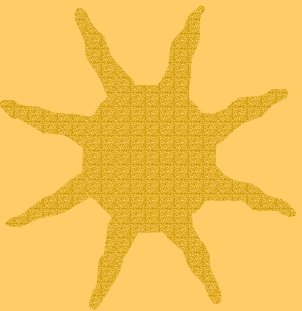
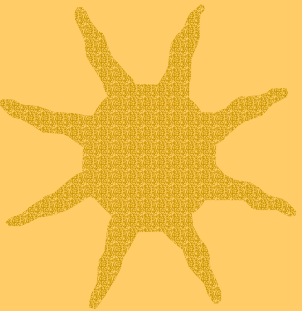
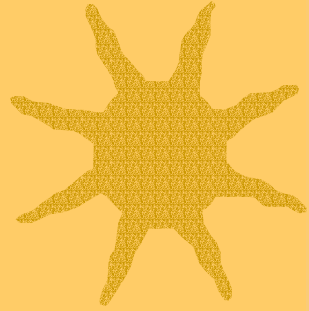




Cost-to-Serve

..... *Project*

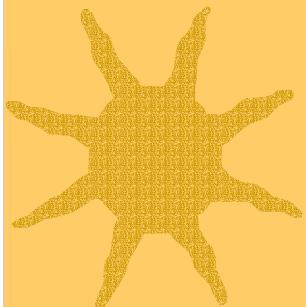
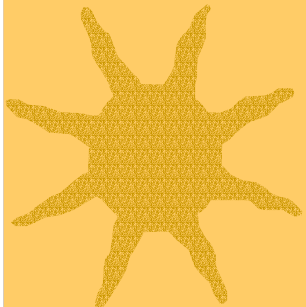
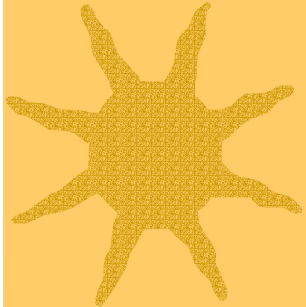
Sponsor:

ZZ



Agenda

- ★ Project
- ★ ABC vs. CTS
- ★ CTS application in sourcing decision-making





..... *Project*



Project Title:

The design and construction of a decision-support tool for taking sourcing and supply chain route-to-market decisions in the clothing retail industry using real cost-to-serve data.

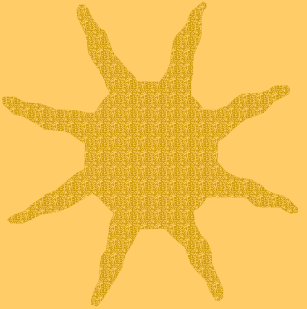


Objectives:

- ❑ Literature research on Activity-based Costing and Cost-to-Serve
- ❑ Using Cost-to-Serve techniques to build a decision-support tool that will guide sourcing decision for a specific clothing business

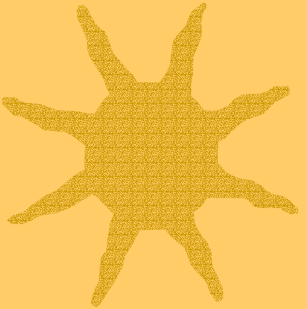


ABC vs. CTS



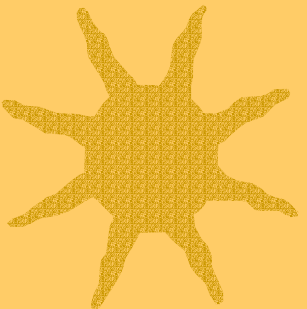
- ★ **Activity-based costing – a powerful costing technique**

- ★ **Unsatisfactory application of ABC in supply chain management**



- ★ **New direction of ABC application**

- ★ **Beyond ABC – Cost-to-Serve is a supply chain analytical tool based on activity-based methodology**



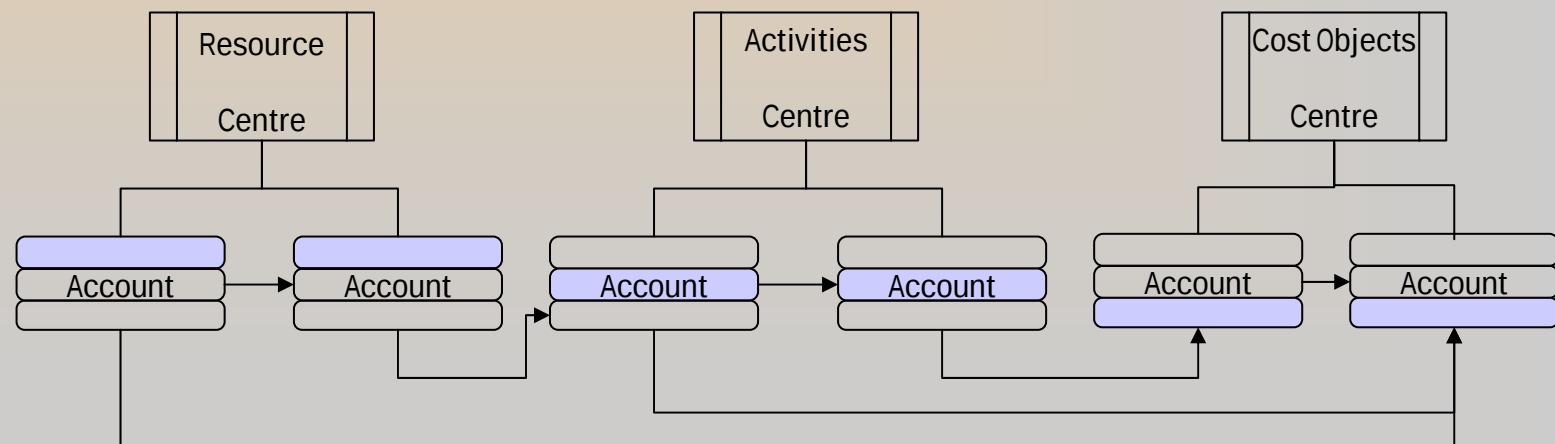
Note: conclusions in this report are based on literature research, case-study, interview with experienced consultant and model analysis

ABC – a powerful costing technique

★ Definition

“ is a *methodology* that measures the cost and performance of cost objects, activities and resources. Resources are assign to activities, then activities are assign to cost objects based on their use. Activity-based costing recognises the *causal relationships* of cost drivers to activities” (source: CAMI)

★ Cost allocation





ABC – a powerful costing technique

★ **Advantages:**

- ❑ ABC analysis enables managers to slice into the business many different ways – by product, customer, or by distribution channel....
- ❑ ABC methodology figures out and then quantifies causal relationships between cost objects and activities and between activities and resources. Cost driver is used to reflect this sort of cause-and-effect relationships;
- ❑ ABC link a company's process and activities;



ABC – a powerful costing technique

★ Conclusion: ABC =

Multi-facet cost information
+ reasonable causal relationships
+ process-based thinking

*“has gained considerable attention as a **potential** tool for evaluating supply chain performance through supply chain”*

(source: Lalonde & Pohlen)

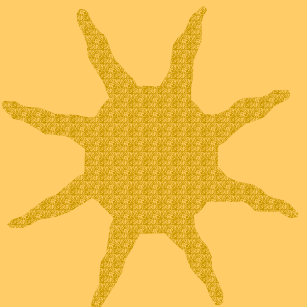
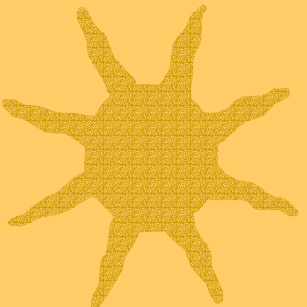
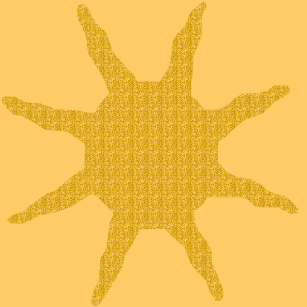


ABC – a powerful costing technique

★ **Expectation:**

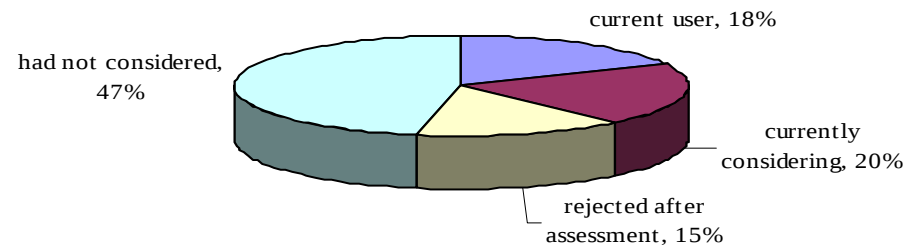
Since 1990's, most firms expected the ABC application in logistics to produce results similar to those experienced in manufacturing....

★ **Fact: not exciting!**



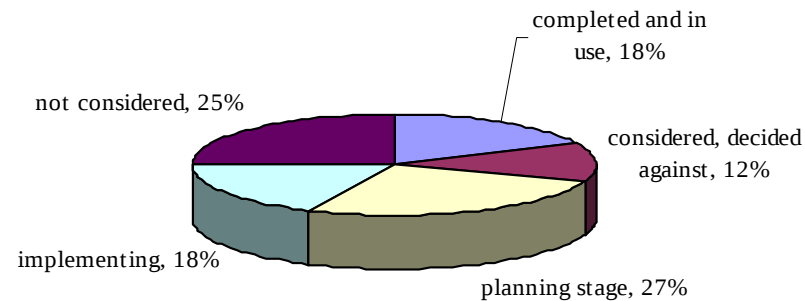
Unsatisfactory application of ABC in supply chain management

ABC Adoption (UK Survey Result)



Source: Chartered Institute of Management Accountants 1999

ABC Adoption (US Survey Results)



Source: OSU Supply Chain Research Group 1998

Conclusion:

Adoption: low 18%

Rejection: 12-15%

Hesitation: 20%

Not considered: 25-47%

Unsatisfactory application of ABC in supply chain management

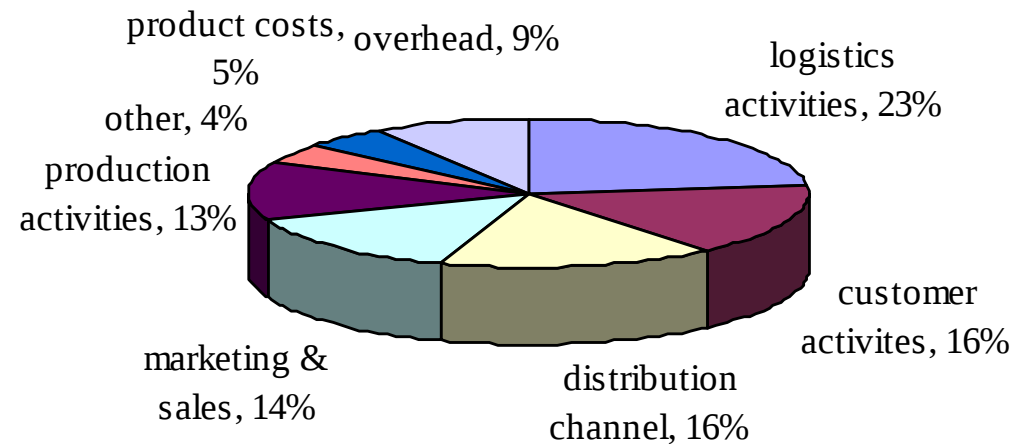
★ Motivation behind implementing ABC

	UK	US
Purpose	Cost reduction	Customer Profitability
high	Product/service pricing	Improve cost system
	Performance measurement/improvement	Benchmarking
	Cost Modeling	Budgeting
	Budgeting	Purchasing decisions
	Customer profitability analysis	Outsourcing decisions
	Output decision	Pricing
	New product/service design	Supply Chain decision
	Stock valuation	Reengineering
low	other applications	
source: Chartered Institute of Management Accountants 1999 OSU Supply Chain Research Group		

Unsatisfactory application of ABC in supply chain management

★ Implementation Direction in Future

Plans to implement ABC elsewhere in firms



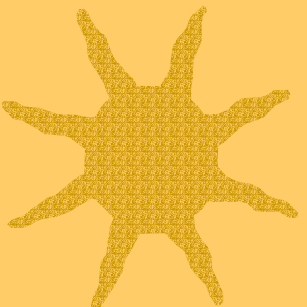
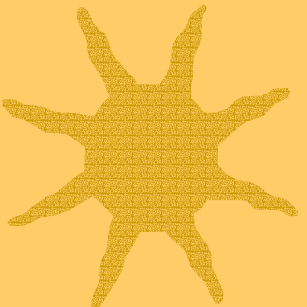
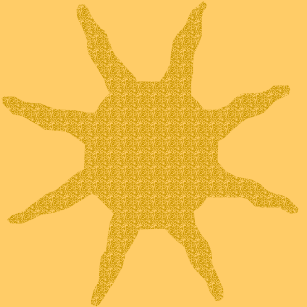
Source: OSU Supply Chain Research Group 1998



Unsatisfactory application of ABC in supply chain management

★ Reasons behind unsatisfied adoption

- ❑ Perceived complexity of implementing and maintaining such a system
- ❑ Using accounting measures can be important, but is not sufficient for the success of supply chain management
- ❑ Debate on “decision” & “activity” – who consumes resources?





ABC vs. CTS

New Direction of ABC application

★ **Voices of Practitioners**

“the newer, slimmer version (ABC) is focused on specific business issues so it needs to come from the logistics or marketing function, with support from finance”

(KPMG Tom Anderson)

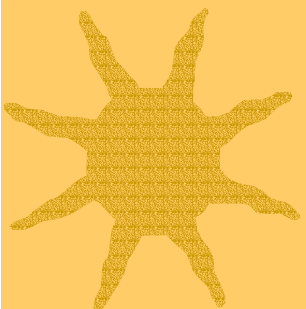
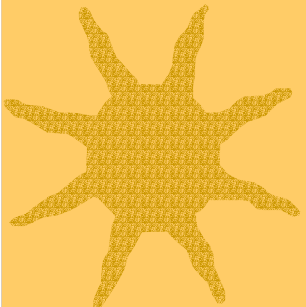
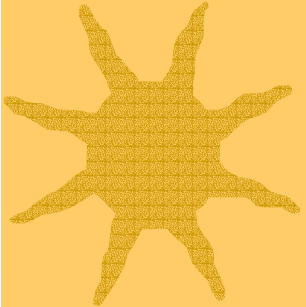
“the huge database of the old-style ABC may be falling by the wayside, but the concept isn’t.....it’s hugely valuable to have the information – to understand cost to serve for different products to different customers”

(Mercer Les Artran)

New Direction of ABC application

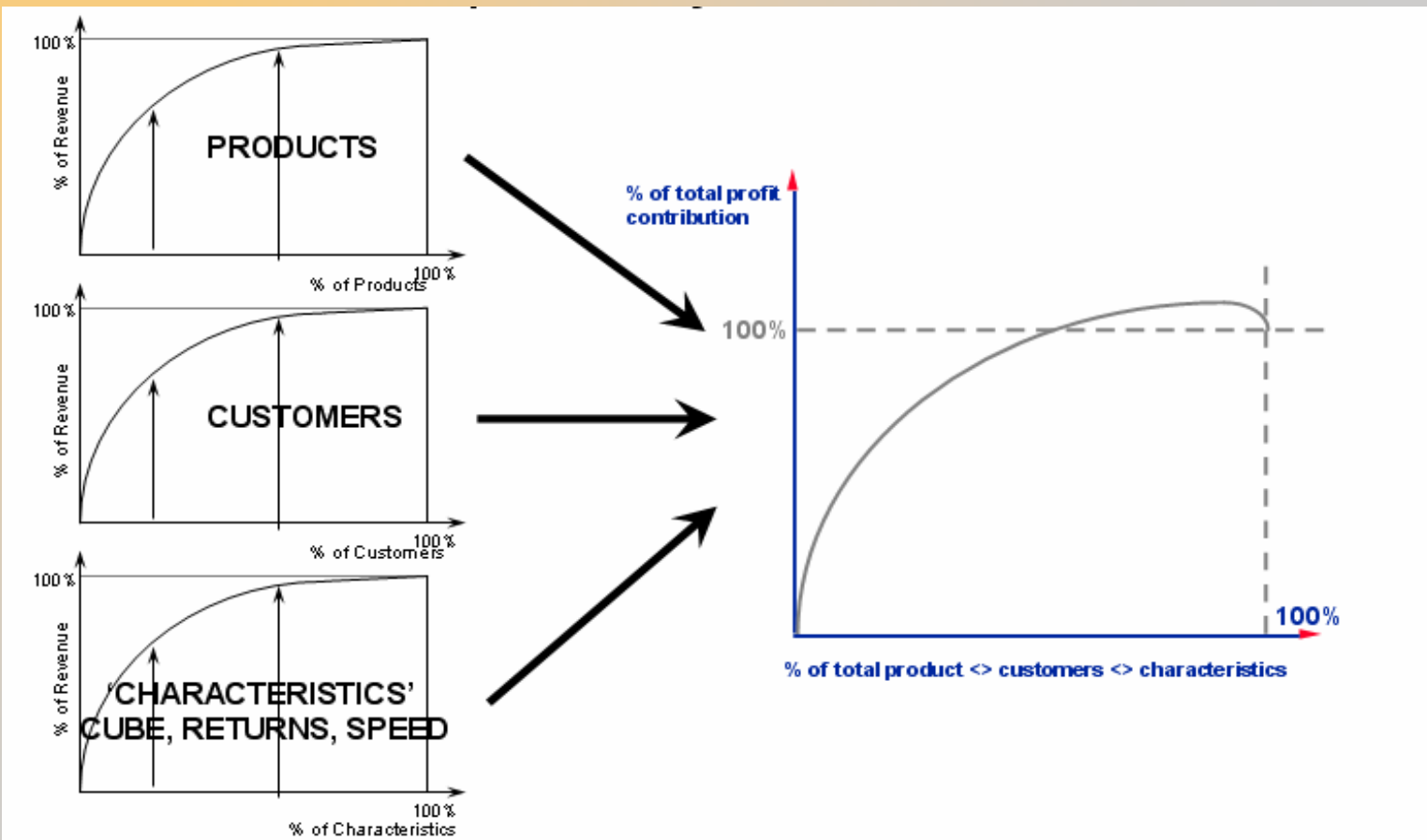
★ Cost-to-Serve

“A more complete supply chain costing system must also capture the downstream costs triggered by customers and their products and service orders – these are Cost-to-Serve”
(source: Cokin)



ABC vs. CTS

Beyond ABC – Cost-to-Serve is a supply chain analytical tool based on activity-based methodology



Cost-to-Serve methodology

(Source: LCP Consulting)



ABC vs. CTS

Beyond ABC – Cost-to-Serve is a supply chain analytical tool based on activity-based methodology

Comparison of ABC and CTS application in supply chain management

	Activity-based costing	Cost-to-serve
Application Areas	all companies, particularly in manufacturing companies	all companies' supply chain management decision
Perspectives	internal view of cost cost-orientated	internal view and external view of cost service-orientated
Major functionalities	cost allocation; budgeting	customer/channel profitability analysis
Managerial roles	accounting tools strategic decision support tool	logistics/supply chain management tool strategic decision support tool tactical decision support tool (logistics functions)
Major Users	finance & production dept. senior management	product & logistics(SCM) dept senior management
Methodology	activity analysis	activity analysis & constraint theory
Approach	full absorption costing consideration	not full absorption costing consideration (only concerns supply chain costs)
Profitability analysis	Product, Customer Channel (?)	Product Customer good at channel profitability analysis and other logistics implication analysis
Key variables	cost drivers	cost drivers & non-financial information (such as products' physical attributes)
Information	balance to General Ledger	General Ledger & transaction information
Major implementation expertise	accountant consultant production/sales managers	logistics/supply chain managers consultant product/marketing managers

Beyond ABC – Cost-to-Serve is a supply chain analytical tool based on activity-based methodology

★ **Channel Profitability**

“As major retailers, whole-salers, distributors, and manufacturers reconfigure their supply chain, all participants in the supply chain need to understand the revenue and cost trade-offs associated with the various channels through which they deliver products and service”

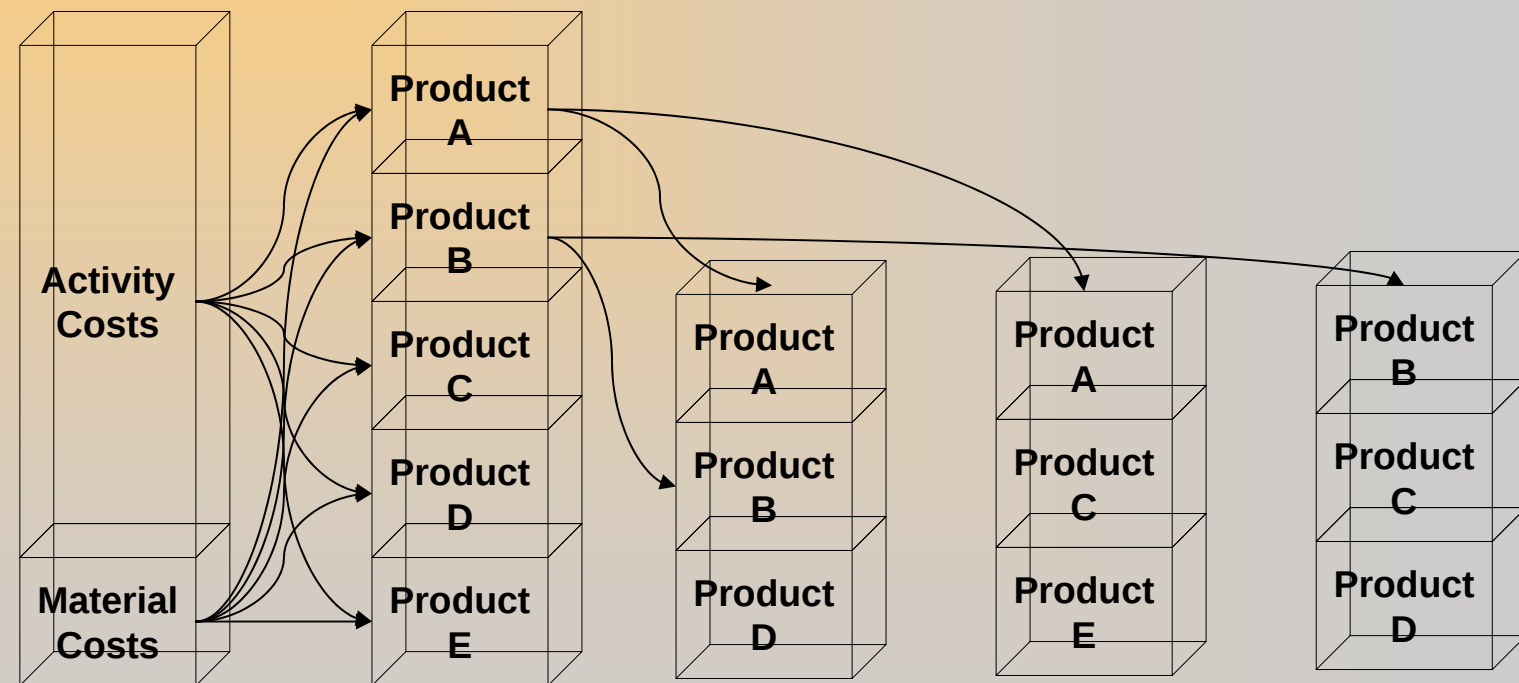
(source: Deloitte & Touche, Kenneth)



ABC vs. CTS

Beyond ABC – Cost-to-Serve is a supply chain analytical tool based on activity-based methodology

★ Channel Profitability Analysis (ABC)



Total Cost
Structure

Product
Related Cost

Channel A

Channel B

Channel C

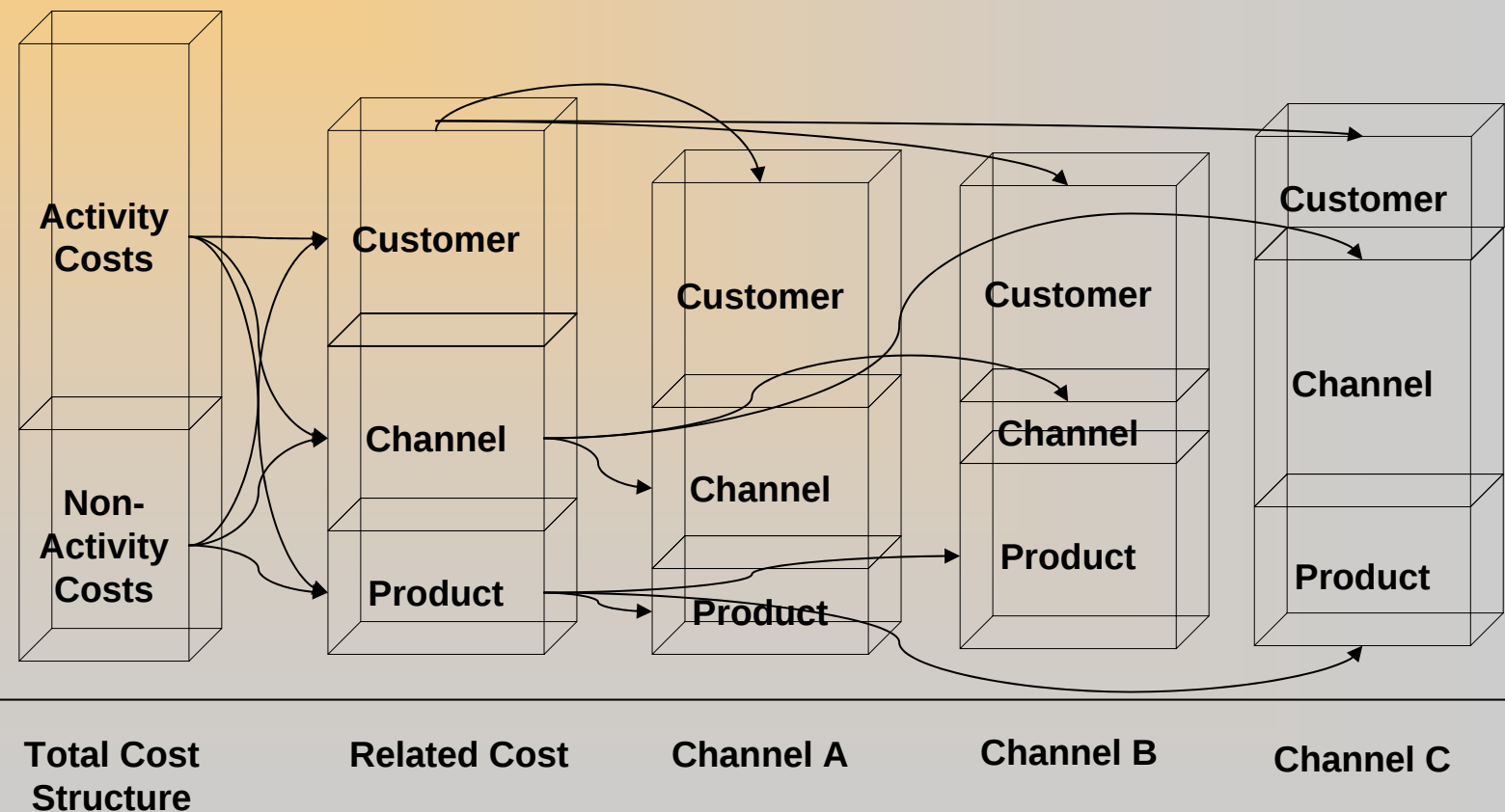
(Adopted from Kenneth)



ABC vs. CTS

Beyond ABC – Cost-to-Serve is a supply chain analytical tool based on activity-based methodology

★ Channel Profitability Analysis (CTS)



Note: non-activity costs: e.g. discounts, A/P, consolidation option, routes-to-market, etc. are not triggered by activities, but by decisions! (Adopted from Kenneth)

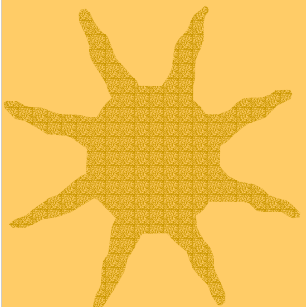
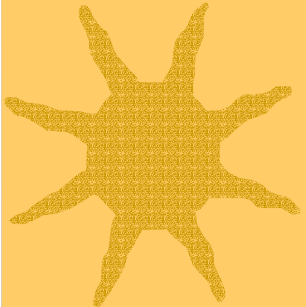
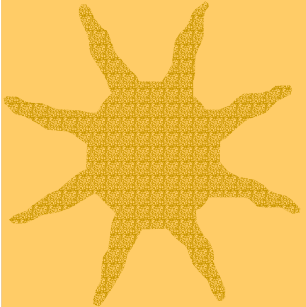
Beyond ABC – Cost-to-Serve is a supply chain analytical tool based on activity-based methodology

★ Conclusion

- ❑ For standard ABC, all costs are traced and allocated to products (products-driven)
- ❑ For CTS, the restriction that all costs must be related to products is removed; the more accurate perspective (product-related, customer-related, channel-related) enable manager to understand cost differences interacting by any combination.
- ❑ The previous two graphs are justified by CTS case study (4X4X3 case) and Oros Quick ABC package

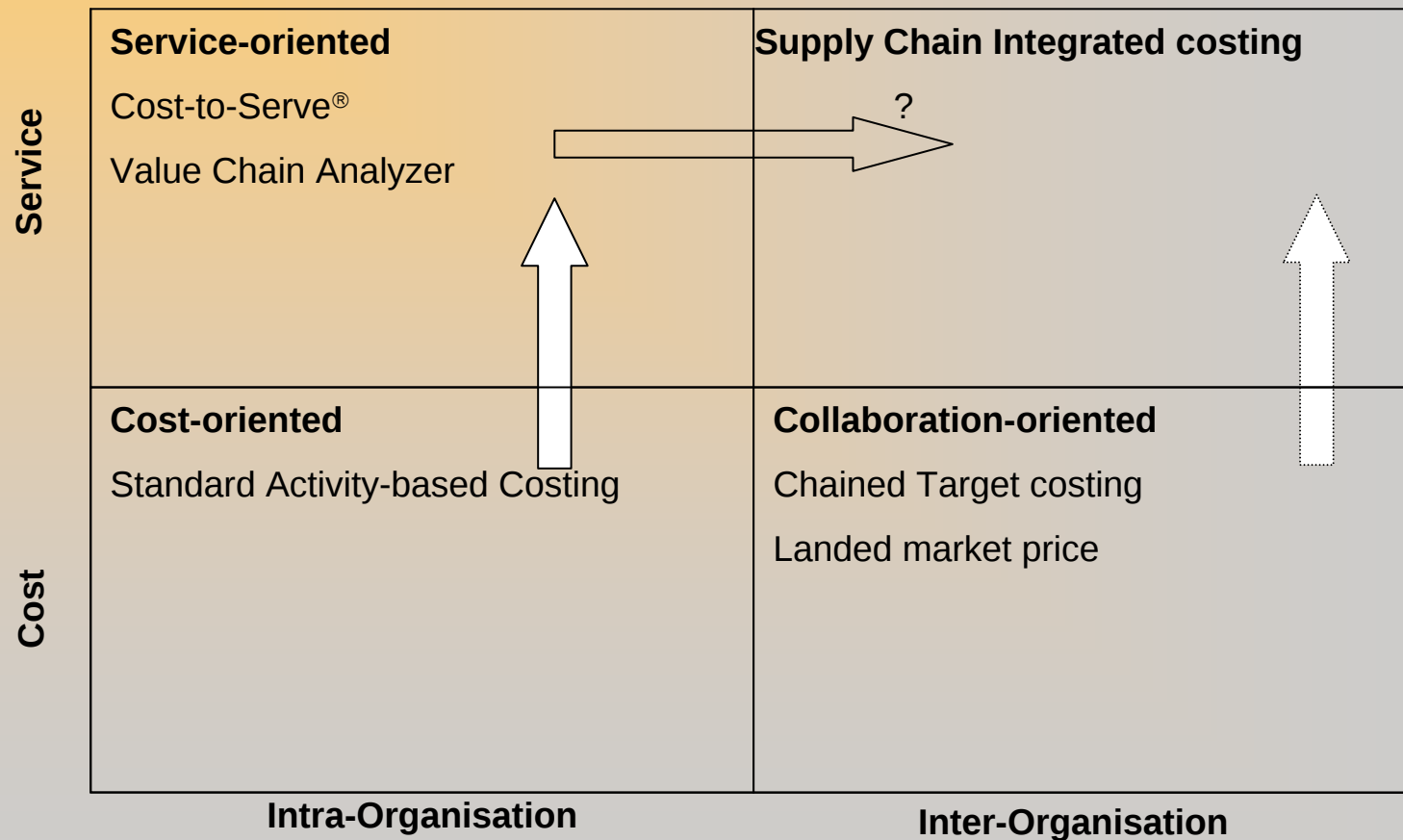
Cost-to-Serve: is a supply chain analytical tool, which uses process view & costing techniques to identify major issues across the chain

(defined by Zhi Zheng)



ABC vs. CTS

Beyond ABC – Cost-to-Serve is a supply chain analytical tool based on activity-based methodology



4 boxes supply chain costing model



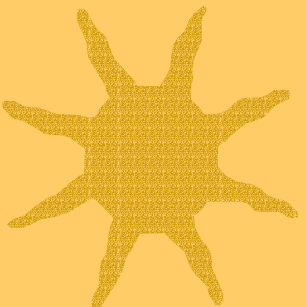
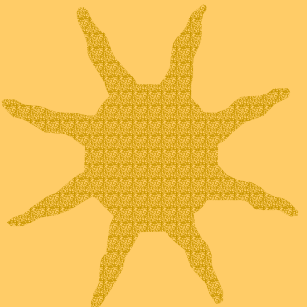
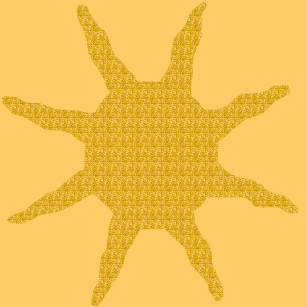
CTS application in sourcing decision-making

★ **Definition of Sourcing**

According to Vollman, the sourcing process includes a group of activities: finding sources of supply , guaranteeing continuity in supply, ensuring alternative sources of supply, gathering knowledge of procurable resources.

★ **Objectives of Sourcing**

- ☐ Cost leverage
- ☐ Supplier base selection and formulation
- ☐ Quality control
- ☐ Right performance metrics
- ☐ Etc.





CTS application in sourcing decision-making

★ Sourcing consideration (domestic against offshore)

Domestic sourcing objective/advantages	Offshore sourcing objective/advantages
Response time (28%)	Low cost (57%)
Flexibility (23%)	Quality (24%)
Design (18%)	Innovation (13%)
Innovation (15%)	Design (4%)
Quality (13%)	Response time (2%)
Cost (3%)	

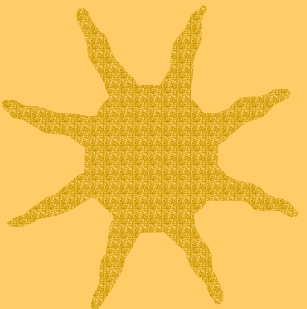
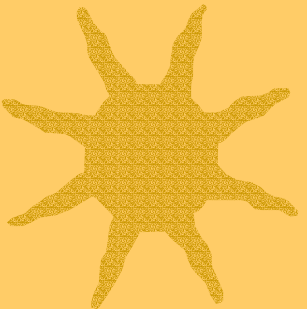
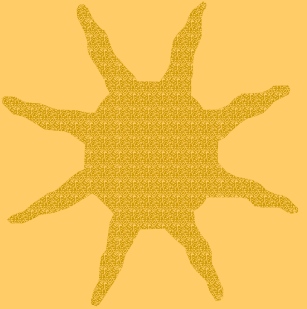
(Source: Lowson)

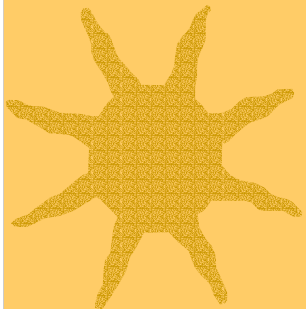
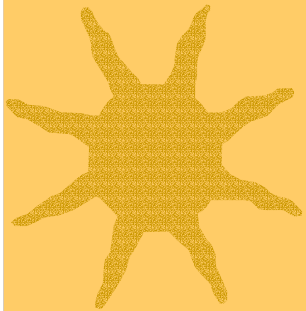
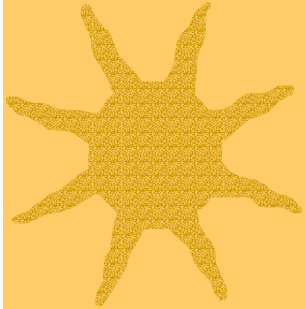
The results are based on European retailer sourcing behaviour, which indicates that sourcing domestically emphasizes on supply chain responsiveness and flexibility, while sourcing internationally takes advantages of cost issues



CTS application in sourcing decision-making

Link to Decision
Support tool





Thank You!