



Marine
Management
Organisation

Linking seafood to data

Steve Pegg & Craig Williams
AVS Developments Ltd

...ambitious for our seas and coasts

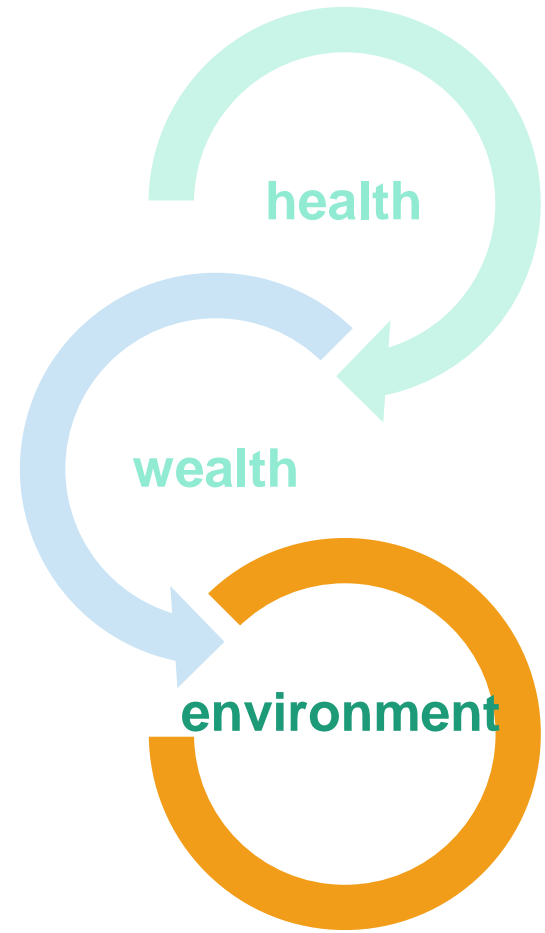


Scope of the Study

- Which technologies can help to deliver the benefits of traceability?
- What are the challenges in introducing technology?
- What can be done to overcome those challenges?



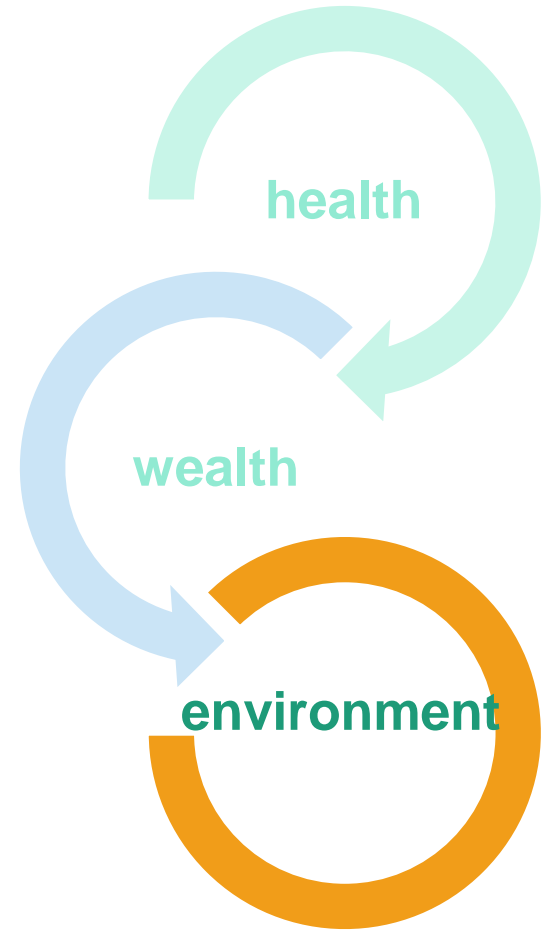
Where technology can help.....



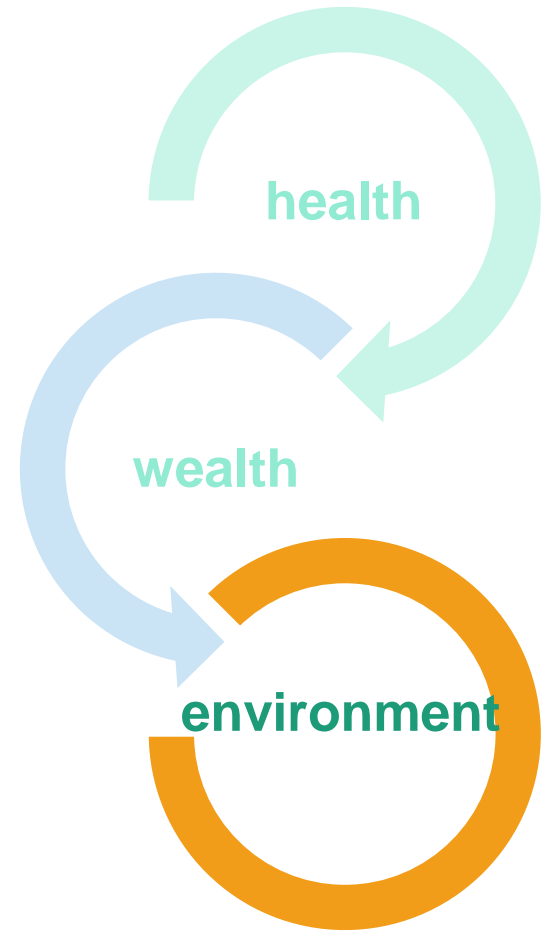
- **Reducing bureaucracy**
(enter data once only, auto-generation of forms, on-line submission to export, reduce audit,)
- **Greater transparency**
(improved trust in data sources, more visibility of chains and processes)
- **Increasing the speed of transaction**
(automatic logging of movements, transfers)

What are the challenges?

- **Diversity of the supply chain(s)**
(In terms of volumes, geography, fleet, processes, economic capacity, level of technology use)
- **Highly cost conscious market**
- **No overarching drivers for change**
(e.g. strong market pull, obvious cost reduction, legislative imperative)



Types of technology which could contribute



Labelling technologies which can be read by human and machine

Recent years has seen the increased use of QR codes (vaccines, marketing aids, ...) and RFID tags (product identification and security)

International Data Standards for exchanging data between users

The use of existing data standards widely used in the retail industry provide a basis to work from. But it is not a one size fits all approach.

Web enabled, accessible technologies for gathering data and presenting it to the consumer

IT can be readily used to promote the best products, promoting sustainability and conservation, engaging with a wider range of consumers

Blockchain for linking it all together

Conclusions Drawn

Labelling

Support to human readable labels, QR codes and RFID all have merits at different points in the chain.

RFID only benefits at the medium/large scale transaction points

Data Standards

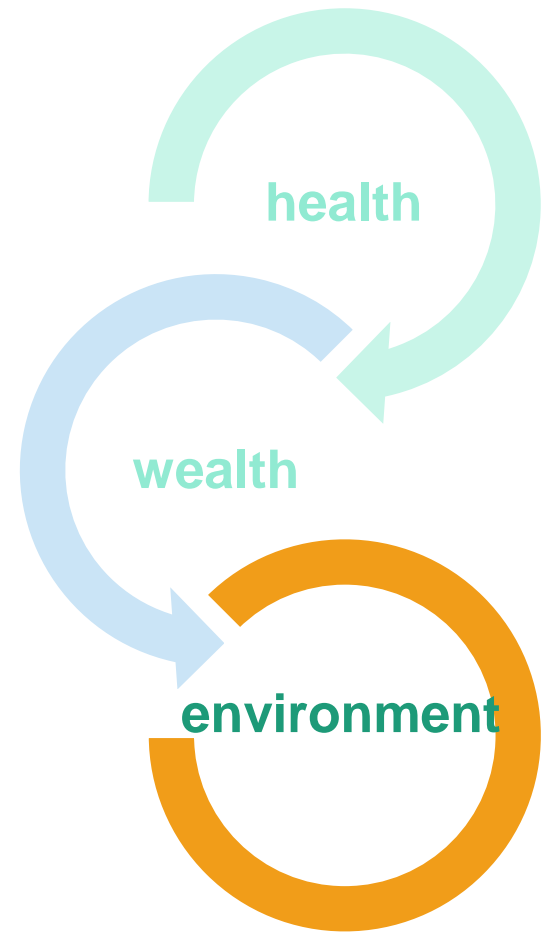
Existing standards such as the Global Demand for Seafood Traceability has defined a comprehensive traceability standard supported by in some large players in the fishing industry....but requires dialogue with a number of existing providers and ready methods for small/medium enterprises to engage.

Web technologies

Offer low cost, accessible solutions to consumers, regulators and industry stakeholders. Maintaining traceability in the absence of web-access is difficult and a solution will need to support fallback mechanisms (e.g. paper records).

Blockchain (i.e. the underlying technology of Bitcoin)

Has been widely touted as a solution for traceability. However in a regulated industry such as fishing, the complexities of implementation outweigh the benefits. Let another industry take the pain....





Marine
Management
Organisation

...ambitious for our seas and coasts