



## Automation and Underwriting

### CURRENT ENVIRONMENT

- Underwriting automation today
- Underwriting trends
- Consumer trends and behaviours - New, what's new?

### SMART WAYS FORWARD

- A smarter way to connect with our consumer?
- A smarter way to assess risk?
- 5<sup>th</sup> Generation automation

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## UW Automation – Definition and Trends

### Straight Through Processing – how many definitions are there?

Some market consensus towards:

*“An automated and final underwriting decision applied to an applicant by an underwriting rules engine where no manual intervention is required”*

(A. Smith circa 2012)

#### Components

- standard rates
- loaded terms
- exclusions
- postpone
- decline
- downgrades

Straight  
Through  
Processing

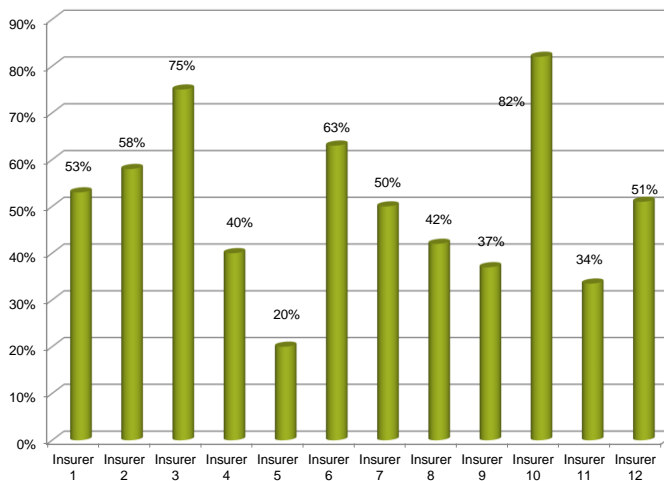
#### Variances

- Recorded by cover, by life or by case?
- Include further evidence requests?
- Is a decline / postpone decision actually issued or referred to UW to issue?
- Case submitted versus decision reached but not proceeded with?

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## Current UK / Irish straight through processing rates

### Combined Benefit STP by Insurer



#### Average

2009 = 36%

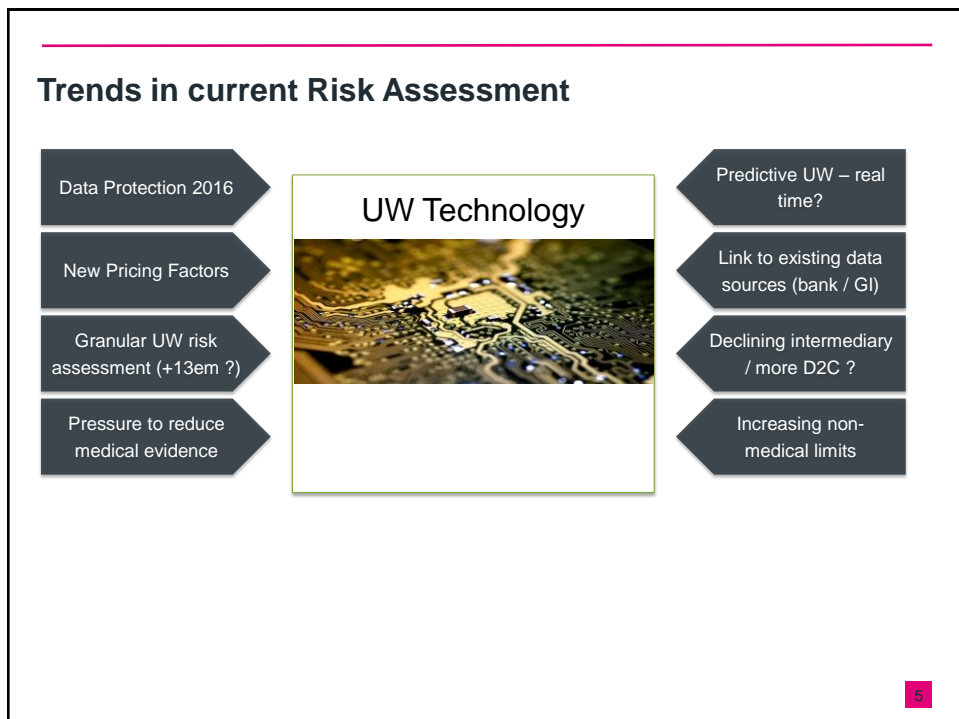
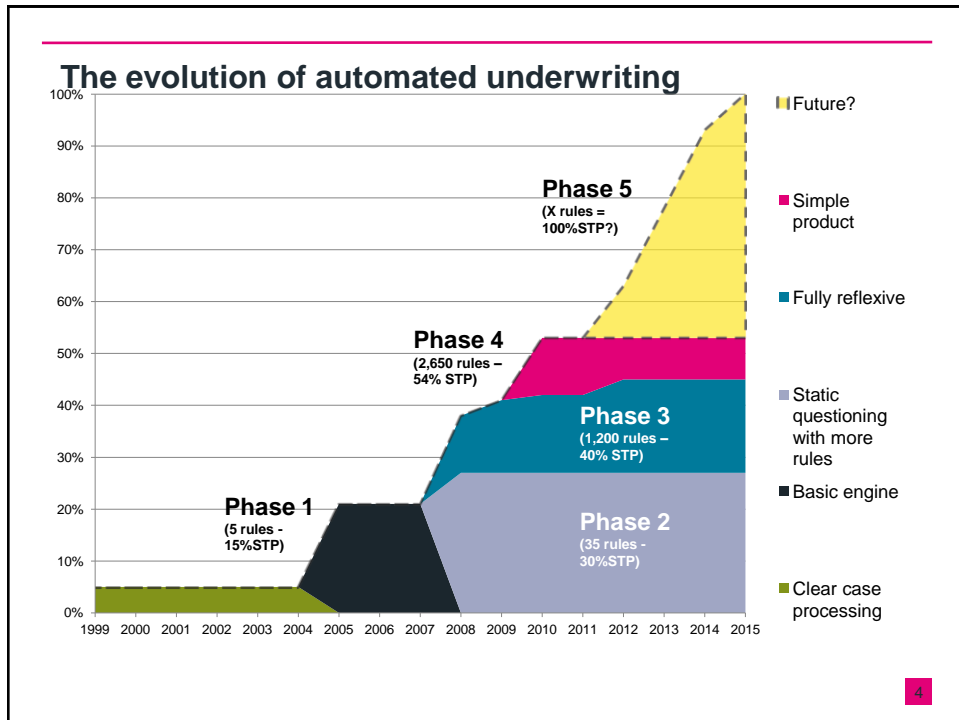
2010 = 52%

2011 = 56%

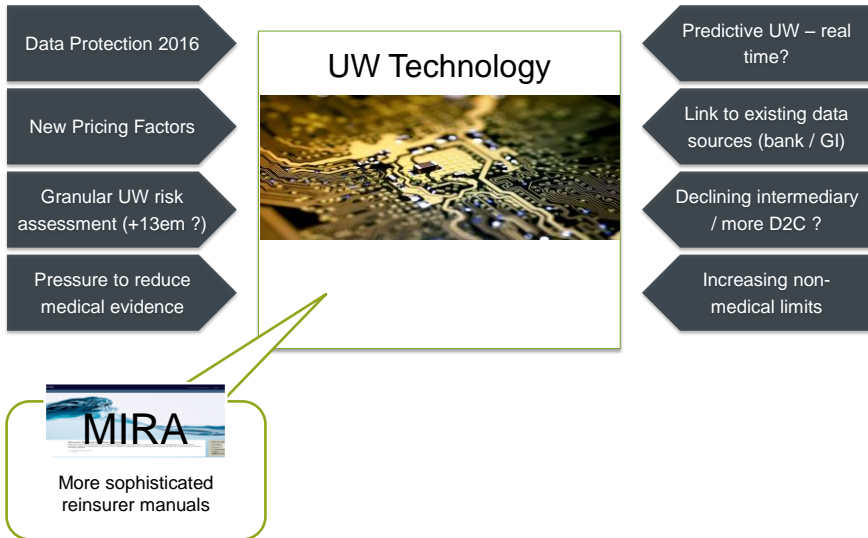
#### Caveats

- Represents a view of the UK/Irish markets but incomplete
- Majority don't include IP
- Differences in period of time over which measured
- Not all measured in the same way
- Different distribution channels

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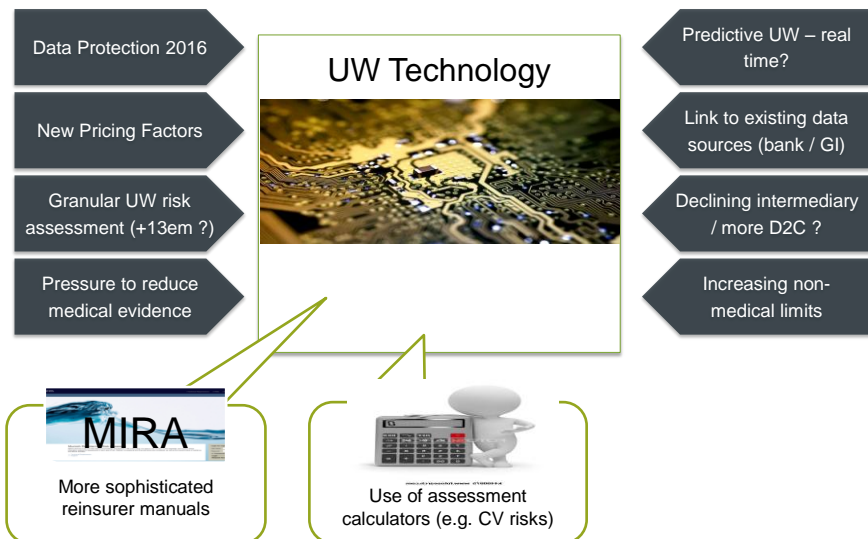


## Trends in current Risk Assessment



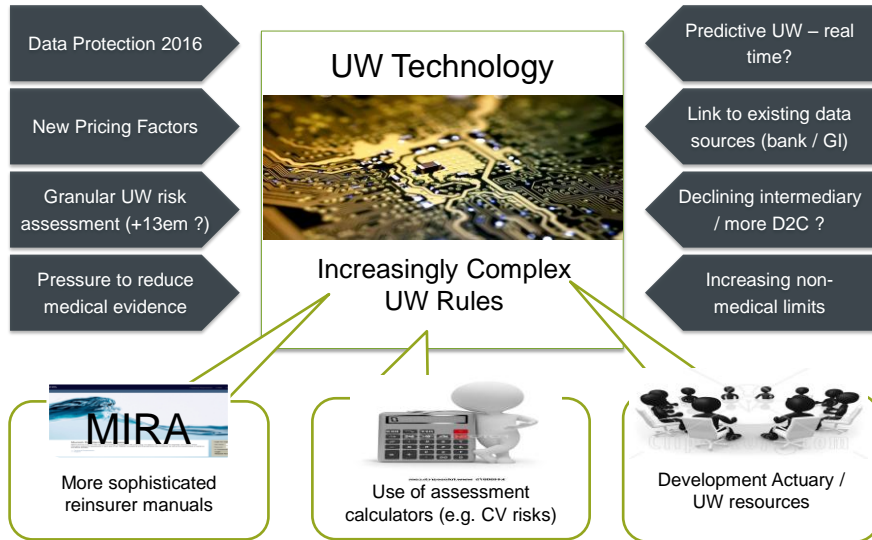
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## Trends in current Risk Assessment



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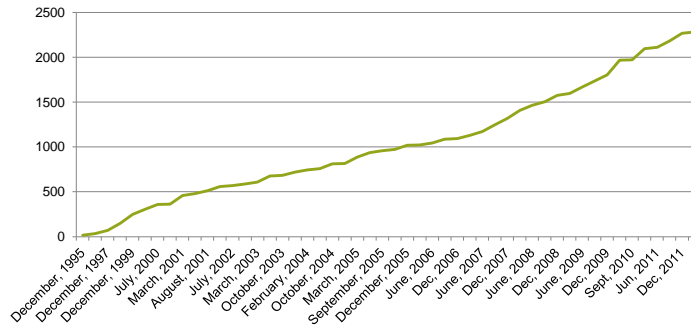
## Trends in current Risk Assessment



“... automated underwriting has passed its zenith...”

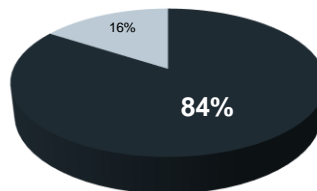
## NEW CONSUMER BEHAVIOUR?

### INTERNET USAGE GROWTH FROM 1995 - 2012



## UK Internet Usage 2011

Percentage of UK Population Online



- 84% of UK population are on line
- 74% (nearly 47 million people) will go online at least once per month in 2012, primarily from home
- Proportion of households online up from 63% in 2006 to almost 85% in 2011
- Adults in the U.K. used the internet on average 8 to 11 hours per week in 2011

## Paradigm shift – can or will we keep pace with changes in consumer behaviour and underwriting trends?

### Consumer Products



### Life Products



Technology needs to facilitate the traditional **human** based sales process into a modern **system** led sales process

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## Paradigm shift – can or will we keep pace with changes in consumer behaviour and underwriting trends?

### Consumer Products



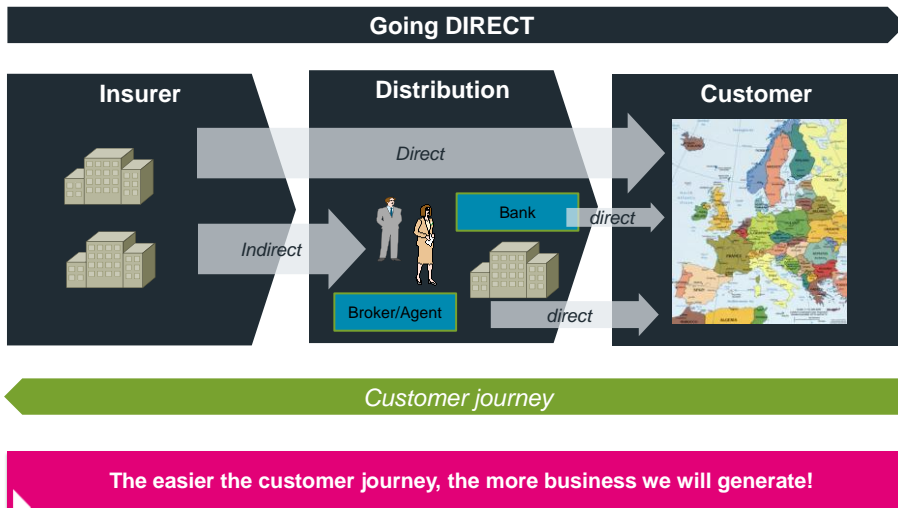
### Life Products



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## The Direct Approach ...



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## The smarter way ...

- 49% of the UK population have a smart phone.
- 50% of android smart phone and 43% of Apple iPhone users are below 34.
- 89% of smart phone owners use their phone every day.
- 10% of all global web page views are from mobile devices
- 79% of online advertisers still do not have a mobile optimised website.

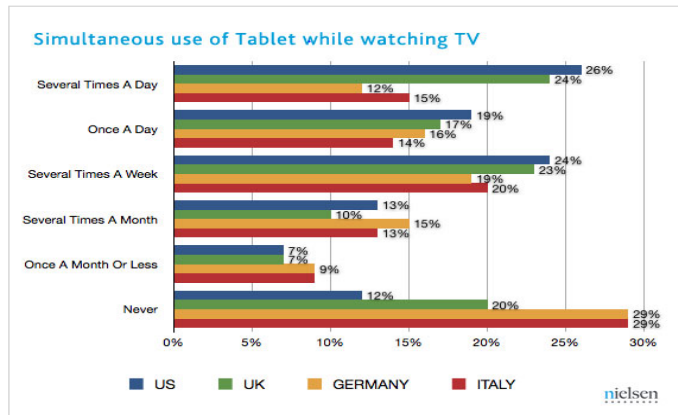
***I am my phone and my phone is me ...***

- Mobile Wallet
- Mobile Access

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## Smart TV and the second screen ...



- “Using a tablet or smartphone while watching TV is more common than not,” reported Nielsen in April 2012.
- Forrester reports that 63% of Gen Xers and 74% of Millennials use a second-screen device more than half the time they watch TV.

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## Smart monitoring, smart health, new data ...

### • Smart-phones through wristbands/shoes

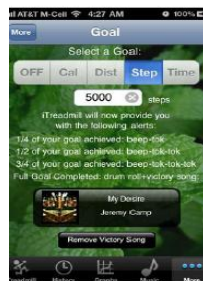
- data gathered through sensors embedded in users' clothing to provide
  - Information
  - recommendations
  - reminders
- track physical activity
- track sleep patterns
- track calorie intake
- use data to get tailored advice on how to make health improvements in real time.



### • Medical Services:

- remote monitoring services
- remote advice services
- could cut 10-12% from the \$6 trillion annual spend on health care worldwide (McKinsey & Co)

### • Personal Data Store of Lifestyle Data

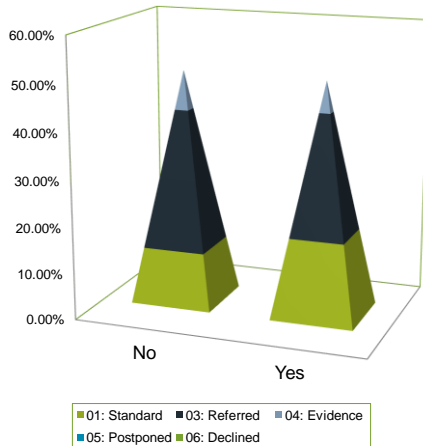


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## Is there a **SMART** way to assess risk?

... access the customer directly

*Automated decisions with the applicant present when the underwriting questions were completed*



5% more STD rates  
3% less refer UW  
2% less evidence

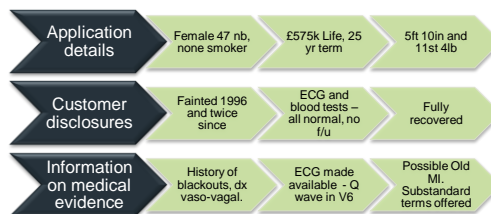
**STP Uplift 10%**



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## Why technology is needed to by-pass customer responses

The limitations of Underwriting based on applicant disclosure



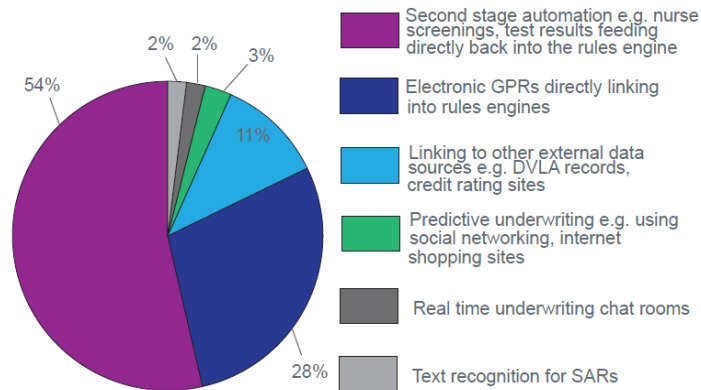
Three options available:

- Serious heart problem = Decline**  
(risk damage to brand / turn away insurable business)
- Guess = +100em? +300em?**  
(if wrong = lapse, churn or NTU)
- Simple faint = O/R**  
(Experience impact? Attract anti-selection?)

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## Automated assessment of medical evidence

What do you think will be the next big development in automated underwriting?



Source: Munich Re 'Future of Underwriting' survey 2012

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## What does this mean ...

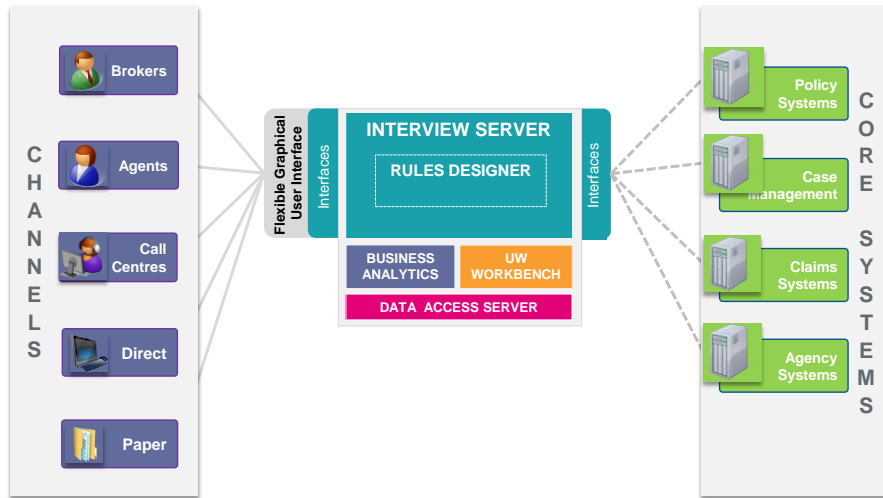
### 8 Technologies that will Shape the Future

1. Smartphones
2. 3G and 4G Wireless Broadband
3. Cloud Computing
4. Eye-Tracking / Voice Commands
5. Augmented Reality
6. Social Networking
7. CAD, 3D Printing & Custom Products
8. Autonomous Cars

Source: Mashable

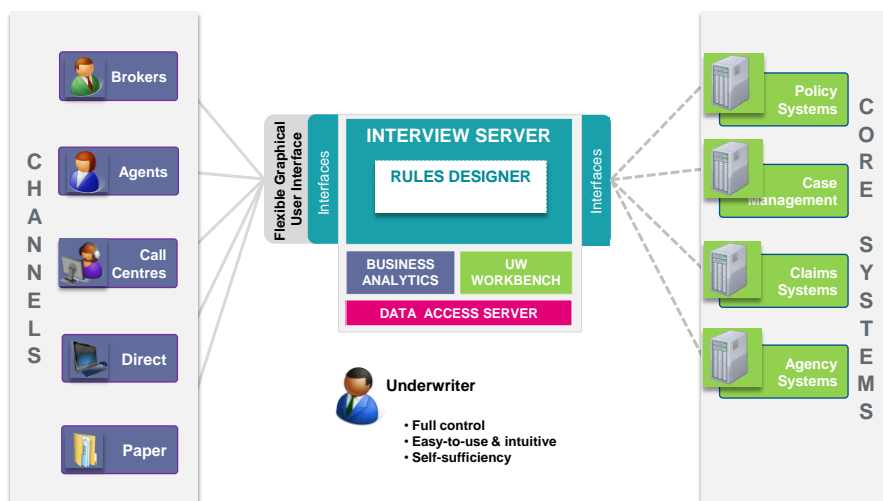
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## Munich Re the 5<sup>TH</sup> Generation



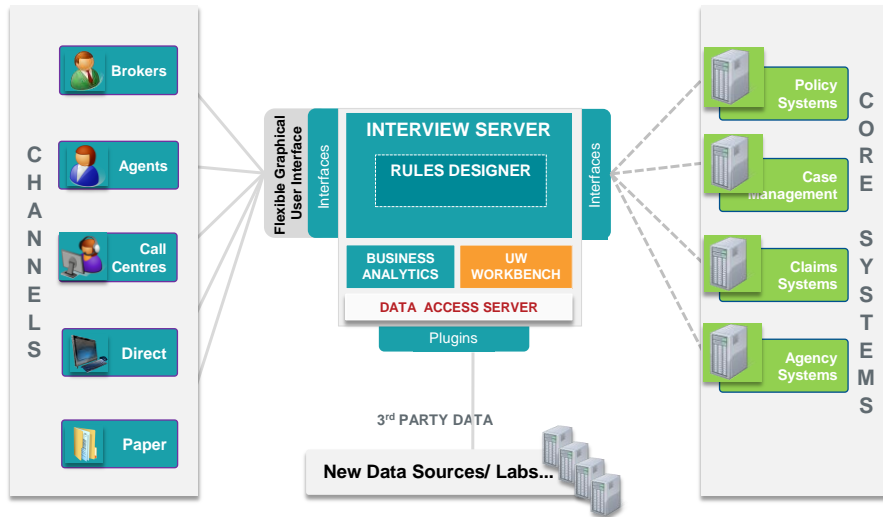
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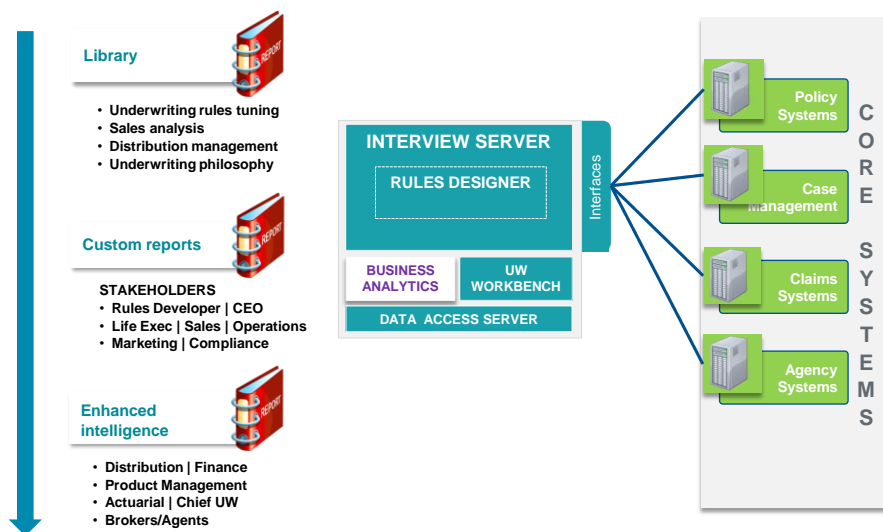
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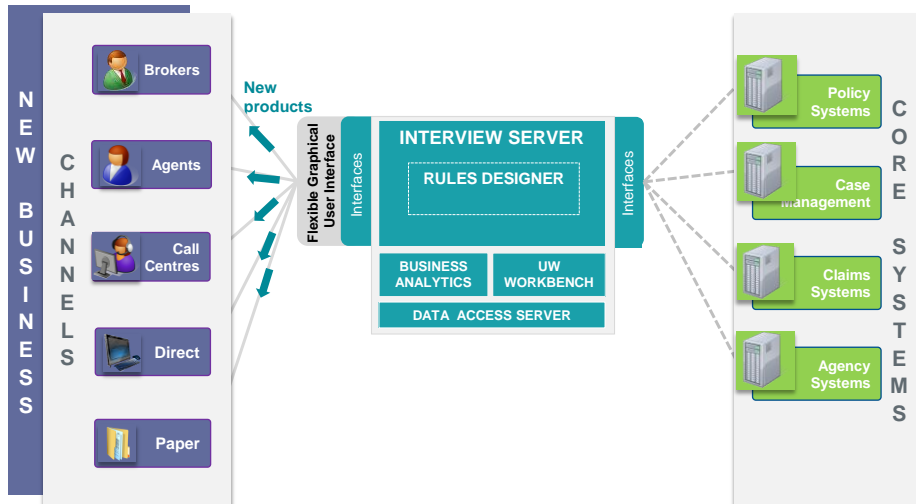
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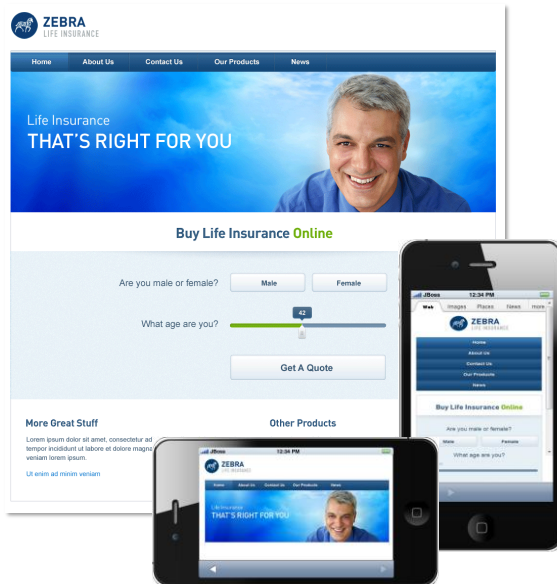
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## Munich Re the 5<sup>TH</sup> Generation



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## Munich Re the 5<sup>TH</sup> Generation User Interface (UI)



- HTML5 based User-centric Interface that comes out-of-the-box
- User Configurable styles
- Channel-specific screen versions
- Platform agnostic – can be viewed on all devices (tablet/mobile/laptop/desktop)
- Responsive Design

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## Insurance Market Trends

**"We expect many players ...  
to continue to struggle to differentiate between  
what sounds like a great idea  
and  
one that will result in a sustainable business,"**

**"But for insurers that can stay ahead of the curve and  
competition, drawing successful lessons from global players,  
direct business will reach well beyond  
the fraction that it is today"**

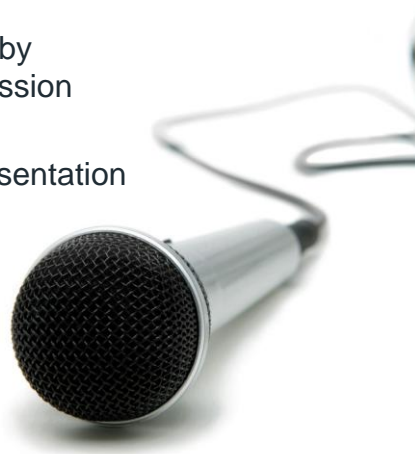
*Head of Insurance Strategy for Oliver Wyman*

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## Questions or comments?

Expressions of individual views by  
members of The Actuarial Profession  
and its staff are encouraged.

The views expressed in this presentation  
are those of the presenters.



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**THANK YOU VERY MUCH  
FOR YOUR ATTENTION**

5<sup>th</sup> November 2012

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