Frameworks for data collaboration in the private sector. Lessons Learned

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Minimize the cost of data reuse

Existing data strategies come with significant data engineering costs

80% of data management is in the preparation

We spend the majority of of our time preparing data, and only 20% of our time exploiting it.

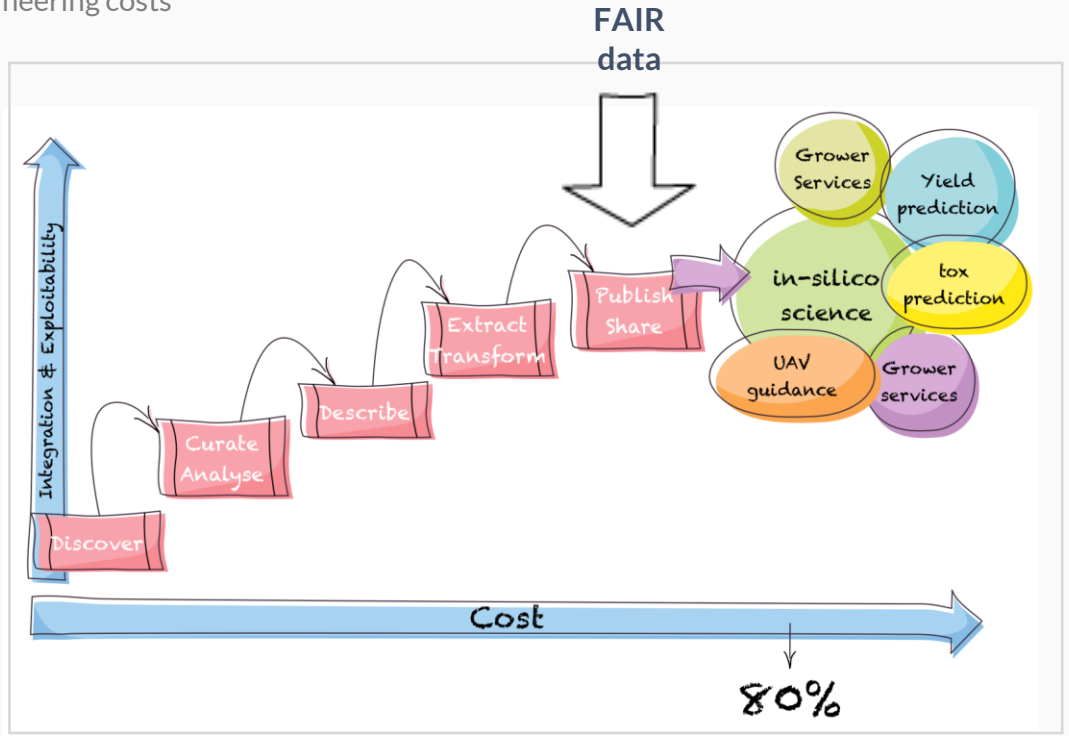
Discovery

Curation

Describe and Model

Publish and Sharing

Extract, Transform, Load



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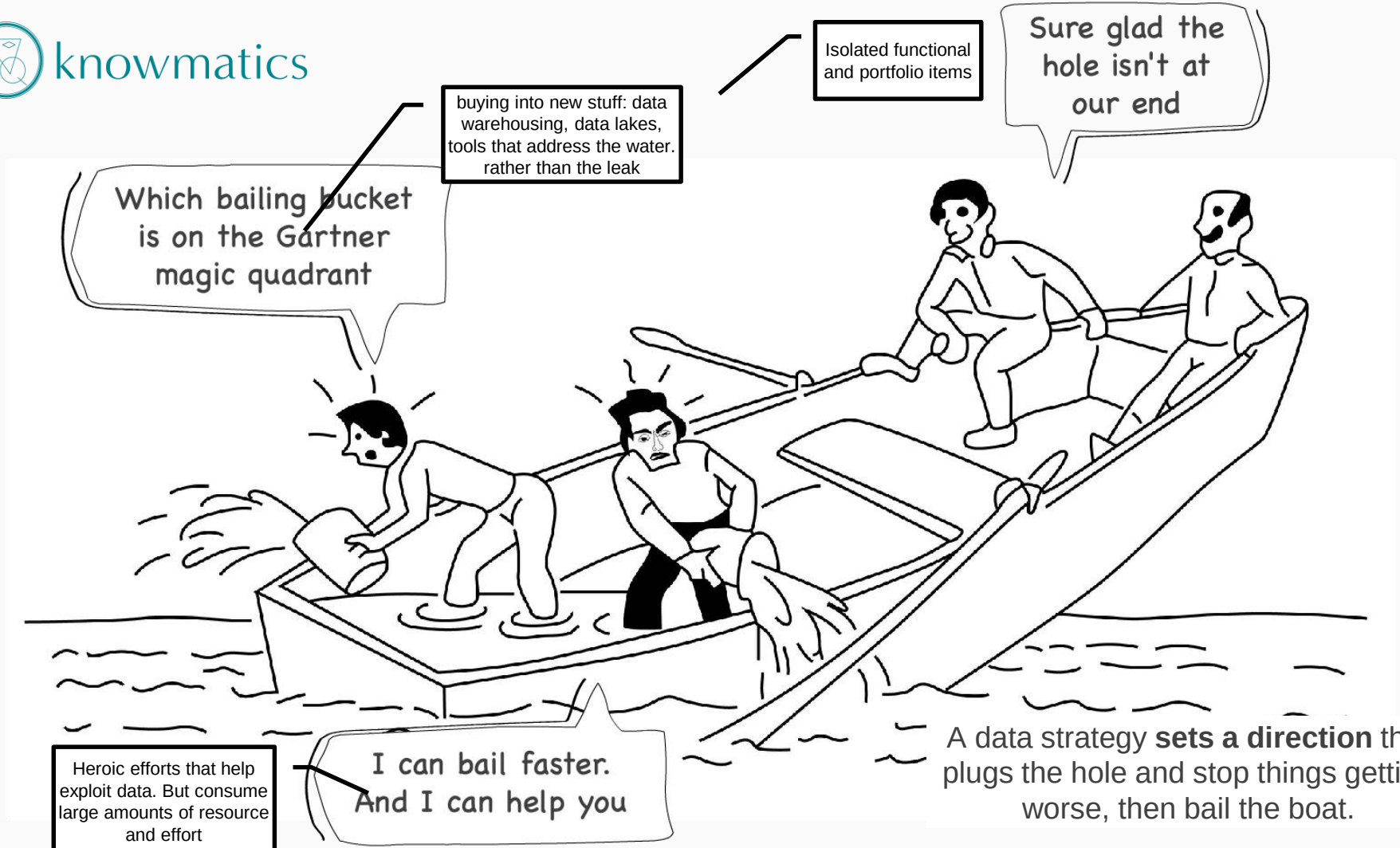
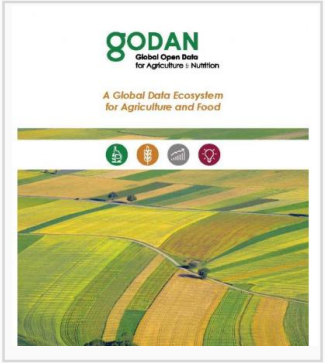


A data strategy **sets a direction** that plugs the hole and stop things getting worse, then bail the boat.

Integrated Solutions need FAIR Data[1]

An example of an integrated solution that relies upon data from multiple sources



Agronomy of Rice Growing

Agronomic knowledge of how to grow rice, and respond to plant development

Supply Logistics

Supply chain planning and unbroken chain of custody

Plant Lability

Models and data about the physiology of rice plants, to develop means of ensuring healthy plants on delivery

Crop Health

Appropriate plant treatment to ensure the best start for growing plants

Local Weather

Local forecasts to support growers and supply planners

Mechanical Rice Planting

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1.http://www.godan.info/documents/data-ecosystem-agriculture-and-food

FAIR Data Enterprise

It's a piece of strategy not a solution

Explained

an approach to publishing structured data so that it can be interlinked and become more useful for the enterprise

Culture

the act of data **creation is intimately coupled with** the act of information **sharing**

Unconscious Coupling

Individuals and groups **continue to produce and consume** information in ways that are specific to their own business needs, but they **produce it in a way that can be connected** to other aspects of the enterprise

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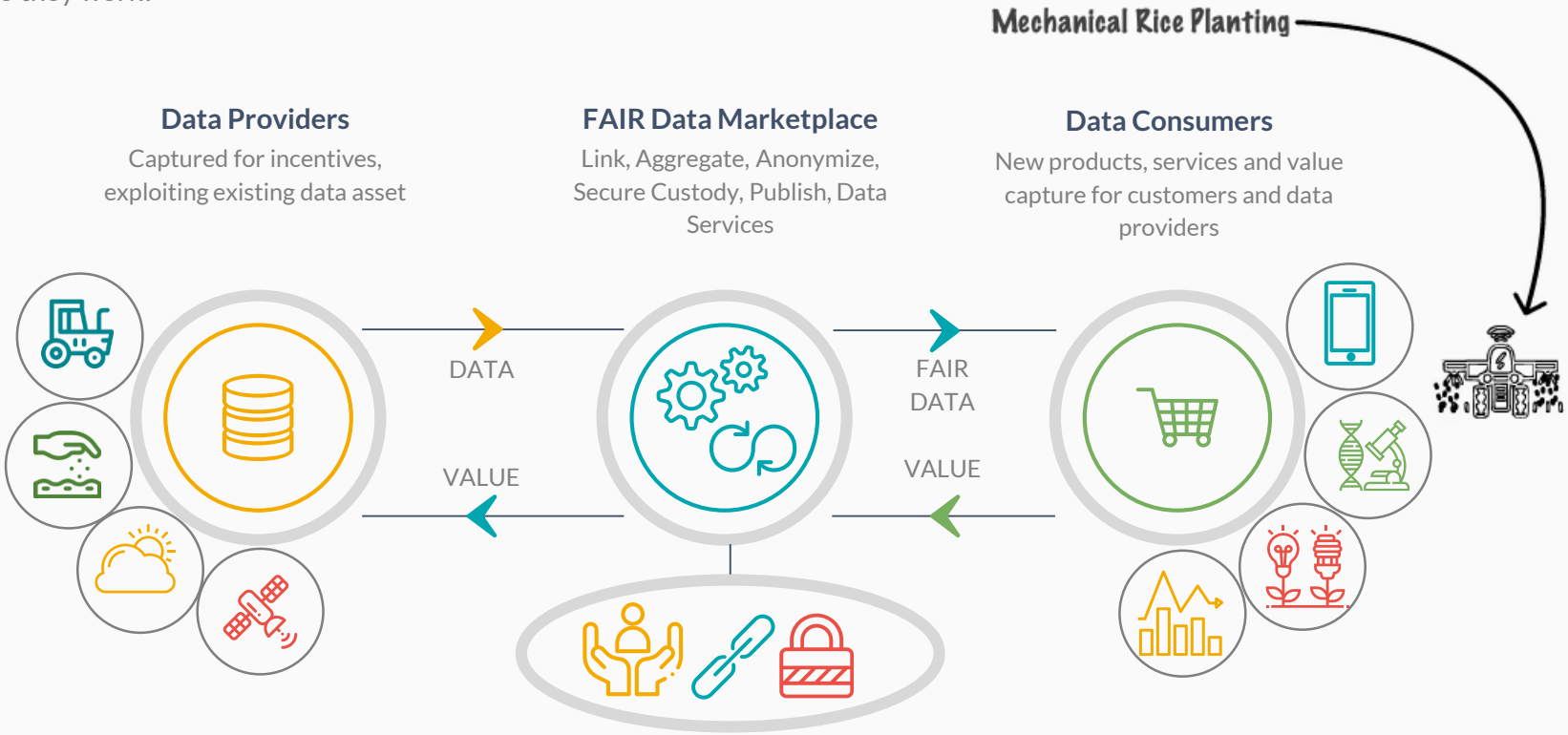
Source: Allemang, D, "Semantic Web and the Linked Data Enterprise", 2010, Springer, 3 Round Stones

Data Marketplace

How do they work?



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Data Marketplace Show Case

Two examples of data marketplaces as data infrastructure

Agrimetrics

THE CATALYST FOR CHANGE

Agrimetrics. National Data Infrastructure

CGIAR

Platform for Big Data in Agriculture

Unifying Data Infrastructure for R&D

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