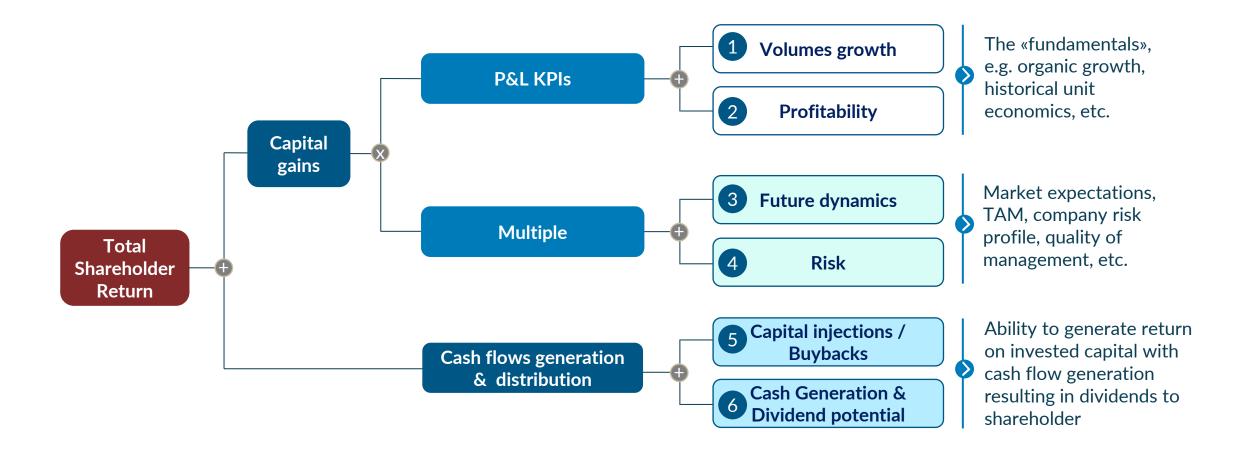


- Advanced analytics to monitor technical performance
- Risk-return view on decision making
 - Independent view on risks which might reduce value



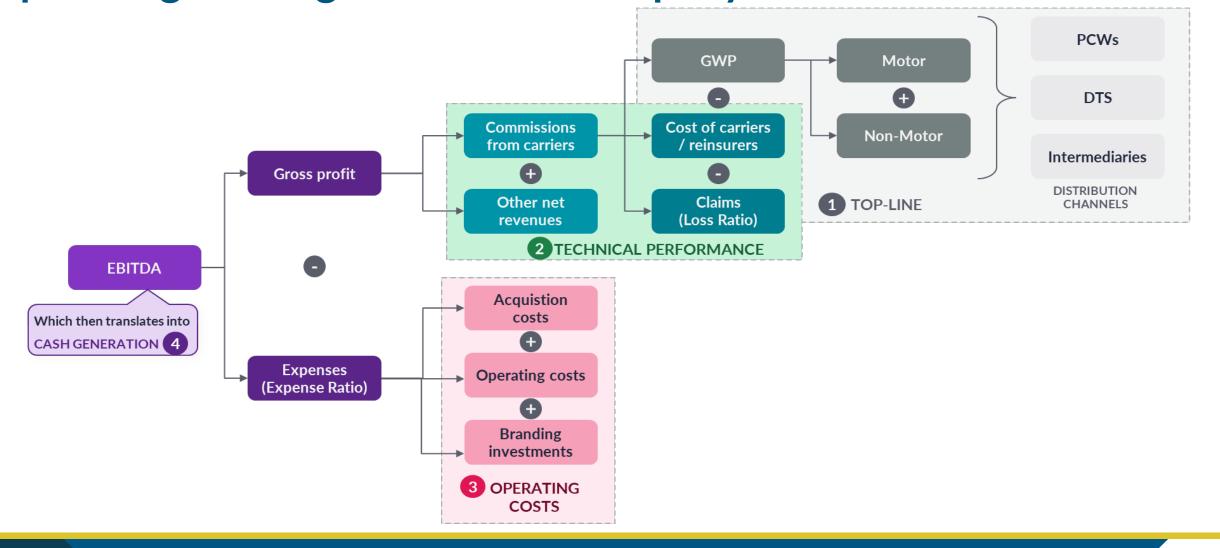
A structured approach to think about value creation through Total Shareholder Return





Defining the right metrics is key to drive strategic planning and align the whole company

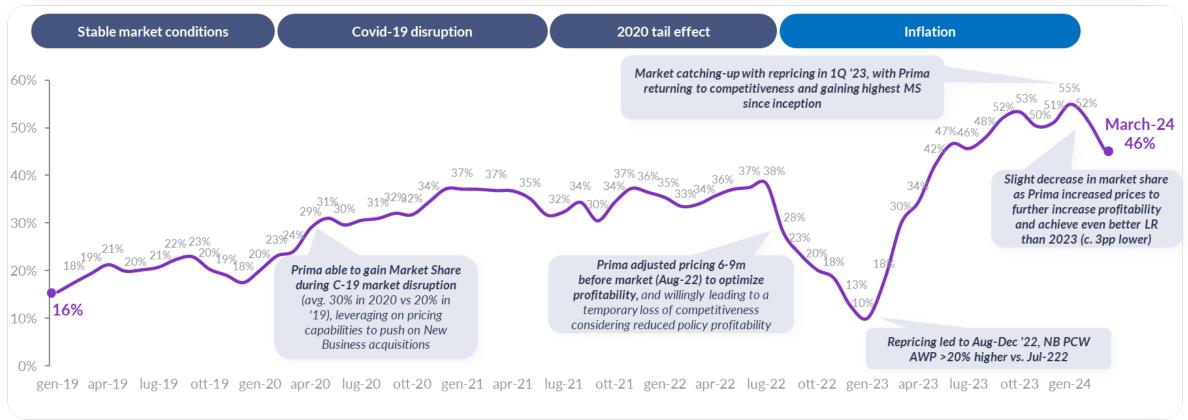




... and focus on the right metrics helps steering the company through challenges and evolving conditions







Source: Company information

Notes: 1. Prima estimate on primary PCW new business car quotes

Serious investments in actuarial & risk analytics enable efficient, high quality info on the full distribution of value

Portfolio valuation and reserving

Prometheus Reserving Tool



Innovative individual claims modelling based on Bayesian networks, projecting loss ratios and reserves by UWY and ACY (incl. full distribution forecasts)

Linking financial reporting, value and enterprise risk management



Mapping and quantification of all risks driving company's value (incl. Strategic, Technical, Cyber, Ops, Compliance, ESG and F&C) to design corrective actions and contingency plans

Dedicated Tech team



Tech developers and a product owner to ensure financial flows are automated (payments, Board / MI dashboards) and there is a single version of truth



THE RISE OF INSURTECH 2.0



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TIPS FOR ACTUARIES IN THE BOARDROOM





A cultural revolution: From "smart skills serving technical excellence", to "technical skills serving the business"

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«Previous kind» actuaries

- Technical Pricing, Reserving, Risk calibration
- Is the expert, the guru
- Understands business strategies and evaluates their sustainability
- Raises concerns (the best ones can also suggest solutions)
- May be called to present to the Top Mgmt or the Board on technical topics

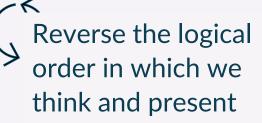
Actuary of the fifth kind

- Street Pricing, Marketing, FP&A, Capital Mgmt
- Has a super effective problem solving method
- Sets the framework for strategic choices, with quantitative backup
- Data-driven decision-making, optimizing/ correcting business performance
- Is part of the Board or of the Top Mgmt

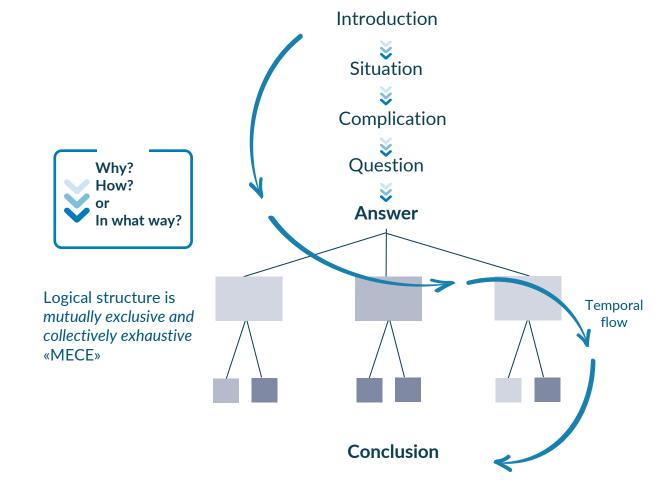
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Tip #1 - The pyramid principle









Tip #2 - Outside of the comfort zone



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Accepting that you are no longer the expert in the room



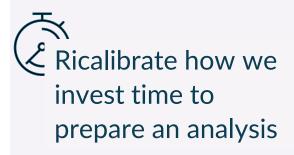


[...] against that "laziness" (Pigrizia) which consists in elevating the "momentary circumstance", in which we have been successful in the past, to a "criterion for excluding in the future the emergence and opening of new needs and possibilities".

Bruno de Finetti L'invenzione della verità

Tip #3 – Focus on framing and communication





	from			
Framing	>>>	5%		
Data/input collection	>>>	15%		
Model work	>>>	60%		
Model refinement	>>>	20%		
Engineer the story	>>>	0%		

Tip #3 – Focus on framing and communication



Ricalibrate how we invest time to prepare an analysis

		from		to
Framing	>> >	5%	>>>	30%
Data/input collection	>> >	15%	>>>	15%
Model work	>>>	60%	>>>	15%
Model refinement	>> >	20%	>>>	20%
Engineer the story	>> >	0%	>>>	20%

Risk-based corporate finance as a cornerstone for Actuaries of the Fifth kind



Many studies in the theory of risk have lacked a **clear purpose** [...]

"

Actuaries have estimated ruin probabilities and approximated claims distributions, without being very articulate as to **how their results could be used in the decisions-making process** of an insurance company [...]

The responsibility for this does not fall entirely on actuaries: **Top Management** of insurance companies has not always been very articulate when it comes to **spelling out the objectives of the company**

- Karl Borch

(Management & Objectives in Insurance Companies, GIIA, 1974)

