

Intelligent Understanding for the Blue Economy

Leveraging the power of knowledge integration

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Knowledge integration?



Principle – access and use all relevant sources of knowledge.

Purpose - Achieve Intelligent Understanding.

Outcome - Optimal decision making.



Concepts



Knowledge?

Information and data?

Understanding?

Intelligent Understanding?



Context



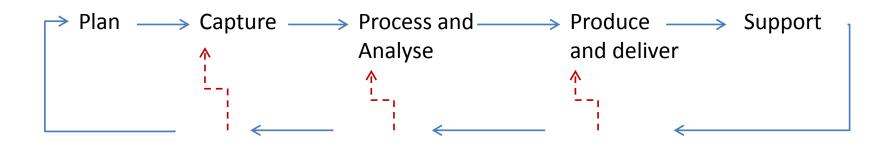
- Exponential growth in data sources.
- Overwhelming data volumes....at light speed.
- Visualisation.
- Secondary and tertiary data.
- Knowledge strategy is essential.
- Not just about tools and techniques.
- And not forgetting environments are integrated.



Approach



- Business strategy component.
- Culture and ways of working.
- Applied throughout information lifecycle.





Knowledge



- What is the question?
- Is it the right question?
- Big data? Or just a big bucket?
- What must we know?
- What would be useful to know?
- IVV Identify, validate, verify.

"Useful, relevant, and aids understanding"



Integration



- People, processes, procedures.
- Knowledge/experience mix.
- Leadership.
- Requirement capture what, not how.
- And not forgetting the client has a vote!

"Technology supports integration, but is not the answer"



Anchoring knowledge



- Everything happens somewhere 'whereness'.
- Geospatial attribution challenges cluster danger.
- Spatial AND temporal association.
- Collation effort ↓ Analytic opportunity ↑
- Relationship analysis.
- Rapid visualisation supports dynamic change.
- Accessibility reduces time/linguistic/cultural barriers.



Knowledge integration challenges



- Activity density.
- Resource competition.
- Rate of change.
- Visibility & interest profile.
- Difficult & complex environment.
- Land and Ocean data capture differences.
- Rich, & growing, secondary and tertiary data seams.

"Consider, for example, the coastal zone"



Influences and actors



Industry

Border Security

Tourism

Ocean

Aquaculture

Land

Waste disposal

Sport

Logistics

Leisure

Marine conservation

Flood Defence

Weather

Travel

Military Activity

Resource extraction

Energy

Politics

Fisheries

Archaeology

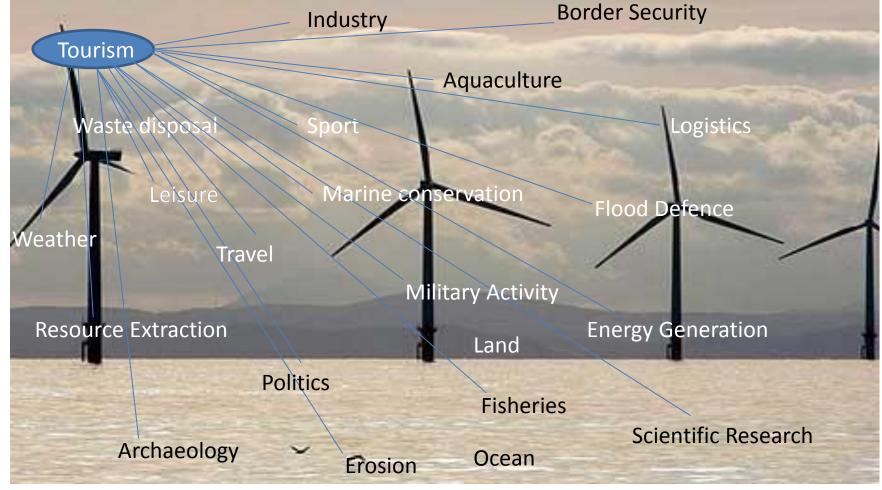
Erosion

Scientific Research



An influence nexus







So what?



Use an knowledge integration approach for.....

- Requirement planning
- Data harvesting
- Analysis
- Visualisation
- Production

- everything we do!

.....in the coastal, or indeed any, environment.

"providing knowledge to aid understanding is our business"



And finally...



What?

Adapt our ways of working to make sure we can continue to provide best and most relevant knowledge from available sources.

Why?

To assist optimal decision making supported by an intelligent understanding

How?

Consider how we think and operate and.....

..... Adopt a knowledge integration approach to every aspect of our business from planning to delivery





Questions and observations?

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