



Activity Based Costing
in the Telecom Industry

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Presented by:

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Activity Based Costing in the Telecom Industry

➔ Introduction -- What ABC is not*

What is Activity Based Costing:

- As defined by Kaplan & Cooper in 1991
- Difference between ABC and Traditional Accounting
- The CAM-I Standard and business modeling

ABC in the Regulatory Environment:

- FDC, LRAIC versus ABC

ABC in Government:

- Cost Recovery, Cost Management, Process Improvement and Outcome/Output Analysis

ABC in the Telecom Industry:

- Predictive Resource Planning, Profitability Analysis, Costing and Cost Management

Who are using ABC


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Financial Accounting versus ABC

"There are many ways to arrive at "cost" as well as revenue as the Enron scandal has so vividly illustrated.

For an accountant, "cost" can be any outflow of value ... for an economist, a "cost" only arises from a real cause."


John Ure



ABC practitioners and economists think alike ...

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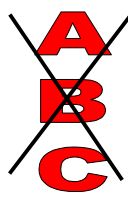
Expenditure is not the same as cost



- Costs and expenses equal in total. But they are not the same thing.
- Expenditures are incurred when money is exchanged between parties. Costs are always calculated, restated and then assigned to products and services.
- ABC resolves the arbitrary "Cost Absorption" in traditional accounting

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ABC is not ...



IS NOT

- the same as financial accounting
- A heretic in the world of accounting
- Well understood by accountant
- In conflict with FDC, LRAIC and other "Costing Philosophy" as defined by economists

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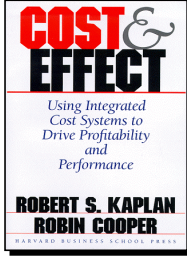
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ABC is...



Defined by Kaplan and Cooper in 1991, ABC shows what activities are used to produce what products and services.

Full blown ABC business models now use Activity-based Cost as a unit of measurement to describe the organisation activities, the resources consumed by those activities and the products and services generated by those activities.

ABC is not just a way to describe cost. It is also an unimpeachable operational management methodology that enables fact-based and quantity based management decision.

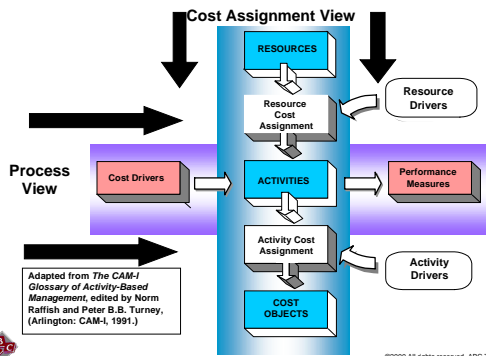


What is ABC

- Resources are consumed by Activities
- Activities are consumed by Products/Services



Industry Definition: The CAM-I Standard

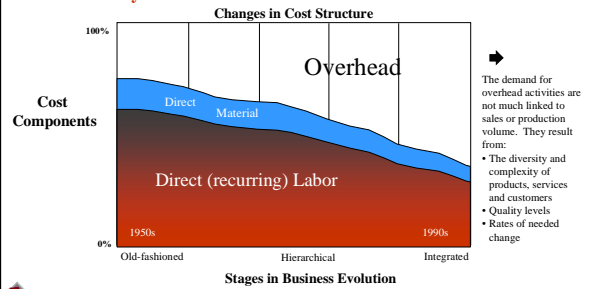


Adapted from *The CAM-I Glossary of Activity-Based Management*, edited by Norm Raffish and Peter B.B. Turney, (Arlington: CAM-I, 1991.)



The Need for ABC

A key to understanding ABC is to understand how cost behavior truly varies in relation to other factors



Activity

“Work performed within an organization.”



What we do

Adapted from *The CAM-I Glossary of Activity-Based Management*, Edited by Norm Raffish and Peter B.B. Turney, (Arlington: CAM-I, 1991.)



Activity Examples

Unloading trucks



Processing phone centre orders



Training employees



Maintaining company vehicles



Forecasting sales



The Language of ABC

Stating activities with an action verb-object-noun grammar convention creates an atmosphere for change by providing a new way of looking at something people are already familiar with, rather than something foreign.

From: General Ledger

Chart-of-Accounts View			
Claims Processing Department			
	Actual	Plan	Favorable/ (unfavorable)
Salaries	\$621,400	\$600,000	\$(21,400)
Equipment	161,200	150,000	(11,200)
Travel expense	58,000	60,000	2,000
Supplies	43,900	40,000	(3,900)
Use and occupancy	30,000	30,000	—
Total	\$914,500	\$880,000	\$(34,500)

To: ABC Data Base

Activity-Based View	
Claims Processing Dept	
Key/scan claims	\$ 31,500
Analyze claims	121,000
Suspend claims	32,500
Receive provider inquiries	101,500
Resolve member problems	83,400
Process batches	45,000
Determine eligibility	119,000
Make copies	145,500
Write correspondence	77,100
Attend training	158,000
Total	\$914,500

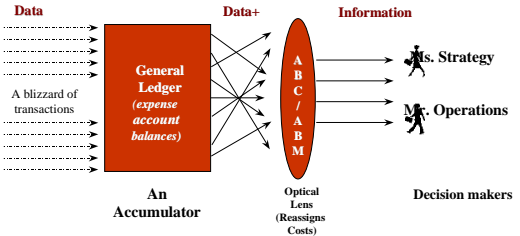
When managers get this kind of report, they are either happy or sad, but they are rarely any smarter!



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ABC Doesn't Replace the Accounting System

An ABC/ABM system does not replace the accounting system. It restates the same data and adds operating relationships to more effectively support decision making.



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Three Views of Cost



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LRAIC as stated by Telecom Agency of Germany

Telestyrelsen National Telecom Agency

- LRAIC is the long run cost of providing either an increment or decrement of output, which should be measured on a forward-looking basis.
- Setting interconnection charges using LRAIC permits recovery of fixed costs, while retaining some of the desirable properties of marginal cost pricing.

LRAIC Model Reference Paper, Telestyrelsen



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OFTA versus Irish Telecoms



In July 1997:

The Telecom Authority considered that ... LRAIC would be the appropriate cost standard for it would send the right "build or buy" signals to interconnecting carriers.



In April 1999:

ABC principles are relevant to the determination of interconnection charges, for which purposes the costing systems of operators will need to be sufficiently detailed to permit the allocation of costs to network components.



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Irish Telecoms Stated in April 1999 ...



•The Telecoms Regulator today issued proposals for the costing methodologies to be used in the separated accounts of operators designated as having significant market power (SMP). The move should facilitate and sustain the further development of a competitive telecoms environment...

•The proposals consider the implications of following the principles of *cost causation* e.g. Activity Based Costing, in the allocation of costs, revenues and capital employed for the purposes of preparing separated accounts.



Irish Telecoms Stated in April 1999 ...



ACCESS:

- An open, fair and transparent licensing regime

PRICE:

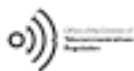
- Regulatory Costing and Accounting
- Interconnection Rates
- Long Run Incremental Costs(LRIC)
- Internet Interconnect
- Accounting Separations
- Costing Methodologies
- Consumer Prices
- Price Cap
- Rate Regulation for TV Delivery

QUALITY:

- Quality of service offered by operator to operator and by operator to consumer is of major importance



Irish Telecoms Stated in April 1999 ...

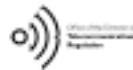


PRINCIPLES OF COST ALLOCATION:

•The 8/4/98 Recommendation recommends that the allocation of costs, capital employed and revenue is done in accordance with the principle of cost causation (such as activity-based costing ("ABC")), i.e. costs and revenues should be allocated to those services or products that cause those costs or revenues to arise.



Irish Telecoms Stated in April 1999 ...



PRINCIPLES OF COST ALLOCATION:

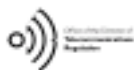
i) **Transparency:** the operator should publish updated versions of its cost allocation methodology when changes are made to it.

ii) **Consistency:** the same bases of allocation should preferably be used from year to year. Where there are changes made the operator should restate the previous year separate accounts on the new bases.

iii) **Materiality:** the use of specific allocation bases may not be necessary if the effect on the allocation is not material to the outcome. Of course, it may not be possible to measure the effect without adopting an alternative basis and, in cases of doubt, **the most appropriate activity related cost apportionment basis should be used.**



Irish Telecoms Stated in April 1999 ...

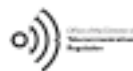


PRICE:

- Access is effectively denied if the price is prohibitive.
- In a monopoly market and in markets in transition from monopoly to competition, specific regulatory measures are necessary to ensure that users and new entrants have appropriately priced access to services from the former monopolist.



Irish Telecoms Stated in April 1999 ...



INTERCONNECTION RATE:

- The ability of new entrants to interconnect to the network of an incumbent operator is fundamental to the development and sustainability of competition in a telecommunications industry.



Many Costing Philosophies ...

FDC and LRAIC are costing "philosophies" which say what costs should or should not be included

Measurement (quantitative technique) is the key



- ABC is a measurement
- ABC demonstrates the "Cost and Effect" (Causation)



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Does our Government understands its cost structure?

Deficit to hit \$60b, says Leung

Finance chief warns shortfall is no passing phase and urges SAR-wide debate on tax revenue

"We will first consider [how to cut] expenditure. The Government is determined to solve the issue in the medium and long term"

Antony Leung, Financial Secretary, S.C.M.P. Thursday December 6, 2001



Activity Based Cost Recovery

(Therapeutic Goods Agency)TGA, Commonwealth Department of Health and Aged Care of Australia
Regulator of therapeutic goods, drugs and medical devices

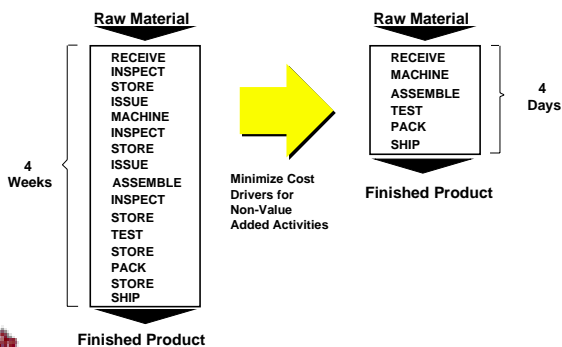
Translate Costs to Prices

- Costs translate to revenue required per sector
- Estimate no. units for fee events
- What - if analysis by sector
- Develop pricing model
- Negotiate with industry associations

- Costs as input to pricing
- Identify cross subsidisation
- Defensible basis for prices
- Similar applications in Hong Kong: Water Supplies Department, Hong Kong Post, OFTA etc.

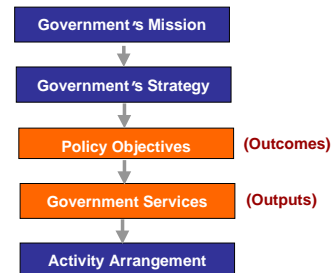


Process Improvement and Cost Management Example

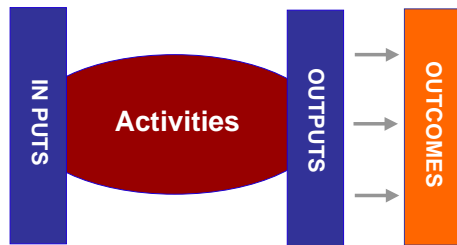


2. ABC/M In Government

Output/Outcome Decision Framework



2. ABC/M in Government



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Managing for Outcomes



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Key challenges for the Telecom industry ...

Economic and Structural Change:

"... these "secular" trends have seen the traditional cash cows of the industry, IDD and mobile voice service drying up."

John Ure, TRP

"... the (Hong Kong) telecom market is saturated. Profits of most operators are falling. Most companies are losing money. I hope government policy would also consider and encourage investments as it opens up the telecom market."

Linus Cheung, PCCW



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ABC in Telecom Business Planning



Business planning for policy makers and Telecommunications operators in the new technical and legal environment



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ABC in Telstra - Why?

The existing Cost Management System was inappropriate

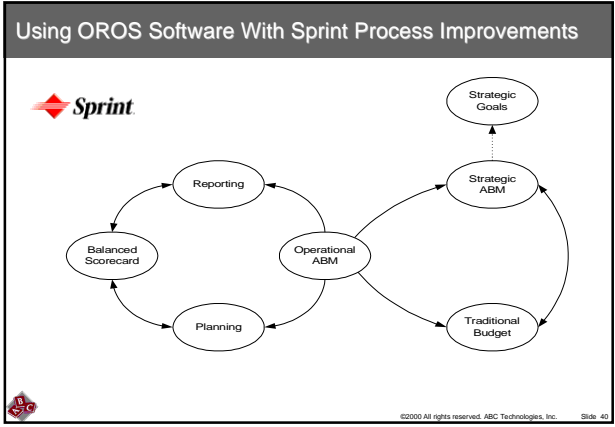
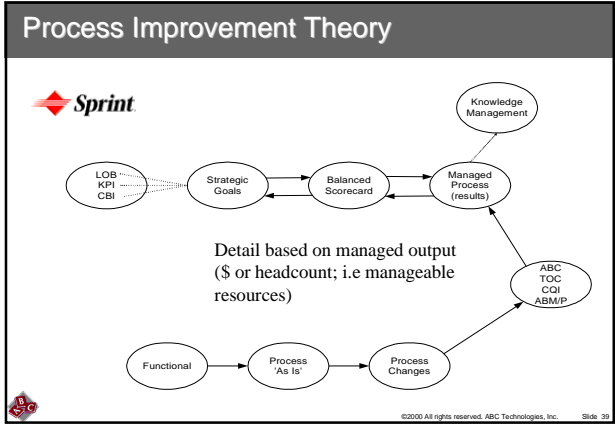
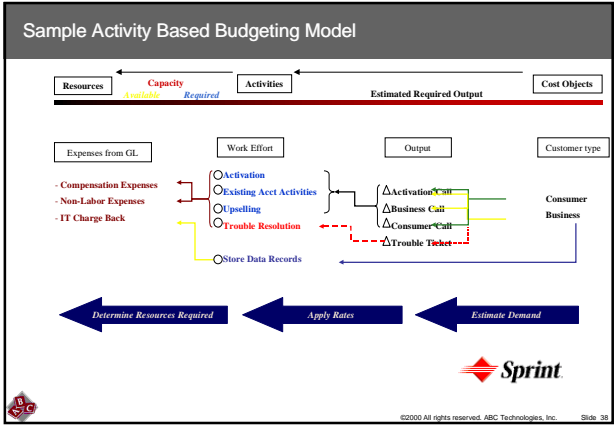
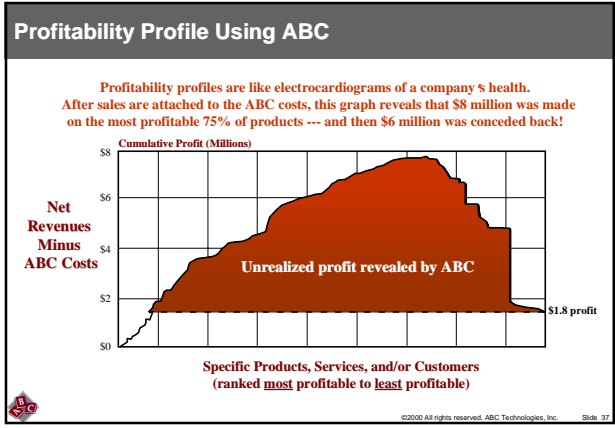
- Profit Margins were not transparent
- Lack of belief in the cost system(s)
- Provided little insight into the key activity costs for each major product segment
- Information not used by line managers
- Large number of special costing studies
- Reports not used by management
- Insufficient to support strategy setting



It was not supporting the product management process



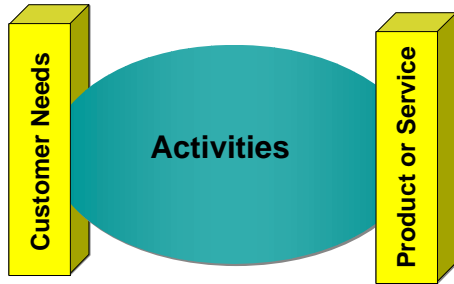
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- ### Process Improvement - Scenario Analysis
- ▼ There are cuts going on all over the company. How do I reduce my budget without sacrificing customer service?
 - ▼ With the business environment dramatically changing, we need to be able to manage growth of some products and maturation of other products effectively.
 - ▼ How efficient do I have to become to support my expected volume with my current budgeted resources?
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- ### Resource Planning
- ▼ How many employees should I hire?
 - ▼ What staff levels (Employees with OT vs. Contractors) do I need?
 - ▼ What should be my mix between Contractors and Salaried employees?
 - ▼ Do I need to build a new facility to handle my expected volume?
 - ▼ Should I buy a new server to support data storage?
 - ▼ Should I train employees to handle multiple tasks? (able to handle 2-3 types of calls)
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Management = Management of Activities



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Who are using ABC – Regulatory Environment



Who are using ABC – Telecom Operators



Clients in the Asia/Pacific:

Telstra
Singapore Telecom
Telekom Malaysia
Globe Telecom (Malaysia)
Telkom Indonesia
Telstra
Celcom Malaysia
LG Telecom (Korea)



Clients in Europe:

ICP Instituto das Comunicacoes
NTL Communications
TMN Telecomunicacoes Movieis



Clients in US and Canada:

AT&T
Northern Telephone Limited
Telecom Australia
Bell South/Atlanta
Sprint
GTE
Pacific Bell
Bell Canada
Global One



Contact atihongkong@abctech.com for CD-ROM



THANK YOU!

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