Cost To Serve – an Introduction

How its application can improve EBIT performance by up to 20%

To read more about Cost To Serve Services by Logistics Bureau, see http://www.logisticsbureau.com/cost_to_serve.htm
Agenda

Introduction
To provide background and context to commentary and case studies

Cost To Serve
What is Cost To Serve?
What benefit does it deliver?
How is it implemented?

Questions/Discussion

http://www.logisticsbureau.com/cost_to_serve.htm
Introduction - Logistics Bureau

- Largest specialist Supply Chain consulting company in the Region
- Breadth and depth of experience, with over 700 Supply Chain projects completed
- We are independent, objective and guarantee results
- We are specialists in cost to serve

http://www.logisticsbureau.com/cost_to_serve.htm
# Focus – Core Industry Sectors

Cost to Serve Case studies from the 3 sectors at the top

## Healthcare
- Animal health
- Hospitals
- Government health
- Optical and dental
- Pharmaceutical distribution
- Pharmaceutical wholesale
- Pharmaceutical retail
- Pharmaceutical manufacturing
- Pathology & Imaging

## FMCG & CPG
- Agriculture
- Appliances
- Baked goods
- Beverages
- Cold stores
- Consumer goods
- Cosmetics
- Dairy
- Dry goods
- Meat
- Milling
- Packaging
- Retail Discount & Variety
- Retail Fashion
- Retail Fast Food
- Retail Grocery

## Energy Mining & Construction
- Building products
- Cable companies
- Construction companies
- Distributors
- Electrical distributors
- Energy, oil, gas, electricity
- Explosives
- Fabrication
- Mining Equipment and parts
- Power distributors

## IT & Telco
- Carriers
- Distributors
- Parts & service
- PC manufacturer
- Printer manufacturers
- Software distributors
- Telecommunication manufacturers
- Wholesalers

## Government & Economic Development
- Development groups
- Federal government
- International government
- Local government
- Specialised services
- State government

## 3PL
- Freight forwarding
- Ocean freight
- Parcel carriers
- Warehouse & distribution

http://www.logisticsbureau.com/cost_to_serve.htm
Some of Our Customers

- AAP Communications
- Abbott Laboratories
- ACF
- ACG
- ADI
- AEL
- ALDI
- ALM
- A.P.I.
- Air New Zealand
- Alcon Laboratories
- AMCOR Australasia
- Auditor General Victoria
- Australian Aerospace
- Australian Trade Coast
- Australian Wheat Board
- Bangkok Gen Hosp Group
- Barbeques Galore
- Bayer
- Bega Cheese
- Beringer Blass Wine Estates
- Berli Jucker
- BHP Billiton
- Bluegum Technology
- Bluescope Steel
- Boots Healthcare
- Boral
- Brightpoint
- Brisbane Airport Corp
- Bunnings
- Buy.com
- Carlton & United Beverages
- Castrol
- Cement Australia
- Ceva
- Chanel
- Chomtana
- Christian Dior
- Colorado
- Corporate Express
- Cosmax Cosmetics
- Costa Group
- Coty Lancaster
- CP Foods
- CSR
- Crompton Lighting
- Daimler Chrysler
- Diageo
- Delta Electricity
- Dept of Defence
- Dept Transport & Regional Svcs
- Dexion
- DHL
- Diethelm Thailand
- Diethelm Vietnam
- Don Smallgoods
- Double A
- Dulux
- EFFEM
- Elgas
- Elizabeth Arden
- Energy Australia
- Epson Australia
- ETSA Utilities
- Exel Logistics
- FiK International
- Fosters
- Freedom Group
- Frutex
- Fujitsu
- GAC
- Gardner Smith Group
- General Pants
- George Weston Foods Group Office
- GlaxoSmithKline
- Goodman Fielder
- Grays online
- GUD Holdings
- Harper Collins
- Ingram Micro
- James Hardie
- Jeans West
- Jalco Group
- John Danks & Sons
- Johnson Controls
- Johnson & Johnson Pacific
- Juvena
- Komatsu
- Laminex
- Lend Lease
- Li and Fung
- Lion Nathan
- Maersk Logistics
- Mariner
- Mars Corporation
- Melosi
- Masterfoods
- Minor Foods
- Mitr Phol Sugar
- Mitsubishi Trucks
- National Blood Authority
- National Foods
- Nokia
- Novartis
- NSW Health
- NSW Police
- NYK Logistics
- Nylex
- Olympus
- Orica Explosives
- Philmac
- Pinkertons
- Pfizer
- Pelerman Group
- Petroleum Inst of Thailand
- Post Logistics
- Provimi
- Siam City Cement
- Selleys
- Shell
- Siemens Dematic
- Signum
- Southcorp
- Southern Health
- SPC Ardmora
- Speedibake
- St Vincent de Paul
- Star Track Express
- Stramit
- Sunbeam Foods
- Supa A Mart
- Sylvania Lighting
- Tattersals
- Tech Pacific
- Tenix
- The Warehouse Group
- Tip Top
- TNT Express
- TNT Logistics
- Toll
- Transend
- Trimex
- Unilever
- Unimin
- UPS
- Vinindex
- Weight Watchers
- Wesfarmers
- Weston Bio Products
- Weston Biscuits
- Weston Milling
- Whirlpool
- Woolworths
- World Bank
- Yates
- Zuellig Pharma
Major Supply Chain Changes & Challenges

➔ Markets
  – Geographic expansion, acquisition, product range expansion

➔ Retail Stores
  – Better stock allocation systems, new point of sale unit loads

➔ Distribution
  – Rationalisation of DC networks, more supplier centralisation

➔ Factory Gate Pricing
  – Changes to order profiles

These…and more, will impact supplier’s processes, use of resources and cost to serve

http://www.logisticsbureau.com/cost_to_serve.htm
Agenda

Introduction

Cost To Serve

What is Cost To Serve?
What benefit does it deliver?
How is it implemented?

Questions/Discussion

http://www.logisticsbureau.com/cost_to_serve.htm
Supply Chain Dimensions
It’s about...... Asset Performance (AP), Supply Chain Network (SCN) and Planning (P)

Make or Buy (COGS) 60 %
Inbound Logistics 8 %
Internal Logistics 5 %
Availability 4 %
Customer Delivery 5 %

Delivering The Promise!

Organisation: Structure, responsibilities, accountabilities, culture, skills
Performance: SOPs, KPIs
Physical Assets: Facilities, storage equipment, vehicles, MHE
Transport: Speed, Utilisation of time & capacity, consolidation, backloads
Time: Lead Time, order size, order frequency, flexibility, responsiveness
Stock: How much and where, Regional, National, Local, Suppliers
Processes and Systems: ERP, add ons
Optimisation: Trade offs: costs, f assets, w capital, availability, sales, customer retention

Cost To Serve is a critical ‘enabler’ in identifying & driving improvement

http://www.logisticsbureau.com/cost_toServe.htm
For all businesses, there are many ‘paths’ through the supply chain for their products and services. The costs related to each ‘path’ vary considerably, based on the customer/product mix. Knowing this cost to serve is vital.
Cost To Serve Concepts

→ Cost To Serve is:

Understanding the total cost of servicing our customers

....at a customer and product level

....so that the business can provide appropriate levels of service to its customers

....to achieve business goals

→ Cost To Serve is NOT:

– Activity Based Costing

http://www.logisticsbureau.com/cost_to_serve.htm
This approach takes no account of the customer and product characteristics that can drive additional costs into the Supply Chain.

http://www.logisticsbureau.com/cost_to_serve.htm
Cost To Serve Approach

Identify & Map Activities
Identify Cost & Drivers
Allocate Costs to Activities
Establish As Is Costs

Identify Product & Service Characteristics
Identify Customer Characteristics
Establish Customer & Product Matrices

ABC Sub Process

Change Management Of Processes and Behaviours

Ongoing Reporting of Cost To Serve
### Different Cost Perspectives

<table>
<thead>
<tr>
<th>GL View</th>
<th>ABC View</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wages</strong></td>
<td><strong>Order Management</strong></td>
</tr>
<tr>
<td>$100,000</td>
<td>$30,000</td>
</tr>
<tr>
<td><strong>Rent</strong></td>
<td><strong>Receipt &amp; Putaway</strong></td>
</tr>
<tr>
<td>$30,000</td>
<td>$30,000</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td><strong>Storage</strong></td>
</tr>
<tr>
<td>$20,000</td>
<td>$60,000</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td><strong>Picking &amp; Despatch</strong></td>
</tr>
<tr>
<td>$20,000</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>$170,000</td>
<td>$170,000</td>
</tr>
</tbody>
</table>

### CTS View 1

<table>
<thead>
<tr>
<th>CTS View 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Continuity fulfilment</strong></td>
</tr>
<tr>
<td><strong>Seasonal fulfilment</strong></td>
</tr>
<tr>
<td><strong>Promotional fulfilment</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

### CTS View 2

<table>
<thead>
<tr>
<th>CTS View 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mass retailers</strong></td>
</tr>
<tr>
<td><strong>Independent retailers</strong></td>
</tr>
<tr>
<td><strong>Route trade</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

*The Cost To Serve (CTS) view allocated costs based on the characteristics of customers and products.*

http://www.logisticsbureau.com/cost_to_serve.htm
Typical Cost to Serve outcomes include:

- Identification of *low margin customers*
- Identification of *low margin products*
- Identification of *high cost processes*
- Ultimately.....*making all customers profitable*, or more profitable!

*The aim is not to delete low margin products or customers, but to make them all profitable. Knowing your cost to serve makes this possible.*

[http://www.logisticsbureau.com/cost_to_serve.htm](http://www.logisticsbureau.com/cost_to_serve.htm)
With Cost to Serve reporting, a company has the ability to:

- Negotiate terms with major customers
- Test alternative distribution modes/service
- Improve customer profitability
- Improve pricing methodology
- Improve processes

A review of Cost To Serve is often the first step to major Supply Chain improvement.

http://www.logisticsbureau.com/cost_to_serve.htm
Cost to Serve requires commitment

Why Cost to Serve often fails:

- Data is not comprehensive
- Data extraction too difficult
- Lack of business ‘buy-in’
- Process is too complicated
- Not fed into Business Strategy
- Cost to Serve not done well first time
- No early wins to be seen

Starting with a specific area of the Supply Chain, such as warehousing or delivery, and focussing on costs by customer and product group only, is often a less resource intensive way to start undertaking cost to serve analysis.

http://www.logisticsbureau.com/cost_to_serve.htm
Try to identify those characteristics of your customers, that drive different service needs and costs in your business.

Then conduct Cost to Serve on those groups, not your traditional customer grouping.
A great example of customer segmentation, where service expectation, and cost to serve vary considerably.

Fare Types
First Class (F,P)
Business (J,C)
Economy (Y)
Sub Classes (B,H,L,M,V)

Service considerations?
Cost to serve implications?

Business

I know what I want!
I want it now!
I'm willing to pay a premium.
And hey! ....... This wine is too warm!

Economy

The Ticket was a good price!
I wonder if we'll get a decent meal on this flight?

Discount Economy

Hey Honey ....... I can see the harbour Bridge!

http://www.logisticsbureau.com/cost_to_serve.htm
## Understanding Customer Characteristics and how they vary across industries

### Customer Profile Characteristics - Mining

<table>
<thead>
<tr>
<th>Customer Name:</th>
<th>ABC Mines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer Category:</strong></td>
<td>Major</td>
</tr>
<tr>
<td><strong>Region:</strong></td>
<td>Qld</td>
</tr>
<tr>
<td><strong>Industry:</strong></td>
<td>Coal</td>
</tr>
<tr>
<td><strong>Market Segment:</strong></td>
<td>OCCO</td>
</tr>
<tr>
<td><strong>Ordering Frequency:</strong></td>
<td>Daily</td>
</tr>
<tr>
<td><strong>Av Order Size (t):</strong></td>
<td>350</td>
</tr>
<tr>
<td><strong>Delivery Service Need (days):</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Type of Contract:</strong></td>
<td>3 year rolling</td>
</tr>
<tr>
<td>Special Service needs:</td>
<td>Shot Crews</td>
</tr>
<tr>
<td>Special Account needs:</td>
<td>Detailed invoices</td>
</tr>
<tr>
<td>Planning Focus:</td>
<td>Disciplined</td>
</tr>
<tr>
<td>Flexibility:</td>
<td>Low</td>
</tr>
<tr>
<td>Mine Road Condition:</td>
<td>Good</td>
</tr>
<tr>
<td>Demand predictable:</td>
<td>Yes</td>
</tr>
<tr>
<td>Part Loads Req'd:</td>
<td>No</td>
</tr>
<tr>
<td>Contract complexity:</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Customer Profile Characteristics - FMCG

<table>
<thead>
<tr>
<th>Customer Name:</th>
<th>Col Mart</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer Category:</strong></td>
<td>Major</td>
</tr>
<tr>
<td><strong>Region:</strong></td>
<td>National</td>
</tr>
<tr>
<td><strong>Industry:</strong></td>
<td>Retail</td>
</tr>
<tr>
<td><strong>Market Segment:</strong></td>
<td>RG</td>
</tr>
<tr>
<td><strong>Ordering Frequency:</strong></td>
<td>Daily</td>
</tr>
<tr>
<td><strong>Av Order Size (plts):</strong></td>
<td>50</td>
</tr>
<tr>
<td><strong>Delivery Service Need (days):</strong></td>
<td>Next day</td>
</tr>
<tr>
<td><strong>Type of Contract:</strong></td>
<td>Annual</td>
</tr>
<tr>
<td>Special Service needs:</td>
<td>30 min delivery window</td>
</tr>
<tr>
<td>Special Account needs:</td>
<td>1 SKU per pallet</td>
</tr>
<tr>
<td>Forecasting ability:</td>
<td>Poor</td>
</tr>
<tr>
<td>Contract relationship:</td>
<td>Needs extra effort</td>
</tr>
<tr>
<td>Payment History:</td>
<td>Medium</td>
</tr>
<tr>
<td>Returns History:</td>
<td>High</td>
</tr>
<tr>
<td>Contract complexity:</td>
<td>Low</td>
</tr>
</tbody>
</table>

**What customer characteristics drive cost in your business?**

**What customer characteristics drive up cost to serve?**

[http://www.logisticsbureau.com/cost_to_serve.htm](http://www.logisticsbureau.com/cost_to_serve.htm)
For this customer, freight charges are much higher than average. This should be investigated.

<table>
<thead>
<tr>
<th></th>
<th>$m</th>
<th>% of Sales</th>
<th>Co Av</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>$34.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Freight</td>
<td>$0.17</td>
<td>0.5%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Factory</td>
<td>$1.36</td>
<td>4.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Secondary Freight</td>
<td>$0.31</td>
<td>0.9%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Secondary Storage</td>
<td>$0.14</td>
<td>0.4%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Plant</td>
<td>$1.36</td>
<td>4.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Delivery Fleet</td>
<td>$2.18</td>
<td>6.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Head Office</td>
<td>$1.02</td>
<td>3.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Freight to Customer</td>
<td>$1.02</td>
<td><strong>3.0%</strong></td>
<td><strong>0.7%</strong></td>
</tr>
<tr>
<td>Sales &amp; Tech Support</td>
<td>$0.52</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Total costs</strong></td>
<td><strong>$8.08</strong></td>
<td><strong>23.8%</strong></td>
<td><strong>22.0%</strong></td>
</tr>
</tbody>
</table>
Cost to Serve at a high level can often identify cost issues between facilities or Regions.
Cost to Serve reporting can be at a customer and SKU level if required.

http://www.logisticsbureau.com/cost_to_serve.htm
Hospital Group Cost to Serve Case Study

→ Overview

- Currently 20+ Hospitals in the group.
- Some supplies are purchased locally by each Hospital, with others (about 20%) handled through the central purchasing department.
- 4,000 to 7,000 different supply items are purchased.
- Suppliers are pushing e-commerce.

http://www.logisticsbureau.com/cost_to_serve.htm
Potential Opportunities Highlighted by Cost to Serve

Supply Chain Cost Drivers
- Cost of stock
- Storage cost
- Handling cost
- Transport cost
- Order processing cost
- Repacking cost

Minimise Multiple Handling
Minimise Stock Levels
Minimise Order Processing
Improve Supplier Management

BUT....... Not at the expense of patient care

A complex Supply Chain, but Cost to Serve highlighted easy wins for reducing costs, that were ‘invisible’ through normal cost reporting.

http://www.logisticsbureau.com/cost_to_serve.htm
Consumer Goods
Australian Business
Overseas as well as local supply
Business mature
In house S&OP Process
Range of 25,000 SKUs

- 30% of products leave the DC with margin eroded!

Simple process changes made a huge difference!

This was identified using cost to serve analysis.
Cost to Serve Case Study – Channel Strategy

**Consumer Products**
- 13 Warehouses/Branches
- Contract Transport ($/Tonne)
- Dedicated Contractor Fleet

**Issues**
- Poor fleet utilisation
- High cost to serve ‘up-country’ (UPC)
- High cost to serve small customers
- High cost to serve small orders
Cost to Serve Case Study – Channel Strategy

Solutions
Use of Distributors
UPC
Rationalisation of contractor fleet
Use of other transport modes (barge)

Result
Savings of about 20% pa on distribution ($10m)
Cost To Serve - Planning Considerations

→ Granularity
  - Level of detail? Customer, customer group?

→ Units of Measure
  - Tonnes, pallets, Cases, $ 

→ Resourcing
  - Finance and IT support is essential 

→ Timelines
  - Simple study = 3-4 weeks 

→ Data availability
  - Extraction and validation can take time

http://www.logisticsbureau.com/cost_to_serve.htm
Cost To Serve - Modes of Use

➔ One Off
  – Network Audit for Strategic Alignment of Supply Chain

➔ Periodic
  – Quarterly/Annually to audit performance

➔ Dynamic
  – Automated real time update of reports

http://www.logisticsbureau.com/cost_to_serve.htm
Supply Chains are constantly changing
Supply Chains continue to be a ‘differentiator’
Visibility of Cost To Serve is essential

Start on just one area of your Supply Chain, and see what you can find!
You will be surprised....

http://www.logisticsbureau.com/cost_to_serve.htm
Cost To Serve
How its application can improve EBIT performance by up to 20%

http://www.logisticsbureau.com/cost_to_serve.htm