



Cost to Serve Profitability Analysis

Why & How

5 July 2006

: FGC

NEW ZEALAND FOOD & GROCERY COUNCIL

AdvisorBase

Workshop will work through an illustrative Cost to Serve analysis

- First some background
- The Cost to Serve Profit Model
- Beer 'N Chips Co.
- Cost to Serve methodology

Tea Break

- Scenario modelling methodology
- Revenue & Discounts
- Product costs

Lunch

- Customer Cost to Serve
 - Logistics
 - Selling

Tea Break

- Overheads
- Beer 'N Chip revitalised

These are interesting times

- Woolworths
- Trans-Tasman market
- Foodstuffs response
- The Warehouse into grocery
- Pressure to reduce ranging
- Increase of private label (house brands)

**For suppliers business is more complex & demanding
... and pressure to maintain margins**

Margins are getting tighter - There is no longer room for guess work in key decisions

Suppliers are pressured to make decisions without the supporting information

- Stressful
- Unnerving
- Risky

Understanding Cost to Serve and scenario modelling supports decision making

Cost to Serve and scenario modelling answers the “what if?” question

What if we ...

- ... gave a discount for full pallet purchases?
 - How much could we give away?
 - What would we save?
- ... shipped full containers to Chch?
 - How much could we give away?
 - What would we save?
- ... packed 6 per case instead of 12?
- ... introduced outbound tele-sales and reduced reps?
 - If we lost sales how much could we afford, but ..
- ... dropped a product line?
 - Is less more?



Introducing Beer 'N Chip

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Beer 'N Chip Co. is an illustrative company



A micro brewery, flushed with the success of its beers decided to buy a growing snack and dips business ... Chips 'N Dips.

There were apparent synergies:

- Chips 'N Dips:
 - Sold premium product through grocery and foodservice
 - Had an established field selling infrastructure
 - Had expertise in its markets
- MicroBrew:
 - Had award winning premium beers
 - Invested in a larger brewery
 - Sold mainly through its own chain of pubs
 - Distributed increasing quantities to independent pubs & clubs



With the acquisition MicroBrew would acquire the expertise and infrastructure to grow its own sales dramatically – and add a profitable complementary product line

Beer 'N Chip has a focused customer base for its tightly controlled product range



Customers

- Grocery
 - Grocery DCs
 - Grocery DSD
- Mass Merchants
- Pubs & Clubs
- Distributors

Products:

- Premium beer
- Quality chips
- Superior dips



Cost to Serve Profit Model

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Take a fresh look at real profitability ... view it differently

Gross Sales

Discounts & Promo

Net Net Sales

Cost Of Goods Sold

Net Margin

Cost to Serve

Net Contribution

Overheads

Take a fresh look at real profitability ... view it differently

Gross Sales

Cost Of Goods Sold

Gross Margin

Discounts & Promo

Net Margin

Divisional costs

Earnings

Gross Sales

Discounts & Promo

Net Net Sales

Cost Of Goods Sold

Net Margin

Cost to Serve

Net Contribution

Overheads

Compare traditional view with Cost to Serve view



Beer 'N Chip Co. P&L Report - Total Product Portfolio	
	TOTAL
Gross Sales	99,784,080
Cost of Goods Sold	44,548,634
Gross Margin	55,235,446
Discounts / Incentives	19,644,662
Distribution Costs	8,103,960
Advertising & Promotions	2,970,863
Sales & Marketing Overhead	4,908,587
Administration	11,334,105
Total Overheads	46,962,178
Net Operating Income	8,273,267
Other Income	
EBITA	8,273,267
% of Gross Sales	8%

	Total Business
Gross Sales Value	100,000,000
Std terms	8,101,876
Promo on invoice	5,447,126
On inv. terms % GSV	13.5%
Net on invoice	86,450,997
Net % of GSV	86%
Settlement	2,812,500
Promo - co-op&rebates	3,499,079
Other terms % of GSV	6.3%
Net Net	80,139,418
Net Net % of GSV	80%
Product Costs	44,548,634
Prod costs % of GSV	45%
Net Margin	35,590,784
Cont. after product cost % of GSV	36%
Warehousing & inwards handling	2,339,222
Order processing	2,005,514
Outwards handling WH	1,793,712
Delivery to customer	2,979,751
Reps & Merchandisers	4,767,063
Mg'ment; sales, key acc & category	2,541,044
Financing; AR & inventory holding	1,190,244
Total cost to serve	17,616,551
Cost to Serve as % of GSV	17.6%
Cont. after cost to serve	17,974,233
Cont as % of GSV	18%
Advertising & OH	10,891,209
other O/H % of GSV	11%
Business contribution	7,083,024
Business contribution as % of GSV	7.1%

- Financing costs = \$1,190,244
- EBITA less financing = \$7,082,024



The bottom line stays the same, it's how you get there that changes

In practical terms what's the difference



**At first glance nothing, company profit is unchanged
... but ...**

... when we look closer we see key differences

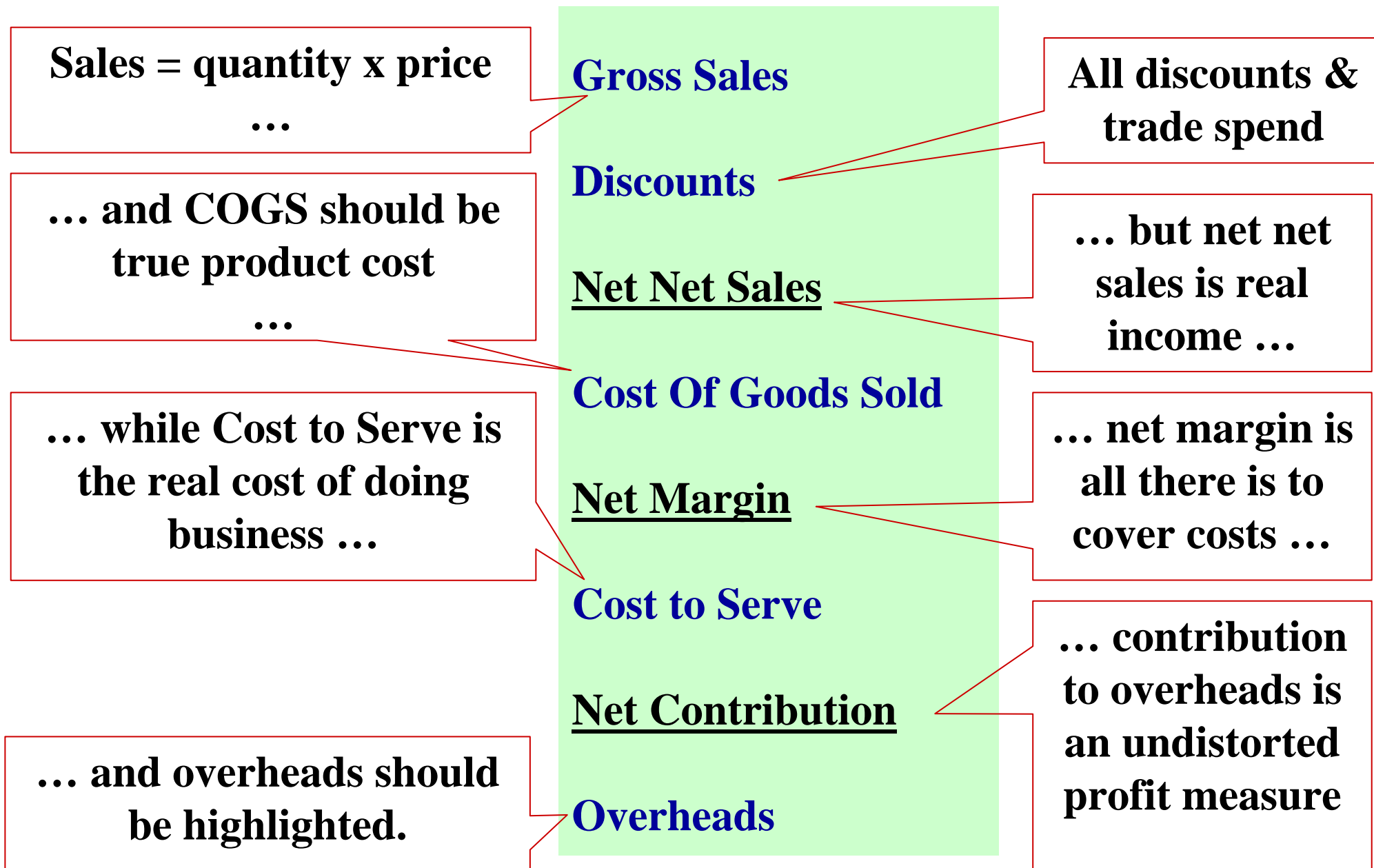
Beer 'n Chip Co illustrates the approach

Old style P&L – New C2S contribution statement

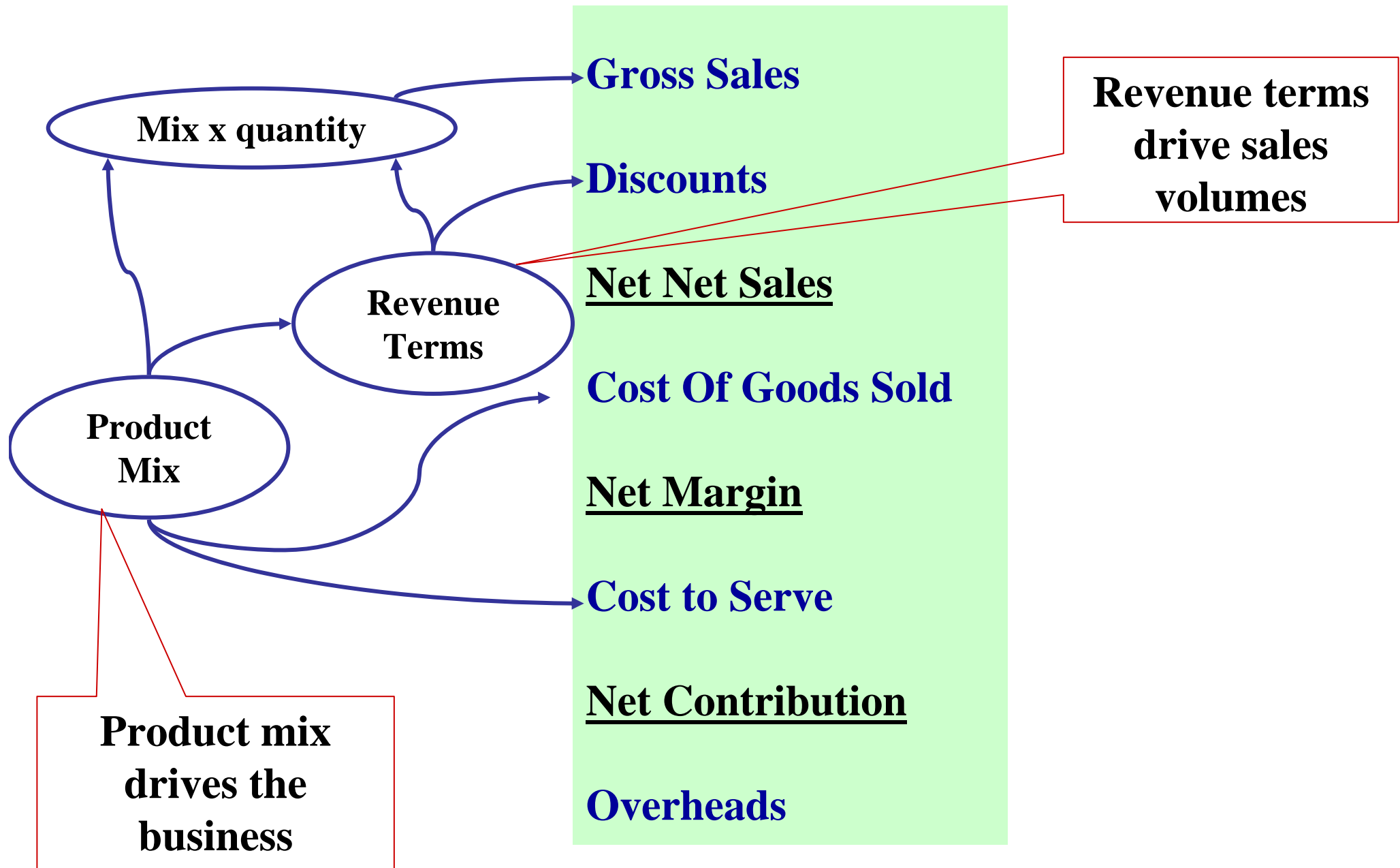
Key differences

- GSV c.f. Sales
- GM%
- Position of promo costs (co-op)
- Inventory holding costs
- C2S c.f. operating costs

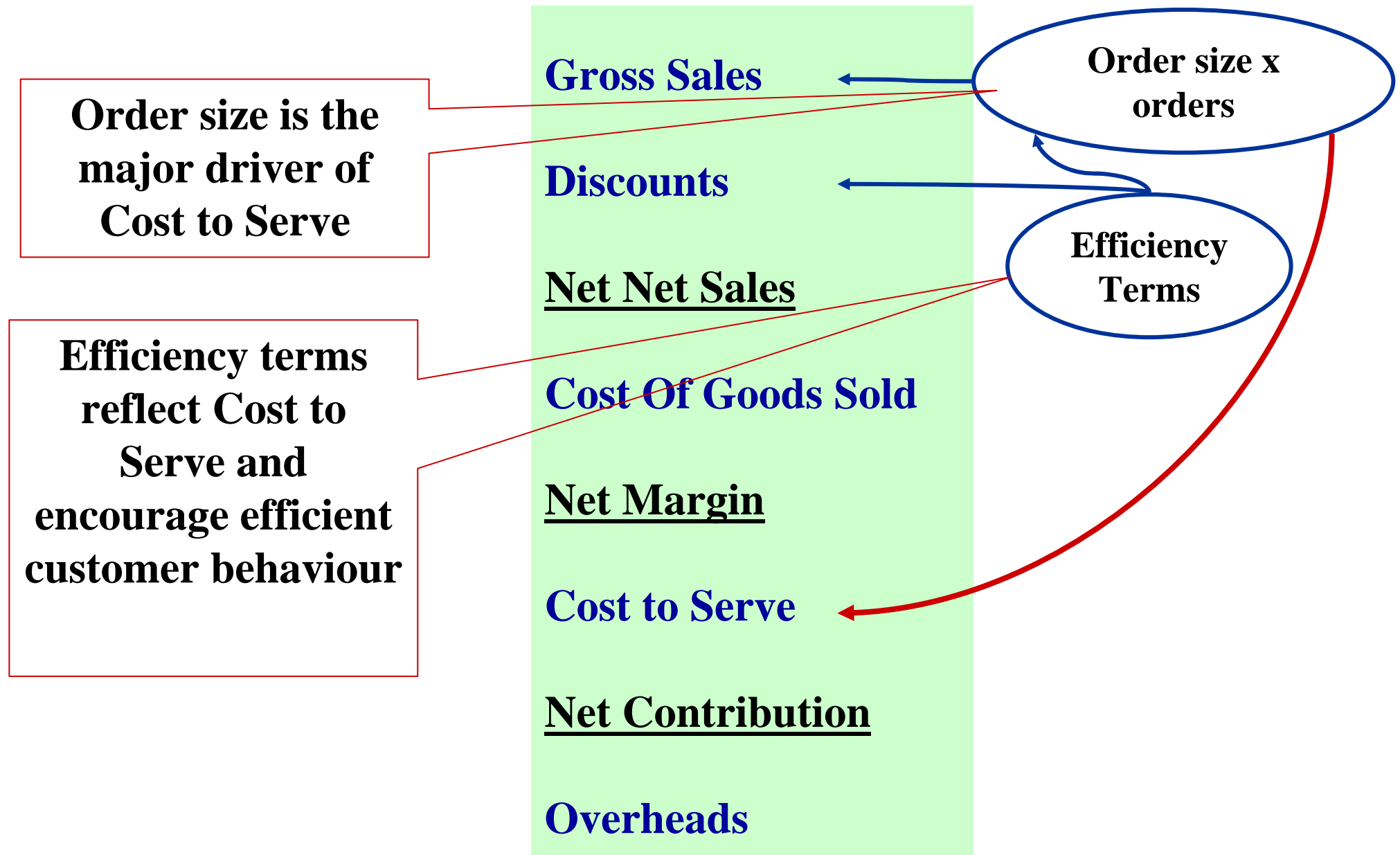
It is important not to lose information



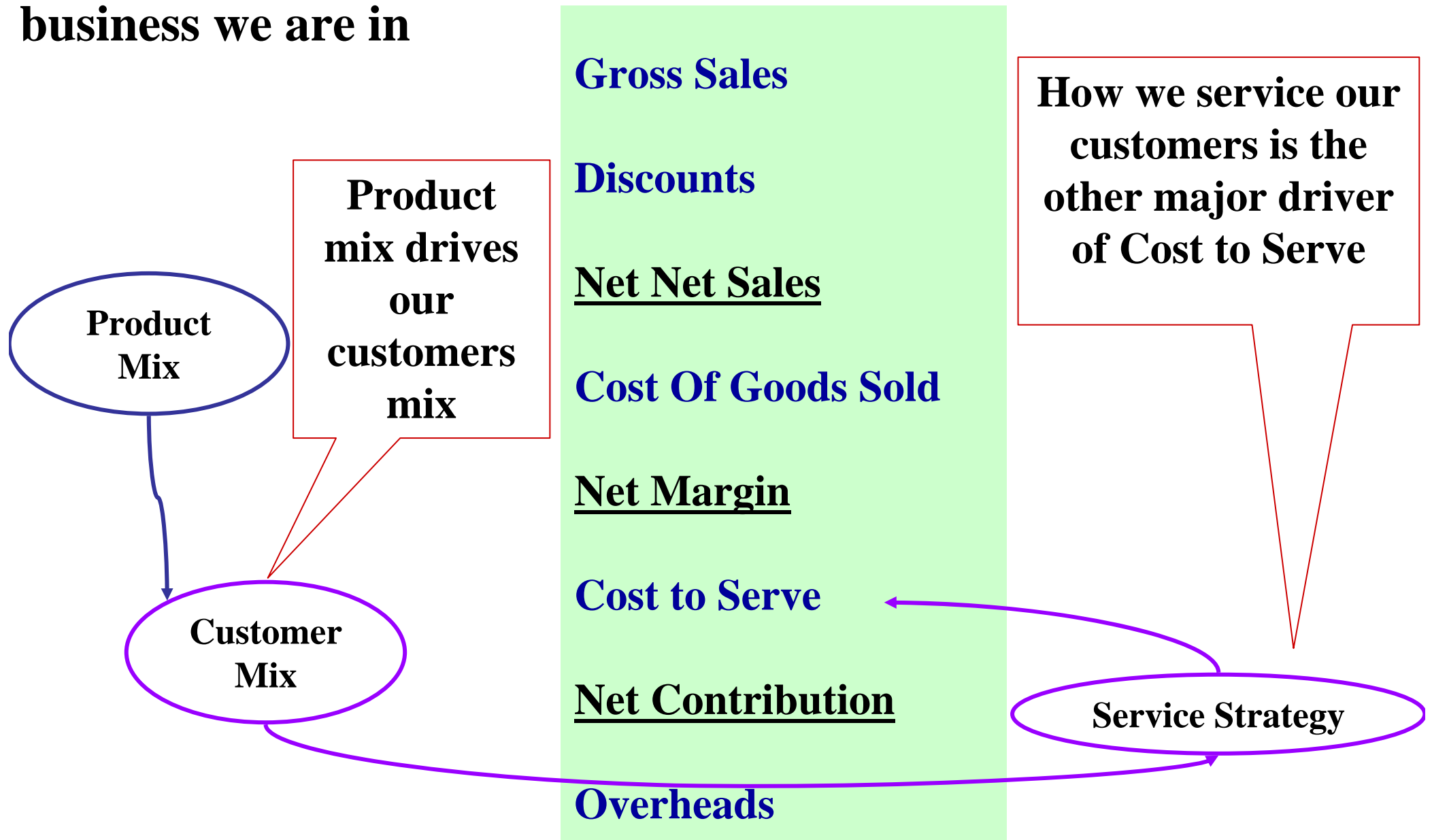
Gross sales is what we sell x price ... which seems simple



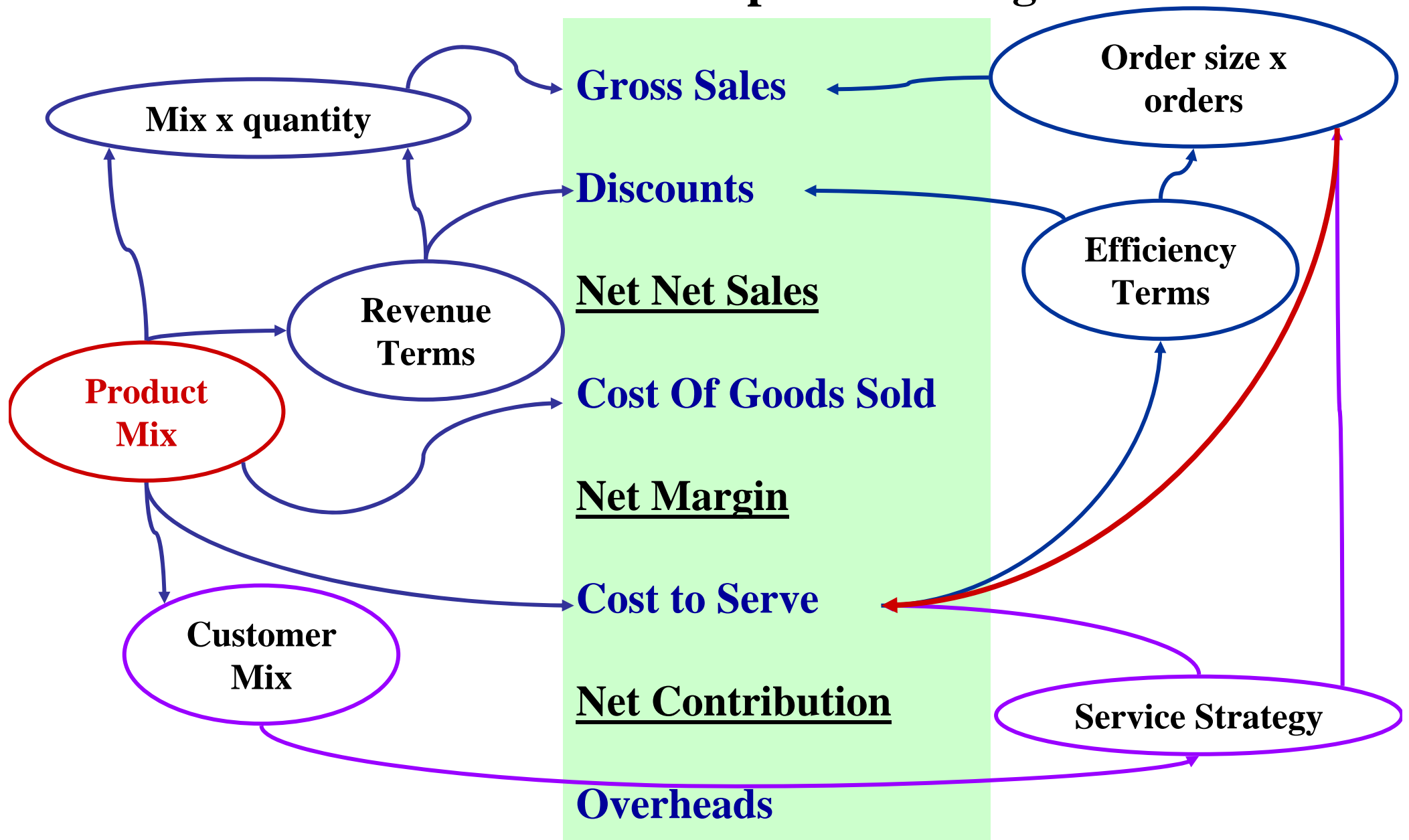
Revenue is also ‘number of orders’ x ‘average order size’



Route to market and service level reflect how we face the business we are in



The “Cost to Serve Profit Model” pulls it all together





Let's look at Beer 'N Chip

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Our first detailed look at Cost to Serve: by customer profitability, not all channels equally profitable



	Total Business	Total Grocery	Mass Merchants	Pubs & Clubs	Distributors
Gross Sales Value	100,000,000	54,750,000	4,250,000	23,650,000	17,350,000
Std terms	8,101,876	4,519,069	593,350	1,835,754	1,153,704
Promo on invoice	5,447,126	3,365,878	246,052	839,839	995,356
On inv. terms % GSV	13.5%	14.4%	19.8%	11.3%	12.4%
Net on invoice	86,450,997	46,865,053	3,410,598	20,974,407	15,200,940
Net % of GSV	86%	86%	80%	89%	88%
Settlement	2,812,500	2,005,579	154,025	-	652,895
Promo - co-op&rebates	3,499,079	2,855,521	107,750	44,971	490,837
Other terms % of GSV	6.3%	8.9%	6.2%	0.2%	6.6%
Net Net	80,139,418	42,003,952	3,148,822	20,929,436	14,057,208
Net Net % of GSV	80%	77%	74%	88%	81%
Product Costs	44,548,634	25,040,757	1,644,176	10,034,002	7,829,699
Prod costs % of GSV	45%	46%	39%	42%	45%
Net Margin	35,590,784	16,963,195	1,504,646	10,895,434	6,227,509
Cont. after product cost % of GSV	36%	31%	35%	46%	36%
Warehousing & inwards handling	2,339,222	1,157,586	137,337	654,009	390,290
Order processing	2,005,514	1,082,068	26,307	769,909	127,231
Outwards handling WH	1,793,712	776,472	51,588	792,817	172,835
Delivery to customer	2,979,751	1,483,402	130,290	1,035,089	330,970
Reps & Merchandisers	4,767,063	2,347,112	5,705	2,262,029	152,217
Mg'ment; sales, key acc & category	2,541,044	697,162	169,514	1,312,616	361,752
Financing; AR & inventory holding	1,190,244	628,003	61,333	301,205	199,702
Total cost to serve	17,616,551	8,171,805	582,074	7,127,675	1,734,997
Cost to Serve as % of GSV	17.6%	14.9%	13.7%	30.1%	10.0%
Cont. after cost to serve	17,974,233	8,791,390	922,572	3,767,759	4,492,512
Cont as % of GSV	18%	16%	22%	16%	26%
Advertising & OH	10,891,209	5,962,937	462,876	2,575,771	1,889,625
other O/H % of GSV	11%	11%	11%	11%	11%
Business contribution	7,083,024	2,828,453	459,695	1,191,988	2,602,887
Business contribution as % of GSV	7.1%	5.2%	10.8%	5.0%	15.0%

Did Beer 'N Chip know Pubs & Clubs had a much higher Cost to Serve?

Our first detailed look at Cost to Serve, shows up some weaknesses



Profitability by customer – key observations

	Total Business	Total Grocery	Mass Merchants	Pubs & Clubs	Distributors
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Cont. after product cost % of GSV	36%	31%	35%	46%	36%
Warehousing & inwards handling	2.3%	2.1%	3.2%	2.8%	2.2%
Order processing	2.0%	2.0%	0.6%	3.3%	0.7%
Outwards handling WH	1.8%	1.4%	1.2%	3.4%	1.0%
Delivery to customer	3.0%	2.7%	3.1%	4.4%	1.9%
Reps & Merchandisers	4.8%	4.3%	0.1%	9.6%	0.9%
Mg'ment; sales, key acc & catego	2.5%	1.3%	4.0%	5.6%	2.1%
Financing; AR & inventory holding	1.2%	1.1%	1.4%	0.0%	1.2%
Total cost to serve	17,616,551	8,171,805	582,074	7,127,675	1,734,997
Cost to Serve as % of GSV	17.6%	14.9%	13.7%	30.1%	10.0%
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- Highest discounts to Mass Merchants
 - Partly due to hidden (List Price) discount
- Lowest discounts to Pubs & Clubs
- Dist have lowest Cost to Serve – Pubs & Clubs highest
- High selling costs in Pubs & Clubs
- Grocery as a mix of DC & DSD sits near the middle.

Knowing the profitable customers raised some questions

– what about product profitability?



	BEER	CHIPS	DIPS
sales	75,000,000	20,000,000	5,000,000
Invoice terms	6,962,356	3,360,748	591,272
After invoice terms	6,567,161	2,018,716	360,328
Discounts as % of sales	18.0%	26.9%	19.0%
Net Net	61,470,483	14,620,535	4,048,400
Net Net % of sales	82.0%	73.1%	81.0%
COGS	36,202,051	6,033,675	2,312,909
Net Margin	25,268,432	8,586,860	1,735,491
Cont after prod costs % of sales	33.7%	42.9%	34.7%
Warehousing	1,122,139	781,138	59,133
Inwards handling	419,959	348,411	26,247
Order processing	1,187,202	354,974	45,533
Outwards handling	1,418,283	315,600	59,829
Freight to customer	1,590,060	1,305,854	83,837
In store services (rep & merch)	2,112,911	2,337,749	316,403
Sales management	494,605	616,699	74,517
Key acc & cat mgment	399,555	749,077	206,591
Finance inventory & AR	746,357	394,189	49,699
Cost to Serve	9,491,071	7,203,690	921,789
Cost to serve % of sales	12.7%	36.0%	18.4%
Cont. After Cost to Serve	15,777,361	1,383,170	813,702
Cont after cost to serve % of sales	21.0%	6.9%	16.3%
Advertising	2,228,147	594,173	148,543
Direct and manage business	5,940,260	1,584,069	396,017
Business Contribution	7,608,954	-795,072	269,142
Business Contribution % of sales	10.1%	-4.0%	5.4%

Clearly a problem within the chips category

➤ *How much did we pay for that business??*

The Cost to Serve profitability model highlights the source of the chips problem



Profitability by product – key observations

	BEER	CHIPS	DIPS
Gross Sales Value	75,000,000	20,000,000	5,000,000
Invoice terms	6,962,356	3,360,748	591,272
After invoice terms	6,567,161	2,018,716	360,328
Discounts as % of sales	18.0%	26.9%	19.0%
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Cont after prod costs % of sales	33.7%	42.9%	34.7%
Warehousing	1.5%	3.9%	1.2%
Inwards handling	0.6%	1.7%	0.5%
Order processing	1.6%	1.8%	0.9%
Outwards handling	1.9%	1.6%	1.2%
Freight to customer	2.1%	6.5%	1.7%
In store services (rep & merch)	2.8%	11.7%	6.3%
Sales management	0.7%	3.1%	1.5%
Key acc & cat mgmt	0.5%	3.7%	4.1%
Finance inventory & AR	1.0%	2.0%	1.0%
Cost to Serve	9,491,071	7,203,690	921,789
Cost to serve % of sales	12.7%	36.0%	18.4%
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- High discounts (Chips)
- High rep time (Chips)
- COGS % (Beer highest, then Dips)
- Inventory holding (high for Chips)
- Cost to Serve lowest for Beer

The real story lies in viewing profit by customer by product



Profitability by customer by product

BEER	Grocery	Pubs & Clubs
GSV	45,000,000	15,750,000
Invoice terms	4,808,531	843,194
After invoice terms	4,984,171	485,198
Discounts as % of sales	22%	8%
Net Net	35,207,298	14,421,608
Net Net % of sales	78%	92%
COGS	21,721,230	7,602,431
Net Margin	13,486,068	6,819,178
Cont after prod costs % of sales	30%	43%
Warehousing	1.4%	2.0%
Inwards handling	0.6%	0.6%
Order processing	1.4%	4.2%
Outwards handling	1.6%	2.3%
Freight to customer	2.2%	2.6%
In store services (rep & merch)	2.3%	6.6%
Sales management	0.3%	2.1%
Key acc & cat mgmt	0.3%	1.1%
Finance inventory & AR	1.0%	1.0%
Cost to Serve	4,964,904	3,544,030
Cost to serve % of sales	11%	23%
Cont. After Cost to Serve	8,521,164	3,275,148
Cont after cost to serve % of sales	19%	21%
Advertising	1,336,888	467,911
Direct and manage business	3,564,156	1,247,455
Business Contribution	3,620,120	1,559,782
Business Contribution % of sales	8%	10%

Sample of 2 customers groups profitability for beer.

- Grocery has far higher level of discounts
- Pubs & Clubs are double the Cost to Serve
- Grocery's low Cost to Serve fails to fully compensate for higher discounts



Cost to Serve

Methodology Overview

AdvisorBase

This workshop focuses on supplier Cost to Serve analysis ... BUT more valuable is Cost to Shelf analysis

Cost to Shelf analysis is the summation of

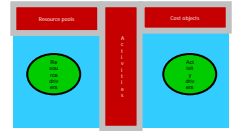
- Supplier Cost to Serve and
- Retailer Cost to Serve

The advantage of Cost to Shelf analysis is:

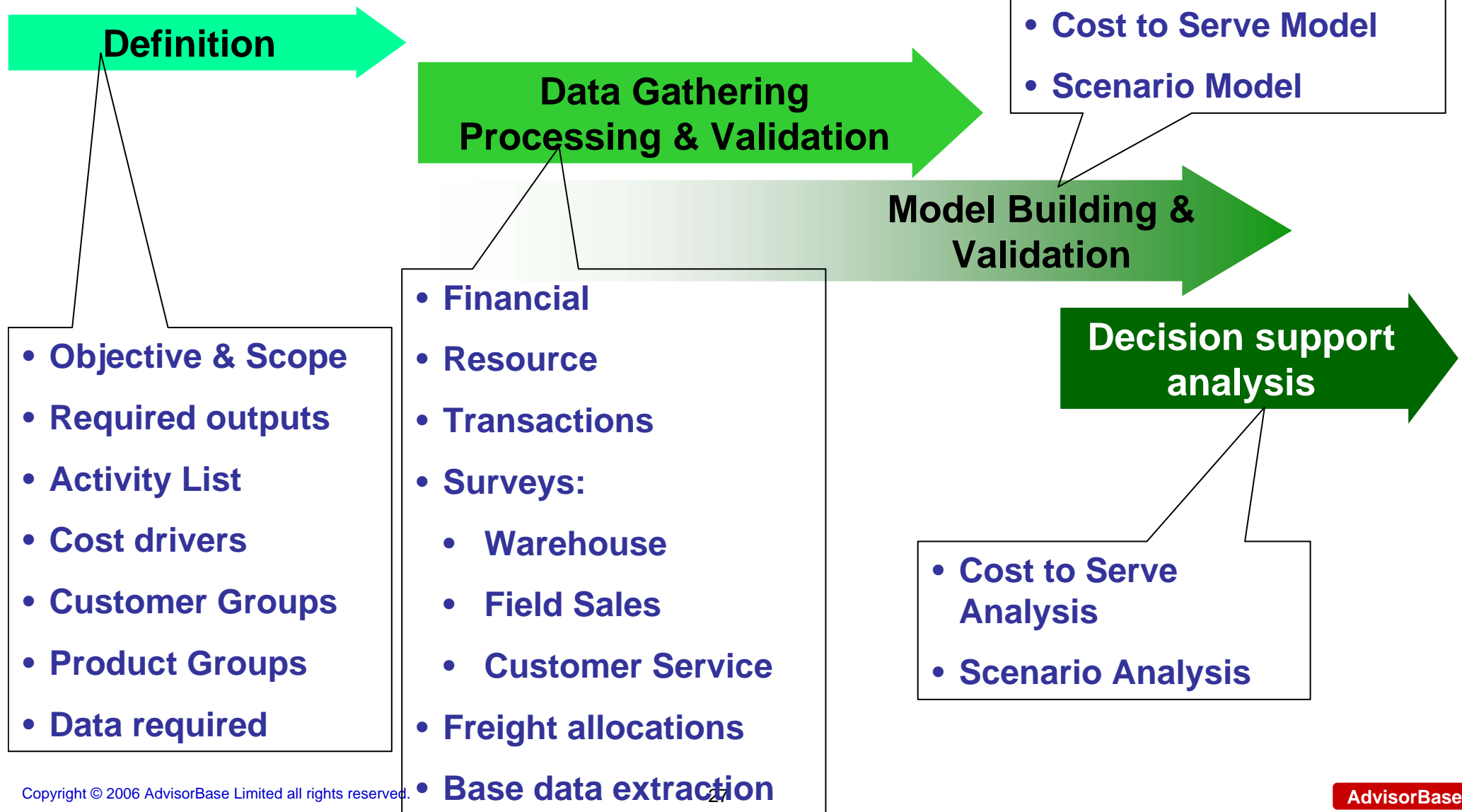
- It identifies initiatives that minimise overall costs
- It highlights the benefits to suppliers of initiatives that may cost them money
- It puts pressure on the retailer & supplier to perform to best practice
- It highlights how costs & benefits should be shared
- It delivers lowest cost of product on shelf which implies:
 - Lower selling price ... or ...
 - Increased margins

The methodology is same as for Cost to Serve but spans a longer supply chain.

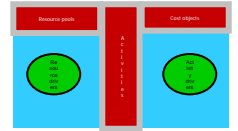
Establishing Cost to Serve - Process overview



There are four main stages involved in the development of Cost to Serve



Data gathering, processing and validation drives Cost to Serve timeline



Each phase has its own challenges and some have rewards

Definition

Have to get it right ... or model won't answer key questions

**Data Gathering
Processing & Validation**

Time consuming, tedious and sometimes frustrating.

Getting it right saves time in model validation

Model Building & Validation

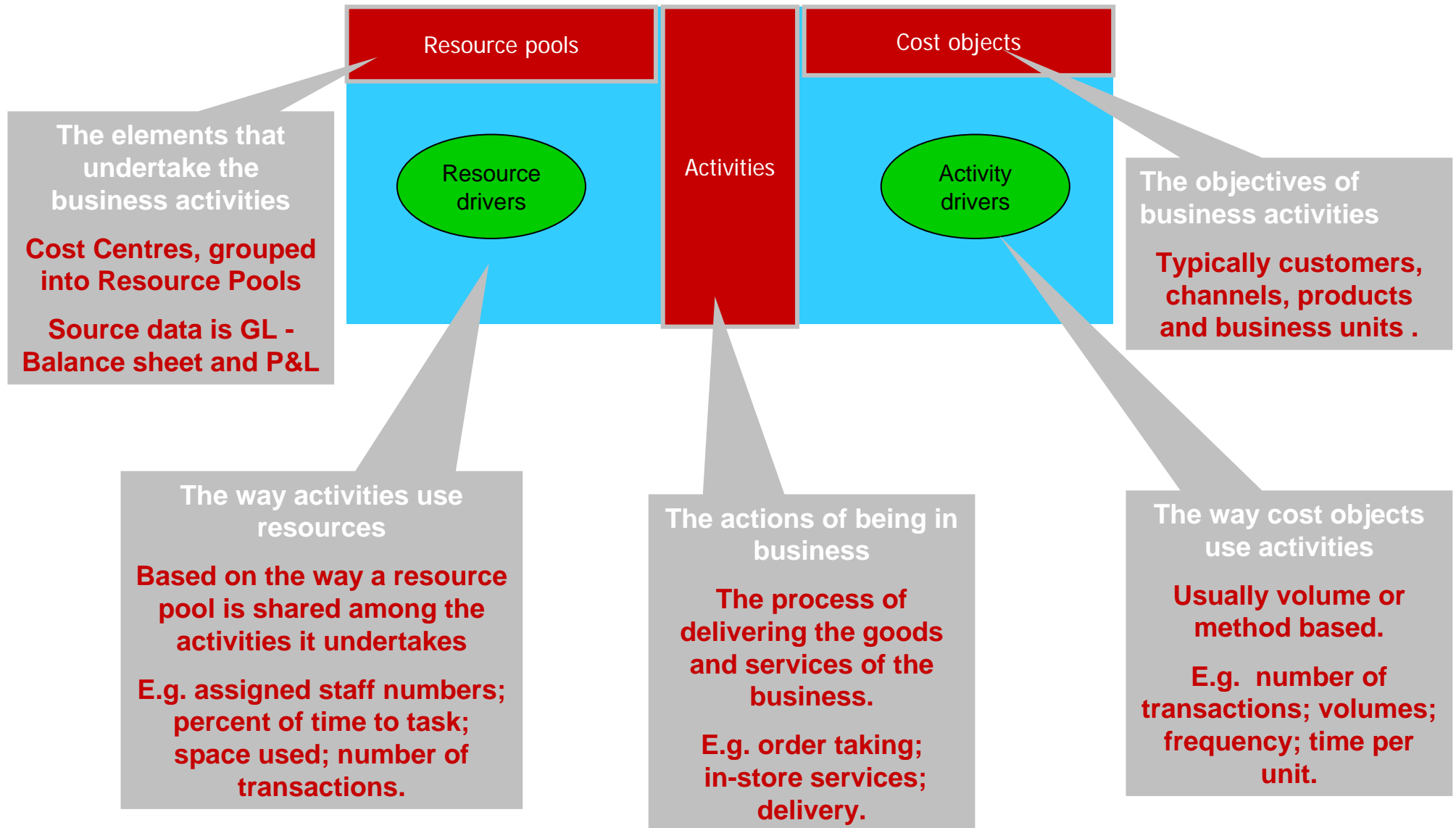
**Technically demanding
Validation is essential**

Decision support analysis

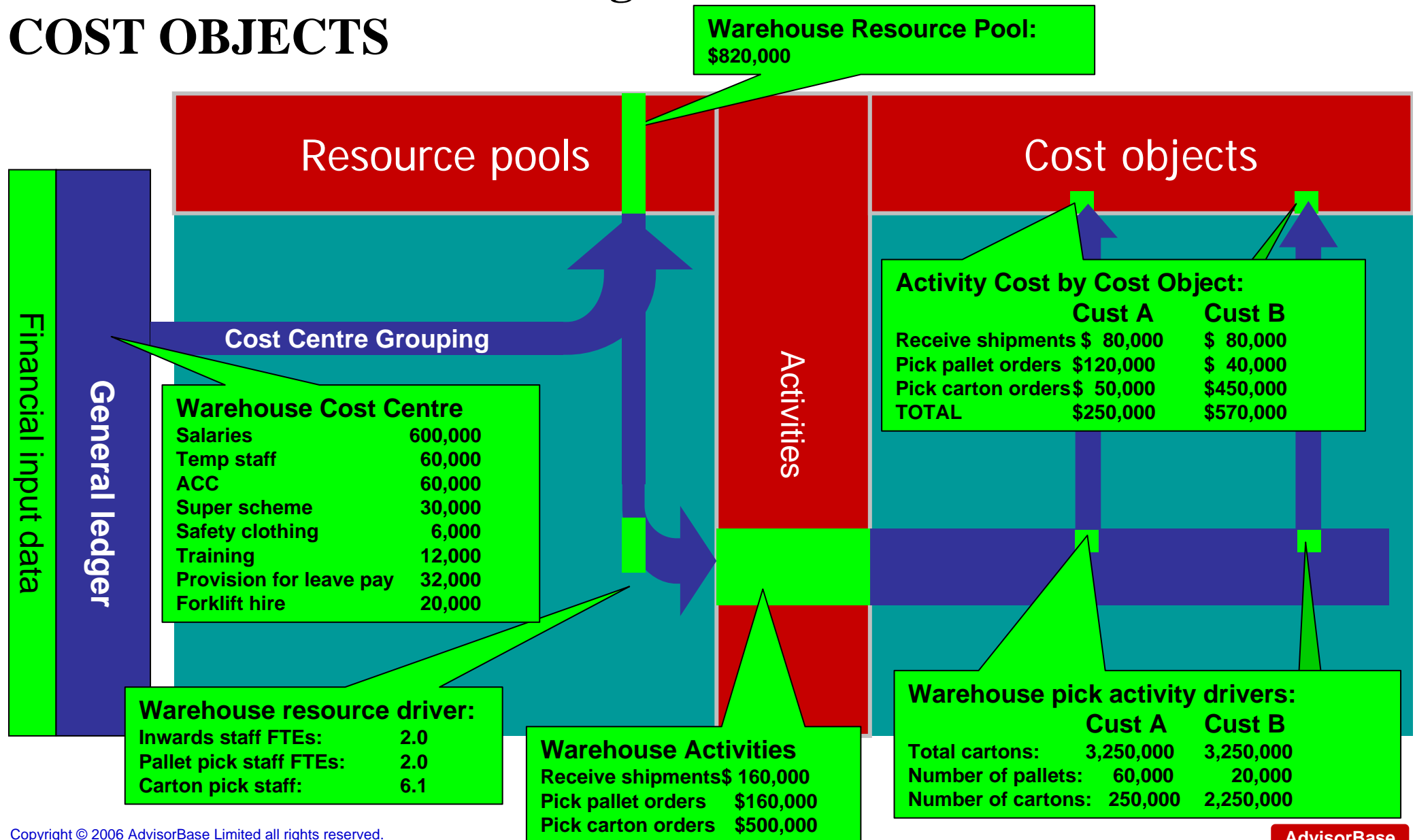
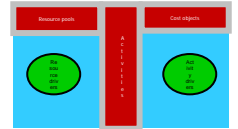
What makes it all worthwhile

Cost flow mechanism

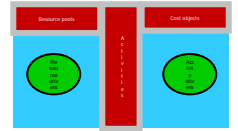
AdvisorBase uses its “T” framework to restructure financial data and enables the conventional ABC elements to be used.



A “T” depicts the transferring of costs from RESOURCE POOLS through ACTIVITIES to the COST OBJECTS



Some enterprise IT systems “report” profit by customer and/or product and even activity costs ... but



The validity of a Cost to Serve based analysis is the drivers used to assign costs.

Check how your ERP is set up:

- Costs often all assigned in proportion to sales
- No ‘static’ drivers used (e.g. staff deployment) or if used not updated since ...
- Variable and fixed portion of costs not differentiated
- Overheads not usually separated from profitability figure.

Traditionally Pubs & Clubs seen as most profitable



Often a quick approach to customer profitability is tried.

- The traditional P&L lines are split to the customer groups on the basis on sales
- This can show a misleading picture of customer profitability

Beer 'N Chip Co. P&L Report - Channel					
	TOTAL	GROCERY	MERCHANTS	PUBS/CLUBS	DISTRIBUTORS
Gross Sales	99,784,080	54,750,000	4,034,080	23,650,000	17,350,000
Cost of Goods Sold	44,548,634	25,040,757	1,644,176	10,034,002	7,829,699
Gross Margin	55,235,446	29,709,243	2,389,904	13,615,998	9,520,301
Discounts / Incentives	19,644,662	12,746,048	885,258	2,720,564	3,292,792
Distribution Costs	8,103,960	4,446,519	327,628	1,920,734	1,409,080
Advertising & Promotions	2,970,863	1,506,598	293,850	722,021	448,394
Sales & Marketing Overhead	4,908,587	2,693,267	198,445	1,163,393	853,483
Administration	11,334,105	6,218,850	458,216	2,686,316	1,970,722
Total Overheads	46,962,178	27,611,283	2,163,396	9,213,028	7,974,471
Net Operating Income	8,273,267	2,097,960	226,507	4,402,970	1,545,830
Other Income					
EBITA	8,273,267	2,097,960	226,507	4,402,970	1,545,830
% of Gross Sales	8%	4%	6%	19%	9%

Compare Beer 'N Chip P&Ls for cost allocation methodology



Breaking the GL into activities then allocating the costs to customers develops a more accurate view

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Order processing	2,005,514	1,082,068	26,307	769,909	127,231
Outwards handling WH	1,793,712	776,472	51,588	792,817	172,835
Delivery to customer	2,979,751	1,483,402	130,290	1,035,089	330,970
Reps & Merchandisers	4,767,063	2,347,112	5,705	2,262,029	152,217
Mg'ment; sales, key acc & category	2,541,044	697,162	169,514	1,312,616	361,752
Financing; AR & inventory holding	1,190,244	628,003	61,333	301,205	199,702
Total cost to serve	17,616,551	8,171,805	582,074	7,127,675	1,734,997
Cost to Serve as % of GSV	17.6%	14.9%	13.7%	30.1%	10.0%
Cont. after cost to serve	17,974,233	8,791,390	922,572	3,767,759	4,492,512
Cont as % of GSV	18%	16%	22%	16%	26%
Advertising & OH	10,891,209	5,962,937	462,876	2,575,771	1,889,625
other O/H % of GSV	11%	11%	11%	11%	11%
Business contribution	7,083,024	2,828,453	459,695	1,191,988	2,602,887
Business contribution as % of GSV	7.1%	5.2%	10.8%	5.0%	15.0%

2,097,960	226,507	4,402,970	1,545,830
4%	6%	19%	9%

- Allocation on sales has P&C as the most profitable – using ABC they are shown to be the LEAST profitable
- Grocery which looked to be least profitable are slightly more profitable than P&C

Compared to the traditional

Traditionally Chips looked very profitable



As with customers a quick approach to product profitability is to allocate costs on the basis of sales.

- This can show to a misleading picture of product profitability

Beer 'N Chip Co. P&L Report - Total Product Portfolio				
	TOTAL	BEER	CHIPS	DIPS
Gross Sales	99,784,080	75,000,000	19,892,040	4,892,040
Cost of Goods Sold	44,548,634	36,202,051	6,033,675	2,312,909
Gross Margin	55,235,446	38,797,949	13,858,365	2,579,131
Discounts / Incentives	19,644,662	13,529,517	5,271,505	843,640
Distribution Costs	8,103,960	6,091,122	1,615,531	397,307
Advertising & Promotions	2,970,863	1,541,666	968,475	460,722
Sales & Marketing Overhead	4,908,587	3,689,406	978,531	240,650
Administration	11,334,105	8,518,973	2,259,463	555,669
Total Overheads	46,962,178	33,370,685	11,093,505	2,497,988
Net Operating Income	8,273,267	5,427,264	2,764,860	81,144
Other Income				
EBITA	8,273,267	5,427,264	2,764,860	81,144
% of Gross Sales	8%	7%	14%	2%

Compare Beer 'N Chip P&Ls for cost allocation methodology



It is clear that ABC allocation can reveal otherwise hidden issues.

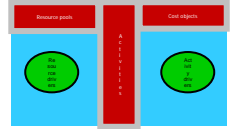
- When costs allocated on sales chips are most profitable and all categories contributing after overheads – with ABC beer is the most profitable and chips are in trouble!

	BEER	CHIPS	DIPS
sales	75,000,000	20,000,000	5,000,000
Invoice terms	6,962,356	3,360,748	591,272
After invoice terms	6,567,161	2,018,716	360,328
Discounts as % of sales	18.0%	26.9%	19.0%
Net Net	61,470,483	14,620,535	4,048,400
Net Net % of sales	82.0%	73.1%	81.0%
COGS	36,202,051	6,033,675	2,312,909
Net Margin	25,268,432	8,586,860	1,735,491
Cont after prod costs % of sales	33.7%	42.9%	34.7%
Warehousing	1,122,139	781,138	59,133
Inwards handling	419,959	348,411	26,247
Order processing	1,187,202	354,974	45,533
Outwards handling	1,418,283	315,600	59,829
Freight to customer	1,590,060	1,305,854	83,837
In store services (rep & merch)	2,112,911	2,337,749	316,403
Sales management	494,605	616,699	74,517
Key acc & cat mgmt	399,555	749,077	206,591
Finance inventory & AR	746,357	394,189	49,699
Cost to Serve	9,491,071	7,203,690	921,789
Cost to serve % of sales	12.7%	36.0%	18.4%
Cont. After Cost to Serve	15,777,361	1,383,170	813,702
Cont after cost to serve % of sales	21.0%	6.9%	16.3%
Advertising	2,228,147	594,173	148,543
Direct and manage business	5,940,260	1,584,069	396,017
Business Contribution	7,608,954	-795,072	269,142
Business Contribution % of sales	10.1%	-4.0%	5.4%

V.S.

5,427,264	2,764,860	81,144
7%	14%	2%

First project step is to decide the scope of the Cost to Serve analysis



Objective:

- What questions do we want the model to answer

Focus on the
questions
being
answered

Cost objects

- Do we want analysis by customers and/or products
 - Identify customer groups
 - Identify product categories

Activity list

- What activity areas are we going to focus on
- What activities may change

Objective for Beer 'N Chip – Make the acquisition work!

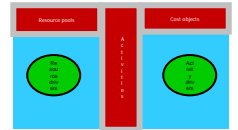


Question:

How to improve overall profitability:

- Which customers make money & why?
- Which product make money & why?

A cost object is defined by its characteristics



Define customer and/or product groups

Why groups?

– are you going to take decisions about a single customer (a New World store) or a single SKU?

Customer groups:

- Group customers that behave similarly and use business resources in similar way e.g:
 - Pak 'n Save Auckland Metro
 - Progressive DC AKL
 - Foodservice Lower NI

Product groups:

- Group products that have similar characteristics and use business resources in a similar way e.g:
 - Chilled
 - Premium beer
 - High density products (dips separate from chips)


What is the implication of having a great many groups?

Beer 'N Chip customer & product groups



We have kept Beer 'N Chip simple

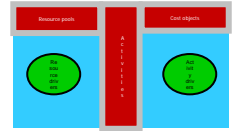
Product Groups:

	Cartons per pallet	Kgs per pallet	m ³ per pallet
Beer	60	907 kg	1.86 m ³
Chips	27	121 kg	1.68 m ³
Dips	80	345 kg	1.44 m ³

Customer Groups:

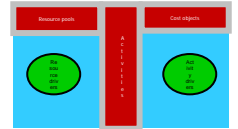
- Grocery DC Metro
- Grocery DC Provincial
- Metro grocery stores
- Non Metro grocery stores
- Mass Merchants
- Pubs & Clubs (metro)
- Pubs & Clubs (provincial)
- Distributor 1
- Distributor 2

Focus on activities that are real and variable



- Distinguish between customer and product driven activities
 - If the purpose is customer Cost to Serve or product profitability the activity list will be different, e.g.:
 - Pick full cases: Auckland if customer centric
 - Pick full cases: Auckland - Category food if product centric
- Focus on activities that vary between customers and/or products, e.g.:
 - Field selling
 - Transaction processing
 - Freight
- Some activity lists contain activities of questionable value:
 - E.g. “truck waiting to unload” is interesting, but if your freight contract is not time based is the knowledge gained worth the effort of gathering the data

The activity list is a key to a successful project



The AdvisorBase typical activity list:

30 high level activity groups, summarised as:

- Revenue and trade terms
- Internal product resupply, handling and storage
- Order / transaction processing
- Customer order handling and delivery
- Key account management
- Field sales and in-store services
- Product driven activities including marketing
- Business sustaining and other overhead activities

List may expand to 2,500 to account for:

- Regionally centred activities
- Product category differentiated activities
- Process 'anomalies'

Activity Group
Gross sales
Credits
Efficiency terms
Revenue Terms
COGS
Advertise product or brand
Inwards FG
Unload or Devan & palletise container
Resupply
Hold FG Inventory
Manage FG inventory
Store finished goods
Warehouse Admin
Primary freight
Resupply freight
Pallets
Loadout
Pick pack and dispatch a less than carton units
Pick pack and dispatch carton
Pick pack and dispatch full layer
Pick pack and dispatch integral pallet
Refill pick locations
W/house Admin/orders
Freight
In-store services
Manage key accounts
Process AP
Finance AR
Process AR
Direct and manage business

Activity list is driven by objectives

Beer 'N Chip activity list



Gross Sales BEER
Gross Sales CHIPS
Gross Sales DIPS
Credits ullage related BEER
Credits ullage related CHIPS
Credits ullage related DIPS
Credits non-ullage related BEER
Credits non-ullage related CHIPS
Credits non-ullage related DIPS
Perm/Efficiency terms (existing) Trading Terms BEER
Perm/Efficiency terms (existing) Trading Terms CHIPS
Perm/Efficiency terms (existing) Trading Terms DIPS
Perm/Efficiency terms (existing) Settlement BEER
Perm/Efficiency terms (existing) Settlement CHIPS
Perm/Efficiency terms (existing) Settlement DIPS
Hidden/balncing discount BEER
Hidden/balncing discount CHIPS
Hidden/balncing discount DIPS
Revenue Terms On invoice BEER
Revenue Terms On invoice CHIPS
Revenue Terms On invoice DIPS
Revenue Terms Rebate BEER
Revenue Terms Rebate CHIPS
Revenue Terms Rebate DIPS
Revenue Terms Co-op BEER
Revenue Terms Co-op CHIPS
Revenue Terms Co-op DIPS

Net Net

COGS BEER
COGS CHIPS
COGS DIPS

Net Margin

Cost to serve activities:

Order processing and finance AR

Process consumer queries BEER
Process consumer queries CHIPS
Process consumer queries DIPS
Process manual phone/ fax orders & rep orders BEER
Process manual phone/ fax orders & rep orders CHIPS
Process manual phone/ fax orders & rep orders DIPS
Process EDI orders BEER
Process EDI orders CHIPS
Process EDI orders DIPS
Process customer order or delivery queries & requests BEER
Process customer order or delivery queries & requests CHIPS
Process customer order or delivery queries & requests DIPS
Process credits (ullage related) BEER
Process credits (ullage related) CHIPS
Process credits (ullage related) DIPS
Process credits (non-ullage) BEER
Process credits (non-ullage) CHIPS
Process credits (non-ullage) DIPS
Process claims (AP) BEER
Process claims (AP) CHIPS
Process claims (AP) DIPS
Process customer payments (AR) BEER
Process customer payments (AR) CHIPS
Process customer payments (AR) DIPS
Finance AR outstanding or late BEER
Finance AR outstanding or late CHIPS
Finance AR outstanding or late DIPS

Beer 'N Chip activity list



Inwards handling & warehousing

Receive and putaway finished goods AKL WH BEER
Receive and putaway finished goods AKL WH CHIPS
Receive and putaway finished goods AKL WH DIPS
Receipt and manage returned goods AKL WH BEER
Receipt and manage returned goods AKL WH CHIPS
Receipt and manage returned goods AKL WH DIPS
Unload truck finished goods AKL WH BEER
Unload truck finished goods AKL WH CHIPS
Unload truck finished goods AKL WH DIPS
Hold FG Inventory Capital charge AKL WH BEER
Hold FG Inventory Capital charge AKL WH CHIPS
Hold FG Inventory Capital charge AKL WH DIPS
Manage FG inventory AKL WH BEER
Manage FG inventory AKL WH CHIPS
Manage FG inventory AKL WH DIPS
Store finished goods AKL WH BEER
Store finished goods AKL WH CHIPS
Store finished goods AKL WH DIPS
Warehouse Admin AKL WH BEER
Warehouse Admin AKL WH CHIPS
Warehouse Admin AKL WH DIPS
Pallet Hire AKL WH BEER
Pallet Hire AKL WH CHIPS
Pallet Hire AKL WH DIPS

Outwards handling

Loadout to truck AKL WH BEER
Loadout to truck AKL WH CHIPS
Loadout to truck AKL WH DIPS
Pick BOTTLE/ less than case lines AKL WH BEER
Pick BOTTLE/ less than case lines AKL WH CHIPS
Pick BOTTLE/ less than case lines AKL WH DIPS
Pick CASE/ SHIPPER lines AKL WH BEER
Pick CASE/ SHIPPER lines AKL WH CHIPS
Pick CASE/ SHIPPER lines AKL WH DIPS
Pick LAYER lines AKL WH BEER
Pick LAYER lines AKL WH CHIPS
Pick LAYER lines AKL WH DIPS
Pick WHOLE PALLET lines AKL WH BEER
Pick WHOLE PALLET lines AKL WH CHIPS
Pick WHOLE PALLET lines AKL WH DIPS
Pick ADDITIONAL BASES to go between layers AKL WH BEER
Pick ADDITIONAL BASES to go between layers AKL WH CHIPS
Pick ADDITIONAL BASES to go between layers AKL WH DIPS
Wrap, Dispatch AKL WH BEER
Wrap, Dispatch AKL WH CHIPS
Wrap, Dispatch AKL WH DIPS
Refill pick locations case face AKL WH BEER
Refill pick locations case face AKL WH CHIPS
Refill pick locations case face AKL WH DIPS
Freight Delivery to customer ex AKL WH BEER
Freight Delivery to customer ex AKL WH CHIPS
Freight Delivery to customer ex AKL WH DIPS

Beer 'N Chip activity list



Merchandising & field sales

Merchandising Merchandisers BEER
Merchandising Merchandisers CHIPS
Merchandising Merchandisers DIPS
Travel, checking stock levels, orders taking, new products, pl
Travel, checking stock levels, orders taking, new products, pl
Travel, checking stock levels, orders taking, new products, pl
In store credits TMs BEER
In store credits TMs CHIPS
In store credits TMs DIPS
In store Shelf Relays TMs BEER
In store Shelf Relays TMs CHIPS
In store Shelf Relays TMs DIPS
Building displays, merchandising, Filling fridges, QA & super
Building displays, merchandising, Filling fridges, QA & super
Building displays, merchandising, Filling fridges, QA & super
Arranging promos & new customers TMs BEER
Arranging promos & new customers TMs CHIPS
Arranging promos & new customers TMs DIPS

Management

Manage field sales and merchandising BEER
Manage field sales and merchandising CHIPS
Manage field sales and merchandising DIPS
Manage key accounts BEER
Manage key accounts CHIPS
Manage key accounts DIPS
Category management BEER
Category management CHIPS
Category management DIPS

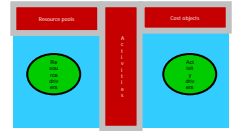
Total cost to serve

Advertising & overheads

Advertise product or brand BEER
Advertise product or brand CHIPS
Advertise product or brand DIPS
Direct and manage business BEER
Direct and manage business CHIPS
Direct and manage business DIPS

Business Contribution

The fixed & variable cost trap



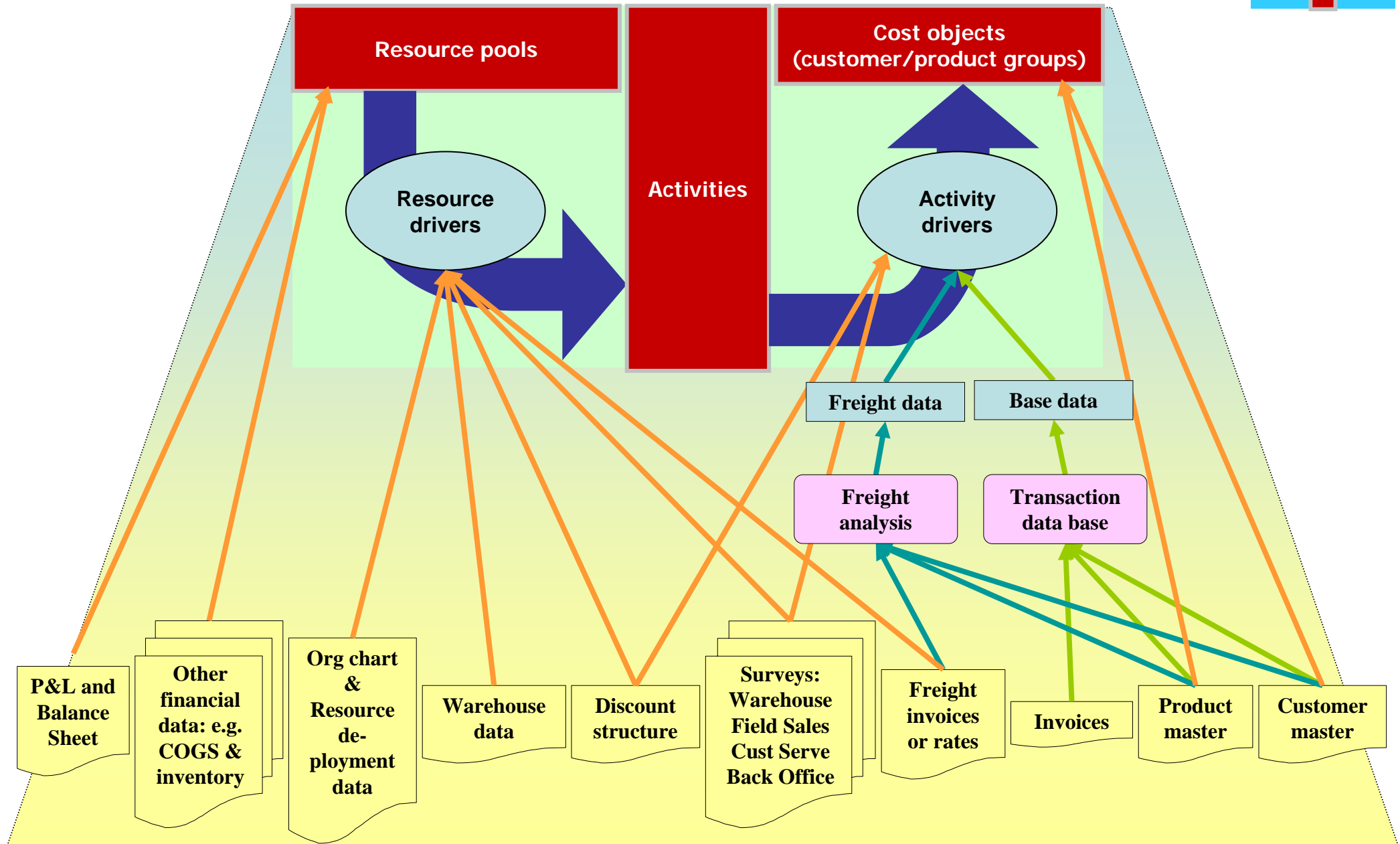
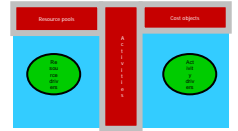
Cost to Serve should be available by both variable and total (=fixed + variable) costs

Unit activity costs are only really relevant if we know how they change with volume

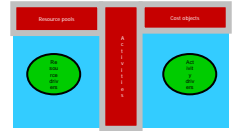
- High fixed costs can mask effect of volume changes
 - Fewer orders – higher processing cost per order
 - Warehouse pallet pick increases, costs unchanged
- As behaviours change among cost objects:
 - Fixed costs are redistributed
 - Variable costs change with volume by cost object

Being able to run Cost to Serve scenarios in either total or variable cost mode increases understanding of business dynamics

Data gathering is limited to the essential model inputs

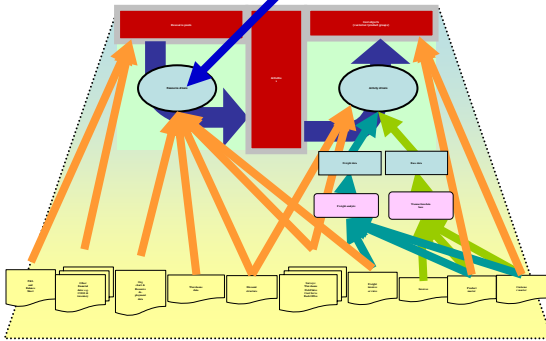


Most of the data collected is used to determine drivers

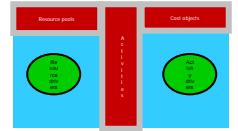


Resource drivers are usually determined by business practice:

- Selling:
 - Time/cost by activity e.g.:
 - Merchandise
 - Arrange promos
- Freight:
 - Cost by delivery channel and region e.g. courier
- Warehouse
 - Time/cost by activity e.g.:
 - Pick units/cases/pallets
 - Store product & hold inventory
- Customer services:
 - Time/cost by activity e.g.:
 - Process orders
 - Manage accounts receivable
 - Respond to customer queries



Activity drivers tend to be volume related

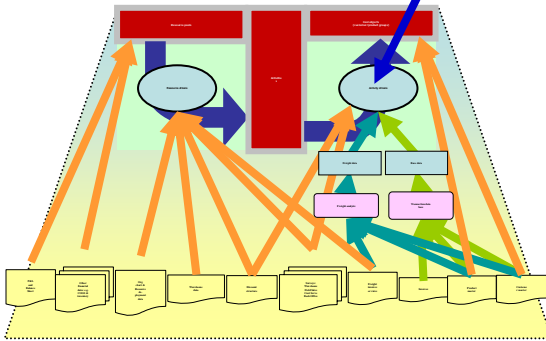


Activity drivers are required by cost object, e.g.:

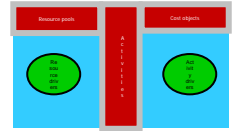
- For customer or channel based Cost to Serve , e.g.:
 - FSA Pak n Save metro
 - PEL DC Akl
- For product based Cost to Serve, by category
- For profitability by customer by product – need both

Activity driver data is mainly derived from transaction data, such as:

- Logistics:
 - Number of full cases ordered
 - Consignment numbers by size range
- Selling:
 - Store visit roster
- Customer service:
 - Number of orders
 - Number of queries



Defining activities is key to a meaningful Cost to Serve

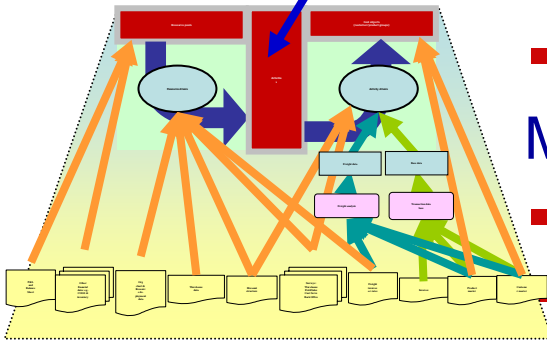


The activity list used as the basis for a Cost to Serve analysis is determined by the objective of the analysis

- High level where possible
- Detail as required:
 - Focus on objective
- Level of detail drives cost of exercise

Main areas of interest for Cost to Serve :

- Logistics
- Customer service
 - Transaction processing
 - Customer queries
- Selling:
 - Field sales
 - In-store services
 - Account management





Scenario Modelling

AdvisorBase

Scenario modelling – you just have to do it!

Answering the “what if?” question is the key to making good decisions

- Decisions affect cost drivers
 - Order frequency = order size
 - Service levels
- Scenario modelling replaces the ‘status quo’ drivers with a new set
- To be really useful a scenario model should calculate the new drivers and replace the old – not just accept new driver values

We structure our scenario models for three levels of user

Scenario designers

- Construct the internal linkages, variable entry areas and formulas that give effect to the scenario

Scenario builders

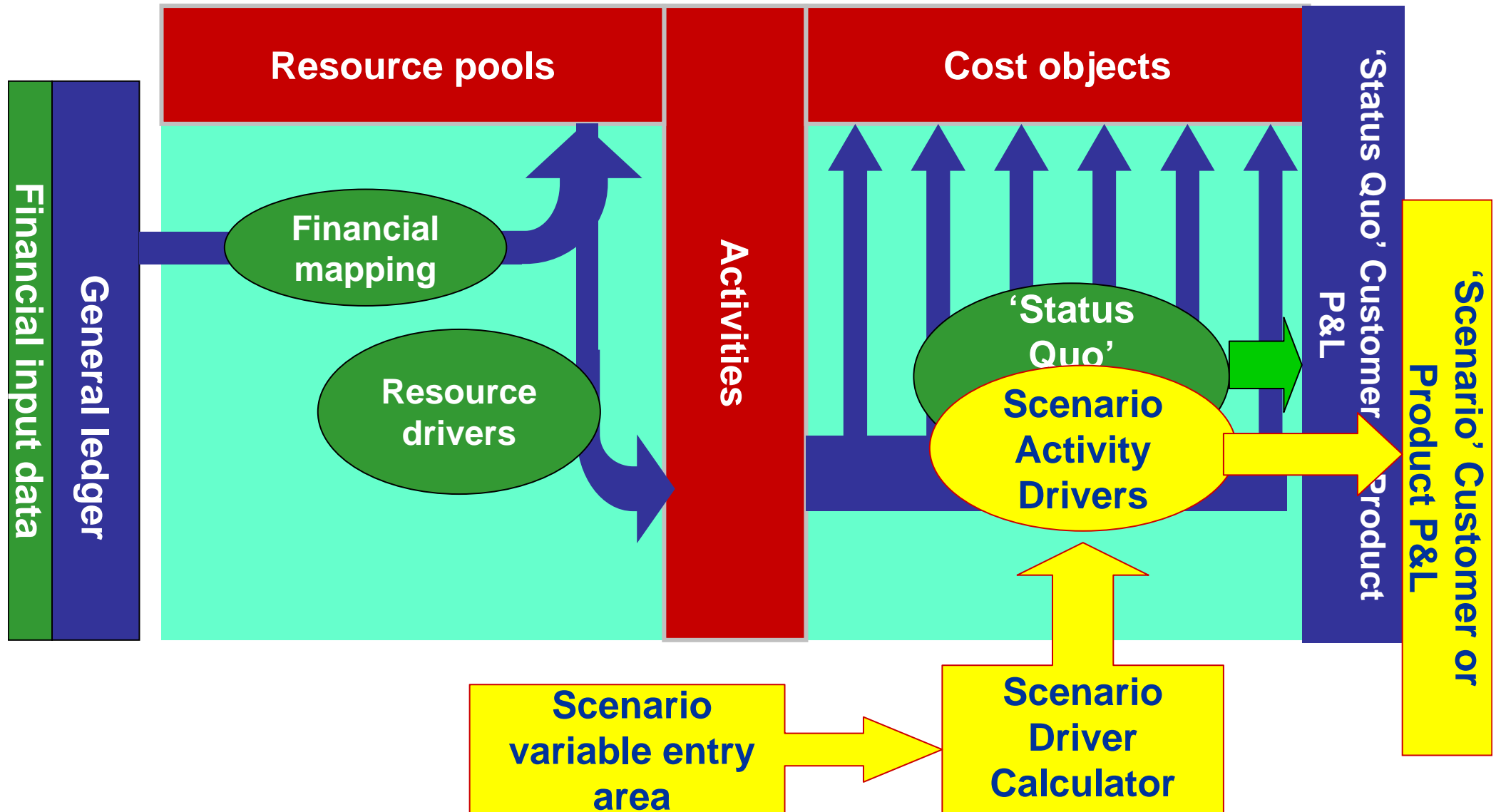
- Enter variables relating to a scenario in designated areas of the model

Scenario evaluators

- Use drop down menus to select combinations of scenarios and assess the outcomes

The evaluators have to specify the scenarios for the designers

The scenario model structure



Beer 'N Chip scenario model options



- Channel switching
- Theoretical vs actual discounts
 - No behaviour change
 - With behaviour change
- Growth
- Promo spend & list price change
 - WW BPR

Growth

Beer	<input type="text" value="No Change"/>	Dips	<input type="text" value="No Change"/>
Chips	<input type="text" value="No Change"/>		

Pick Configuration Rules

Beer	<input type="text" value="No Change"/>	Dips	<input type="text" value="No Change"/>
Chips	<input type="text" value="No Change"/>		

☒ TOTOAL
 ☐ VARIABLE

TOTAL MODE

Buying behaviour

AKL WH	<input type="text" value="VMI - DC grocer"/>	VMI	<input type="text" value="YES"/>
--------	--	-----	----------------------------------

Delivery

Channel	<input type="text" value="No Change"/>	Which WH	<input type="text" value="No Change"/>
---------	--	----------	--

Customers

Customers/group	<input type="text" value="No Change"/>
-----------------	--

Freight

	FOB	<input type="text" value="No FOB"/>
courier	<input type="text" value="Existing Freight"/>	New rates <input type="text" value="Existing"/>

Discount Related

Apply new	<input type="text" value="ALL"/>	Promotional spend	<input type="text" value="No Change"/>
Discounts & list price			
Settlement	<input type="text" value="No change"/>	Ullage	<input type="text" value="Yes to Grocery"/>
Long term incent	<input type="text" value="discount not applied"/>	DC/Re-distribution	<input type="text" value="discount not applied"/>



Cost to Serve

AdvisorBase

What does Cost to Serve tell us about the business?



- Revenue & discounts
 - Different price lists
 - Different discount structures (not transparent or equitable)
- COGS % of GSV varies between customers
 - Product mix
- Cost to Serve variances highlighted:
 - Logistics
 - Handling
 - Freight
 - Customer service:
 - Field selling
 - Merchandising
 - Transaction processing
- Customer & product profitability highly variable
 - Pubs & Clubs a problem area
 - Chips not profitable



Revenue & Discounts

AdvisorBase

Current Beer 'N Chip reporting conceals problems



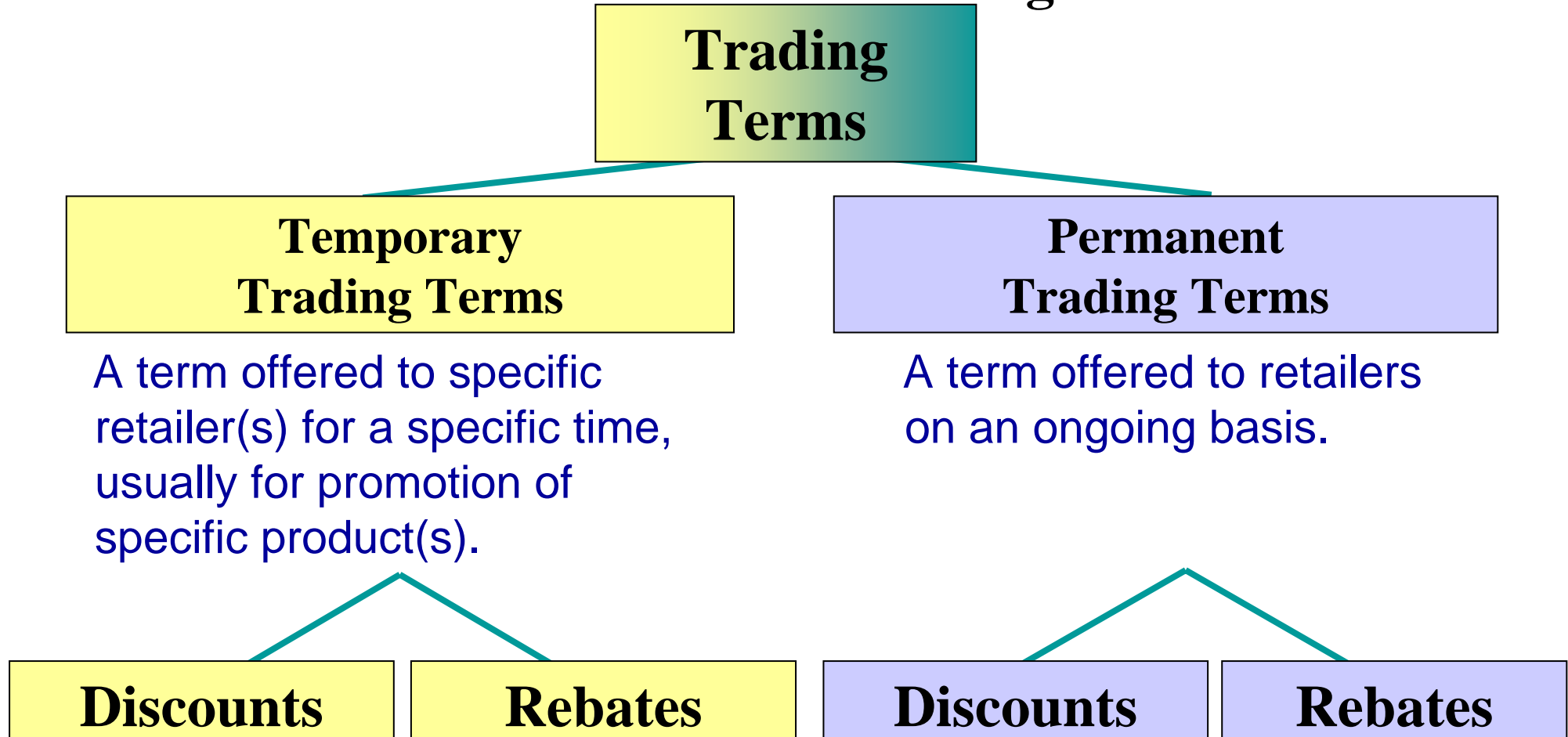
- Revenue & discounts
 - Different price lists
 - Different discount structures (not transparent or equitable)
 - Business plan rebate
 - Ullage
 - Everyday discounts

These are customer specific issues

	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Gross Sales Value	100,000,000	17,200,000	37,550,000	4,250,000	23,650,000	17,350,000
Std terms	8,101,876	1,524,171	2,994,898	593,360	1,835,754	1,153,704
Promo on invoice	5,447,126	1,075,516	2,290,363	246,052	839,839	995,356
On inv. terms % GSV	13.5%	15.1%	14.1%	19.8%	11.3%	12.4%
Net on invoice	86,450,997	14,600,313	32,264,739	3,410,598	20,974,407	15,200,940
Net % of GSV	86%	85%	86%	80%	89%	88%
Settlement	2,812,500	623,556	1,382,023	154,025	-	652,895
Promo - co-op&rebates	3,499,079	902,683	1,952,838	107,750	44,971	490,837
Other terms % of GSV	6.3%	8.9%	8.9%	6.2%	0.2%	6.6%
Net Net	80,139,418	13,074,074	28,929,878	3,148,822	20,929,436	14,057,208
Net Net % of GSV	80%	76%	77%	74%	88%	81%

	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Current discounts						
Total Terms	20%	24%	23%	26%	12%	19%

There are traditional definitions of trading terms ...



- Discounts: A deduction from the list price made in arriving at the invoice value; calculated on invoice.
- Rebate: A deduction from the amount to be paid (invoice value) or a return of part of an amount given in payment; calculated off/after invoice. Includes co-op spend.

... and more useful definitions

Trading Terms

Revenue Trading Terms

A term offered to specific retailer(s) to promote sales of specific product(s).

- Can be permanent or temporary in nature
- “Top line” or revenue focus

Efficiency Trading Terms

A term offered to retailers on an ongoing basis.

- Reflects cost to serve
- Encourages efficient customer behaviour
- “Bottom line” or cost focus

Discounts

Rebates

Discounts

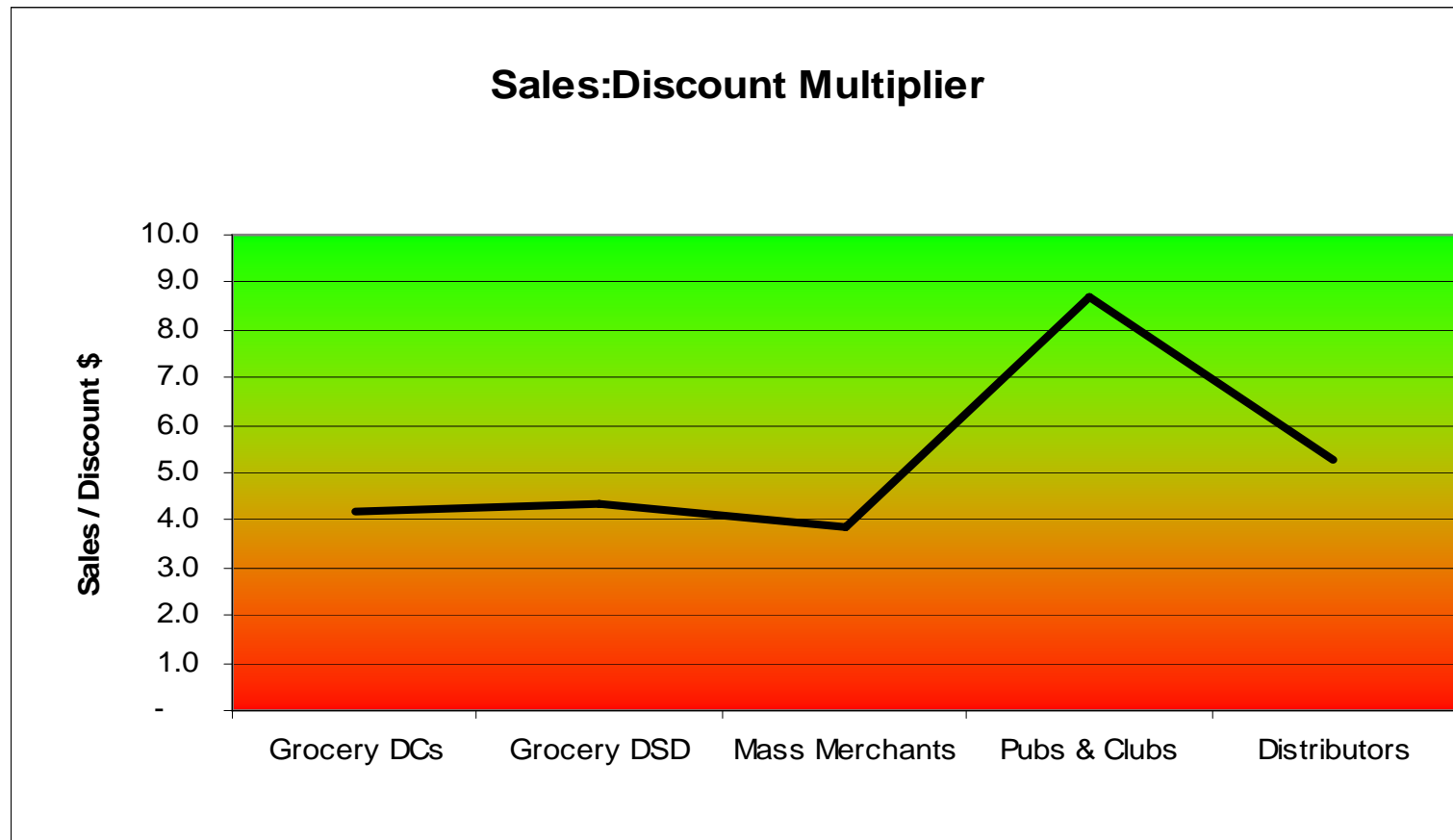
Rebates

Revenue and efficiency terms may be presented as either discounts calculated on invoice, or as rebates paid as % of invoice or a calculated amount.

A good measure of discount effectiveness is the discount : sales multiplier



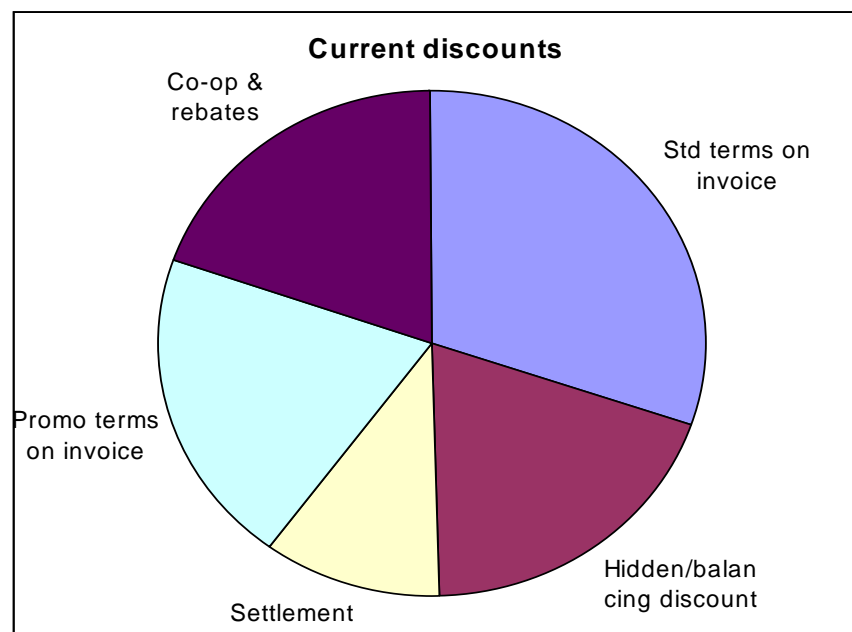
- Where would you invest an extra discount dollar?
 - Is there a real causal relationship?



Existing discounts vary in nature and by customer group



Split of total discounts by type



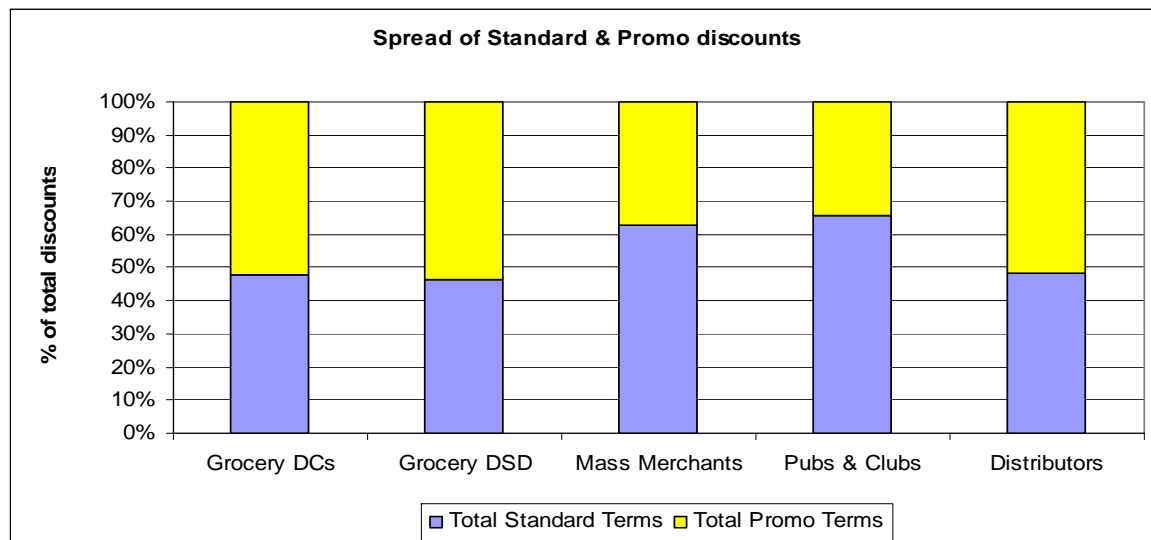
- MM were sold product at a reduced list price – effectively a discount
 - This reduction was not reported previously so the discount was hidden, both from supplier & retailer
- P&C do not get settlement – if terms become transparent would it then be available to them?

Current discounts	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Standard Terms						
Std terms on invoice	8%	9%	8%	9%	8%	7%
Hidden/balancing discount	0%	0%	0%	5%	0%	0%
Settlement	3%	4%	4%	4%	0%	4%
Total Standard Terms	11%	12%	12%	18%	8%	10%
Promotional Terms						
Promo terms on invoice	5%	6%	6%	6%	4%	6%
Co-op & rebates	3%	5%	5%	3%	0%	3%
Total Promo Terms	9%	12%	11%	8%	4%	9%
Total Terms	20%	24%	23%	26%	12%	19%

Changes in market conditions may require a flexible discount structure



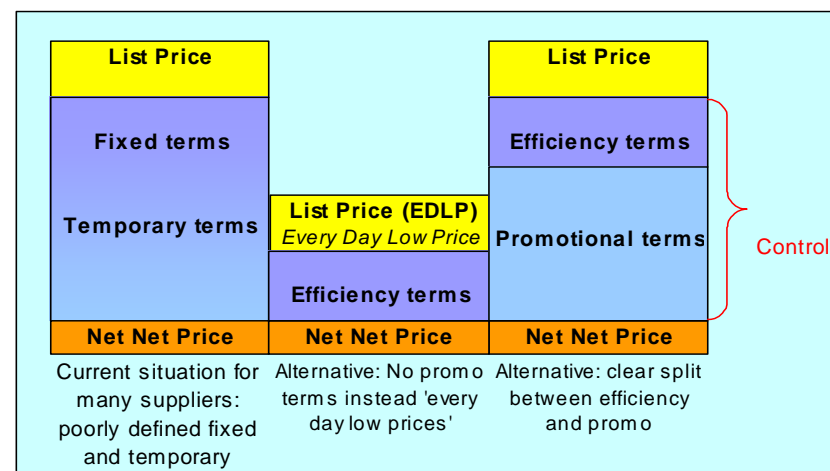
Proportion fixed vs. proportion variable



- The fixed standard terms & promotional terms are split about 50/50
 - MM and P&C get more in standard terms

Does the business plan rebate help or hinder?

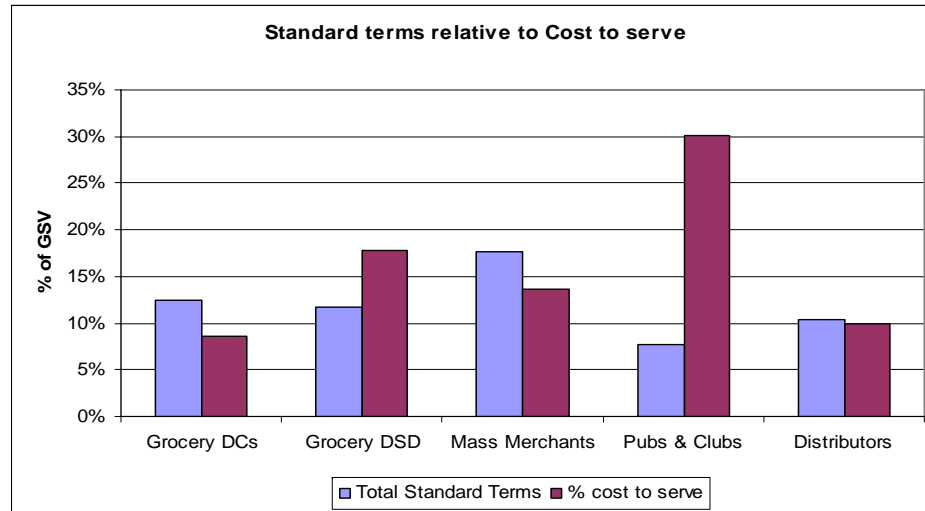
- In all likelihood efficiency savings are small – discounts should reflect that (not give away more than savings)
- This leaves remaining terms flexible (not fixed) to be revenue/promotional focused



Efficiency and revenue terms have different objectives



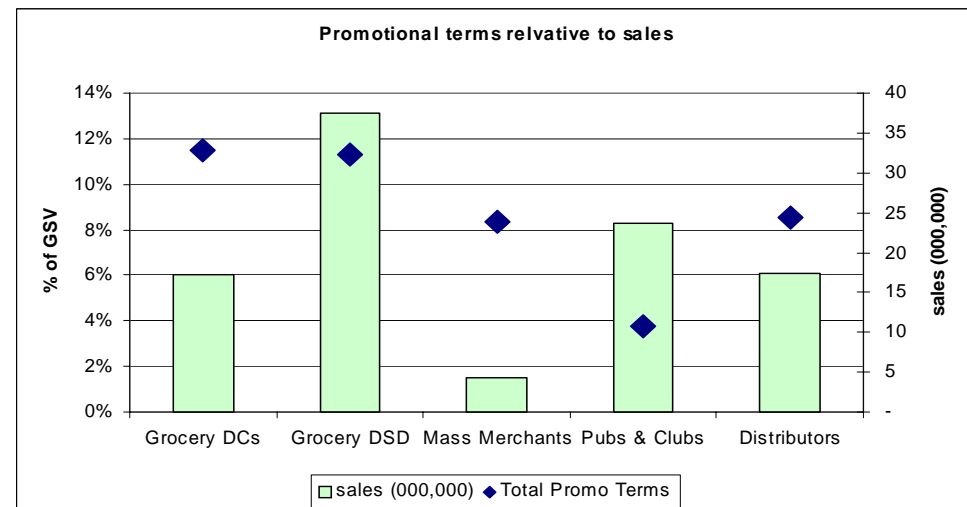
Standard terms relative to Cost to Serve



- Efficiency discounts should be linked to Cost to Serve
- P&C have high Cost to Serve and low std terms – good planning or coincidence?

Promotional terms relative to sales

- Promotional terms should be focused to drive revenue
- A lot of promotion going into MM for little gain?



Discount structures



Discounts should be:

- Targeted
- Flexible to allow responses to market changes
- Paying their way
- Easy to understand
- Reflect new supply chain costs
- Net revenue neutral to us (implies no real price change)
- \$ or % based efficiency terms (determined by product characteristics)
- Structured to drive supply chain efficiencies
- Simple to administer
- Transparent
 - promo too ??
 - What about WW ?
- Beneficial to you and your customers
- Structured to meet customer requirements.

Possible terms for Beer 'N Chip

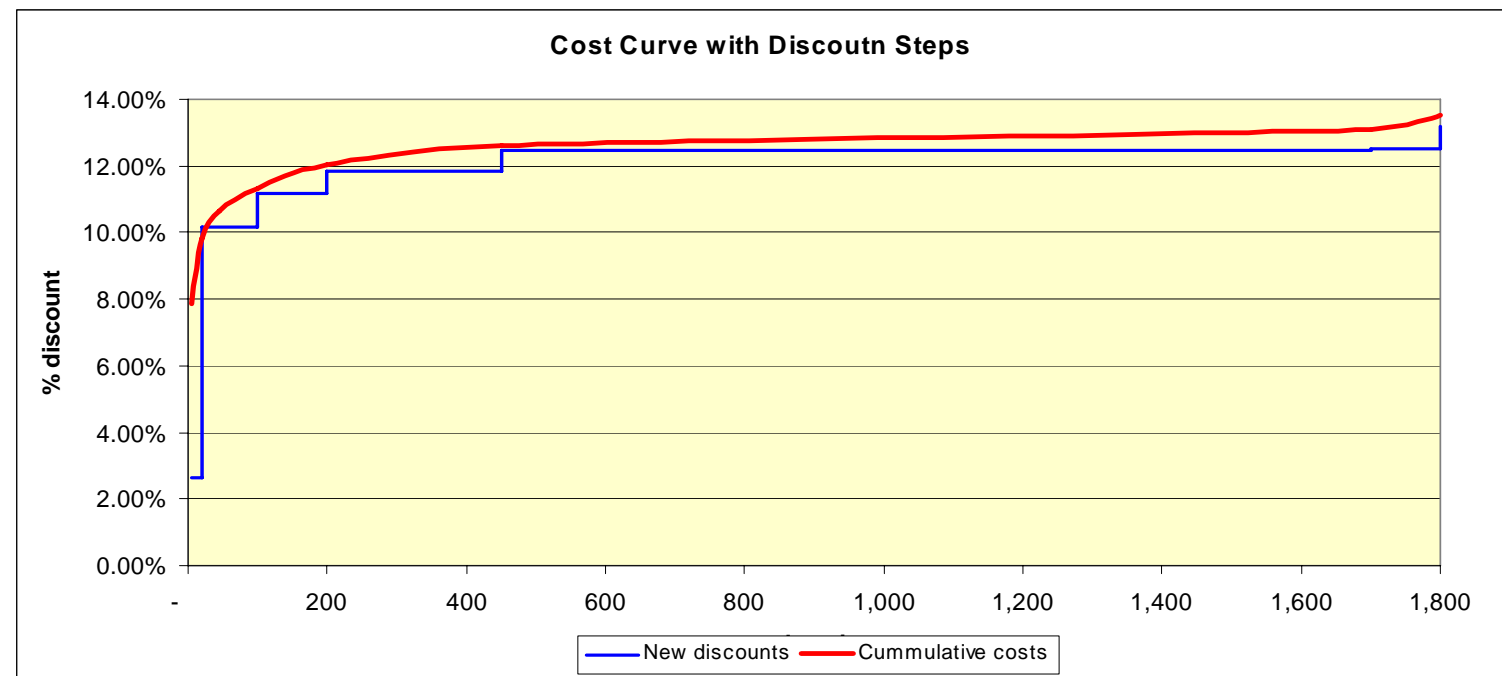


Order Size	Cummulative %	Step %
0 - 5	0.00%	0.00%
5 - 20	7.50%	7.50%
20 - 45	7.50%	0.00%
45 - 100	8.50%	1.00%
100 - 200	9.20%	0.70%
200 - 450	9.75%	0.55%
450 - 1700	9.75%	0.00%
1700 +	10.20%	0.45%

New term structure:

- Settlement (2.5%)
- Ullage (0.15%)
- Whole pallet pick (0.4%)
- Promotional spend
- Volumetric (see table – based on curve below)

Doesn't this
keep a high
portion of
discounts
fixed?



Impact of new terms on Net Net Sales



New terms almost Net Net revenue neutral

Status Quo	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Gross Sales Value	100,000,000	17,200,000	37,550,000	4,250,000	23,650,000	17,350,000
Std terms	8,101,876	1,524,171	2,994,898	593,350	1,835,754	1,153,704
Promo on invoice	5,447,126	1,075,516	2,290,363	246,052	839,839	995,356
On inv. terms % GSV	13.5%	15.1%	14.1%	19.8%	11.3%	12.4%
Net on invoice	86,450,997	14,600,313	32,264,739	3,410,598	20,974,407	15,200,940
Net % of GSV	86%	85%	86%	80%	89%	88%
Settlement	2,812,500	623,556	1,382,023	154,025	-	652,895
Promo - co-op&rebates	3,499,079	902,683	1,952,838	107,750	44,971	490,837
Other terms % of GSV	6.3%	8.9%	8.9%	6.2%	0.2%	6.6%
Net Net	80,139,418	13,074,074	28,929,878	3,148,822	20,929,436	14,057,208
Net Net % of GSV	80%	76%	77%	74%	88%	81%

Scenario	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Gross Sales Value	100,088,113	17,227,681	37,610,432	4,250,000	23,650,000	17,350,000
Std terms	9,357,543	1,720,340	3,520,146	421,107	1,984,818	1,711,132
Promo on invoice	5,302,889	1,075,516	2,290,363	246,052	695,602	995,356
On inv. terms % GSV	14.6%	16.2%	15.4%	15.7%	11.3%	15.6%
Net on invoice	85,427,681	14,431,826	31,799,923	3,582,841	20,969,580	14,643,511
Net % of GSV	85%	84%	85%	84%	89%	84%
Settlement	1,446,125	334,304	737,162	73,634	-	301,025
Promo - co-op&rebates	3,784,648	1,015,213	2,077,337	369,038	44,237	278,823
Other terms % of GSV	5.2%	7.8%	7.5%	10.4%	0.2%	3.3%
Net Net	80,196,909	13,082,309	28,985,424	3,140,170	20,925,343	14,063,663
Net Net % of GSV	80%	76%	77%	74%	88%	81%

...this is with no behaviour change.



Product Profitability

AdvisorBase

Knowing the profitable customers helps – but what about products



Profitability by product – key observations

	BEER	CHIPS	DIPS
sales	75,000,000	20,000,000	5,000,000
Invoice terms	6,962,356	3,360,748	591,272
After invoice terms	6,567,161	2,018,716	360,328
Discounts as % of sales	18.0%	26.9%	19.0%
Net Net	61,470,483	14,620,535	4,048,400
Net Net % of sales	82.0%	73.1%	81.0%
COGS	36,202,051	6,033,675	2,312,909
Net Margin	25,268,432	8,586,860	1,735,491
Cont after prod costs % of sales	33.7%	42.9%	34.7%
Warehousing	1,122,139	781,138	59,133
Inwards handling	419,959	348,411	26,247
Order processing	1,187,202	354,974	45,533
Outwards handling	1,418,283	315,600	59,829
Freight to customer	1,590,060	1,305,854	83,837
In store services (rep & merch)	2,112,911	2,337,749	316,403
Sales management	494,605	616,699	74,517
Key acc & cat mgmt	399,555	749,077	206,591
Finance inventory & AR	746,357	394,189	49,699
Cost to Serve	9,491,071	7,203,690	921,789
Cost to serve % of sales	12.7%	36.0%	18.4%
Cont. After Cost to Serve	15,777,361	1,383,170	813,702
Cont after cost to serve % of sales	21.0%	6.9%	16.3%
Advertising	2,228,147	594,173	148,543
Direct and manage business	5,940,260	1,584,069	396,017
Business Contribution	7,608,954	-795,072	269,142
Business Contribution % of sales	10.1%	-4.0%	5.4%

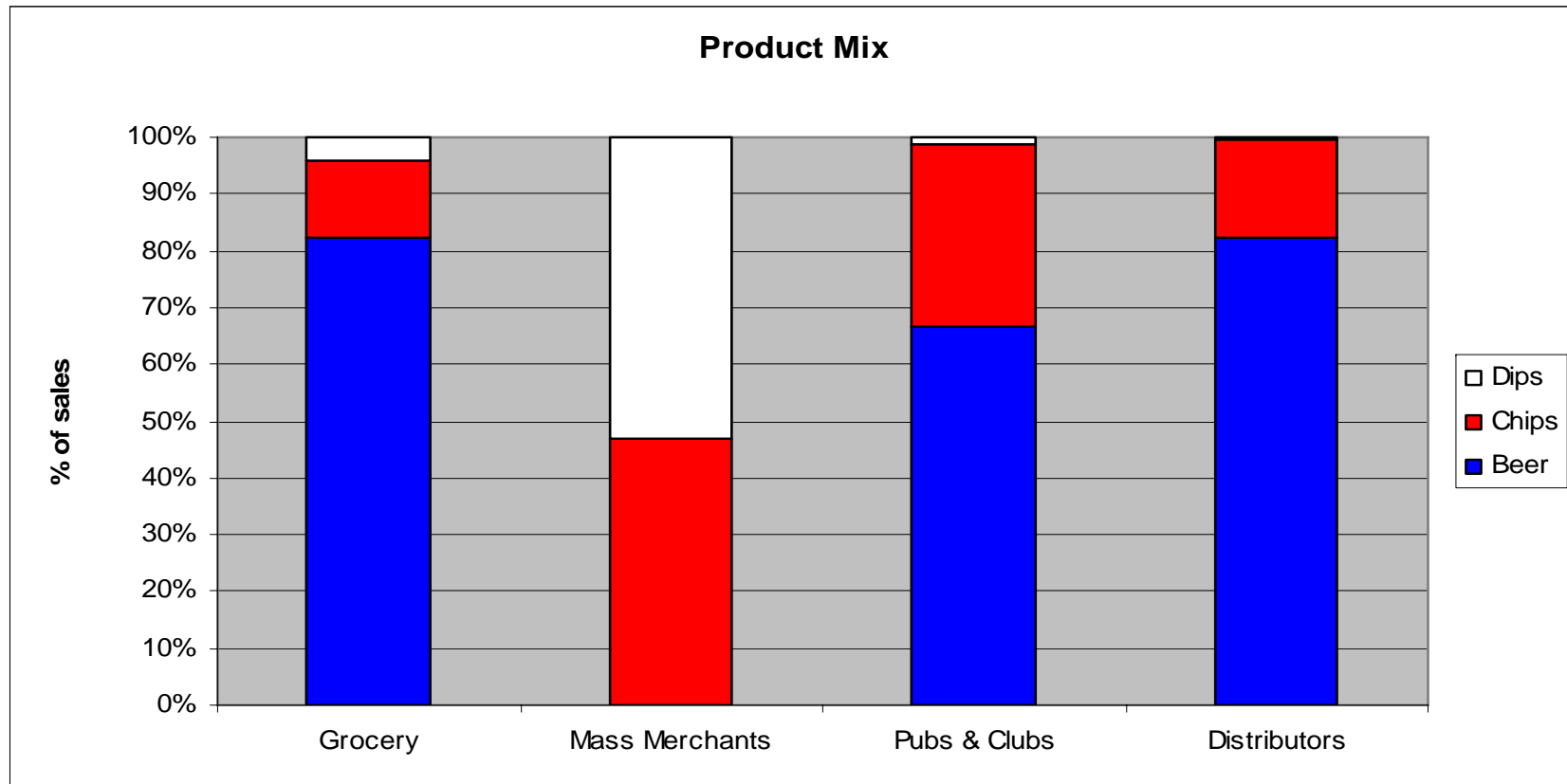
- High discounts (Chips)
- High rep time (Chips)
- COGS % (Beer highest, then dips)
- Inventory holding (very high for Chips)

Product mix is a driver of customer profitability



Product mix by customer

- Beer is the dominant category
 - Except for mass merchants
- Mass merchants take only Chips & Dips
 - For all other channels Dips are a minor category

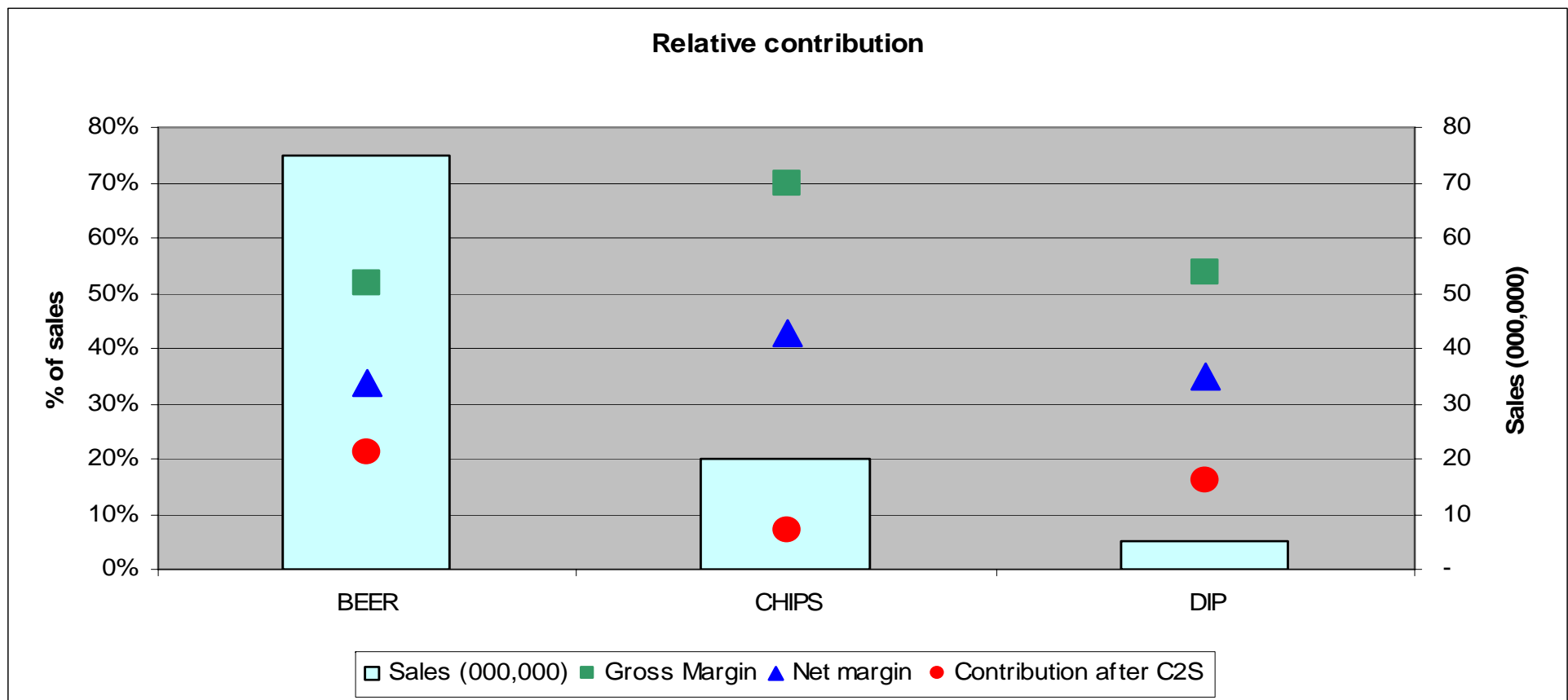


A high “gross margin” does not imply a high contribution



At gross margin Chips are the most profitable category

- At net margin they are still the most profitable
- But after cost to serve they are the least profitable!



What is product profitability?

Key lies in how you measure it

- Compare:
 - Traditional gross margin = $\text{GSV} - \text{COGS}$ (old GL)
 - Chips then Dips then Beer
 - Net margin = $\text{NSV} - \text{COGS}$ (C2S)
 - Chips then Dips then Beer

... but this is only half the story - Better measure

- Net contribution after C2S
 - Beer then Dips then Chips

Why the change

- Bottle/unit pick hurts Beer & Dips
- But... inventory & selling costs kills Chips

Drivers & factors

Can control

- Inventory
 - Production runs
 - VMI
- Focus of rep time in field
- Focus of promo by category
- Category specific advertising
- Product offering.

Product characteristics influence supply chain costs

- Units per case
- Cases per pallet
- Weight and volume

What if? Reps change their sales push...



Reallocate rep time between products

- No change in company costs but products change
 - Will change in rep focus affect sales?
- Improvement to overall contribution if sales force decreased?

STATUS QUO	BEER	CHIPS	DIPS
In store services	2.8%	11.7%	6.3%
Cont after cost t	21.0%	6.9%	16.3%



SCENARIO	BEER	CHIPS	DIPS
In store services	4.5%	5.3%	6.3%
Cont after cost t	19.3%	13.4%	16.3%

What if? Vendor managed inventory implemented...



VMI initiative with Grocery DCs

- Reduces stock holding
- Improves order behaviour
- Creates more efficient product movement
- Increase in costs for managing VMI

STATUS QUO	BEER	CHIPS	DIPS	TOTAL
Cost to Serve	12.7%	36.0%	18.4%	17.6%
Business Contribution	7,608,954	- 795,072	269,142	7,083,024

SCENARIO	BEER	CHIPS	DIPS	TOTAL
Cost to Serve	12.4%	35.2%	18.2%	17.2%
Business Contribution	7,894,703	- 588,832	292,270	7,598,141

Total change	
Cost to Serve	-0.4%
Business Contribution	515,117

Other possibilities...

- Delete a category
- Grow category



Cost to Serve The BIG Numbers

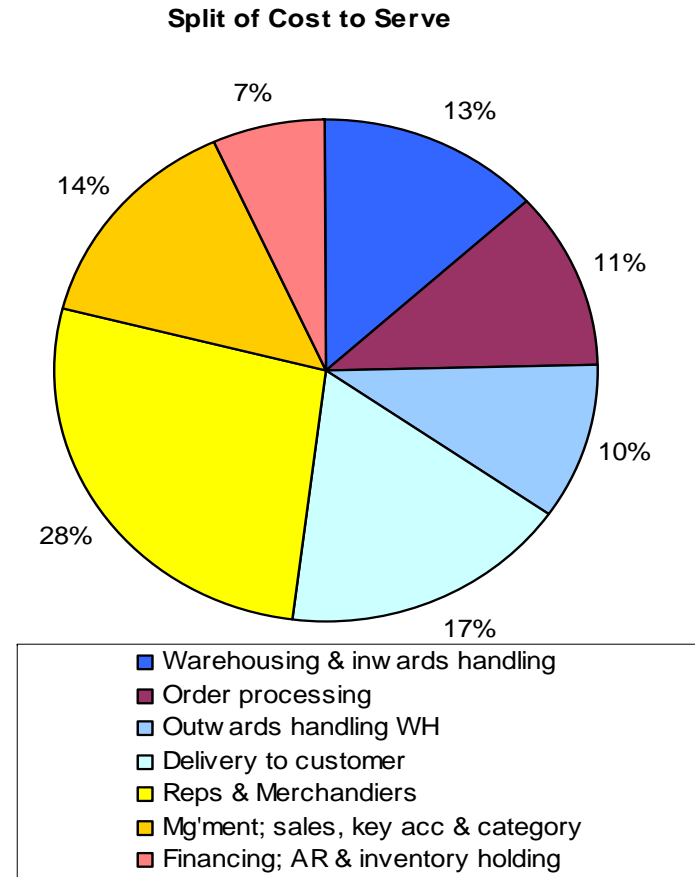
AdvisorBase

In FMCG field selling and freight dominate Cost to Serve



Beer 'N Chip Co. has typical costs:

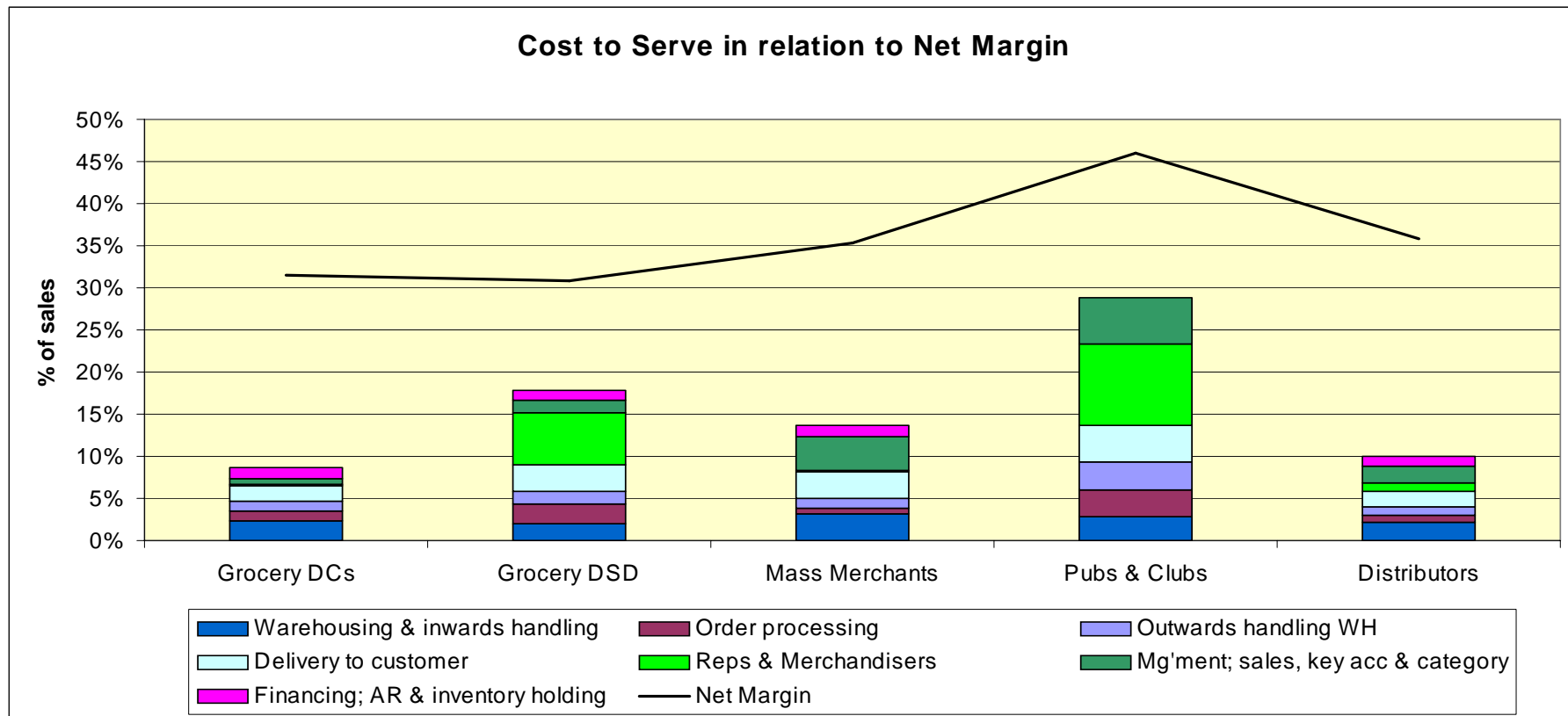
- Logistics:
 - Inventory holding
 - Pick, pack and dispatch
 - Delivery to customer
- Selling:
 - Field sales
 - Merchandising
 - Transaction processing
 - Sales management and key account management



Customers consume resource differently.

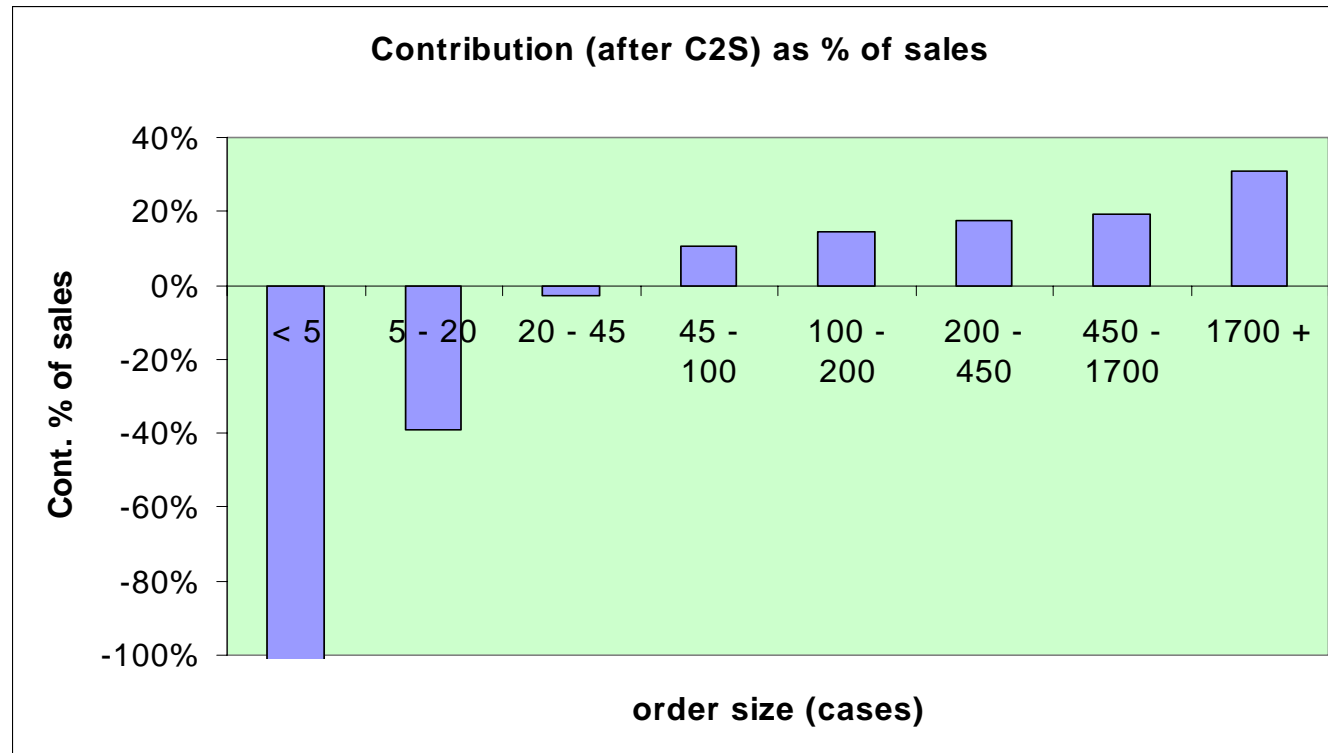


Does Net Margin support a different Cost to Serve?





...scale means order sizes consume resources disproportionately. Not all orders contribute to overheads...



Order size determines:

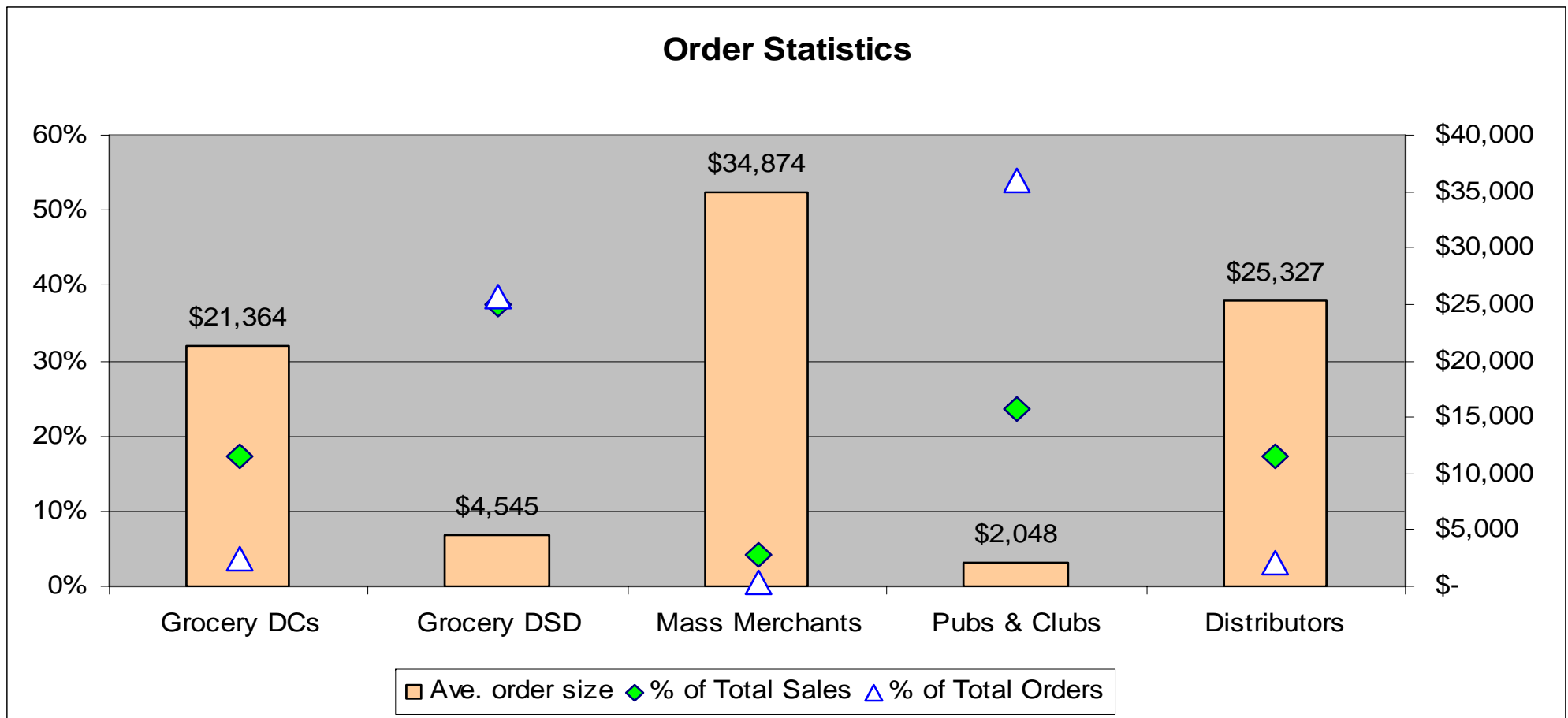
- The ability to pay for the time spent selling and processing the order
- The efficiency of order picking
- The utilisation of 'best' freight rates

Only orders above 45 cases contribute (ie, orders greater than 1 pallet)

Order size is a primary indicator of Cost to Serve



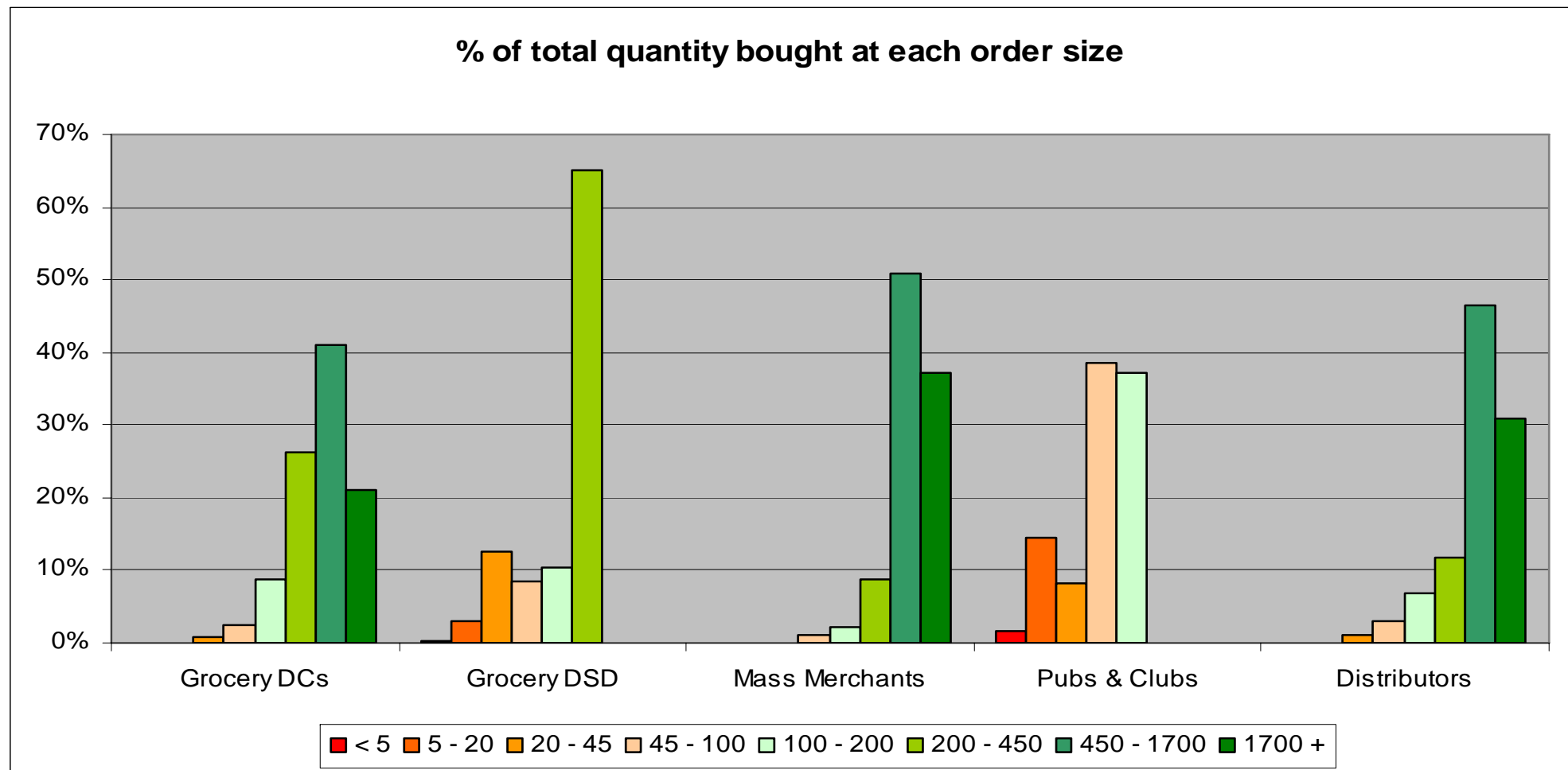
- Proportion of total sales and total orders reveals magnitude and service requirements



Spread of cases purchased in various order ranges reveals potential areas for change...



- Minimum order size
- Who could take advantage of volumetric discounts.





Customer Service & Selling Costs

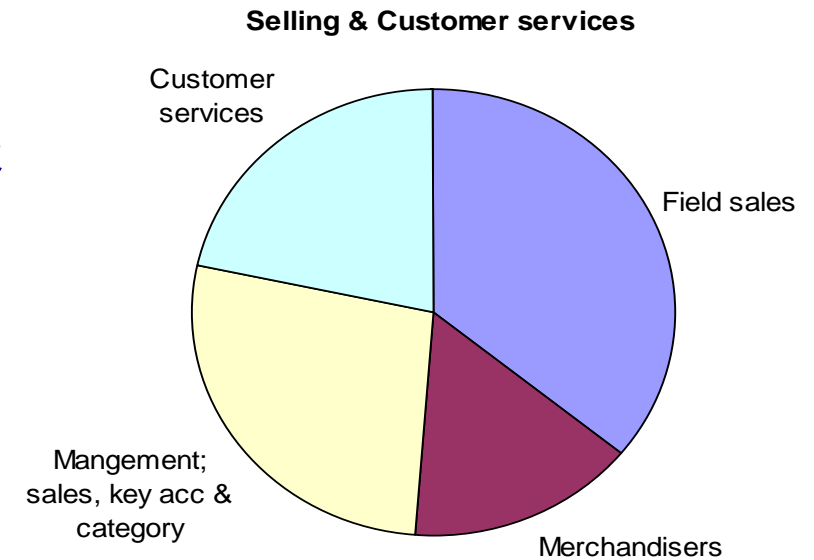
How we choose to serve our customers

AdvisorBase

Selling and Customer Service cost reflect deliberate service strategy...

In-store services are typically the biggest cost to serve component due to:

- Frequent order cycle
- Constant merchandising of fast moving goods
- Travel component.



Costs available by customer or customer group?

Understanding and measuring how resource is deployed across customers is important...

... what discount would you offer a customer if they were to complete their own merchandising?

Beer 'N Chip selling resources are not evenly deployed across products and customers



In-store costs % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Field sales	3.3%	0.2%	2.6%	0.1%	9.6%	0.4%
Merchandisers	1.4%	0.0%	3.6%	0.0%	0.0%	0.5%
Sales & key management	1.2%	0.1%	0.9%	0.1%	3.4%	0.1%
Total instore costs	6%	0.3%	7.1%	0.2%	13.0%	1.0%

Customer needs and service strategy drives resource deployment:

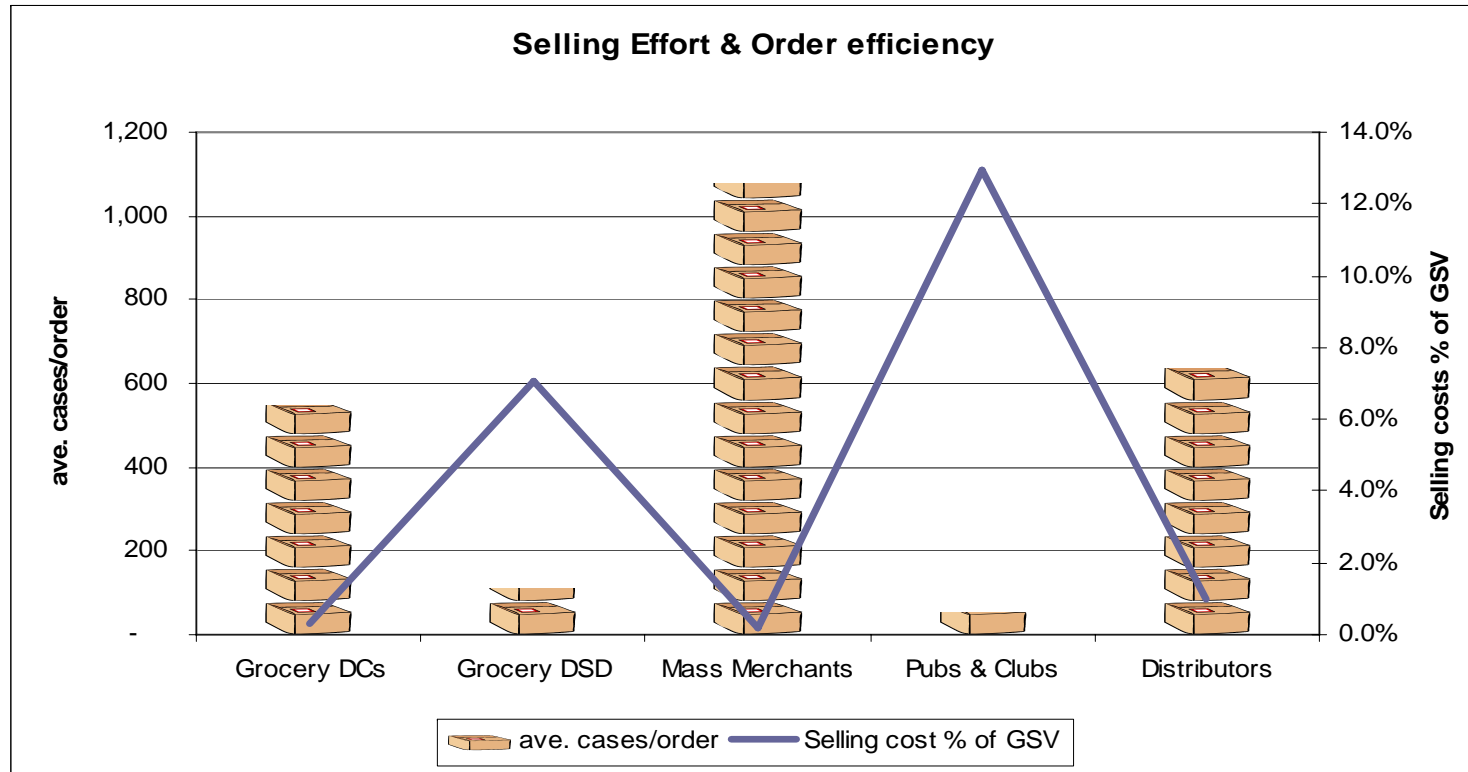
- In-store Grocery merchandising & compliance checking
- In-store order taking for Pubs & Clubs
- Grocery DSD requires supplier to merchandise
- Low cost EDI ordering for Grocery DCs.

Customer and product mix drives costs:

- Cases merchandised varies
- Order lines processed by product varies.

	BEER	CHIPS	DIPS
In store services (rep & merch)	2.8%	11.7%	6.3%

The selling effort and order efficiency gap...



Large proportion of selling resource is used to generate the small orders

...is there a better way of servicing small order customers?

The Cost to Serve analysis reveals a problem with Pubs & Clubs...



Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Warehousing & inwards handling	2.3%	2.3%	2.0%	3.2%	2.8%	2.2%
Order processing	2.0%	1.2%	2.3%	0.6%	3.3%	0.7%
Outwards handling WH	1.8%	1.2%	1.5%	1.2%	3.4%	1.0%
Delivery to customer	3.0%	1.9%	3.1%	3.1%	4.4%	1.9%
Reps & Merchandisers	4.8%	0.2%	6.2%	0.1%	9.6%	0.9%
Mg'ment; sales, key acc & category	2.5%	0.7%	1.6%	4.0%	5.6%	2.1%
Financing; AR & inventory holding	1.2%	1.2%	1.1%	1.4%	0.0%	1.2%
Total cost to serve	17.6%	8.6%	17.8%	13.7%	30.1%	10.0%

- Legacy business involved intensive service of this channel
- High frequency call cycle resulted in:
 - Frequent and small orders
 - High cost to capture, process, handle and ship orders
 - Low contribution.



Drivers of selling and customer service

- Field sales:
 - Call cycle
 - DSD, DC, sales strategy (telesales)
 - In-store service level
 - Driver data by survey
- Merchandising
 - Order cycle
 - Number cases
 - Driver data
 - by survey
 - Call cycle
 - Transaction history
- Transaction processing
 - Number and type of transaction
 - Order method
 - Manual/fax or electronic (EDI)

What if? Change to Field Sales Strategy...



Could the Pubs & Clubs be more efficiently serviced by outbound telesales?

- Reps limit visits to once every 2 months
- Weekly/fortnightly telesales calls in between visits
- Estimated 3% reduction in sales from change
- Estimated 9.5% reduction in costs.

STATUS QUO	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Gross Sales Value	100,000,000	17,200,000	37,550,000	4,250,000	23,650,000	17,350,000
Net Margin	35,590,784	5,408,290	11,554,905	1,504,646	10,895,434	6,227,509
Total cost to serve	17,616,551	1,477,261	6,694,544	582,074	7,127,675	1,734,997
Cont. after cost to serve	17,974,233	3,931,029	4,860,361	922,572	3,767,759	4,492,512
Business contribution	7,083,024	2,057,741	770,711	459,695	1,191,988	2,602,887
Business contribution as % of GSV	7.1%	12.0%	2.1%	10.8%	5.0%	15.0%

SCENARIO	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Gross Sales Value	99,290,500	17,200,000	37,550,000	4,250,000	22,940,500	17,350,000
Net Margin	35,263,921	5,408,290	11,554,905	1,504,646	10,568,571	6,227,509
Total cost to serve	17,034,737	1,480,804	6,785,867	582,819	6,443,960	1,741,288
Cont. after cost to serve	18,229,184	3,927,486	4,769,038	921,827	4,124,611	4,486,222
Business contribution	7,337,974	2,040,918	651,841	455,997	1,606,248	2,582,970
Business contribution as % of GSV	7.4%	11.9%	1.7%	10.7%	7.0%	14.9%

What if? An ullage agreement is implemented...



An ullage agreement avoids dealing with some credits

- Reps no longer have to issue ullage related credits in-store
- No processing requirements at Head Office
- ...but an appropriate discount must be offered.

	\$	% of Sales
Sales	101,609,373	
ullage credits	160,937	0.158%
ullage credit processing	3,821	0.004%
in store ullage credit processing	4,862	0.005%
Total credit cost	169,621	0.167%

...but are rep and data entry costs significant enough to be truly variable?





Logistics

AdvisorBase

Logistics cost reflect the efficiency of customer behaviour....



Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Warehousing & inwards handling	2.3%	2.3%	2.0%	3.2%	2.8%	2.2%
Outwards handling WH	1.8%	1.2%	1.5%	1.2%	3.4%	1.0%
Delivery to customer	3.1%	1.9%	3.1%	3.1%	4.7%	2.0%

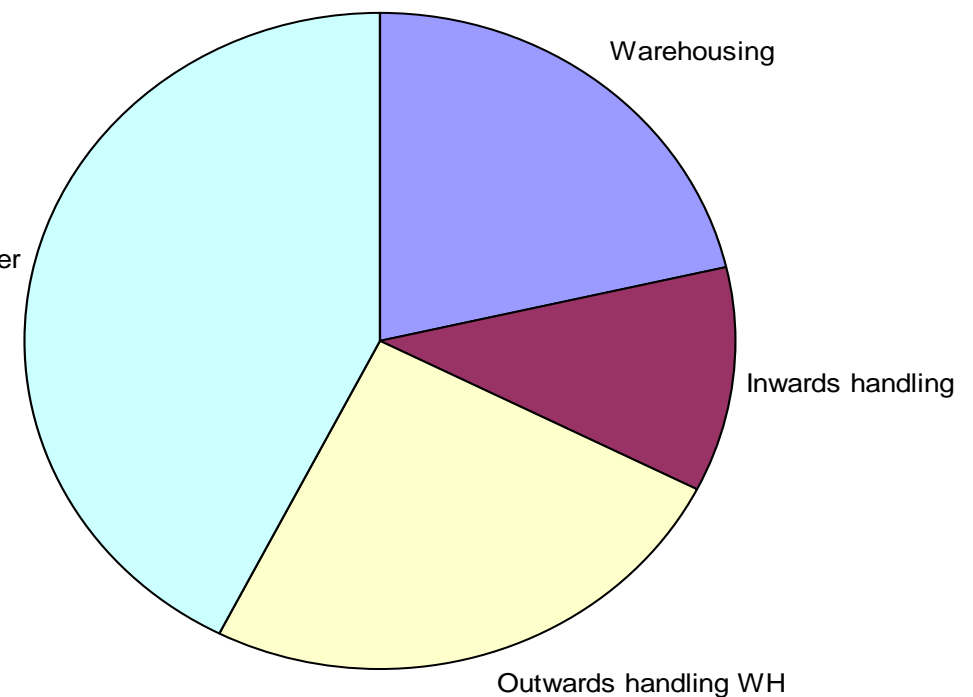
Efficiency due to:

- Low cost, whole pallet picking
- Freight at most efficient part of freight curve

But some contracts with 3PLs may not reflect this...

- Carton rate for Mass Merchants deliveries
- Cost plus contracts that do not readily reflect changes in activity levels.

Logistics Costs



Outwards Handling - Pick, pack and dispatch...



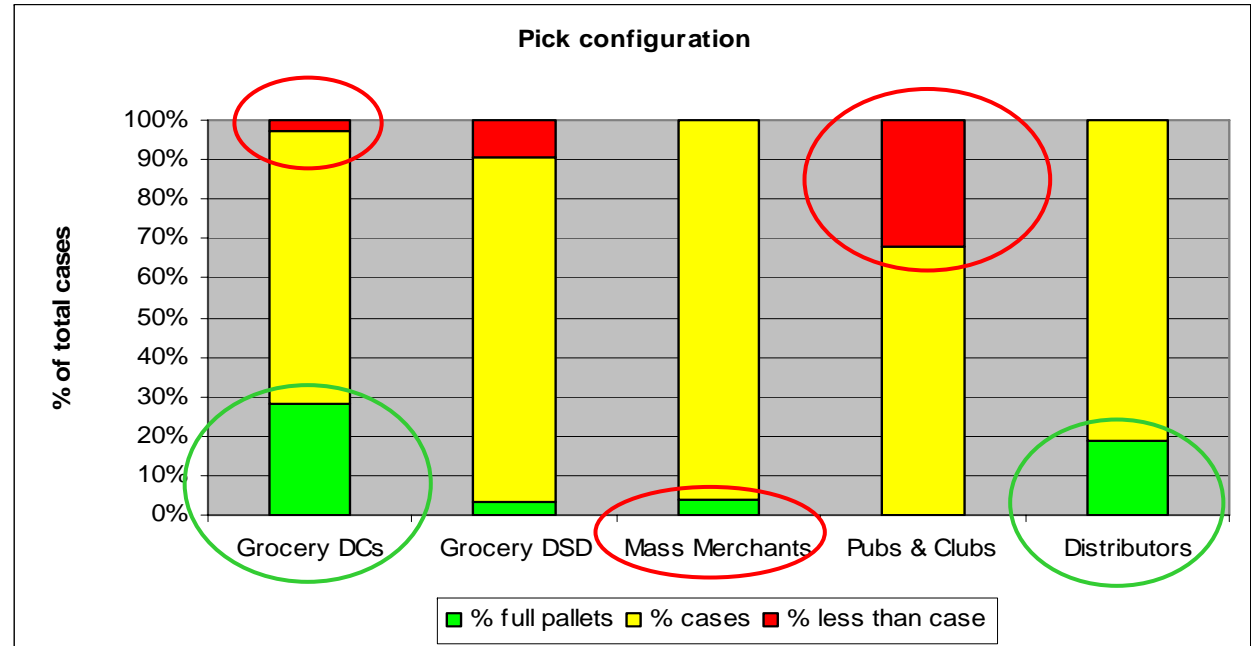
Understanding warehouse unit costs allows for:

- Allocation of costs to customers based on meaningful driver
- Calculation of efficiency discounts such as whole pallet discount.

	Pick Rate	Ave. Saving from Consolidation
Pick Unit	\$0.12	\$3.36 per case
Pick Carton	\$0.24	\$7.82 per pallet
Pick Pallet	\$3.27	Na

Understanding pick configuration for customers will highlight improvement opportunities

- Unit picks for Grocery DCs?
- Limited whole pallet picks for Mass Merchants.



Warehouse data



Determining how resource is deployed to activities requires either:

- An activity based contract with warehouse provider, or
- Warehouse survey (time sample, time & motion etc).

Drivers are easy = volumes

- Driver for pallet picks = whole pallet picks
- Driver for carton picks = loose cartons picked

Lots of activities – do we need the detail?

- Driver for refill pick face = No. of equivalent pallets (that are not sold as a whole pallet)

Rates required for:

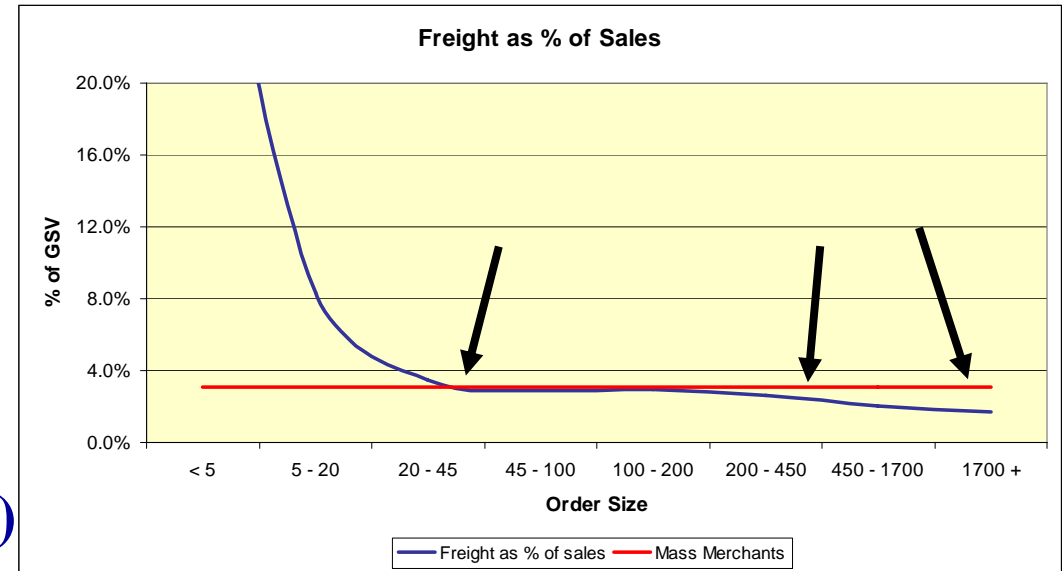
- Each pick activity
- Order processing
- Other warehouse activity.

Delivery to customer



Beer 'N Chip have 2 freight contracts:

- Standard weight based contract
 - Minimum charge (0.5T)
 - Volume breaks at 5T and 20T
- Case rate contract
 - Deliveries to Mass Merchants



Customer order frequency (and size) affects the freight efficiency

- Improvement opportunities for all customers
- Is the case rate contract appropriate?

% of Orders	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Min. rate	62%	10%	65%	Na	67%	14%
Std. rate	36%	69%	35%	Na	33%	57%
> 5 Tonne	2%	20%	0%	Na	0%	28%

Freight data



Drivers

- Contract & volumes (multi-dimensional)
 - Geographic spread
 - Rate base (m3/kg/lift/case)
 - Min order size & volume breaks
 - Customer specific requirements
 - Pallets between SKUs

Costs

- Typically sourced from freight consignment notes
- Require average rate per customer so costs can be accurately assigned.

Requires a freight model...

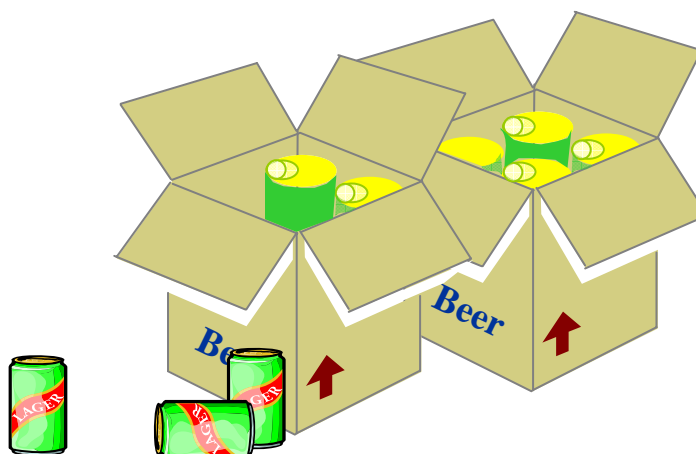
What if? Elimination of unit picks...



Grocery has unit picks for beer and dips.

- Eliminating unit picks for Grocery DCs (for Beer) saves \$31K
- Eliminating for all Grocery customers saves \$268

Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Outwards handling WH	1.8%	1.2%	1.5%	1.2%	3.4%	1.0%
Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Outwards handling WH	1.5%	1.0%	0.9%	1.2%	3.4%	1.0%



What if? Whole pallet discount...



Provide a discount for whole pallet picks?

- 0.4% savings from whole pallet picks
 - \$38k given away for existing behaviour
- A 25% increase in cases picked as whole pallets and Mass Merchants moving to 25% whole pallet picks
 - An additional \$11k in discounts and an additional \$16k in savings

Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Outwards handling WH	1.8%	1.2%	1.5%	1.2%	3.4%	1.0%
Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Outwards handling WH	1.8%	1.1%	1.5%	1.1%	3.4%	1.0%

...if discount based on cost, removes risk from behaviour change

What if? Volumetric discounts offered...



Incentive for retailers to place larger orders

- Not possible for all to change frequency (or increase order size).
 - 1 order per week for large customers
 - 1 order per fortnight for Pubs & Clubs.

Less orders = larger orders = more efficient product movement

Ignoring incentives/discounts, supply chain savings can be tested...

Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Order processing	2.0%	1.2%	2.3%	0.6%	3.3%	0.7%
Delivery to customer	3.0%	1.9%	3.1%	3.1%	4.4%	1.9%

Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Order processing	1.9%	1.1%	2.4%	0.6%	3.0%	0.7%
Delivery to customer	2.7%	1.8%	2.9%	3.1%	3.7%	1.8%

- Over 2,000 orders avoided (\$65k transaction processing costs)
- \$257k freight savings.

What if? Case rate freight contract is restructured with volume breaks...



No change in initial cost for delivery to this customer, but:

- Savings possible if Mass Merchants increase order size
- Will have to offer volumetric terms to this customer regardless of the specific freight arrangements that apply?



Order Size (cartons)	Existing \$ / EQ Pallet	New \$ /EQ Pallet
< 5	39	450
5 - 20	39	300
20 - 45	39	150
45 - 100	39	80
100 - 200	39	50
200 - 450	39	39
450 - 1700	39	38
1700 +	39	28

What if? Couriers used for small orders...



Orders in smallest range size currently shipped at minimum charge

- Orders less than 5 cases are sent by courier
- \$6.50 charge per ticket /carton

Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Delivery to customer	3.0%	1.9%	3.1%	3.1%	4.4%	1.9%
Cost to serve as % of GSV	Total Business	Grocery DCs	Grocery DSD	Mass Merchants	Pubs & Clubs	Distributors
Delivery to customer	2.9%	1.9%	3.0%	3.1%	4.1%	1.9%

In percentage terms a small change,
but saves \$78k for very little effort.



Overheads

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Overheads lack meaningful drivers...

Where overheads can be linked to customers or products they should allocated directly to them e.g.

- Product/ Category specific advertising
 - What about generic brand or corporate advertising?
- R&D driven from project data
- Scan data (customer & product)

Some overheads have an activity base e.g.

- Warehouse IT system

But for most overheads there is no causal drivers

Real case studies in New Zealand

Field Sales Consolidation

Company with separate sales team for each of its product categories were successfully combined into 1 multi-category sales force.

Route Trade / Foodservice Channel

Intensive rep service requirement for route and foodservice channel was replaced with a regular outbound call centre service.

Route to Market

Small outlets with high freight and picking costs were passed onto a distributor whose model better suited small deliveries.

Freight Contract Structure Re-aligned

Customer ordering profiles meant existing freight structure was not operating efficiently. Contract restructured to match customer behaviour.



Beer 'N Chip Revitalised

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Review of the scenarios



Running all the change/improvement scenarios concurrently:

- New trading terms applied
 - Ullage (for all grocery Customers)
 - Settlement
 - Whole pallet discount
 - Volumetric discounts
- Reallocation of rep attention to beer category
- Rep visits to Pubs & Clubs reduced
- Telesales emphasis for serving Pubs & Clubs
- Courier deliveries for <5 cases
- New freight contract for Mass Merchant deliveries
- Unit picks eliminated (for grocery)
- VMI for Grocery DC.

Extreme makeover!



	Total Business	Total Business
Gross Sales Value	100,000,000	99,378,613
Std terms	8,101,876	9,533,408
Promo on invoice	5,447,126	5,302,889
On inv. terms % GSV	13.5%	14.9%
Net on invoice	86,450,997	84,542,316
Net % of GSV	86%	85%
Settlement	2,812,500	1,442,130
Promo - co-op&rebates	3,499,079	3,784,648
Other terms % of GSV	6.3%	5.3%
Net Net	80,139,418	79,315,538
Net Net % of GSV	80%	80%
Product Costs	44,548,634	44,247,614
Prod costs % of GSV	45%	45%
Net Margin	35,590,784	35,067,924
Cont. after product cost % of GSV	36%	35%
Warehousing & inwards handling	2,339,222	2,196,348
Order processing	2,005,514	1,959,449
Outwards handling WH	1,793,712	1,483,154
Delivery to customer	2,979,751	2,653,282
Reps & Merchandisers	4,767,063	3,616,144
Mg'ment; sales, key acc & category	2,541,044	2,541,044
Financing; AR & inventory holding	1,190,244	1,078,285
Total cost to serve	17,616,551	15,527,795
Cost to Serve as % of GSV	17.6%	15.6%
Cont. after cost to serve	17,974,233	19,540,218
Cont as % of GSV	18%	20%
Advertising & OH	10,891,209	10,891,209
other O/H % of GSV	11%	11%
Business contribution	7,083,024	8,649,009
Business contribution as % of GSV	7.1%	8.7%

With all the change initiatives...

- Net Net Sales % unchanged
- Cost reduction for servicing customers
- Contribution improvement

Profitability up \$1.6 MIL

Pubs & Clubs – the turnaround



	Pubs & Clubs	Pubs & Clubs
Gross Sales Value	23,650,000	22,940,500
Std terms	1,835,754	2,000,903
Promo on invoice	839,839	695,602
On inv. terms % GSV	11.3%	11.8%
Net on invoice	20,974,407	20,243,995
Net % of GSV	89%	88%
Settlement	-	-
Promo - co-op&rebates	44,971	44,237
Other terms % of GSV	0.2%	0.2%
Net Net	20,929,436	20,199,758
Net Net % of GSV	88%	88%
Product Costs	10,034,002	9,732,982
Prod costs % of GSV	42%	42%
Net Margin	10,895,434	10,466,776
Cont. after product cost % of GSV	46%	46%
Warehousing & inwards handling	654,009	599,683
Order processing	769,909	719,274
Outwards handling WH	792,817	769,148
Delivery to customer	1,035,089	841,108
Reps & Merchandisers	2,262,029	992,578
Mg'ment; sales, key acc & category	1,312,616	1,024,407
Financing; AR & inventory holding	301,205	265,197
Total cost to serve	7,127,675	5,211,395
Cost to Serve as % of GSV	30.1%	22.7%
Cont. after cost to serve	3,767,759	5,255,381
Cont as % of GSV	16%	23%
Advertising & OH	2,575,771	2,518,363
other O/H % of GSV	11%	11%
Business contribution	1,191,988	2,737,018
Business contribution as % of GSV	5.0%	11.9%

- Downturn in sales due to the change in service strategy
- Terms structure changed:
 - Increased standard terms
 - Reduced off invoice promo
 - Same Net Net Sales
- Cost to Serve savings:
 - Reduced orders
 - Less order processing
 - Less orders at minimum freight charge
 - Courier for <5 carton orders
 - Less rep visits, more telesales servicing.
 - Less Field Sales Management allocation.

Chips – the \$2.5m change



	CHIPS	CHIPS
sales	20,000,000	19,783,909
Invoice terms	3,360,748	2,097,375
After invoice terms	2,018,716	2,156,906
Discounts as % of sales	26.9%	21.5%
Net Net	14,620,535	15,529,628
Net Net % of sales	73.1%	78.5%
COGS	6,033,675	5,964,891
Net Margin	8,586,860	9,564,737
Cont after prod costs % of sales	42.9%	48.3%
Warehousing	781,138	703,279
Inwards handling	348,411	345,355
Order processing	354,974	359,892
Outwards handling	315,600	307,474
Freight to customer	1,305,854	1,128,387
In store services (rep & merch)	2,337,749	1,033,501
Sales management	616,699	616,699
Key acc & cat mgmt	749,077	749,077
Finance inventory & AR	394,189	350,563
Cost to Serve	7,203,690	5,594,227
Cost to serve % of sales	36.0%	28.3%
Cont. After Cost to Serve	1,383,170	3,970,510
Cont after cost to serve % of sales	6.9%	20.1%
Advertising	594,173	594,173
Direct and manage business	1,584,069	1,584,069
Business Contribution	-795,072	1,792,268
Business Contribution % of sales	-4.0%	9.1%

Not all saved, some costs 'reallocated' back to other categories

- Terms structure change, means less overall discounts.
 - Customer mix
- In-store focus away from Chips reduces rep costs.
- Advertising of Chips and share of general overheads unchanged.



Conclusion

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These are still interesting times

Having worked through a Cost to Serve analysis ...

- The theory:
 - Analysis framework – model structure
 - Drivers and data collection
 - Scenario modelling
- The example, Beer 'N Chip
 - Identified and modelled improvement initiatives
- FGC web site to contain:
 - Presentation material

... are you better equipped to deal with them?