

# Looking into the crystal ball: the future of marine insurance

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**Andy Yeoman**  
**(CEO)**

Ex-Trimble Inc., and GM of Commercial Vehicle Insurance Telematics and significant experience in Personal lines. Andy has significant start-up and M&A experience.



**Jonathan Kalman**

Experienced investor with over 20 years experience in investing in FinTech and Insurance

Outstanding track record of driving investor returns including two unicorns and multiple exits

Jonathan has significant experience operating and growing start-ups

The current market is NOT sustainable





*“The 2017 results are proof, if any were needed, that business as usual is not sustainable.”*

- Bruce Carnegie-Brown, Chairman Lloyd's of London



\$2bn

125%

42%

70%

\$5bn

An aerial photograph of a large, curling ocean wave in shades of teal and blue. A small figure of a person is visible on the wave's face, surfing. The background shows a hazy, overcast sky.

There is a Tsunami of data and technology coming at us  
Learn to surf or get ready to drown

In 2012, insurers or reinsurers completed just one strategic investment to a private tech company.

In 2016, they completed 100.

CB Insights



Who needs more data?



A large container ship is shown from a side-on perspective, sailing on a dark blue ocean. The ship's deck is covered with numerous colorful shipping containers in shades of blue, yellow, red, and green. The ship's hull is white with a dark blue stripe along the bottom. The sky is a deep blue with scattered white clouds. The overall scene is a digital rendering or a high-quality photograph of a modern cargo vessel.

In the future...

- More or less data?
- More or less accurate?
- Increase or decrease in frequency?
- Diverse or harmonised?
- Ignored or integrated?

An iceberg floating in the ocean. The tip of the iceberg is visible above the water line, while the much larger, jagged mass of the iceberg is submerged below the surface. The sky is blue with some clouds, and the water is a deep blue.

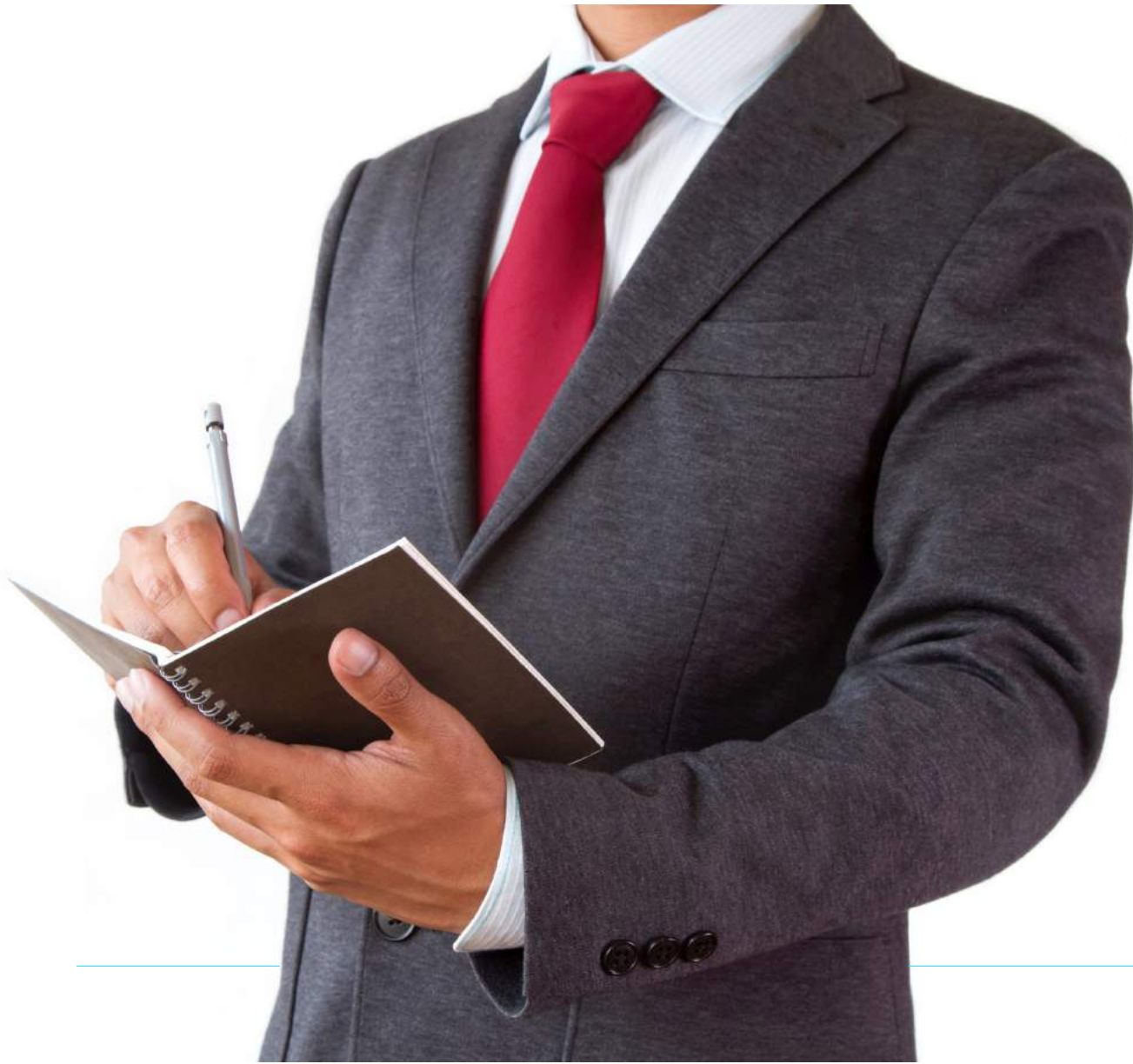
The future is....

If you could have known  
you should have known

...only technology  
can save us

A photograph of a wooden pier extending into a body of water. In the foreground, the bow of a wooden boat is visible, tied to the pier. In the distance, another small boat with several people is on the water. The sky is overcast and the water is calm.

But can we trust these  
technology sorts?



Insurance



Technologists



InsureTech?



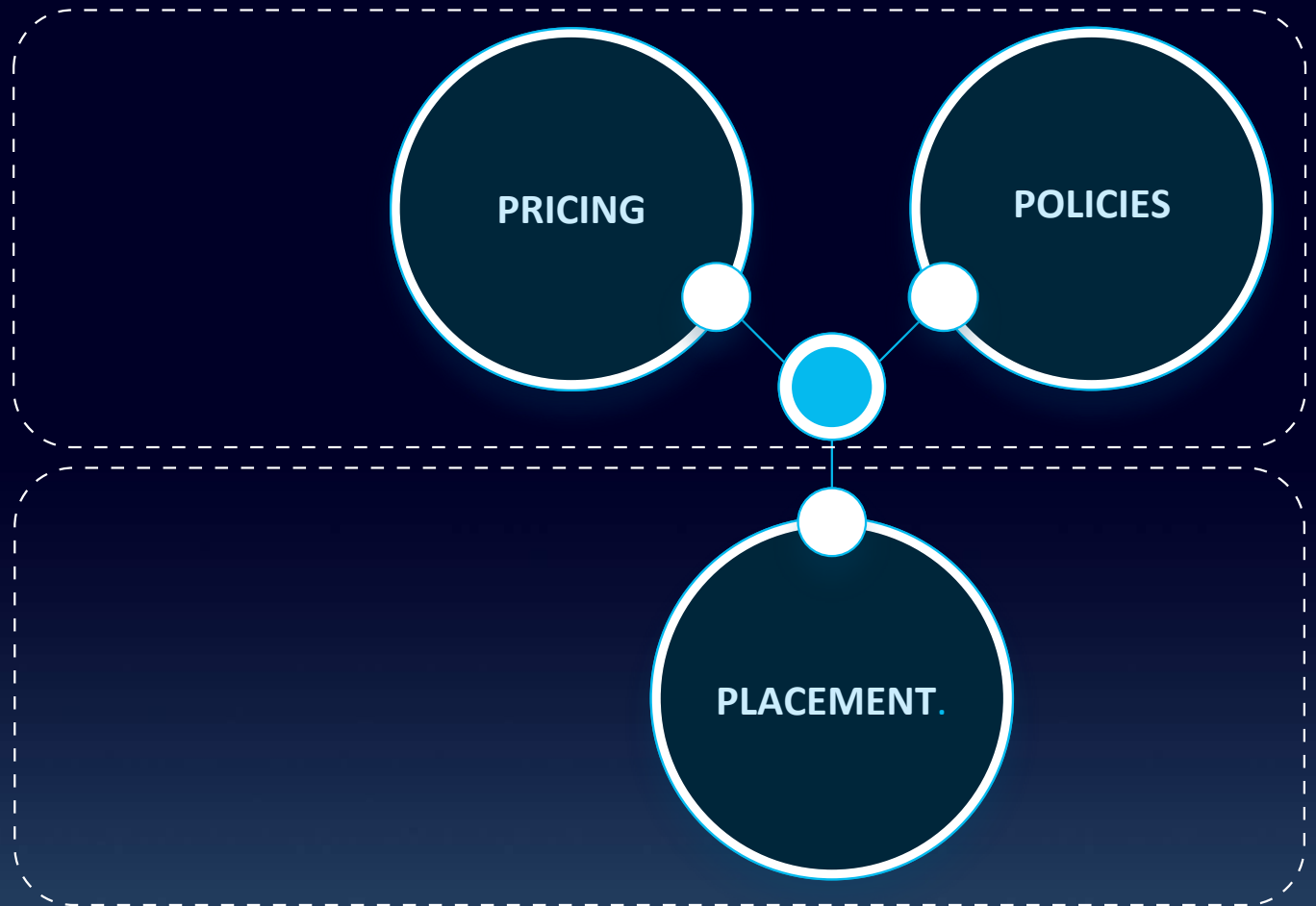
Today we'll explore

What the future could look like

What can we learn from other industries

What we can do today

# Marine Insurance Areas of change





## The 3 pillars of change

- ① Pricing driven by demographics
- ② Policies are global and few exclusions
- ③ Placement is offline and manual

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“Everything that can be digitised in our industry will be digitised.” – Maersk



Commercial in Confidence

Concirus 



Every aspect of insured marine risks is being monitored in real-time - hull, machinery, cargo, contents

It's forecast that there will be 50 billion sensors connected to the internet by 2020.



We now live in an age where much of what was  
unknown or unknowable can now be known

This changes the fundamentals of commercial marine insurance

## What the data shows



What we derive:

- Routes
- Port visits
- Mileage
- Speed
- Accumulations
- Exposures

Seeing behaviour in real time means we gain new insight into risk...

Flag: Netherlands

Owner: Davro

Operator: Davro

[More info](#)

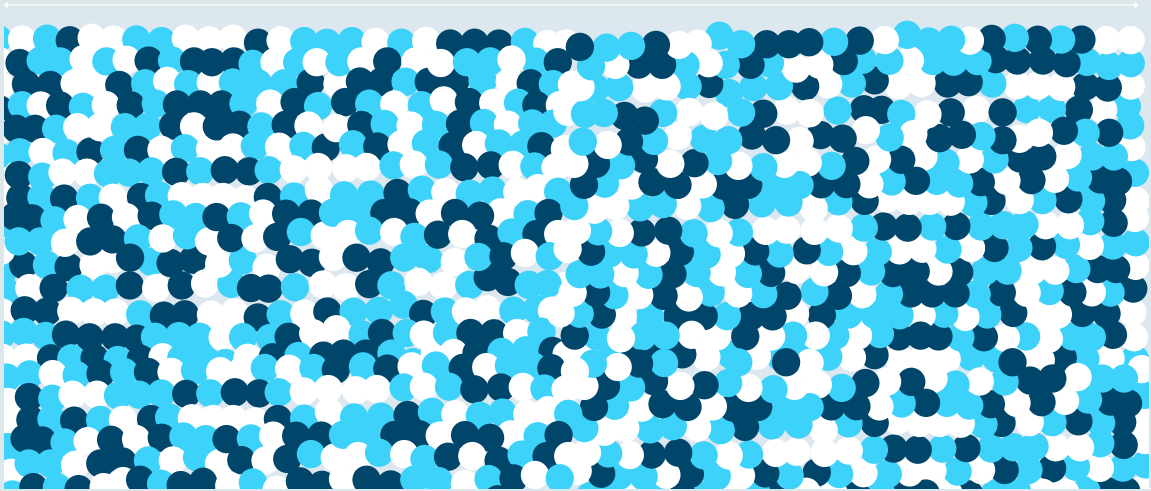


# Developing a 'score' and weaponizing the data

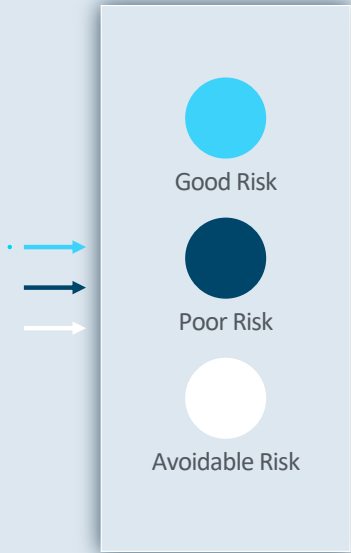
## Static Demographic Factors

... Class Flag Year built Yard built Tonnage ...

Behavioural Data  
Historical, Real-time &  
Predictive  
...  
Area of Operation  
Port Activity  
Owner Performance  
Benchmarking  
...



## Behavioural correlations & risk indicators





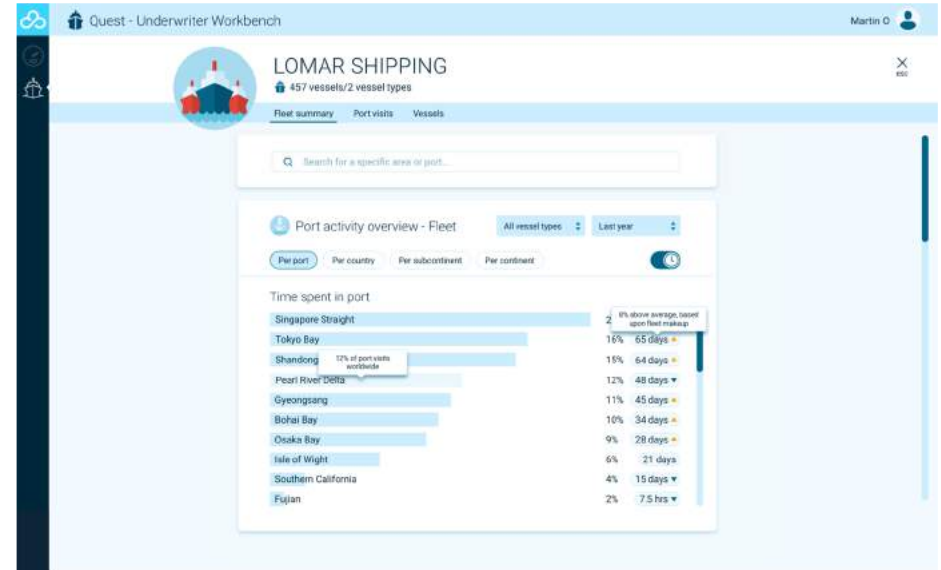
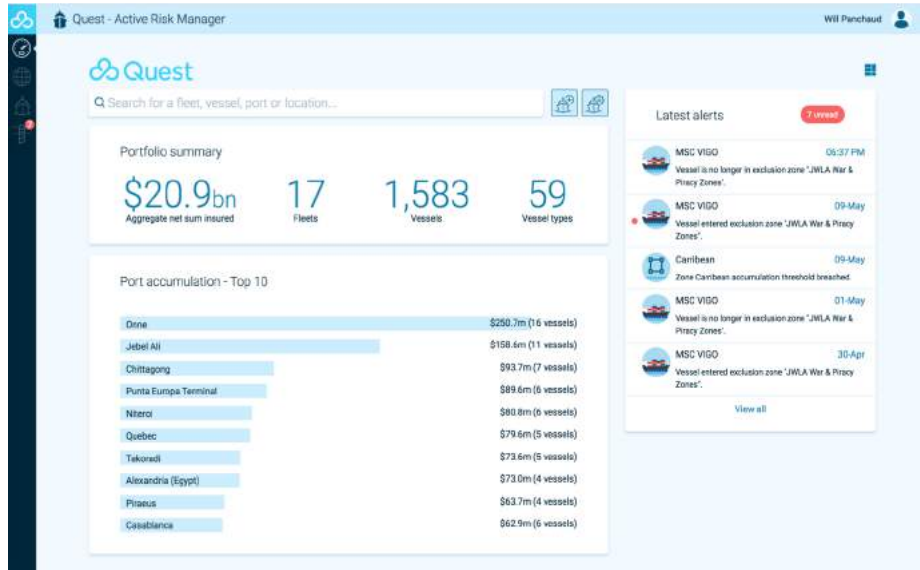
# Global Benchmarking

Operator	Bulk Carriers	Cargo	Fishing	Misc.	Non-Ship Str.	Passenger	Tankers	Yachts	Total
Mitsui OSK Lines Ltd	294	16	6	6	1124	21	1	0	1
MSC Mediterranean Shipping Co	3	4	0	3450	2333	378	9	0	2
NYK Line	2386	1	0	0	0	0	0	0	3
Kawasaki Kisen Kaisha Ltd	2	5	0	2074	1810	0	15	0	4
Maersk A/S	4	6	0	2477	1961	0	45	0	5
CMA CGM SA The French Line	0	2	0	0	0	0	5072	0	6
Oldendorff Carriers GmbH & Co	0	3	0	3601	0	587	0	0	7
Edison Chouest Offshore LLC	1	265	0	207	0	0	0	0	8
Wagenborg Shipping BV	0	0	140	1	0	3783	0	0	9
Evergreen Marine Corp	0	0	0	66	1	0	0	0	10
Maersk Line A/S	37	33	120	63	56338	198	35	0	11
Volgotanker Volzhski Oil Shpg	0	8	0	6390	2826	253	0	0	12
Hanjin Shipping Co Ltd-KRS	0	0	0	4	0	11	194	189	13
ASDP Indonesia Ferry	0	7	0	0	0	0	0	0	14
COSCO Shipping Lines Co Ltd	1109	24	68	54	306	67	909	45	15
Hapag-Lloyd AG	0	9	0	0	1626	0	0	0	16
Crowley Marine Services Inc	43	0	0	3601	0	0	2	0	17
Pacific International Lines	201	259	65	15	0	232	28	0	18
Bourbon Offshore Surf SAS	0	36	598	17	0	39	1097	0	19
Mexicanos Pesqueros SA de CV	13	22	0	9953	0	0	340	0	20
Northern Transportation Co Ltd	0	3428	0	0	0	1	0	0	21
SCI	3938	10	0	9885	0	0	0	0	22
Volga Shipping JSC	0	0	3307	3	0	385	1097	0	23
COSCO Shipping Development	0	11	0	0	0	3705	0	0	24
BBC Chartering & Logistic GmbH	0	13062	0	2	0	0	0	0	25
China Oilfield Services Ltd	0	0	1	0	3987	0	0	0	26
Ocean Tankers Pte Ltd	486	12	0	0	0	0	0	0	27
Hyundai Merchant Marine Co Ltd	0	0	0	767	2	0	0	0	28
Pan Ocean Co Ltd	0	0	2	0	0	0	0	0	29
Hamburg Sudamerikanische	0	7007	0	5	534	479	0	0	30

Quest Marine is able to combine the last ten years of global data to produce a global ranking of operators that includes additional features to demonstrate size and vessel type.

Using our Global fleet ranking, Concirrus is able to benchmark a client's portfolio, identifying missing accounts that would be a suitable fit and poorly performing accounts that could be replaced.

Due to the large number of operators, only the top 30 are shown.



# Pricing models can undergo a seismic change...

## YESTERDAY

Risk assessed and priced on historic declared, articulated demographics

## TODAY

Risk assessed, priced and managed based on live observed, even anticipated behaviour

A man in a black t-shirt is shown from the chest up, looking directly at the camera. He is wearing black gloves with glowing blue lights on the fingers. His hands are raised, and there are glowing blue digital elements around them, including a circular ring on his right hand. The background is a dark, futuristic digital space with various glowing elements, including a large, stylized '00' and some abstract shapes. The overall color palette is dark blue and black with bright blue highlights.

Active Risk Management  
becomes possible  
Precrime becomes Preclaim

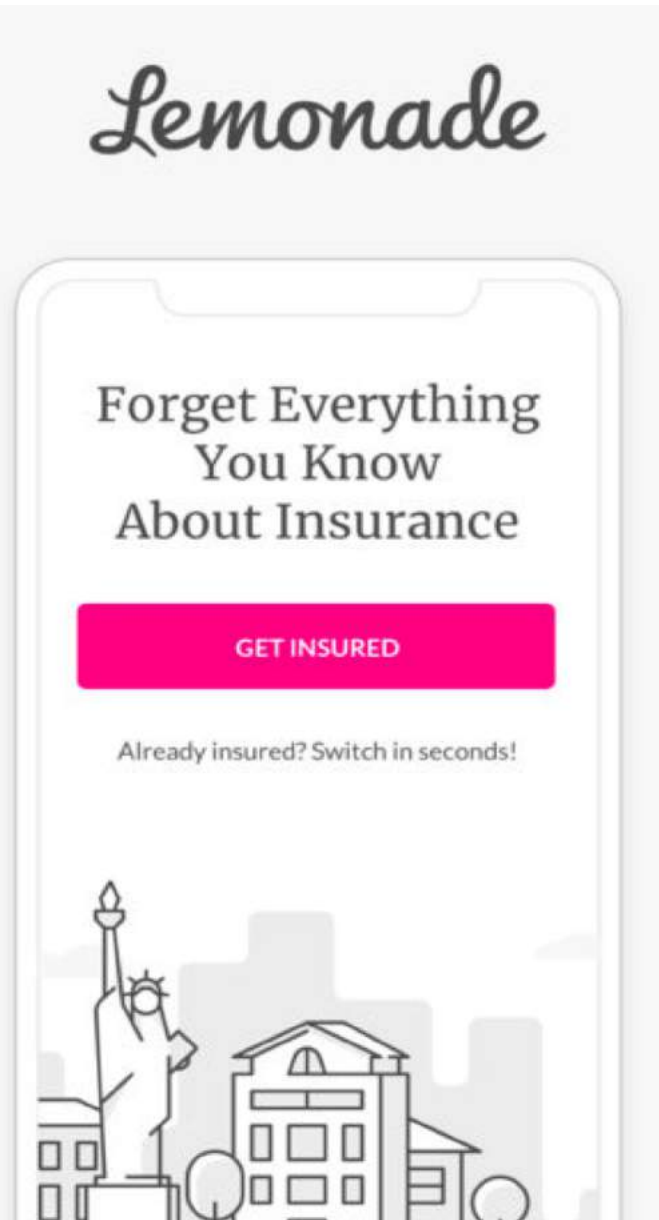
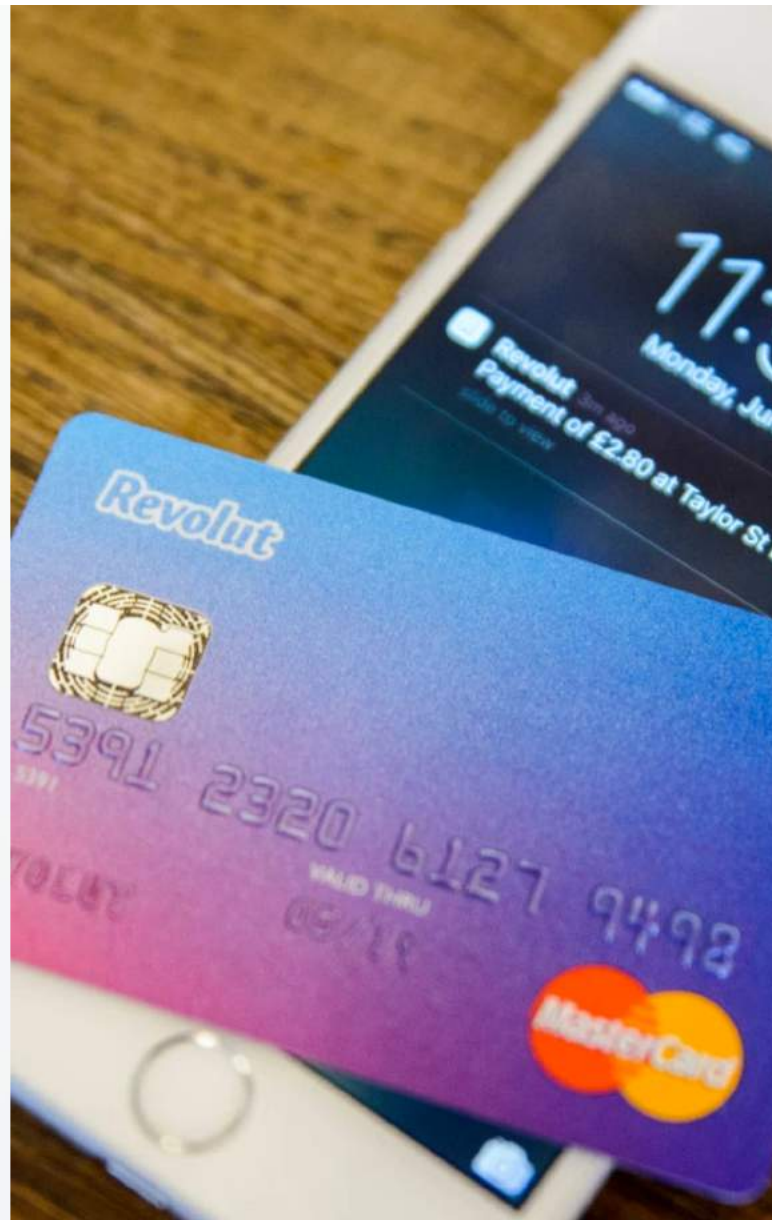
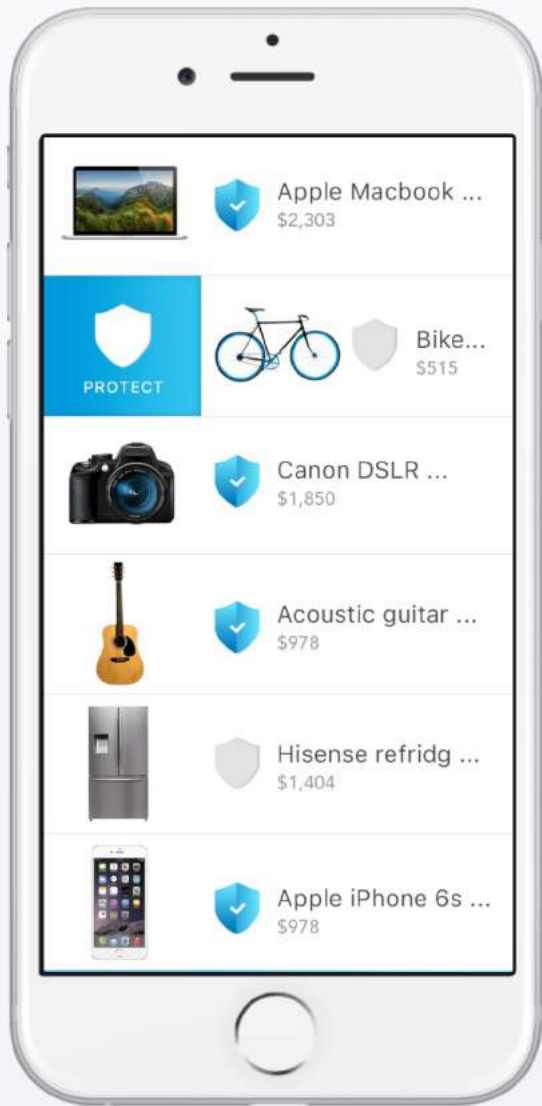
## The 3 pillars of change

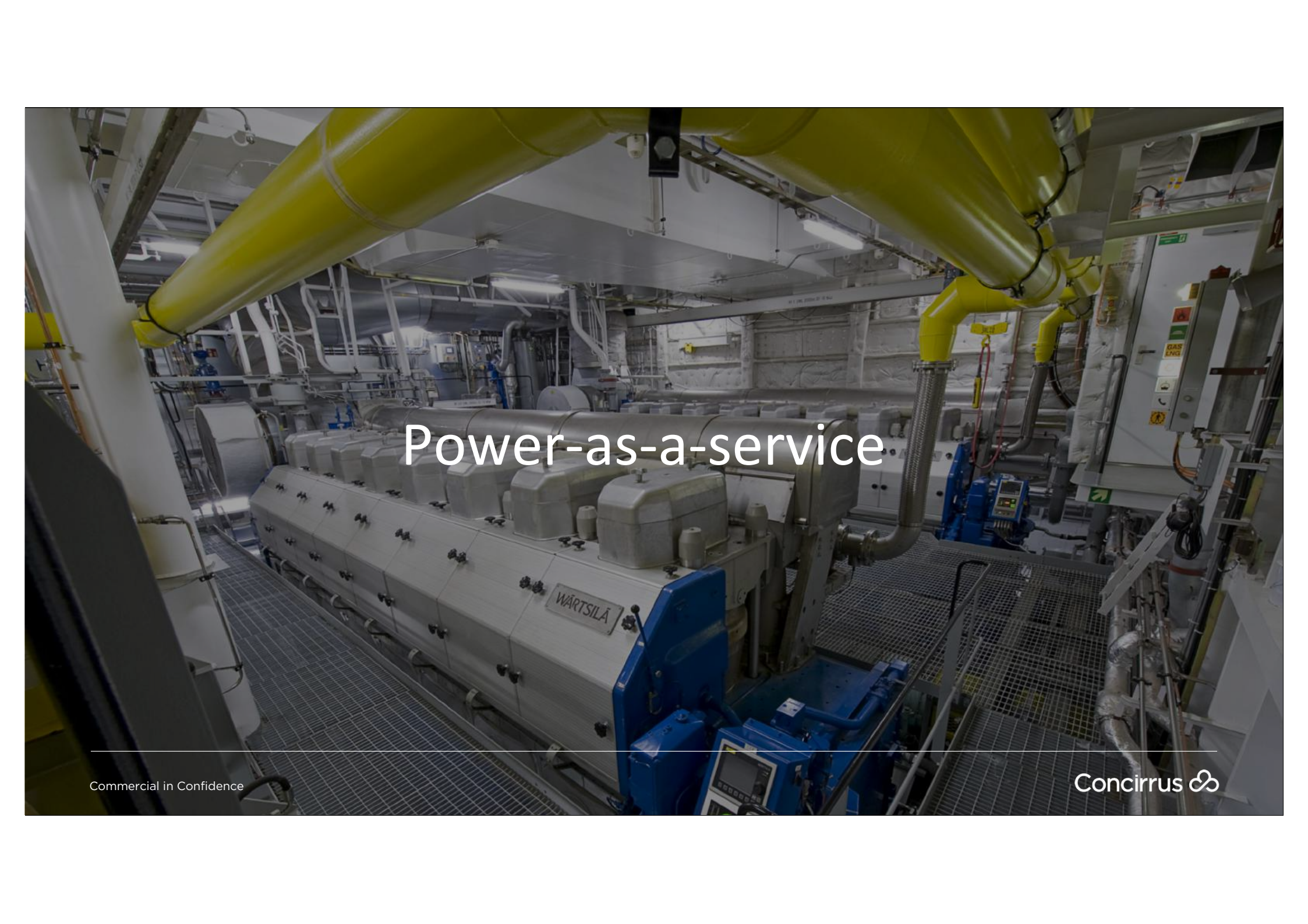
- ① Pricing driven by demographics
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- ③ Placement is offline and manual

Policies are global, annual and few  
exclusions....but why?

Alternatives:

1. Continuous coverage
2. Fractional policies
3. On demand






# Power-as-a-service





Elastic policies  
Automated coverage  
Automated Return of Premium



Data will uncover risks that are  
not insured today

Only 10% of the World's risk is  
Uninsured

## The 3 pillars of change

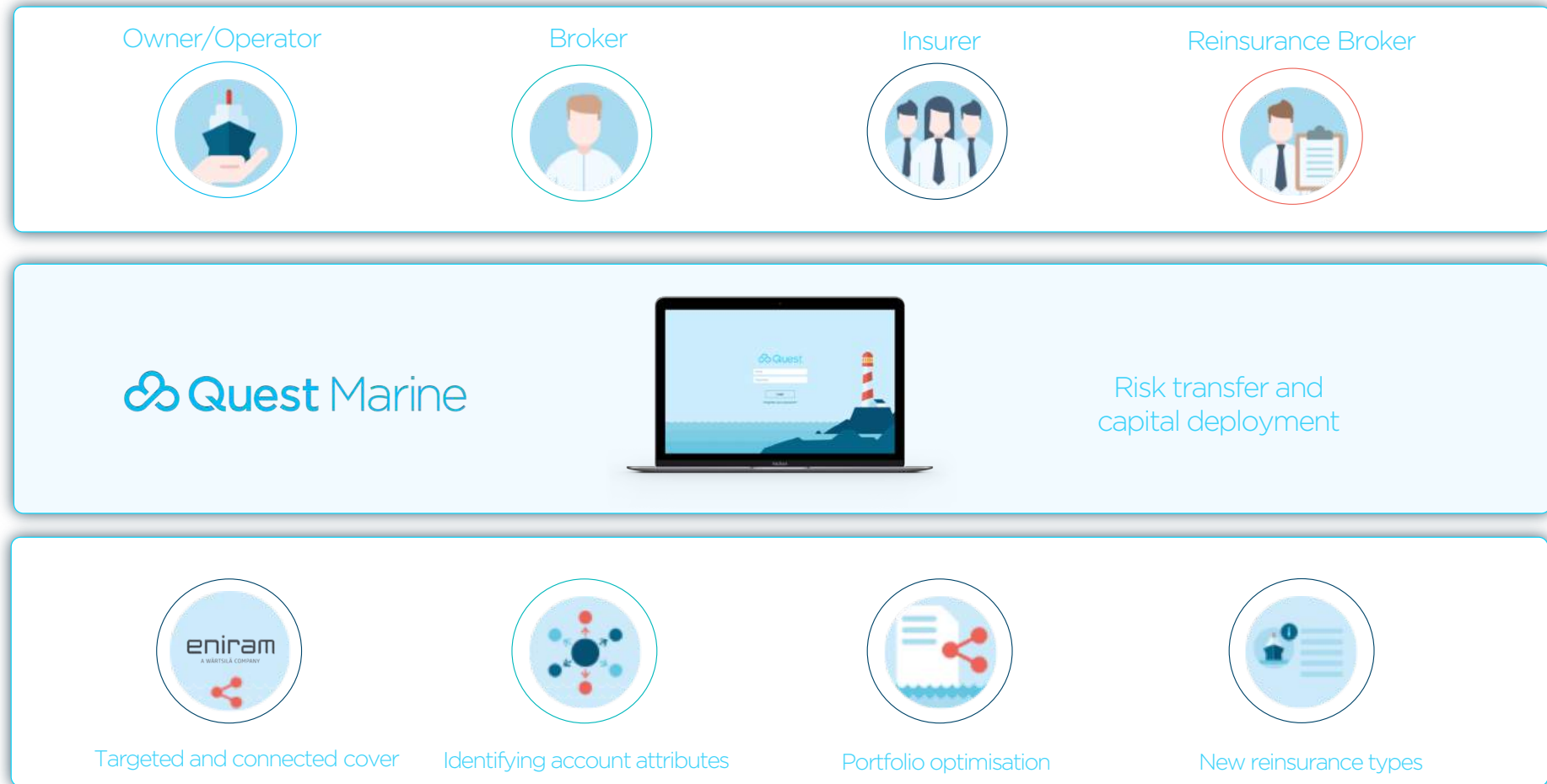
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Placement moves from  
offline & manual  
to  
real-time and electronic

“Insurance transactions are currently far too tedious and frictional. Blockchain technology has the potential to facilitate the desired development that is long overdue.”

Lars Henneberg, Maersk’s head of risk and insurance

# Wins across the value chain – certain functions are redundant





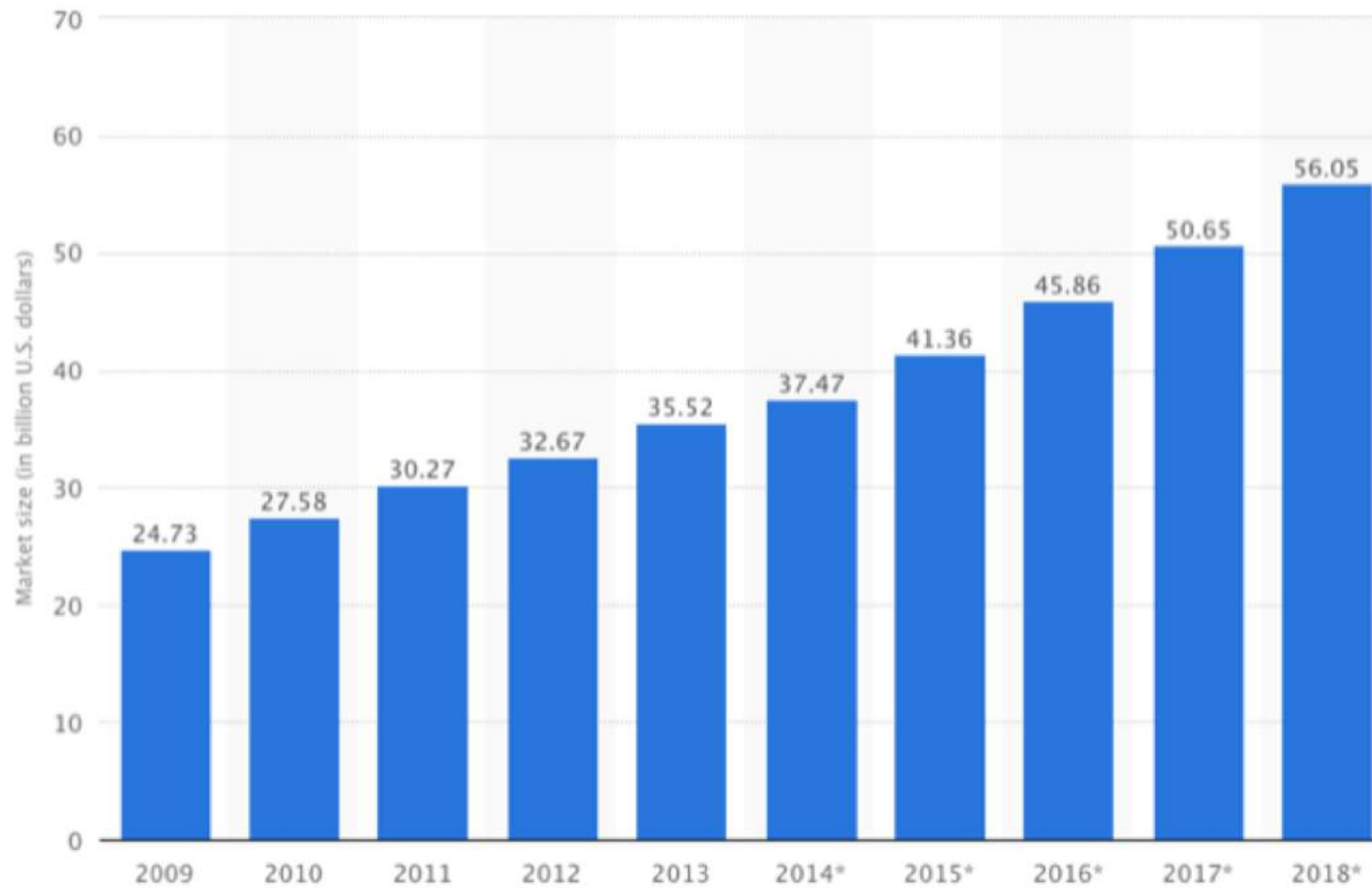
# In Play betting

Commercial in Confidence

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## Size of the online gambling market from 2008 to 2018



Source: Statista.com

A wide-angle photograph of a calm sea under a deep blue sky. The horizon is visible in the middle ground, with a small boat on the right side. The water has a subtle ripple pattern. The overall mood is peaceful and expansive.

# Summary Conclusions

## Marine insurance future:

- ① Risk is rated by demographics + behaviour
- ② Policies are elastic and fractional
- ③ Placement is online and automated

## How does this benefit insurers?

- 1 More premium and new target markets
- 2 Improved loss ratios and better risk
- 3 Active risk management in real time
- 4 New, elastic policies

= more profit

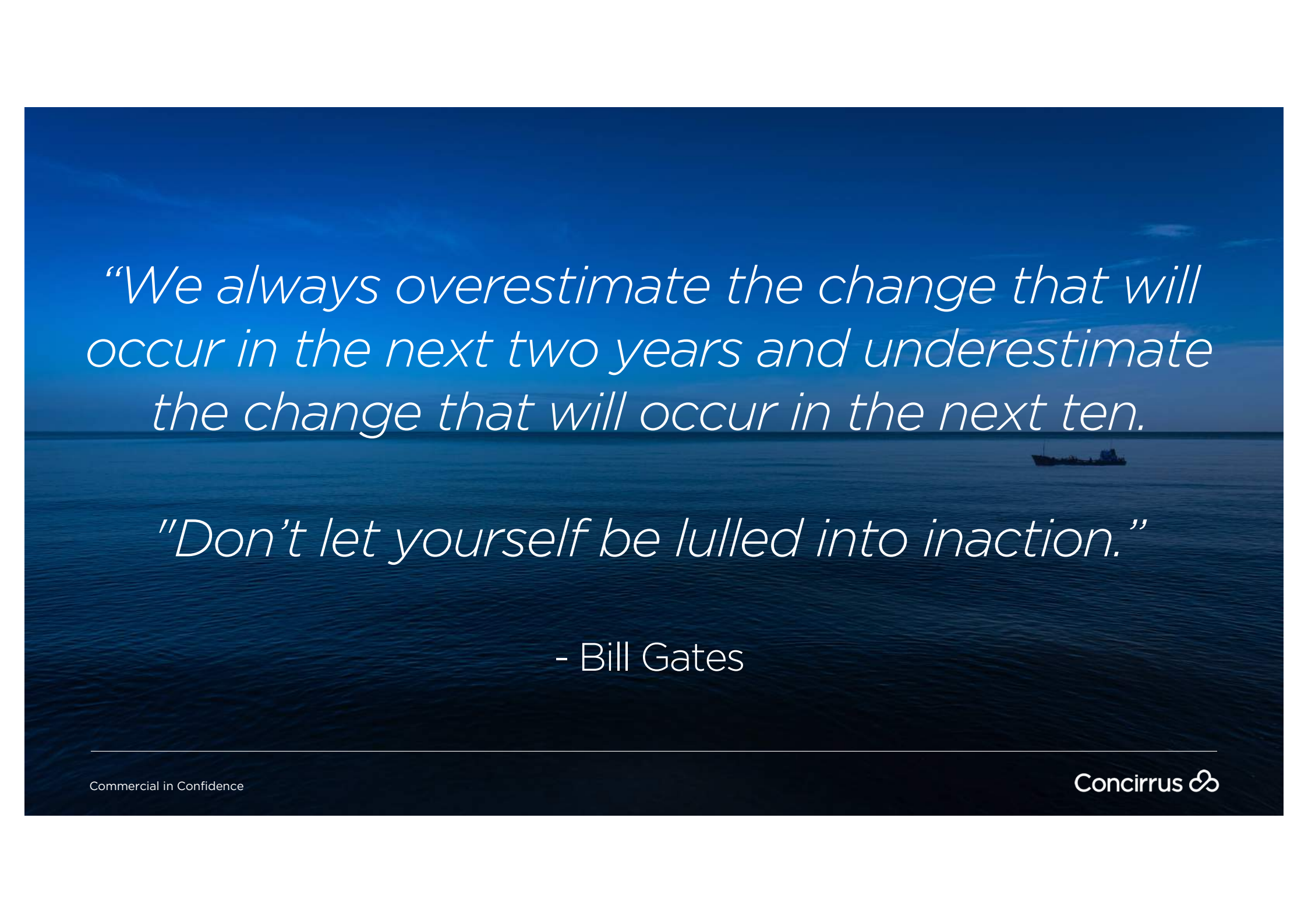
DOT.  
CON

“The internet has not been a  
‘disruptive technology’...”

“It is difficult to think of a single example in which an internet company has supplanted a major ‘old economy’ firm”

“The internet does not represent  
a revolutionary new business  
model”





*“We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten.*

*“Don’t let yourself be lulled into inaction.”*

- Bill Gates

We need to work together...



The future belongs to those who create it

Concirus 

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