On Digital Transformation for O&G Drilling

Overcoming the challenges to deploy a robust IoT Strategy
A system of systems view

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Transocean

Premier Offshore O&G Drilling Services

- Largest ultra-deepwater market segment
- Largest fleet of high spec ultra-deepwater and harsh environment floaters
- Operates in most major markets worldwide
- Technology leader in offshore drilling

Understanding the Technology Landscape

Offshore Drilling Patents
Unique Patent Families Worldwide

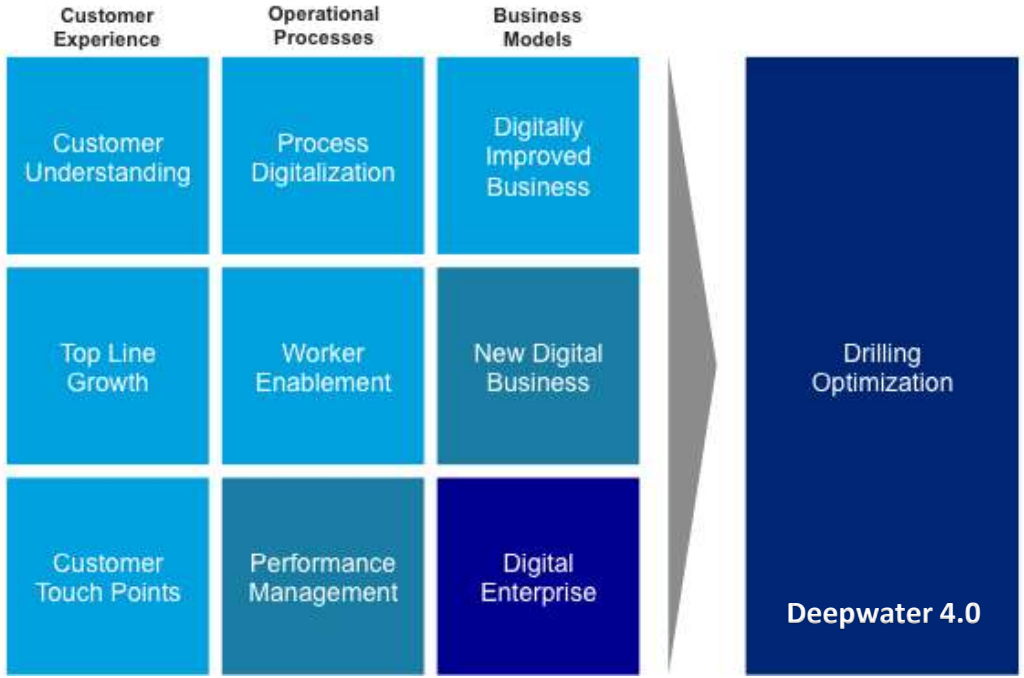
1945-2012

Telecommunication Patents
Unique Patent Families Worldwide

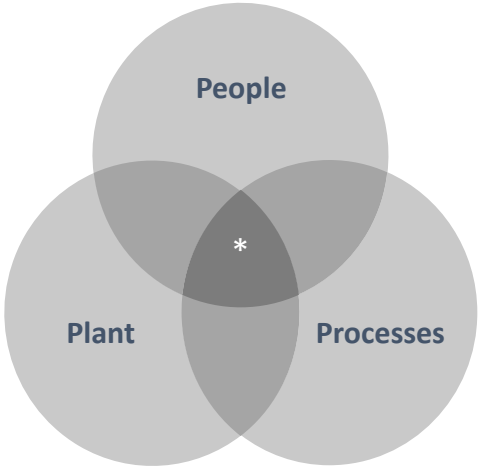
2014

A Digital Transformation Journey toward Drilling Optimization

Transforming…



But Digital Transformation in itself has its own set of challenges…



Data Management

- Data capturing and data cleansing
- Data normalization
- Data Management Policy and Governance
- Data Sharing Management and Cyber-Security

IT Infrastructure Management

- OT and IT governance
- Scalability, Availability, and Standardization
- Multiplicity of platforms with varying degrees of quality
- Platform architecture: edge, fog and cloud levels.

Knowledge Management

- Too many platforms competing for attention… … too many solutions looking for a problem
- Novel business models trying to position themselves to provide value-added services based on knowledge harvested.
- Lack of understanding of analytic needs

Business Factors

- Business model delivery, governance, execution and control
- Competitive landscape
- Regulatory environment
- Customer Policies
- Liability and other legal elements.

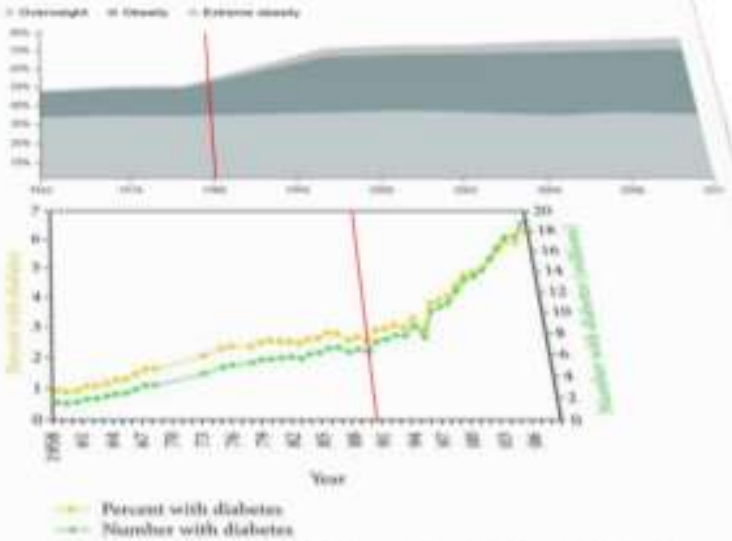
The digital platforms landscape is still on early growth stage

Here is where selecting the right partners to leverage the digital strategy is crucial for success

Better information does not necessarily implies better decisions

- *U.S. Nutritional Labelling and Information Act of 1990 required labels on food as we know them today*
- *Obesity and diabetes have continued to rise, even more steeply since then*

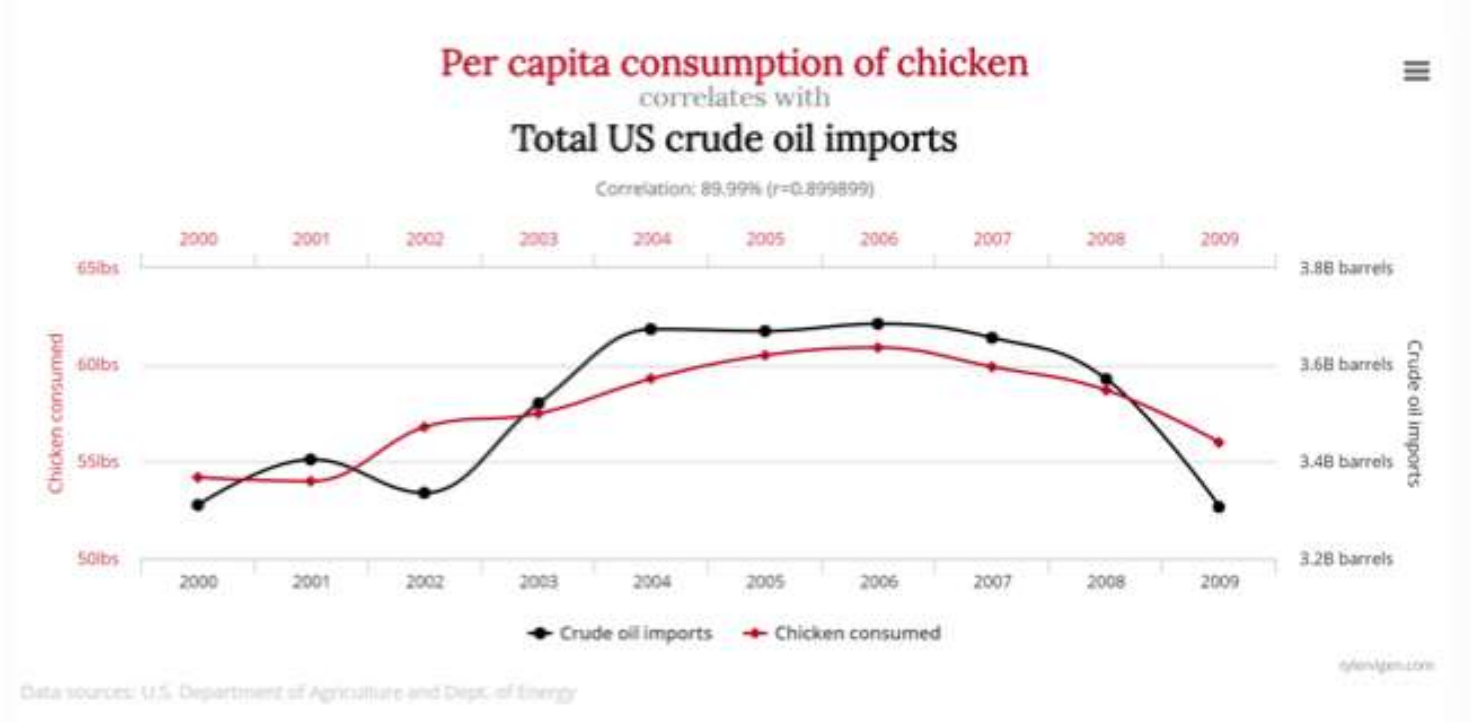
Nutrition Labelling and Information Act of 1990



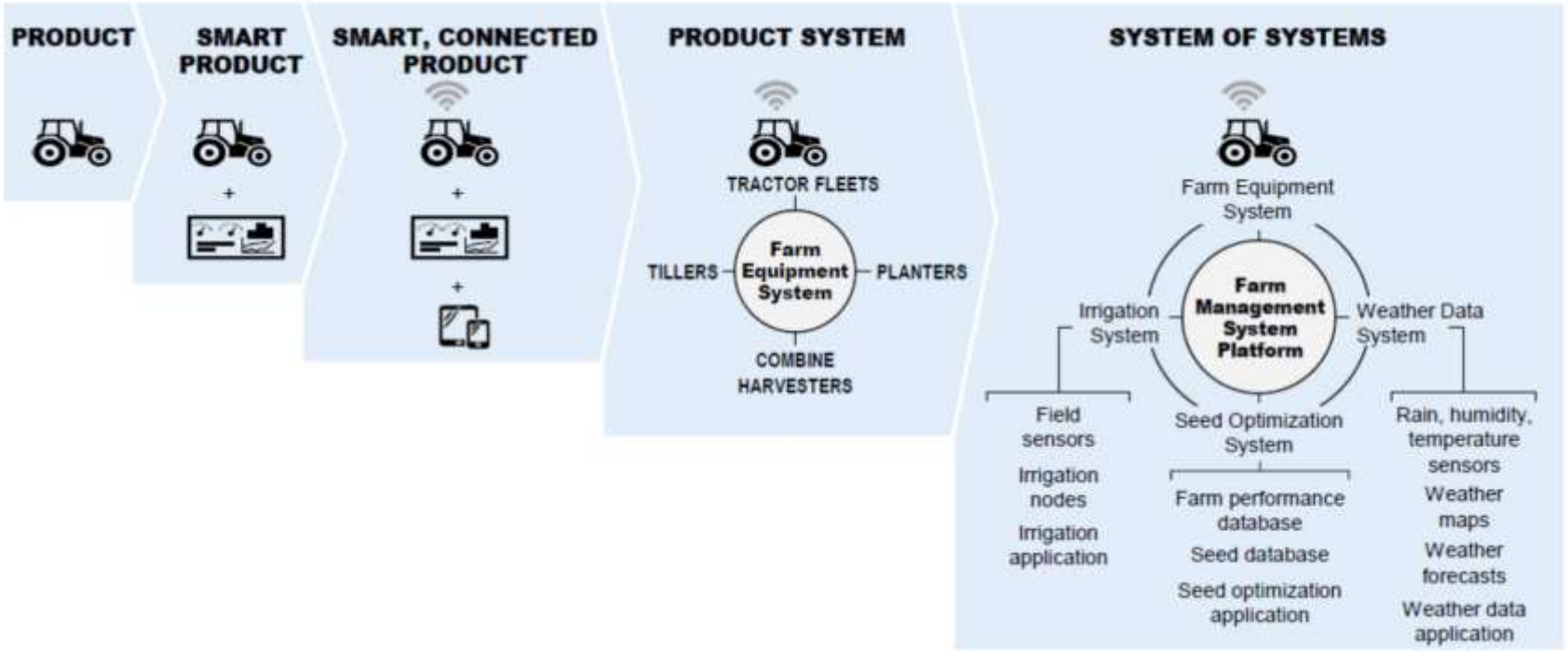
CDC (top) and National Institute of Diabetes and Digestive and Kidney Diseases

luxresearch

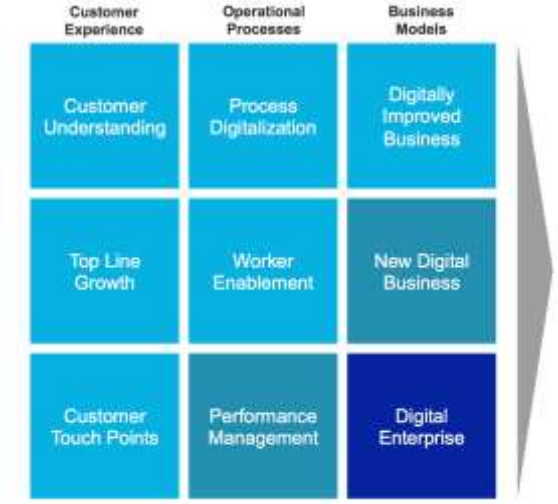
And of course a good data scientist can always find a correlation…..

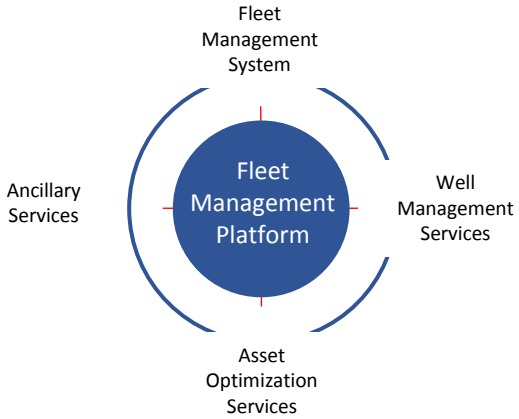


An systems of systems strategy roadmap



Putting it all together….





Business Strategy driving the digital transformation

Conclusions

The Digital Transformation journey has many business and technical challenges. A sound business strategy along with an innovative mindset toward the enablement of new or enhanced business models should be the driver toward successful execution.

It is not about data, big data, or IoT platforms. Data provides no value without a clear business strategy.

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Transocean

Questions

Please wait for the **microphone** before asking your questions

State your **name & company**

Please remember to…

Complete the Online Survey for this session

Merci

谢谢

Danke

Спасибо

Gracias

Thank You

감사합니다

ありがとう

Grazie

Obrigado

Digital Transformation is about enablement
of new and enhanced business models to deliver value