

Smart Ferries: Three ways to increase revenue

Demand forecasting · **Dynamic pricing** · **Availability control**

Built and tested on four years of real bookings.

Certus Online @ a Glance

Industry leading
booking system



Trusted

Customers in 60%+ of
the Named Major
Companies in Greece



Handles different booking types, such as passenger bookings with cabins, enumerated and non-enumerated seats, vehicles, onboard services and cargo bookings.

Easily manage both multi leg routes, simple round trip routes and circular routes with repeatable calls for the same ports.



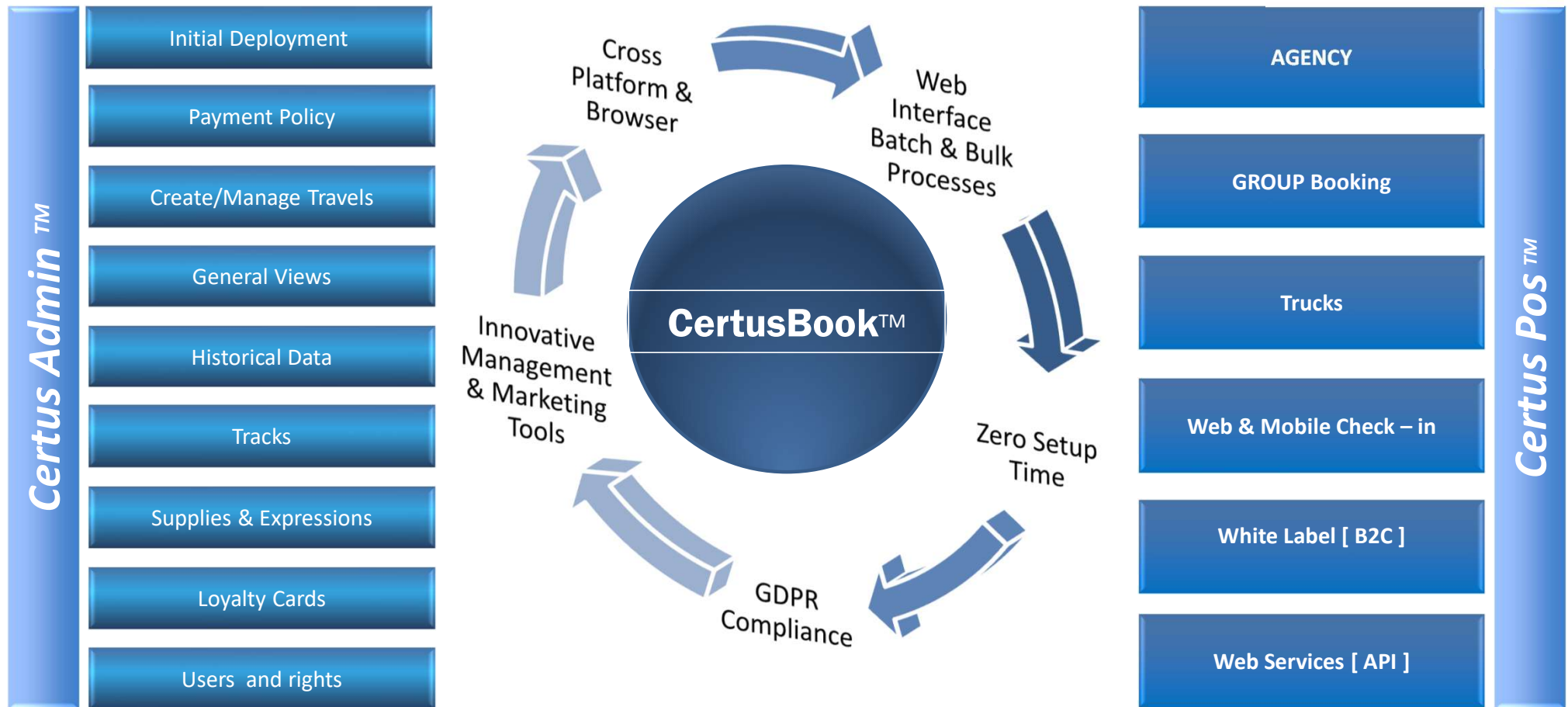
Quick ROI Based on our deep
knowledge on latest booking and
inventory management

Flexible and very easy to configure



1.500+ Certified
professionals and partners

The ENGINE



THE PROBLEM

A seat on the ship is the most perishable product there is

The moment the lines are cast off, the value of every empty seat drops to zero — and never comes back.

Half-empty sailing

It left with 300 empty seats on a route that had demand. Nobody spotted it in time to promote it.

Full, but with cheap tickets

Seats were taken early by cheap short-hop tickets. The expensive long journeys found the ship closed.

A customer who didn't fit

They asked for a seat, there was none, they went elsewhere. And the ship still sailed with gaps on other legs.

What they share: all three decisions are made today on experience and on averages from previous years. Experience is sound — but it cannot review 300 departures every morning.

What's missing isn't judgement — it's time and memory. Someone to review, every morning, every departure of the next three months, remembering what happened in the previous twenty thousand.

IN PLAIN WORDS

What is “smart” here — and what isn't

It's not magic and it's not a chatbot. It's a program that read your history and learned to recognise patterns.

WHAT IT IS

- **It read the history:** about 20,000 departures and 2.8 million daily booking snapshots, across four years.
- **It learned patterns:** which routes fill late, which days break out, what “ten bookings today” means for each specific sailing.
- **It gives a number, not an opinion —** and it tells you how confident it is.

WHAT IT ISN'T

- **It doesn't chat and it doesn't invent.** It has nothing to do with the chatbots that produce text.
- **It doesn't change prices on its own.** It writes a recommendation; the person or the booking system decides whether to apply it.
- **It isn't a black box.** It was tested on departures it had never seen, and its error was measured.

The analogy: think of a clerk with twenty years of booking experience — who also remembers precisely every one of the 20,000 departures of the last four years, and manages to review them all every morning before eight.

OVERVIEW

Three tools, three everyday questions

Each tool answers one single question, and gives one clear answer.

1

How many will travel?

Demand forecasting

When: from three months out

For what: for every departure

Answer: "it will sail 85% full"

For planning vessels, crews and promotions.

2

What price do I set today?

Dynamic pricing

When: every day, the last 15

For what: for each route separately

Answer: "raise it by 5%"

For day-to-day pricing.

3

Do I accept this booking?

Availability control

When: every day, the last 15

For what: for each leg of the route

Answer: "sell" or "hold the seat"

So the high-value journeys aren't lost.

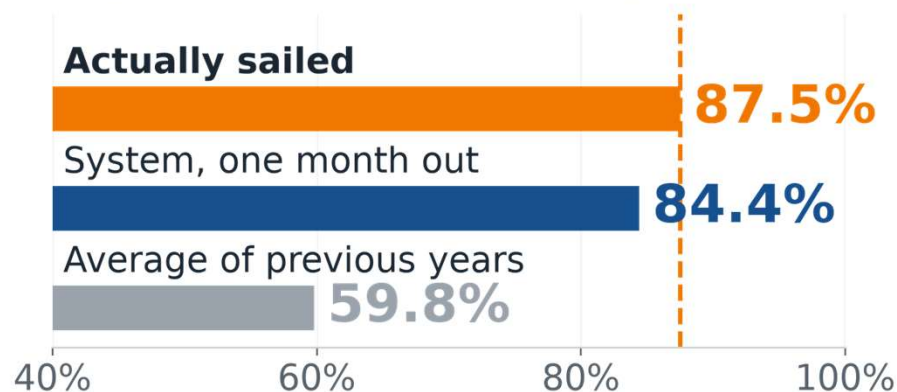
DEMAND FORECASTING

1 · How many will travel

You ask “this departure, one month out, how full will it sail?” — and you get a number.

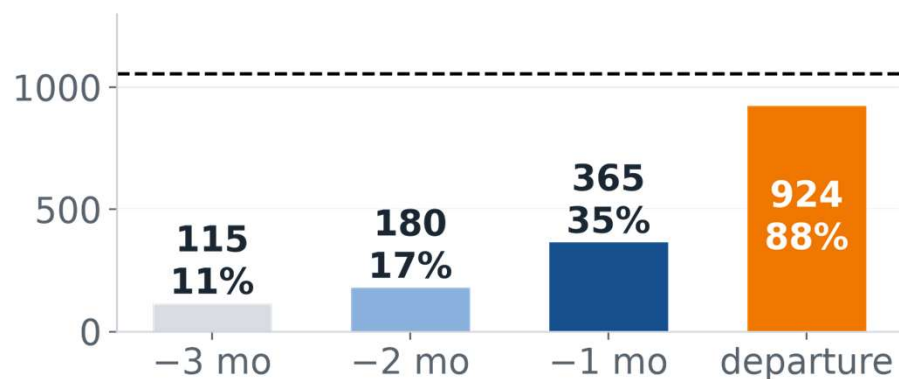
One real departure

average off by 28 points, system by 3



Bookings come at the end

three months out only 11% is sold · 1,056 seats



The example in words: the average of previous years said “it will sail 60% full”. The system, one month out, said 84%. It sailed 87.5% full — with the average you would have planned for a half-empty ship.

What you do with it: vessel and crew planning, timely promotion on weak departures, seat protection on strong ones.

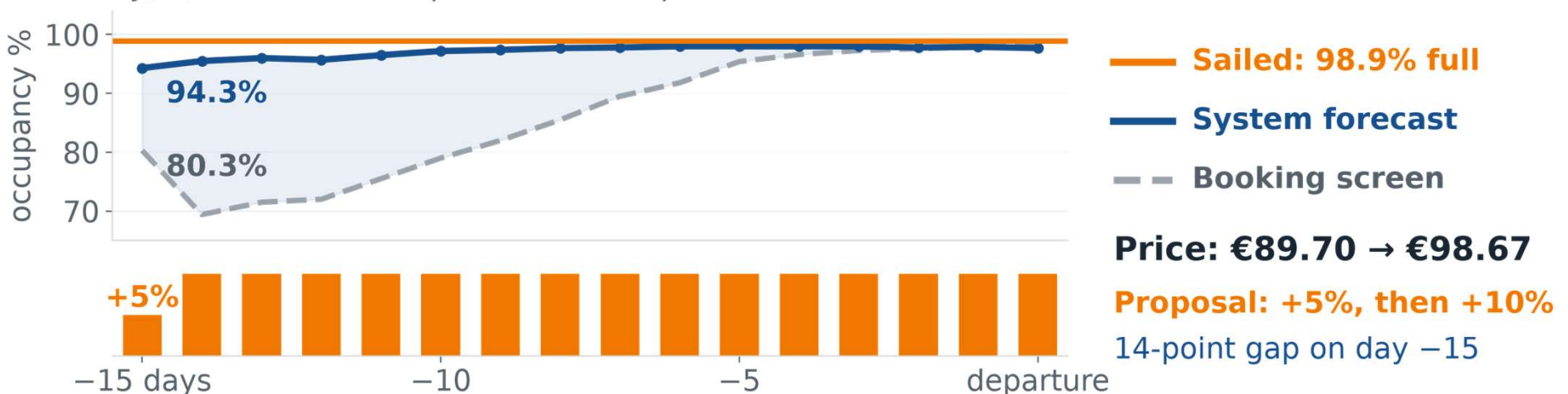
DYNAMIC PRICING

2 · What price do I set today

The screen shows the past — how many have booked. The system tells the future — how many will have booked at departure.

One route, the last 15 days before departure

fast ferry, 1,255 seats · real peak-season departure



Fifteen days out the screen showed 80% and the clerk saw “half full”. The system said “it will close full” and proposed an increase. It closed at 98.9%. — **It's a proposal, not an order:** the system writes the recommendation, you decide.

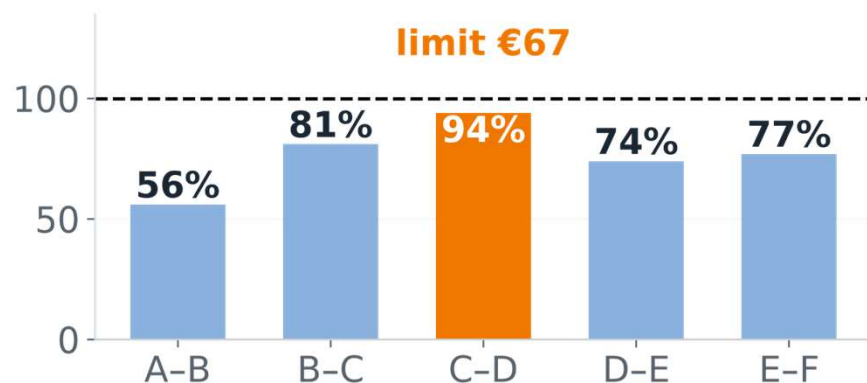
AVAILABILITY CONTROL

3 · Do I accept this booking

On a route with six ports, usually only one leg gets tight — and that's where revenue is decided.

The ship does not fill evenly

five legs · only one gets tight



The rule is one line

fare above the limit → sell · below → hold



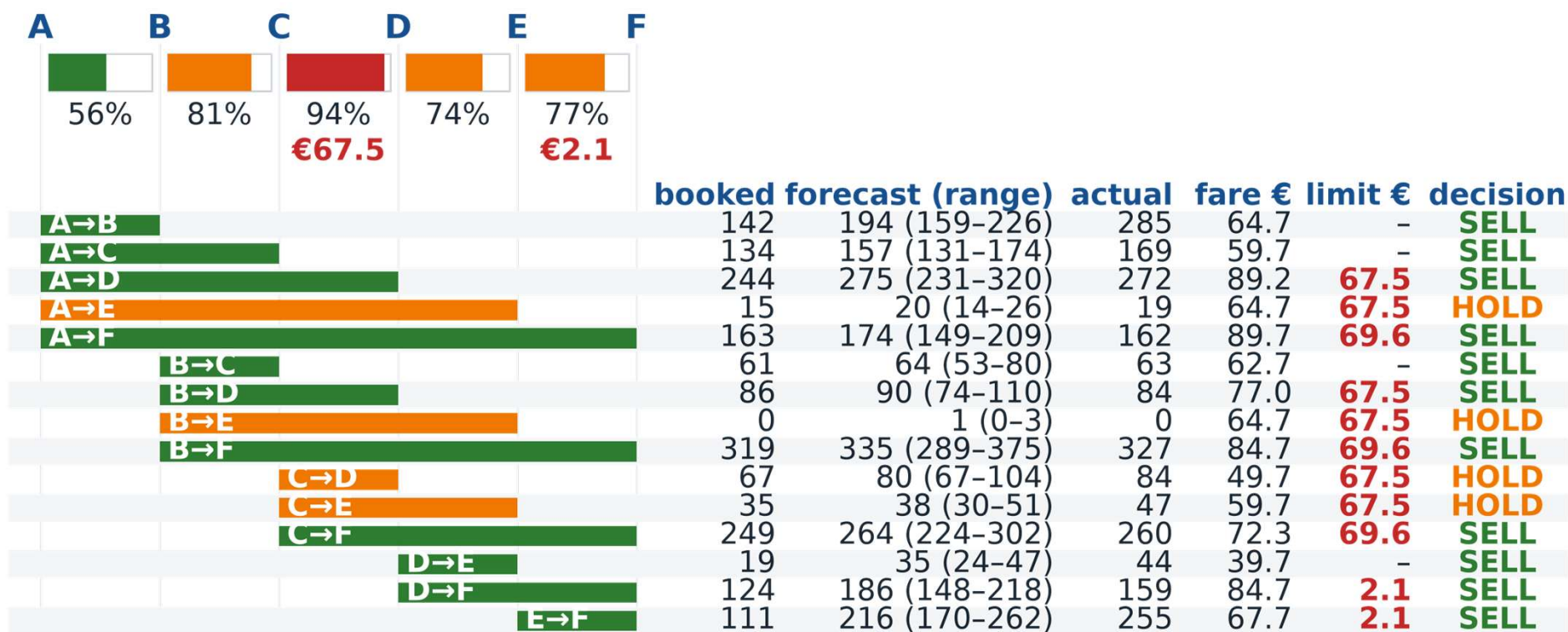
The point in one sentence: a C → D ticket at €50 takes the same seat on the full leg that an A → D ticket at €90 wants. If you sell the cheap one first, you lose €40 — and you only realise it when it's too late.

Every day the system computes a price threshold for each leg: above it you sell freely, below it you hold the seat.

AVAILABILITY CONTROL

3 · The control board

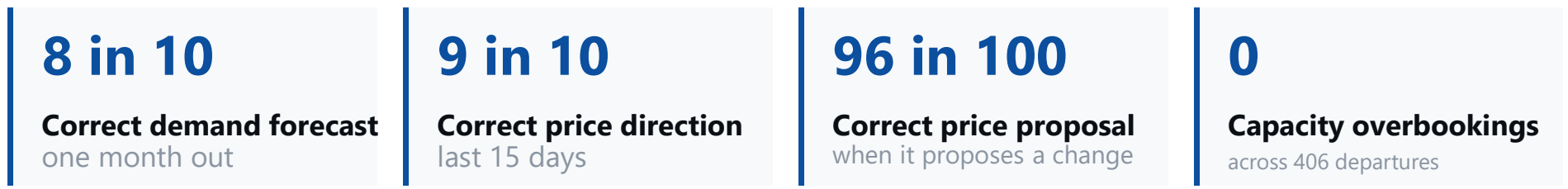
One picture per departure, refreshed every day.



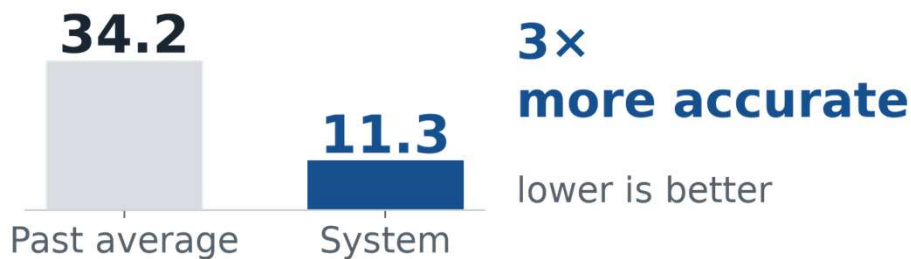
RESULTS

How well it works

All the numbers come from departures the system had never seen during training — not from the ones it learned on.



Error one month out



Error in last 15 days



Left: the forecast one month out. Right: the forecast in the last two weeks. In both cases we measure the same thing — by how many occupancy points it is off.

RESULTS

What it means in revenue

We took 406 real departures and replayed the actual bookings over them, one by one, under three different policies.

Revenue, last 15 days · 406 real departures replayed



The main conclusion: the fixed allotments someone would set “by hand” cost 30% of revenue — they turned away 100,000 bookings that daily control accepts comfortably. Threshold-based control never lost ground and never exceeded capacity.

And one point of honesty: on historical data we can only replay the bookings that were made. Whoever was turned away back then was never recorded, so the real gain shows only in live operation.

HOW IT FITS INTO YOUR WORK

What it needs to work

Nothing changes in your booking system. Three things are needed, and the first two are data you already keep.

1

One daily snapshot

Once a day, the system asks: "this departure, how many bookings does it have now?". That information already exists in your database — it just needs to be readable.

2

One point in the flow

For the third tool only: when a booking comes in, the booking system asks "should I accept it?" and gets a yes or no. Without this, thresholds are computed but not applied.

3

One file per year

At the close of each season, the year's booking file. The system retrains on the new data — two commands, with nothing else changed.

The system does not sit in the critical path of the sale. It reads once a day and writes proposals into a table. If it goes down, bookings continue exactly as they do today.

SUMMARY

Three decisions that used to be made on instinct

Now they are made with a number — and the number was measured.

How many will travel?

from 3 months out

3× more accurate than the average

What price do I set today?

every day, the last 15

8× more accurate · correct direction 9 in 10

Do I accept this booking?

every day, the last 15

no capacity overbooking across 406 departures

Built on four years of real bookings. Tested on departures the system had never seen.

Clientele



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