

All About Allocations



MARKETING TECHNOLOGIES GROUP

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Marketing Technologies Group

Objectives of Allocations

- Understand true cost
- Manage and control costs
- Shared services such as IT, accounting, legal, real estate
- Assign all costs to revenue generating activities
- **IMPROVE BUSINESS PERFORMANCE!**

Before Allocation

| | All Business Units | Corp Overhead | Commercial | Industrial | Consumer |
|-----------------------------|---------------------------|------------------|----------------|----------------|----------------|
| Revenue | 1,000,000 | | 500,000 | 250,000 | 250,000 |
| Cost Of Goods Sold | 500,000 | | 250,000 | 125,000 | 125,000 |
| Gross Margin | 500,000 | | 250,000 | 125,000 | 125,000 |
| Rent | 100,000 | 100,000 | | | |
| SG&A | 100,000 | 100,000 | | | |
| Sales and Marketing | 100,000 | 100,000 | | | |
| Total Indirect Costs | 300,000 | 300,000 | - | - | - |
| Profit Before Tax | 200,000 | (300,000) | 250,000 | 125,000 | 125,000 |
| Statistics | | | | | |
| Headcount | 1,000 | - | 500 | 300 | 200 |
| Headcount Percent | 100% | 0% | 50% | 30% | 20% |

After Allocation

| | All Business Units | Corp Overhead | Commercial | Industrial | Consumer |
|-----------------------------|---------------------------|---------------|----------------|----------------|----------------|
| Revenue | 1,000,000 | | 500,000 | 250,000 | 250,000 |
| Cost Of Goods Sold | 500,000 | | 250,000 | 125,000 | 125,000 |
| Gross Margin | 500,000 | | 250,000 | 125,000 | 125,000 |
| Rent | 100,000 | - | 50,000 | 30,000 | 20,000 |
| SG&A | 100,000 | - | 50,000 | 30,000 | 20,000 |
| Sales and Marketing | 100,000 | - | 50,000 | 30,000 | 20,000 |
| Total Indirect Costs | 300,000 | - | 150,000 | 90,000 | 60,000 |
| Profit Before Tax | 200,000 | - | 100,000 | 35,000 | 65,000 |
| Statistics | | | | | |
| Headcount | 1,000 | - | 500 | 300 | 200 |
| Headcount Percent | 100% | 0% | 50% | 30% | 20% |

Applications

- Fully Loaded Profitability
- Customer Profitability
- Product Profitability
- Shareholder Value/EVA
- Activity Based Management
- Strategic Cost Management

Allocation Concepts

- Cost drivers/Metrics
- True cost means using true drivers
- One-dimensional
- Multi-dimensional
- Waterfall allocations
- Essbase functions for allocations

Cost Drivers/Metrics

- Percentages used to spread total cost
- e.g. Spread rent based on cost center headcount
- Allocations are only as good as the drivers

Product Related Drivers

- # of machine hours by product
- # of purchase orders
- # of line items per PO
- # of inspections
- # of ingredients
- # of work orders
- # of material movements
- # of receipts

Customer Related Drivers

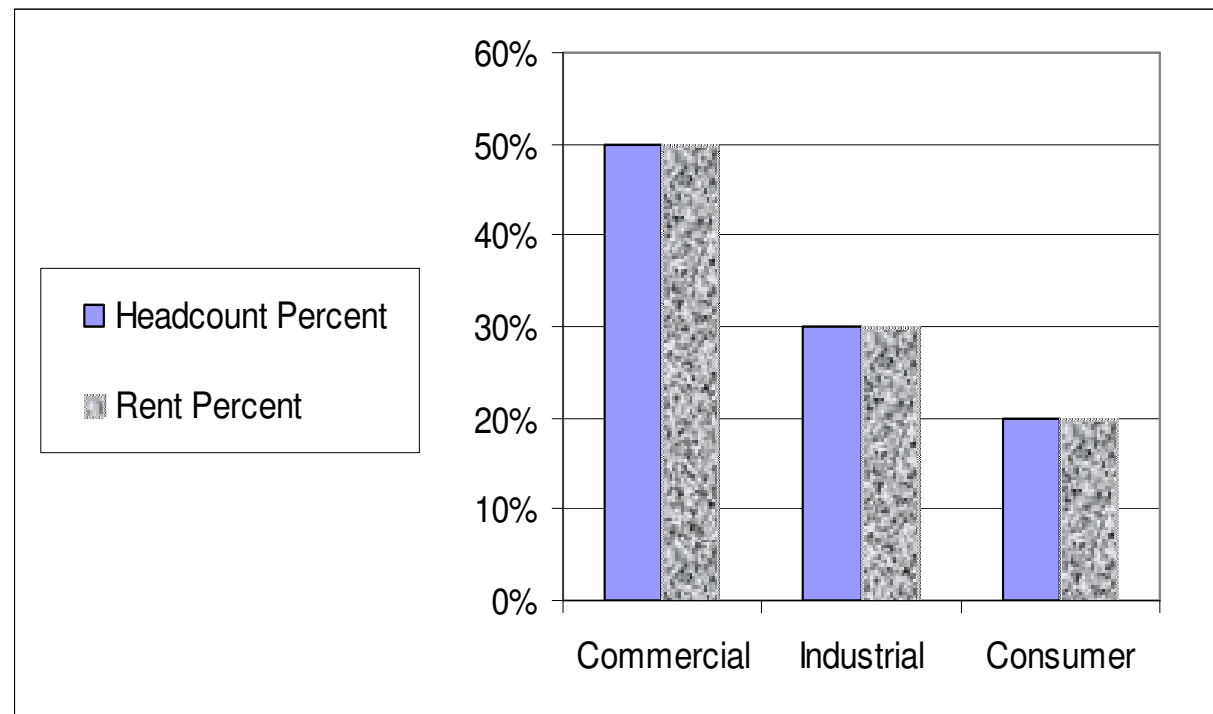
- # of complaints
- # of customers
- # of sales calls
- # of line items picked
- # trouble calls
- # of customer orders
- # of order changes
- # of private label products

Cost Driver / Expense Line Item

| <i>Cost driver</i> | <i>Expense line item</i> |
|------------------------------|----------------------------|
| Square footage | Rent expense |
| Headcount | Salary expense |
| Headcount | Employee benefits expense |
| Number of invoices generated | Billing department expense |
| Number of desktop PCs | IP desktop support expense |

Percentage Relationships

| | All Business Units | Corp Overhead | Commercial | Industrial | Consumer |
|-------------------|---------------------------|---------------|------------|------------|------------|
| Rent | 100,000 | - | 50,000 | 30,000 | 20,000 |
| Headcount | 1,000 | - | 500 | 300 | 200 |
| Headcount Percent | 100% | 0% | 50% | 30% | 20% |
| Rent Percent | 100% | 0% | 50% | 30% | 20% |



Where's the Data?

- Costs to be allocated loaded high
- Driver base values loaded low

| | | Jan | Budget | | | | | | | |
|-----------|----------------|------|-----------|--------------------|-------|-----------|------------|------------|---------|---------|
| | | Cola | Diet Cola | Caffeine Free Cola | Colas | Root Beer | Cream Soda | Fruit Soda | Product | |
| Headcount | New York | 21 | 69 | 64 | - | - | - | - | - | - |
| | Massachusetts | 63 | 18 | 3 | - | - | - | - | - | - |
| | Florida | 18 | 90 | 19 | - | - | - | - | - | - |
| | Connecticut | 99 | 61 | 41 | - | - | - | - | - | - |
| | New Hampshire | 17 | 93 | 33 | - | - | - | - | - | - |
| | East | - | - | - | - | - | - | - | - | - |
| | West | - | - | - | - | - | - | - | - | - |
| | South | - | - | - | - | - | - | - | - | - |
| | Central | - | - | - | - | - | - | - | - | - |
| | Market | - | - | - | - | - | - | - | - | - |
| Rent | New York | - | - | - | - | - | - | - | - | - |
| | Massachusetts | - | - | - | - | - | - | - | - | - |
| | Florida | - | - | - | - | - | - | - | - | - |
| | Connecticut | - | - | - | - | - | - | - | - | - |
| | New Hampshire | - | - | - | - | - | - | - | - | - |
| | East | - | - | - | - | - | - | - | - | - |
| | West | - | - | - | - | - | - | - | - | - |
| | South | - | - | - | - | - | - | - | - | - |
| | Central | - | - | - | - | - | - | - | - | - |
| | Market | - | - | - | - | - | - | - | - | 100,000 |

Essbase Allocation Functions

- CROSS DIM Operator (->)
- @PARENTVAL()
- @ANCESTVAL()
- @MDPARENTVAL()
- @MDANCESTVAL()
- @ALLOCATE()
- @MDALLOCATE()
- Relationship functions return the VALUE

One-Dimensional

- CROSS DIM
- @PARENTVAL(*dimName*, *Xmbr*)
- @ANCESTVAL(*dimName*, *genLevNum*, [*mbrName*])

Multi-Dimensional

- Multi-D Cross Dim
- @MDPARENTVAL(*numDim, dimName1, ... dimNameX, [xmbr]*)
- @MDANCESTVAL(*NumDim, DimName1, GenLevNum1. . . DimNameX, GenLevNumX [,Xmbr]*)

Fixed vs. Relative References

- Fixed points to same value for all members
 - e.g. “Hdcnt Pct” = $\text{Hdcnt} / \text{Hdcnt}$ -> “All Markets”;
- Relative points to same relationship
 - e.g. “Hdcnt Pct” = $\text{Hdcnt} / @\text{PARENTVAL}$ (“All Markets”, Hdcnt);

Allocation Procedure in Essbase

- 1. Rollup Driver Denominators
- 2. Calculate Driver Percentages
- 3. Calculate Allocated Charges

Rollup Driver Denominators

- FIX() on driver base measures
- CALC DIM (or equivalent)

Calculate Driver Percentages (1 Dimensional)

- $\text{Hdcnt Pct} = \text{Hdcnt} / \text{Hdcnt} \rightarrow \text{“All Markets”};$
- $\text{Hdcnt Pct} = \text{Hdcnt} / @\text{PARENTVAL}(\text{“All Markets”}, \text{Hdcnt});$
- $\text{Hdcnt Pct} = \text{Hdcnt} / @\text{ANCESTVAL}(\text{“All Markets”}, 2, \text{Hdcnt});$

Calculate Driver Percentages (Multi Dimensional)

- Hdcnt Pct =
Hdcnt / Hdcnt ->"All Markets"->"All Prods";
- Hdcnt Pct =
Hdcnt /@MDPARENTVAL(2,"All Markets","All Prods",Hdcnt);
- Hdcnt Pct =
Hdcnt /@MDANCESTVAL(2,"All Markets",2,"All Prods",2,Hdcnt);

Calculate Allocated Charges

- Rent =
Hdcnt Pct * Rent ->"All Markets"->"All Prods";
- Rent =
Hdcnt Pct * @MDPARENTVAL(2,"All Markets","All Prods",Rent);
- Rent =
Hdcnt Pct * @MDANCESTVAL(2"All Markets",2,"All Prods",2,Rent);