



Institute
and Faculty
of Actuaries

Telematics in Health and Care Insurance

Slave to the machine

Oliver Werneyer
Data and Distribution Leader, Swiss Re




14 May 2014

Remember 2005?

"...Facebook didn't exist ... for most people..., Twitter was a sound, the Cloud was in the sky, 4G was a parking space ... and ... 'Skype' was a typo."

Thomas Friedman
Author of "The world is Flat"



14 May 2014 2

Device use is spreading...



2005



2013

... and become more acceptable and in some cases even expected.



14 May 2014 3



**Institute
and Faculty
of Actuaries**

The Rise Of The Quantified Self

The drive to know more about ourselves.

04 May 2014

[illegible]

What to know about Person X



14 May 2014

5

[illegible]

Have you heard of Larry Smarr?



... the most monitored man in the world?

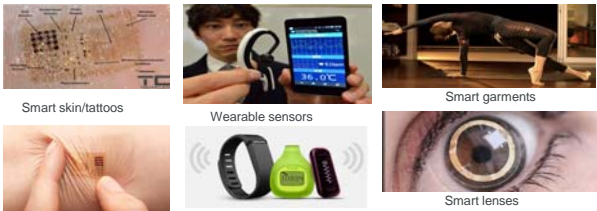


Institute
and Faculty
of Actuaries

14 May 2014

6

Collecting personal data



As people collect it, we should be ready for and make it easy to share it.



14 May 2014

7

The sensors of "me"



Smart Body Area Networks of sensors

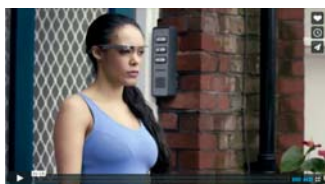
Xsensio – real-time evaluation of hydration & physical activity



14 May 2014

8

Augmented reality to drive participation




Sensoria Fitness and Race Yourself enable Augmented Reality with Smart Garments and Google Glass

[Click on image to load video](#)



14 May 2014

9



Institute
and Faculty
of Actuaries

That's Nice...


What does that mean for the Actuarial profession?

Enterprise
Sponsorship
Thought leadership
Thought progress
Community
Professional Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Support

14 May 2014

More data for us... wohooo


- There is so much more data around
- Are we analysing it?
- Why not? Is it not useful/accessible?
- Are old methods, models and traditions also a barrier?



Institute
and Faculty
of Actuaries

14 May 2014 11


What is your call?




Height

Weight

Wikipedia




Health Promotion Board



WHO Table WHO

=>

- Accept
- Load
- Exclusions
- Decline



Institute
and Faculty
of Actuaries

14 May 2014 12

Data that was not accessible before

Accept
Load
Exclusions
Decline

Existing data that is recorded or reported differently can add a lot of value

Wikipedia

14 May 2014

Institute and Faculty of Actuaries

13

PREDICTIVE MEDICINE GROUP

Common data,
Uncommon predictions
Predmed.org
Ben_Reis@Harvard.edu

About Projects People Publications Survey Press Contact

14 May 2014

Institute and Faculty of Actuaries

Suffering abuse – earlier presentations for men

Alcohol- and substance-related mental disorders

Other mental conditions

Residual codes, unclassified

Affective disorders

Anxiety-Somatiform, Dissociative, and Personality Disorders

Schizophrenia and related disorders

Factors influencing health care

Viral infection

Poisoning

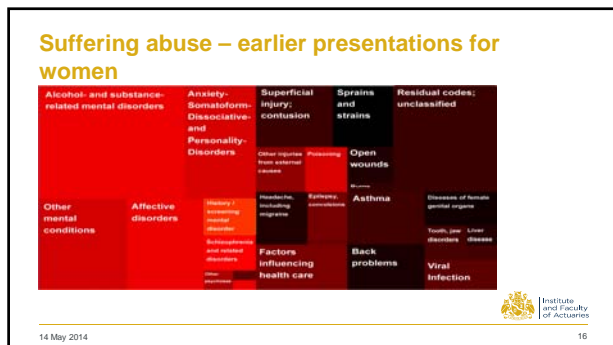
Asthma

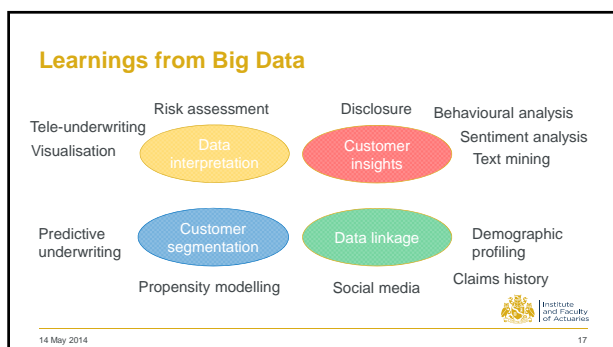
Encephalopathy

14 May 2014

Institute and Faculty of Actuaries

15





Institute and Faculty of Actuaries

The Actuary of the future

New tools, skills and insights will be required.

Adviser
Mentorship
Thought leadership
Press
Community
Professional Meetings
Education
Working parties
Volunteering
Research
Shaping the future
Networking
Professional support
Enterprise and risk
Learned society
Opportunity
International profile
Journals
Support

14 May 2014

The profession and on-the-job training

- Are we talking about, exploring and educating members about new and non-traditional sources of data?
 - New sources
 - New structure (unstructured, activity based, behavioural, etc.)
- Is the course material, on-the-job training, WBS, etc. sufficiently up-to-date to ensure Actuaries are developing the right skills?
- We need to promote more entrepreneurial thinking.



14 May 2014

19

The theory

- Explore and develop new models and theories.
- Look outside of our own industry/members for guidance or inspiration.
- Who has the experience to check these models for reasonableness?
- Is the industry ready, or even willing, to pursue this?



14 May 2014

20

The Actuary

- Develop new technical skills
- Understand and work with new variables
- Develop and use new models
- Explore, familiarise and understand new sources of data
- Explore, familiarise and become experts of new technologies
- Be open minded and look to other markets for expertise and inspiration



14 May 2014

21

**"Things may come to those who wait, but
only the things left by those who hustle."**

Abraham Lincoln



14 May 2014

22

Questions

Comments

Expressions of individual views by members of the Institute and Faculty of Actuaries and its staff are encouraged.

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



14 May 2014

23
