

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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Analytics Energy Management Security
Regulatory Compliance Time Series Real-time Event Frames
Digital Transformation
Open System Asset Health Sensor-based Data IoT
Operational Intelligence Quality Integrators Connectivity
High Speed Community Process Scalability Partner
Infrastructure Reliability Enterprise Agreement
Business Impact Operational Efficiency Safety
Enterprise Connected Services Streaming Data Ecosystem CBM
PI System Visualization Asset Framework
Millions of Streams Big Data Future Data

deepwater operate return deck less expected self costs thruster controlled costless locations wholly exchange greater derrick including handing types position types
 ultra equipment harsh conditions platform leading semisubmersible position
 owned contract capable fleet
 units rig drillships designed high feet
 capacity support Partners
 rig activity normal following
 rigs equipped February
 Transocean technology services generally jackups system
 operations specification operating dual may environments
 water depths of off-shore floaters
 shares cost well wells operation support Part Developments together Statements
 semisubmersibles off-shore
 extended Financial
 positioned stacked information construction dynamic proposed
 Fleet systems construction dynamic proposed Merge
 service





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

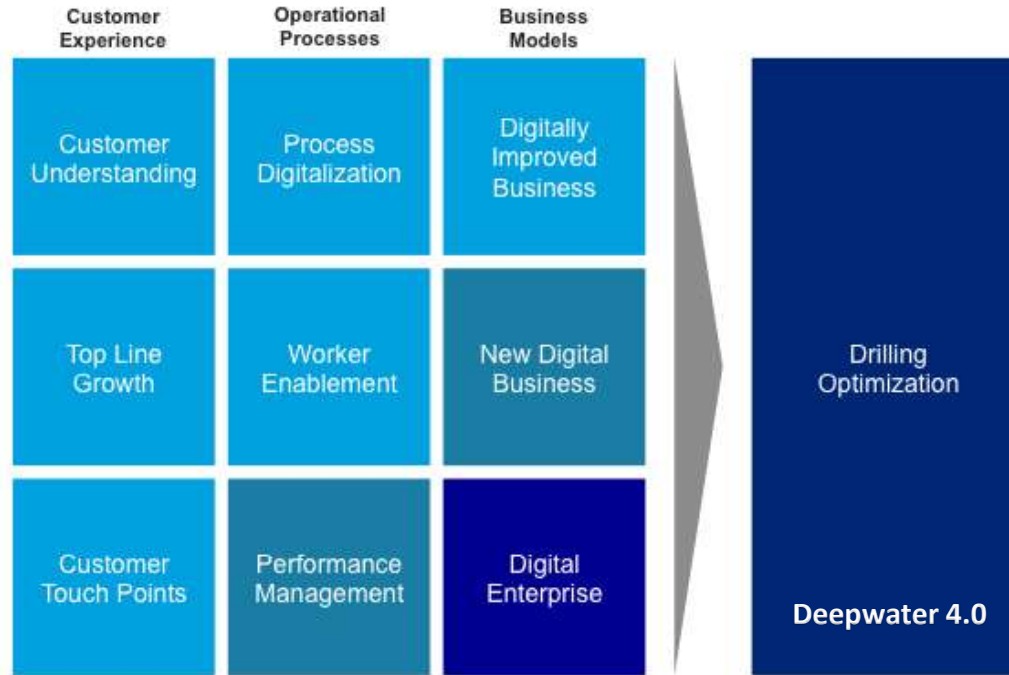
Telecommunication Patents
Unique Patent Families Worldwide



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

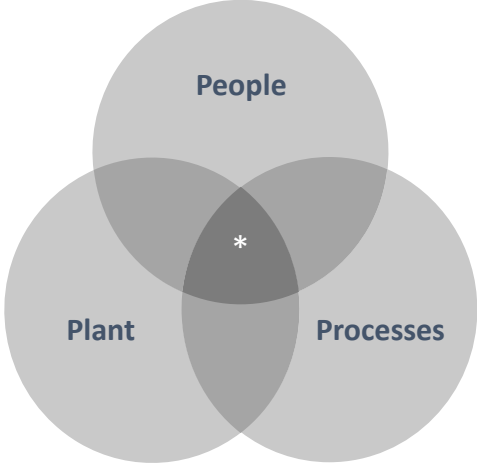
- OT and IT governance
- Scalability, Availability, and Standardization
- Multiplicity of platforms with varying degrees of quality
- Platform architecture: edge, fog and cloud levels.

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

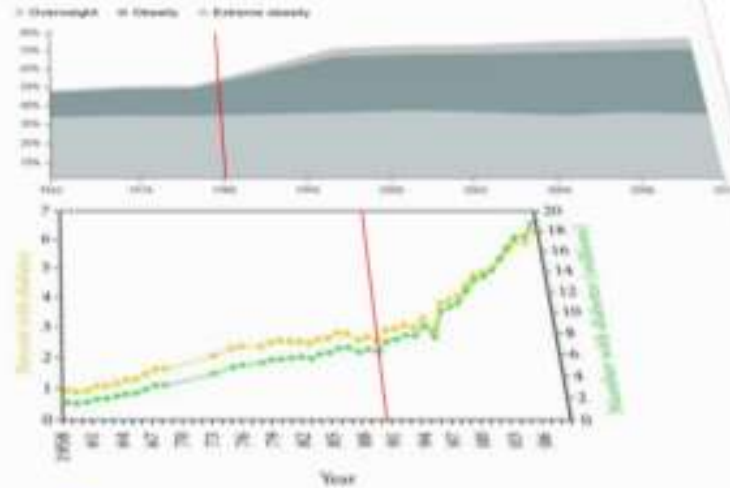


Better information does not necessarily implies better decisions

- > 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 Facts	
Serving Size 1 cup (240g)	
Amount Per Serving	
% Daily Value*	Amount Per Serving
Total Fat	15g
Saturated Fat	10g
Trans Fat	0.5g
Cholesterol	30mg
Sodium	100mg
Total Carbohydrate	30g
Dietary Fiber	5g
Sugars	15g
Protein	5g
*Percent Daily Values are based on a diet of other people's secrets.	

Nutrition Labelling and Information Act of 1990

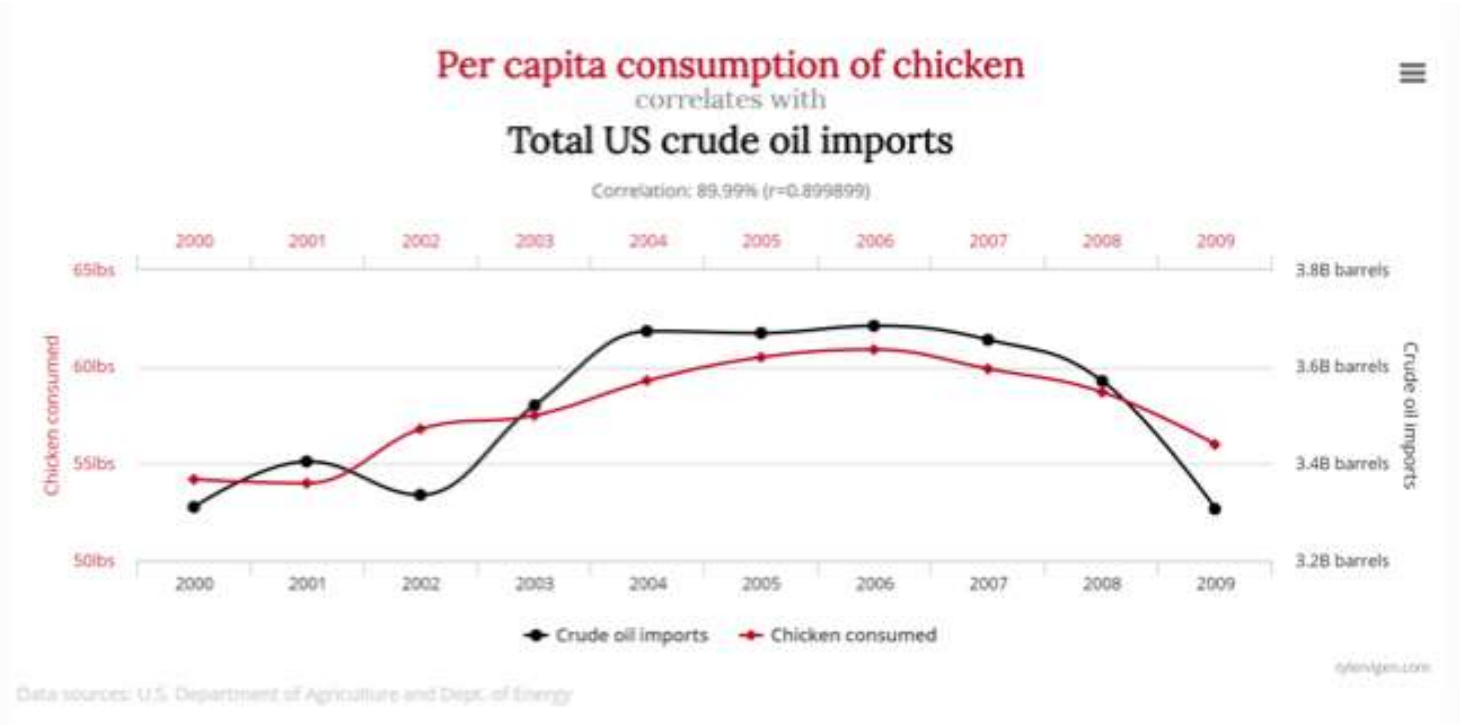


Percent with diabetes
Number with diabetes

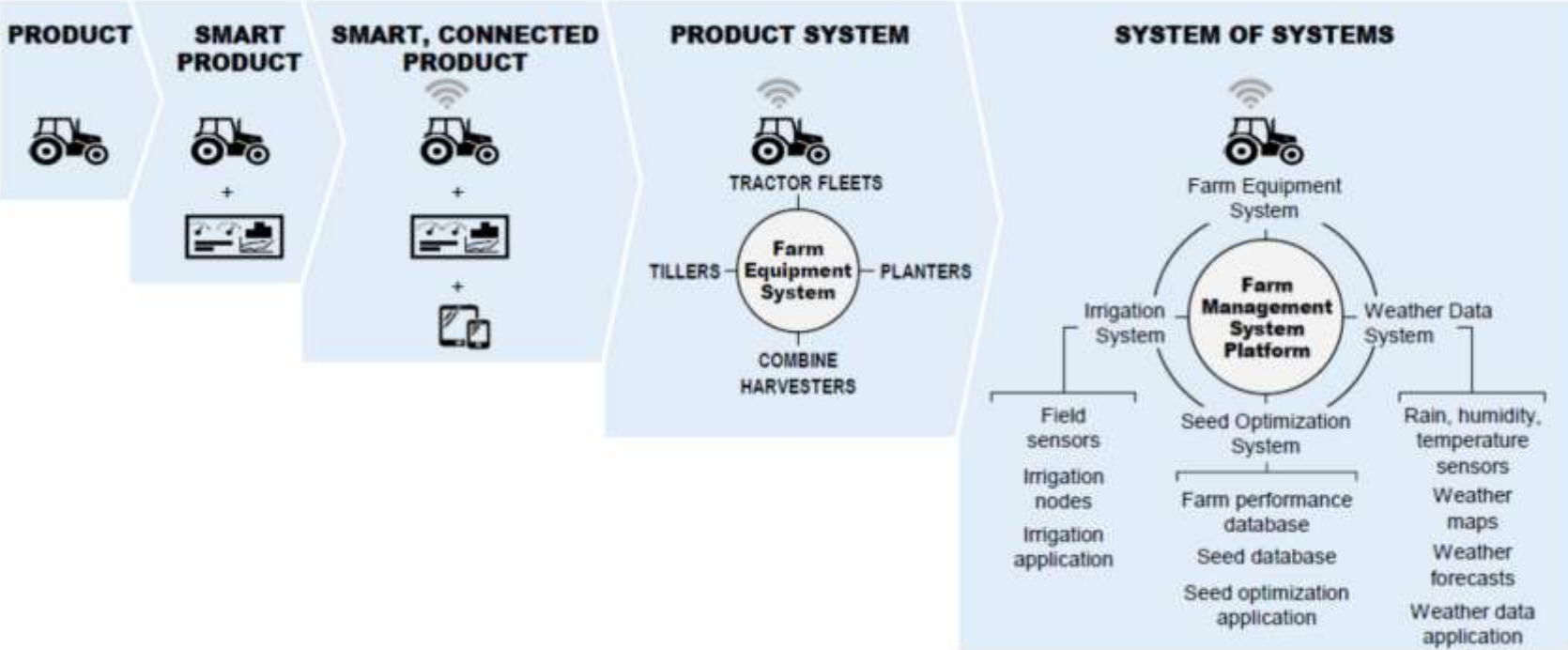
CDC (top) and National Institute of Diabetes and Digestive and Kidney Diseases



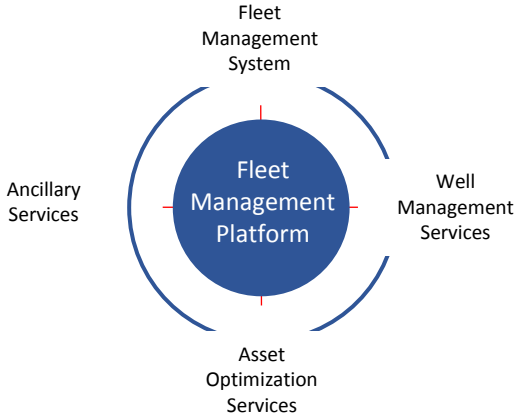
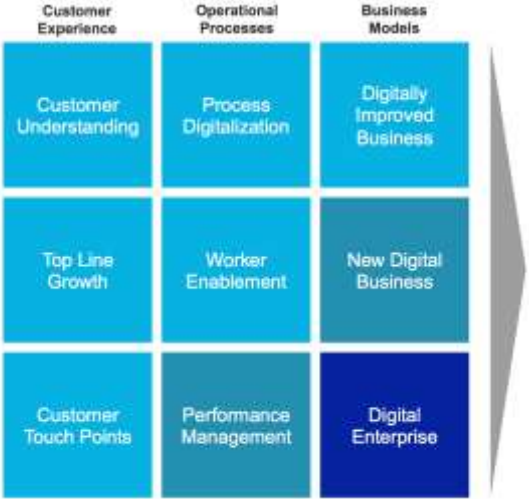
And of course a good data scientist can always find a correlation.....



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



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Merci

谢谢

Спасибо

Danke

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