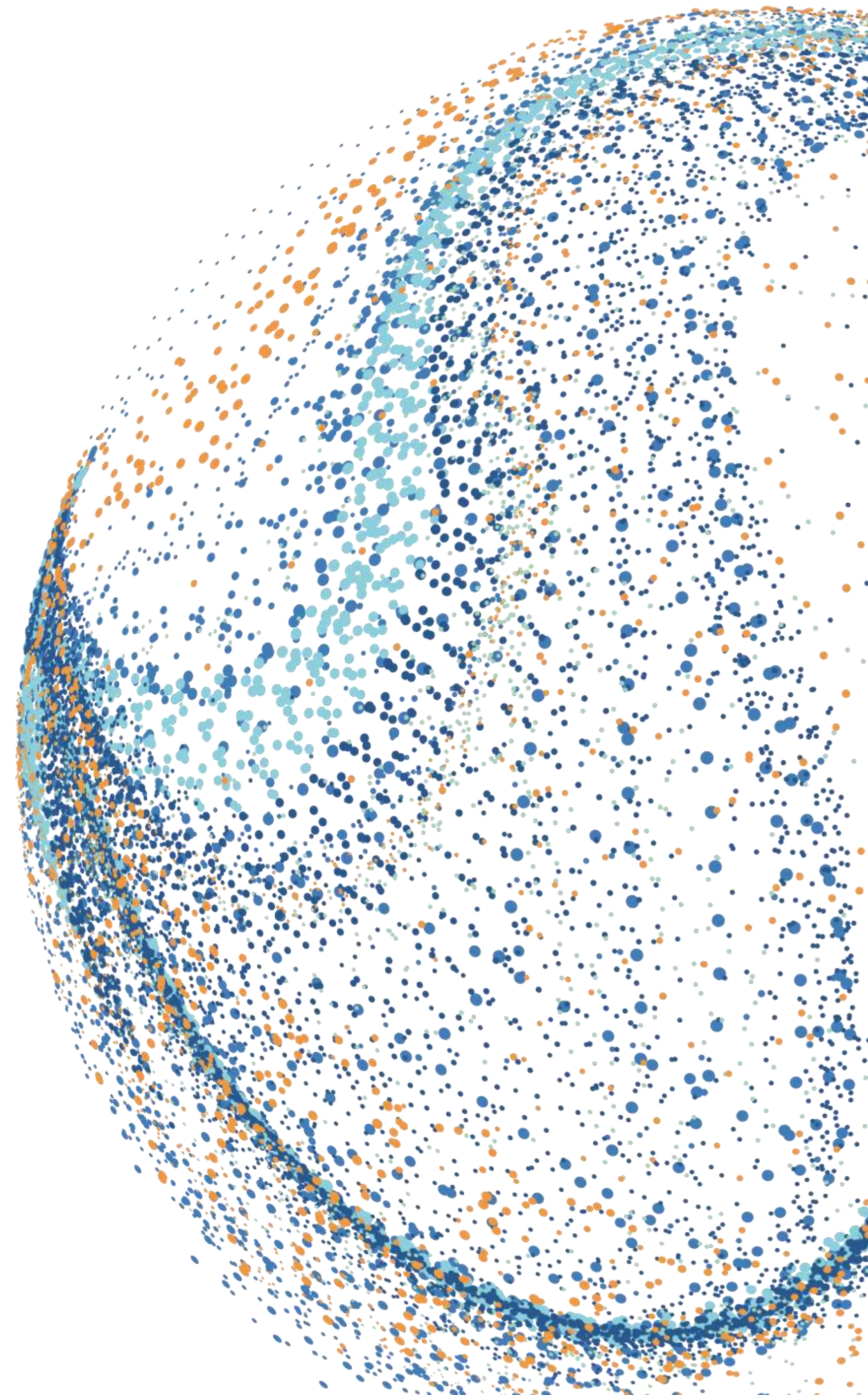


ABC for Digitalisation

Nakul Malhotra
Vice President, Technical Solutions & Marketing
Marine Products





A_1

Accelerating

B_3

Business

C_3

Compulsions

Is the maritime industry still traditional?



The maritime industry

a crucial part of everyday life

- In an industry driven by regulations, we face threats from disruption and often take a reactive stance
- Now we're modernizing and **looking outside the industry** for technological competencies we can adopt

Shipping is

90%

of world trade.





96%

believe in technology
adding value to shipping
operations

72%

have actually tried

Based on a 2018 survey by lcontainers.com
with 200 companies

Why Now?

The trinity of Industry 4.0 convergence:



Data generation



Computing power



Communication

- Shipping has tons of *data*, but they're localised and siloed
- Access to *computing power* is readily available today
- In deep sea, *communication* used to be a challenge but is now being bridged

Accelerating data rates have changed the world

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

5 GBps

1G

1980s
• Analog Voice

2G

1990s
• Digital Voice

3G

2000s
• Mobile Data

4G

2010s
• Mobile Broadband

5G

2019
and Onward

Wireless data speeds

As mobile technology advances to increase the supply of wireless broadband, new applications, business models and life-changing functionality have followed.

Use of texting, email, social media, mobile commerce, streaming media and so much more have built on the foundation of each new wireless technology standard.



Transformation through digital services enabled with data
will deliver more value to meet our customers' needs

DATA

an enabler to provide
insights and outcomes



PHYSICAL
DISTANCE



SOCIAL
DISTANCE

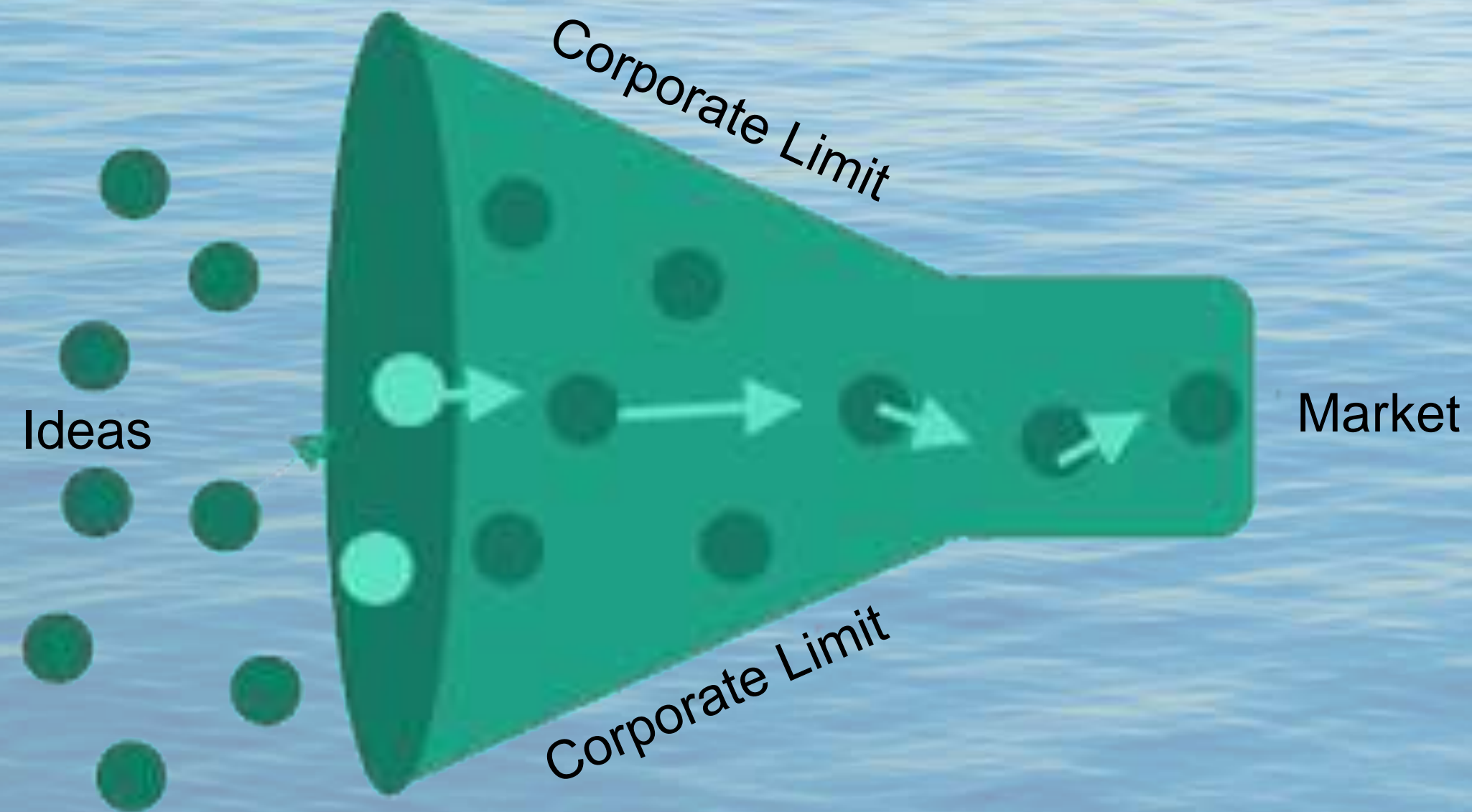
PHYSICAL
DISTANCE



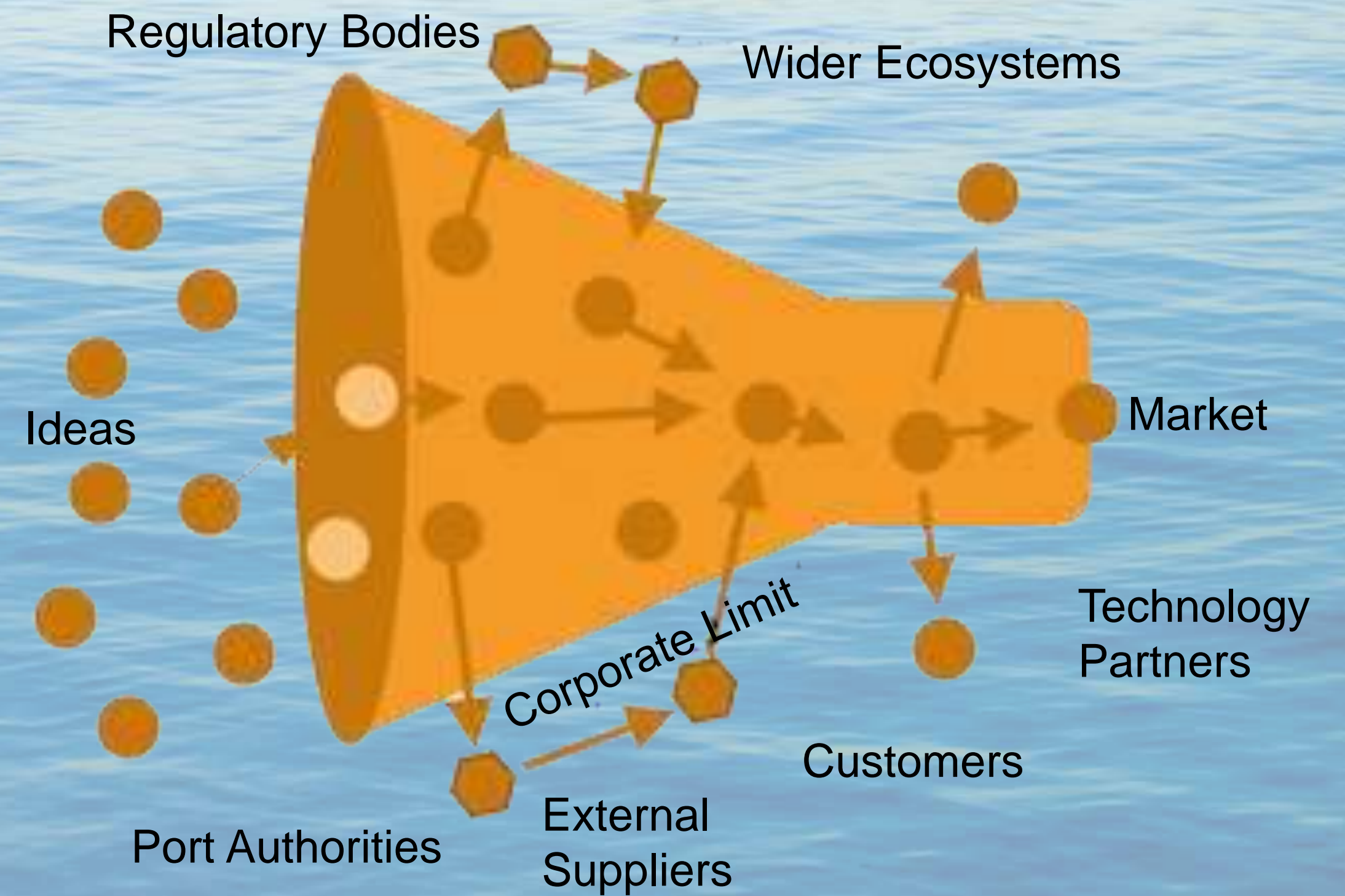
LOW TOUCH/
NO TOUCH
OPERATIONS

Open Innovation

CLOSED INNOVATION MODEL



OPEN INNOVATION MODEL



INNOVATION \neq INVENTION

Making decisions

How do we qualify what we should work on?



Can we do it?



Is there value?



Is there demand?



We are transitioning to the digital age through multiple initiatives that will not only improve the customer experience but also provide ‘deep optimisation’ possibilities

DECARBONISATION

3D PRINTING



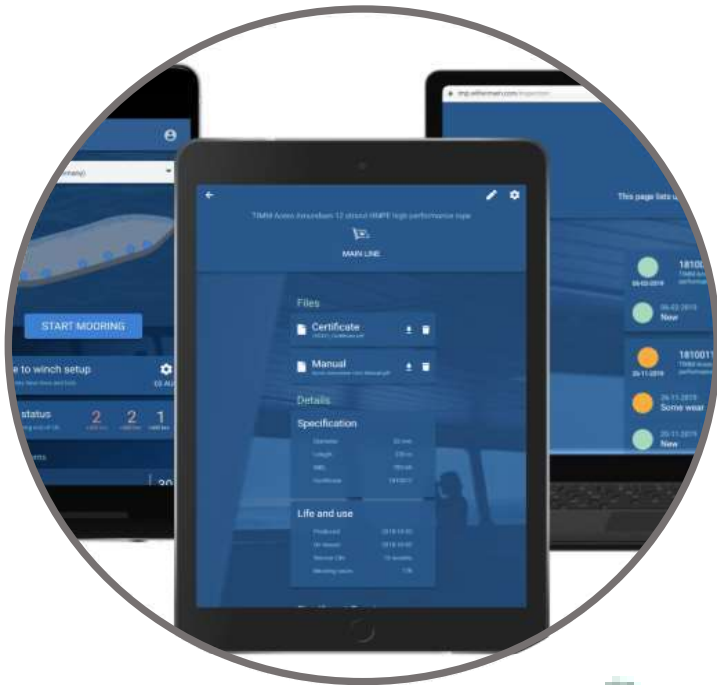
DIGIBoILER



SMART ROPES



LMP

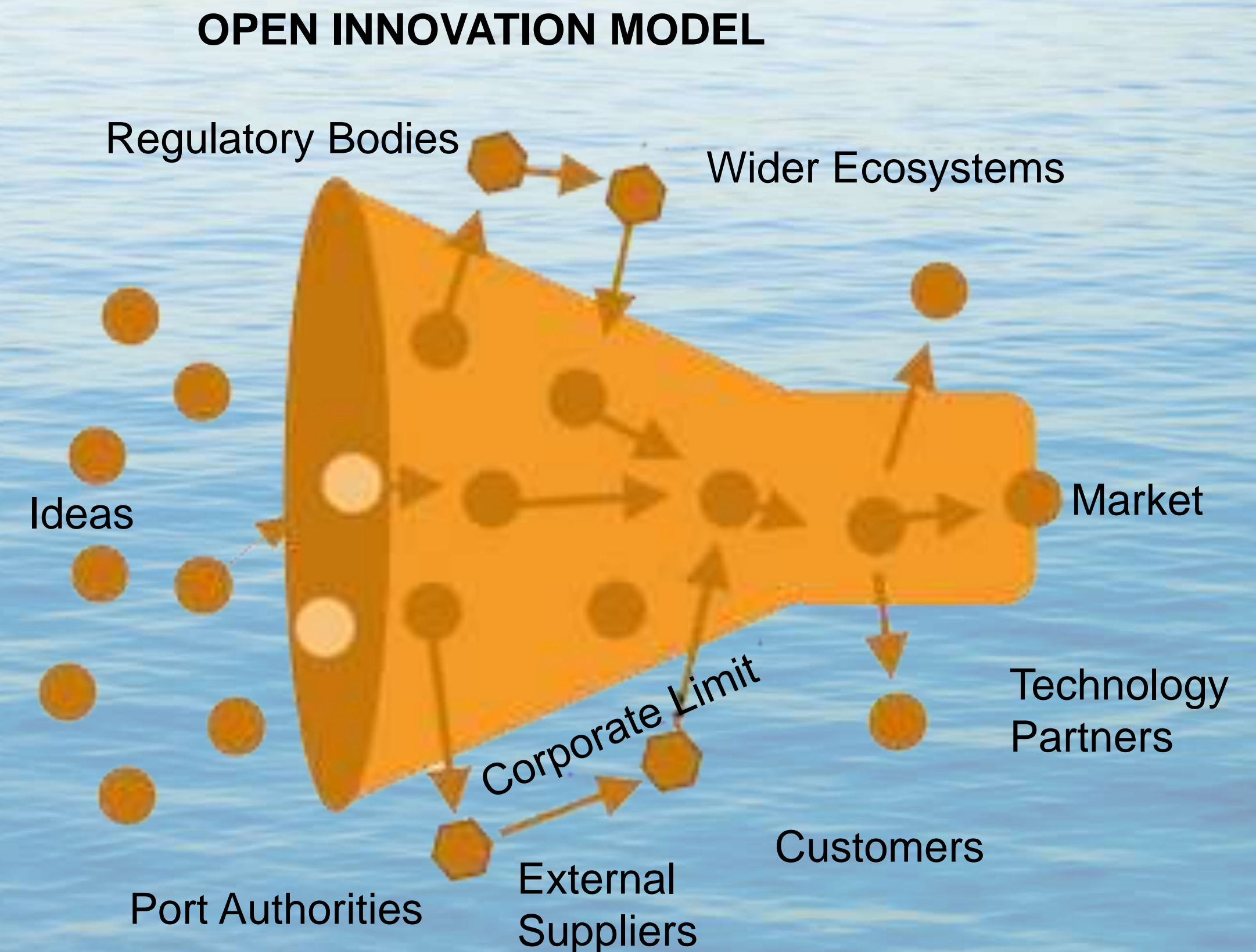


Open Innovation

Not only can venture developments co-exist, but they can also help to migrate core business.

Our digital ventures pipeline is constantly evolving.

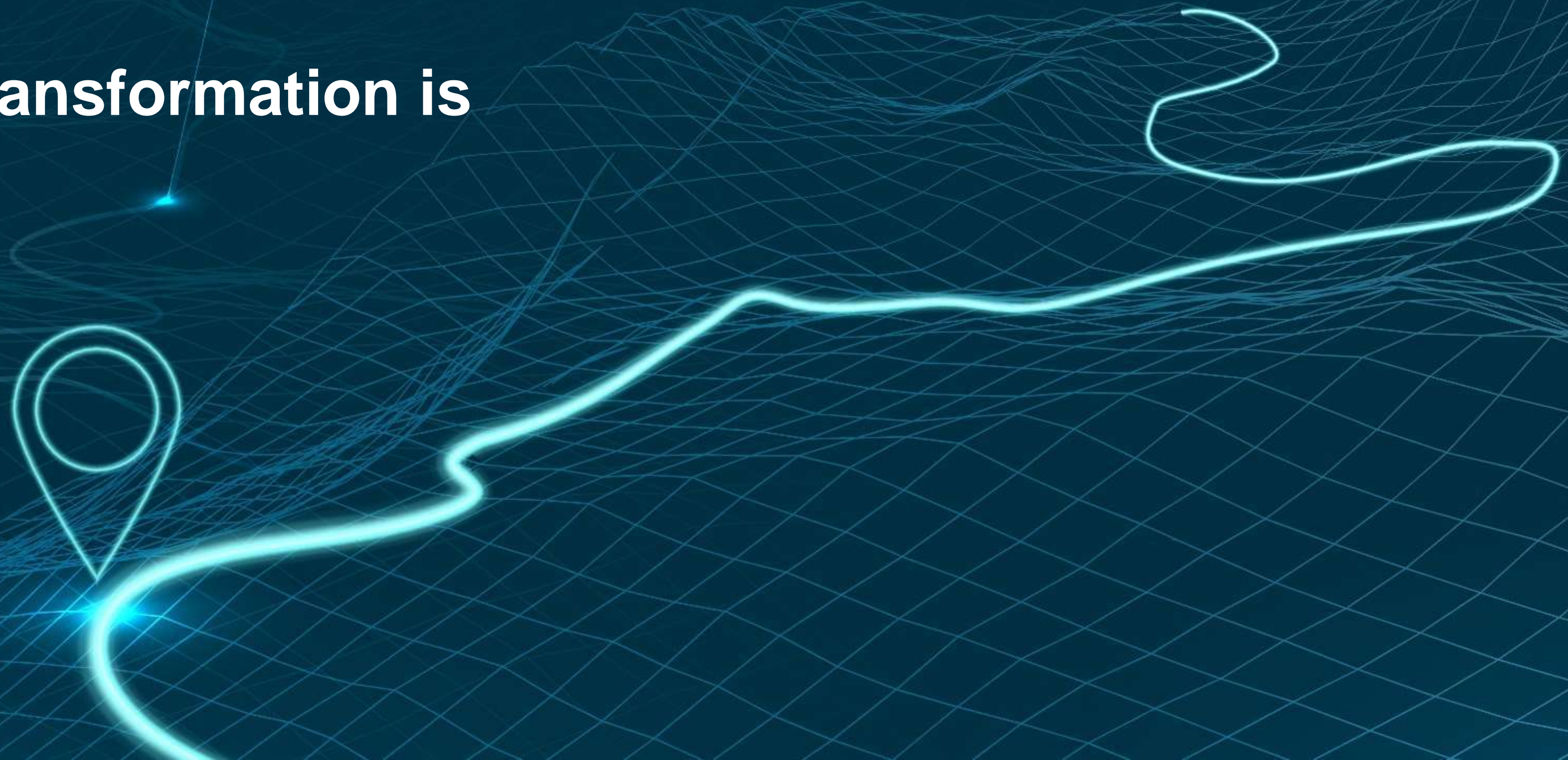
As new ideas come to life, markets progress and technology develops, so does our pipeline.



Transformation doesn't happen at the flip of a switch.

It is **a journey you set sail on** to provide optimized outcomes for stakeholders.

Without that, transformation is ***meaningless.***





EXPECT
SMARTER
DIGITAL
SOLUTIONS



Wilhelmsen

