Measuring logistics costs and performance (Part b)
CH # 3

Main Title Goes Here….

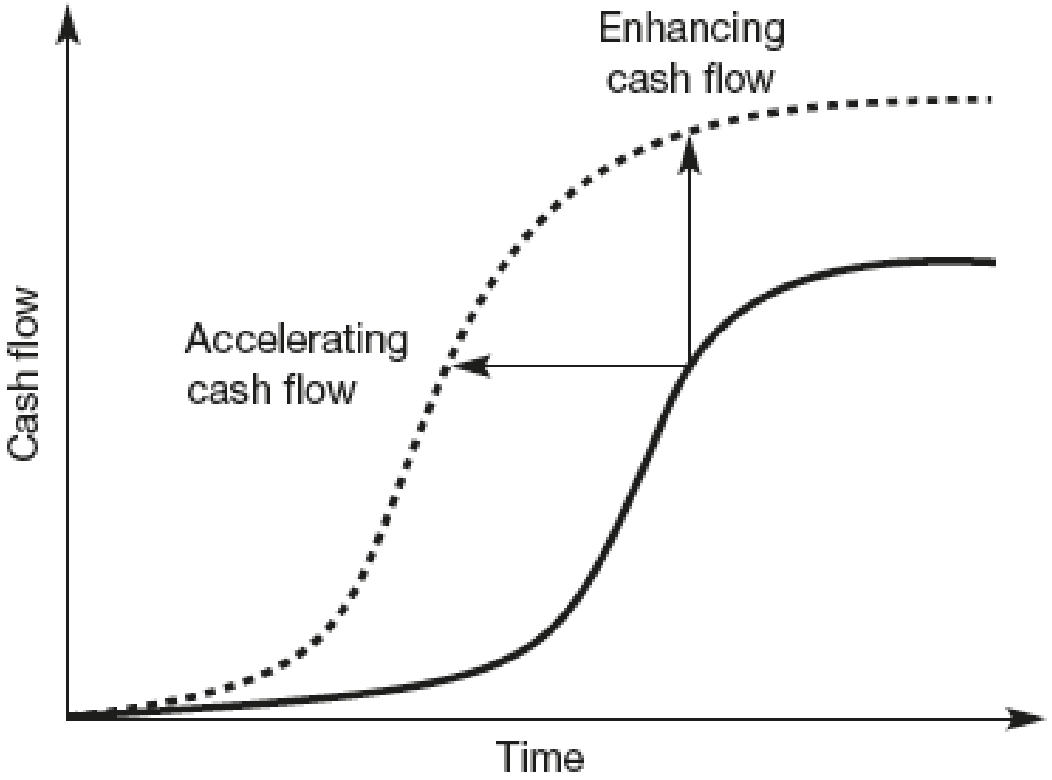
- Logistics and the bottom line
- Logistics and shareholder value
- **Logistics cost analysis**
- **The concept of total cost analysis**
- **Principles of logistics costing (Understanding the cost-to-serve)**
- Customer profitability analysis
- Direct product profitability
- Cost drivers and activity-based costing

The role of cash flow in creating shareholder value

- Thus the challenge to managers seeking to enhance shareholder value is to identify strategies that can directly or indirectly affect free cash flow. Srivastava *et al*.4 have suggested that the value of any strategy is inherently driven by:

1. An acceleration of cash flows because risk and time adjustments reduce the value of later cash flows;
2. An increase in the level of cash flows (e.g. higher revenues and/or lower costs, working capital and fixed investment);
3. A reduction in risk associated with cash flows (e.g. through reduction in both volatility and vulnerability of future cash flows) and hence, indirectly, the firm's cost of capital; and
4. The residual value of the business (long-term value can be enhanced, for example, by increasing the size of the customer base).

Figure 4.5 Changing the cash flow profile



Source: Srivastava, R. *et al.*, 'Market-Based Assets and Shareholder Value: A Framework for Analysis', *Journal of Marketing*, Vol. 62, No. 1, January 1998, pp. 2–18

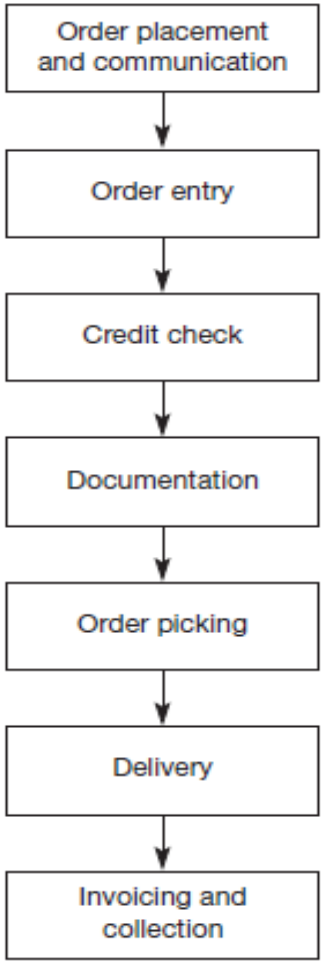
Logistics cost analysis

- Because logistics management is a flow-oriented concept with the objective of integrating resources across a pipeline which extends from suppliers to final customers, it is desirable to have a means whereby the costs and performance of that pipeline flow can be assessed.
- Many companies struggle to adopt an integrated logistics and distribution approach due to inadequate cost information from traditional accounting systems.
- Conventional accounting aggregates costs, preventing detailed analysis of true customer or product-related logistics costs.
- Without logistics-oriented cost accounting, firms cannot accurately assess cost trade-offs or determine whether higher service levels and costs actually improve overall profitability.

The concept of total cost analysis

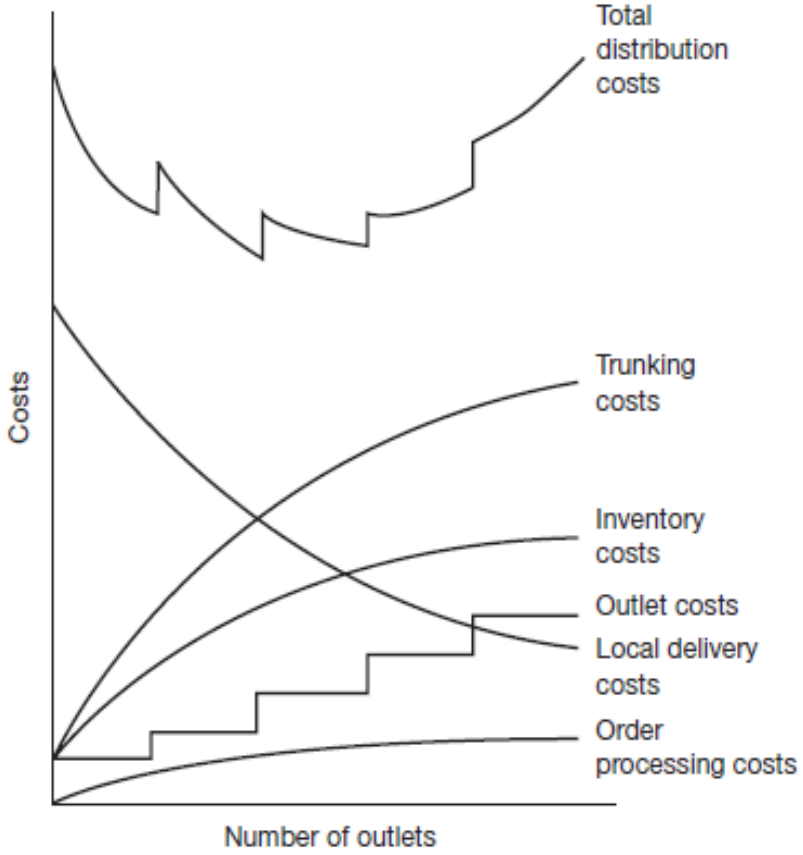
- Many logistics issues arise from decisions made without considering their full system-wide impact.
- Changes in one area (e.g., order policy or production schedule) can create hidden costs in others.
- Logistics affects multiple functions across the organization, making total cost assessment difficult.
- Traditional accounting systems fail to capture logistics costs accurately, as they are spread across departments.
- A system-based, integrated approach is needed to understand and manage the true total cost of logistics decisions.

Figure 3.6 Stages in the order-to-collection cycle



- Traditional accounting and budgeting ar **function-based**, leading **compartmentalized cost data**.
- In reality, **logistics costs cut acro departments**, so policy impacts exte beyond their immediate area.
- A change in logistics structure (e.g., addi or removing a depot) affects **transpo inventory, and communication cos** throughout the network.
- **Incremental cost analysis**—measuring t change in total costs due to a decision— more relevant than total cost figures.
- Logistics decisions are made within **existi systems**, so understanding the **increment cost impact** of each change is key to sou decision-making.

Figure 3.7 The total costs of a distribution network



The cost of holding inventory

- **Inventory** is one of the **largest and least well-accounted** logistics costs.
- Many managers **underestimate the true cost** of holding inventory.
- When all related expenses are included, **inventory holding costs** can reach **around 25% per year** of the inventory's book value.
- Major components of this cost include the **cost of capital**, which reflects both **debt** and **equity costs**.
- The **weighted cost of capital** is used to represent this mix, as even low borrowing rates are offset by shareholders' higher expected returns.

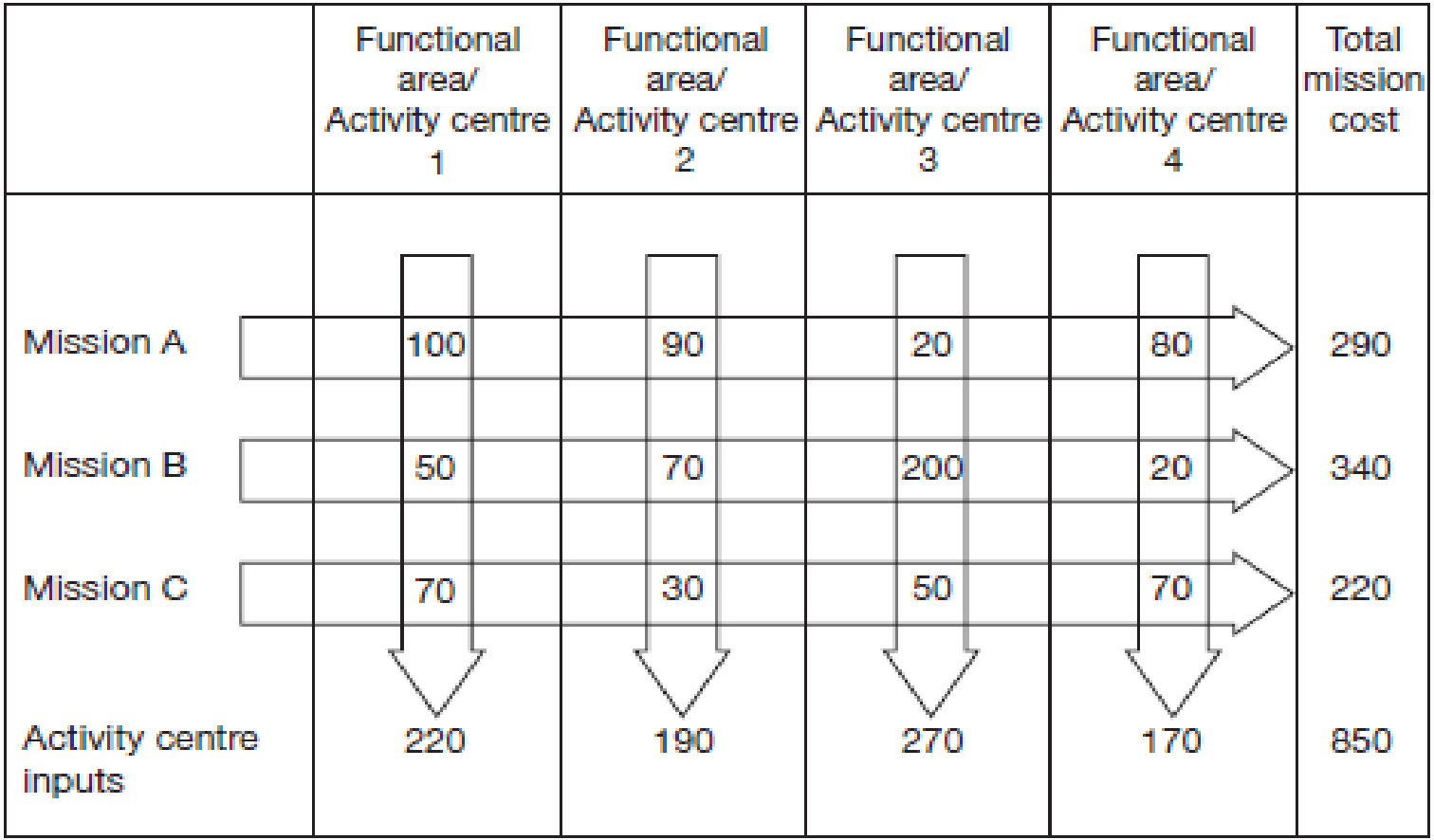
Principles of logistics costing

- The main challenge in logistics costing is **focus**—traditional accounting systems lack focus on **customer service outputs**.
- **Logistics-oriented costing** should:

1. **Mirror material flow**, identifying costs tied to providing customer service.
2. Allow **cost and revenue analysis** by **customer type**, **market segment**, or **distribution channel** rather than using misleading averages.

- Effective logistics costing requires an **output-oriented approach**, starting with defined service goals and then linking costs to those outputs.
- The concept of a **"mission"** helps define these goals—each mission represents specific **customer service objectives** within a product/market context.
- Missions **cut across traditional functional boundaries**, emphasizing a holistic, system-wide view of logistics performance and cost.

Figure 3.9 The programme budget (£'000)



	Functional area/ Activity centre 1	Functional area/ Activity centre 2	Functional area/ Activity centre 3	Functional area/ Activity centre 4	Total mission cost
Mission A	100	90	20	80	290
Mission B	50	70	200	20	340
Mission C	70	30	50	70	220
Activity centre inputs	220	190	270	170	850