CCIC SINGAPORE · MARINE SURVEY AND INSPECTION

From Vessel Assignment to Certified Survey Report

Barrana AI built CCIC Singapore one platform that manages the entire life of a marine survey — from assigning a surveyor to a vessel, through measurements and calculations, to the certified report and the invoice.

THE CLIENT

CCIC Singapore performs marine surveys that certify how much fuel was actually delivered to a vessel. Their certificates settle real commercial questions, so accuracy and traceability are the business.

THE CHALLENGE

Survey work ran on manual coordination and repeated paperwork, under schedules that changed with every vessel's arrival.

Unpredictable scheduling

Changing arrival times, overlapping jobs and irregular hours made surveyor deployment a daily puzzle.

The same data, four times over

The same survey information was retyped into reports, certificates, time logs and invoices.

Specialist calculations by hand

Fuel quantities depend on precise temperature, density and volume corrections — slow to compute and easy to get wrong manually.

THE SOLUTION

Barrana AI designed and delivered a single platform where every stage of a survey writes to one central job record.

Scheduling and field work

Jobs are created from client instructions, surveyors are assigned with conflict warnings, and field measurements are captured in a guided, structured way on board.

Automated calculations

The platform performs the industry-standard petroleum quantity calculations for every tank automatically, the same way every time.

Certified delivery and billing

A manager reviews and approves each report pack before release. Clients receive their documents through a secure portal, and invoices come from the same record.

In plain terms: a measurement taken at the ship's manifold flows untouched into the certificate, the invoice and the surveyor's timesheet.

Designed around the life of a survey.

We mapped how a survey actually runs — from the client's instruction to the released report — and shaped the platform so every stage writes to one job record.

THE SURVEY LIFECYCLE WE BUILT AROUND

01	02	03	04	05	06	07	08
Client instruction	Job creation	Surveyor assignment	Field measurement	Automated calculation	Evidence and documents	Management approval	Delivery and billing

THEY NEEDED

One source of truth

A central job record. Every stage — scheduling, measurement, calculation, evidence, approval, billing — reads from it and writes to it, so nothing is ever retyped.

THEY NEEDED

Calculations that follow industry rules

The standard petroleum quantity methods were encoded once and applied identically to every tank and fuel grade, covering both conventional tank gauging and Mass Flow Meter delivery verification.

THEY NEEDED

Evidence captured where work happens

Time logs, samples, seal numbers and signatures are attached at the moment of capture, so every certified figure keeps its field evidence with it.

THEY NEEDED

A human in charge of release

Automation prepares; people authorise. The platform assembles the report pack, and a manager reviews, approves, signs and stamps it before anything reaches the client.

THEY NEEDED

Commerce that follows operations

Client pricing, quotations, invoices and surveyor compensation are generated from the same job record the survey created — administration is a by-product, not a second job.

What changed for CCIC Singapore.

The platform was delivered for CCIC Singapore's day-to-day survey operations, carrying each job from client instruction to released report pack.

Data entered once, used everywhere

A measurement recorded in the field flows automatically into the report, the certificate, the time log and the invoice — the retyping is gone.

Calculations that are always consistent

Every tank, every fuel grade, every survey uses the same encoded calculation rules, ending the risk of manual calculation differences between surveyors.

Coordinated surveyor deployment

Daily scheduling, assignment notifications and overlap warnings keep surveyors deployed cleanly despite shifting vessel arrivals.

Reports clients can rely on

Nothing is released without authorised management review, approval and stamping, and clients collect their documents from a secure portal.

Evidence for every certified number

Time logs, samples, seals and signatures are attached to the job record, so any certified quantity can be traced back to its field evidence.

Admin that runs itself off the survey

Invoices, quotations and surveyor compensation are generated from the same job record, instead of being reconciled separately after the fact.

8	12	2	4
STAGES, ONE JOB RECORD	STANDARDISED DOCUMENTS	MEASUREMENT METHODS	FUEL PARCELS PER SURVEY

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WORK WITH BARRANA

Barrana AI builds operational platforms for work that depends on accuracy, traceability and disciplined execution.

Discuss your operational automation requirements with Barrana AI.

DISCUSS YOUR REQUIREMENTS

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