



From spaghetti to a new way of managing fisheries

- VISTOOLS -

A case of co-management in Belgium

**Sea fisheries in Belgium
& the data revolution**

NSSAC
Hans Polet (ILVO)
September 12th 2024

ILVO
Instituut voor Landbouw-
Visserij- en Voedingsonderzoek

 **Iliad**

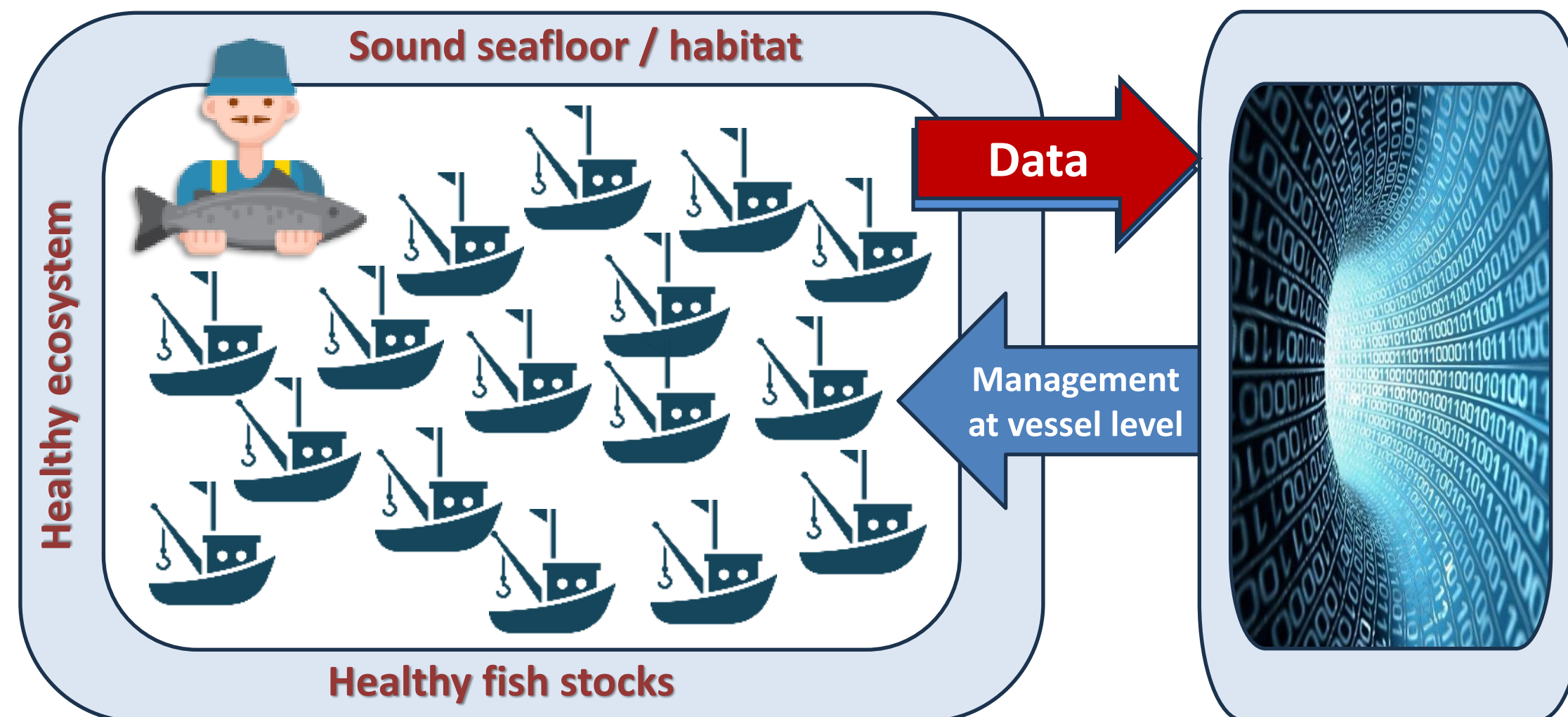


in cooperation with
 

Fisheries management

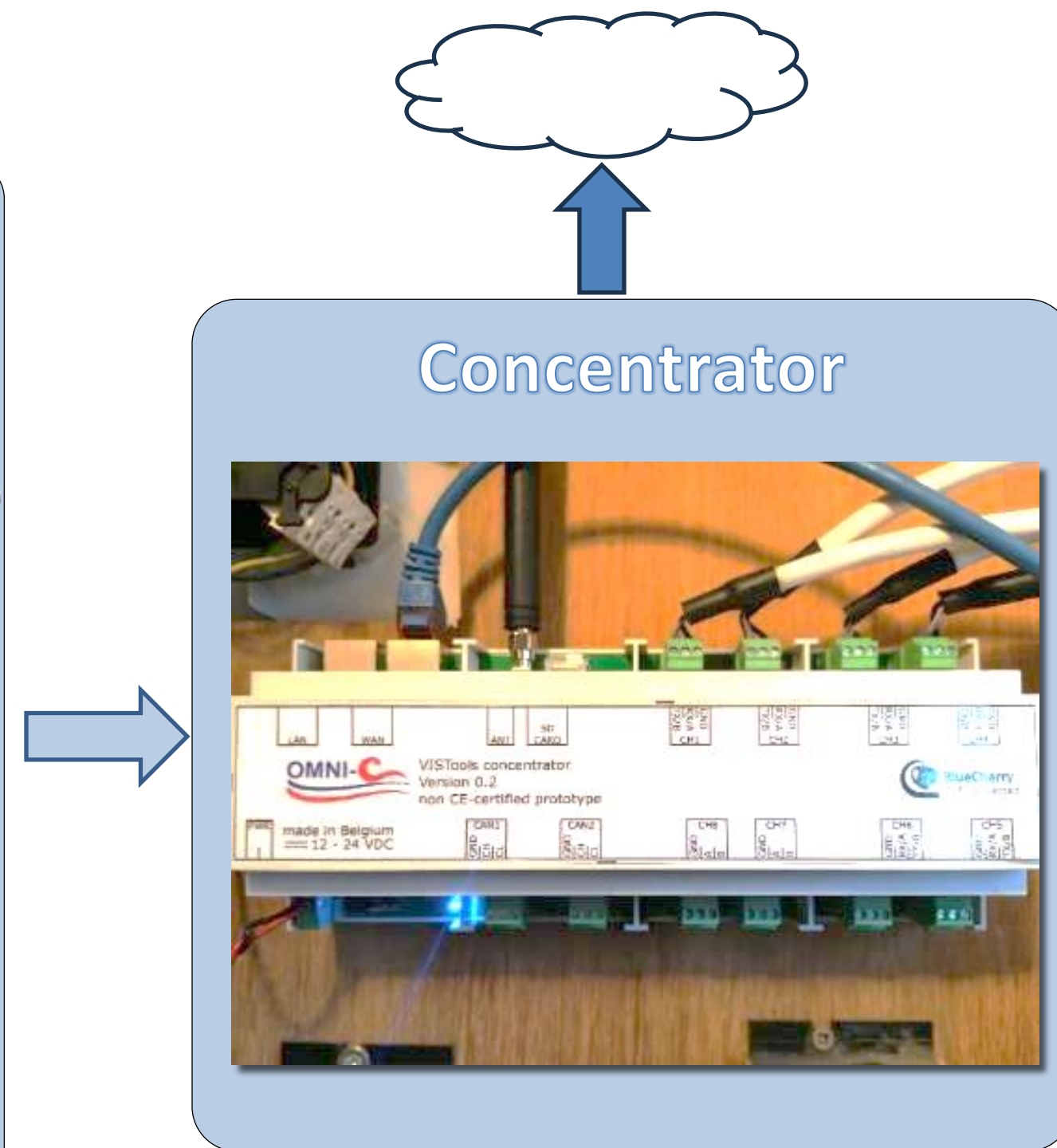
*Can the digital twin lift fisheries management to a higher level ?
...and do we need to ?*

Imagine a fishery without control and enforcement



The data

The solution is 'Pedro' and his 'spaghetti'



Build trust - the Covenant -

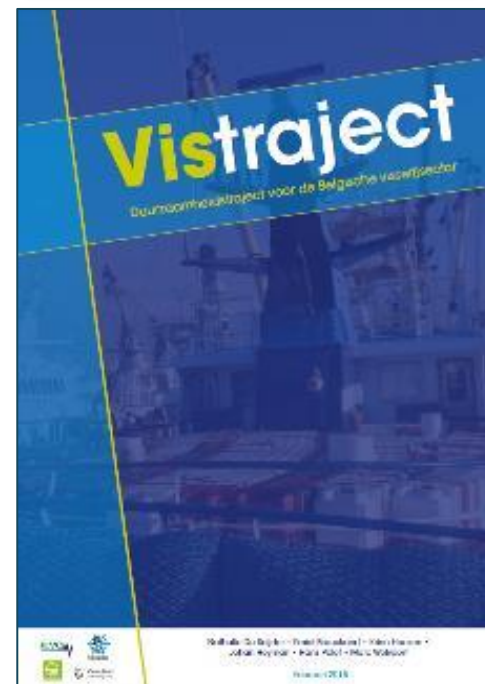
Building trust as a precondition for open data

30 August 2011

The covenant for the promotion of a sustainable Belgian fishing sector is signed

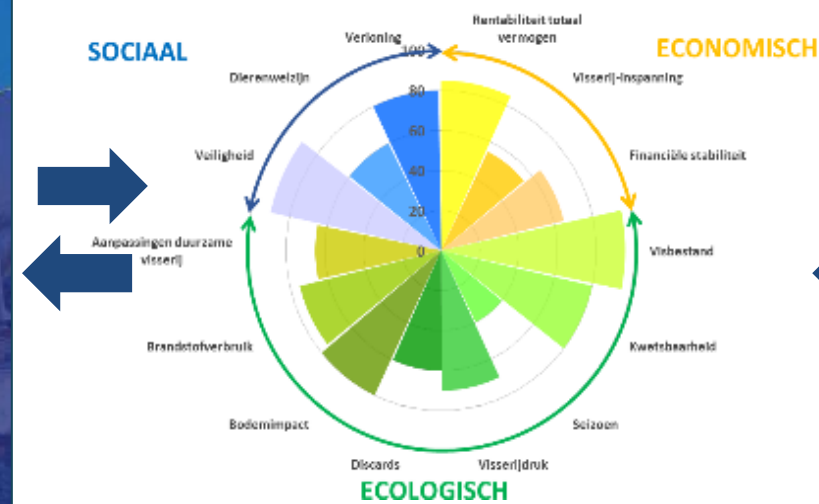


Vistraject
= the challenge



Goals and actions for a sustainable fishery as written by the local NGO

VALDUVIS
= the tool



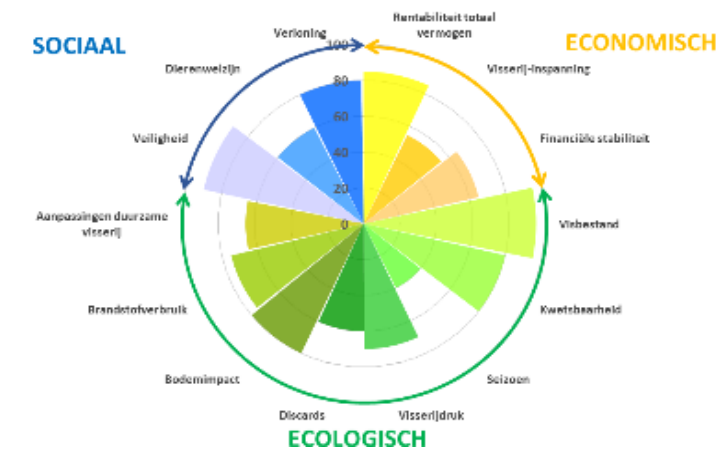
Indicator-based sustainability assessment tool

Visserij
Verduurzaamt
= the FIP



A fisheries improvement program that gives market access

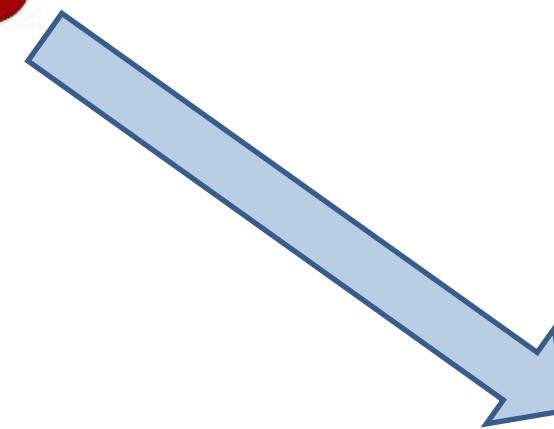
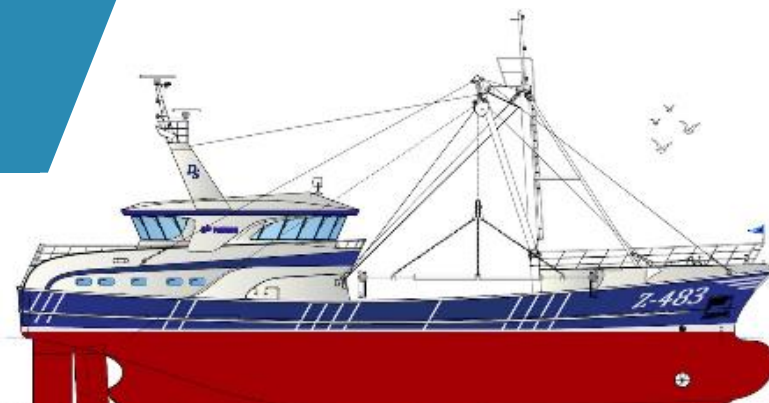
1 indicator on data



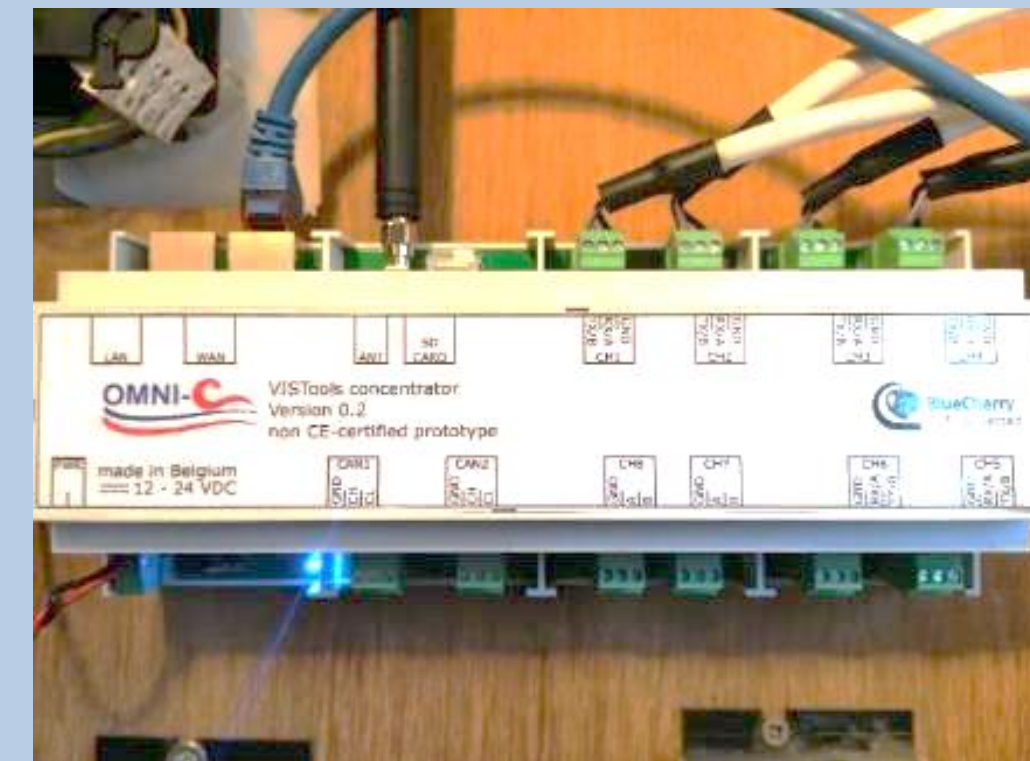
Delivering data to science adds to the sustainability score

The data

Real time, high resolution, high quality data collection from individual vessels



Concentrator



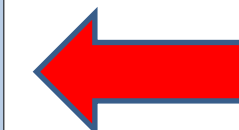
The digital twin



Digital twin

The screenshot shows a software interface for 'VISTOOLS analytics'. It features a central heatmap on a map, a sidebar with a user profile for 'Far Polibus', and several data visualization panels including a pie chart and a bar chart. The interface is branded with 'VISTOOLS analytics' and 'ILVO'.

VISTOOLS analytics

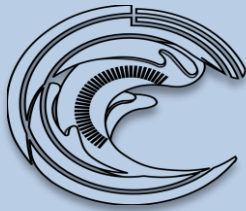


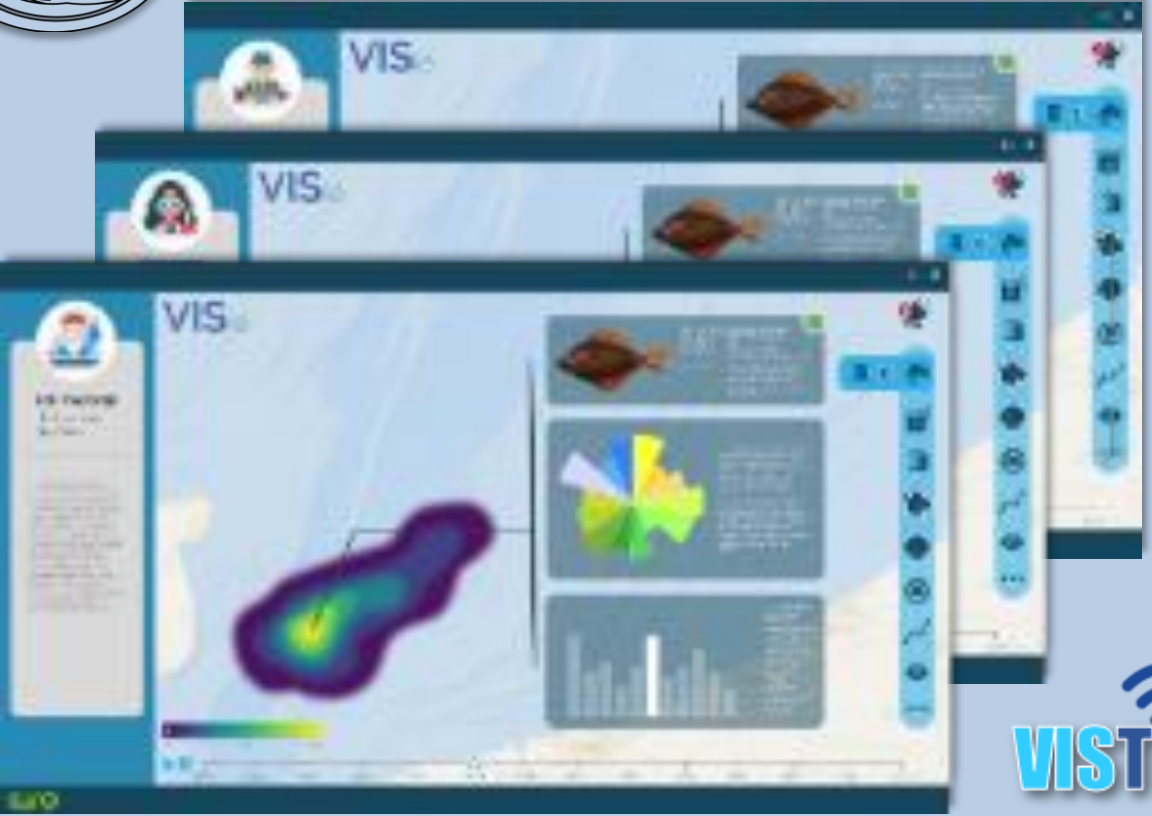
Concentrator

The photograph shows a rack-mounted hardware device labeled 'OMNI-C VISTools concentrator Version 0.2 non CE-certified prototype'. It has various ports and labels, including 'LAB', 'WAN', 'LAN1', 'LAN2', 'LAN3', 'LAN4', 'LAN5', 'LAN6', 'LAN7', 'LAN8', 'LAN9', 'LAN10', 'LAN11', 'LAN12', 'LAN13', 'LAN14', 'LAN15', 'LAN16', 'LAN17', 'LAN18', 'LAN19', 'LAN20', 'LAN21', 'LAN22', 'LAN23', 'LAN24', 'LAN25', 'LAN26', 'LAN27', 'LAN28', 'LAN29', 'LAN30', 'LAN31', 'LAN32', 'LAN33', 'LAN34', 'LAN35', 'LAN36', 'LAN37', 'LAN38', 'LAN39', 'LAN40', 'LAN41', 'LAN42', 'LAN43', 'LAN44', 'LAN45', 'LAN46', 'LAN47', 'LAN48', 'LAN49', 'LAN50'. It also features a 'BlueCherry' logo and 'made in Belgium 12 - 24 VDC'.

Application

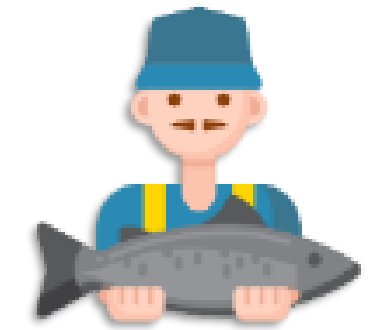
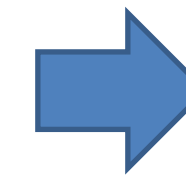


 **Digital twin**

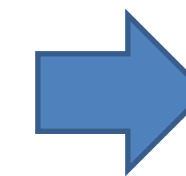


VISTOOLS
analytics

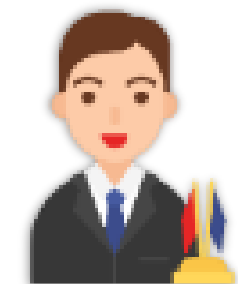
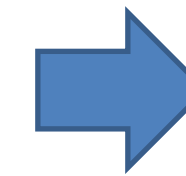
**User-Specific
Dashboards**



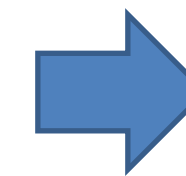
Fishers & Vessel Owners



Research



Policy & Management



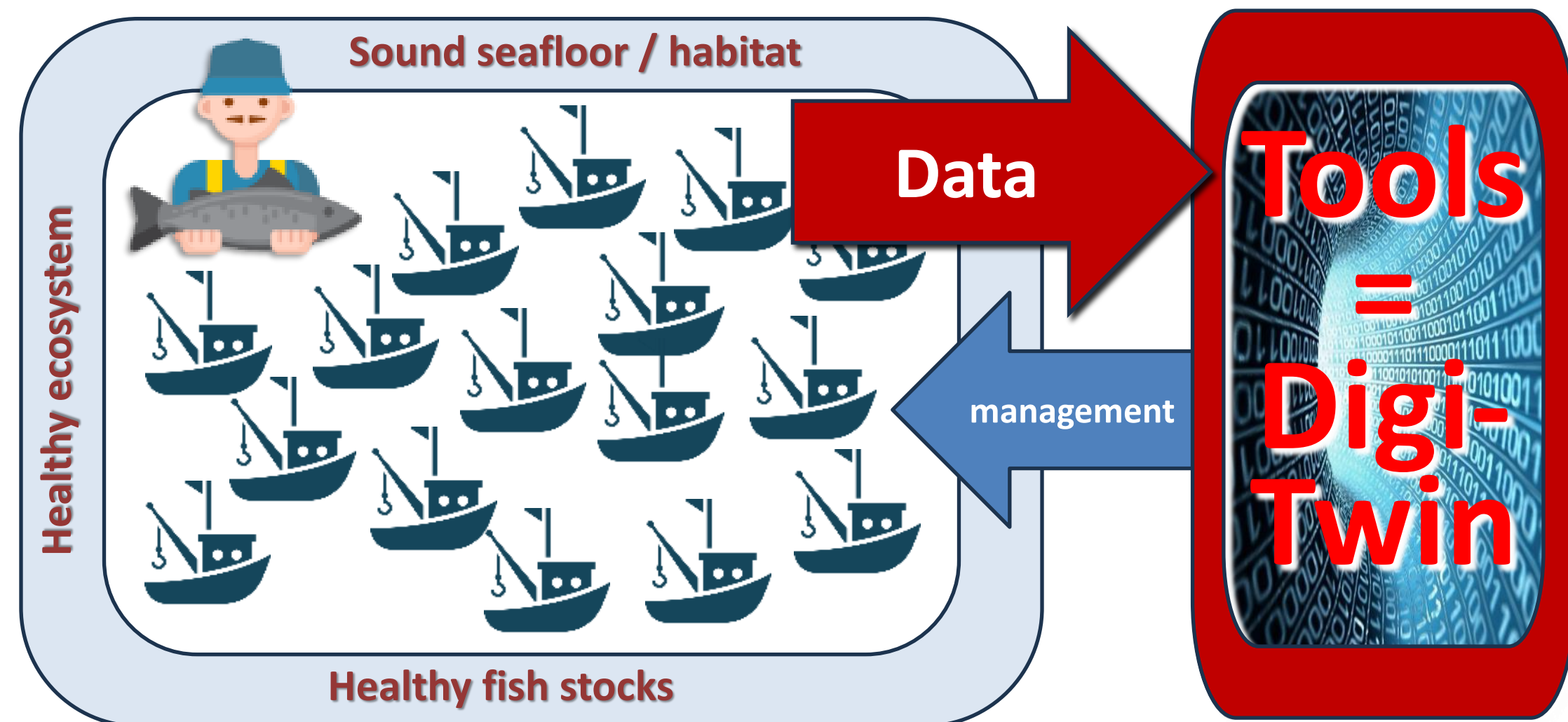
Market

Fisheries management

Powerful tools...

will allow real time fish stock & ecosystem evaluation & catch prediction & more...

...which allows managing fisheries in a fundamentally different but more effective and mature way !



**Thank you for
your attention**



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