

Aker Solutions Next Generation Control Systems

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Product Manager All Electric and New Concepts

Controls System and Automation



- Integrated, modular and standardized
- Safe and efficient operations in all climates and water depths
- High quality and reliability
- Tomorrow's technology needs

Vectus™



ELDRIVE™



Fieldkeeper™



Subsea Control System Challenge



Technology Trends – Performance Evolution

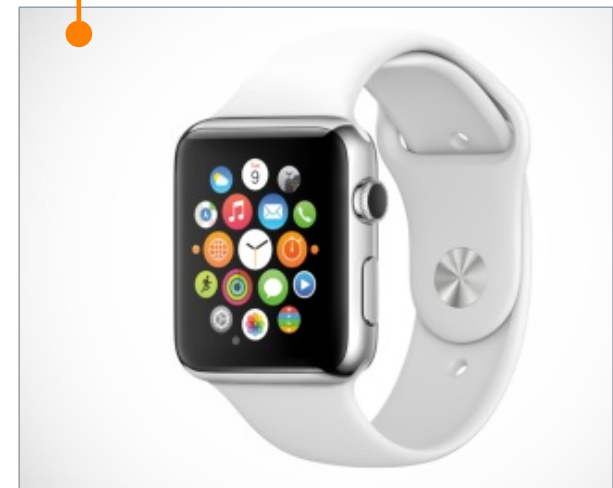
1985 Cray 2



2010 Iphone

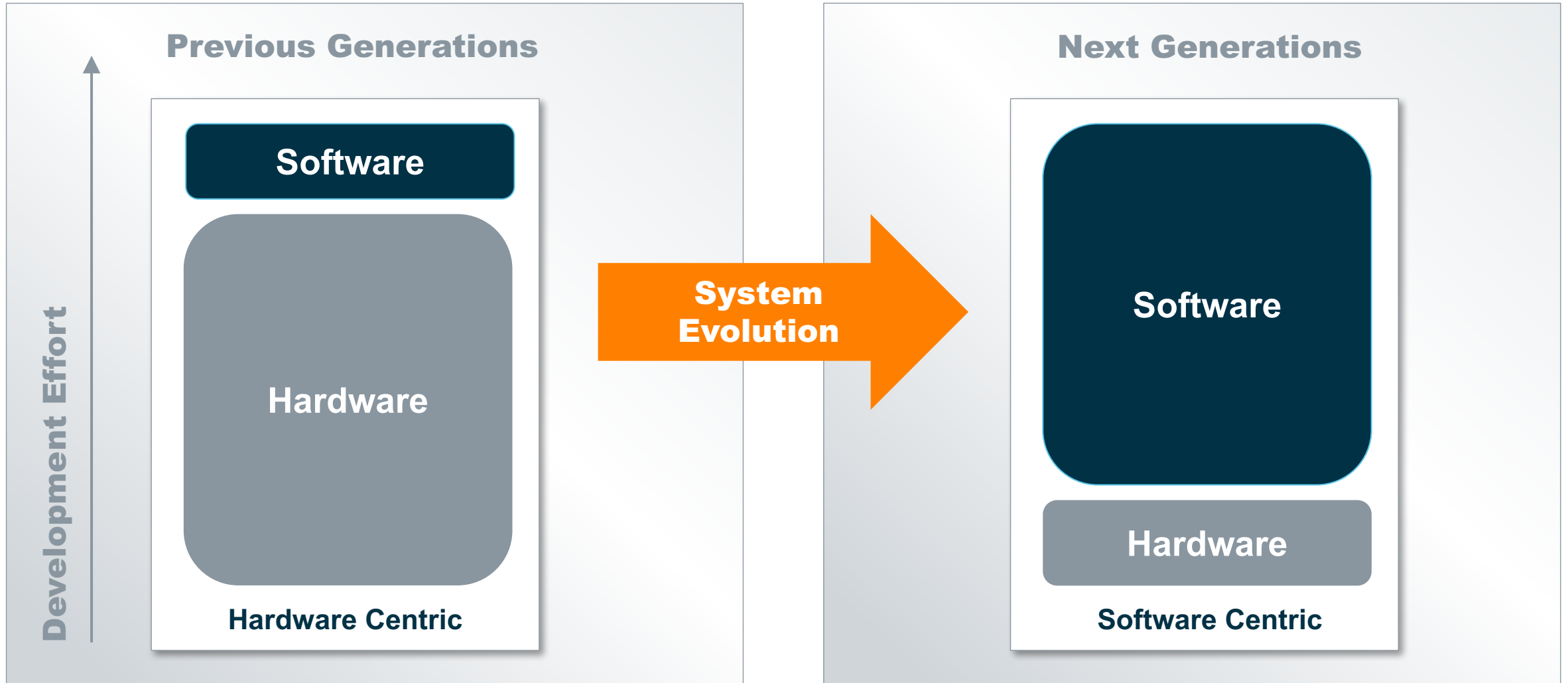


2015 Apple Watch

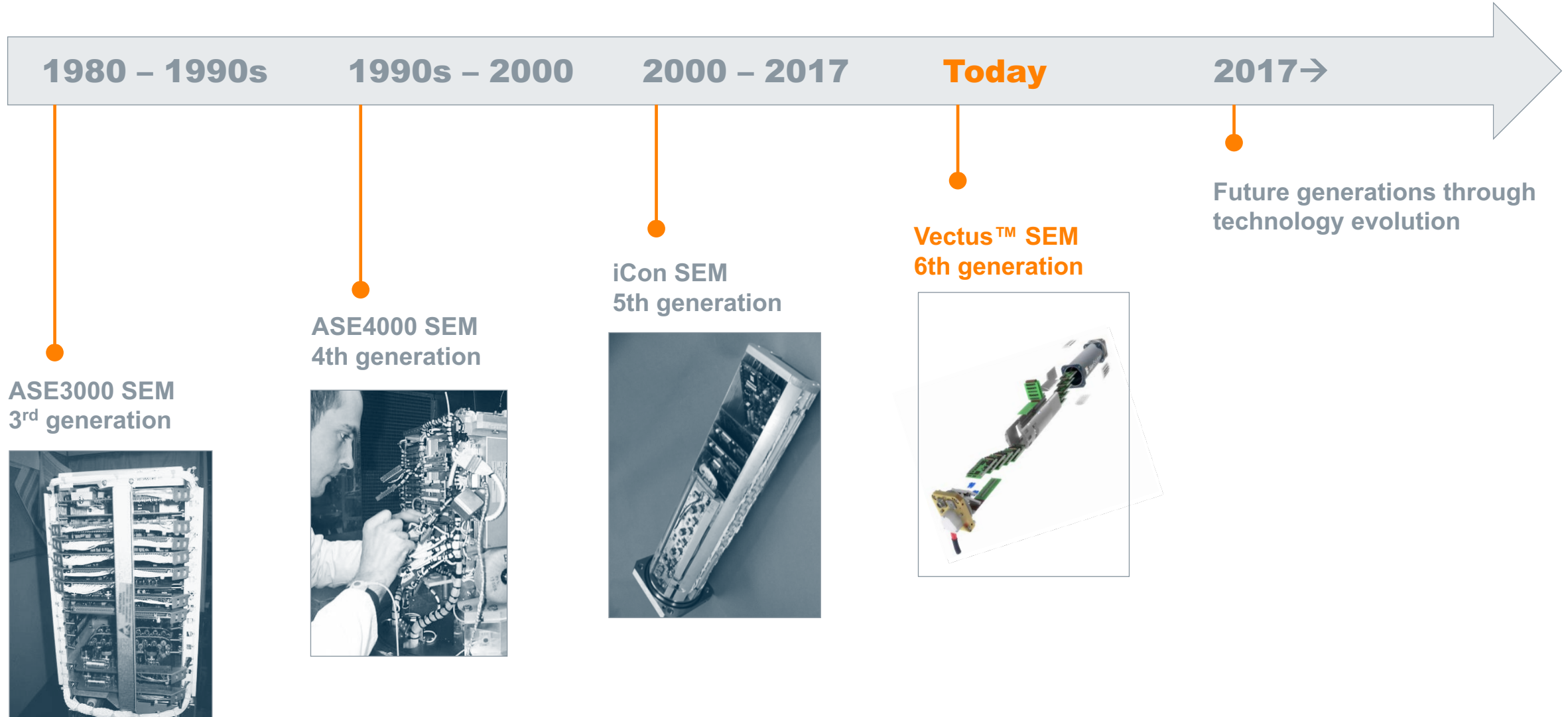


Same Processing Capability

Technology Trends – System Evolution



Trends Impact Next Generation Controls Development



Subsea Production Going All-Electric

1

Lower CAPEX

- Optimize umbilical scope
- Reductions in Subsea hardware components
- Less equipment topside (weight and envelope)

2

Lower OPEX

- Reduced SURF scope
- Hydraulic fluid is removed
- Potential for predictive services and planned intervention

3

More environmental friendliness

- No risk of hydraulic fluid release to sea
- High pressure units removed topside
- Lower carbon footprint

4

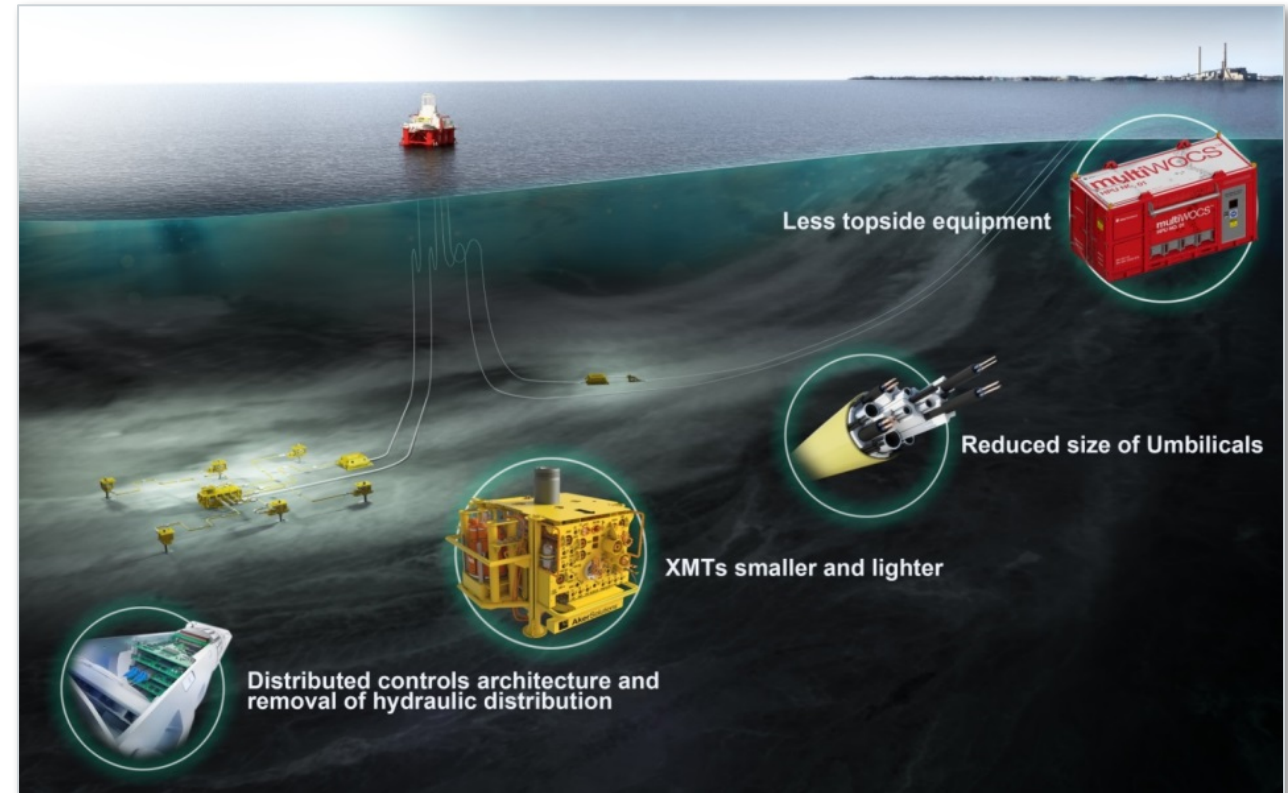
Enabling digitalization

- Easier to monitor the functionality
- Higher degree of condition monitoring more data
- Predictive maintenance

5

Higher flexibility

- During early system design phase
- Simpler expansion of field (tie-back)
- Plug-and-play integration of control loops



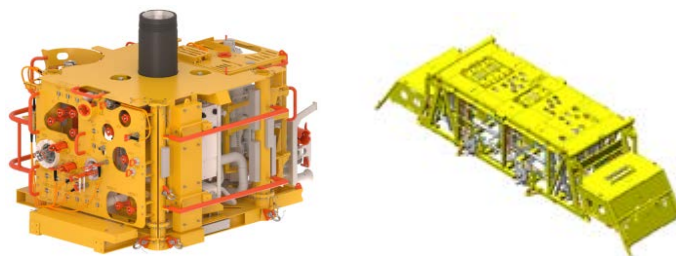
Aker Solutions Meets The Challenge For Electrification

Controls



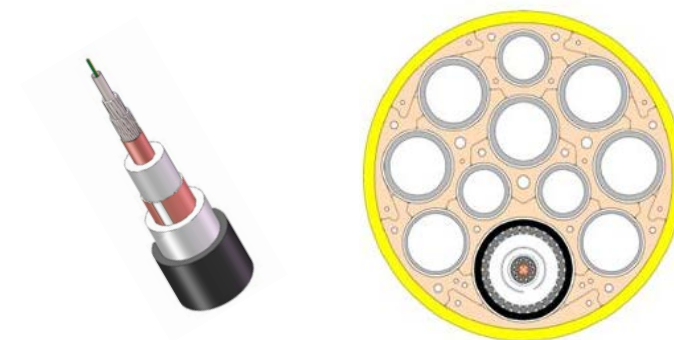
- HW independent SW platform
- Flexible actuation platform
- CPM and Management tool

XMT/Manifolds



- Robust valve and sealing technology
- State of the art XMT
- Diverse manifold and structure portfolio

Umbilical



- Leading supplier of umbilicals and subsea power cable systems



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