

National Integrated Fisheries Digital Platform

Business document for Vanuatu Fisheries digital transformation. Prepared for the Ministry responsible for Fisheries / Vanuatu Fisheries Department. Prepared by Nabanga Solutions.

Field capture: Electronic Monitoring, tabu map and monthly letter. Solution model: modular fisheries ecosystem with one trusted Vanuatu Fisheries Data Hub. Basis: Vanuatu National Roadmap for Coastal Fisheries: 2019–2030.

0. Purpose of this document

This business document explains why digitisation and proper app-based data collection are critical to achieving the Vanuatu coastal fisheries roadmap. It positions Nabanga Solutions as a practical partner for building a field-to-decision ecosystem: Smart Fishers in the hand, Electronic Monitoring to identify fish and estimate catch, a drawn tabu and trade map, one monthly letter to every audience, a Vanuatu-controlled Data Hub, classified dashboards and data governance.

1. Executive summary

Vanuatu fisheries sit at the centre of food security, livelihoods, culture and coastal resilience. The national roadmap for coastal fisheries sets a clear 2030 vision: sustainable coastal fisheries, underpinned by community-based approaches, that support the resilience and well-being of the people of Vanuatu.

Nabanga Solutions proposes a digital fisheries data ecosystem that starts where the data is created. Smart Fishers captures registration, landings, Electronic Monitoring reads, GPS, community management areas, compliance observations, training needs, market activity and disaster impacts. Every tabu and marine managed area is drawn as a polygon the committee, the officer and the fisher can see together. Trade heat is kilograms already written to the Hub — not names. One monthly letter reaches fishers, officers, CBFM committees, MCS, market desks and command. The Vanuatu Fisheries Data Hub standardises and governs this information.

Core message: a dashboard alone will not solve the fisheries challenge. The Ministry needs a trusted data flow — field collection, governed Data Hub, analytics, action.

2. Why digitisation matters now

Food security and livelihoods	See where supply, risks and service needs are changing.
Dispersed islands	Officers and focal points submit records without waiting for paper.
Community-based management	Who fishes, where, what rules apply, whether the drawn tabu is respected.
Enforcement and compliance	Incidents, geotags, landing records and case follow-up on one trail.
Markets	Prices, demand, colour grade, cold-chain risk and trade heat from Hub kilograms.
Monitoring and reporting	Roadmap reporting faster, cleaner and more transparent.

3. Alignment to the Vanuatu Coastal Fisheries Roadmap

The design does not replace community-based approaches. It strengthens them by giving communities, provincial officers and national decision-makers a shared evidence base. Tabu lines are drawn. The monthly letter is the same month in every room.

4. Current-state challenges

Fragmented records	Field notes, Excel and community knowledge are not connected.
Late visibility	By the time paper reaches Port Vila the chance to act has passed.
Spoken tabu, paper news	A tabu that lives only in a meeting is gone in a cyclone. A notice that never reaches the phone is not a notice.
Weak traceability	Without stable IDs, reports cannot be reconciled.
Difficult MCS follow-up	Incidents die without a case number.
Unclear data ownership	Sharing requires stewardship, classification, consent and approved use.

5. Proposed ecosystem

Smart Fishers	Registry, landings, Electronic Monitoring, cases, GPS, photos, monthly letter.
Tabu and trade map	Every tabu and MMA drawn. Trade heat from Hub kilograms. Names stay on the Hub.
Monthly letter and news	One edition. Filter by fisher, officer, CBFM, MCS, market or command.
Fisheries Data Hub	Vanuatu-controlled bronze, silver, gold. Audit trail. Approved products.
Analytics and dashboards	Minister to province. Classified marts only.
Electronic Monitoring	Species, colour and kilograms before the buyer speaks.
Data governance	Owners, stewards, quality rules, access class, lineage.

6. App and data collection modules

Fisher and community registry	Profile, community, consent, assigned officer, group membership.
Landing and catch log	Species, colour from EM, kilograms, gear, use, photo evidence.
GPS and location registry	Landings, tabu polygons, MMA, FAD, trade heat.
Monthly letter and news	One edition each month. Same facts. Filter by audience.
CBFM plan and local rules	Plans, review dates, meeting actions, compliance.
MCS cases	Incidents, geotags, status, escalation, closure.
Market monitoring	Demand, price, quality, cold-chain, volume.
Training and M&E;	Needs, visits, beneficiaries, milestones, field evidence.

7. Tabu map, trade heat and the monthly letter

A tabu that is only spoken is gone in a cyclone. The platform draws every managed area so the committee, the officer and the fisher look at one line. Imanaka tabu, Green Point seasonal tabu, Sulphur Bay reef tabu, West reef rest tabu and the Port Resolution MMA sit on the same Tanna picture as Lenakel landing, Isangel, Whitesands, the market and the FAD.

Trade heat is not a new survey. It is kilograms already written to the Hub, shown as warmth at the stall. Command may open a Vanuatu view from Torres to Aneityum. Aggregates move. Names stay with VFD.

Tanna working map	Tabu polygons, MMA, landings, market, FAD. Layers toggle. Tap a shape to read the rule.
Vanuatu heat view	Provincial trade intensity from Hub kilograms. No fisher names on the national picture.
Monthly letter	One edition on Smart Fishers, officer, CBFM, MCS, market and command.
What it is not	Not a settlement rail. Not a public dump of raw tables. Not a substitute for the committee.

8. Vanuatu Fisheries Data Hub and governance

Bronze / raw	App, web forms, approved files. Source and load date retained.
Silver / clean	Stable IDs for fishers, sites, species, gear, communities, tabu polygons.
Gold / reporting marts	Catch, MCS, CBFM, markets, trade heat, food security, programme performance.
Approved products	HTML desks, PDF and Excel reports, curated extracts, the map, the monthly letter.

9. Dashboard and reporting use cases

Minister / Director	Roadmap, catch, MCS, trade heat, food security.
Provincial fisheries	Officer load, landings, drawn tabu coverage.
CBFM	Plans, drawn tabu and MMA, compliance.
MCS	Hotspots on the line, cases, response time.
Market	Volume, price, colour grade, heat.
Food security	Availability and vulnerability flags.
Donor	Approved products only.

10. Phased roadmap

Pilot / MVP · 8–12 weeks	Tafea landings. Registry, catch, EM, first tabu polygons, first monthly letter, first dashboards.
Phase 1 · 3–4 months	CBFM polygons, officer tasks, market records, provincial heat view.
Phase 2 · 4–6 months	MCS analytics, food security, scorecards, M&E, governance.
Phase 3 · 6–12 months	National products, controlled APIs, blue-economy analytics.

11. Business benefits

Ministry leadership	Faster visibility of risk, progress, enforcement and evidence for funding.
VFD officers	Worklists, drawn tabu walks, the same letter the committee reads.
Communities	The tabu line on the phone. Recognition of local management.
Fishers	Fair weight, colour grade, proof of landing, tabu on Sea, monthly letter.

12. Ownership and data sovereignty

The National Integrated Fisheries Digital Platform is a standalone coastal fisheries operating system for the Vanuatu Fisheries Department. Smart Fishers is the phone in the fisher's hand. VFD remains owner of fisheries science, MCS cases, CBFM records, the fisher registry, the tabu lines and the monthly letter. Nabanga Solutions remains the delivery entity. Data sovereignty stays inside Vanuatu-controlled paths. No settlement rail is named in this programme.

- Keep Electronic Monitoring on the landing as the proof of species, colour and kilograms.
- Keep every tabu and MMA as a drawn line on the Hub map. Trade heat is kilograms, not names.
- Keep one monthly letter for every audience on the app. Do not invent a second news product.
- Keep the Vanuatu Fisheries Data Hub as the single classification layer.
- Aggregates may be shared with authorised institutions; names do not leave VFD control.

13. Proposed next steps

- Confirm priority pilot geography, communities, landing sites, tabu areas and user groups.
- Agree minimum fields for registry, landing, CBFM, GPS, tabu polygons and issue reporting.
- Agree the monthly letter cadence and which desks may author a page.
- Validate roles and sensitivity rules before production collection starts.
- Build the pilot workflow, first map layers and first Hub tables on actual field data.
- Present first dashboards, the Tanna map and the first letter before wider rollout.

Recommended starting point: start small but real — Tafea landings, drawn tabu, one monthly letter, dashboards that prove the flow from field to decision. Once the Ministry trusts the data, the platform can scale.

Discussion sign-off. Detailed scope, timeline, governance model, commercial terms and implementation responsibilities can be finalised after pilot requirements and Ministry priorities are confirmed.