

Combining VA and Activity Based Costing to Achieve Better Outcomes

CSVA Symposium

Toronto

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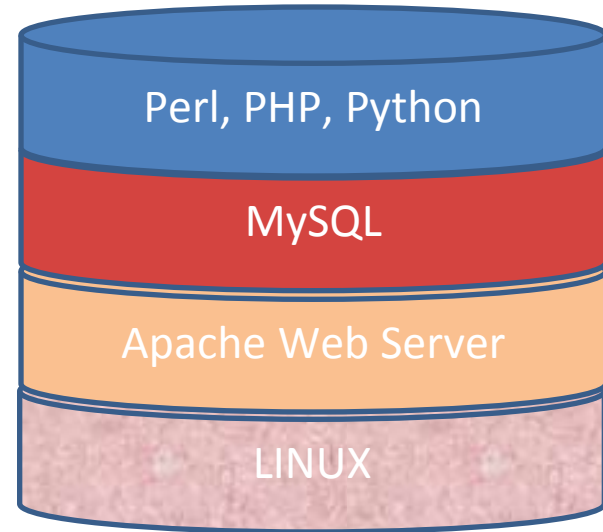
D. Paul Scarbrough

Overview

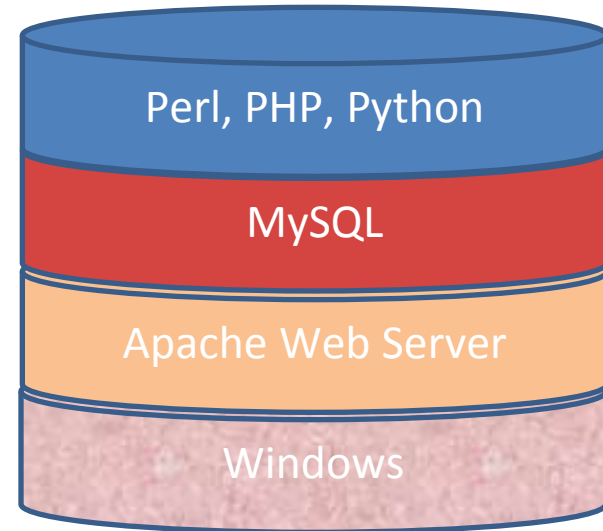
- *ABC Solution stack*
- *ABC and its connection to Activities*
- *Level of Abstraction problems with activities*
- *The use of Function Analysis and FAST to stabilize the Level of Abstraction*

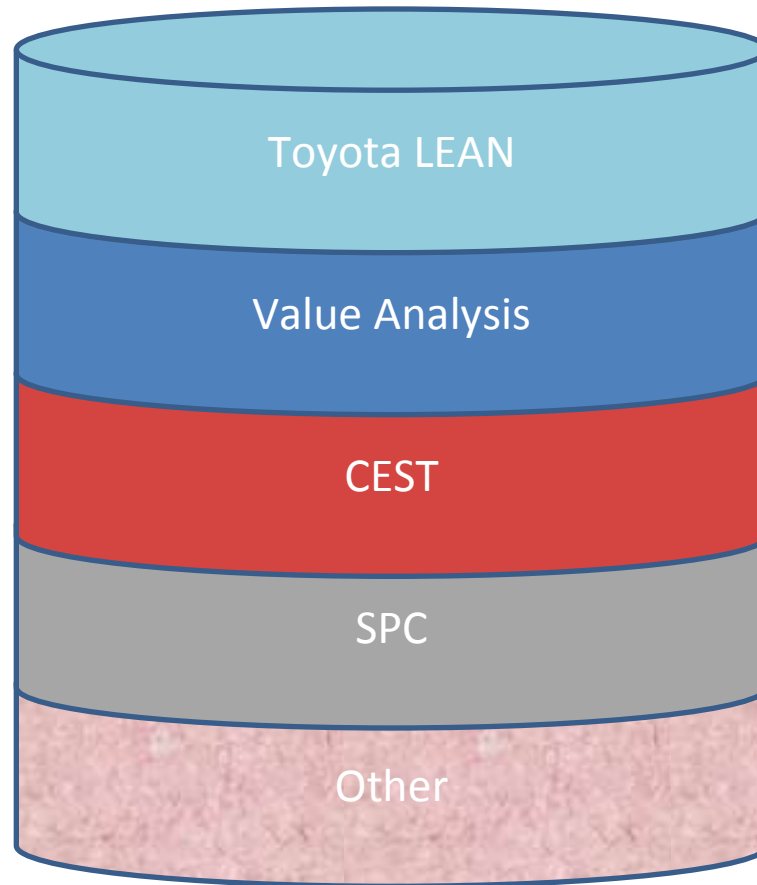
Internet Solution Stack

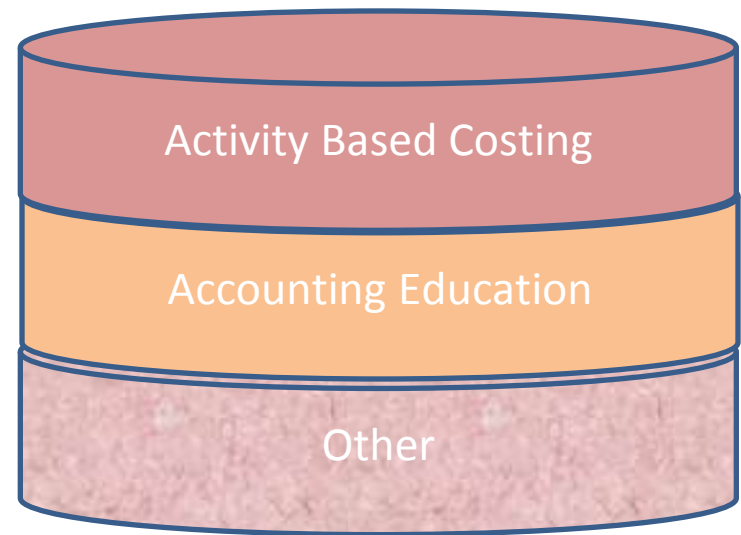
LAMP

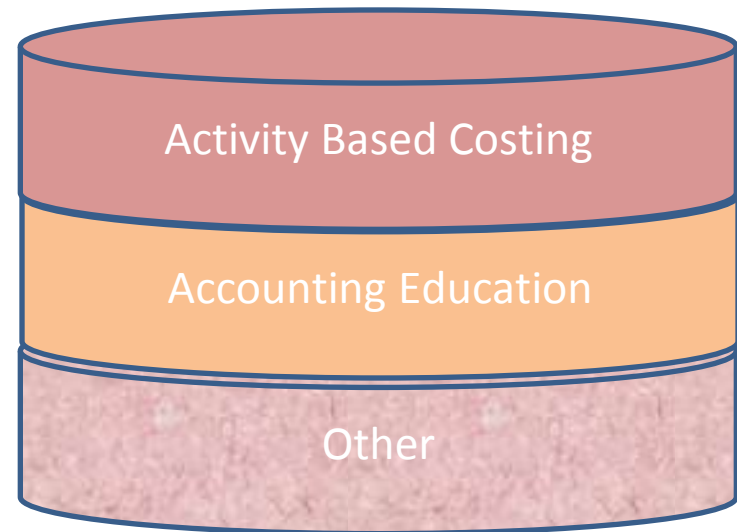
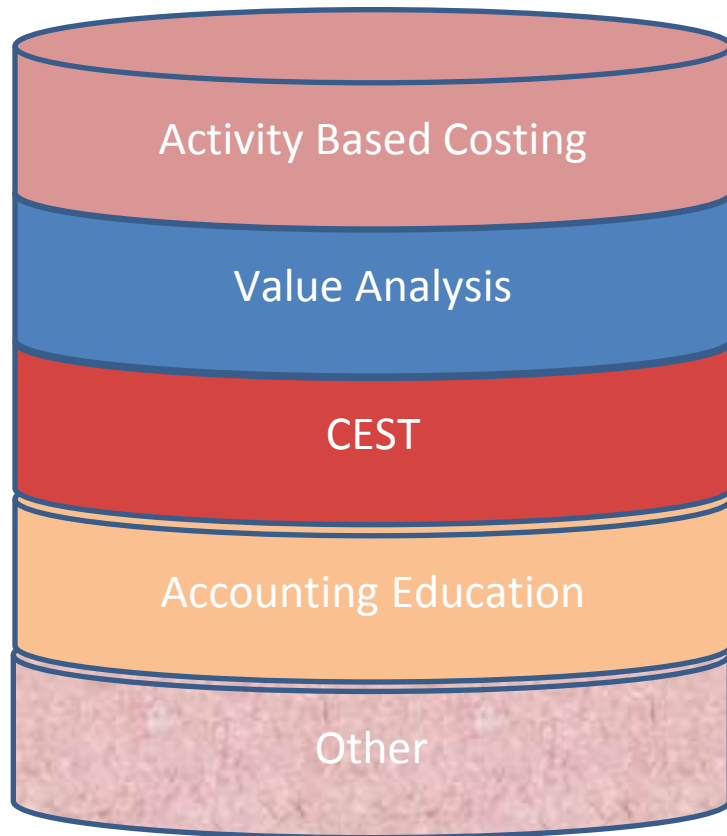


WAMP



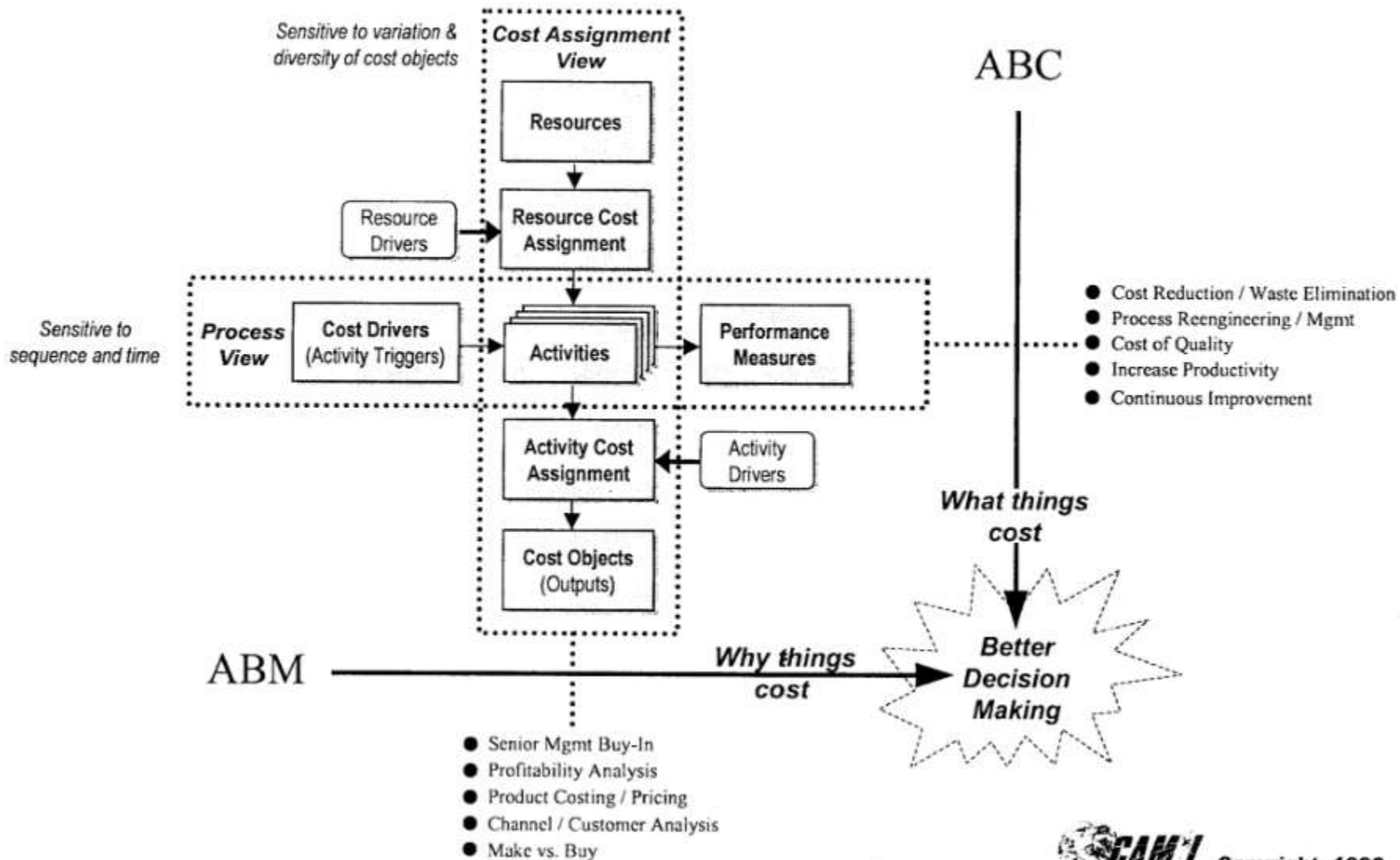




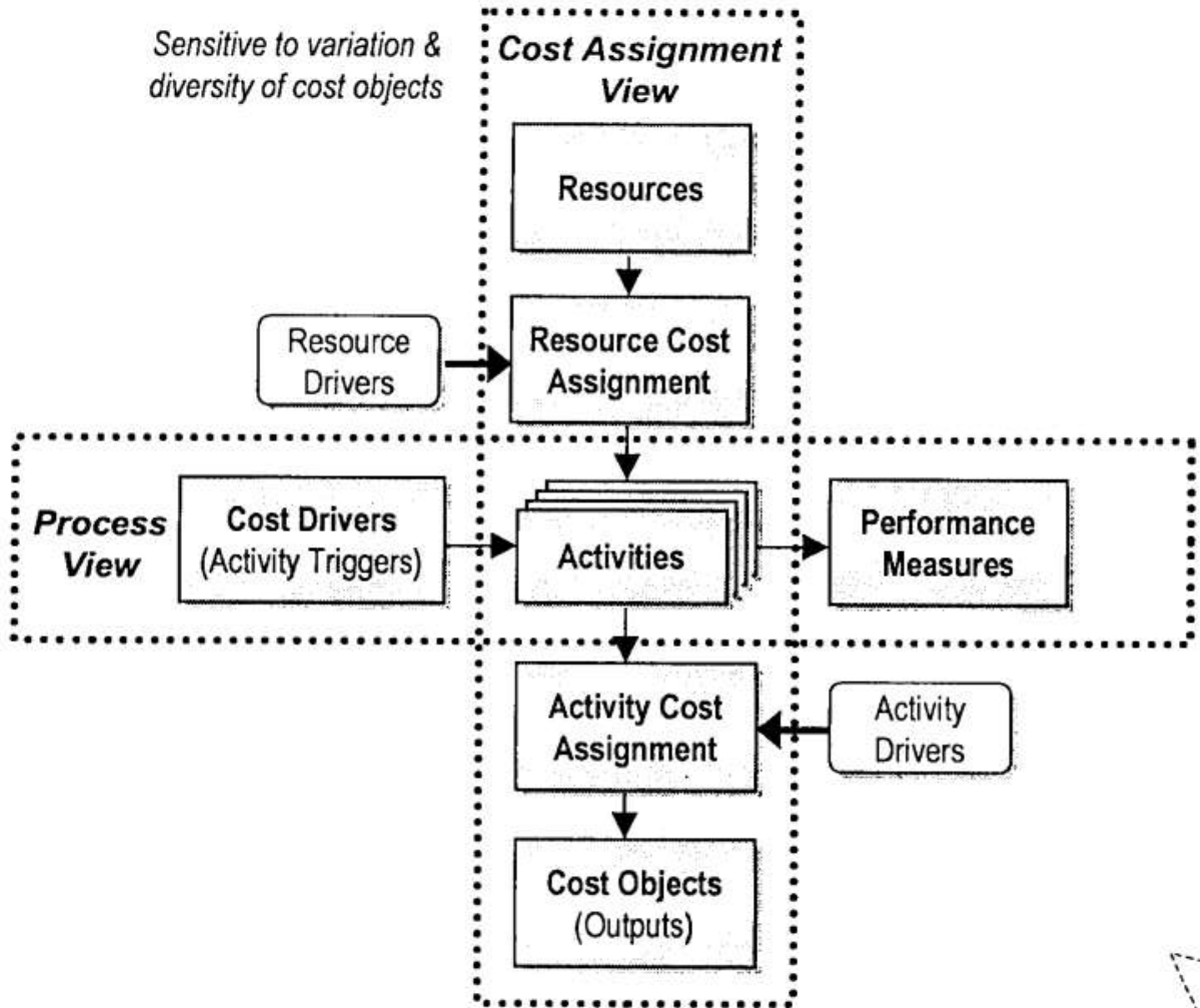


The CAM-I ABCM Model

AKA The CAM-I Cross



Sensitive to variation & diversity of cost objects



Activities are a tool to achieve a good Estimate of the cost of a Cost Object.

ABC was developed in environments where “activities” were the only tool available to identify costs.

Assumption:

We should minimize accounting system complexity and scope because **accounting accuracy is not a normal good.**

A good estimate of the cost of a
Cost Object.

Bank
1 type of chequing account
1 type of customer

Total annual cost \$ 5,000,000

Total accounts 500,000

Cost per account = \$ 5000000/500000
= \$10/account

You cannot get more accurate than this for these facts.

Two main problems when using ABC:

- Bad identification of “Activities”
- Too many Activities

If you focus on activities you will end up with a complex map similar to a VSM, but without the discipline of focusing on customers.

You should focus on Cost Objects and use the minimum number of tools to develop a cost

Most Activities are not
controllable in the decision
horizon.

VA and ABC have different goals.

- ABC is for describing costs
- VA is for problem solving, so

The normal VA language does not apply in the same way because the goals are different.

In VA, a function is not an activity.

However we can use it as an “activity” in ABC because sometimes our cost object is a function.

Function analysis (verb-noun)

FAST (how functions relate to each other)

How? →

← Why?

Make
Cost Object

Assemble
Cost Object
Parts

Provide
Cost Object
Labour

Provide
Cost Object
Parts

Provide
Cost Object
Space

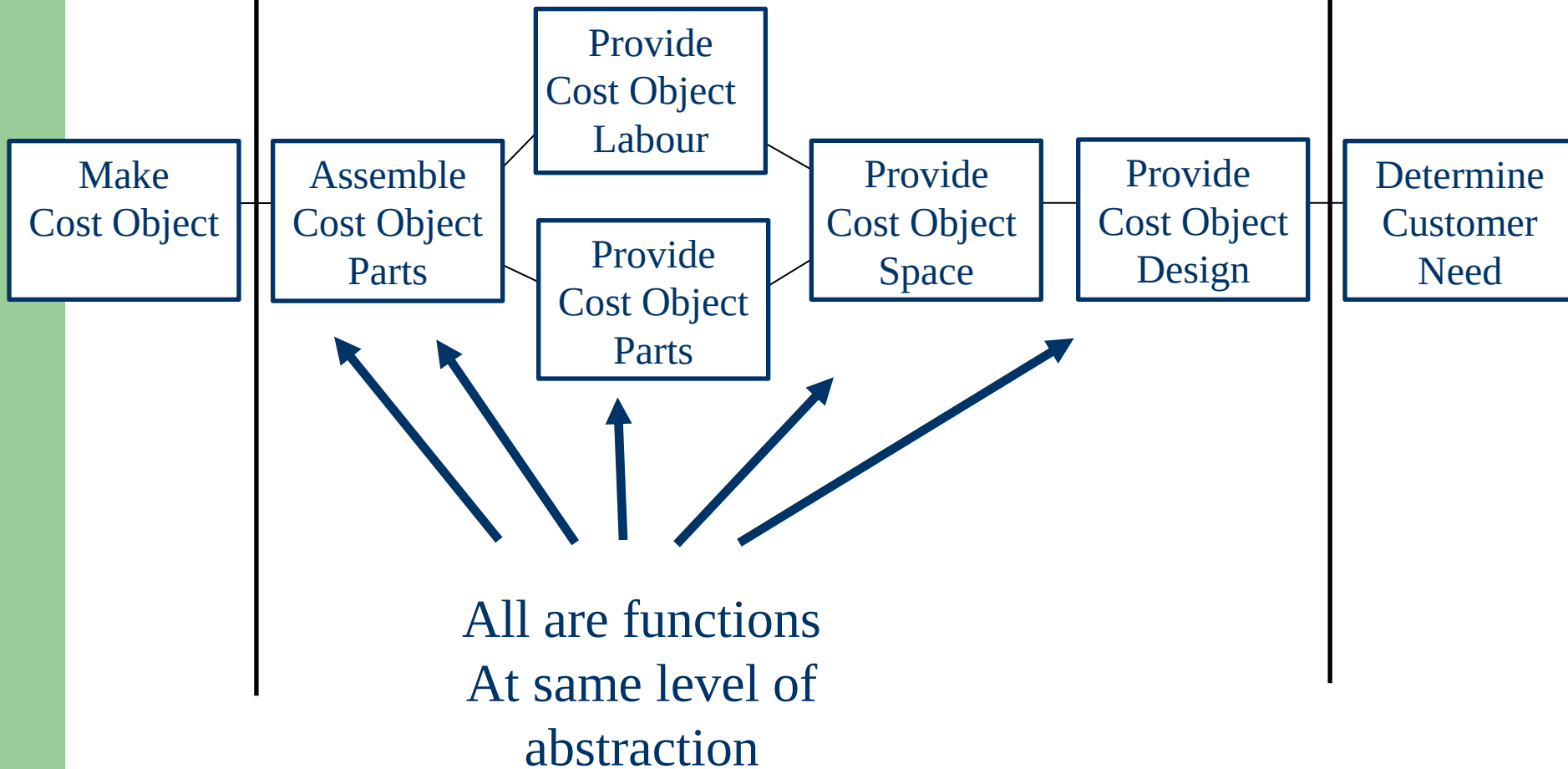
Provide
Cost Object
Design

Determine
Customer
Need

Tangible object, or
Mortgage loan, or
Restaurant meal, or
Design for a dam

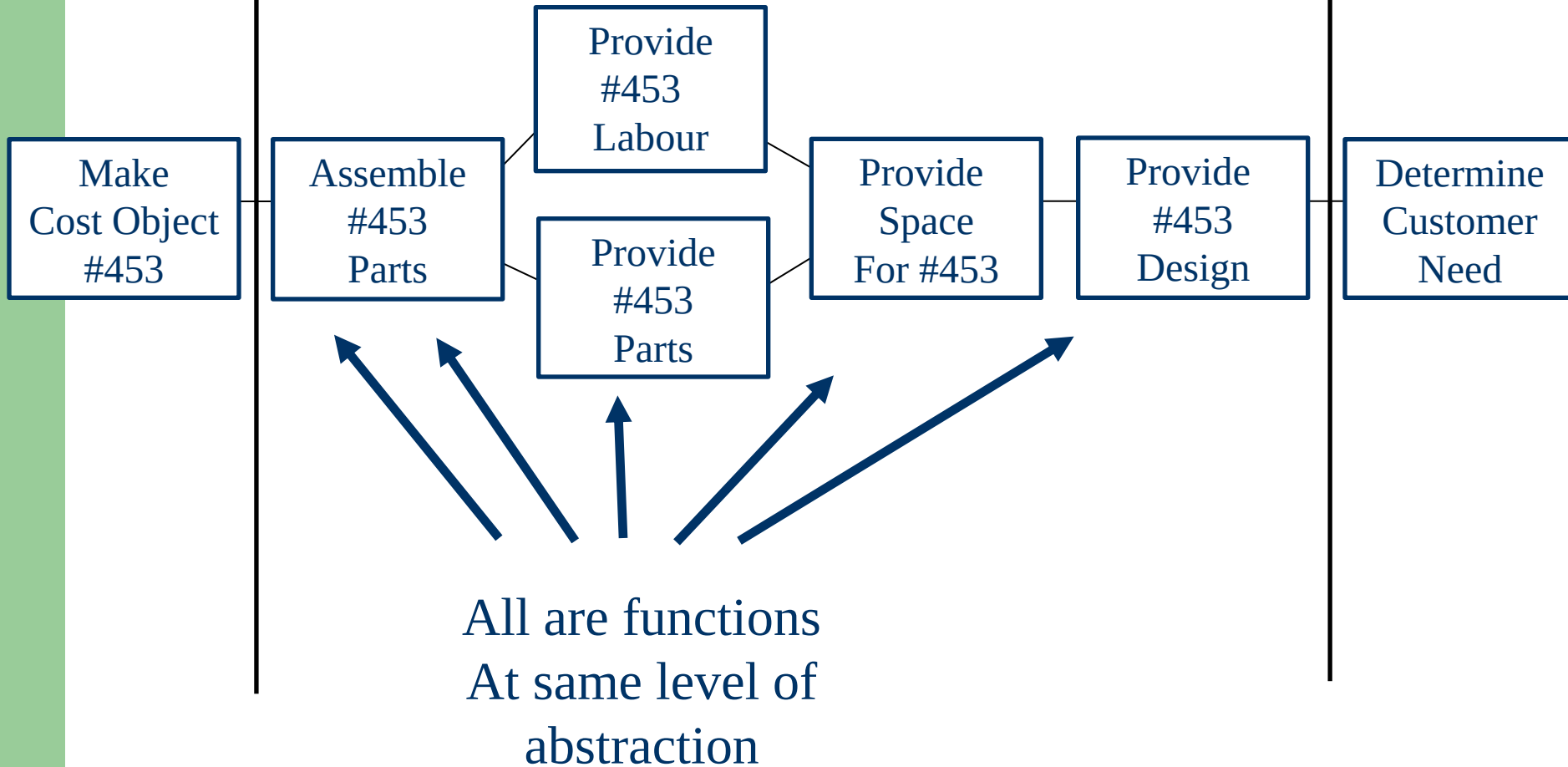
How? →

← Why?



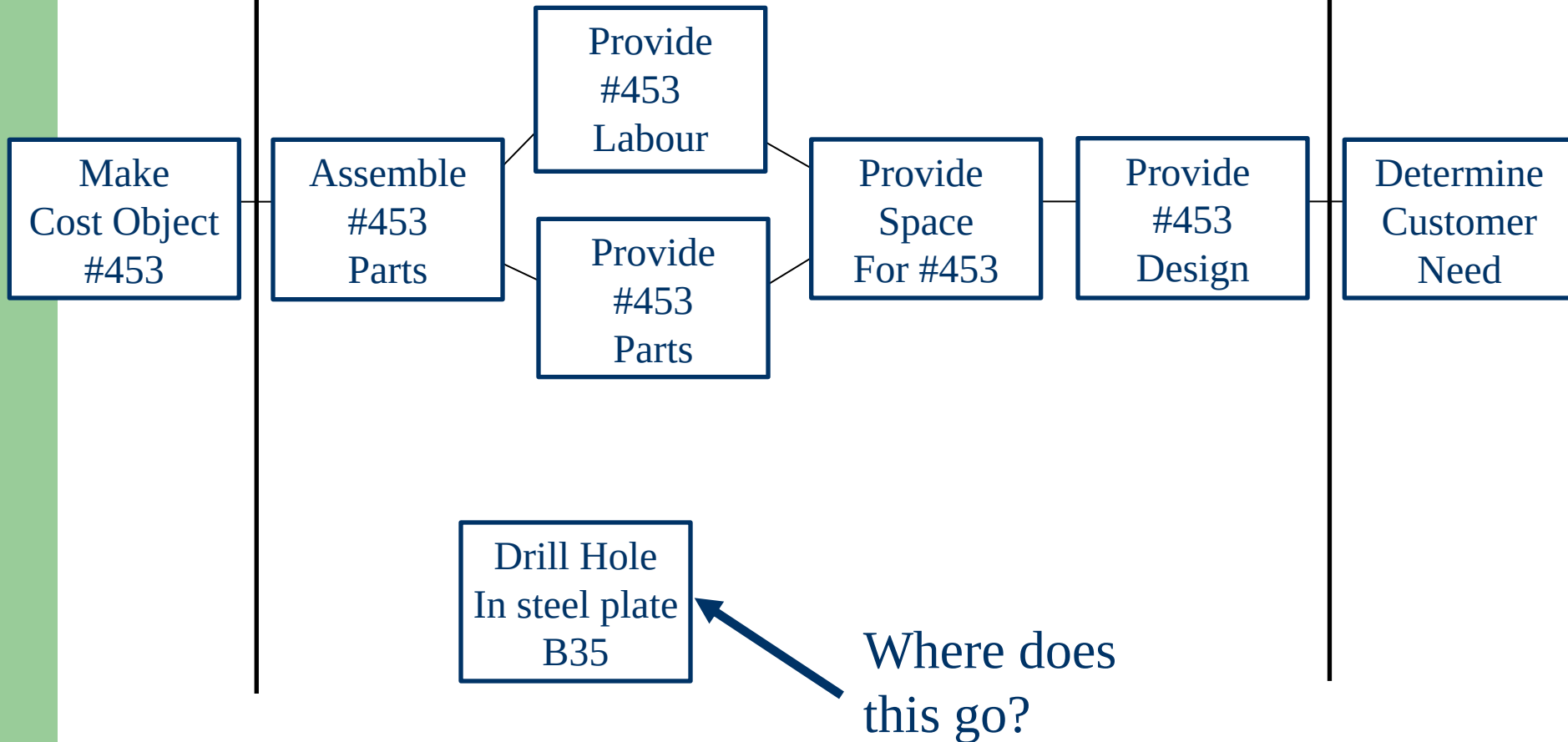
How? →

← Why?



How? →

← Why?



How? →

← Why?

Drill Hole
In steel plate
B35

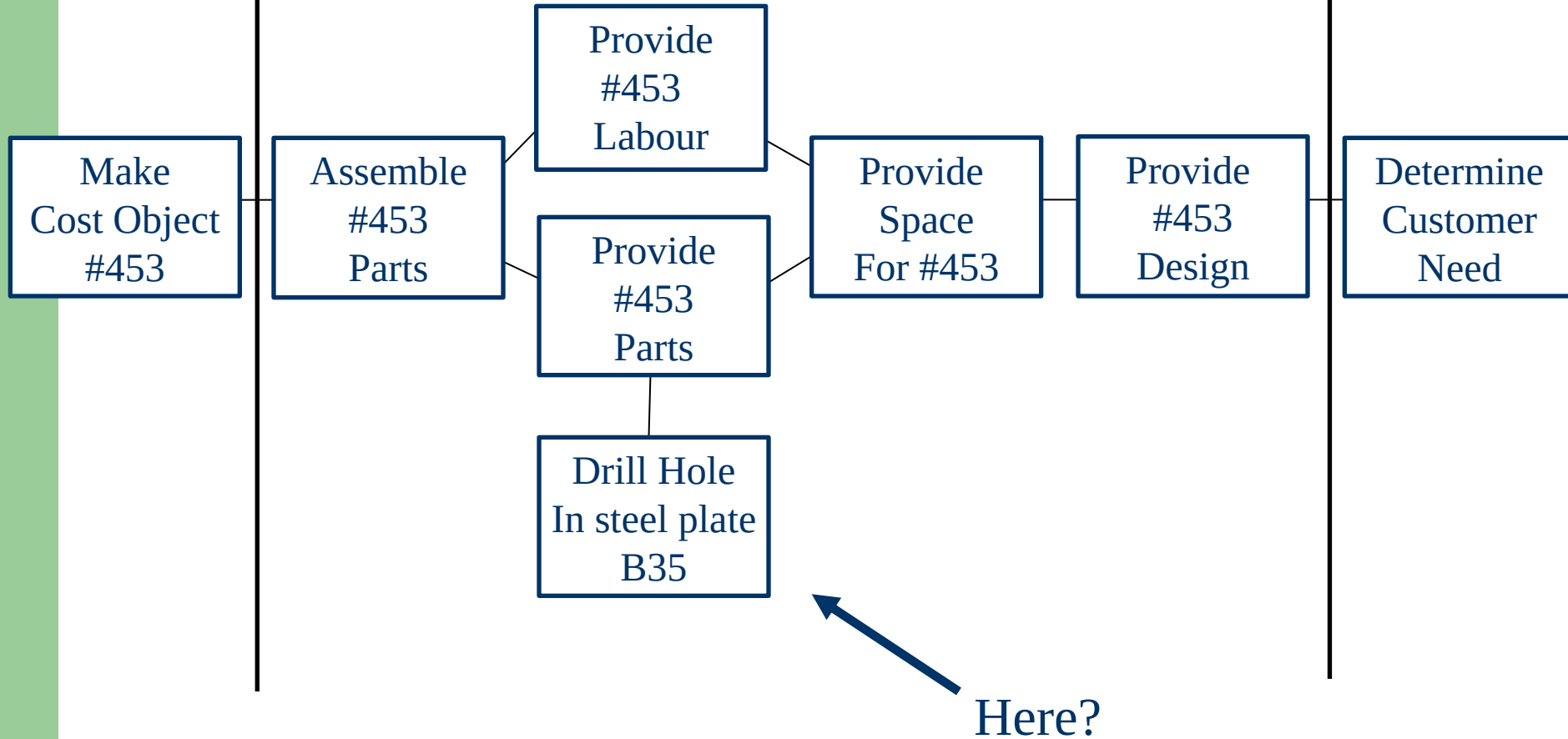
↙ Where does
this go?

Different level of abstraction!

Do we need to go there?
Refer back to Cost Object
Does this activity change the Cost
Object cost? If not, then ignore.

How? →

← Why?



How? →

← Why?

Make
Dam
Design

Design
Components

Provide
Civil Engineer
Labour

Provide
Design tools
(Autocad)

Provide
Adequate
Space

Provide
Dam
Specifications

Determine
Customer
Need

Develop
Environmental
Impact form

Where does
this go?

How? →

← Why?

Make
Dam
Design

Design
Components

Provide
Civil Engineer
Labour

Provide
Autocad

Provide
Space

Provide
Dam
Specifications

Determine
Customer
Need

Develop
Environmental
Impact form

Assemble
Environmental
Documents

Gather
Impact
Data



Knowing the Cost Object permits rapid development of a FAST model at a high level of abstraction.

Every time you change abstraction level you will see that the FAST model does not work smoothly.

Ask: Is this change necessary for an accurate estimate of the cost of the Cost Object.

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