

From list to pocket, on one page

Chapters 1 and 4. Start at revenue at list, which no report carries, and walk down to the money that arrived. Sort the deductions by what they are, not by who spends them.

Business / unit		Prepared by	
Period		Date	

Line	On or off the invoice	A share of	Ledger page and owner	Money	% of list	% of invoice
Revenue at list (price file x volume file)						
Order-size discount						
Negotiated discount						
INVOICED REVENUE						
Annual volume rebate						
Cash discount taken						
Freight allowance						
Co-operative marketing						
Growth bonus						
Returns and credits						
Promotional allowance						
Other: ship-and-debit, free goods, year-end settlements						
POCKET REVENUE						
Variable cost of goods						
Sales commission						
CONTRIBUTION						
Fixed costs						
OPERATING PROFIT (must equal the reported figure to the cent)						

The give-away	Money	Against operating profit
On the invoice		
Behind the invoice		
Total, list to pocket		

Ravensworth: 69,880,000.00 at list, 60,253,524.93 invoiced, 56,124,433.13 in the pocket; 13.8 points on the invoice and 5.9 behind it; the give-away is 2.4 times operating profit of 5,739,362.59. Reconcile to the reported accounts before anyone argues about a line.

One account-family line, list to pocket

Chapter 4. One line per family: the same account pays a different price on each product. Every off-invoice rate is a share of the invoice.

Account		Salesperson	
Family		Annual units	

Step	Rate	A share of	Per unit	For the year	Who set it, and when
List price					
Order-size discount (automatic)					
Negotiated discount (headline x family)					
INVOICE PRICE					
Annual volume rebate (retroactive?)					
Cash discount taken					
Freight allowance					
Co-operative marketing					
Growth bonus					
Returns and credits					
Promotional allowance					
POCKET PRICE					
Variable cost					
Commission (share of invoice)					
CONTRIBUTION					

Reading	Value
Discount the invoice shows, points of list	
Pocket price, points below list	
Gap between the two, points of list	
Contribution at list after commission, per unit	
Share of that contribution the discounting took	

Calibration: DIS-024 on structural adhesives, 148.00 list, 129.03 invoice (12.8 points), 112.51 pocket (24.0 points below list), 31.93 of contribution against 67.04 at list: 52.4 per cent of it given away on an account nobody worries about.

The four levers and the break-even card

Chapters 2 and 3. Last year's closed accounts, one multiplication each. Use the pocket margin, unrounded, never the margin at list.

Business / unit		Prepared by	
Period		Date	

Lever, one per cent each	Computation	Change in operating profit	% of operating profit	Owner
Price, volume unchanged				
1% of pocket revenue less 1% of commission				
Volume, prices unchanged				
Variable cost down				
Fixed costs down				

Your margin	Value
Pocket contribution margin m (contribution over pocket revenue)	
The same with commission moving with price: contribution over (pocket less commission)	
One point of price, in points of volume (price lever over volume lever)	

Price change d	A cut needs $d/(m-d)$	A rise can lose $d/(m+d)$	Structural / family 1	Family 2	Family 3

The card for the desk: a 5 per cent cut needs ____ per cent more volume; a 5 per cent rise can lose ____ per cent. The break-even holds only where the next unit costs what the average unit costs: treat it as a floor.

Ravensworth at 26.9746 per cent: 549,193.63 / 151,393.63 / 397,800.00 / 94,000.00; one point of price is worth 3.63 points of volume; a 5 per cent cut needs 22.8 per cent more volume, a 5 per cent rise can lose 15.6.

The band, and what explains it

Chapters 5 and 6. Draw the band inside a segment and a family; then match a cohort on the basis your rebate is keyed on; then test size against the account owner, with the chance level beside it.

Business / unit		Prepared by	
Period		Date	

Segment	Family	Lines	Min	P25	Median	P75	Max	Corr. with units

Same-size cohort (matched on the rebate basis)	Value
Accounts, and their range of annual units	
Band of pocket price, points of list	
Of which explained by published rules still inside the match (order size, terms, allowances)	
Left for the negotiated discount	

Two-column test, one segment	Value
Accounts n, and groups k (account owners)	
Size explains (R-squared on log units)	
Grouping explains	
Chance level for that many groups: $(k-1)/(n-1)$	
Grouping, adjusted: $1-(1-R^2)(n-1)/(n-k)$	
F and p	
Money: one book repriced at another's pocket share (a ceiling, not a target)	

Ravensworth, direct industrial: size 0.7 per cent, grouping 17.9 against a chance level of 11.9, adjusted 6.8, F 1.62, p 0.152. The grouping bounds everything nobody recorded about the account; it does not attribute the spread to a person. Never take this table to a performance review.

The rebate tier review

Chapter 7. Every month, every account near a tier. A retroactive tier prices the last units at the average; inside the two windows they cost money.

Business / unit		Prepared by	
Period		Date	

Account	Units to date	Next tier	Units short	Rate now / at tier	Other off-invoice %	Free window	Below-cost window	Timing or demand?

For one account	Formula
Free window: the last units whose rebate jump exceeds their invoice value	
$(r_{hi} - r_{lo}) \times T / ((1 - r_{hi}) + (r_{hi} - r_{lo}))$	
Below-cost window: the last units that do not cover variable cost, commission and every other off-invoice deduction	
$(r_{hi} - r_{lo}) \times T \times p / ((p - v - c \times p - o \times p) - r_{hi} \times p + (r_{hi} - r_{lo}) \times p)$	

Across the book	Value
Accounts within 15 per cent below a tier, and units short	
Rebate bill if all of them cross, on volume you already have	
Retroactive bill less the same rates paid incrementally: the price increase a conversion is	
Decision on that money: taken, or given back through higher incremental rates	

DIR-075, 640 units short of 10,000: the free window is 153 units; counting its freight allowance and returns (2.1 per cent of invoice) the below-cost window is 458 units, not the 430 the book prints, and the 640 units leave 4,967.53, not 6,087.91. The conversion is worth 652,643.92.

The payment terms register

Chapter 8. Every term has a rate. Two points off the amount payable, divided by 0.98; the days bought are net days less discount days.

Business / unit		Prepared by	
Period		Date	

Term	Annual rate	Accounts on it	Take the discount	Invoiced revenue of takers	Discount taken	Value of the days	Overpayment

The counterfactual: if net accounts really pay on day	Days bought	Value	Overpayment
30			
40			
50			

The condition	Value
Accounts that take the discount and pay after the discount day	
Their discount, and the days actually gained	
Unearned part, money	
Written authority for credit control to debit it without the salesperson: yes / no	

A request for longer terms	Value
Extra days asked for	
Invoiced revenue it applies to	
Cost a year at your cost of money	
The same concession expressed in points of price	

Ravensworth: 2/10 net 30 is 37.2 per cent a year against 7.0; 406,079.90 taken for days worth 76,320.76; overpayment 329,759.14 (253,438.38 if net accounts pay on day 50); eighteen accounts take it and pay around day 25: 124,294.08. Withdrawing the term is a two-point increase to your best finance departments.

Account profit and the cost to serve

Chapter 9 and 16. Two declared rates, carved OUT of the fixed base, never added to it. Say what share of the attributable base they recover, then move them until the answer flips.

Business / unit		Prepared by	
Period		Date	

The rates	Value
Cost per order (handling, picking, invoicing, credit)	
Cost per account a year (visits, technical support, management)	
Total carved out of fixed costs	
Attributable fixed base (warehouse and distribution plus selling)	
Share of it the rates recover	
Multiple at which the segment ranking reverses (bisection, not a table row)	

Segment	Accounts	Pocket revenue	Contribution	Cost to serve	Account profit	% of pocket	Pocket % of list

The curve	Value
Top fifth of accounts: share of total profit	
Peak of the cumulative curve, % of total	
Accounts beyond the peak, and what they lose together	

Loss-making account	Units	Orders	Pocket % of list	Cost to serve	Loss	Fix: minimum order / channel / leave alone

Ravensworth at 145.00 and 6,500.00: 44.8 per cent of 3,700,000.00 recovered; the ranking reverses at 1.17 times; eleven accounts lose 25,389.65, all paying 94.2 to 99.0 per cent of list. Put freight and receivables into the next version: Case 3 does.

The price increase: plan and realization

Chapters 10 and 13. Compute the stand-still rate before choosing the announcement; report rate obtained and months at the new price separately; sign every exemption.

Business / unit		Prepared by	
Period		Date	

Before the announcement	Value
Cost inflation in money	
Stand-still rate: that money over pocket revenue	
Announced rate, and the part of it that is ambition	
Full year of the full announcement, and each month of delay	

Segment	Pocket revenue	Rate obtained	Effective date	Months	Exempted (signed by)	Realized %	Money	Commission created

The year in four numbers	Value
Announced	
Cost inflation	
Needed to stand still	
Realized, and effect on contribution after the commission the increase creates	

A paper to skip the increase: what the first year costs at your REALIZED rate, what three years cost, and what competitors did. Without it, the increase happens.

Ravensworth: 5.0 announced, 4.1 cost inflation, 2.9 needed, 2.3 realized; 1,291,961.25 against 1,630,980.00. Commission charged segment by segment is 27,423.12, not 27,740.22, so contribution fell 366,441.87. A skipped 3.5 per cent year costs 884,954.72 at the realized rate.

A competitor has cut: match or hold

Chapter 11. Convert the cut to the pocket price first, compute the threshold before anyone argues, then ask for named accounts rather than an elasticity.

Business / unit		Prepared by	
Period		Date	

The arithmetic	Value
Competitor's cut, and what it means off YOUR pocket price	
Family contribution today	
Cost of matching everywhere (commission falls with the invoice)	
Break-even defection: cost of matching over contribution	
Elasticity at which matching becomes cheaper: break-even over the cut	
Contestable segments only: cost, and break-even	

Named account in play	Segment	Units of the family	Contribution at risk	Evidence (quote, letter, buyer)	Decision

Total named contribution against the threshold	Value
Named contribution at risk	
Threshold in money	
Verdict: hold / match selectively / match	

Ravensworth sealants: matching costs 1,598,532.89 a year; holding is cheaper unless 32.9 per cent of the family contribution walks, an elasticity past -4.11. The elasticity is a cross-price response nobody measured: the most provisional number in the book.

The price-volume-mix bridge

Chapter 12. Five effects that sum to the change in contribution, a check line at zero, the convention written at the foot, and the alternatives shown.

Business / unit		Prepared by	
Period		Date	

Effect	Definition	Money
Volume		
Change in units at year-one average contribution per unit		
Mix		
Shift between families at year-one unit contributions		
Price		
Change in POCKET price per unit, at year-two volumes		
Commission		
Moves with the invoice price		
Variable cost per unit		
Change in unit cost, at year-two volumes		
CHANGE IN CONTRIBUTION		
Year two less year one		
CHECK: sum of the five less the change		
Must read 0.00		

Family	Units Y1	Units Y2	Pocket/unit Y1	Pocket/unit Y2	Margin Y1	Margin Y2

Convention	Price effect
Pocket price, year-two volumes (the harsher)	
Pocket price, year-one volumes	
Invoice price, year-two volumes	

Three family margins falling at once is price, cost or both: mix cannot do it. Ravensworth year two: volume +774,292.16, mix -329,158.64, price -1,089,991.39, commission +21,533.04, cost -825,193.32; the review blamed mix.

The discount request

Chapters 14 and 17. No request is discussed without the three numbers at the top. Convert a band off list at the ACCOUNT's invoice share of list, never at its pocket share.

Account		Requested by	
Family		Date	

The request	Value
Extra discount asked, points of list	
On-invoice deductions already carried, share of list	
Off-invoice leakage on the account, share of invoice	
Account units in the family this year	

The three numbers	Value
1. Pocket price after the discount, share of list, AGAINST THE SEGMENT FLOOR	
2. Break-even volume: d converted at the invoice share, over (account margin less d), IN UNITS	
3. Contribution per unit after the discount and after commission	

What it costs whom	Value
Share of the commission the representative gives up	
Share of the contribution the company gives up	
Ratio between the two	

Authority band (off list)	Volume the band commits the company to	Approver	Signature
Up to 3.0 per cent			
Up to 6.0 per cent			
Up to 10.0 per cent			
Above 10.0 per cent			

Where will the volume come from, in units of what this account buys, this year? Expiry date of the discount (twelve months, renewal by a positive act):

Ravensworth: 3, 6 and 10 points off list commit the company to 14.8, 34.8 and 75.4 per cent more volume. Five points on a 1,000-pail order cost the representative 5.0 per cent of the commission and the company 11.7 per cent of the contribution: 2.34 to one.

Thirty questions before you approve a discount

Appendix B, condensed. Answer the first eleven first: they give the distance from list to pocket and the volume a discount needs at your margin.

Business / unit		Prepared by	
Period		Date	

Question	Your answer	Ravensworth / note
Waterfall		
1 Revenue at list		
2 How many mechanisms between list and bank		
3 On the invoice / behind it, in points		
4 Owner of each off-invoice item		
5 Give-away against operating profit		
Margin		
6 Pocket margin, company and family		
7 Truly variable costs		
8 A point of price in points of volume		
9 The four levers ranked, in money		
10 Which lever has an owner		
Break-even		
11 5% cut needs / 5% rise can lose		
12 Is it printed on the request		
13 Volume in units, this account, this year		
14 At the thinnest family's margin		
15 Does the next unit cost more		
Band		
16 Range inside one segment and family		
17 Correlation with volume		
18 Same-size cohort on the rebate basis		
19 Size vs owner vs chance		
20 Which family gives ground		
Rebates and terms		
21 Retroactive or incremental		
22 Accounts near a tier, and the bill		
23 Free and below-cost windows		
24 Term as an annual rate		
25 Takers who pay late		
26 Thirty more days on the largest segment		
Increase and plan		
27 Announced, realized, cost inflation		
28 Commission base: what a 5% discount costs each side		
29 Conversion of the tiers, called an increase		
30 Floor at P25: worth, tolerance, largest account		