THE FIELD GUIDE · 300 SLIDES

Restaurant Revenue Management

Every seat, every hour, every rupee. The maths, the menu and the floor.

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Swipe, save, or download the full guide. The workbook link is in the first comment.

BEFORE YOU START

Who this is for

For owners, chefs, GMs and F&B directors who want more from the same room.

Most restaurants still judge a night by covers and average check. Both hide where the money is made and where it leaks.

This guide puts the discipline in one place: definitions, formulas, worked examples and the questions to ask your team.

I've run restaurants for 28 years and opened 65 of them. Everything here is what I'd want a new F&B director to know in the first month.

BEFORE YOU START

The specimen restaurant

100
seats in an all-day dining room

31
tables: 14 twos, 15 fours, 2 sixes

07–23
trading hours, 16 a day

₹1,744
average dinner check, food and drink

643
covers a day

₹2.18 Cr
revenue a month

A fictitious five-star hotel restaurant in India, built to be realistic. The specimen numbers come from the workbook. Rupees, net of GST. 1 lakh = 100,000; 1 crore = 10 million.

BEFORE YOU START

The chain this guide follows

01 **The plate**
What a dish costs and what it earns. Costing, pricing, menu engineering, menu design.

02 **The seat-hour**
What a seat earns in an hour. RevPASH, hot and cold hours, table mix, meal duration.

03 **The book**
Who is coming and when. Forecasting, reservations, protection, no-shows, the queue.

04 **The levers**
Price, channels, beverage and guest value.

05 **The back of house and the ledger**
Kitchen, labour, banquets, the hotel link and the P&L.

BEFORE YOU START

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PARTS 1 TO 9	PARTS 10 TO 18
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2 The plate: costing, pricing	11 Protection and displacement
3 Menu engineering	12 No-shows and overbooking
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PART 1

Foundations

What restaurant revenue management is, when it works, and what it is worth.

- The definition
- The six conditions
- The two strategic levers
- The five levers and the five steps
- What it is worth

1

Restaurants sell seat-hours. The menu prices them.

A table at 20:00 on a Saturday and the same table at 16:00 on a Tuesday are different products. Most restaurants charge the same for both.

PART 1 · FOUNDATIONS

The definition

Selling the right seat to the right guest at the right price, for the right duration.

That is how Sheryl Kimes and her colleagues defined it at Cornell in 1998. Airlines had done it for twenty years and hotels for about ten. Restaurants had barely started.

The goal is more revenue per available seat-hour, without hurting the guest. Every tool in this guide serves that one number.

The six conditions (Kimes 1989)

CONDITION	SCORE	IN THE SPECIMEN
Relatively fixed capacity	5	100 seats; more takes a refit
Perishable inventory	5	An empty seat at 20:00 is gone at 20:30
Uneven, time-variable demand	5	88% full at 20:00, 10% at 16:00
Segmentable demand	4	Tasting, à la carte, offers, groups
Product sold in advance	3	Dinner is booked; lunch is walk-in
Low sales cost, high capacity cost	4	57% of a new cover reaches profit

Score each from 1 (absent) to 5 (strong). The weakest score tells you where to start.

PART 1 · FOUNDATIONS

The readiness index

0.87

readiness: 26 of a possible 30

3 / 5

weakest: sold in advance, because lunch is walk-in

A score above about 0.8 says implement the full chain. The specimen is strong at dinner and weak at lunch, so lunch needs forecasting by regression (Part 9) more than a reservation book.

The two strategic levers (Kimes and Chase 1998)

DURATION: PREDICTABLE → UNPREDICTABLE

Q1 Fixed price, predictable duration. Cinemas, arenas.	**Q2** Variable price, predictable duration. Hotels, airlines. The goal.
Q3 Fixed price, unpredictable duration. Restaurants, golf. Start here.	**Q4** Variable price, unpredictable duration. Hospital care.

PRICE: FIXED → VARIABLE

Restaurants sit in Q3. Move to Q2 in order: control duration first, then vary price. Pricing a seat whose time you can't predict is guesswork.

Duration first, then price

If you raise the 20:00 price before you control how long tables stay, you charge more for a seat you can't promise.

So the order is fixed. Measure duration. Cut the waits the house makes. Sell tables in slots. Then, and only then, move price by hour and day.

- Duration levers: slot length, pacing, service standards, table mix.
- Price levers: hourly menus, offers in cold hours, cover charges at sell-outs.

PART 1 · FOUNDATIONS

The five levers

LEVER	WHAT YOU CONTROL	PARTS
Capacity	Table mix, space, kitchen throughput	7, 15
Duration	Minutes by stage, slot length	8, 10
Price	Menu, classes, cover charge, wine list	2, 3, 11, 14
Information	Forecasts, guest value, benchmarks	9, 14
Sales management	Channels, deposits, overbooking	10, 12, 14

From the 2025 systematic review of restaurant revenue management in the British Food Journal.

The five-step method (Kimes 1999)

01 **Establish the baseline**
Hourly POS data, a stopwatch study, the reservations export.

02 **Understand the drivers**
Why hours are hot or cold. Booking curve and regression.

03 **Develop the strategy**
Protection, overbooking, cover charge, menu, table mix.

04 **Implement**
An SOP manual and shift briefs by hot and cold hour.

05 **Monitor**
Re-measure in 8 to 12 weeks on the same six numbers.

What the programme is worth here

₹3.05 L
more departmental profit a month

₹36.6 L
a year

+3.7%
on departmental profit

4
moves, ranked by rupees

Duration on sell-out nights, a card guarantee, overbooking after the guarantee and two menu reprices. No new seats, no new staff.

ASK YOUR TEAM

- Which of the six conditions is weakest in our room?
- Do we know our RevPASH by hour, or only covers and check?
- Which quadrant are we in, and what is our first duration move?

RED FLAGS

- The night is judged on covers alone.
- Prices are the same at 13:00 and 20:00, and at 16:00.
- Someone wants to raise prices before anyone has timed a meal.

PART 2

The plate

What each dish truly costs, and what it should sell for. Everything else in this guide rests on these numbers.

- As purchased to edible portion
- The recipe card and the Q-factor
- Food cost: theoretical and actual
- Four ways to price a dish
- The house price

2

PART 2 · THE PLATE

Start with the plate

If the plate cost is wrong, every decision built on it is wrong.

Menu engineering, pricing, delivery decisions, the P&L. All of them use plate cost. Most kitchens cost from the invoice price, which is the wrong number.

The right number is the cost of the part that reaches the plate, after trim, bones, skin and cooking loss.

PART 2 · THE PLATE

As purchased to edible portion

AP is what you pay for. EP is what you serve.

THE FORMULA

```
Yield  = EP weight ÷ AP weight

EP cost = AP price ÷ yield
```

A ₹2,200 kg of salmon at a 78% yield costs ₹2,821 for every kg that reaches a plate.

Run a yield test on every protein and on anything you trim heavily. Weigh before, weigh after, write it down.

PART 2 · THE PLATE

Yields on the specimen list

INGREDIENT	AP ₹/KG	YIELD	EP ₹/KG
Chicken thigh, boneless	380	95%	400
Lamb shoulder, bone-in	950	80%	1,188
Norwegian salmon, side	2,200	78%	2,821
NZ lamb rack, frenched	3,300	82%	4,024
Asparagus and new potatoes	380	80%	475
Salad greens	260	65%	400
Mozzarella and San Marzano	700	97%	722
Fries, frozen	180	92%	196

Indicative Delhi NCR wholesale, October 2026. Re-test any item whose price moves 10%.

PART 2 · THE PLATE

What the invoice hides

+54%
salad greens: plate cost above invoice

+28%
salmon

+25%
lamb shoulder

A chef who costs salmon at the invoice price thinks the dish is 28% cheaper than it is. That error flows straight into the menu price and the P&L.

How to run a yield test

01 **Weigh as delivered**
Record AP weight and the invoice price per kg.

02 **Prep to spec**
Trim, debone and portion exactly as the recipe says.

03 **Weigh what is usable**
Separate saleable trim (stock, staff meal) from waste.

04 **Cook a sample**
Add cooking loss for anything costed cooked.

05 **Record and repeat**
Average three tests. Repeat when the supplier or spec changes.

PART 2 · THE PLATE

The standard recipe

One portion, costed line by line from one ingredient master.

THE FORMULA

```
Line cost  = quantity × EP cost
Raw cost   = Σ line costs
Plate cost = raw cost × (1 + Q)
```

Q is the Q-factor: salt, oil, garnish, spice and the things nobody weighs. The specimen uses 8% of raw cost.

PART 2 · THE PLATE

Recipe card: butter chicken

INGREDIENT	QTY KG	EP ₹/KG	LINE ₹
Chicken thigh, boneless	0.243	400	97.40
Makhani base (house)	0.150	475	71.11
Tomato, spice, aromatics	0.152	110	16.70
Raw cost			185.21
Q-factor 8%			14.82
Plate cost			**200.02**

House preparations are batch-costed once, then used as a single ingredient. That keeps every recipe card to a few lines.

PART 2 · THE PLATE

Plate cost of eight mains

DISH	PLATE COST ₹
Club sandwich with fries	125
Margherita pizza	177
Butter chicken	200
Vegetable lasagne	240
Spaghetti carbonara	255
Lamb biryani	463
Grilled Norwegian salmon	742
New Zealand lamb chops	924

Garlic naan, a basket of three, costs ₹29. Accompaniments are priced differently (see the house price, a few slides on).

PART 2 · THE PLATE

Food cost percentage

THE FORMULA

```
Food cost % = plate cost ÷ menu price

Theoretical  = from recipe cards and the
sales mix
Actual       = (opening stock + purchases
               − closing stock) ÷ food
revenue
```

The gap between actual and theoretical is the money you lose to waste, over-portioning, comps, theft and recipe drift.

PART 2 · THE PLATE

Theoretical against actual

27.5%
theoretical food cost, mains, at today's mix

4 pts
actual over theoretical, assumed

29.8%
cost of sales in the P&L

₹6.5 L
a month of avoidable cost at 4 points

Four points on ₹1.63 crore of food revenue is about ₹6.5 lakh a month. Close the gap before you raise a single price.

PART 2 · THE PLATE

Where the gap comes from

Check it weekly. Count the top 20 items by value. The rest can wait for month end.

- A 220 g salmon portion becomes 250 g on a busy night.
- Over-prep on a slow day, spoilage and dropped plates.
- The cream goes up in the pan and the card stays the same.
- Comps and staff food rung through as nothing.
- Short weight or the wrong grade accepted at the door.
- Theft. It's rare, but it shows up here first.

Four ways to price a dish

THE FORMULA

```
Factor  = plate cost ÷ target food cost %
CM      = plate cost + target contribution
Blended = average of factor and CM
Market  = what comparable rooms charge
```

Specimen targets: 30% food cost on mains, 10% on accompaniments, ₹700 contribution per main.

Why the factor method alone fails

Factor pricing marks up a cheap dish too little and an expensive one too much. A ₹125 sandwich at 30% sells for ₹417. A ₹924 lamb chop at 30% sells for ₹3,080.

Guests pay for the experience of the dish. They never see its cost. Contribution pricing fixes the rupees each plate must earn. Blending the two gives a starting point you can defend.

The house price

THE FORMULA

House = CEILING(blend, 50) − 5

Accompaniments use the factor price alone.

Round up to the next ₹50 and take off 5. One house ending, used everywhere, keeps the menu calm and consistent.

PART 2 · THE PLATE

Pricing the eight mains

DISH	PLATE	FACTOR	COST+CM	HOUSE	TODAY
Butter chicken	200	667	900	795	945
Lamb biryani	463	1,543	1,163	1,395	1,345
Grilled salmon	742	2,473	1,442	1,995	1,895
NZ lamb chops	924	3,080	1,624	2,395	2,195
Carbonara	255	850	955	945	995
Margherita	177	590	877	745	795
Club sandwich	125	417	825	645	695
Veg lasagne	240	800	940	895	795

The house price is a guide. Menu engineering (Part 3) decides whether a dish can carry it.

PART 2 · THE PLATE

Percentages hide rupees

21% butter chicken food cost	₹745 butter chicken contribution
42% lamb chops food cost	₹1,271 lamb chops contribution

By food cost %, the lamb chop looks like the worst dish on the menu. By contribution it earns ₹526 more per plate than the butter chicken.

ASK YOUR TEAM

- When was each protein last yield-tested?
- What is our actual against theoretical food cost this month?
- How do we set a new dish price, and who signs it off?

RED FLAGS

- Plate costs built from invoice prices.
- A target food cost % applied to every dish.
- Recipe cards older than the last supplier change.

PART 3

Menu engineering

Which dishes earn their place, which need a new price, and which should go.

- Contribution margin and menu mix
- The four classes
- What to do with each
- The repricing test
- Benchmarking the menu

3

Food cost % is the wrong scoreboard. Contribution pays the rent.

Menu engineering, from Kasavana and Smith (1982), judges each dish on two things at once: how many sell, and how many rupees each one leaves.

The two tests

THE FORMULA

```
CM per dish    = price − plate cost
Menu mix %     = units ÷ total units

Popular if     mix ≥ 70% × (1 ÷ items)
Profitable if CM ≥ weighted average CM

Weighted CM    = Σ(units × CM) ÷ Σ units
```

Run it within one category, mains with mains. Never mix starters and mains in one test.

PART 3 · MENU ENGINEERING

The two lines on the specimen

8.75%

popularity line: 70% of an equal 12.5% share across 8 mains

₹734

profitability line: weighted average CM per main

4,420

mains sold a month

₹32.4 L

menu contribution from mains a month

The four classes

CONTRIBUTION: LOW → HIGH

Puzzle

High CM, low popularity. Earns well, sells too little.

Star

High CM, high popularity. The best dishes you have.

Dog

Low CM, low popularity. Takes a line and earns little.

Plowhorse

Low CM, high popularity. Loved, but under-earning.

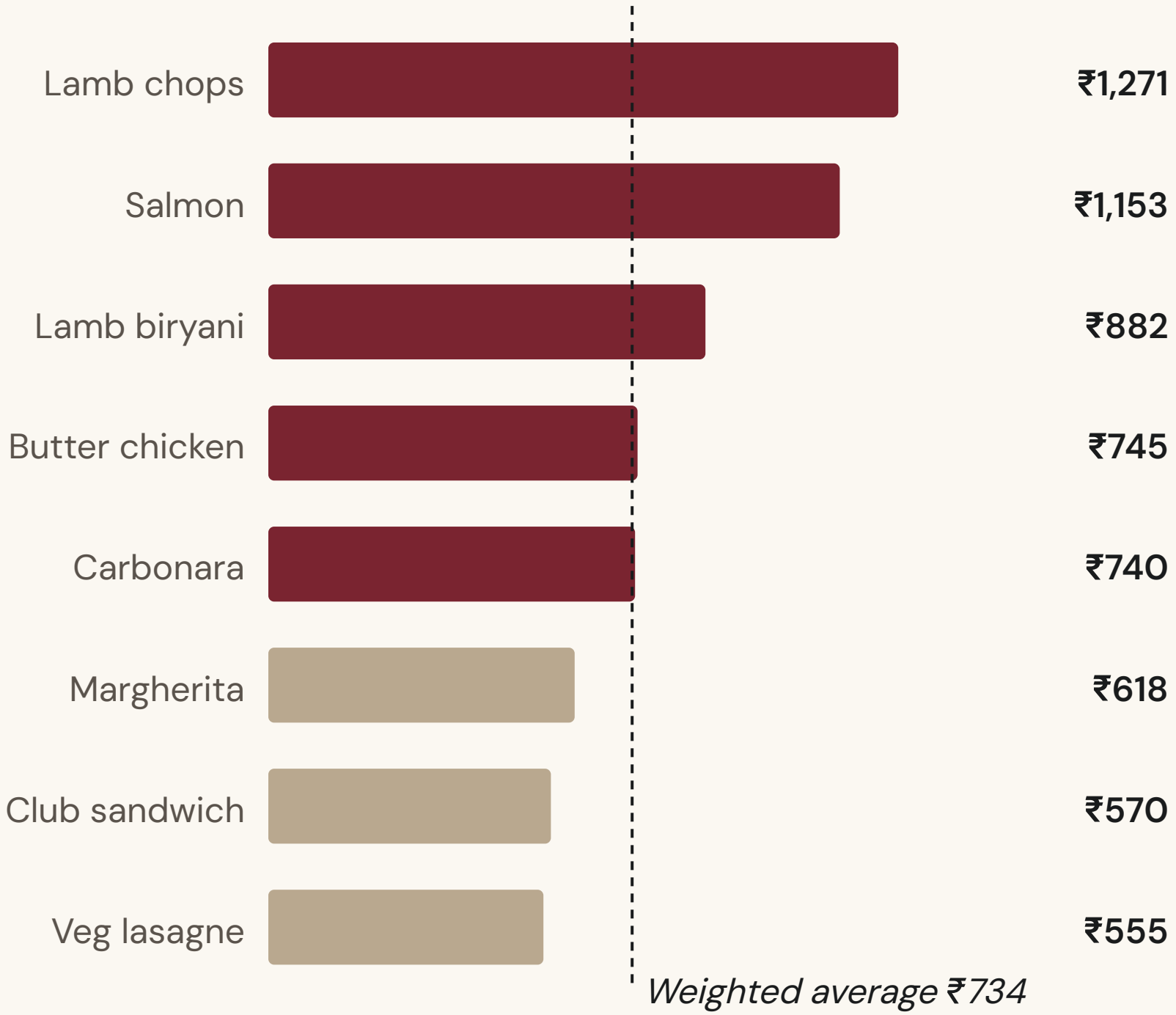
POPULARITY: LOW → HIGH

The eight mains, classified

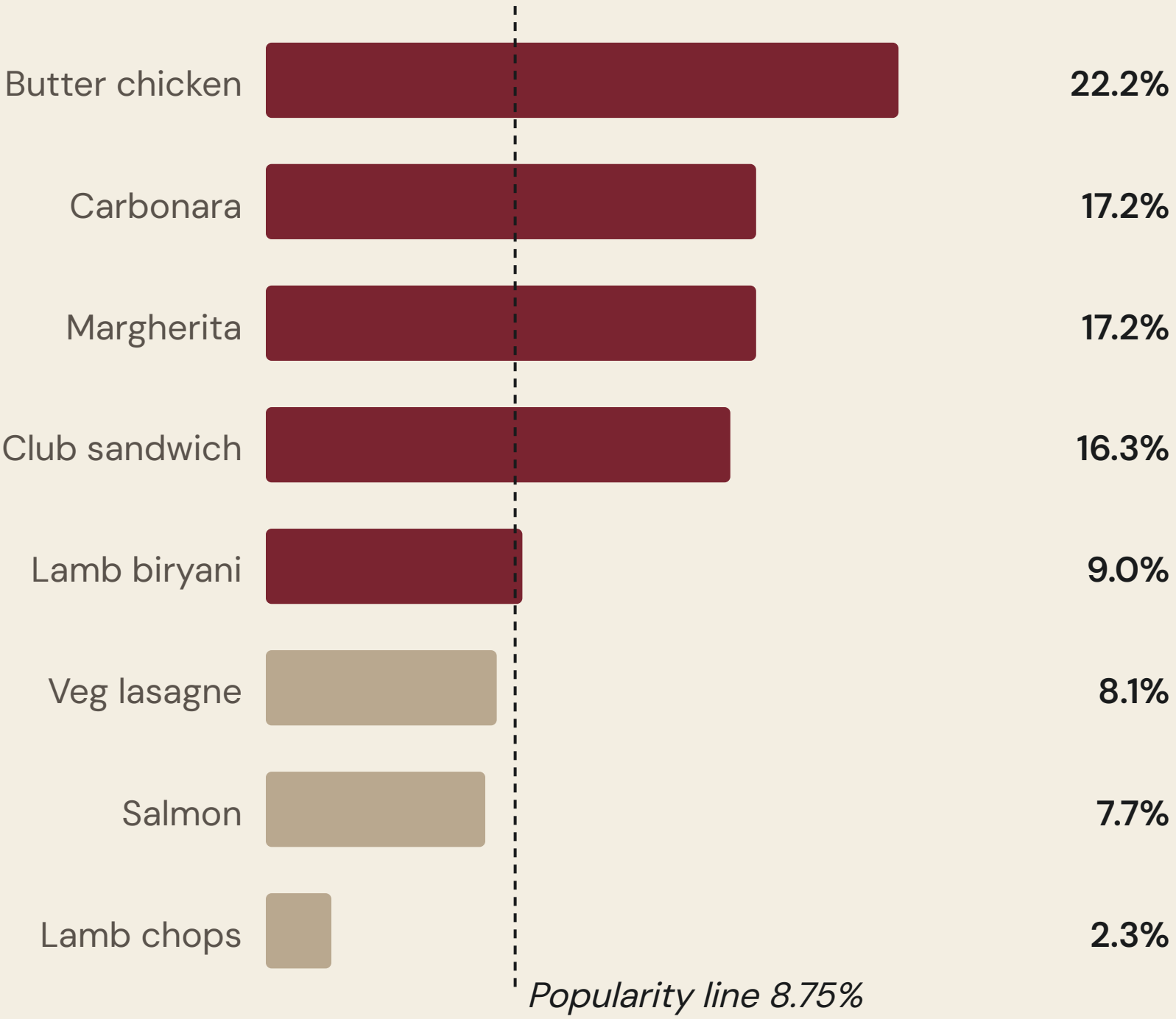
MAIN	UNITS	CM ₹	MIX	CLASS
Butter chicken	980	745	22.2%	Star
Lamb biryani	400	882	9.0%	Star
Spaghetti carbonara	760	740	17.2%	Star
Margherita pizza	760	618	17.2%	Plowhorse
Club sandwich	720	570	16.3%	Plowhorse
Grilled salmon	340	1,153	7.7%	Puzzle
NZ lamb chops	100	1,271	2.3%	Puzzle
Vegetable lasagne	360	555	8.1%	Dog

Three Stars, two Plowhorses, two Puzzles, one Dog.

Contribution per main against the ₹734 line



Menu mix against the 8.75% line



PART 3 · MENU ENGINEERING

Stars: protect them

Butter chicken, lamb biryani and carbonara carry 48% of mains volume.

- Keep them where the eye lands first in their section.
- Hold the recipe and the portion exactly. Stars are where drift costs most.
- Never discount a Star. Test a small price rise once a year.
- Train the team to know why guests love them.

PART 3 · MENU ENGINEERING

Plowhorses: reprice or re-engineer

Margherita and the club sandwich sell well and earn ₹116 to ₹164 less than the average main.

- Raise the price in small steps, ₹50 at a time.
- Take cost out without the guest noticing: portion of the expensive line, a cheaper garnish.
- Pair with a high-CM side or drink.
- Move it lower in its section, so it stops stealing first glances.

Puzzles: make them sell

Salmon and lamb chops earn ₹1,153 and ₹1,271 a plate. Each one sold earns about one and a half times the average main.

- Give them a better position and a better description.
- Have servers recommend them by name.
- Check the price against rivals. A Puzzle can be a price problem.
- Keep a signature Puzzle even if it never becomes a Star.

PART 3 · MENU ENGINEERING

Dogs: replace, unless they hold a guest

Vegetable lasagne earns ₹555 and sells 8.1%. It is the only vegetarian pasta, so re-engineer before you cut it.

- Usually: replace with a new dish that can reach the CM line.
- Keep it if it is the only choice for a group you need, such as the one vegetarian main.
- If you keep it, re-engineer it. A Dog you need should at least earn the average.

The repricing test

THE FORMULA

```
New units = units × (1 + E × %Δprice)
CM after  = new units × (new price − plate)
Gain      = CM after − CM now
```

E is price elasticity of demand. The specimen assumes −0.8 for premium dining until you measure your own.

PART 3 · MENU ENGINEERING

Repricing the two Plowhorses

DISH	PRICE	UNITS	CM NOW	GAIN A MONTH
Margherita	795 → 845	760 → 722	₹4.70 L	+₹12,460
Club sandwich	695 → 745	720 → 679	₹4.10 L	+₹10,307
Together				**+₹22,767**

Fewer units, more rupees. Watch the mix for eight weeks after the reprint. What you observe becomes your own elasticity.

Limits of the classic method

When the kitchen is the bottleneck, rank by contribution per kitchen minute (Part 15). When the room is full, rank by contribution per seat-hour.

- It ignores labour and kitchen time. A slow dish at the peak costs seats.
- It treats each dish alone, but dishes steal from each other.
- The 70% rule is a convention. Treat it as one.
- It looks back. A new dish needs eight weeks before it can be judged.

Run it every month

01 **Export the mix**
Units by item from the POS, last 4 to 8 weeks.

02 **Refresh plate costs**
From the current ingredient master.

03 **Classify by category**
Two lines, four classes.

04 **Decide one action per dish**
Protect, reprice, promote or replace.

05 **Reprint and re-measure**
Change few things at a time so you can read the result.

Benchmark the menu like a rate shop

Hotels shop rival rates every day. Restaurants rarely look. Pick three to five comparable rooms and price the same dish categories once a quarter.

- Price index = your price ÷ rival median.
- Under 95% on a Star means headroom.
- Over 110% on a Plowhorse means risk.

The specimen against four rivals

DISH	OURS ₹	RIVAL MEDIAN ₹	INDEX
Butter chicken	945	935	1.01
Lamb biryani	1,345	1,345	1.00
Grilled salmon	1,895	2,025	0.94
Lamb chops	2,195	2,323	0.95
Margherita	795	838	0.95
Club sandwich	695	735	0.95
Menu			**0.96**

The two Puzzles sit 5 to 7% under the market, so cutting the price won't help. They need better visibility. The Plowhorses have room to move.

ASK YOUR TEAM

- Which dishes are Stars, Plowhorses, Puzzles and Dogs this month?
- What did we change after the last analysis, and what happened?
- Where do we sit against three rival menus?

RED FLAGS

- Menu decisions made on food cost % alone.
- A Dog kept for years because the chef likes it.
- Five things changed at once, so nothing can be read.

PART 4

Menu design

Every guest reads the menu. It is the one sales document with a full readership. Design it to sell what you engineered.

- What the research says, and what it doesn't
- Position, price format, description
- Anchors, boxes and ladders
- Digital menus
- A design checklist

4

PART 4 · MENU DESIGN

The sweet spot is a myth

For years designers said guests look first at the upper right of an open menu. Eye-tracking by Sybil Yang at Cornell (2012) found no such spot. Guests read a menu much like a book, from the top, section by section.

So the useful rule is simpler. Put the dishes you want sold early in each section, where the reader starts.

PART 4 · MENU DESIGN

Drop the currency sign

Yang, Kimes and Sessarego (2009) tested price formats in a restaurant. Plain numbers gave the highest checks of the three formats tested, though not every difference was statistically significant.

So write 945. Leave the currency sign off, and keep every price in the same format.

- No currency symbol, as tested.
- No decimals or trailing zeros: house style.
- One house ending, used everywhere.

Don't line the prices up

A column of prices down the right edge invites guests to read prices first and choose the cheapest. Placing the price at the end of the description, in the same type, keeps the eye on the dish.

This is common practice, and the evidence is thin. Test it on one section before you reprint the whole menu.

Describe the dish

Name the origin, the method, and the one ingredient that justifies the price. Two lines are enough.

- "Lamb chops" says little.
- "New Zealand lamb rack, chargrilled, rosemary jus, potato gratin" sells the price.
- Use the longer description on Puzzles first. They need it most.

PART 4 · MENU DESIGN

Anchors and the price ladder

A high-priced dish at the top of a section makes the next ones look reasonable. That is anchoring, one of the most replicated effects in behavioural economics.

Within each section, offer an entry price, a core price and a premium price. Guests trade up a step more easily than they trade up three.

- Lead each section with a premium dish you are proud of.
- Place the Star you most want sold just below it.

Boxes, icons and photographs

- A box or a symbol draws the eye. Use one per section, on a Star or a Puzzle.
- Three boxes on a page cancel each other.
- Photographs sell the dish they show, and cheapen a fine-dining menu. Use them on digital menus and casual rooms.
- "Chef's recommendation" works only if the team will say it out loud as well.

How long should the menu be?

Every extra dish costs stock, prep, training and decision time. A long menu slows ordering, which slows the table, which lowers RevPASH.

- Cut Dogs before adding dishes.
- Keep each section to what a guest can scan in a few seconds.
- A shorter menu also improves yield, because fewer ingredients sit and spoil.

Digital and QR menus

A digital menu tells you what guests look at as well as what they order. Treat the view data like the POS mix.

- Track which dishes are opened and which are ordered.
- A dish viewed often and ordered rarely needs a better description or price.
- Keep a printed menu for guests who want one.

A menu design checklist

01 **Engineer first**
Know your Stars, Plowhorses, Puzzles and Dogs.

02 **Position**
Stars and Puzzles early in each section.

03 **Price format**
Plain numbers, no symbol, one house ending, no price column.

04 **Describe**
Origin, method, the justifying ingredient.

05 **Ladder**
Entry, core and premium in each section.

06 **Highlight sparingly**
One box per section at most.

07 **Read it in the room**
At night, in the real light.

ASK YOUR TEAM

- Which dishes did we design the page to sell?
- When did we last change the menu, and what happened to the mix?
- Have we read our menu in the room at 21:00?

RED FLAGS

- A redesign with no menu engineering behind it.
- A column of prices with currency signs and decimals.
- Boxes on half the dishes.

PART 5

RevPASH and the seat-hour

The one number that joins how full the room is with how much each guest spends, hour by hour.

- The formula
- The specimen by hour
- The two ways to raise it
- Seats, tables and fit
- The bar as seats

5

RevPASH is RevPAR for a dining room.

Revenue per available seat-hour. Covers tell you how busy you were. Average check tells you how much they spent. RevPASH tells you what the room earned for the time it was open.

PART 5 · REVPASH AND THE SEAT-HOUR

The formula

THE FORMULA

RevPASH = revenue ÷ (seats × hours)

= seat occupancy
× revenue per occupied seat-hour

Seat occupancy = guests in house ÷ seats

Work it hour by hour. A daily RevPASH hides the hours that matter.

Why covers and check mislead

RevPASH puts all three in one number: how many seats were filled, for how long, and at what spend.

- Covers rise when meals get shorter, even if spend falls.
- Average check rises when the room is half empty and only big spenders came.
- Neither one knows how long the seat was used.

The specimen day

₹454
RevPASH, whole day

₹1,147
RevPASH at 20:00, the peak

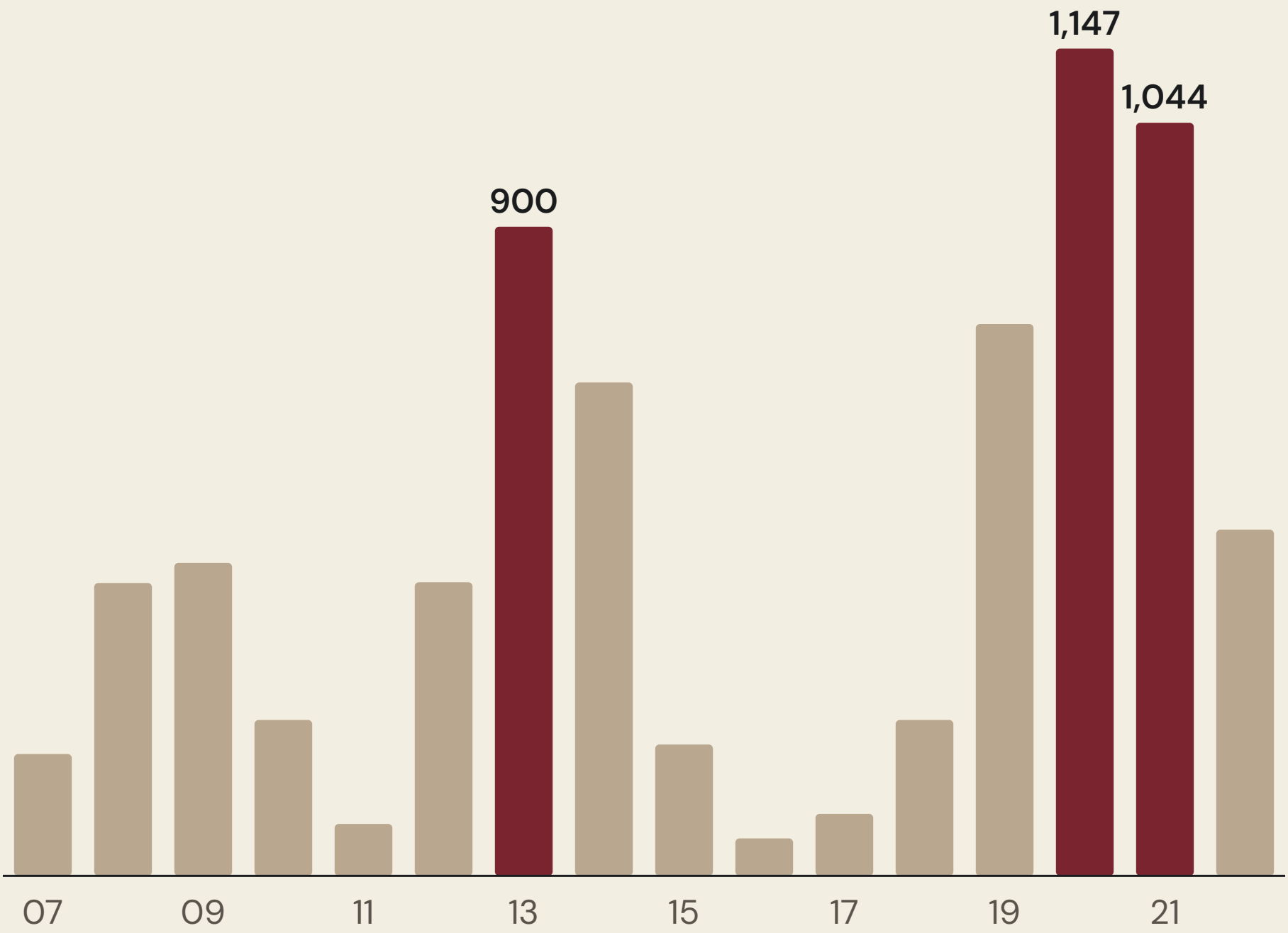
43.8%
average seat occupancy

1,600
seat-hours on sale a day

₹1,036
revenue per occupied seat-hour

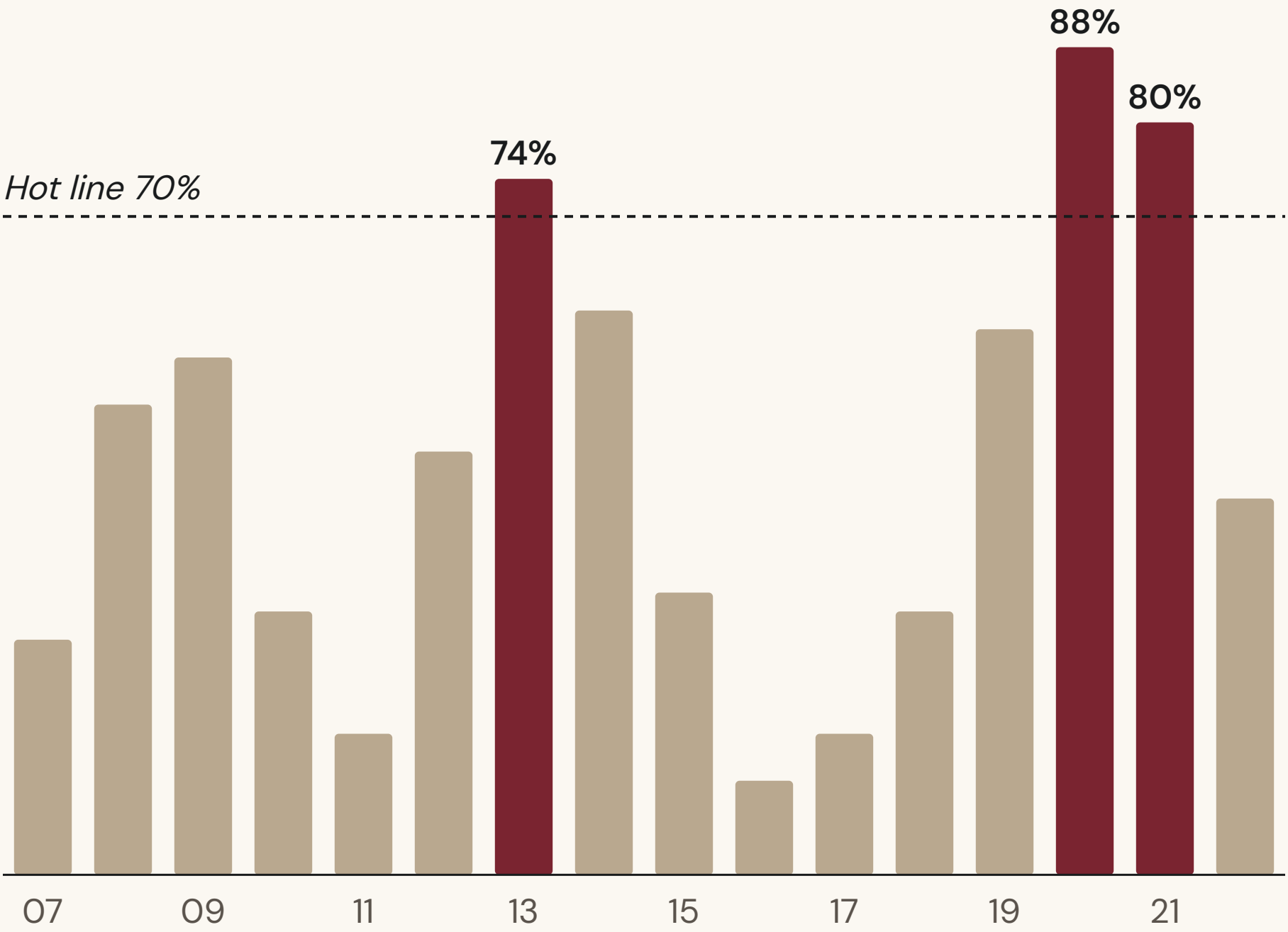
₹7.26 L
revenue a day

RevPASH by hour



Two peaks, 13:00 and 20:00 to 21:00. The 15:00 to 18:00 trough earns a tenth of the peak. Each needs a different tool.

Seat occupancy by hour



Only three hours cross 70%. The room is empty more than it is full, which is normal, and is where most of the opportunity sits.

The two ways to raise it

THE FORMULA

```
Fill the seat:   seat occupancy ↑

Earn more per hour:
  spend per seat-hour
  = check ÷ duration in hours
```

At ₹1,744 and 87 minutes a seat earns ₹1,203 an hour. At 76 minutes the same check earns ₹1,377. Cutting duration raises spend per hour without raising price.

PART 5 · REVPASH AND THE SEAT-HOUR

Which lever, which hour

In hot hours the room is full. More guests can only come from shorter meals or higher prices. In cold hours there are seats to spare, so the job is to fill them.

- Hot: protect the seat. Duration, price, protection, cover charge.
- Warm: nudge spend. Suggestive selling, bundles.
- Cold: create demand. Off-peak menus, residents, events.

Seats, tables and fit

THE FORMULA

```
Table occupancy = tables in use ÷ tables
Seat occupancy  = guests ÷ seats

Seat fit = guests ÷ seats at
           occupied tables
```

A couple at a four-top fills the table and half its seats. Table occupancy can read 100% while seat occupancy reads 60%.

What an empty seat costs at the peak

₹3,130
two empty seats at a four-top, 72 minutes, at 20:00

₹1,303
revenue per occupied seat-hour at 20:00

Seat a couple at a four-top at 20:00 and the two empty chairs forgo about ₹3,130 over a 72-minute meal, if guests were waiting for them. Twenty times a week, that is about ₹2.7 lakh a month of potential revenue. That is why the table mix matters (Part 7).

The bar out-earns the dining room

₹1,500

bar RevPASH: 14 seats, 8 hours, ₹1.68 L a day

₹859

dining room RevPASH over its four evening hours

Bar seats are short stays at a high spend. Treat them as seats with their own menu, their own duration standard and their own target.

PART 5 · REVPASH AND THE SEAT-HOUR

Net RevPASH

Gross RevPASH counts every rupee on the check. Net RevPASH takes off discounts, platform fees and card offers.

- Specimen gross at 20:00: ₹1,147.
- Specimen net at 20:00 at today's channel mix: ₹1,087. Close the discount channels in hot hours and it rises.
- Use net when you compare channels and offers (Part 14).

How to measure it

01 **Export hourly sales**
POS revenue and covers by hour, every day, for eight weeks.

02 **Count guests in house**
From open and closed check times, or a head count each hour.

03 **Divide**
Revenue ÷ (seats × 1 hour). Plot by hour and by day.

04 **Mark the zones**
Hot ≥ 70% seat occupancy, cold < 40%.

05 **Set hourly targets**
And review them weekly with the team.

ASK YOUR TEAM

- What was our RevPASH at 20:00 last Saturday?
- Which hour earns the least, and what are we doing with it?
- What is our bar RevPASH?

RED FLAGS

- Covers and check reported, RevPASH never.
- A daily average and no hourly view.
- Couples routinely seated at four-tops on a full night.

PART 6

Hot, warm and cold hours

The hour decides the tool. What works at 20:00 on a Saturday does damage at 16:00 on a Tuesday, and the other way round.

- The thresholds
- The specimen's day in zones
- Protect, nudge, stimulate

6

The thresholds

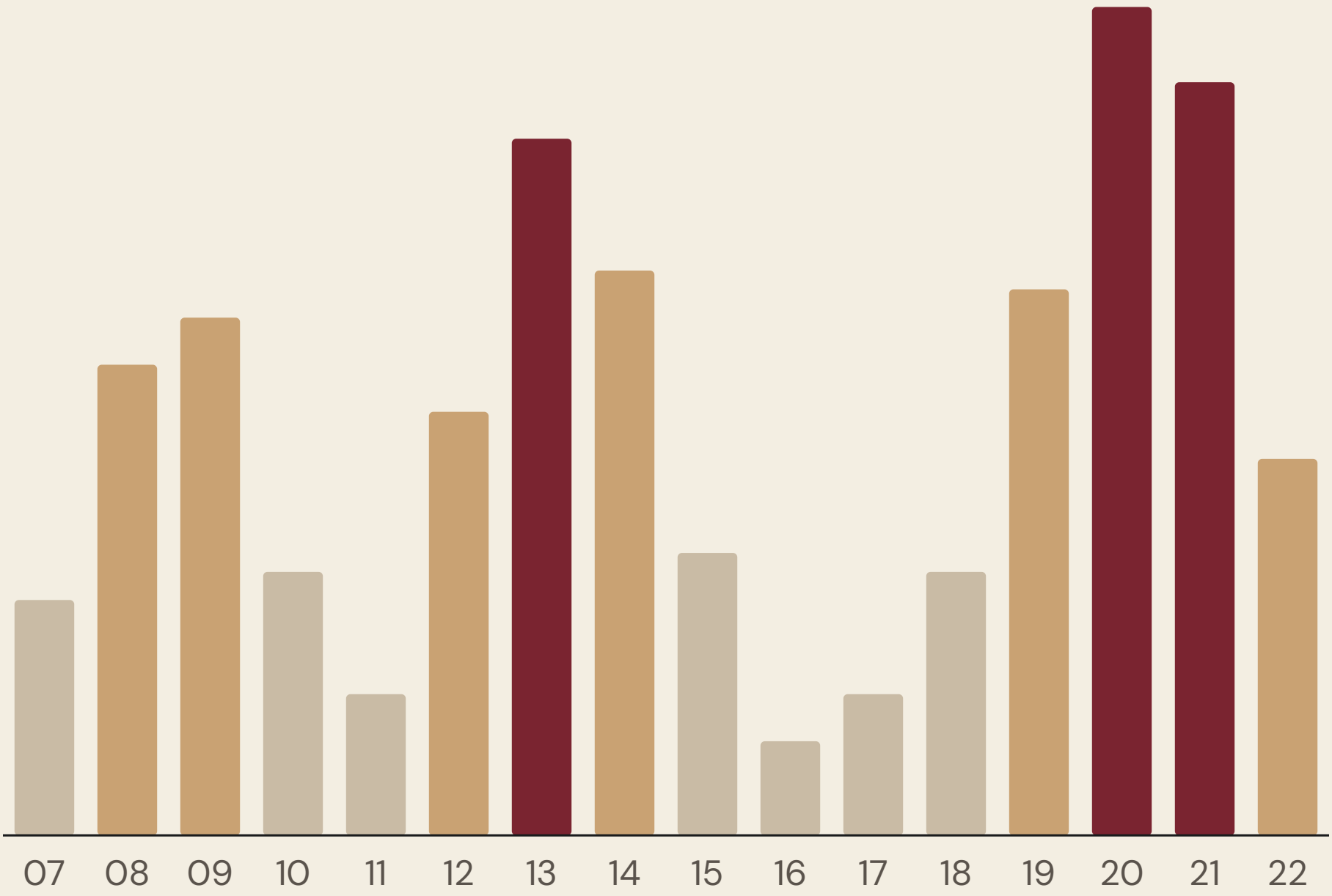
THE FORMULA

```
Hot   seat occupancy ≥ 70%
Warm  40% to 70%
Cold  below 40%

Check high or low = spend per occupied
  seat-hour above or below the day average
```

Two questions for every hour: how full, and how much each guest spends. Together they give four boxes, and each box has its own tools.

The specimen day in zones



Dark red: hot (13:00, 20:00, 21:00). Gold: warm. Pale: cold. Three hot hours, six warm, seven cold.

Three hours carry the day

42.6%
of the day's revenue in 3 hot hours

7
cold hours, earning a small fraction

6
warm hours

16
hours open

Three hours make 43% of the day's money. Protect them first.

The tool set by zone

ZONE	TOOLS
Hot · protect	Duration control, slot booking, protection of high-spend classes, cover charge on sell-outs, no discounts
Warm · nudge	Suggestive selling, bundles, upsell of drinks and desserts, targeted release of offer tables
Cold · stimulate	Off-peak menus, residents' and corporate offers, events, tastings, private hire, delivery

Hot hours: protect

At 20:00 every discount gives money to a guest who would have paid full price. Every slow table costs a booking you turned away.

- No offer covers. Close the discount channels.
- Book in slots by party size (Part 10).
- Hold seats for the highest-spend classes (Part 11).
- Pace the kitchen in 15-minute bands.

Warm hours: nudge

There is room to seat more, but the bigger gain is spend per guest.

- Train two specific suggestions per shift. "Anything else?" sells nothing.
- A drink-and-dish bundle at 14:00 and 19:00.
- Release a few offer tables and keep the channel closed otherwise.

PART 6 · HOT, WARM AND COLD HOURS

Cold hours: stimulate

From 15:00 to 18:00 the specimen earns ₹52 to ₹216 a seat-hour. The seats cost the same whether they are full or empty.

- A short afternoon menu at a lower price point.
- Hotel residents and nearby offices: a reason to come at 16:00.
- Private hire, tastings, cookery classes, high tea.
- Delivery and takeaway, when the kitchen has spare capacity.

ASK YOUR TEAM

- Which of our hours are hot, warm and cold, by day of week?
- What do we do differently at 16:00 compared with 20:00?
- Are any offers live in a hot hour?

RED FLAGS

- The same menu, prices and offers at every hour.
- Discount apps taking bookings at 20:00 on Saturday.
- No plan at all for 15:00 to 18:00.

PART 7

Table mix and table sizes

The right tables for the parties that actually come. Most rooms are furnished for the parties the designer imagined.

- Party size against table size
- Little's law
- The specimen's mix
- Combinable or dedicated tables
- Running a table-mix study

7

Most rooms have the wrong tables for the parties that come.

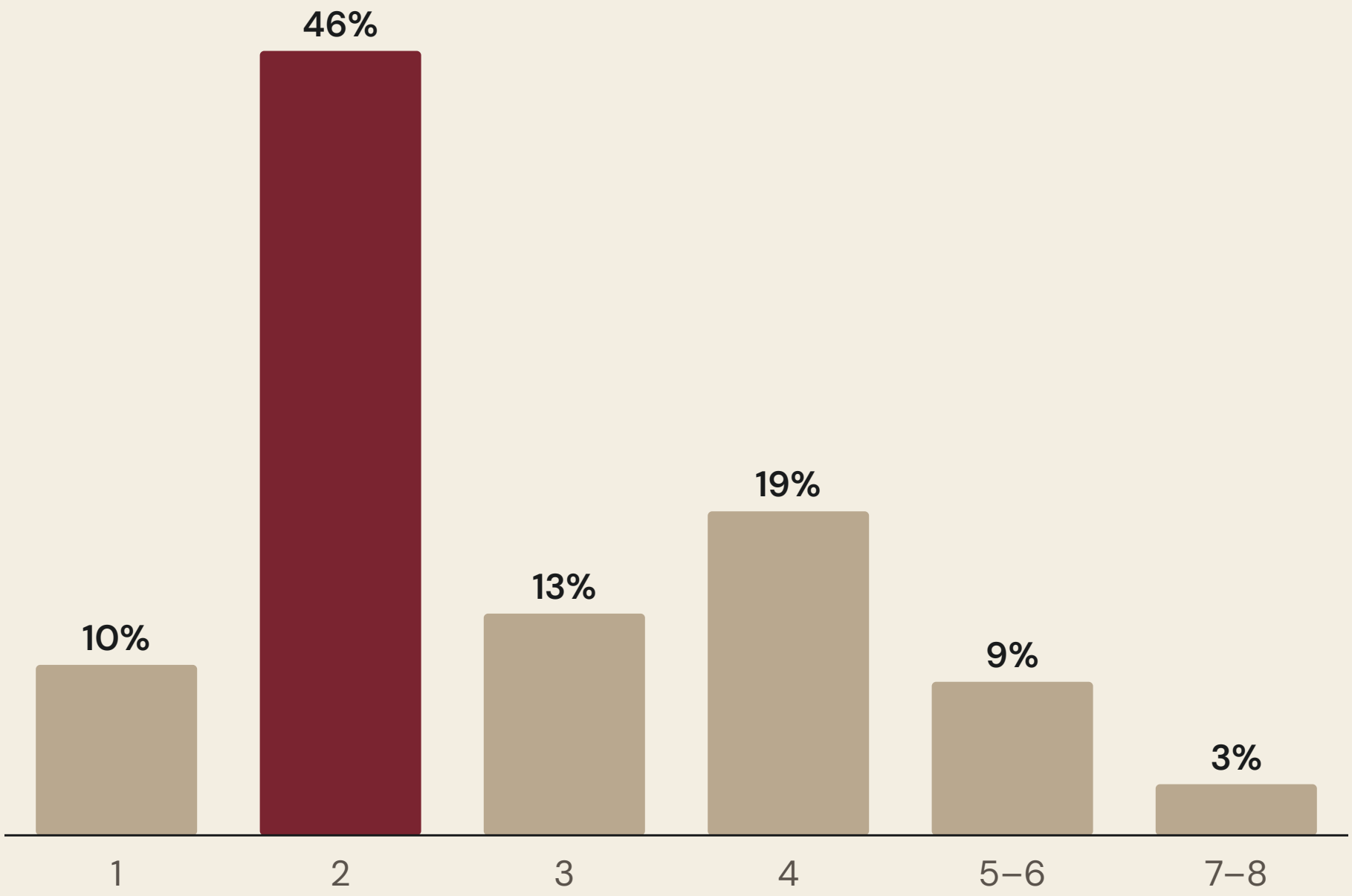
A queue at the door with empty seats inside is usually a table-mix problem. Demand is already at the door.

Who actually comes: party mix

PARTY SIZE	SHARE	SEATED MIN	TABLE
1	10%	72	Two-top
2	46%	72	Two-top
3	13%	98	Four-top
4	19%	98	Four-top
5–6	9%	118	Six-top
7–8	3%	130	Six-top +
Average	**2.9 guests**	**86**	

Saturday dinner. 56% of parties are one or two people. The room has 14 two-tops and 15 four-tops.

Party size share



The two-guest party is the room's main customer. Furnish for it.

Little's law, applied to tables

THE FORMULA

```
Tables in use = λ × share × minutes ÷ 60

Required = in use × (1 + buffer),
           rounded up

Seat fit = guests seated ÷ seats at their
tables
```

λ is party arrivals an hour at the peak (18 at 20:00 on Saturday). The buffer, 10% here, covers variation in arrivals and durations.

The specimen's tables at the peak

TABLE	TODAY	IN USE	UTILISATION	REQUIRED
Two-top	14	12.1	86%	14
Four-top	15	9.4	63%	11
Six-top	2	4.4	218%	5
Seats	100			102

Four-tops sit a third empty while six-top parties queue. The room needs three more six-tops and four fewer four-tops, roughly the same seats in a different shape.

The mismatch

218%
six-top utilisation: demand for more than twice the tables

63%
four-top utilisation

0.94
seat fit at the peak

102
seats required against 100 in the room

Any table type above 90% at the peak is where parties wait, even in a half-empty room.

When more tables are not the answer

If the seats required exceed the room, rearranging furniture won't solve it. The answer is duration or price.

The specimen needs 102 seats at the peak against 100. So the fix is a shorter meal (Part 8) and protection of the high-spend classes (Part 11), plus the six-tops.

PART 7 · TABLE MIX AND TABLE SIZES

What Chevys taught

Kimes and Thompson (2004) studied the Chevys Arrowhead restaurant in Arizona. They tested other table mixes against the restaurant's own arrivals and meal durations.

A better mix of the same number of seats could serve more parties and earn more, without adding a chair. Design your table mix from your own party data.

Combinable or dedicated tables

Two-tops that push together into four-tops look flexible. They cost time to move, block aisles, and leave odd seats.

Thompson (2002) found combinable tables pay best where small parties dominate a smaller room. In larger rooms, dedicated tables of the right sizes did as well or better.

- Make deuces along banquettes combinable.
- Keep dedicated six-tops for the large parties you know will come.

Seat singles where they earn

One guest in ten dines alone. A single at a two-top wastes half the table for 72 minutes.

- A counter or bar dining seat is the single guest's best table.
- Chef's counter seats often sell at a premium.
- Train hosts to offer the counter first at the peak.

Running a table-mix study

01 **Export party sizes**
Reservations and walk-ins, peak services, eight weeks.

02 **Time the meals**
Seated minutes by party size.

03 **Count arrivals**
Parties per hour at the peak.

04 **Apply Little's law**
Tables required by size, with a buffer.

05 **Rearrange and test**
Two Saturdays with movable tops, then commit.

ASK YOUR TEAM

- What share of our parties are one or two people?
- Which table size runs above 90% at the peak?
- How many tables do guests refuse?

RED FLAGS

- Couples seated at four-tops while a six queues at the door.
- Combinable tables everywhere, combined nowhere.
- A new layout drawn from the architect's plan with no party data.

PART 8

Meal duration

Where the minutes go, which of them the house controls, and what a minute is worth on a full night.

- The seven stages
- What to cut and what never to touch
- What freed time is really worth
- Duration by party size



Cut the waits the house makes.
Leave the meal alone.

A guest who waits 9 minutes for a menu is annoyed. A guest rushed through the main course is lost. Take minutes from the house's delays and leave the guest's time alone.

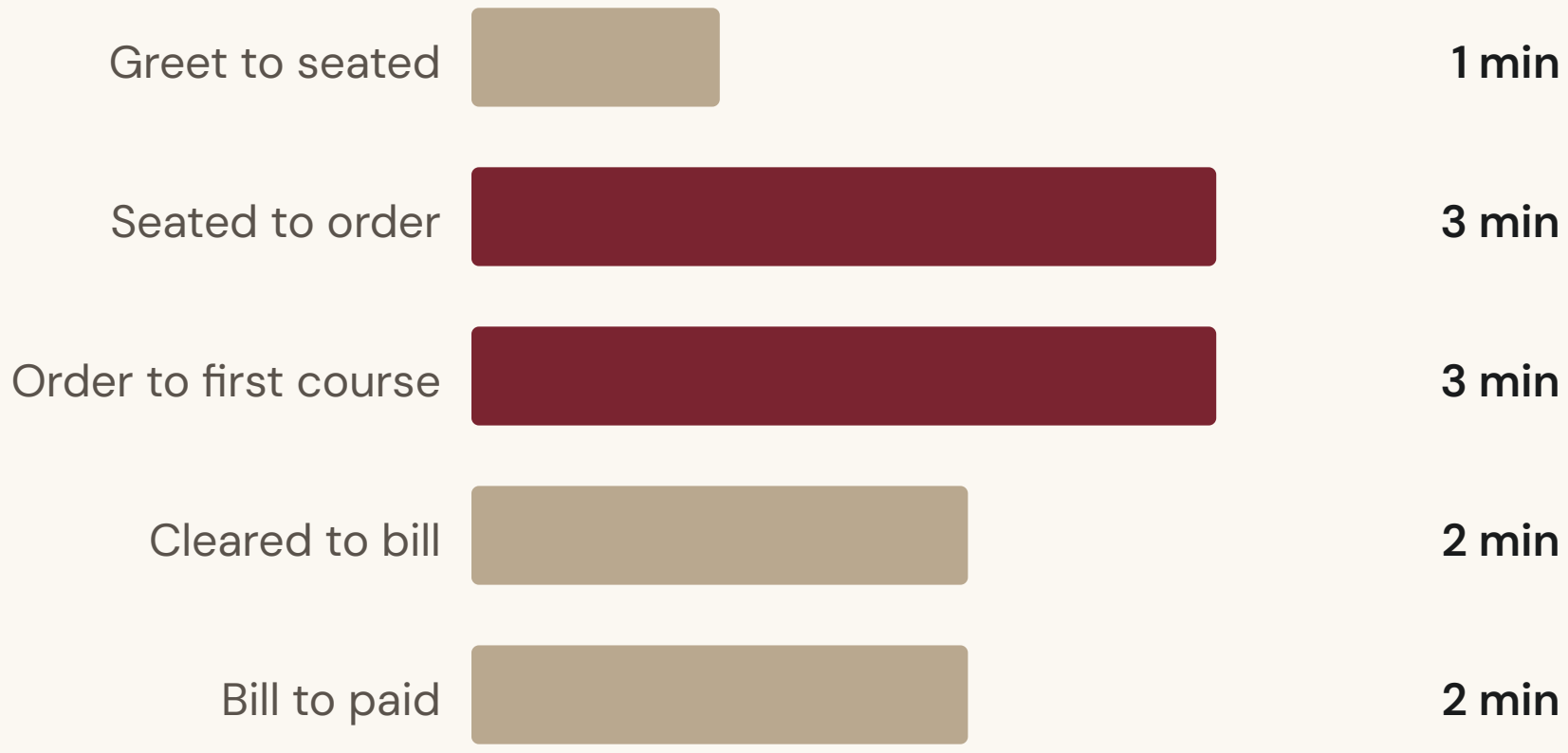
PART 8 · MEAL DURATION

Where 87 minutes go

STAGE	NOW	TARGET	HOW
Greet to seated	4	3	Table ready before arrival
Seated to order	9	6	Water and menus in 60 seconds
Order to first course	14	11	Fire on order; prep to forecast
Eating, all courses	46	46	Never rush it
Cleared to bill asked	6	4	Clear in 2 minutes; offer dessert once
Bill asked to paid	5	3	Pay at the table
Paid to departed	3	3	Never rush it
Total	**87**	**76**	

Minutes, mean, Saturday dinner. Five stages are the house's to fix. Two belong to the guest.

The controllable minutes



Eleven minutes come out without touching the meal. Most of it sits at the start, before the guest has eaten anything.

The result

87 → 76
minutes, Saturday dinner

12.6%
of the meal, all from house waits

2.07 → 2.37
turns in the 19:30 to 22:30 window

14.9 min
standard deviation of the meal today

PART 8 · MEAL DURATION

Guests have a duration in mind

Kimes, Wirtz and Noone (2002) asked diners how long dinner should take. Guests came with a clear expectation, and it varied by type of restaurant and occasion.

Noone and colleagues (2007) found that dinner guests dislike feeling rushed through the welcome, seating and ordering, and are glad of a fast bill.

- Have the table ready and the menus there. Never hurry a guest's choice.
- Take the biggest savings from the kitchen and the bill.
- Never clear a plate while someone is still eating.

PART 8 · MEAL DURATION

What freed minutes are worth

THE FORMULA

```
Turns = window ÷ duration
Freed covers = seats × Δturns
Usable = min(freed, spilled demand)
Realised = usable × 40%
```

Spilled demand is the guests you turned away. The 40% realisation factor is a house assumption. Thompson (2009) found the real gain averaged under a quarter of the naive estimate, and under half even in the best cases.

Valued on a sell-out night

STEP	SPECIMEN
Seats in play, 19:30 to 22:30	91
Covers freed by 11 minutes	27.3
Capped at guests turned away	17.4
Realised at 40%	7.0 covers
Revenue a sell-out night	₹12,159
Revenue a year, 260 nights	₹31.6 L
Profit a month at 57%	**₹1.50 L**

PART 8 · MEAL DURATION

The honest number

₹3.76 L

the claim a month before the realisation factor

₹1.50 L

the realised value a month

Thompson (2009) called the bigger gains mythical. Shorter meals pay only when demand is waiting to fill the seat, and only part of it arrives at the right minute. Use the smaller number in any business case, and test 40% against your own nights.

PART 8 · MEAL DURATION

Duration by party size

PARTY	SEATED MIN	SLOT TO BOOK
1–2	72	90 min
3–4	98	120 min
5–6	118	135 min
7–8	130	150 min

Slot = seated minutes + 10 minutes to reset the table, rounded up to 15. Size the slot to the party. A flat two hours wastes the deuce and squeezes the six.

Run a stopwatch study

01 **Pick two peak services**
Saturday dinner and a weekday lunch.

02 **Stamp eight moments**
Greeted, seated, ordered, first course, cleared, bill asked, paid, departed.

03 **Use POS timestamps too**
Order fired and bill printed come free.

04 **Average and spread**
Mean and standard deviation by stage and party size.

05 **Fix one stage a month**
Then time it again.

PART 8 · MEAL DURATION

Disclose the slot

In London and Tokyo a time-limited table is normal. "Your table is yours until 22:00." Guests accept it when they are told at booking.

Say it early. Saying it at dessert is the version guests resent.

ASK YOUR TEAM

- How long is our average dinner, by stage?
- How many minutes pass between seating and the first order?
- How many guests did we turn away last Saturday?

RED FLAGS

- Plates cleared while someone is still eating.
- Duration savings valued as if every freed seat refills.
- Slot limits first mentioned when the guest is mid-meal.

PART 9

Forecasting

How many guests are coming, when, and how sure you are. Prep, rosters, protection and offers all hang on it.

- The booking curve
- Pickup and pace
- Accuracy
- The week ahead: smoothing and day-of-week
- Lunch by regression

9

PART 9 · FORECASTING

Why forecast covers

A restaurant that doesn't forecast is using last Saturday as its forecast, and is wrong in both directions.

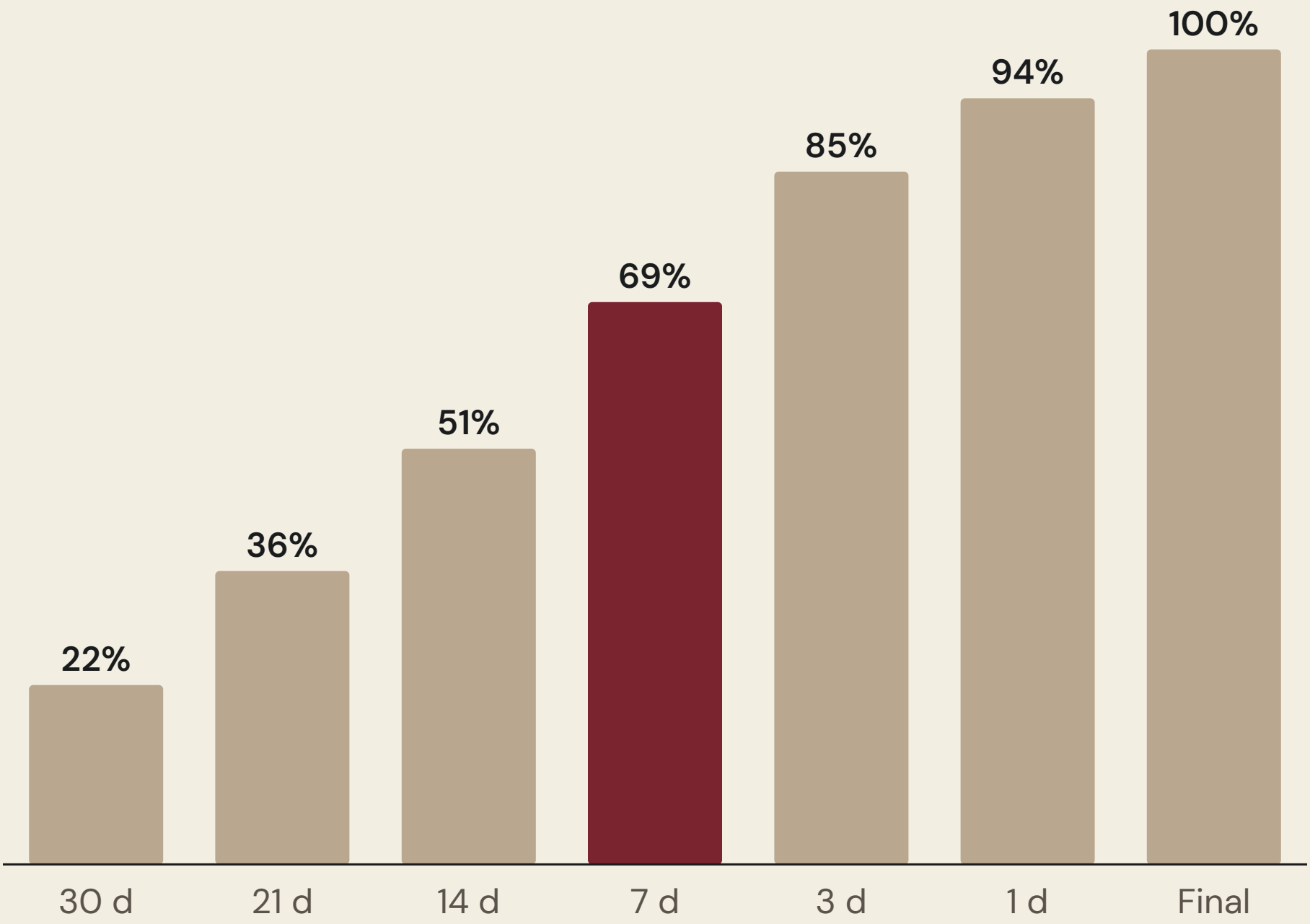
- Prep mise en place to the forecast.
- Roster staff in 15-minute intervals to the forecast.
- Decide how many seats to hold for full-price guests.
- Release seats to discount channels only when pace says you won't fill them.
- Order stock for next week from next week's forecast.

The Saturday booking curve

DAYS OUT	COVERS ON BOOKS	SHARE OF FINAL
30	46	22%
21	75	36%
14	106	51%
7	144	69%
3	177	85%
1	196	94%
Final	209	100%

Average of eight Saturdays. Half the book arrives in the last 14 days, and almost a third in the last 7.

Share of final covers on the books



Build one curve per day of the week and per meal. A Tuesday lunch curve looks nothing like this.

Pickup and pace

THE FORMULA

```
Additive:        OTB + average pickup
Multiplicative:  OTB × average(final ÷ OTB)
Blend:           average of the two

Pace = OTB ÷ curve at this point − 1
```

OTB is covers on the books today. Additive assumes the same number still to come. Multiplicative assumes the same share.

A Saturday, seven days out

128
covers on the books

−11%
pace against the curve of 144

193 / 186
additive and multiplicative forecasts

189
blended forecast against 200 seats

Behind pace with room to spare. Release slots to offers and walk-ins now. By Friday afternoon it's too late.

Acting on pace

Act at 7 and 3 days out. By the day before, most of what you can change is already decided.

- Ahead of pace, close offer channels, hold seats for full-price guests and firm up deposits.
- On pace, do nothing. Most days this is the right answer.
- Behind pace, release slots to offers and walk-ins, call residents and regulars, and check the competition.

Forecast accuracy

THE FORMULA

```
Error = actual − forecast
MAPE  = mean of |error| ÷ actual
Bias  = mean of error
TS    = Σ error ÷ mean |error|
```

MAPE says how far off you are. Bias says which way you lean. The tracking signal (TS) says whether the lean is luck or method; beyond ±4, the method is wrong.

Eight recent Saturdays

2.3%
MAPE, forecast made 7 days out

−1.0
covers bias, close to zero

< 10%
the standard for a reservations-led room

2 months
of steady bias means change the method

Tested out of sample: these eight Saturdays were not used to build the curve.

PART 9 · FORECASTING

The week ahead

THE FORMULA

$$\text{Smoothed}(t) = \alpha \times \text{actual}(t) + (1 - \alpha) \times \text{smoothed}(t - 1)$$

$$\text{Day forecast} = \text{smoothed week} \times \text{day-of-week index} \div 7$$

α = 0.3. Higher α reacts faster and jumps more. Day-of-week index = that day's average share × 7.

Next week by day

DAY	INDEX	COVERS
Monday	0.84	585
Tuesday	0.87	604
Wednesday	0.90	627
Thursday	0.96	670
Friday	1.09	756
Saturday	1.19	826
Sunday	1.16	808
Week		**4,876**

Twelve weeks of history, smoothed. Saturday runs 41% above Monday.

PART 9 · FORECASTING

Lunch needs a different tool

Lunch in a hotel restaurant is mostly walk-in. There is no book to read. But lunch moves with things you can see in advance: hotel occupancy, conference delegates, holidays, rain, offers.

Regression measures how much each one moves the covers. Then you plug in next Thursday's values.

PART 9 · FORECASTING

What drives Thursday lunch

DRIVER	EFFECT	T-STAT
Base	37 covers	5.8
Trend	+0.15 a week	4.3
Hotel occupancy	+1.0 per point	10.9
Each delegate in house	+0.11	5.9
Public holiday	−30	−6.2
Rain	+12	7.3
Business-lunch offer	+13	6.8

Fitted on 92 weeks. R^2 0.88. Standard error 6.4 covers. Every driver is significant.

PART 9 · FORECASTING

Next Thursday

163
forecast covers

155–171
80% range

166
prep and roster to forecast + ½ SE

4.7%
MAPE on 12 weeks the model never saw

82% occupancy, 140 delegates, offer on, no rain, no holiday. Rain alone would add 12 covers. Watch the weather app as closely as the reservation book.

PART 9 · FORECASTING

Count the guests you turn away

A forecast built only on covers served will never ask for more seats than you had. On a sell-out night the specimen turns away six parties.

- Log every turned-away party: size, time asked for, channel.
- Log waitlist walk-aways.
- Add them back when you build the curve. That is unconstraining.

The weekly forecasting routine

01 **Monday**
Smooth last week, refresh day-of-week indices.

02 **Daily**
Read pace for the next 30 days against the curve.

03 **7 and 3 days out**
Act: release or protect seats.

04 **Every Thursday**
Run the lunch regression with next week's drivers.

05 **Monthly**
Check MAPE and bias. Change the method if bias persists.

ASK YOUR TEAM

- What is our forecast for next Saturday, and how sure are we?
- What was our MAPE last month, and which way did we lean?
- How many parties did we turn away last week?

RED FLAGS

- "Same as last week" is the forecast.
- Prep and rosters set before anyone reads the book.
- Turned-away guests never written down.

PART 10

Reservations and pacing

Sell the book in slots the kitchen can fire, quote waits honestly, and count every way a booking fails to arrive.

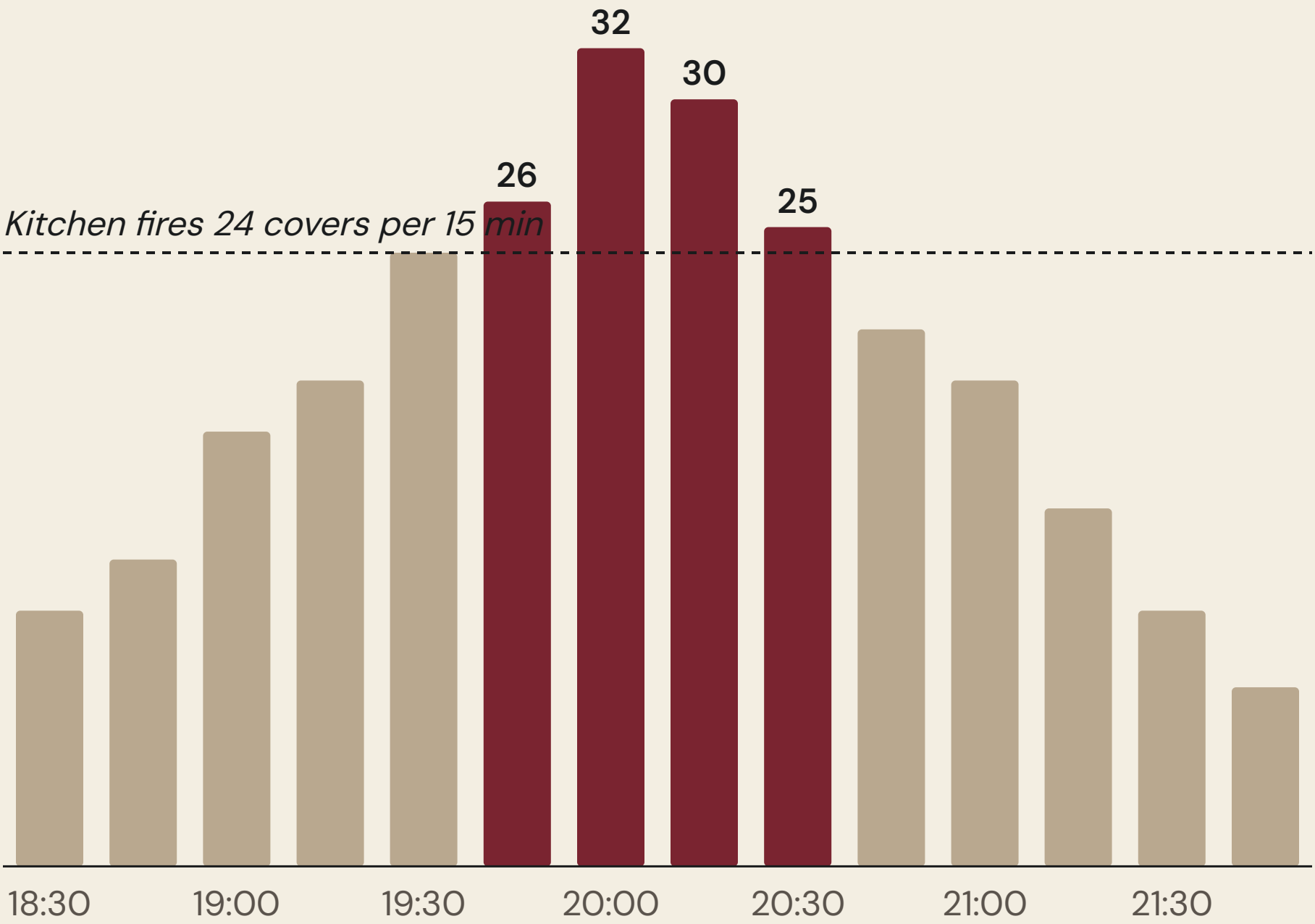
- Kitchen pacing in 15-minute slots
- Slot length by party size
- The waitlist quote
- Realistic no-show accounting
- The deposit ladder

10

Sell the book in slots the kitchen can fire.

The specimen books 32 covers into the 20:00 slot. A kitchen that fires 24 every 15 minutes turns the extra eight into a wait for food. Guests read it as slow service.

Saturday dinner: load against the kitchen



Booked covers plus expected walk-ins in each 15-minute slot. Four slots run over the kitchen; 20:00 runs at 133%.

Fix the over-sold slots

Moving a booking by 15 minutes costs nothing. A long wait for food can cost the review.

- Offer 19:45 or 20:15 instead of 20:00 when the slot is full.
- Cap each slot in the booking system by covers.
- Hold a few covers per slot for walk-ins you know will come.
- Brief the pass on the slots that will run hot.

Book the table, not the hour

A flat two-hour slot wastes the deuce and squeezes the six. Slot length should follow party size: seated minutes plus reset time, rounded up to 15.

- 1–2 guests: 90 minutes.
- 3–4 guests: 120 minutes.
- 5–6 guests: 135 minutes.
- 7–8 guests: 150 minutes.

The waitlist quote

THE FORMULA

```
Quote = position × minutes between
        releases of that table size + 5
```

Specimen: third in line for a four-top, a four-top frees every 6.5 minutes, so quote 25 minutes.

The psychology of waiting

David Maister (1985) set out why some waits feel longer than others. His points still run every good host stand.

- Unoccupied time feels longer than occupied time.
- Uncertain waits feel longer than known, finite waits.
- Unexplained waits feel longer than explained ones.
- Unfair waits feel longer than fair ones.
- Waiting alone feels longer than waiting in company.

So, at the door

- Quote a little long. Seat early.
- Give the waiting guest a drink and a place to stand.
- Text them when the table is ready, so they can wait at the bar.
- Explain the delay in one honest sentence.
- Seat strictly in order, unless you say why.

Why 100 booked becomes 88

LEAK	RATE
No-shows	5%
Late cancellations, never resold	4%
Party shrinkage: a four arrives as three	3%
Covers that arrive, of 100 booked	**88.5**
Covers lost against the book	11.5

These are rates with a card guarantee in place. Without one, no-shows and late cancels together run about 12% (Part 12). Counting only clean no-shows understates the gap by about half.

The deposit ladder

RUNG	NO-SHOW	WHEN	FRICTION
0 Nothing	12%	Never at the peak	None
1 Reminder and confirmation	8%	Every booking	None
2 Card hold, charge stated	5%	Peak seatings	Low
3 Refundable deposit	5%	Large parties, holidays	Medium
4 Peak cover charge	3%	Sell-out nights only	Medium
5 Prepaid ticket	1.5%	Chef's table, tasting	High

Climb only as far as the night needs. No-show rates are the specimen's assumptions; measure your own.

PART 10 · RESERVATIONS AND PACING

What the market now accepts

OpenTable's October 2026 Restaurant Impact Report found deposits cut no-shows by about 60% where restaurants used them. UK diners accepted a refundable hold of around £35 a head, and operators rated reminders as the most effective single step.

Start at rung one everywhere. Add a card hold for the peak. Keep deposits for the nights and parties that need them.

ASK YOUR TEAM

- How many covers does the kitchen fire per 15 minutes?
- What share of last month's bookings did not arrive, all three leaks counted?
- Which rung of the deposit ladder are we on for Saturday at 20:00?

RED FLAGS

- Bookings taken by the hour with no cover cap per slot.
- Wait quotes guessed at the door.
- Deposits on a Tuesday lunch.

PART 11

Protection and displacement

How many seats to hold for guests who spend more, and when a group costs more than it brings.

- Price classes in a restaurant
- Littlewood's rule
- EMSR-b nested limits
- Group displacement

11

A restaurant has price classes too

CLASS	SPEND ₹	MEAN DEMAND	Σ
Chef's tasting	4,500	10	4
À la carte	1,750	55	14
Dining offer, 25% off	1,300	35	10
Group set menu	950	30	10

Saturday, the 20:00 seating, 100 seats. Each class books at a different time and spends a different amount.

The question protection answers

Offer guests and groups book early. Tasting and à la carte guests book late. Fill the room with the early bookers and there is no seat left for the guest who would have spent more.

So hold some seats back. The question is how many.

Littlewood's rule, two classes

THE FORMULA

Hold one more seat for the higher class
while $r_1 \times P(D_1 > y) \geq r_2$

$$y = \mu_1 + \sigma_1 \times \Phi^{-1}(1 - r_2 \div r_1)$$

r_1 and r_2 are the spends of the higher and lower class. D_1 is higher-class demand with mean μ_1 and spread σ_1. Φ^{-1} is the inverse normal.

À la carte against the offer

0.74

price ratio: ₹1,300 ÷ ₹1,750

46

seats to protect for à la carte at 20:00

With only these two classes, sell no more than 54 seats to the offer, however early it books.

EMSR-b: many classes

THE FORMULA

For each line between classes:

  $\bar{\mu}$ = Σ means above the line

  $\bar{\sigma}$ = √(Σ variances above)

  $\bar{r}$ = demand-weighted spend above

  $y = \bar{\mu} + \bar{\sigma} \times \Phi^{-1}(1 - r_{next} \div \bar{r})$

Belobaba (1992). Protection levels nest: a higher class can always take a lower class's seat, never the reverse.

PART 11 · PROTECTION AND DISPLACEMENT

Nested limits at 20:00

CLASS	PROTECT (THIS AND ABOVE)	LIMIT FOR NEXT CLASS
Chef's tasting	11	89
+ À la carte	61	39
+ Dining offer	100	0
Group set menu		none at 20:00

Sell at most 39 offer seats at 20:00, and no group seats at all. Groups belong at 18:30 or in a cold hour.

Putting it in the booking system

- Load the offer allocation per seating.
- Let the higher class book into any unsold lower-class seat.
- Refresh the limits weekly from the forecast.
- At 7 and 3 days out, release protected seats if pace says they won't fill.

Group displacement

THE FORMULA

```
Group value     = covers × (food + drink)
                  × contribution ratio
Displaced value = covers it pushes out
                  × weighted spend
                  × contribution ratio
Accept if group value > displaced
```

PART 11 · PROTECTION AND DISPLACEMENT

A group of 30 at 20:00

LINE	SPECIMEN
Group: 30 covers at ₹950 food + ₹350 drink	₹22,249 contribution
Displaced: 30 covers at ₹1,868 weighted spend	₹31,962 contribution
Net	**−₹9,713**
Break-even food price a head	₹1,518
Quote, house ending	₹1,545

At ₹950 a head the group costs the restaurant ₹9,713. Quote ₹1,545, or move it to 18:30 where it displaces no one.

The seat floor

On a full night, the weighted spend of the guests a booking would displace is the lowest price that seat should sell for. On the specimen at 20:00 that floor is ₹1,868 a cover.

- Private dining minimum spends should start from it.
- Group menus at peak should clear it.
- In a cold hour the floor drops toward variable cost. Sell accordingly.

ASK YOUR TEAM

- How many offer covers did we sell at 20:00 last Saturday?
- Who prices group bookings, and against what floor?
- Do our protection levels nest?

RED FLAGS

- Discount platforms with open inventory at the peak.
- Groups quoted from the banquet menu with no displacement check.
- Protected seats never released, so they go empty.

PART 12

No-shows and overbooking

How many bookings to take for the tables you have, and why a card guarantee beats clever overbooking.

- The binomial book
- The newsvendor rule
- Guarantee first, then overbook
- House rules

12

PART 12 · NO-SHOWS AND OVERBOOKING

Why overbook at all

At the 20:00 peak the specimen has 24 reservable tables. With 12% of bookings failing to arrive, taking exactly 24 bookings leaves about three tables empty on a night guests were turned away.

Overbooking takes a few more bookings than tables, so the no-shows are covered. The risk is a party that arrives to no table.

PART 12 · NO-SHOWS AND OVERBOOKING

The binomial book

THE FORMULA

```
Each booking shows with p = 1 − no-show rate
Seated = min(shows, tables)
Walks  = max(0, shows − tables)

Value = seated × Cu − walks × Co
```

Cu: contribution of a seated party (party × check × contribution ratio).
Co: cost of walking a party, in goodwill and recovery.

The newsvendor rule

THE FORMULA

$$\text{Critical ratio} = Cu \div (Cu + Co)$$

Take one more booking while

$$P(\text{no-shows} \geq \text{extra bookings}) \geq Co \div (Cu + Co)$$

The more an empty table costs relative to a walk, the more you overbook.

The specimen's inputs

12%

no-shows today, including cancels inside 24 hours

₹2,890

Cu: contribution of a seated party

₹2,500

Co: cost of walking a party

0.54

critical ratio

Bookings against value, 24 tables

BOOKINGS	SEATED	WALKS	VALUE ₹
24	21.1	0.0	61,043
25	22.0	0.0	63,366
26	22.7	0.2	65,053
27	**23.2**	**0.5**	**65,788**
28	23.6	1.1	65,531
30	23.9	2.5	62,871
32	24.0	4.2	58,885

At 12% no-shows the best is 27 bookings for 24 tables, about one walk every two nights. It adds ₹4,744 a seating.

Fix the no-shows first

12% → 5%
no-shows with a card guarantee

₹1.05 L
a month from the guarantee alone

25
best bookings once guaranteed

₹27,096
a month from overbooking after the guarantee

The card guarantee earns four times what overbooking does, and it walks nobody.

PART 12 · NO-SHOWS AND OVERBOOKING

Don't count the same table twice

Overbooking valued at 12% no-shows and a guarantee that cuts no-shows to 5% can't both be claimed. Once the guarantee works there is less to overbook against.

Value overbooking after the guarantee. The specimen's first edition made this mistake and overstated the prize by ₹75,700 a month. The workbook now shows both.

House rules for overbooking

- Overbook two-tops and four-tops only. Never six-tops or larger.
- Keep walk-in tables as the buffer.
- A walked party is seated within 15 minutes, with a drink, and the bill reflects it.
- Never overbook a regular or a guest celebrating something.
- Review every walk the next morning.

Overbook against the leaks you can predict

No-shows are only part of the gap. Late cancellations and smaller parties than booked take about 6.5 more covers in every 100.

- Overbook tables against no-shows and late cancels.
- Seat shrunken parties at smaller tables when you can.
- Re-measure the three rates every quarter.

ASK YOUR TEAM

- What is our true no-show rate at the peak, late cancels included?
- Do we hold cards for peak bookings?
- How many parties did we walk last month, and how were they treated?

RED FLAGS

- Overbooking used in place of a guarantee.
- Large tables overbooked.
- A walked guest offered nothing.

PART 13

The queue

Tables are servers, parties are arrivals. Queueing maths explains why the last few percent of a room cost so much.

- Erlang C at the peak
- The wait cliff
- Variability: Kingman
- Pooling
- The economics of the empty table

13

The last 15% of a room costs the most.

Running a dining room at 95% looks efficient on paper. At the door it means a queue that grows faster than anyone can seat it.

Erlang C, applied to a dining room

THE FORMULA

```
μ = 60 ÷ meal minutes   (parties a table an hour)
a = λ ÷ μ               (offered load, in tables)
ρ = λ ÷ (c × μ)         (utilisation)

P(wait) = Erlang C(c, a)
Wait (min) = 60 × P(wait) ÷ (c × μ − λ)
```

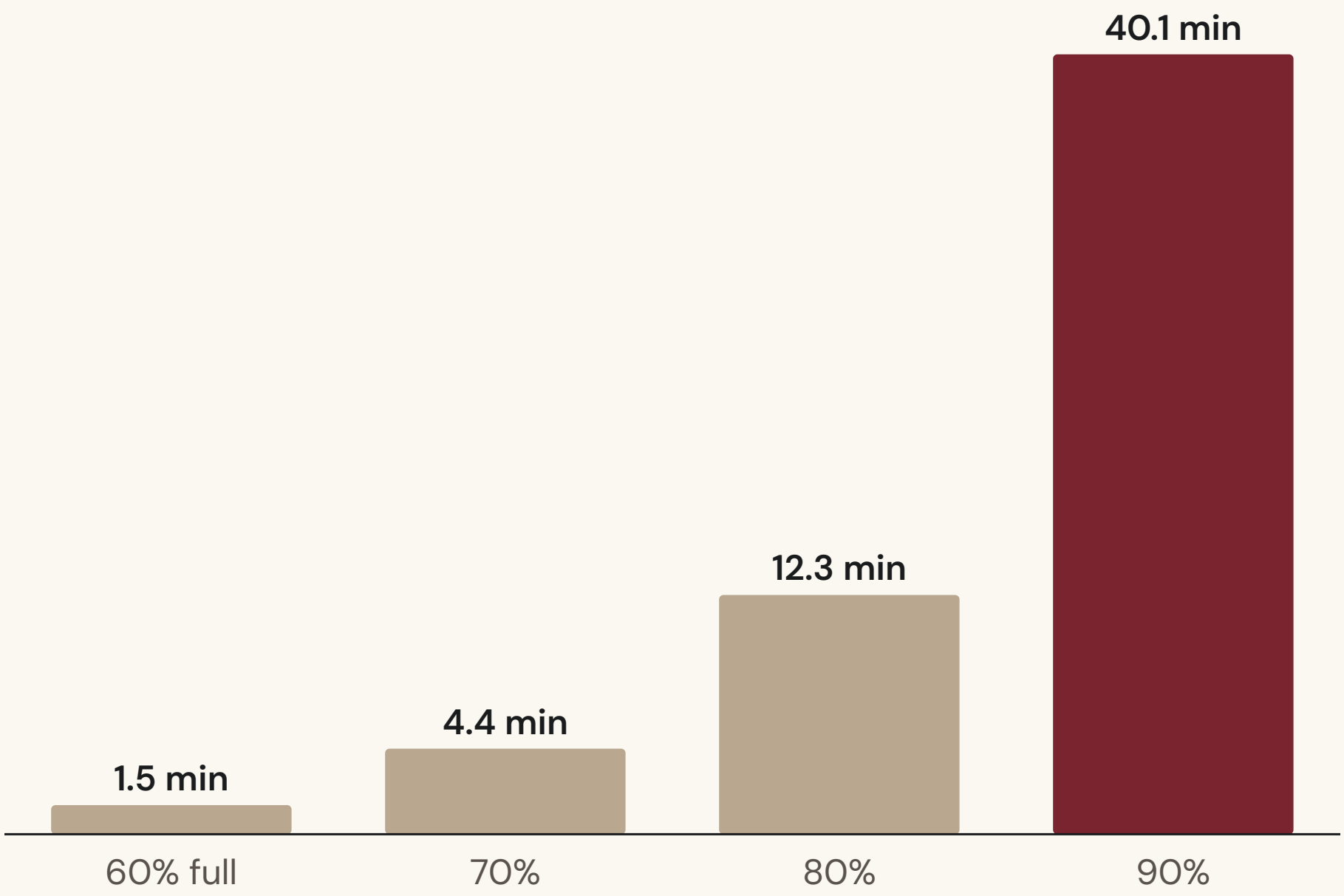
c = tables in play, λ = parties arriving an hour. Erlang (1917) built it for telephone exchanges. Treat it as a first view: reservations make arrivals less random than it assumes.

The specimen at the peak

PARTIES/HR	P	P(WAIT)	WAIT	READING
14	66%	2%	0.1 min	Comfortable
16	75%	9%	1.0 min	Comfortable
18	**84%**	**27%**	**4.7 min**	**Plan here**
20	94%	63%	27 min	Past the ceiling
22	103%	100%	unbounded	Queue grows forever

31 tables treated as one pool, 87-minute dinner. Two more parties an hour turn a five-minute wait into a 27-minute wait. The six-tops queue sooner (Part 7).

The wait cliff: 10 tables, 60-minute meal



From 60% to 90% utilisation the average wait rises more than 25 times. The wait rises even faster than ρ ÷ (1 − ρ): each step toward full costs more than the one before.

Where to plan

80–85%
utilisation to plan at the peak

< 5 min
average wait for a luxury room

> 15 min
where guests start to leave

ρ ÷ (1 − ρ)
the shape of the cliff

Variability: Kingman's formula

THE FORMULA

$$\text{Wait} \approx [\rho \div (1 - \rho)] \times [(ca^2 + cs^2) \div 2] \times \text{service time}$$

ca and cs are the coefficients of variation of arrivals and of meal times. Kingman (1961). Same room, same staff: less variability means less waiting.

PART 13 · THE QUEUE

Smooth the arrivals

0.65

relative wait with arrival CV 0.75

0.40

relative wait with arrival CV 0.5

At 85% utilisation and the same 60-minute meal, smoothing arrivals from a CV of 0.75 to 0.5 cuts the wait by about 40%. Staggered booking slots do exactly that, at no cost in payroll.

PART 13 · THE QUEUE

Pooling

33 min

wait: two rooms of 5 tables, 4 parties an hour each

12 min

wait: one room of 10 tables, 8 parties an hour

Same tables, same guests. One shared queue and one host stand cut the wait by almost two thirds.

Pooling in practice

- One host stand and one waitlist for the whole room.
- Cross-trained servers who can cover any station.
- Terrace and inside run as one pool when weather allows.
- Bar seats offered as dining seats at the peak.

PART 13 · THE QUEUE

The economics of the empty table

₹667

fixed cost a cover at 90% of 200 covers

₹1,000

fixed cost a cover at 60%

₹333

the premium a quieter room must carry per cover

₹1.2 L

fixed cost of one service

PART 13 · THE QUEUE

Slack is what the premium buys

Running below capacity costs a little, every night, in a straight line. Running above the ceiling costs a lot, at random, and in reputation.

A luxury room chooses the small certain cost. It prices it into the check and keeps the wait short.

ASK YOUR TEAM

- What is our utilisation at the peak hour?
- What is our average wait, and what do we quote?
- Do we run one queue or several?

RED FLAGS

- A peak planned at 95% full.
- Every booking at 20:00 on the dot.
- Separate waitlists for terrace and dining room.

PART 14

Price, channels, drinks and guests

Demand-based pricing guests accept, the true cost of each channel, drinks priced by the rupees they leave, and whose table to protect.

- Fair demand-based pricing
- The peak cover charge
- Channels and net RevPASH
- Pour cost and the two multiplier grids
- Guest lifetime value

14

Prices that move by hour

Hotels have moved price by day for decades. Restaurants can move it by hour, as long as guests see the logic.

- Early-evening and afternoon menus at a lower price point.
- A set menu only at the peak seating.
- Lunch and dinner menus priced differently.
- Offers released only in warm and cold hours.
- A cover charge or minimum spend on sell-out nights only.

What guests call fair

Kimes and Wirtz (2002) tested how diners judged different demand-based prices. Time-of-day prices framed as discounts, and lunch-dinner differences, were judged fair. Charging more for a better table was judged unfair.

- Frame it as an off-peak saving.
- Disclose it at booking.
- Charge for time and leave the view alone.

The peak cover charge

A charge per guest, paid at booking, fully redeemable against the bill, forfeited on a no-show. Sell-out nights, 20:00 and 21:00 only.

- It tightens the book: fewer no-shows.
- It sets a spend floor for guests who would spend less.
- Most guests pay nothing extra: it comes off their bill.

₹1,500 a head on a sell-out seating

SOURCE OF VALUE	A SEATING
Tighter, safer book	₹1,785
Forfeited charges	₹3,268
Spend-floor top-ups	₹1,748
Lost bookings, net of refill	₹0
Net a seating	**₹6,801**
Net a month	₹1.47 L
Increment over guarantee and overbooking	₹15,061 a month

Assumes 15% of guests would spend below ₹1,500 and 6% decline to prepay, refilled from the waitlist.

When the charge is wrong

On the specimen the charge adds only ₹15,061 a month once the guarantee and overbooking are in place. Treat it as an option for later.

- Any night the room does not turn guests away.
- Breakfast, lunch, or a cold night.
- In-house hotel guests and top loyalty tiers: exempt them.
- A room whose regulars would read it as distrust.

Supplement, monsieur

You want lamb chops in place of the curry. Then a foie gras Rossini on top of it. So they charge you whatever the hell they want. That is supplement, monsieur.

It's the easiest premium on any menu, because the guest asked for it. Price it on the extra plate cost, with a gentler multiplier as the cost climbs, the way a good wine list does. The chops still sell, and still leave more rupees than the dish it replaced.

On a half-board plan it's how the guest pays for luxury. Packages don't shrink the money guests keep aside for extras (Cozzio and colleagues, 2020).

Split the main? Supplement.

Two people want to split the entrée. Then there is a supplement. For it.

Two guests sharing one main still hold two seats for the whole meal. At 20:00 on a Saturday each of those seats earns ₹1,147 an hour. The split carries a supplement because the seats do.

- Busy hours: charge it. Two plates, a side for each guest.
- Quiet hours: waive it. The seat would be empty anyway.
- Print it on the menu. A surprise on the bill is the version guests resent.
- Starters and desserts to share: never. They raise the check.

Channel net value

THE FORMULA

```
Net a cover = check × (1 − discount)
                    × (1 − commission) − fee
Contribution = net − variable cost

Hot-hour test: sell at the peak only if
  contribution ≥ 90% of direct
```

Six channels, one check

CHANNEL	SHARE	NET ₹	VS DIRECT	HOT HOURS?
Direct, phone and web	38%	1,744	100%	Yes
Hotel guests	22%	1,744	100%	Yes
Reservation platform, ₹60 fee	15%	1,684	94%	Yes
Corporate account, 10% off	5%	1,570	90%	Yes
Bank and card offer, 15% off	8%	1,482	85%	No
Discovery app, 20% off + 6%	12%	1,311	72%	No

Compare contribution as well as the net. The discovery app leaves 72% of a direct cover's contribution.

Channel leakage

₹91
leaked per cover between gross check and net

5.2%
of the check

₹1,147
gross RevPASH at 20:00

₹1,087
net RevPASH at 20:00

Offers belong where seats would otherwise be empty. At the peak, every discounted cover displaces a full-price guest.

Pour cost

THE FORMULA

```
Pour cost = (bottle cost ÷ bottle ml
                × pour ml × 1.10) ÷ price

Cash margin = price − pour cost in ₹
```

The 10% covers mixers, garnish and spillage. Use excise-inclusive landed costs; Indian state duties change the picture completely.

Contribution margin quantum

Price a drink by the rupees it leaves. Read the multiple off a grid.

THE FORMULA

```
Price = cost per serve × multiplier

The multiplier falls as the cost rises
Contribution = price − cost, in ₹
```

A flat percentage makes a cheap highball too cheap and a fine pour hard to sell. The grid takes a high multiple where the guest won't notice it and a gentle one where they will.

The multiplier grid, per serve

COST PER SERVE ₹	×	EXAMPLE ₹	PRICE ₹	CONTRIBUTION ₹
0 to 50	6.0	50	300	250
51 to 100	5.5	80	440	360
101 to 150	5.0	120	600	480
151 to 200	4.5	180	810	630
201 to 300	4.0	250	1,000	750
301 to 400	3.5	350	1,225	875
401 to 600	3.0	500	1,500	1,000
601 to 900	**2.5**	**750**	**1,875**	**1,125**
901 to 1,500	2.0	1,000	2,000	1,000
Above 1,500	1.5 to 1.8	2,000	3,000	1,000

The multiple shrinks and the rupees grow. Above ₹900 a serve the gentle multiple keeps the pour moving, and each glass still leaves about ₹1,000.

Round it, then check the market

DRINK	COST ₹	×	RAW ₹	MENU ₹
Mojito	86	5.5	473	450
Negroni	186	4.5	837	800
Penicillin	224	4.0	896	900
Macallan 18	890	2.5	2,225	2,250

Round to ₹50 up to ₹500, ₹100 up to ₹1,000, ₹250 up to ₹2,500, ₹500 up to ₹5,000 and ₹1,000 beyond. Then flag any price more than 15% above the highest comparable bar or 15% below the lowest.

The Lodhi wine grid, per bottle

LANDED COST ₹	×	COST %	CONTRIBUTION ₹
1 to 550	2.75	36%	up to 963
551 to 1,000	2.50	40%	827 to 1,500
1,001 to 2,000	2.25	44%	1,251 to 2,500
2,001 to 3,000	2.00	50%	2,001 to 3,000
3,001 to 5,000	1.75	57%	2,251 to 3,750
5,001 to 7,000	1.50	67%	2,501 to 3,500
7,001 to 10,000	1.40	71%	2,800 to 4,000
10,001 to 15,000	1.30	77%	3,000 to 4,500
15,001 to 25,000	1.20	83%	3,000 to 5,000
Above 25,000	1.15	87%	3,750 and up

Prices before local tax. Above ₹3,000 a bottle the rupees hardly move: ₹2,250 to ₹5,000 whatever the wine costs. The gentle multiple is there to sell the great bottles.

Mind the band edges

LANDED COST ₹	GRID PRICE ₹	WITH THE FLOOR ₹
3,000	6,000	6,000
3,001	5,252	6,000
5,000	8,750	8,750
5,001	**7,502**	**8,750**
15,000	19,500	19,500
15,001	18,001	19,500

A stepped grid lists a dearer wine below a cheaper one at every band edge. The fix is a floor: no bottle lists below the top price of the band beneath it. Every bottle landing between ₹5,001 and ₹5,833 sells at ₹8,750.

The bar as seats

₹1,500
bar RevPASH

14
bar seats, 8 hours

₹1.68 L
bar revenue a day

1.7×
the dining room's RevPASH, 19:00 to 23:00

Guest lifetime value

THE FORMULA

$$LTV = \text{margin a year} \times (1 + d) \div (1 + d - \text{retention})$$

d is the discount rate, 12% here. Margin a year = visits × check × contribution ratio.

Whose table to protect

GUEST	VISITS	CHECK ₹	RETENTION	LTV ₹
Local regular	14	1,900	75%	45,935
Corporate host	8	2,600	65%	28,277
Occasion diner	2	2,400	35%	3,983
Offer seeker	3	1,250	30%	2,922
In-house guest	1.3	1,744	25%	1,665

A regular at ₹1,900 is worth more than eleven times an occasion diner at ₹2,400. Protect by lifetime value.

ASK YOUR TEAM

- Which channels sell at 20:00 on Saturday, and what does each leave us?
- How is our wine list priced, by percentage or by grid?
- Who are our twenty most valuable regulars?

RED FLAGS

- Discount apps open at the peak.
- One percentage target on every drink and every bottle.
- Regulars treated like first-time guests.

PART 15

Kitchen, banquets, hotels and resorts

The constraints behind the dining room, and the restaurant inside a hotel or a resort where the guest is captive.

- The kitchen as capacity
- Labour to standard
- Function space: RevPAST and ConPAST
- The hotel link
- Resort dining with a captive guest

15

The kitchen is capacity too

When the line is the bottleneck, every ticket competes for minutes. A delivery order and a dine-in plate may sell for the same price and use the line very differently.

- Measure plates the line can produce in an hour at the peak.
- Know each main's kitchen minutes.
- Rank orders by contribution per kitchen minute when the line is full.

The line at the peak

106%
line utilisation at the peak

96
plates an hour the line can produce

78
dine-in plates an hour

24
delivery plates an hour

Above 85% utilisation the queue maths of Part 13 applies to tickets as it does to tables. Food waits climb steeply.

Dine-in against delivery

SAME MAIN, ₹1,150	DINE-IN	DELIVERY
Platform commission	0%	25%
Packaging	₹0	₹60
Plate cost	₹300	₹300
Kitchen minutes	6	7
Margin after food, fees, packing	₹850	₹503
Per kitchen minute	**₹142**	**₹72**

At the peak, a delivery order earns half as much per kitchen minute. Pause delivery or extend its prep time between 19:30 and 21:30.

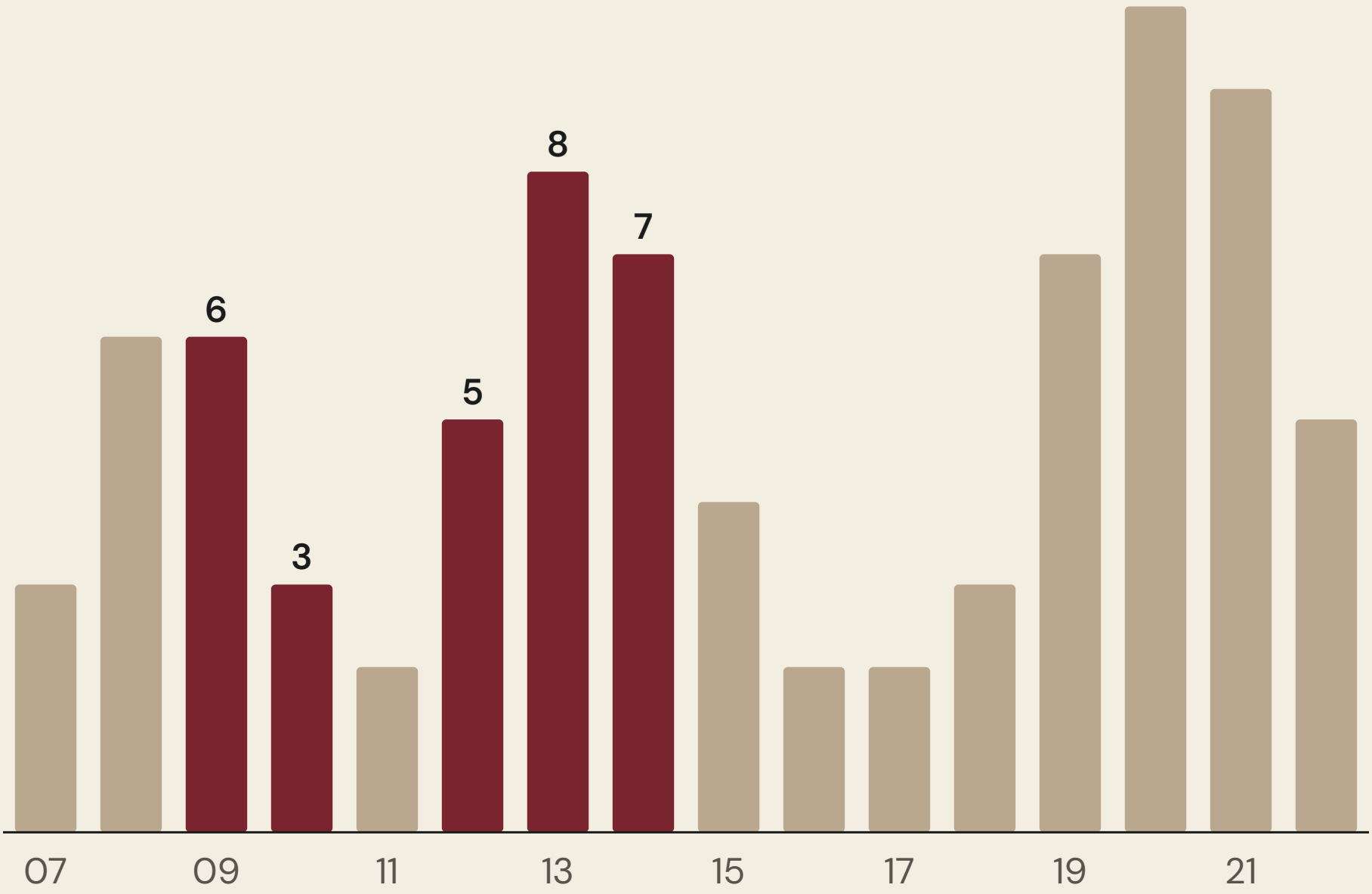
Labour to standard

THE FORMULA

$$\text{Servers required} = \text{guests in house} \div (p \times (1 - q)), \text{ rounded up}$$

p = guests one server can hold to standard (12 here). q = the quality reserve (20%). A server at 100% serves covers. At 80% they serve guests.

Servers required against scheduled



Highlighted: the hours where the schedule is one server short (09:00, 10:00, 12:00, 13:00 and 14:00). Five server-hours short a day, all at breakfast and lunch.

Staff to the forecast, in 15 minutes

Scheduling in 15-minute intervals fits staff to demand far better than whole hours A poor forecast forces you to staff for the worst case.

This is where the lunch regression of Part 9 earns its keep.

The quality reserve

A server running at 100% of capacity takes orders and carries plates. A server at 80% has time to read the table, suggest the wine, notice the birthday.

The reserve is where the check rises and the guest comes back. Build it into the roster on purpose.

Function space metrics

THE FORMULA

```
RevPASF = revenue ÷ sq ft
RevPAST = revenue ÷ (sq ft × sessions)
ConPAST = contribution ÷ (sq ft × sessions)
Space fit = guests ÷ capacity
```

Three sessions a day: morning, afternoon, evening. Kimes and McGuire (2001) showed that the session is the unit to manage.

Four venues in December

VENUE	SQ FT	REVPAST ₹	CONPAST ₹	SOLD
Grand Ballroom	6,000	45.8	21.6	44%
Junior Ballroom	2,400	35.5	16.6	45%
Boardroom	600	28.5	17.5	54%
Garden Lawn	10,000	19.4	9.5	15%
All space	**19,000**	**30.1**	**14.5**	**40%**

The boardroom earns more contribution per sq ft per session than the junior ballroom. The lawn is the largest space and the weakest.

The ballroom by session

19%	29%	84%
morning: cold	afternoon: warm	evening: hot

Sell mornings to conferences and training at a lower rate. Protect evenings for weddings and gala dinners.

Two enquiries, one Saturday evening

	CONFERENCE DINNER	WEDDING SANGEET
Guests	250	450
F&B a head	₹1,800	₹2,800
Room hire	₹1.5 L	₹3.0 L
Probability it happens	95%	70%
Contribution if it happens	₹3.08 L	₹7.59 L
Expected contribution	**₹2.92 L**	**₹5.31 L**

The riskier wedding is still worth more. The conference wins only above ₹4,318 a head. Rank space on expected contribution.

The restaurant inside a hotel

An all-day dining room in a hotel is part of the hotel's total revenue and profit. Judge it alone and you will misjudge it.

- Allocate the breakfast in the room package at a fair value.
- Count in-room dining and banquets with the outlet.
- Look at TRevPAR as well as the outlet P&L.

The specimen hotel

₹650
fair value of a package breakfast

70%
of morning revenue is package breakfast

12%
of outlet revenue is package breakfast

60%
of hotel revenue from F&B in December, a wedding month

Leave the breakfast unallocated and the restaurant looks empty while the rooms look rich. In India, F&B and banquets carried 42.3% of hotel revenue in the FHRAI and Horwath HTL survey for 2017–18.

A captive guest can't eat elsewhere tonight. They can decide never to come back.

In a resort the competition is the guest's expectation and the room rate they paid. Next year they choose again.

The resort's two numbers

THE FORMULA

```
Capture rate = in-house covers ÷
  (in-house guests × meal periods)

F&B spend per guest-day =
  F&B revenue from in-house guests
  ÷ guest nights
```

Track capture by meal and outlet. A falling dinner capture rate is the first sign that guests feel the menu is too dear or too familiar.

The easiest forecast in hospitality

A resort knows who is in the house tonight, who arrives, who leaves, and which meal plan each guest bought. Most restaurants can only dream of that.

- Covers = in-house guests × capture rate by meal × plan entitlement.
- Read arrivals and departures: a departure day kills dinner, an arrival day kills lunch.
- Group itineraries and spa bookings tell you who will be away at lunch.
- Forecast by outlet, by meal, every morning, and prep to it.

The sunset peak

A resort's hot hour is sharper than a city restaurant's. Everyone wants the terrace at 19:30, when the light is best.

- Take in-house reservations for dinner, with slots, even when the guest is captive.
- Spread the peak with sunset drinks, a cooking class or a guided walk before dinner.
- Offer a dine-around across outlets so one terrace doesn't carry the night.
- Protect resident tables before you take outside bookings.

Meal plans and the long stay

Half-board and full-board plans lift capture and lower spend per cover. The work is in what sits outside the plan.

- Price each plan on contribution, never on the room rate.
- Sell supplements: the premium main, the wine pairing, the private dinner.
- Rotate menus by length of stay. A seven-night guest needs a seven-night menu cycle.
- Allocate the plan's food value to the outlet before you judge it.

A ladder of experiences

A captive guest spends most freely on what they can't get at home. Build a ladder from the everyday outlet to the once-a-stay dinner.

- Everyday: the all-day outlet at fair, visible prices.
- Special: the speciality restaurant, booked once or twice a stay.
- Once a stay: a private dinner on the beach, in the forest or on the dune, priced as an occasion.
- Each rung has its own capacity, so each needs its own protection and slots.

What the research says about captive guests

- Bundles don't eat the extras. Across 61,000 guests in three Italian resorts, adding drinks to the package raised use of the bundled drinks and left paid bar spend unchanged. Guests keep a fixed mental budget for extras (Cozzio, Tokarchuk and Maurer 2020).
- Upscale guests spend outside the bundle. After a soft-drinks package was added, guests at the upscale resort raised spending on spirits, aperitifs and craft beer more than guests at economy resorts (Cozzio et al. 2022).
- Open buffets drive overeating and waste. In studies reviewed by Koc (2016), most all-inclusive guests ate and drank more than at home. Plate the premium items; cost the buffet on what is actually taken.
- Locals fill the quiet weeks. A resort that markets its restaurants to residents keeps them busy when occupancy drops (Karson and Murphy 2013).

Price fairly to a guest who can't leave

Captive guests notice a ₹600 coffee more than city guests do, and they write about it. Hostage pricing shows up in reviews.

- Benchmark against the city prices your guests know, with a premium you can explain.
- Show every price, tax and service charge on the menu.
- Let the value outlet stay good value. Let the occasion dinner carry the premium.
- Watch review mentions of value for money as closely as capture rate.

ASK YOUR TEAM

- What does our line produce at the peak, and what do we ask of it?
- Which banquet sessions sit empty, and who sells them?
- In a resort: what is our dinner capture rate, by outlet and by length of stay?

RED FLAGS

- Delivery tickets flooding the line at 20:00.
- Rosters by whole hours, built on last week.
- Space sold first come, first served, on revenue.

PART 16

The ledger and the rhythm

The outlet P&L in USALI terms, what each move is worth in departmental profit, and the calendar that keeps it going.

- Prime cost and the P&L
- Break-even covers
- The programme, priced
- The operating rhythm and the scorecard

16

The outlet P&L, a month

LINE	₹ A MONTH	% REVENUE
Revenue	2.18 Cr	100%
Food	1.63 Cr	75%
Beverage	54.5 L	25%
Cost of sales	64.9 L	29.8%
Payroll	42.0 L	19.3%
Prime cost	**1.07 Cr**	**49.1%**
Other expenses	28.3 L	13.0%
Departmental profit	**82.6 L**	**37.9%**

USALI 12th Revised Edition, adopted from 1 January 2026. Read prime cost first.

The numbers under the P&L

THE FORMULA

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Prime cost = cost of sales + payroll
Contribution ratio = 1 − variable costs
                       ÷ revenue
Break-even covers = fixed costs
                    ÷ contribution per cover
```

Contribution ratio is the flow-through of one more cover: how much of each new rupee reaches profit.

Break-even and safety

57%
of a new cover's revenue reaches profit

₹644
contribution per cover

216
covers a day to break even

66%
margin of safety at 643 covers

Benchmarks to test against

The specimen sits at 49% prime cost and 38% profit. Replace these with your own peers before you draw conclusions.

- Prime cost, all-day dining: 45% to 60% of revenue.
- Departmental profit, all-day dining: 30% to 40%.
- US hotel F&B departmental profit averaged 29.1% (CBRE 2025).

The programme, ranked by profit

MOVE	PROFIT A MONTH
Duration on sell-out nights, realised at 40%	₹150,296
Card guarantee: no-shows 12% → 5%	₹105,207
Overbooking at the peak, after the guarantee	₹27,096
Two Plowhorses up ₹50	₹22,767
Total	**₹305,365**
Option: peak cover charge	₹15,061

The prize

₹3.05 L
more departmental profit a month

₹36.6 L
a year

+3.7%
on departmental profit

4
moves, using the room and team you have

The assumptions are stated: duration realised at 40%, overbooking valued after the guarantee, menu elasticity at −0.8. Test each one on your own data.

The operating rhythm

WHEN	WHAT
Every shift	Brief by hot and cold hour; slot loads against the kitchen; the wait quote
Daily	Pace for the next 30 days; release or protect seats; turned-away log
Weekly	Forecast and roster; protection limits; channel allocation
Monthly	Menu engineering; P&L and prime cost; forecast accuracy
Quarterly	Table mix; menu benchmark; wine grid; deposit rung; no-show rates

The scorecard: six numbers

NUMBER	SPECIMEN	DIRECTION
RevPASH at the peak	₹1,147	Up
Seat occupancy, day	43.8%	Up in cold hours
Dinner duration	87 min	Down to 76
No-show rate at the peak	12%	Down to 5%
Prime cost	49.1%	Hold or down
Menu weighted CM	₹734	Up

The technology, in order

- A POS that exports sales and item mix by the hour. Without it, nothing in this guide can be measured.
- A reservation system with cover caps per 15-minute slot, card holds and guest tags.
- Kitchen display timestamps, which give you duration data for every table.
- Scheduling software that works in 15-minute intervals.
- A spreadsheet like the workbook, before any expensive software.

Hosts are revenue managers

The host stand decides who sits where, for how long, and who waits. That is revenue management, done live, forty times a night.

- Train hosts on table fit and slot length.
- Give them the wait-quote rule.
- Show them the night's RevPASH.
- Reward them on the room's RevPASH.

A 90-day start

01 **Days 1–14**
Export POS by hour. Time two services. Build the booking curve.

02 **Days 15–30**
Menu engineering. Hot and cold hours. Table mix study.

03 **Days 31–45**
Slots and cover caps. Card holds at the peak. Wait-quote rule.

04 **Days 46–60**
Reprice Plowhorses. Close offers in hot hours.

05 **Days 61–90**
Re-measure the six numbers. Keep what worked. Write the SOP.

ASK YOUR TEAM

- What is our prime cost this month?
- Which of the six numbers do we review weekly?
- Who owns revenue management in the restaurant?

RED FLAGS

- No one owns it.
- Monthly P&L the only number anyone reads.
- Software bought before the basic data exist.

PART 17

Glossary

Every term in this guide, in plain words, A to Z. Save this part on its own.

- 100 terms
- Two to a page
- Each with the part where it is used

17

Actual food cost

Opening stock plus purchases minus closing stock, divided by food revenue. What the kitchen really spent. Part 2.

Actual-over-theoretical gap

Actual food cost minus theoretical food cost. The money lost to waste, over-portioning, comps, recipe drift and theft. Part 2.

Aggregator

A third-party delivery or discovery platform that sells your food or tables for a commission or fee. Judge it on contribution. Part 14.

AP price

As-purchased price: what the supplier charges per kilogram or unit, before any trimming or cooking loss. Part 2.

Average check

Revenue divided by covers. Useful, but blind to how long the seat was used. Part 5.

Bar RevPASH

Revenue per available bar seat-hour. Bar seats are short stays at high spend and often the most valuable seats in the room. Part 5.

Bias

The average forecast error, with its sign. Negative bias means you forecast too high. Two months of steady bias means the method is wrong. Part 9.

Blended price

The average of the factor price and the contribution price for a dish. A defensible starting point before menu engineering. Part 2.

Booking curve

Covers on the books at set points before the date (30, 21, 14, 7, 3, 1 days), averaged over past dates. One per day of week and meal. Part 9.

Booking limit

The most seats a price class may sell at a seating. Seats above the limit are protected for higher classes. Part 11.

Break-even covers

Fixed costs divided by contribution per cover. The covers a day needed to make no loss. Part 16.

Buffer

Extra tables added to the Little's law requirement to absorb variation in arrivals and meal times. 10% in the specimen. Part 7.

Capture rate

In-house guests who eat in your outlets as a share of those who could, by meal period. The first number in a resort restaurant. Part 15.

Card guarantee

A card held at booking with a stated no-show charge. Cuts no-shows sharply with little guest friction. Part 12.

Channel leakage

The gap between the gross check and the net a channel leaves after discounts, commissions and fees. Part 14.

Combinable table

A table that joins with others to seat larger parties. Flexible, but slow to move. Pays best where small parties dominate a smaller room. Part 7.

ConPAST

Contribution per available square foot per session, for function space. Ranks events on profit. Part 15.

Contribution margin (CM)

Menu price minus plate cost. The rupees a dish leaves to pay for labour, rent and profit. Part 3.

Contribution per kitchen minute

A dish's contribution divided by the line minutes it takes. The ranking to use when the kitchen is the bottleneck. Part 15.

Contribution ratio

The share of each extra rupee of revenue that reaches profit after variable costs. 57% in the specimen. Part 16.

Controllable wait

A stage of the meal the house controls, such as seating, ordering or paying. Cut these. Never cut the eating. Part 8.

Cover charge

A per-guest charge paid at booking, redeemable against the bill and forfeited on a no-show. Sell-out nights only. Part 14.

Critical ratio

Cu ÷ (Cu + Co): the cost of an empty table against the cost of a walk. It sets how far to overbook. Part 12.

Day-of-week index

Each day's share of weekly covers, times seven. Saturday at 1.19 means 19% above an average day. Part 9.

Dedicated table

A table that is never joined to another. Faster to turn. Often better in larger rooms. Part 7.

Demand-based pricing

Prices that move with demand by hour, day or season. Accepted when framed as off-peak savings and disclosed in advance. Part 14.

Departmental profit

Outlet revenue minus cost of sales, payroll and other direct expenses, in USALI terms. Part 16.

Deposit ladder

Steps from no deposit to prepaid tickets, each cutting no-shows further at more guest friction. Climb only as far as the night needs. Part 10.

Displacement

The full-price guests a group or offer pushes out. Accept the booking only if it earns more than they would have. Part 11.

Dog

A dish with low contribution and low popularity. Replace it, unless it is the only choice for guests you need. Part 3.

Duration

The minutes a party holds a table, from seating to departure. 87 minutes at the specimen's Saturday dinner. Part 8.

Elasticity of demand

The percentage change in units sold for a 1% change in price. The specimen assumes −0.8 until measured. Part 3.

EMSR-b

Belobaba's method for setting nested protection levels across several price classes at once. Part 11.

EP cost

Edible-portion cost: AP price divided by yield. The cost of what actually reaches the plate. Part 2.

Erlang C

The queueing formula for the chance a party waits and how long, given tables, meal time and arrivals. Part 13.

Exponential smoothing

A forecast that weights recent weeks more than older ones by a constant α. Part 9.

Factor pricing

Plate cost divided by a target food cost percentage. Underprices cheap dishes and overprices expensive ones. Part 2.

Hold-out test

Testing a forecast on data it never saw. The only honest measure of accuracy. Part 9.

Hot, warm and cold hours

Hours above 70% seat occupancy, between 40% and 70%, and below 40%. Each calls for different tools. Part 6.

House ending

One consistent price ending used across the menu, here round up to ₹50 and take off 5. Part 2.

House price

The guide price for a dish from the blended method and the house ending. Menu engineering decides whether the dish can carry it. Part 2.

Kingman's formula

An approximation showing waits grow with utilisation and with the variability of arrivals and meal times. Part 13.

Kitchen pacing

Capping bookings per 15-minute slot at what the kitchen can fire. Part 10.

Late cancellation

A booking cancelled too late to resell, usually inside 24 hours. Count it with no-shows. Part 10.

Lifetime value (LTV)

The present value of a guest's margin over all future visits, given retention and a discount rate. Part 14.

Little's law

Items in a system = arrival rate × time in the system.

Tables in use = parties an hour × hours at the table. Part 7.

Littlewood's rule

Protect one more seat for the higher class while its expected spend beats the lower class's certain spend. Part 11.

MAPE

Mean absolute percentage error. How far, on average, forecasts miss. Under 10% is the standard for a reservations-led room. Part 9.

Margin of safety

How far covers can fall before the outlet makes a loss, as a share of current covers. 66% in the specimen. Part 16.

Menu engineering

Classifying dishes on contribution and popularity into Stars, Plowhorses, Puzzles and Dogs (Kasavana and Smith 1982). Part 3.

Menu mix

A dish's share of units sold within its category. Part 3.

Minimum spend

A floor on what a table or private room must spend. Start from the seat floor on peak nights. Part 11.

Nesting

A higher price class may always take a lower class's seat, never the reverse. Part 11.

Net RevPASH

RevPASH after discounts, commissions and fees. ₹1,087 at the specimen's 20:00 peak against ₹1,147 gross. Part 14.

Newsvendor rule

Take one more booking while the chance it fills a no-show outweighs the chance it causes a walk, weighted by their costs. Part 12.

No-show

A booked party that does not arrive and does not cancel. 12% at the specimen's peak without a guarantee. Part 12.

On the books (OTB)

Covers already booked for a future date. Part 9.

Overbooking

Taking more bookings than tables, so that no-shows are covered. Value it after the guarantee. Part 12.

Pace

Covers on the books against the booking curve at the same point. −11% means behind. Part 9.

Party mix

The share of parties by size. 56% of the specimen's parties are one or two guests. Part 7.

Party shrinkage

A party that arrives smaller than booked. A four that arrives as three. Part 10.

Pickup

Covers booked between today and the date. Additive pickup adds the average; multiplicative scales by the average ratio. Part 9.

Plate cost

Raw recipe cost plus the Q-factor. The true cost of one portion. Part 2.

Plowhorse

A popular dish with low contribution. Reprice in small steps or re-engineer its cost. Part 3.

Pooling

Running one queue across all tables and staff. Cuts waits sharply for the same load. Part 13.

Popularity line

70% of an equal share of the category's units. A dish above it is popular. Part 3.

Pour cost

The cost of a drink as a share of its price, including mixers and spillage. Judge drinks by cash margin as well. Part 14.

Price class

A group of guests who book and spend alike: tasting, à la carte, offer, group. Part 11.

Price index

Your price divided by the rival median for the same dish category. Part 3.

Prime cost

Cost of sales plus payroll. The first line to read in a restaurant P&L. Part 16.

Profitability line

The weighted average contribution margin of the category. A dish above it is profitable. Part 3.

Protection level

Seats held back for a price class and those above it. Part 11.

Puzzle

A high-contribution dish that sells too little. Reposition, describe, recommend. Part 3.

Q-factor

An allowance for uncosted items such as oil, salt and garnish, added to raw recipe cost. 8% here. Part 2.

Quality reserve

Spare capacity held in each server's section so they have time for the guest. 20% here. Part 15.

Realisation factor

The share of freed table time that actually fills with paying guests. 40% after Thompson (2009). Part 8.

Regression

A forecast built from drivers such as occupancy, delegates, holidays and rain. Best for walk-in meals. Part 9.

RevPASF

Revenue per available square foot, for function space. Part 15.

RevPASH

Revenue per available seat-hour. Seat occupancy times revenue per occupied seat-hour. The restaurant's RevPAR. Part 5.

RevPAST

Revenue per available square foot per session (time slot), for function space. Part 15.

Seat fit

Guests seated divided by seats at occupied tables. Low fit means couples at four-tops. Part 7.

Seat floor

The weighted spend of the guests a booking would displace. The lowest price a peak seat should sell for. Part 11.

Seat-hour

One seat available for one hour. The specimen sells 1,600 a day. Part 5.

Seat occupancy

Guests in house divided by seats. Part 5.

Slot

A booked block of table time sized to the party: 90 minutes for two, 120 for four. Part 10.

Space fit

Guests divided by the capacity of the space they book. Part 15.

Star

A popular dish with high contribution. Protect it. Part 3.

Supplement

An extra charge for upgrades, such as lamb chops or foie gras, or for splitting a main. Price it on the extra cost with a gentle multiplier. Part 14.

Table occupancy

Tables in use divided by tables. Can read full while seats sit empty. Part 5.

Theoretical food cost

What food cost should be from recipe cards and the sales mix, with no waste. Part 2.

Tracking signal

Cumulative error divided by mean absolute error. Beyond ±4, the forecast method is biased. Part 9.

TRevPAR

Total revenue per available room, for a hotel. Counts the restaurant, banquets and spa with the rooms. Part 15.

Turn

One seating of a table. Turns in a window = window minutes ÷ duration. Part 8.

Unconstraining

Adding turned-away demand back into history, so forecasts show true demand. Part 9.

USALI

Uniform System of Accounts for the Lodging Industry. The 12th Revised Edition is adopted from 1 January 2026. Part 16.

Utilisation

Load divided by capacity. For tables, ρ = arrivals ÷ (tables × service rate). Plan the peak at 80 to 85%. Part 13.

Waitlist quote

Position in line × minutes between releases of that table size, plus 5. Part 10.

Walk

Turning away a booked party because no table is free. Seat them within 15 minutes, with a drink. Part 12.

Wine grid

Bands of landed cost, each with its own multiplier, falling as cost rises. A floor at each band edge stops a dearer bottle listing cheaper. Part 14.

Yield

Edible-portion weight divided by as-purchased weight. Part 2.

PART 18

Formulas, rules and sources

Every formula on five pages, ten rules to pin above the pass, and where the evidence comes from.

- The formula sheet
- Ten rules
- Sources
- The workbook

18

The plate

MEASURE	FORMULA
Yield	EP weight ÷ AP weight
EP cost	AP price ÷ yield
Plate cost	Σ(qty × EP cost) × (1 + Q-factor)
Food cost %	plate cost ÷ menu price
Actual food cost	(opening + purchases − closing) ÷ food revenue
Factor price	plate cost ÷ target food cost %
CM price	plate cost + target contribution
House price	CEILING(blend, 50) − 5

The menu and the seat-hour

MEASURE	FORMULA
Contribution margin	price − plate cost
Menu mix	units ÷ category units
Popularity line	70% × (1 ÷ items in category)
Profitability line	Σ(units × CM) ÷ Σ units
Repricing	new units = units × (1 + E × %Δprice)
RevPASH	revenue ÷ (seats × hours) = seat occupancy × revenue per occupied seat-hour
Spend per seat-hour	check ÷ duration in hours

Tables, time and the book

MEASURE	FORMULA
Tables in use	λ × party share × minutes ÷ 60
Tables required	in use × (1 + buffer), rounded up
Turns	window ÷ duration
Realised covers	min(freed, spilled) × 40%
Additive pickup	OTB + average pickup
Multiplicative	OTB × average(final ÷ OTB)
Pace	OTB ÷ curve − 1
Smoothing	α × actual + (1 − α) × last smoothed

Protection, overbooking, queue

MEASURE	FORMULA
Littlewood	$y = \mu_1 + \sigma_1 \times \Phi^{-1}(1 - r_2 \div r_1)$
EMSR-b	$y = \bar{\mu} + \bar{\sigma} \times \Phi^{-1}(1 - r_next \div \bar{r})$
Displacement	accept if group value > displaced value
Critical ratio	Cu ÷ (Cu + Co)
Utilisation	ρ = λ ÷ (tables × 60 ÷ duration)
Erlang C wait	60 × P(wait) ÷ (c × μ − λ) minutes
Kingman	[ρ ÷ (1 − ρ)] × [(ca² + cs²) ÷ 2] × service time
Wait quote	position × release interval + 5

Channels, drinks, guests, ledger

MEASURE	FORMULA
Channel net	check × (1 − discount) × (1 − commission) − fee
Pour cost	cost ÷ ml × pour × 1.1 ÷ price
Lifetime value	margin a year × (1 + d) ÷ (1 + d − retention)
Servers needed	guests ÷ (p × (1 − q))
RevPAST	revenue ÷ (sq ft × sessions)
Prime cost	cost of sales + payroll
Contribution ratio	1 − variable costs ÷ revenue
Break-even covers	fixed costs ÷ contribution per cover

Ten rules for the pass, 1 to 5

- Measure by the hour. A daily average hides the hours that matter.
- Cost from the edible portion. The invoice price is the wrong number.
- Judge dishes in rupees. Food cost % is only a symptom.
- Cut the house's waits. Leave the meal alone.
- Furnish for the parties that come. Mostly ones and twos.

Ten rules for the pass, 6 to 10

- Book slots the kitchen can fire. Cap covers per 15 minutes.
- Guarantee before you overbook. And never overbook large tables.
- Plan the peak at 80 to 85%. The last 15% costs the most.
- No discounts in a hot hour. Offers belong in empty seats.
- Protect the regular. Lifetime value beats tonight's check.

Sources, 1 of 2

- Kimes, S.E. (1989), Journal of Operations Management 8(4).
- Kimes, S.E. and Chase, R.B. (1998), Journal of Service Research 1(2).
- Kimes, Chase, Choi, Lee and Ngonzi (1998), Cornell HRA Quarterly 39(3).
- Kimes, S.E. (1999), Cornell HRA Quarterly 40(3).
- Kimes, S.E. and Thompson, G.M. (2004), Decision Sciences 35(3).
- Thompson, G.M. (2002), Cornell HRA Quarterly 43(4); (2009), Cornell Hospitality Quarterly 50(1).
- Kimes, Wirtz and Noone (2002), Journal of Revenue and Pricing Management 1(3).
- Kimes and Wirtz (2002), Cornell HRA Quarterly 43(1).
- Noone, Kimes, Mattila and Wirtz (2007), Cornell HRA Quarterly 48(3).

Sources, 2 of 2

- Kasavana, M. and Smith, D. (1982), Menu Engineering.
- Yang, S.S. (2012), IJHM 31(3). Yang, Kimes and Sessarego (2009), IJHM 28(1).
- Littlewood (1972), AGIFORS. Belobaba (1989), Operations Research 37(2); (1992), EMSR-b.
- Kimes and McGuire (2001), Cornell HRA Quarterly 42(6).
- Maister (1985), The Psychology of Waiting Lines. Kingman (1961). Erlang (1917).
- British Food Journal 127(6) (2025): systematic review of restaurant RM.
- Cozzio, Tokarchuk and Maurer (2020), Current Issues in Tourism 24(20); (2022), Tourism Review 78(1). Koc (2016), Journal of Gastronomy and Tourism 2(2). Karson and Murphy (2013), Journal of Foodservice Business Research 16(4).
- OpenTable Restaurant Impact Report (October 2026). HFTP and AHLA, USALI 12th Revised Edition. CBRE (2025). FHRAI and Horwath HTL (2017–18).

Every number here is live in the workbook

Twenty-six sheets covering the tools in this guide. Change a gold cell and the whole chain recomputes, from the plate cost to the monthly prize.

Put in your own POS, recipe, payroll, reservation and banquet data, and decide on your own numbers.

- The link is in the first comment.
- Free to use in your own restaurant.
- Most slides name the sheet that goes with them.

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Third-generation hotelier. Born at The Oberoi Grand in Calcutta and raised in Oberoi hotels from Kathmandu to Cairo. 28 years in luxury hotels and restaurants, from Four Seasons to The Lodhi, where revenue rose 3.5 times.

I have opened 65 restaurants. Founder and CEO of Excelsior Asset Management, advising hotel and restaurant owners in India and beyond.

Save it. Share it with your chef. Then time one dinner service.

Follow for the hotel edition and the workbook updates. Questions are welcome in the comments.

Non multa, sed multum.