

WorldFish x AgUnity

AquaData Workshop



3-DAY WORKSHOP
NOVEMBER 2022

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Introduction

The AquaData Workshop between AgUnity and WorldFish was held from November 15th to 17th, 2022 at the WorldFish facility, in Penang, Malaysia.

The objective of this 3-day workshop was to define parameters and an Agile approach to the design and development of a solution to support data and knowledge sharing on aquatic food systems within WorldFish and with external stakeholders.

Participants

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AGILE COACH

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Workshop structure

DAY 1: UNDERSTAND WHO WE ARE AND WHY WE WANT TO DO THIS

- Define a Problem Statement
- Identify stakeholders
- Brainstorm on stakeholder needs using a Value Proposition Canvas

DAY 2: WHAT DO WE WANT TO DO?

- Brainstorm on possible epics for initial deliverables
- Impact analysis of possible solution components
- Define high impact candidates for development

DAY 3: WHAT ARE THE BIG THINGS WE NEED TO ACCOMPLISH?

- Identify first candidate for development
- Ideation on requirements and possible features
- Defined epic for MVP

Day 1

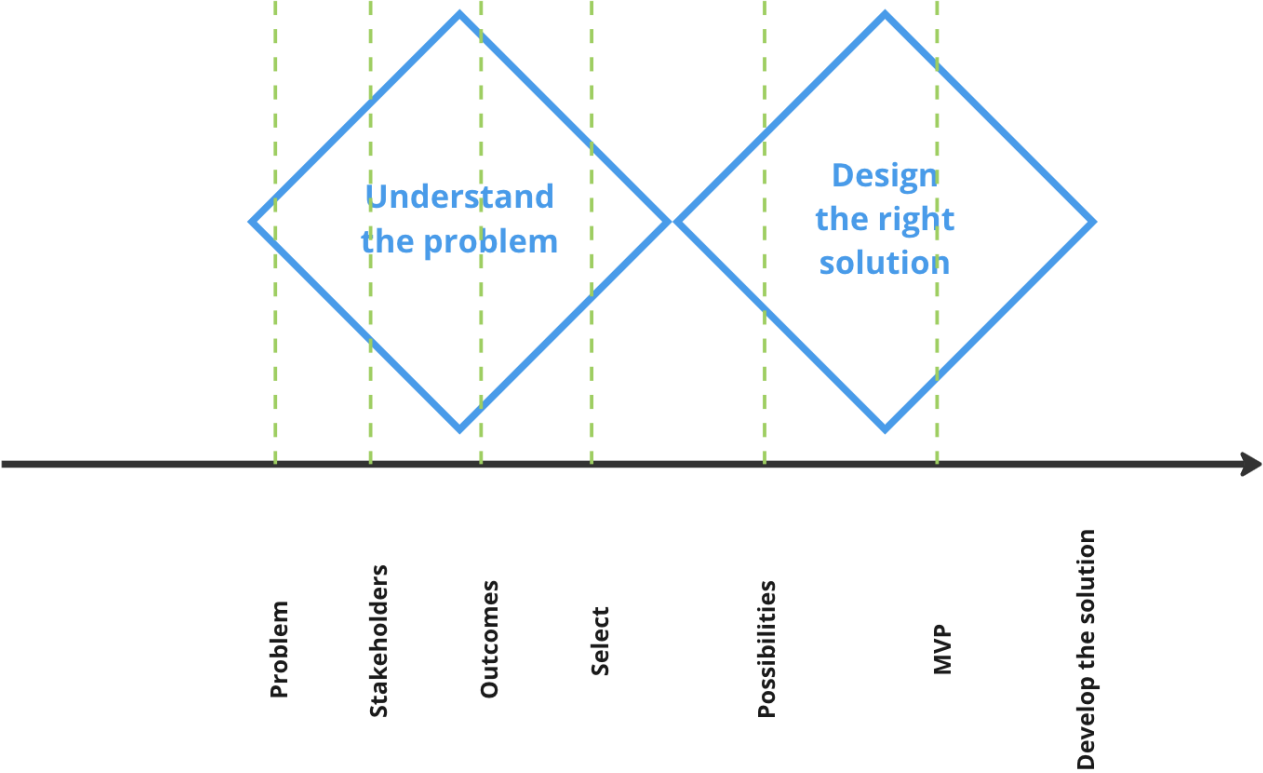
UNDERSTAND WHO WE ARE AND WHY WE WANT TO DO THIS

The main goals on day one of the workshop were to articulate the problem we are trying to solve, identify stakeholders and customers, and brainstorm about all the value that we could potentially create for those groups.



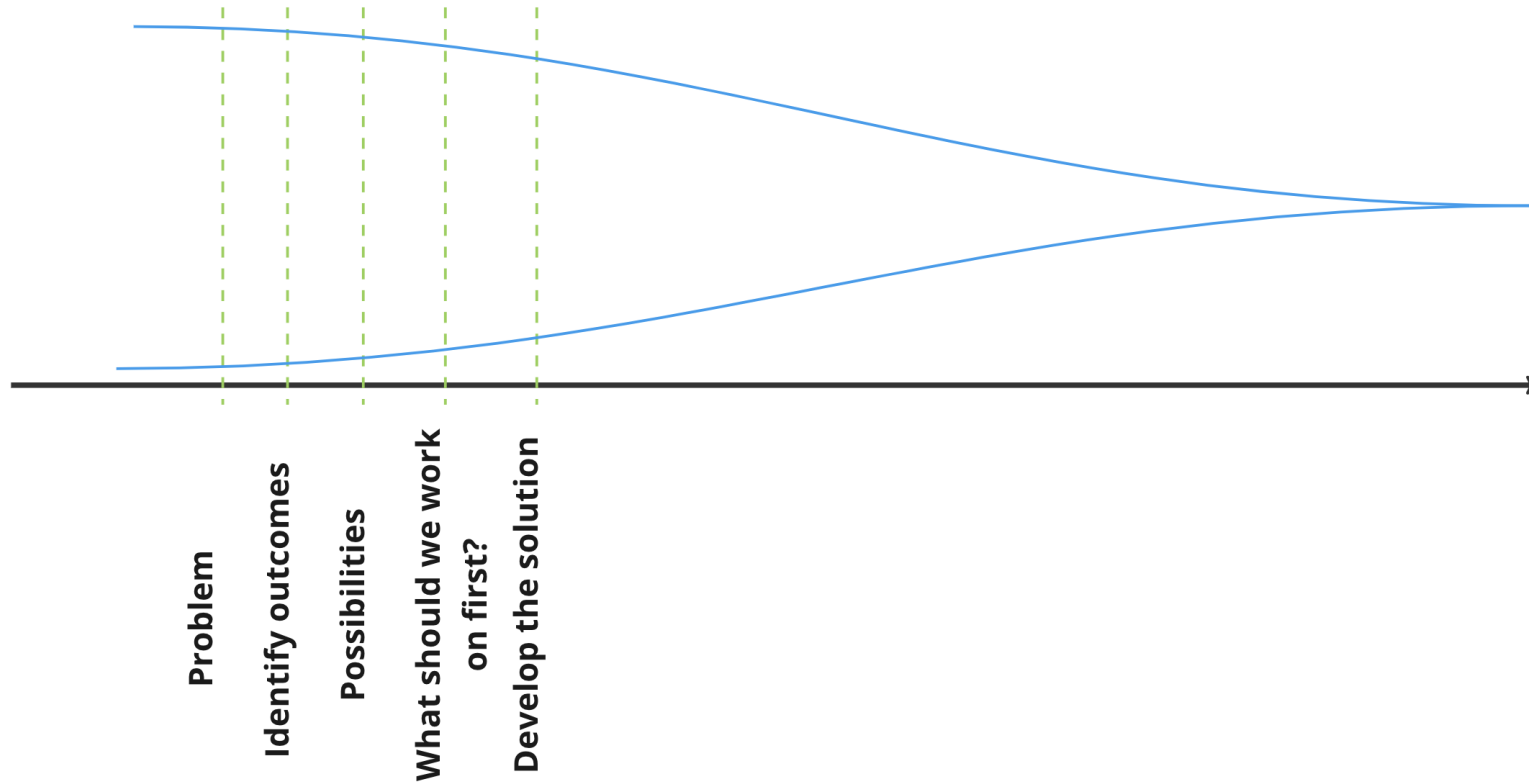
Double diamond diagram

Demonstrates the cycles of convergence and divergence of ideas throughout the process.

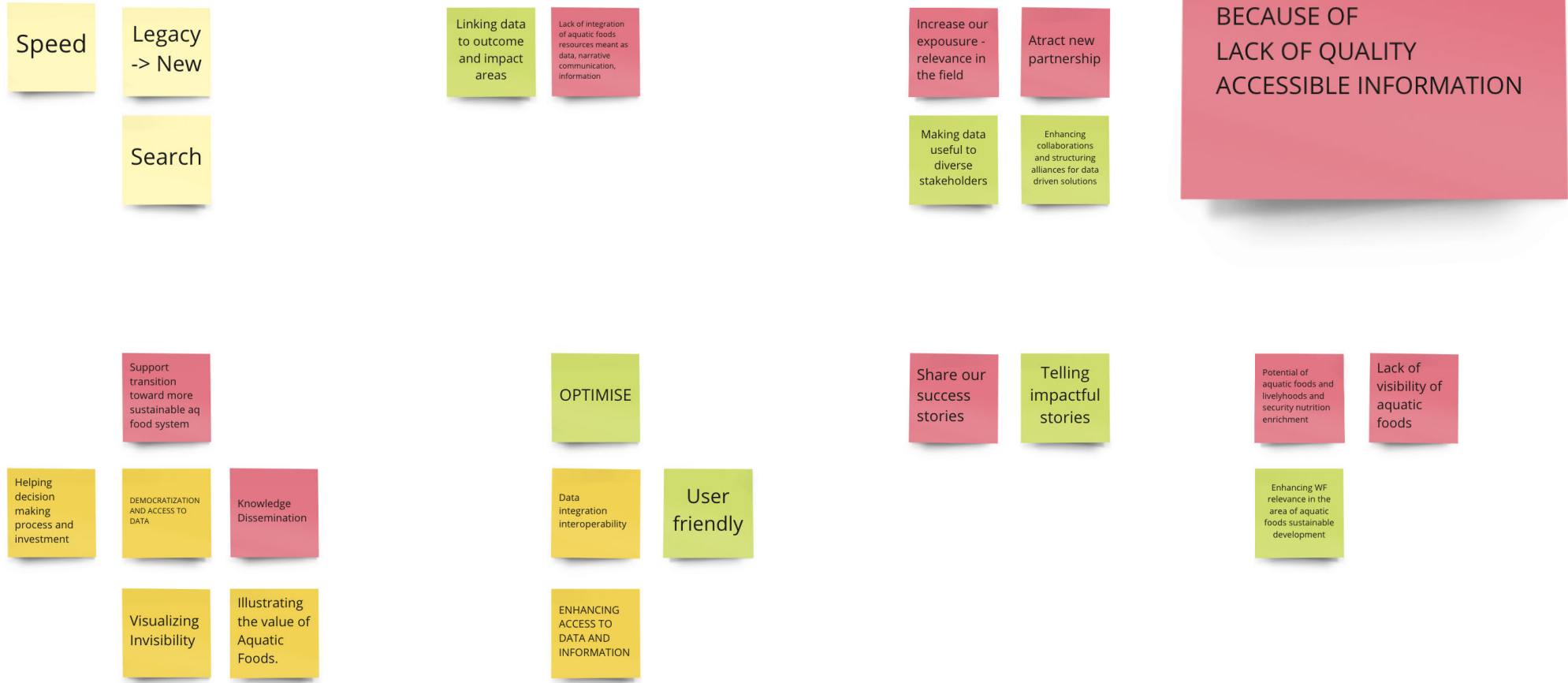


Cone of uncertainty

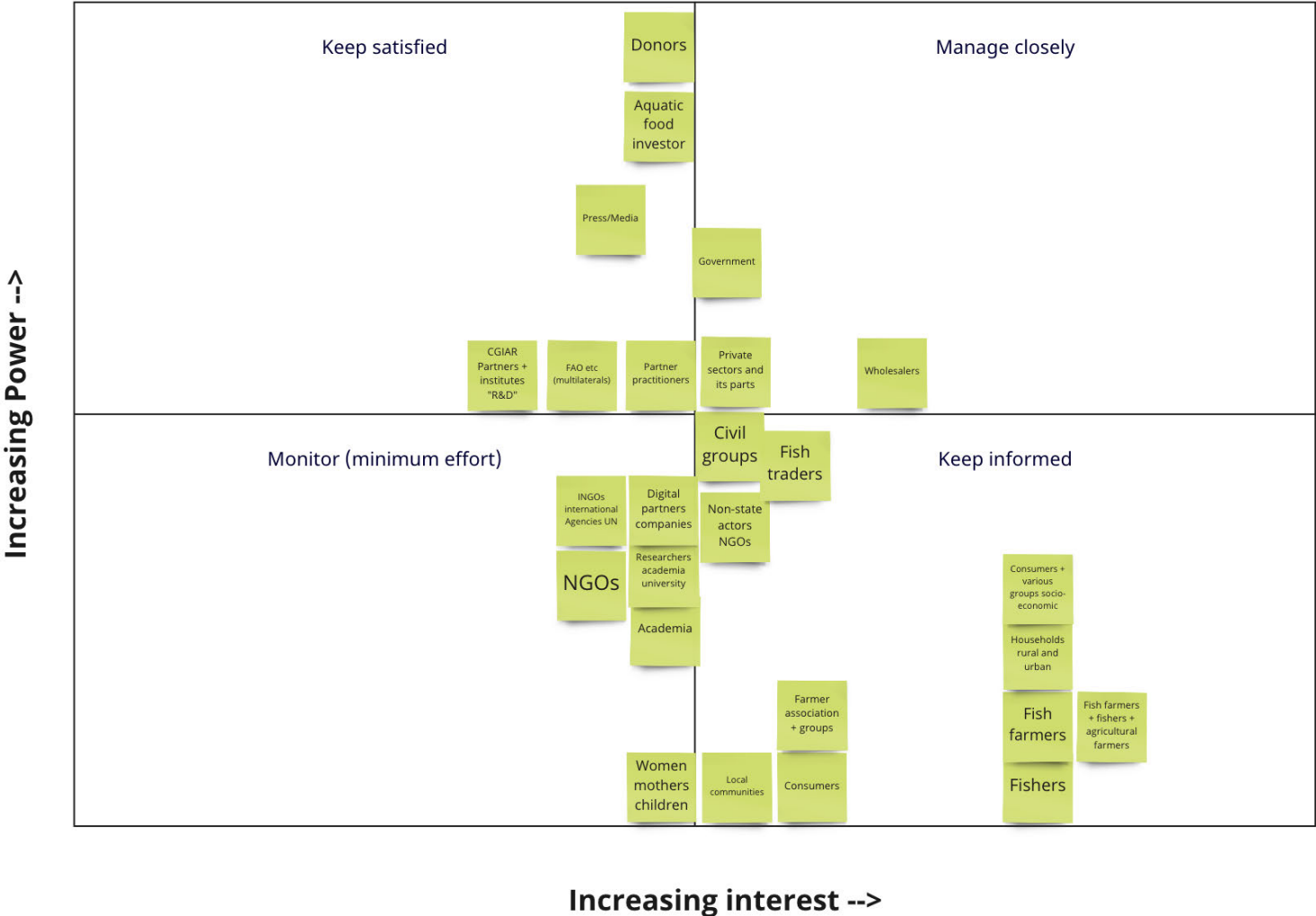
Demonstrates how the solution is arrived at iteratively throughout the process rather than being defined upfront.



Problem statement

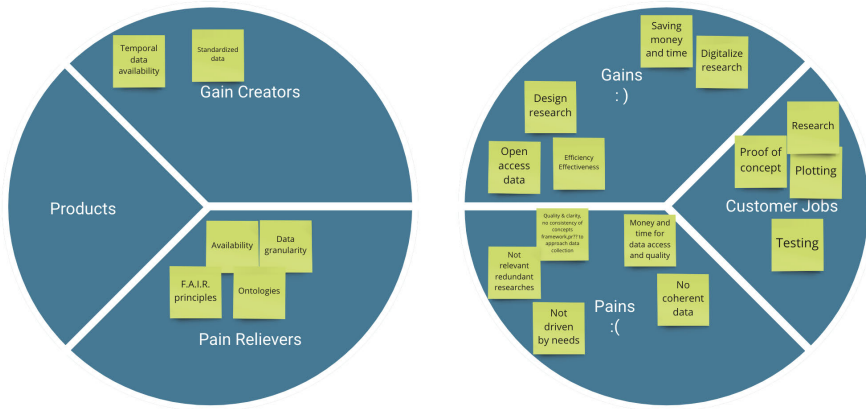


Stakeholder mapping

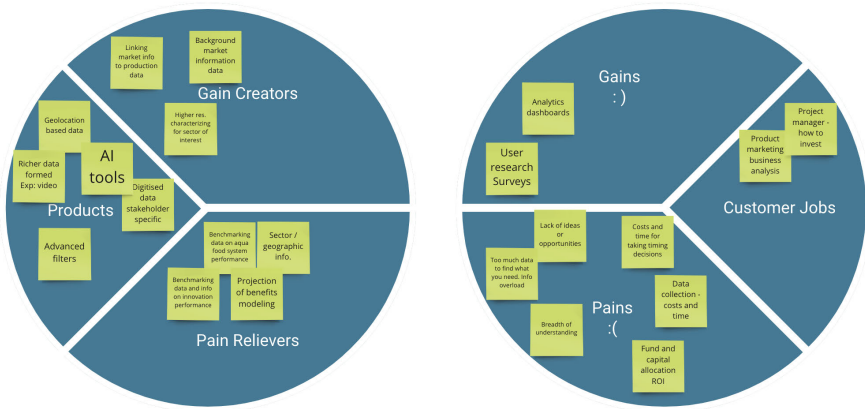


Value proposition canvas

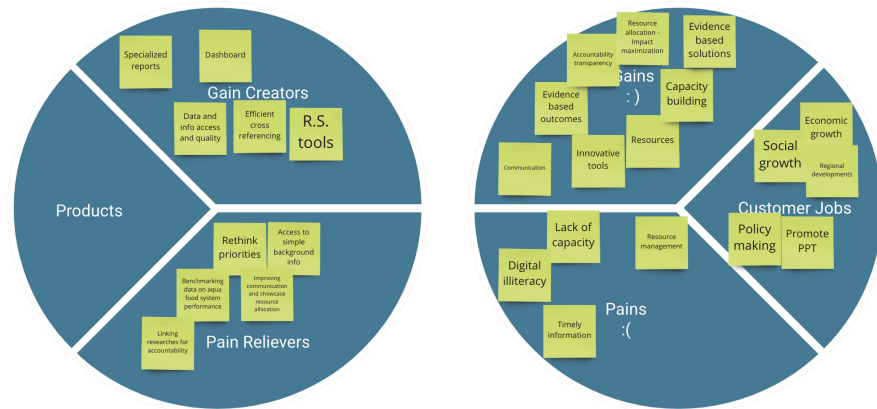
Academia Researchers



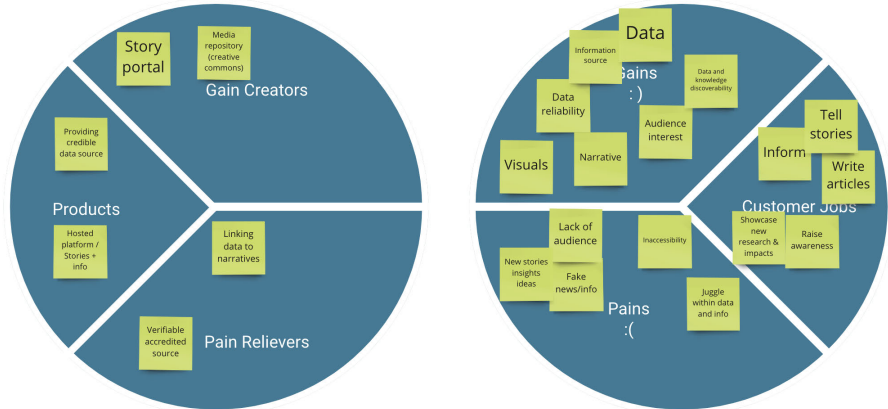
Private Sector



Government and Ministries



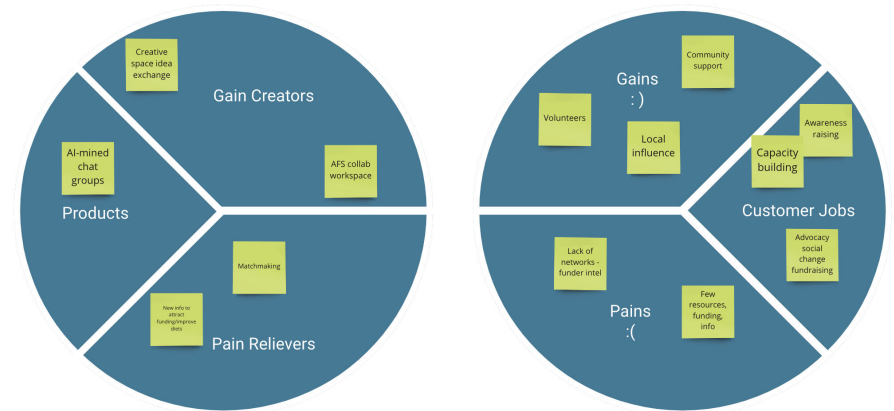
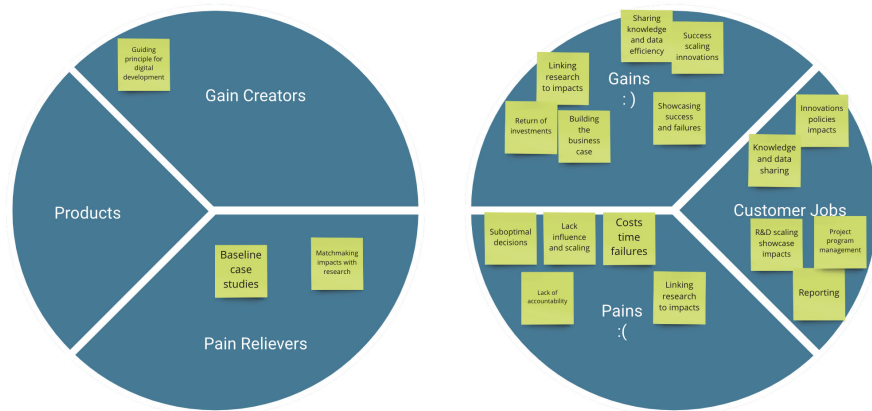
Press / Media



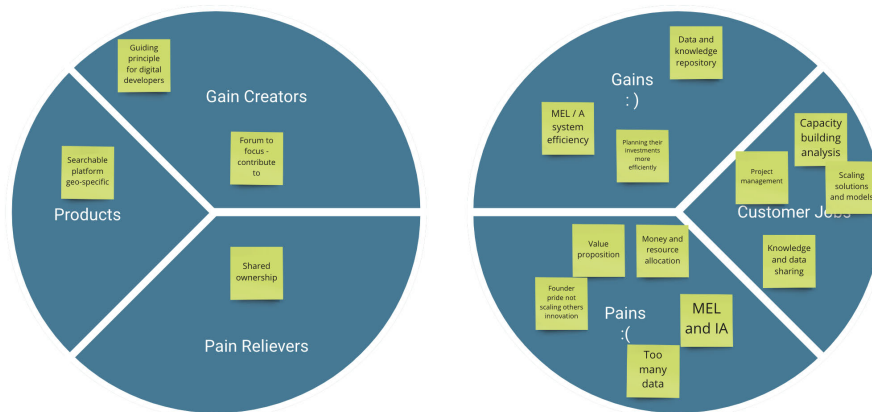
Value proposition canvas

CGIAR Centres

CSOs Public/Private



NGOs / Multilaterals (National/International)



Key Takeaways

Brain storming	Data and narrative are a key	Identifying key stakeholders and agree they will influence others	Amount of work being done + funded by donors to help w/ complex problem
4 pillars ask - idea - dev - imp -> different / unique	Many gain creators are common among stakeholders... that's good!	Observing "Clarify + ideation" benefits "Development and implementation"	Key stakeholders -> analysis
Framing MVPs or sub-outputs still around achieving an outcome	Jobs = user stories Task oriented alleviating 'pain' obstacles to doing that	Sparked thinking about rel data, knowledge narrative synthesis	

Retrospective



Support logistics space IT	Level of engagement	Productive & stress free	Very engaged participants
Interesting facts about others	Time to think and elaborate ideas	Time management	Focus discussions
Great food	IT team	Tom	Workshop space
Room energy levels were good	Tea, coffee, food + snack	Level of engagement	



Coffee and aircon	The air was cold this morning	Plastic-tastic lunchboxes
Traffic	Type 6 plastic for lunch not recyclable	Didn't see any monkey or lizards
4:1 gender bias		

Day 2

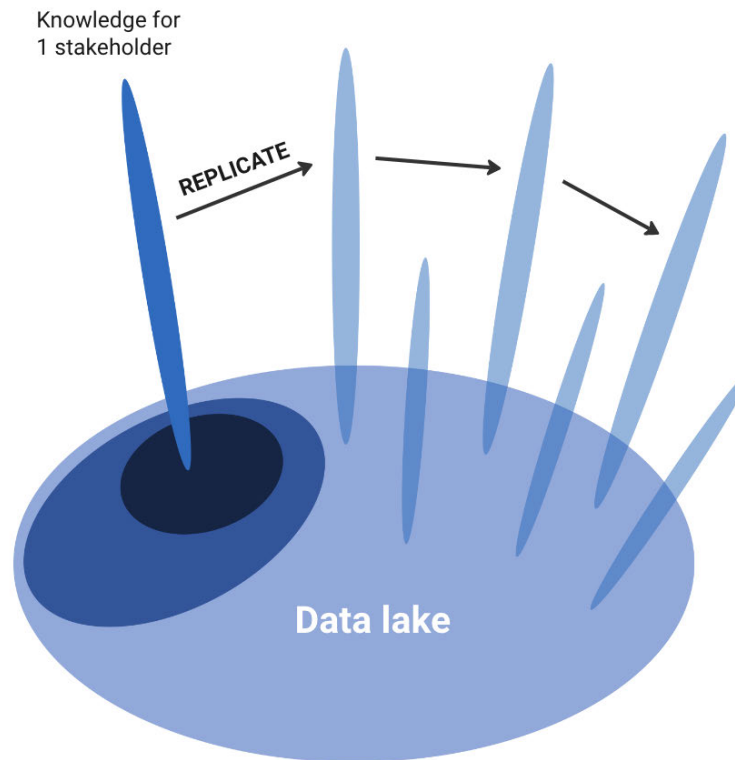
WHAT DO WE WANT TO DO?

The second day of the workshop was focused on identifying what we want to deliver. We brainstormed around possible epics for initial deliverables, performed impact analysis of possible solution components, and defined high impact candidates for development.



Sea urchin model

Visualization of the concept of picking one stakeholder to cater information to first. After success in a small domain, the same process can be replicated for other stakeholders, building informed access to the whole data lake over time rather than worrying about the data lake as whole to start with.



Quality, accessible information brainstorm



Stakeholder epics

1) For who?

IFPRI

2) What is their "job"?

Research to drive food policy | Influence policy

3) What is the pain?

Limited inclusion on AFS | Data access / availability | System boundaries / impact P way unclear | No incentives to include AQF | Limited CG partner P's for AFS

4) What is in place now?

Some DBs - FAO, INFOods | CGAR repository and framework | Worldfish outputs, lit, info, partner P's | Impact model - fish model, foresight modeling | Fragmented information from multiple sectors

5) What is the gain/pain reliever?

Linking data to impacts | Clarify system boundaries and impact pathway with data | AFS info / resource / evidence hub | Stories / C.S. / linked to impacts | Incentive for 2-way data sharing | Inclusion of fish and AQF into foresight modeling

6) What is the outcome you believe will be produced?

Greater AFS inclus. in policy guidance | Increased AQF visibility | Historic / integrated approaches (AQF, crop, livestock, etc) | Greater relevance of AQF | Greater investments and funding for AQF

7) Leading indicator?

IFPRI does that mention AFS | # joint partnerships | # downloads | # data shared | # citation # actimetrics

1) For who?

University of Tokyo Research group

2) What is their "job"?

Proof concepts strong research, publishing | Developing guiding principles and method | Generation of new data on knowledge

3) What is the pain?

Data quality: Data time series, Data access | Data bias, overpopulation of data, resources

4) What is in place now?

Limited secondary data / Multiple data ontology | Multiple methods for data collection / Multiple evidence, sustainability, etc | Currently data available through different resources | No incentive to share data and new knowledge if not influential / No building on previous work (always re-inventing the wheel)

5) What is the gain/pain reliever?

Trusted source of data / information | Incentive / rewarding mechanism to improve data sharing | Definition of guiding principle for digital development and tool | Data aggregation or disaggregation system | Sharing consolidated methods for data collection | Ontology definition and roll out | Highlight broader benefits of data integration (e.g. more CGAR, etc) | Consistent methodological approach

6) What is the outcome you believe will be produced?

- A "go-to" platform for AFS's A new-age source of info | Become a "trust" hub for information, content, gaining principle | Increase "trust" for engagement in high-revenue, high-impact, high-visibility research community | Boosting research interest and opportunities | Improve data quality and data availability for better decision

Multiplication effects

7) Leading indicator?

Number of citation and access to the data platform | Number of contacts per year

1) For who?

NGO (care int.)

2) What is their "job"?

Improve public health + + dvjpt city's | Fundraising | Capacity building / outreach

3) What is the pain?

Lack of info & knowledge of AFS & potential | Lack of guiding data collection principles for AFS

4) What is in place now?

Worldfish reports and partnerships | Good cases of how some NGOs incorporate AFS in program

5) What is the gain/pain reliever?

Simple solutions to engage with AFS | Information access | Data access | Resource hub | Best practices - links to impacts | Reinventing methods or approach to data quality

6) What is the outcome you believe will be produced?

Improved scale of AFS interv. | Improved nutrition in + HHs | Improved planning | More inclusive AFS programs (outward) | Enhanced contribution and data sharing | Improved coalition | Improved scaling of innovation

7) Leading indicator?

new partners, projects, com's | # downloads | # contribution on data shared | # non AFS NGO's engaged | # citations

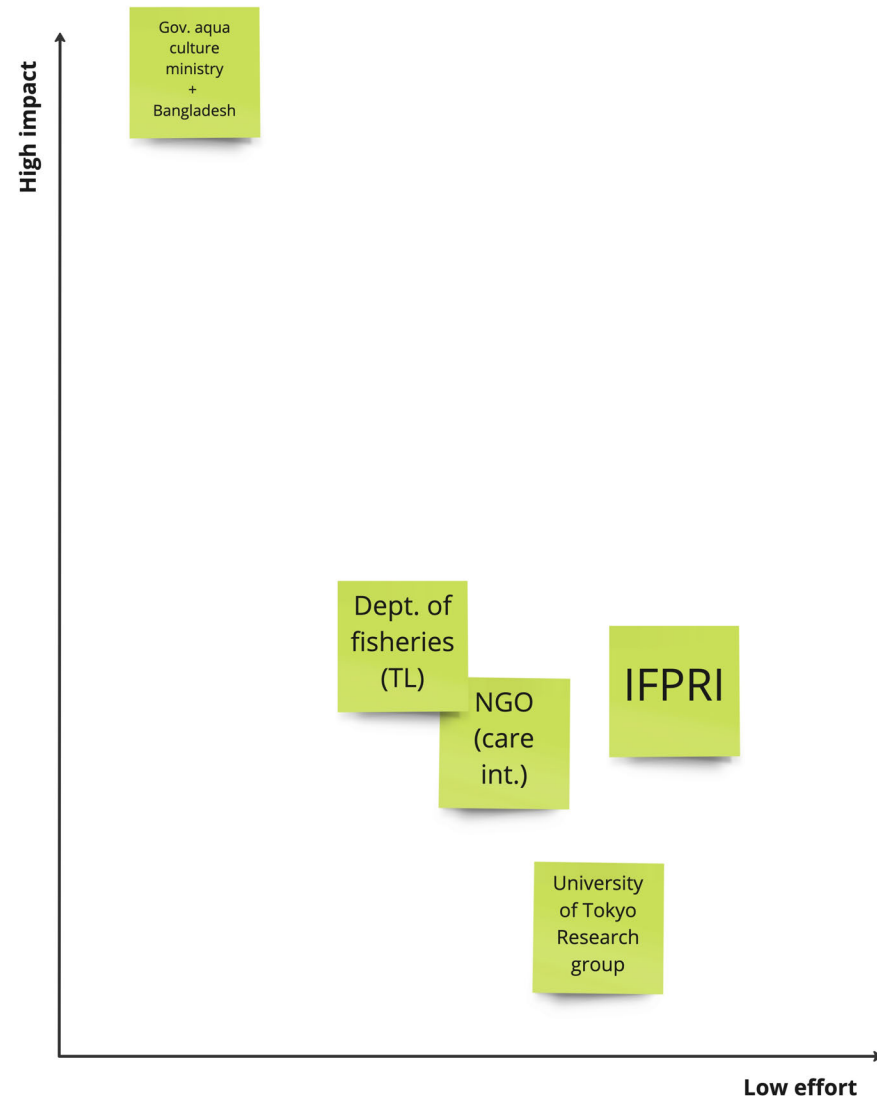
Stakeholder epics



Stakeholder impact analysis

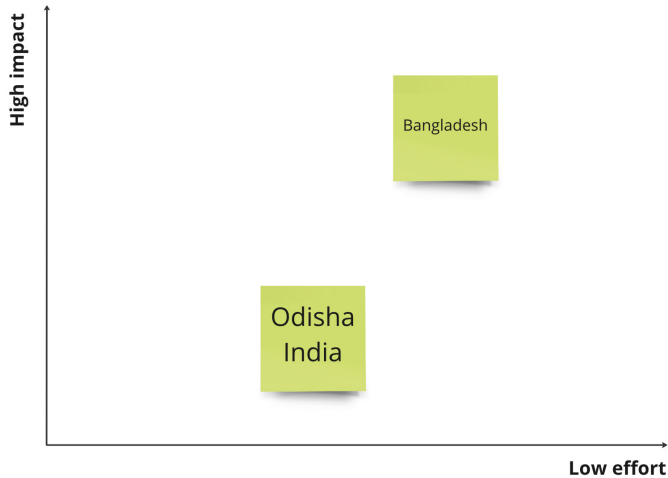
After documenting the solution components that would add value for each stakeholder, the team used the impact analysis diagram to evaluate which solution would have the highest impact with the least effort.

Important to note the finding that if we removed solution number 1 from the “Gov. aqua culture ministry + Bangladesh” we would be able to move it to the right in the graph and have a high impact solution for less effort.



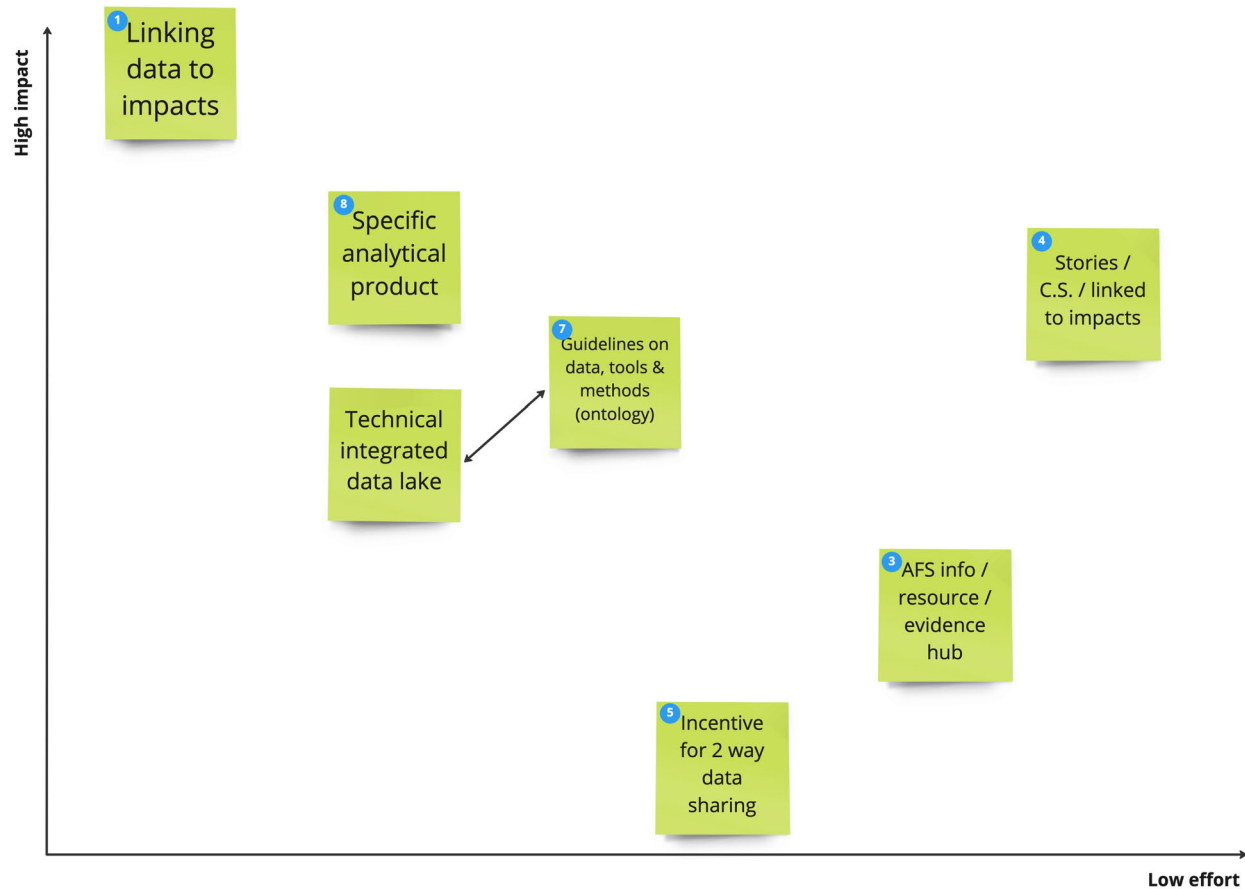
“Spine” stakeholders

This was deeper analysis of the “Governments and ministries” stakeholder to better understand the impact and effort differences between possible “customers”.



Solutions impact analysis

Gains/pain relievers for all stakeholders were grouped, and each group was numbered for the analysis below:



Key Takeaways

Sea urchin spine	Focusing on smaller components / targets is becoming easier to identify	Impact graph scaling	Urchin model	Love when the group grabs the reigns from me. Success!
Process of divergence before converge seemingly tedious but is worth it!	How to find the strongest urchin spine? or how to make it...	Focus on solutions and articulation of problem / outcomes	Data -> information stories status p	Impact / effort thinking is useful
Value of the different exercises	Right people = real examples = thorough thinking	Nice to find converging ideas that apparently address several stakeholders!	Crazy respect for Worldfish guys! So complex issues and so much passion!	Usable MEL
Impact measurement "Wicked challenge"	Low hanging fruit not always what expected	Sea urchin model	From pond / lake to spine	

Retrospective



Participation and energy	Mediocre vs Rocky Balboa	Interesting learning process	Stretching Zus coffee
The strategy energy!	Cat!! shared w/ younger daughter	Group stretch	Zus coffee
Fish at lunch was tasty	Workspace logistics	Engagement	Better coffee :D
Zus coffee	Tom (& JF)	Blue rice	"surching.org"



Explanation of graphs - even 4 scientists	GAH!	Still the plastic :(
The shrimp was too difficult to eat	Man that juice is sweet	The blocker

Day 3

WHAT ARE THE BIG THINGS WE NEED TO ACCOMPLISH?

On day 3 of the workshop we focused on identifying what needs to be accomplished next. We identified first candidate for development, ideated on requirements and possible features, and defined an epic for the MVP.

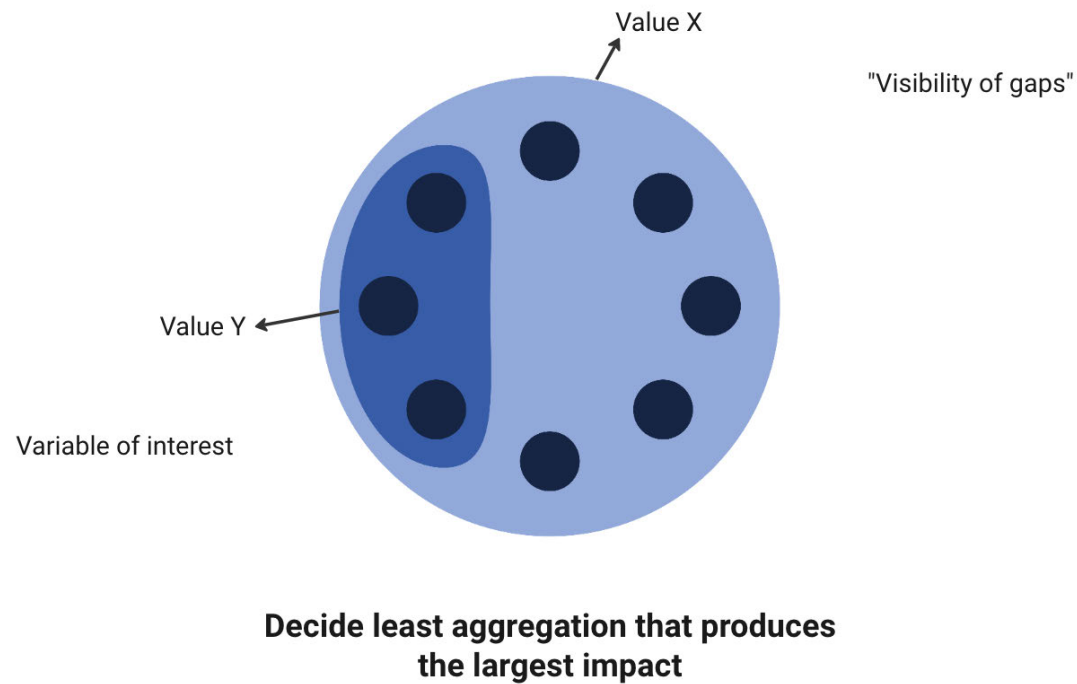


What is the “spine”?

A. Slice of country-wide knowledge ("stories", "narrative")

OR

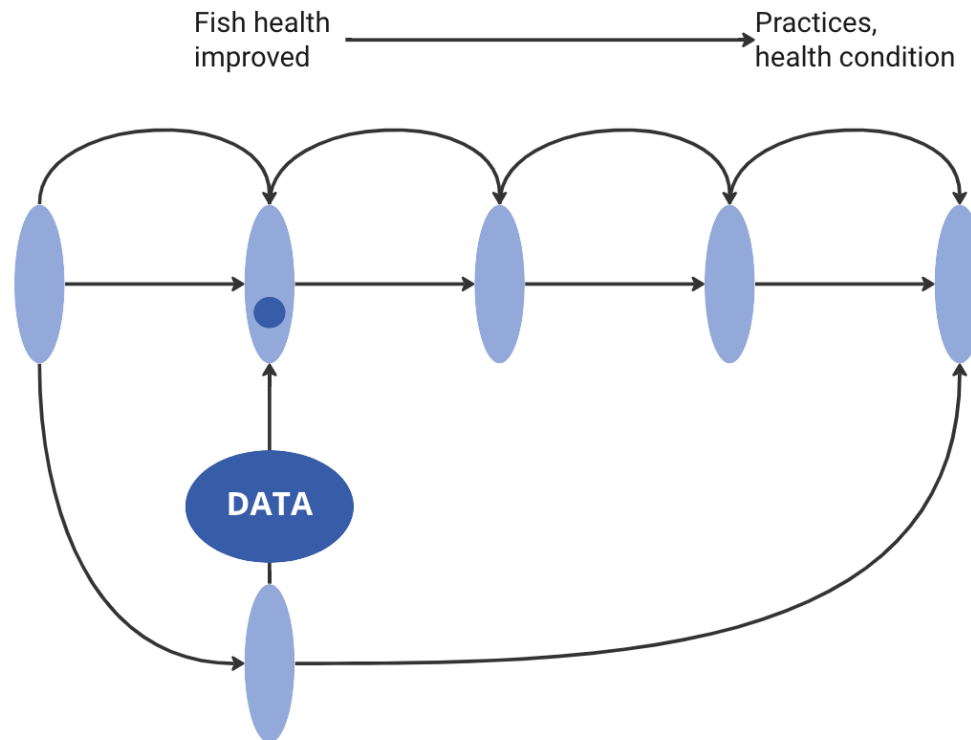
B. Small local slice replicable



Decisions / Pathways

Planning phase of intervention. Prioritization of investment.

- Compare paths
- Visualize different decisions
- Awareness of options



Risk assessment

NFRs

- National data store/ownership (7)
- We can reward good practices (7)
- Social-cultural resistance (eg. employability) (TL) (7)
- Complex tool - Missing data
- Non-clarity on data collection not reliable. So ignored
- Overpromising data value
- Hard to upload, too complex (7)
- Uploading format too rigid, in scope
- Leads to useless data, hence limited COVID data, eg. # number foreign (7)

Assumptions (risk + dependencies)

- Hard to push sustainable longevity of data updates (7)
- Partners share the value of repeatable system
- How to sustainably extract digitally local data (ongoing not a snapshot) (7)
- Potential bias when aggregating different samples/sampling method (4)
- Changing gov. priorities
- WF data is already attractive to potential users. Just dangle and see who takes the bait (7)
- PESCAAS replicability elsewhere w/ not so much resources (3)
- Less about same way to collect the data, but to allow sharing the data (3)
- Redundancy with FAD works / data WF gives more nuance and can complement (4)
- Not a clear data sharing w/ local ministries to local levels (7)
- Worldfish can continue to use/access data (7)
- Access to data is an incentive for data collectors / uploaders (3)
- Not clear secondary themes relevant to which stakeholder (3)
- Non aligned objectives of data interpretation (rise of misuse) (4)
- Getting validation of aggr. stats w/ local realities (7)
- Assuming data collected is easily recollectable (7)

Include NGOs traders

National too rough

Include tools to do SH w/ your own data

Experiments

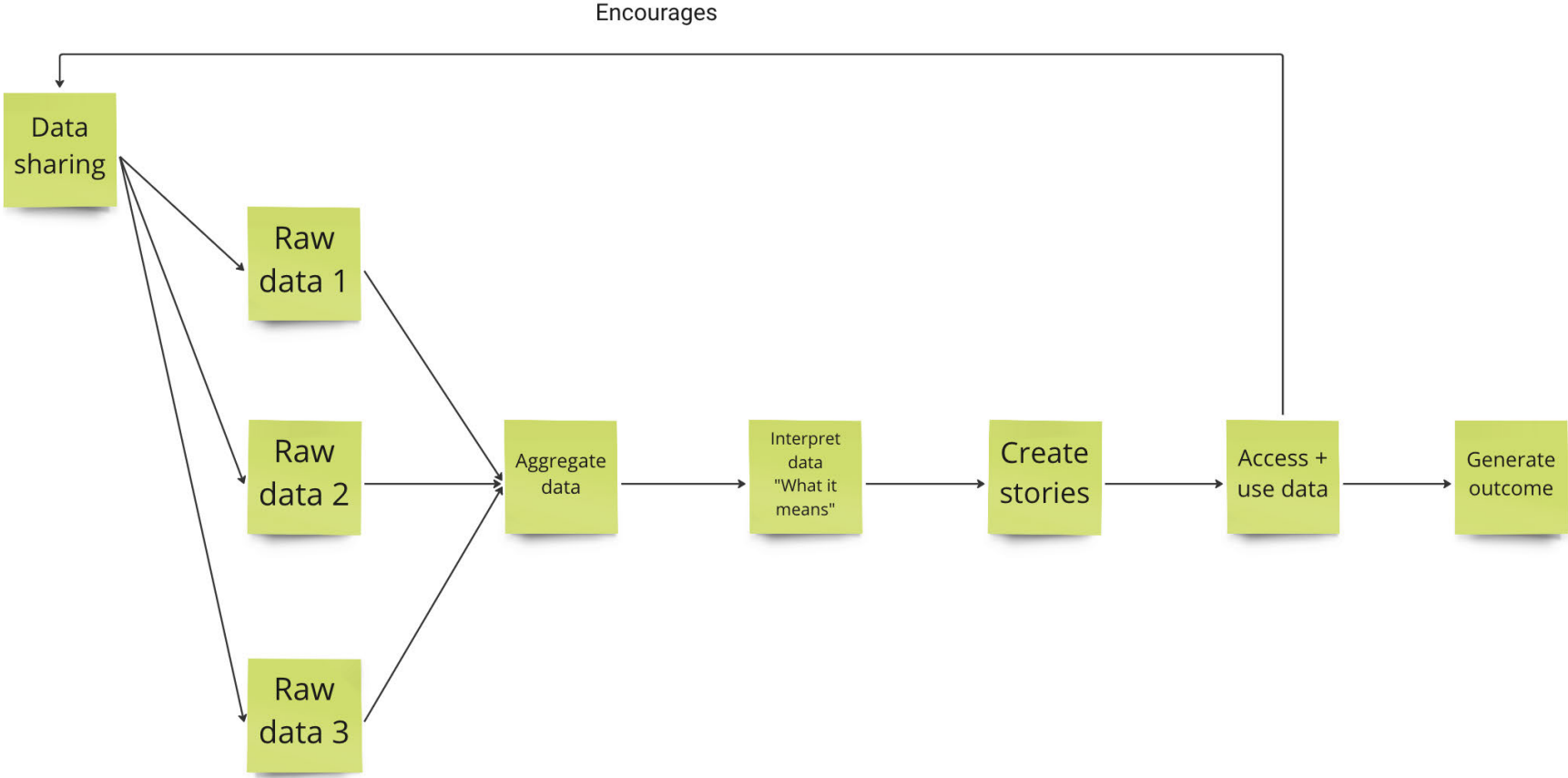
- Making WF project researchers into Aquadata team. Helping them collect data (7)
- Incentives for diverse stakeholders to collect / data share / pay for it (7)
- Tools on remote-sensing, drones, GIS, mapping codes - ext of Rhomis (3)
- Guiding principles for data interpretation (4)
- Template: here are the boxes. Fill in! (3)
- Finding optimal targets depending on "Variable of interest" (4)
- Policy makers - stories - correction - show pathways (causality) at all levels (4)
- Sliders on prioritization of key impacts. Show relevant AFS indicators / activities (4)
- Making scenarios visualised (4)
- Showcase WF data and see who takes the bait (7)
- Easier top NGOs to operate repeatable data gathering (harder for ministry) (7)
- Leverage CG partners to use new tools (3)
- Can we vladly do focused (even in) easy, automated AF very local level and still be aligned w/ aqua index (4)
- Leaderboards on data sharing collection (3)
- Add value to FAO Nuance, granularity, rigor, sustainability - Long term goal
- Scoping externalities Typology mapping. Whose examples are relevant for you? (3)
- Decision tree to show causality (4)
- Slider: tailored to interest & risk (photo on the right) (4)

Handwritten note: SUPER slider 4. Tailored to interest & risk.

References

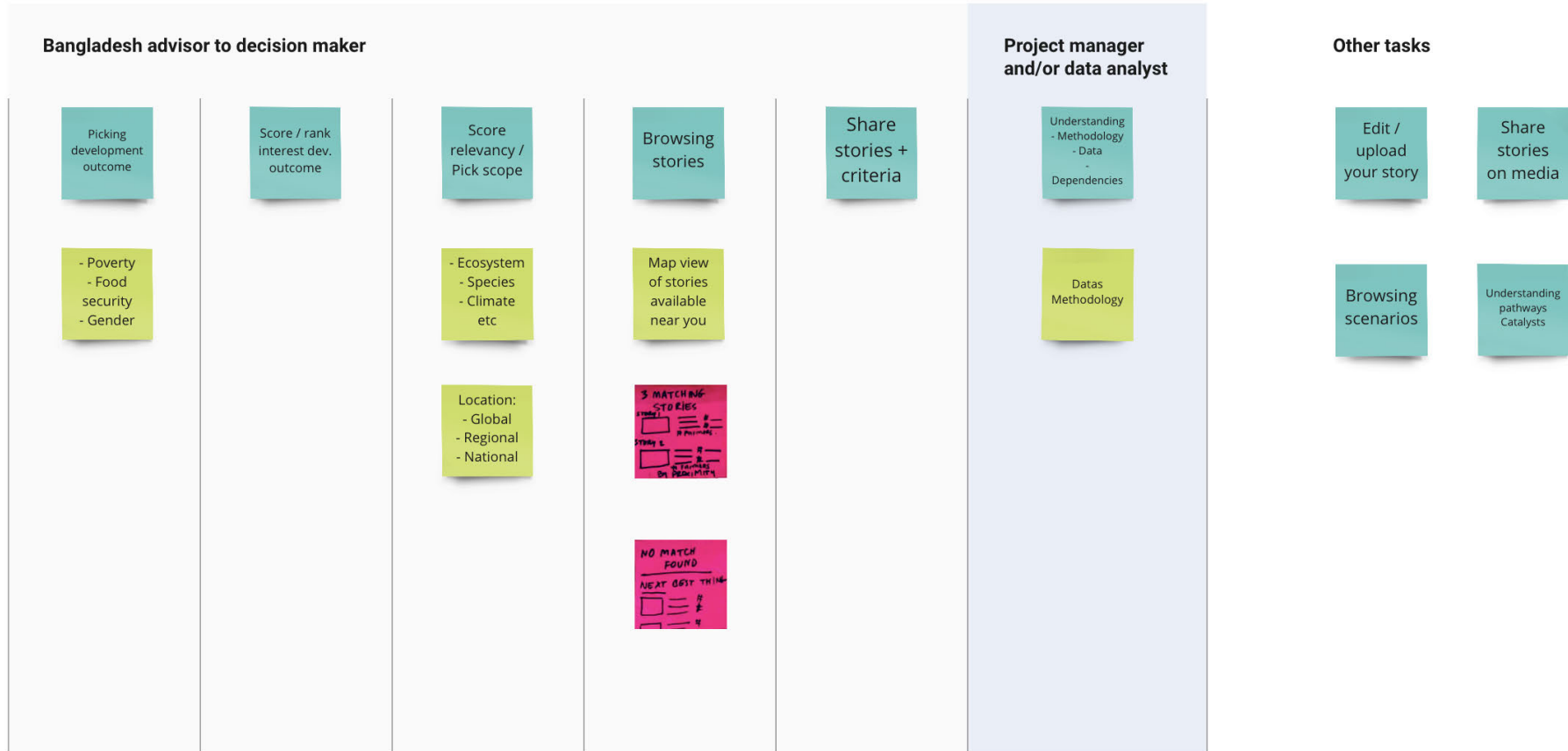
- Rhomis Shares tools, pre-coded forms (3)
- Guidance principles for digital development (3)
- 60 stories presented to DG
- (Potential) Interviews "How can we help you?" to several country partners
- Statista.com
- ss.wm.infor
- Scenarios building

Data flow



Customer journey mapping

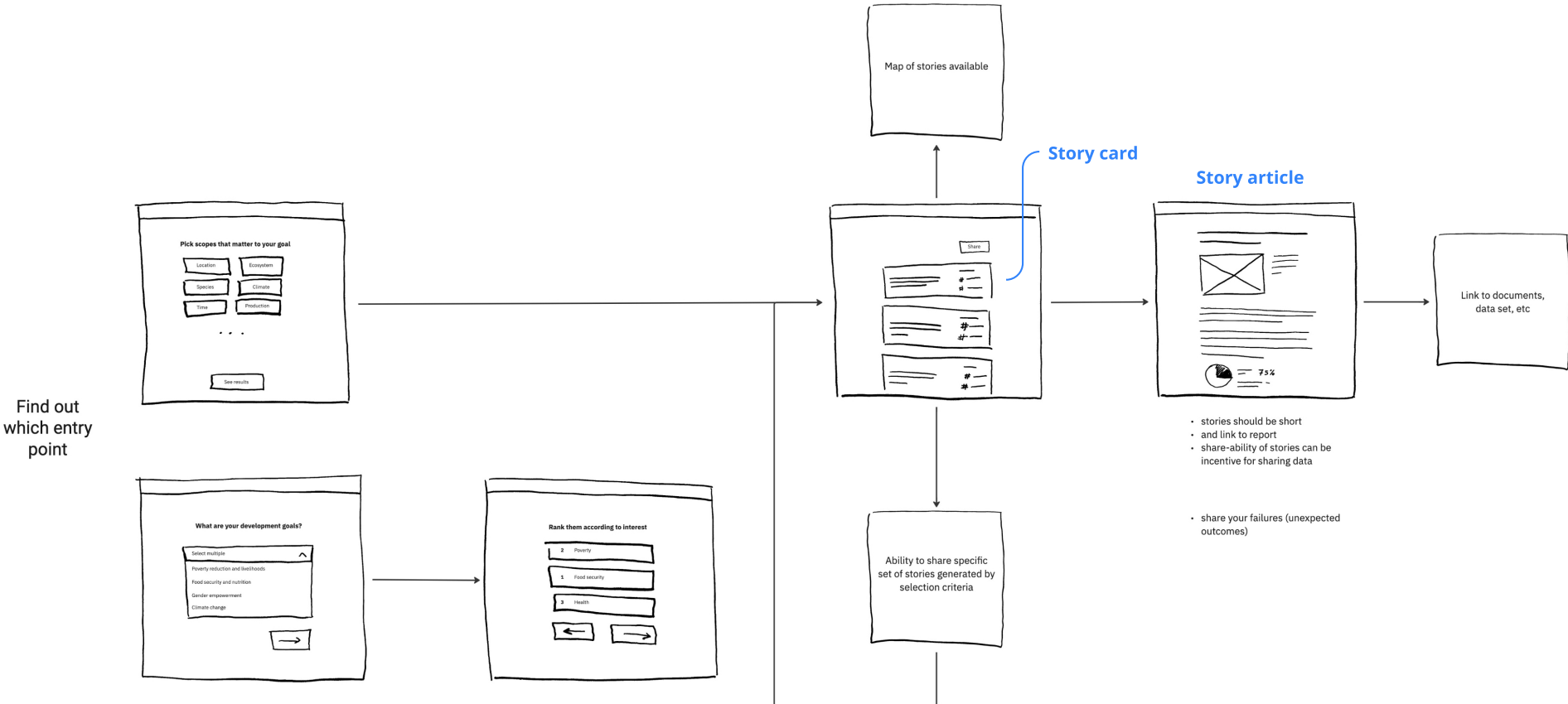
As an advisor, I want _____
 so that I can convince on _____



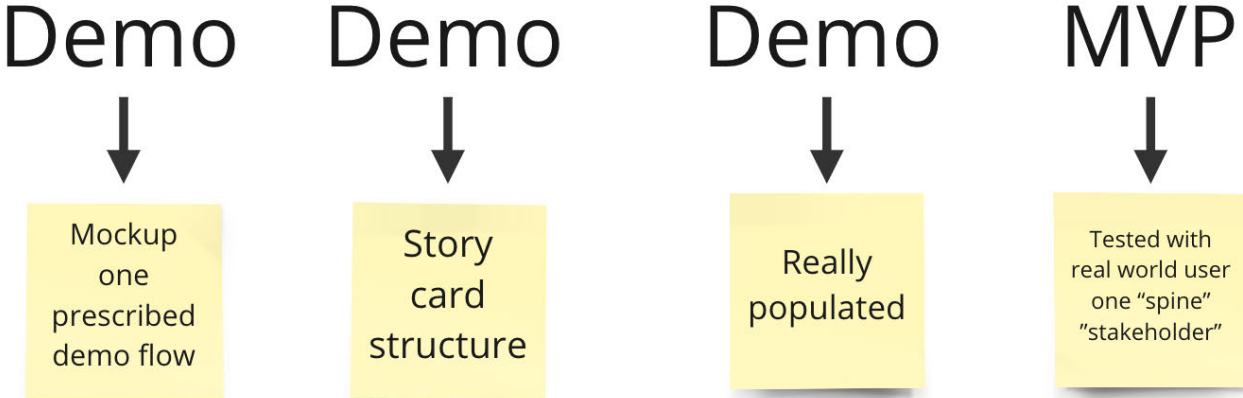
Features brainstorm



Wireframes



MVP breakdown



Parking lot


The parking lot was used as an area to put thoughts and ideas that didn't have time to be mentioned during the workshop.



Key Takeaways

Remember the cone	Always deliver some value	Financial sustainability f***s you in the end	Tik tok stories	Zoom in zoom out	You never know where things are going to go
But productive	Brainstorms are tiring...	Don't be such a scientist	Always be reminded of value / outcome, not functions	Priority solution oriented	Such a pleasure to do a workshop w/ strong collabs + smart participants
BrainSTORMing	Spine vs lake	I'm such a clarify - ideate + not + develop / implement	Narrow and even narrower scope to digest & act!	Think of tangible value for every interaction	Science communities at core of first release
Complex challenges	Motivation for change	Tom's sea urchin©	Unexpected outcomes	Gaps and opportunities	Look at the whole, focus on the value
Face to face workshop gives more dimensions and graciousness	Shark is fish, too!	Urchin model analogy	Got to an MVP concept that feels doable, valuable & scalable		

Retrospective

					
Logistics seamless thanks to SK and Pauline	Tom = Zus	People	Worldfish team (top to bottom)	Plastic box	
Dinner	AgUnity team	People so beautiful	Engaged group	The blocker "still there"	Still with the plastic
Group dinner	Awesome people	Golden seeds	Thank you!		
Zus coffee					