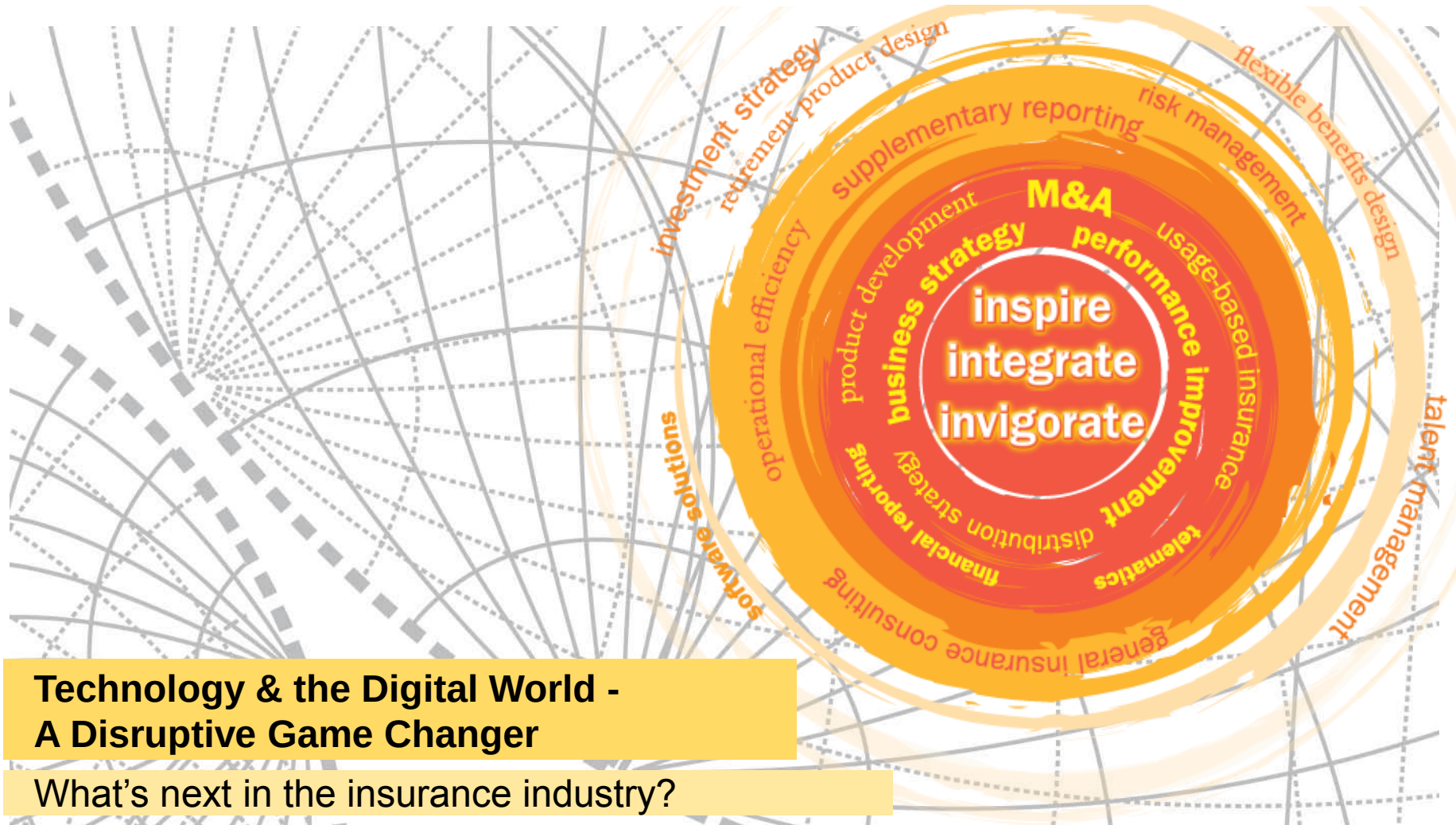




Technology & the Digital World - A Disruptive Game Changer

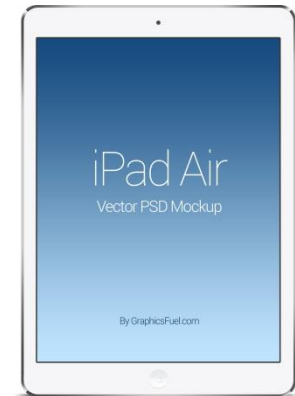
What's next in the insurance industry?

Alan Merten, Director, Asia Pacific Insurance Consulting

Joint Regional Seminar 2014 – The Future of Insurance
31 July 2014

The Digital Revolution is Transforming the Insurance Industry

- **Digital disruption:**
 - music, travel, and brick and mortar businesses
 - P&C: aggregators and the direct channel
- **Changing consumer behaviour:**
 - proliferation of mobile devices
 - ubiquitous connectivity
- **Falling barriers to entry**



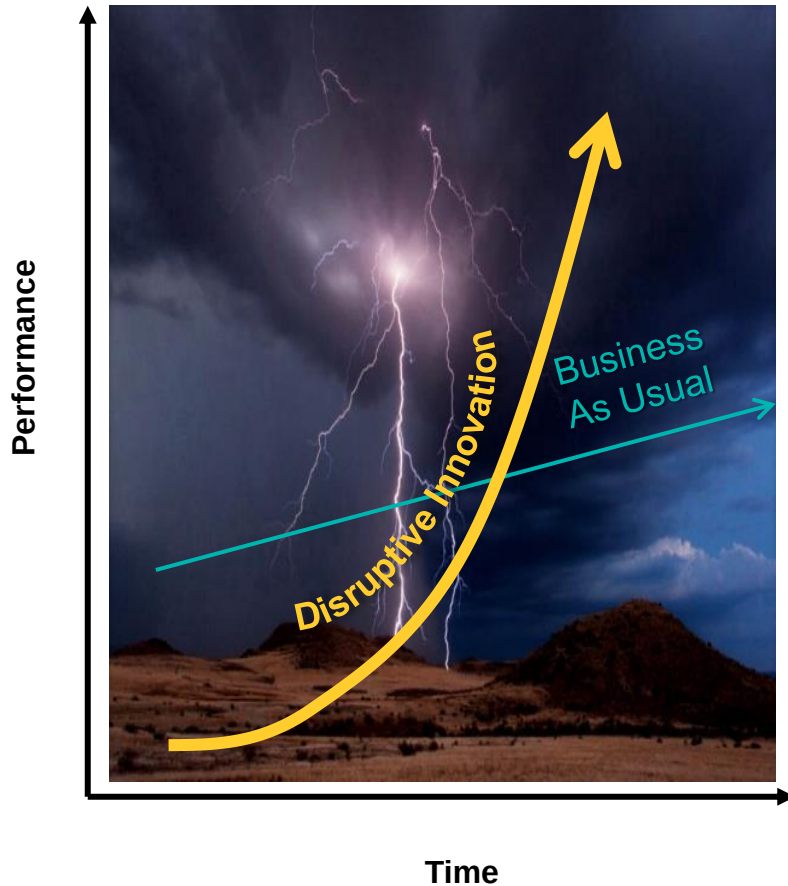
‘Are You Ready?’

“Nothing is stronger than habit.”

[Ovid]

Innovation? Disruptive?

$$\boxed{\text{Fresh Thinking}} + \underline{\underline{\text{Creates Value}}} = \text{Innovation}$$



$$\boxed{\text{Innovation}} + \boxed{\text{Displacing Competitors}} = \text{Disruptive Innovation}$$

Creating Competitive Advantage by Addressing Key Trends



**Growth Wealth &
Expanding Middle Class**



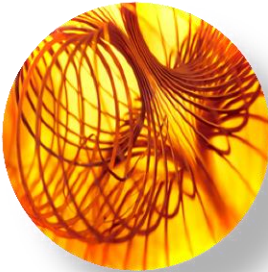
**Protection &
Retirement**



**Continued
Urbanisation**



**High Savings
Ratios**



**“Connected”
Societies**



**New
Technologies**



**Evolving
Distribution**



Data

Facts about Hong Kong

93% of Hong Kong's GDP is from the services industry



'A Symphony of Lights' is recognised by Guinness World Records as the world's 'Largest Permanent Light and Sound Show'

Hong Kong has the fastest

#1

Average Internet Speed

7 in 10    
People in Hong Kong take busses

The world's most expensive bottles of wine at **USD232,692** per bottle were sold at an auction in Hong Kong



Hong Kong's personal income increased 16 times in 30 years

16x



Hong Kong has more Rolls Royces per person than any other city in the world

160' X 72'

The Peak Tram became the first cable funicular in Asia in 1888



Hong Kong has the world's most affordable Michelin star restaurants with dishes at less than USD2 per dish

War is 90% Information*

Opportunity and Challenge???

- 2000+ petabytes of information is generated every day
- +60% growth per year
- 90% of the data available today have been created in the last 2 years.
- Increasing variety of sources
- Only 5% of available information is used by companies
- Usages of data are being revolutionised, with great early-movers showing the way, including Amazon, Google, Tesco, Walmart, leveraging new skills & technologies.

Source: IBM, Google, McKinsey Research Institute, Gartner, Wikibon

Data is on the Insurers' Executive agenda

- **15-20%** of insurers are planning to move to Big Data solutions within the next 12 months¹
- **>25%** of insurers are using or plan to use Internet clickstreams, audio data, mobile geospatial data, telematics and social media¹
- **<50%** of insurers are using data to improve operational areas¹

¹ Novarica / Tata Consulting survey: big data and analytics in Insurance, 9 August 2012

Example of Insurers' Big Data initiatives (press and public information)



- Generali Assurances (France) are currently running Proofs Of Concept to explore the value of Big Data
- Source: L'Argus de L'assurance – September 2013



- The AXA Business Intelligence and Analytics function is a research and analytics centre of excellence operating across Life and P&C markets
- Source: AXA Business Services website



- Investing in predictive analytics across personal and commercial lines
 - Developing centres of excellence in this area to improve performance across the Group.
- Source: Aviva Group plc – 2012 Report & Accounts



- Created Data Science Team focusing on analytics to enable science-driven decisions about their strategy across underwriting, product innovation, pricing, distribution, marketing, claims and customer experience.
- Created position of Chief Science Officer reporting to the CEO

Source: AIG website – 'Applying Science and Technology to Predictive Risk Analysis', 11 December 2012

*Napoleon Bonaparte, French Military and Political Leader

Internet of Things (IoT) – Next Revolution in Digital Technology

Connecting every device that is electronically powered to the internet



“Centuries ago, the wealthy had servants, and in the future, we will all have cybservants”

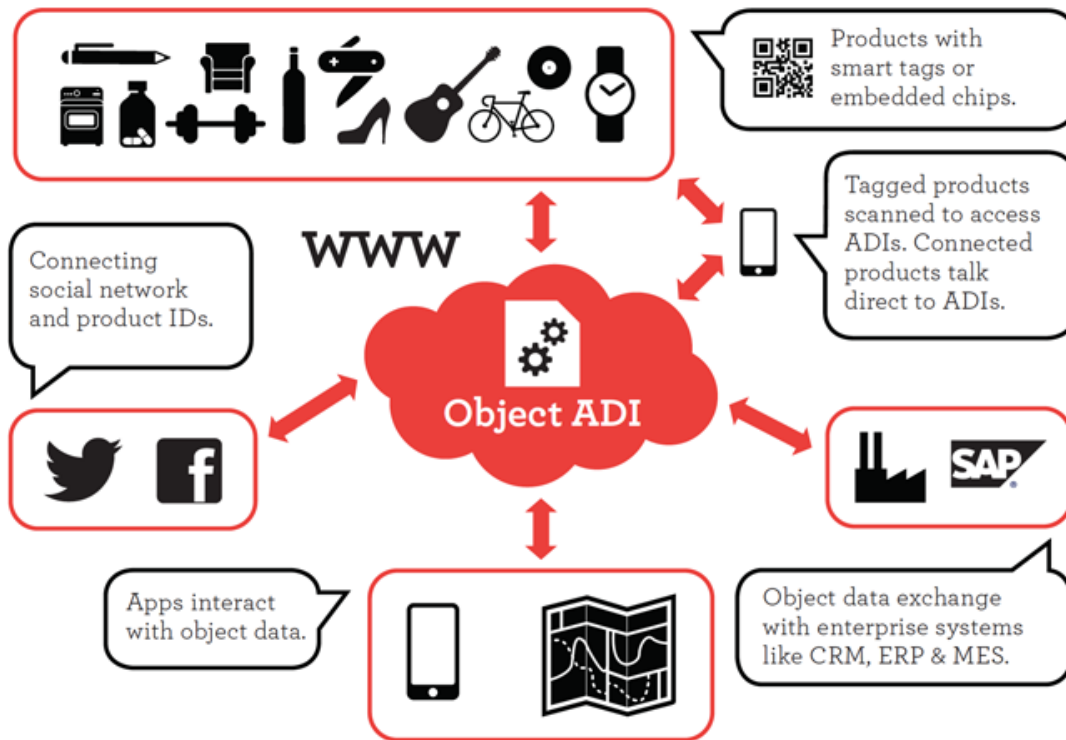
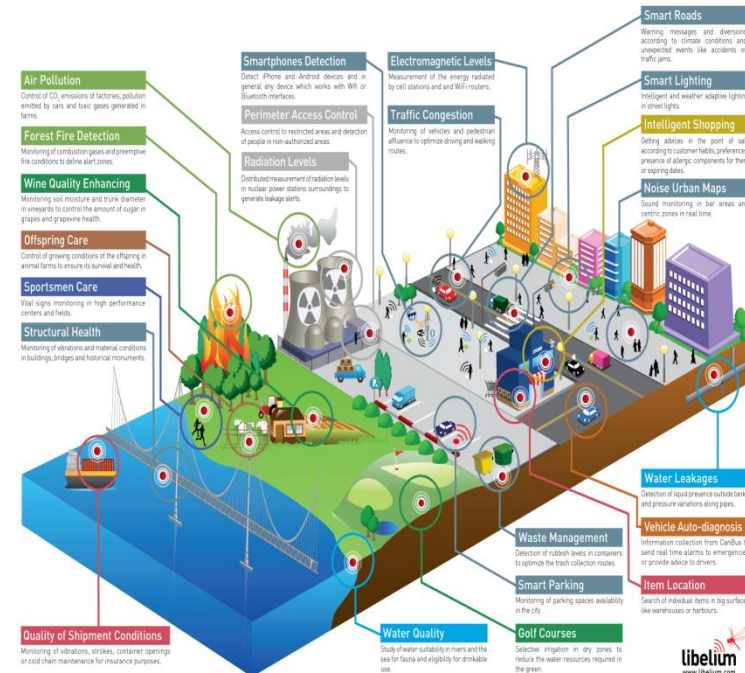
Source: Pew Research

“I think there is a world market for
maybe five computers.”

[Thomas Watson, chairman of IBM, 1943]

Internet of Things (IoT)

Every object has a digital identity

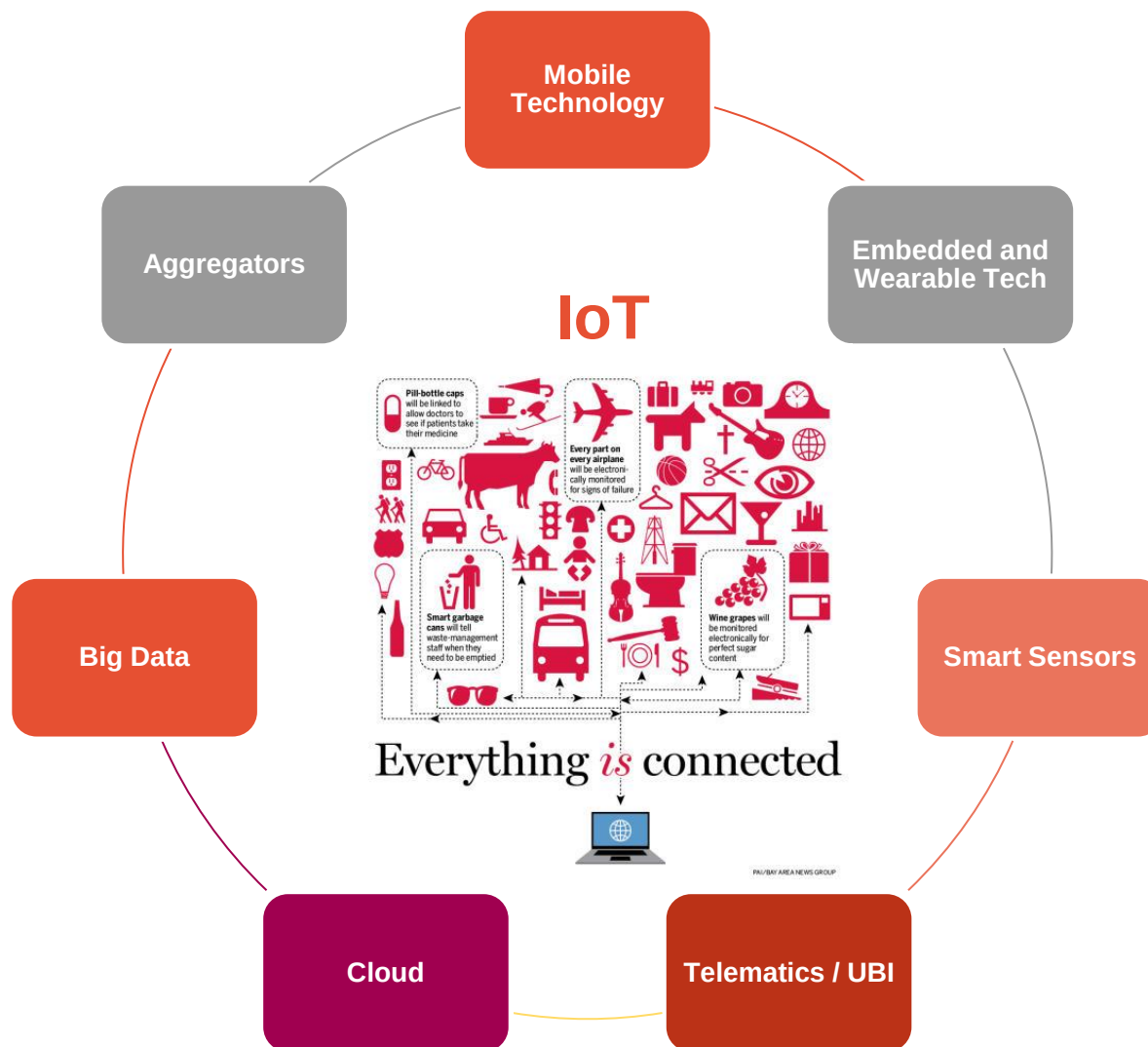


“IoT excluding PCs, tablets, and smartphones will grow to 26Bn units installed in 2020” ¹

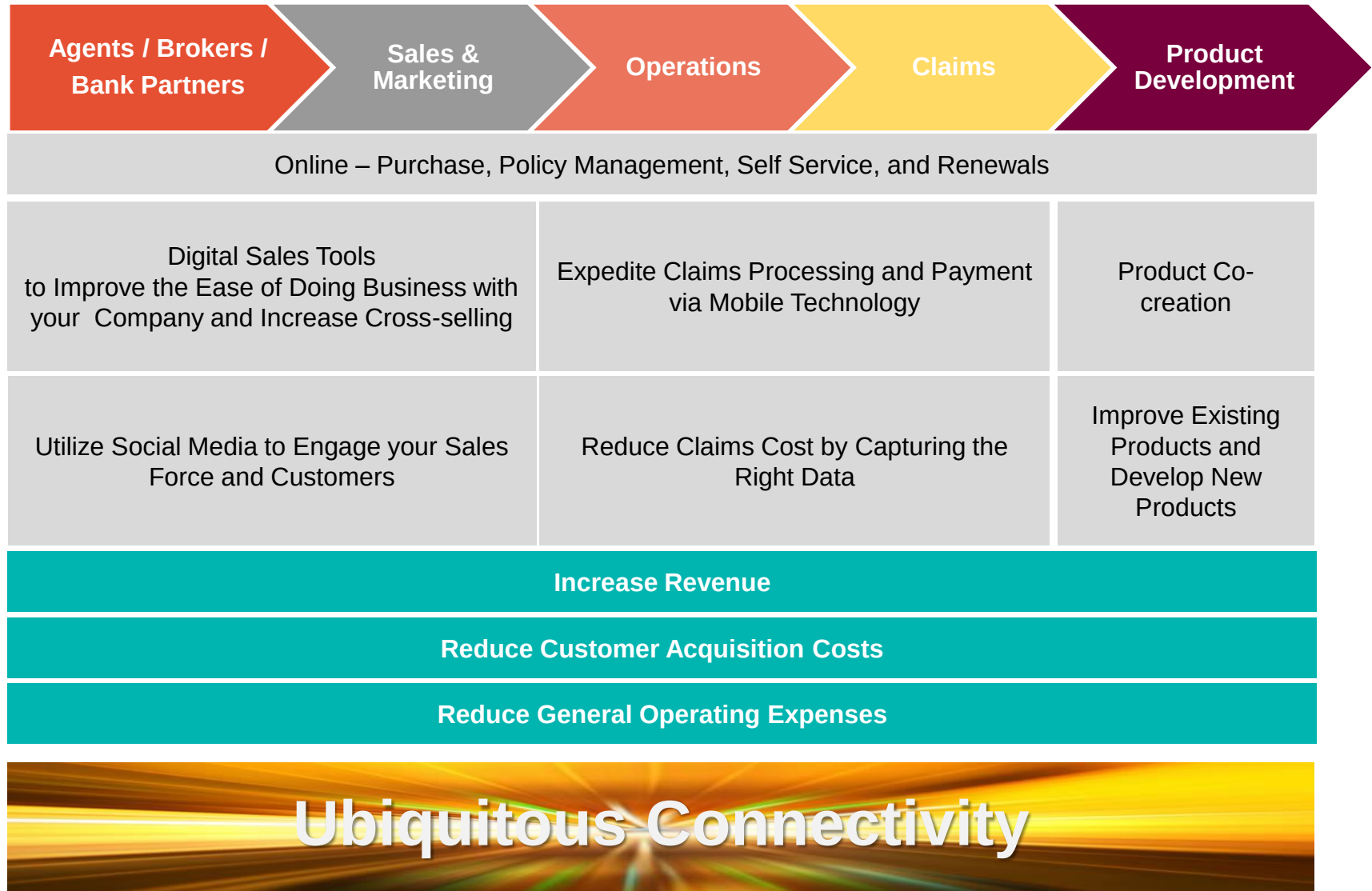
Source: Illustrative diagram – EVERYTHING

¹ Gartner

Digital Technologies Disrupting the Insurance Industry



How Digital Technologies can Create Value Across Functions



“This ‘telephone’ has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us.”

[Western Union internal memo, 1876]

Mobile – Endless Possibilities



Benefits:

Digital Distribution Channel	Reduce Claims Cost
Customer Self-service	Mobile Payments
Usage Based Insurance (UBI)	Innovative Insurance Products
Claims Filing and Management	Marketing
Customer Engagement	Sales Tool for Agents / Brokers

“The horse is here to stay but the automobile is only a novelty – a fad.”

[The president of the Michigan Savings Bank advising Henry Ford's lawyer not to invest in the Ford Motor Co., 1903]

Telematics / UBI - everybody wins

(once the technology costs enable the business case)



Consumers:

- Control of premium
- Understandable rating based on how, when, where they drive
- Access to useful driving feedback
- Value-added services
- “Green” and “progressive” products

Insurers:

- Enhanced pricing
- Product differentiation and brand awareness
- Reduced loss costs
- Improved consumer satisfaction and retention

Regulators:

- Saves lives
- “Fairly” discriminatory variables
- Consumer acceptance and premium control
- Environmentally friendly

Some Benefit Examples (cited in the public domain)

Self-selection



Pricing



10x

Differential in loss ratio
from TW DriveAbility score

Retention

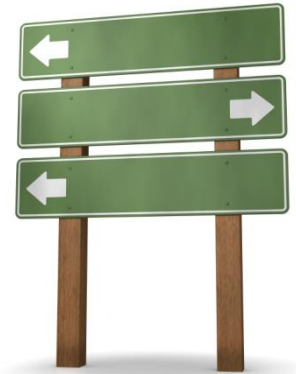


40%

Improvement in retention
cited by Progressive

http://media.corporate-ir.net/media_files/IROL/81/81824/clip-415391-dl_aud-en.mp3

Behaviour change



30+%

Reduction in claims costs
Young driver: 30% - 40%
Commercial fleet : 54% - 93%

20+%

Average discounts: 12% - 25%
Maximum discounts: 30% - 50%



Smart Home

Integrating the Smart Home with Insurance



Scenario

- A water pipe bursts causing the kitchen to start flooding while the owner is away on holiday
- Smart sensors pick up the unusually high water flow and alerts the owner via his smartphone
- The system is programmed to automatically shut the water supply in the event of a pipe burst

Conclusion

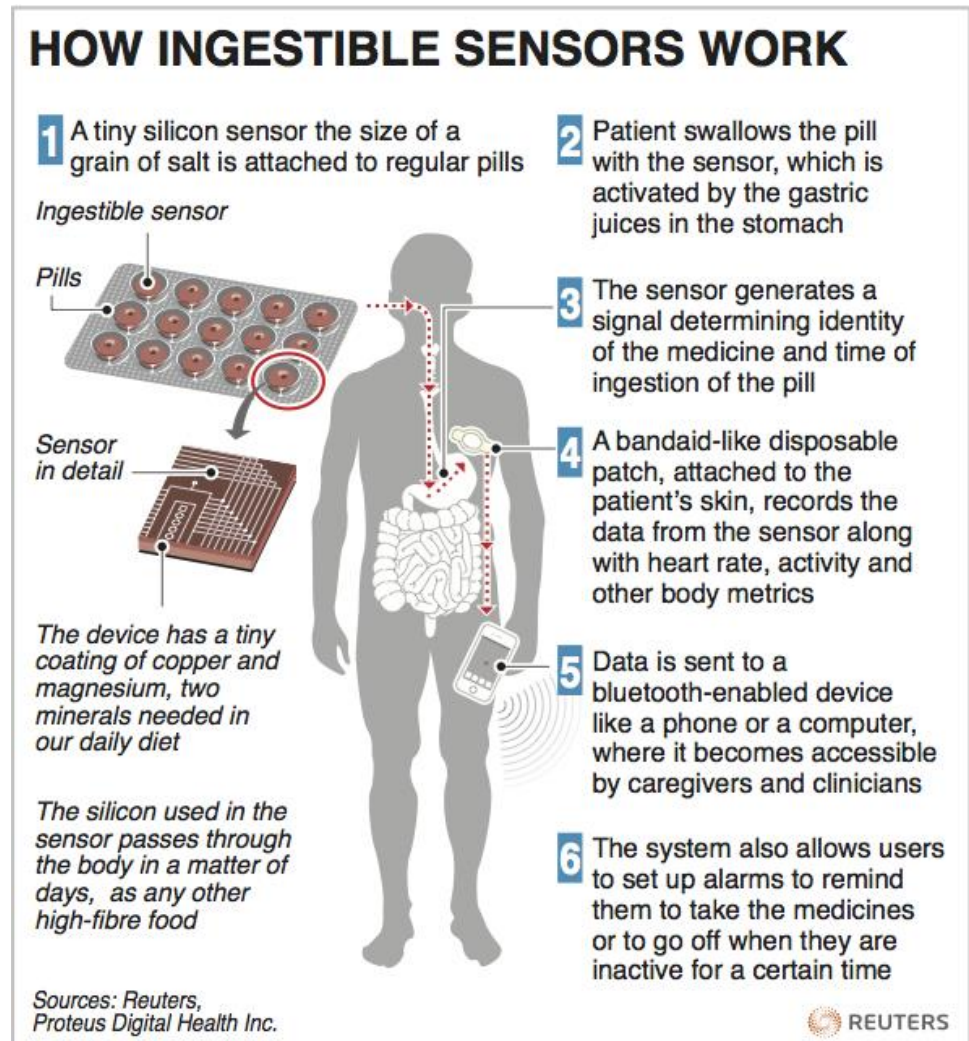
- The owner has minimised flood damage which effectively reduced or prevented a claim
- **A win-win situation for both parties!**



Future of Medicine Utilising Ingestible Digital Pills

Will insurance companies use this data to determine premiums?

- Patients with chronic illnesses will benefit the most
- Some ingestible digital pill are approved by the US Food and Drug Administration
- Enable doctors to monitor how a patient reacts to a drug, the dosage timing, physiologic response
- Reduce cost of developing new drugs by providing real-time data about the body's reaction to the drug
- Sensors are low cost



Source: Reuters

Technology Innovation will Advance Healthcare According to a Recent Study Commissioned by Intel

Improving Personal Care and Self-Monitoring with Technology

- More than 70 percent of people globally are receptive to toilet sensors, prescription bottle sensors or swallowed monitors
- Sixty-six percent of people say they would prefer a personalized healthcare regimen designed specifically for them based on their genetic profile or biology
- Fifty-three percent of people say they would trust a test they personally administered as much or more than if performed by a doctor

Emerging Technology Tools for Increased In-Home Health Management

- Half of those surveyed would trust a diagnosis delivered via video conference from their doctor
- Seventy-two percent are receptive to communication technologies that allow them to remotely connect to their doctor
- Forty-three percent globally would trust themselves to monitor their own blood pressure and other basic vitals
- Only 42 percent of Japanese respondents say the traditional hospital will become obsolete in the future compared with 57 percent of global respondents

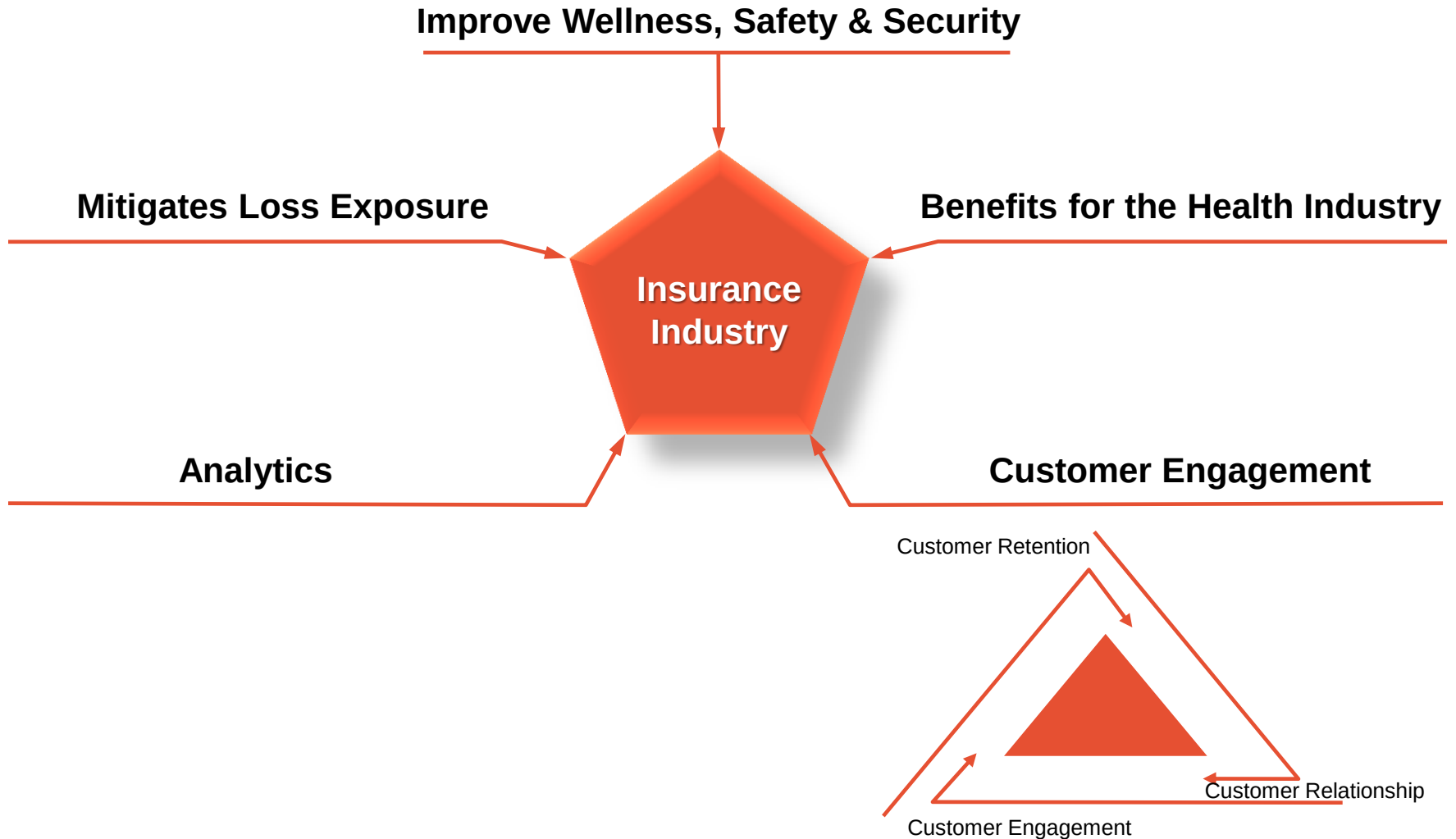
Source: Intel

This survey was conducted online by Penn Schoen Berland on behalf of Intel in Brazil, China, France, India, Indonesia, Italy, Japan and the United States from July 28 to Aug. 15, 2013. It was conducted among a representative sample of 12,000 adults ages 18 and older with a margin of error of plus or minus 0.89 percentage points.

“If you always do what you always did, you will always get what you always got.”

[Albert Einstein]

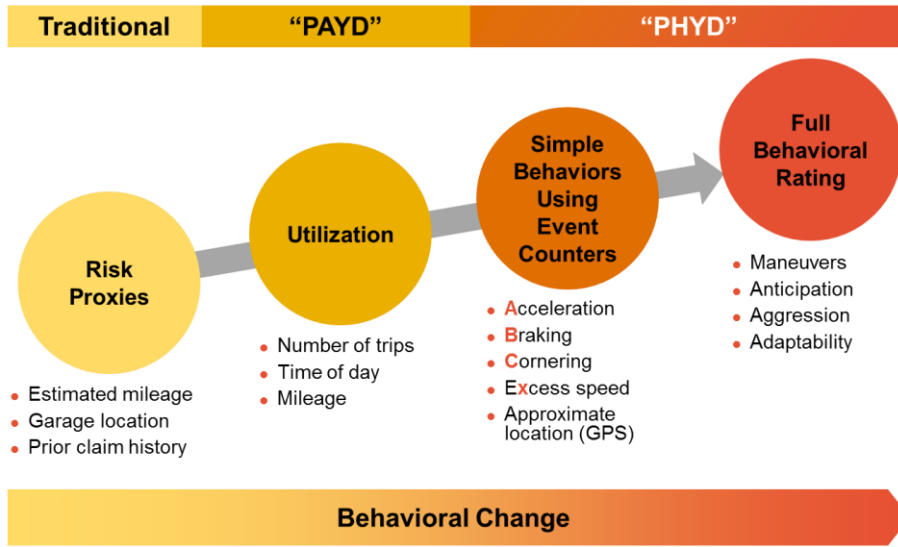
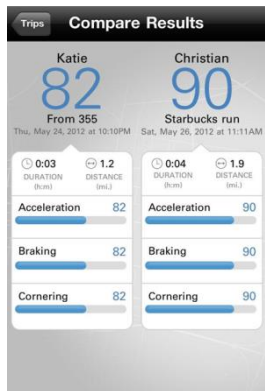
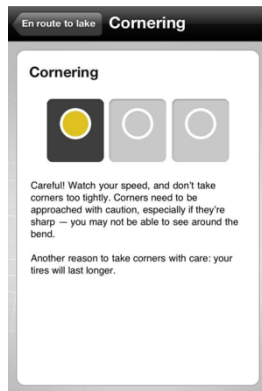
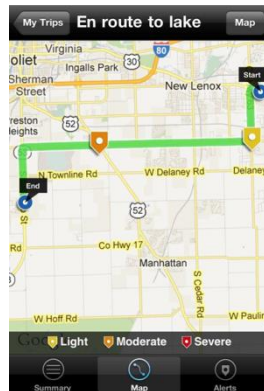
IoT will Provide Significant Opportunities for the Insurance Industry



Game Changing Opportunities?

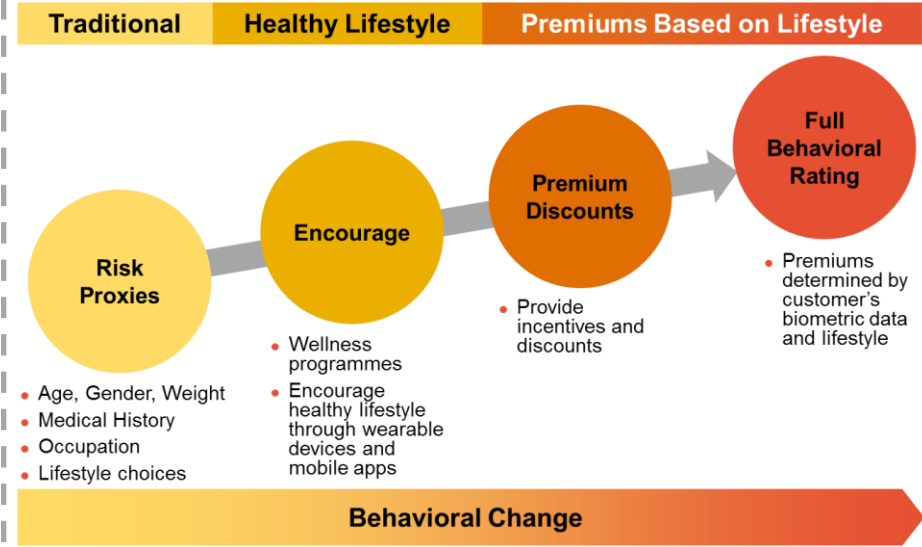
Usage Based Insurance (UBI) Example

Auto UBI



What it could look like for life?

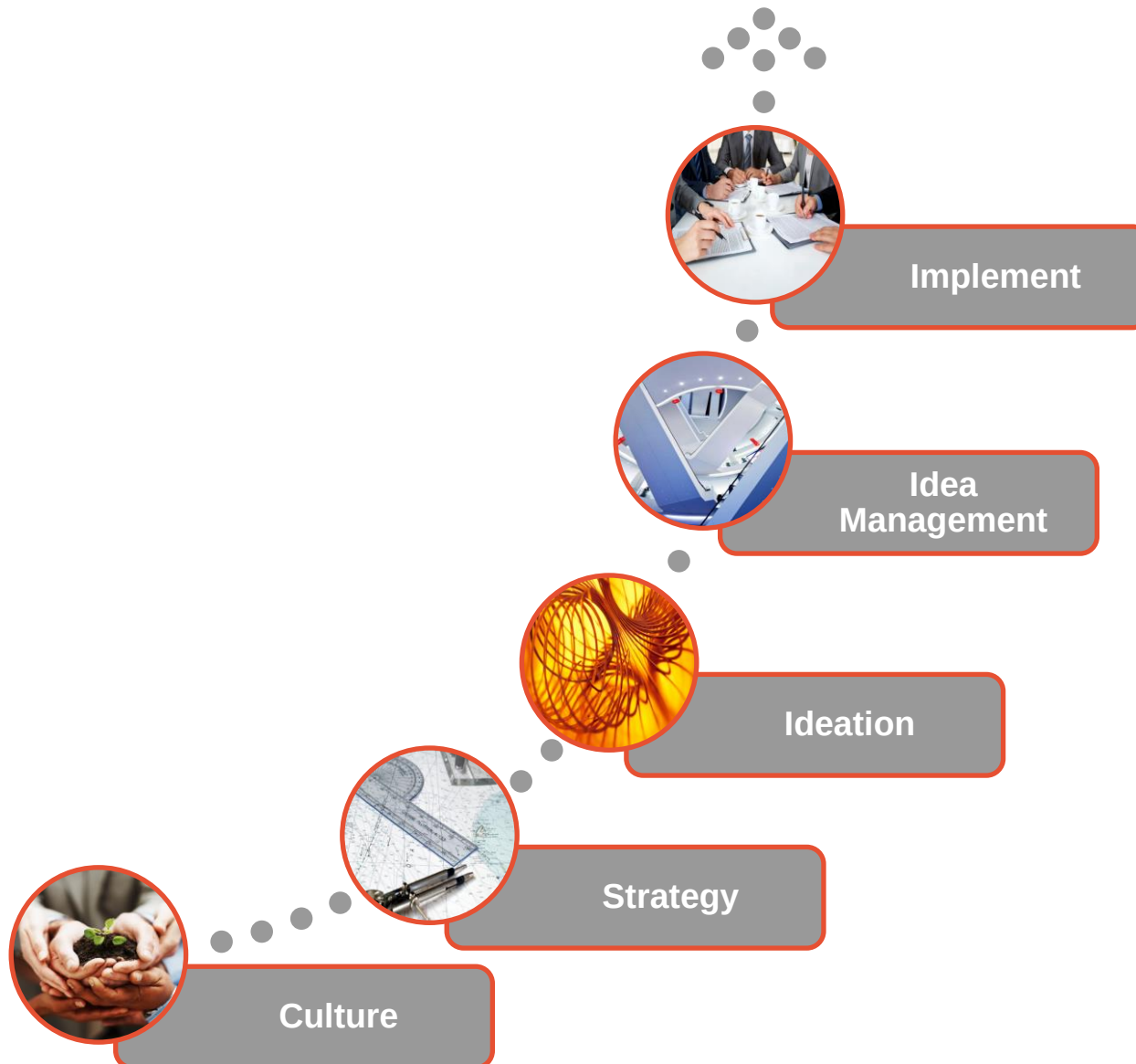
"Lifestyle Based Insurance"



“There is no reason for any individual to have a computer in his home.”

[Ken Olson, president, chairman and founder of Digital Equipment Corporation (DEC), in a talk given to a 1977 World Future Society meeting in Boston]

Critical Success Factors for Innovation



“You cannot discover new oceans
unless you have the courage to
lose sight of the shore.”

[Andre Gide]

We live in interesting and exciting times ...

Thank you



Alan Merten

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