



regoUniversity

NASHVILLE • 2022

Designing a TBM Model that is Defensible

Your Guides:
Eric Self and Vu Nguyen

Objectives

Upon completing this session, participants should be able to:

- Understand what a defensible Apptio cost model is
- Understand all the steps involved in building a defensible Apptio cost model
- Understand Apptio allocation best practices

Agenda

- Introduction
- Characteristics of a defensible model
- Steps to build an accurate TBM model
- Allocation best practices

Introductions

- Take 5 Minutes
- Turn to a Person Near You
- Introduce Yourself
- Business Cards



Open Mic



- What is a defensible cost model?
- Do you believe your model is defensible?
- How do you ensure your model is defensible?

Characteristics of a Defensible Model



ALL ASSUMPTIONS, RULES, AND
MAPPING ARE APPROVED BY
APPROPRIATE STAKEHOLDERS

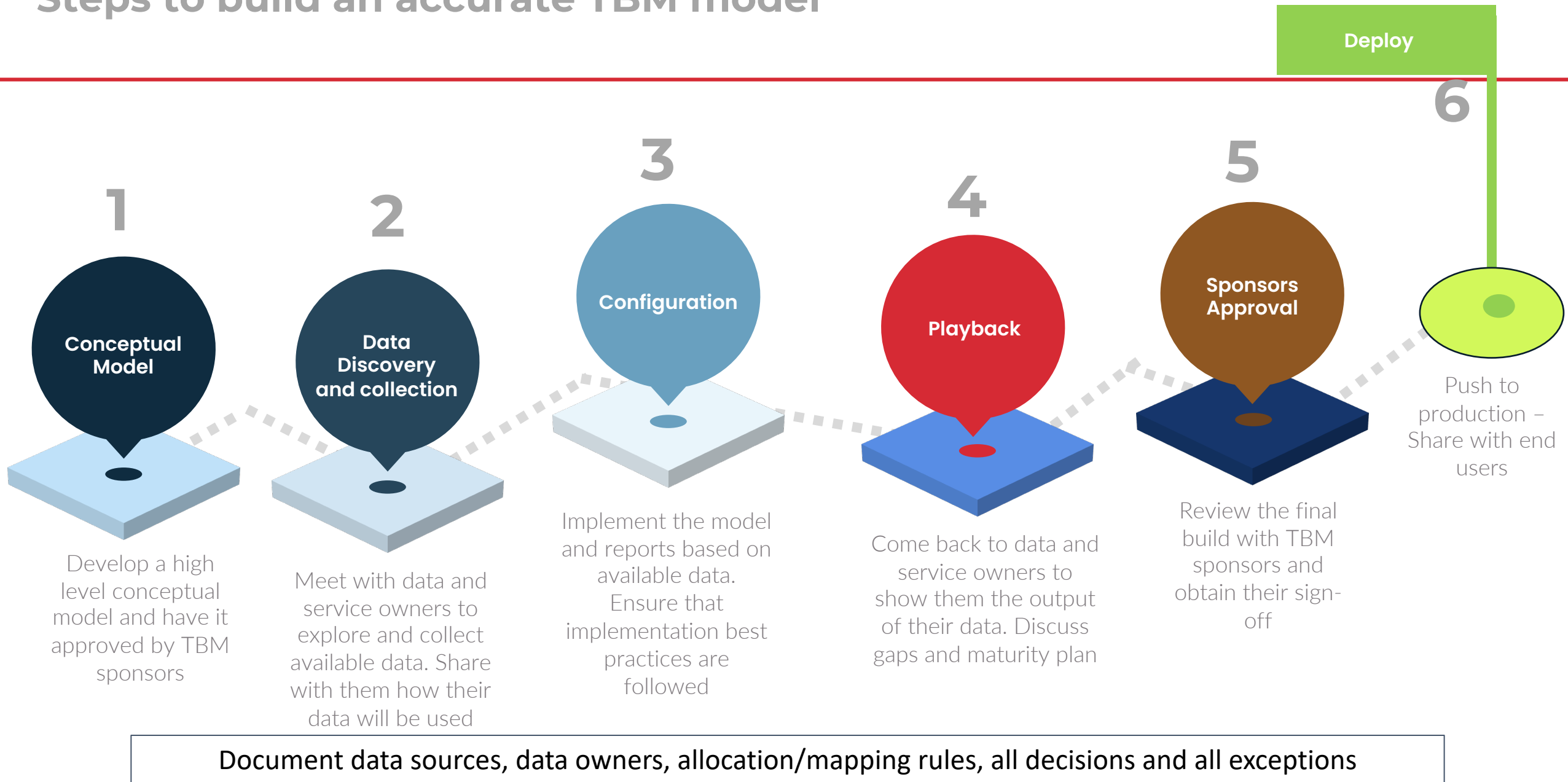


DETAILED MODEL
DOCUMENTATION IS AVAILABLE



QUESTIONS CAN BE ANSWERED
USING DATA AND REPORTS FROM
THE MODEL

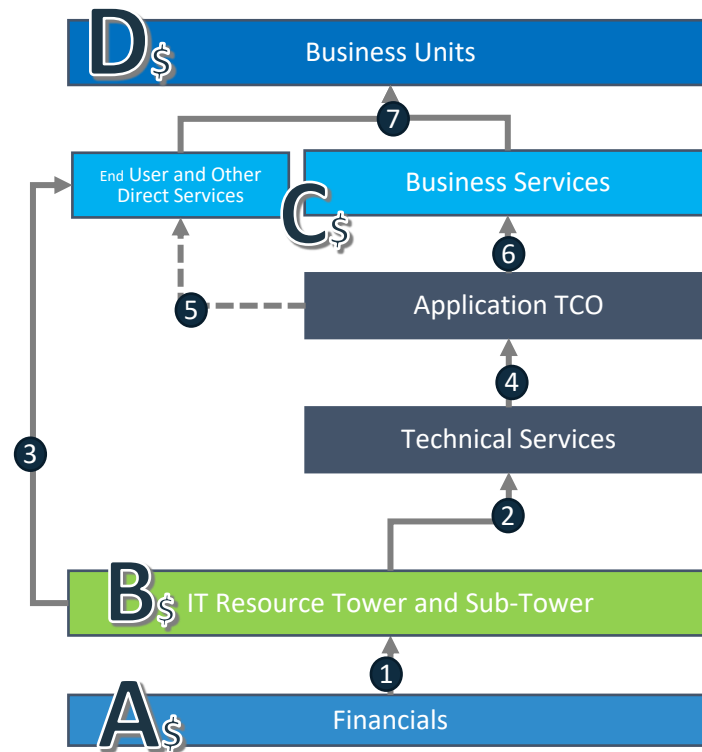
Steps to build an accurate TBM model



Step 1: Conceptual Model

- Align with TBM sponsors' vision and expectation
- Design a conceptual model based on the vision and expectation
- Obtain sign-off on the conceptual model
- Store the conceptual model in a document repository

Example of High-Level End to End Conceptual Model



$$A_{\$} = B_{\$} = C_{\$} = D_{\$}$$

- Using mappings, rules, and additional financial and operational data such as vendor, project, headcount, etc. 100% of the budget is mapped to standard ATUM towers and sub-towers
- A large portion of IT Resource Towers/sub-towers are mapped/allocated to technical services (these are services such as servers, storage, database, etc. that IT uses to host and support applications)
 - Some IT Resource Towers/sub-towers are mapped directly to End User services or other direct services such as business sponsored projects, managed services etc.
 - IT sets rates at this layer
- Technical services are mapped to applications based on mapping and consumption
- Applications are mapped to business services based on functions
 - Some applications are mapped to End user services and other Direct services
- Services are mapped/allocated to business units based on consumption or direct ownership

Step 2: Discovery

Objectives

- Explore and collect available data
- Align on owners and source of records
- Align on allocation and mapping rules

Approach

- Meet with data owners and service owners (schedule multiple meetings based on type of data: financials, infrastructure etc.)
- Inform on why data is needed and how it will be used in the model
- Provide information on data needed: must have, good to have, nice to have (refer to Apptio data advisory)
- Accept whatever is available: do not wait for perfect data (it is preferred that data goes directly from source to destination – Avoid manual manipulation)
- Discuss data refresh schedule (e.g., monthly, quarterly, etc.)
- Discuss logistics for data collection (e.g., datalink, shared folders, etc.)
 - Avid sending data by email
- Advise that you come bac and share the output after modeling

Step 3: Configuration

Objectives

- Model data collected during discovery

Approach

- Develop a model with associated reports based on data collected
- Align with conceptual model as well as mapping and allocation rules agreed upon during discovery
- Document the model
- Follow modeling best practices.
 - Use allocation good/better/best approach

Step 4: Playback

Objectives

- Obtain feedback/approval from data and service owners on the model

Approach

- Meet with stakeholders from the discovery step
- Review data and all allocations implemented in Apptio
 - Show all data transformation steps
 - Show that allocation rules align with what the approved during discovery
- Review all associated reports
- Highlight data gaps and advise on maturity roadmap
- Obtain feedback
- Repeat this step until approval
- Document and store all feedback and approvals

Step 4: Playback

Objectives

- Obtain feedback/approval from TBM sponsors on the model

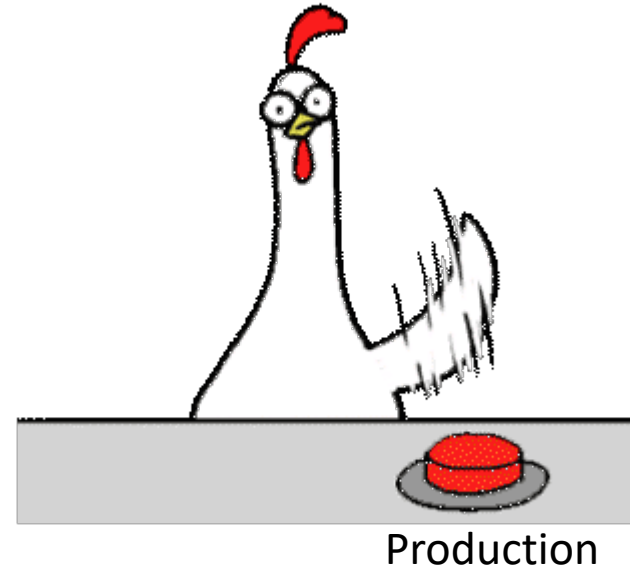
Approach

- Meet with TBM sponsors (usually these are recurring meetings)
- Review the model, allocation rules and reports
 - Keep this report very high level
- Highlight data gaps and advise on maturity roadmap
- Discuss roadblocks/risks and how the sponsors can help
- Obtain feedback
- Repeat this step until approval
- Document and store all feedback and approvals

Step 5: Deploy



We did it! Now time to push to production



Allocation Best Practices



- Do you have any unique / creative allocation methods you'd like to share?
- Are there any allocations you're struggling to make?

More information on
Allocation best practices



Microsoft
PowerPoint Presentat

Cost Source to Labour

Good

Relationship: Cost Centre

Weighting: None – evenly spread to all employees

Pros: Allocates labour costs to resources within the cost centre

Cons: Does not differentiate between internal and external labour costs. There is also no weighting of the costs to reflect the actual cost of an employee.

Better

Relationship: Type of employment i.e. Internal External

Weighting: Role or salary band

Pros: More accurate cost distribution

Cons: May expose salary bands

Best

Relationship: Time spent from a time tracking tool.

Weighting: Rate and time

Pros: Defensible and accurate allocation. Tracks very well to labour spend

Cons: Many time reporting systems do not have “good” data (availability or quality) or categories that align to ITRST or services.

Data Source

GL accounts codes or profit centers that are mapped as Internal labour or External labour should feed the cost to the labour object.

Common Source Systems

- SAP Enterprise Resource Planning
- Oracle E-Business Suite Financials
- Oracle Peoplesoft Financial Management
- Oracle Hyperion EpM
- Oracle JD Edwards EnterpriseOne Financial Management
- IBM Cognos TM1
- Adaptive Insights
- Infor Lawson
- Microsoft Dynamics
- Netsuite

Cost Source to Fixed Assets

Good

Relationship: Cost Center

Weighting: None – Even Spread

Pros: Costs will flow in the model to all assets in the cost centre

Cons: No differentiation of Hardware vs Software depreciation

Better

Relationship: Asset Category

Weighting: None – Even Spread

Pros: The costs will be segregated between Hardware and Software

Cons: All assets receive the same cost, regardless of their depreciation amount

Best

Relationship: Asset Category

Weighting: Monthly Depreciation Amount

Pros: Best cost distribution as it is based on the actual value of the depreciation.

Cons: Many fixed asset systems may not be at the level needed to perform this allocation, and mapping to towers may be complex

Data Source

GL account codes or cost centers that have depreciating assets that are part of the IT organisation. Line items with this characteristic should be source of cost to fixed assets

Common Source Systems

- SAP Enterprise Resource Planning
- Oracle E-Business Suite Financials
- Oracle Peoplesoft Financial Management
- Oracle Hypereion EpM
- Oracle JD Edwards EnterpriseOne Financial Management
- IBM Cognos TM1
- Adaptive Insights
- Infor Lawson
- Microsoft Dynamics
- Netsuite

Cost Source to Vendor

Good

Relationship: Cost Center

Weighting: None – Even Spread

Pros: Cost will flow within the model

Cons: If multiple vendors exist in a cost centre, they will attract the same cost

Better

Relationship: Vendor ID

Weighting: None – Even Spread

Pros: Costs related to each vendor and a defensible allocation strategy.

Cons: If there are multiple contracts pertaining to a vendor, they will all have the same cost

Best

Relationship: Vendor ID

Weighting: Vendor spend/contract amount

Pros: Costs related to each vendor, split by contract, and a defensible allocation strategy.

Cons: Need a current list of vendors that is always updated.

Data Source

GL account codes or cost centers that have a specific cost to a vendor normally marked by the vendor ID column.

Common Source Systems

- SAP Enterprise Resource Planning
- Oracle E-Business Suite Financials
- Oracle Peoplesoft Financial Management
- Oracle Hypereion EpM
- Oracle JD Edwards EnterpriseOne Financial Management
- IBM Cognos TM1
- Adaptive Insights
- Infor Lawson
- Microsoft Dynamics
- Netsuite

Cost Source to Projects

Good

Relationship: Cost Center

Weighting: None – Even Spread

Pros: Cost will flow

Cons: Costs will be spread to all projects in that cost centre evenly

Better/Best

Relationship: Project ID

Weighting: None – Spread per project

Pros: Each line of the GL that refers to a project is cleared marked

Cons: Needs integration between the project tool and the GL so that the information flows correctly.

Data Source

GL account codes or cost centers that have a specific cost related to a project spend.

Common Source Systems

- SAP Enterprise Resource Planning
- Oracle E-Business Suite Financials
- Oracle Peoplesoft Financial Management
- Oracle Hypereion EpM
- Oracle JD Edwards EnterpriseOne Financial Management
- IBM Cognos TM1
- Adaptive Insights
- Infor Lawson
- Microsoft Dynamics
- Netsuite

Status Report

From	To	Good	Better	Best	Obs.
Cost Source	labour				
Cost Source	Fixed Assets				
Cost Source	Vendor				
Cost Source	Projects				

Labour to IT Resource Towers

Good

Relationship: User Managed Table

Weighting: N/A

Pros: Allocation according to the SME experience and knowledge of the team.

Cons: Process heavily dependent on human input. If SME leaves the company the process will be affected.

Better

Relationship: Role mapping to ITRT

Weighting: N/A

Pros: Defendable and clear allocation methodology with less human dependency

Cons: Roles may not be granular enough for accurate mapping i.e. Server Support instead of Wintel or Unix Support

Best

Relationship: Time Tracking task mapping to ITRT

Weighting: N/A

Pros: Accurate cost allocation based on actual time spent of labour resource

Cons: Need an accurate timesheet system, with tasks granular enough to map to specific ITRT's. Rare for all employees to submit timesheets

Data Source

Every row in the labour/Time Tracking Master dataset needs to have the IT Resource Tower and Sub-Tower columns populated with valid values in order for the costs to flow correctly

Common Source Systems

- Workday
- Oracle Peoplesoft Financial Management
- Oracle Human Capital Management
- Oracle Hyperion EPM
- SAS SuccessFactors

Fixed Assets to IT Resource Towers

Good

Relationship: User Managed Table

Weighting: N/A

Pros: Allocation according to the SME experience and superior knowledge of the data.

Cons: Process heavily dependent on human input. If SME leaves the company the process will be affected. Also this approach is only as accurate as the estimates for the %'s of asset types to the different resource towers.

Better

Relationship: Tablematch (identify key words in asset descriptions to match to ITRT)

Weighting: N/A

Pros: Can be a quick win way to map a large FAR to ITRT, where manual intervention would be too cumbersome.

Cons: Is only as good as your tablematch logic – things may be incorrectly mapped if they share similar keywords. Can also have performance impact if too many wild cards used against large dataset.

Best

Relationship: FA line Items to ITRT

Weighting: N/A

Pros: Defendable and clear allocation methodology. Can be very powerful if introduced as fields in the FAR source system.

Cons: The mapping to ITRT might be very cumbersome, and needs a good knowledge of the data.

Data Source

Fixed asset register/depreciation schedule.

Common Source Systems

- SAP Enterprise Resource Planning
- Oracle E-Business Suite Financials
- Oracle Peoplesoft Financial Management
- Oracle JD Edwards EnterpriseOne Financial Management
- Infor Lawson
- Microsoft Dynamics
- Netsuite

Other Cost Pools to IT Resource Towers

Good

Relationship: User Managed Table

Weighting: Specified by SME

Pros: Allocation according to the SME experience and superior knowledge of the data.

Cons: Process heavily dependent on human input. If SME leaves the company the process will be affected. Also this approach is only as accurate as the estimated mappings to the different resource towers.

Better/Best

Relationship: Allocate other costs by cost center to IT Resource Sub-Tower based on detailed mapping of journal entries from ledger.

Weighting: SME/Finance specified

Pros: Most accurate and automated process

Cons: May require manual intervention to map specific journal entries to a specific ITRST.

Data Source

Other costs mapped to ITRT, this means costs that did not go through any other specific object.

Common Source Systems

- SAP Enterprise Resource Planning
- Oracle E-Business Suite Financials
- Oracle Peoplesoft Financial Management
- Oracle JD Edwards EnterpriseOne Financial Management
- Infor Lawson
- Microsoft Dynamics
- Netsuite

Vendor to IT Resource Towers

Good

Relationship: Mapping from each line on the vendor object to an ITRT (assumes vendors object split by ITRT)

Weighting: N/A

Pros: The numbers will flow.

Cons: Likely to be a very basic list of vendors, resulting in lack of details in the data shown of reports

Better/Best

Relationship: Allocate per vendor with the correct % spread per ITRT based on sub contracts or PO information

Weighting: N/A

Pros: Vendor list available giving clear data and information for ITRT mapping and reports

Cons: Need of a well maintained and updated vendor list with clear understanding of spend for this approach to work

Data Source

Vendor information normally from a segregated IT vendors list.

Common Source Systems

- SAP Ariba
- Coupa
- Zycus
- BravoSolution
- Ivalua

Status Report

From	To	Good	Better	Best	Obs.
labour	ITRT				
Fixed Assets	ITRT				
Other Costs	ITRT				
Vendor	ITRT				

IT Resource Towers to Network Devices

Good

Relationship: Even Spread to Network Devices within ITRST

Weighting: Even Spread

Pros: The numbers will flow. If no data associating GL and FA line items with Network Devices can be obtained, and no port count data is available then you may distribute costs evenly

Cons: No precision on the allocation, causing lack of details in the data affecting reports

Better/Best

Relationship: ITRT to Network Device ID using metadata

Weighting: Number of ports or port type

Pros: Precise and defensible allocation

Cons: This assumes customer has a readily-available inventory of all Ports, Devices, and Handsets. Sometimes this type of data is not closely managed

Data Source

Information on Network LAN, Network WAN and Network Voice costs

Common Source Systems

- SolarWinds
- CA Spectrum
- CiscoWorks
- NetScout Systems
- Riverbed
- Viavi Solutions

IT Resource Towers to Server/Physical Server

Good

Relationship: ITRST

Weighting: Even Spread

Pros: The number will flow from one object to another.

Cons: A even spread here is really bad for your search for transparency, as all servers within an architecture will attract the same cost, so this should be your last resort

Better

Relationship: ITRST

Weighting: CPU cores, installed memory, power usage, calculated coefficient of all of these

Pros: Defendable and clear allocation methodology which effectively weights across the architecture based on assumed cost of compute

Cons: Does not take into account sub-architectures i.e. Unix is not split into AIX, HP-UX, Solaris etc.

Best

Relationship: ITRST and metadata

Weighting: #CPU cores, installed memory, power usage, calculated coefficient of all of these

Pros: Within the Compute IT Resource Tower, we also have Sub-Towers for Wintel, Linux, Unix, iSeries, Midrange, and Mainframe. If the Physical Servers data has a corresponding attribute (typically via OS or Platform columns), it is possible to create a key and set up a data-based relationship so that each sub tower sends costs only to matching Physical Servers

Cons: Need very accurate information. Also some data normalization might be needed

Data Source

Information from the CMDB or system of record for compute assets

Common Source Systems

- VMware vCenter
- SCCM
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB

IT Resource Towers to Data Centers

Good

Relationship: ITRST

Weighting: Even Spread

Pros: Costs will flow.

Cons: No precision on the allocation – all datacenters will effectively cost the same, regardless of size

Relationship: ITRST

Weighting: Square footage, rack units, available power, number of ports

Pros: Defensible allocation based on usable capacity of data center

Cons: Does not take into account specific costs related to a data center

Better/Best

Relationship: ITRST and metadata

Weighting: Square footage, rack units, power consumption, number of ports

Pros: Precise and defensible allocation based on information specific to a datacenter i.e. if there is a contract pertaining to one datacenter, you would use metadata to ring-fence this cost and allocate it directly to that location

Cons: N/A

Data Source

Source of information for data centres including metrics such as size, occupancy and power usage

Common Source Systems

- ServiceNow CMDB
- BMC Atrium CMDB

IT Resource Towers to End User Devices

Good

Relationship: ITRST

Weighting: Even Spread

Pros: The numbers will flow from the Desktops, Mobile Devices based ITRST

Cons: No precision on the allocation i.e. does not distinguish between different desktop machine specs or support levels

Relationship: ITRST

Weighting: Device type or level of support

Pros: Better management of costs and distribution

Cons: Requires good maintenance of devices information

Better/Best

Relationship: ITRST and metadata

Weighting: Device type or level of support

Pros: Use of metadata allows direct allocation of specific costs i.e. Lenovo vs HP laptop costs

Cons: Requires good maintenance of devices information

Data Source

Information of end user devices such as Desktops, laptops and mobile devices

Common Source Systems

- IBM Tivoli
- SCCM
- Microsoft Active Directory
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB

IT Resource Towers to Mainframes

Good

Relationship: ITRST

Weighting: Even Spread

Pros: The numbers will flow from Allocate Mainframe, Mainframe Database and Mainframe Middleware costs

Cons: No precision on the allocation, all mainframe components get the same cost

Better/Best

Relationship: ITRT to Mainframes

Weighting: MIPS or GB Storage

Pros: Accurate distribution of costs based on mainframe usage

Cons: Requires good maintenance of Weighting information

Data Source

MIP/Job status from mainframe source system. Typically this is pulled from a bespoke IBM product

IT Resource Towers to Storage/Storage Devices

Good

Relationship: ITRST

Weighting: Even Spread

Pros: The number will flow from one object to another.

Cons: A even spread will mean all storage volumes within that sub tower will cost the same, regardless of size

Better

Relationship: ITRST

Weighting: Based on usable capacity (GB/TB) of Storage Devices/volumes.

Pros: Defendable and clear allocation methodology with less human dependency

Cons: If there are large cost differences between storage technologies within the same ITRST, these will not be reflected i.e. solid state vs disk

Best

Relationship: ITRST and meta

Weighting: Based on usable capacity (GB/TB) of Storage Devices/volumes.

Pros: Use of metadata allows for differentiation in cost of different storage technologies within the same ITRST

Cons: Can be complex to gather/maintain the data for this

Data Source

System of record for storage device and volume information

Common Source Systems

- EMC VMAX/VNX/Isilon
- Hitachi Data Systems Command Suite
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB
- HP 3PAR StoreServ
- NetApp OnCommand Insight
- Veritas Operation Manager

IT Resource Towers to Tickets

Good

Relationship: ITRT to Tickets

Weighting: Even Spread

Pros: The number will flow from one object to another.

Cons: Does not reflect difference in costs of tickets based on severity or time to resolve

Better

Relationship: ITRT to Tickets

Weighting: Use the rate of the person that is handling the ticket

Pros: Good information to allocate costs giving a good number to gauge tickets costs

Cons: Needs a deeper level of information and a good ticket and HR system. Also data will probably need to be anonymized

Best

Relationship: ITRT to Tickets

Weighting: Severity/Ticket Level or Time to Resolve

Pros: Better information giving a more realistic cost distribution due to level of labour used

Cons: This method still does not differentiate the cost of different labour resources. Care should also be taken not to use the elapsed time the ticket was open for, as low priority / severity tickets may attract too much cost

Data Source

Ticket management/helpdesk system such as:

Common Source Systems

- BMC Remedy Service
- CA Service Desk Manager
- ServiceNow
- HEAT/FrontRange IT Service Management

IT Resource Towers to Applications

Good

Better

Best

Relationship: ITRST

Weighting: Even Spread

Pros: The number will flow from one object to another.

Cons: Will not distinguish costs actually incurred by the app

Relationship: ITRST

Weighting: Allocate cost of Application IT Resource tower across all apps, but weight by the number of users per application.

Pros: Good information to allocate costs giving a good number to gauge application costs

Cons: Number of users is a viable proxy to differentiate application size and burden costs accordingly, however it may not take into consideration other drivers of per application cost such as volume of development/support labour or license and maintenance costs.

Relationship: ITRST and meta

Weighting:

- For App Dev, weighting by timetracking or project spend is generally ideal (assuming projects tie to Apps).
- For LOB Software, direct cost is generally best. Sometimes this needs to be added as an additional subfield under SubTower to maintain integrity of the spend going up the model (assuming info is available in GL).
- For App Support, timetracking or tickets are generally best. Business Criticality could be a secondary option if this is unavailable.
- For Cloud Apps, direct cost is generally best.

Pros: Very good information per application line

Cons: High maintenance of information

Data Source

List of applications within your organisation

Common Source Systems

- BizDesign
- Mega International
- Software AG ARIS
- Planview Troux
- SCCM
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB

IT Resource Towers to Business Services

Good

Relationship: ITRT to Business Services

Weighting: Even Spread

Pros: The number will flow from one object to another.

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better

Relationship: ITRT to Business Services

Weighting: % Spread

Pros: Map the IT Resource to Business Services based on company knowledge of what business services use which resource towers.

Cons: Each specific business service may require a different measure and baseline since their nature and method of measurement may vary drastically.

Best

Relationship: No/minimal direct relationship

Weighting: N/A

Pros: The idea is to let the ITRT get to business service in a indirect way through the other objects in the model.

Cons: Some costs might get stranded and will need to be addressed

Data Source

List of business services within you oragnisation

Common Source Systems

- BizzDesign
- Mega International
- Software AG ARIS
- Planview Troux
- SCCM
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB

Status Report

From	To	Good	Better	Best	Obs.
ITRT	Network Devices				
ITRT	Physical Server				
ITRT	Data Centers				
ITRT	End User Devices				
ITRT	Mainframes				
ITRT	Storage Devices				
ITRT	Tickets				
ITRT	Application				
ITRT	Business Services				

Applications to Business Services

Good

Relationship: Applications to Business Services

Weighting: Even Spread

Pros: The number will flow from one object to another.

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better

Relationship: Applications to Business Services

Weighting: Knowledge Based Allocation (% Split)

Pros: SME expertise enables a better allocation than even spread

Cons: Since this method is not based on specific data, it is subject to estimation by whoever is tasked with applying percentages.

Best

Relationship: Applications to Business Services

Weighting: Direct allocations, or number of service 'transactions'

Pros: Data-driven allocations for each application enables high accuracy service costings

Cons: High maintenance of information

Data Source

Applications that the company have and what business service it supports

Common Source Systems

- BizzDesign
- Mega International
- Software AG ARIS
- Planview Troux
- SCCM
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB

Status Report

From	To	Good	Better	Best	Obs.
Application	Business Services				



Apps / Business Services to Business Units

Good

Relationship: Apps / Bus Svcs to Business Units

Weighting: Even Spread

Pros: The number will flow from one object to another.

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better

Relationship: Apps / Bus Svcs to Business Units

Weighting: Organisational size / headcount

Pros: Uses SME expertise

Cons: Since this method is not based on specific data, it is subject to estimation by whoever is tasked with applying percentages.

Best

Relationship: Apps / Bus Svcs to Business Units

Weighting: Number of app users / log ins or licences

Pros: High accuracy and enables demand-driven conversations

Cons: High maintenance of information

Data Source

Common Source Systems

- Peoplesoft
- WorkDay
- Active Directory
- In-app usage / log-in tracking data (in application)
- Flexera (or other Software Asset Management system)

Status Report

From	To	Good	Better	Best	Obs.
Application / Business Service	Business Units				

Communications to End User Devices

Good

Relationship: Allocate all Communication costs for Type = End User Device to End User Devices

Weighting: Even Spread

Pros: The numbers will flow and allocate for the above data

Cons: No precision on the allocation, causing lack of details in the data affecting reports.

Better/Best

Relationship: Allocate all Communication costs for Type = End User Device to End User Devices

Weighting: Configured bandwidth

Pros: Better management of costs and distribution

Cons: N/A

Data Source

Common Source Systems

- Dimension Data Xigo
- Tangoe
- Vendor Billing

Communications to Servers

Good

Relationship: Allocate all Network Devices costs for Type = Data Center to Servers

Weighting: Even Spread

Pros: The numbers will flow and allocate for the above data

Cons: No precision on the allocation, causing lack of details in the data affecting reports.

Better/Best

Relationship: Allocate all Network Devices costs for Type = Data Center to Servers

Weighting: measured network I/O

Pros: Better management of costs and distribution

Cons: N/A

Data Source

Common Source Systems

- Dimension Data Xigo
- Tangoe
- Vendor Billing

Communications to Business Services

Good

Relationship: Allocate all Communication costs for Type = Business Services to specific Business Service (e.g. Retail Kiosk)

Weighting: Even Spread

Pros: The numbers will flow and allocate for the above data

Cons: No precision on the allocation, causing lack of details in the data affecting reports.

Better/Best

Relationship: Allocate all Communication costs for Type = Business Services to specific Business Service (e.g. Retail Kiosk)

Weighting: Configure bandwidth

Pros: Better management of costs and distribution

Cons: N/A

Data Source

Common Source Systems

- Dimension Data Xigo
- Tangoe
- Vendor Billing

Status Report

From	To	Good	Better	Best	Obs.
Communications	End User Devices				
Communications	Servers				
Communications	Business Services				

Data Centers to Physical Compute Assets, Storage Devices and Network Devices

Good

Relationship: Apportion all Data Center (DC) costs across Mainframes, Physical Servers, Storage Devices and Network Devices

Weighting: Even Spread

Pros: All DC costs will be allocated to all assets

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better

Relationship: Apportion each Data Center costs across Mainframes, Physical Servers, Storage Devices and Network Devices within them

Weighting: Even Spread

Pros: Data Centre costs are distributed to assets within each individual Data Centre

Cons: Does not take into account each individual asset

Best

Relationship: Apportion Data Center costs across Mainframes, Physical Servers, Storage Devices and Network Devices within them

Weighting: Average Power Consumption

Pros: Data Centre costs are distributed to each asset within the Data Centre based on the power that they draw giving a fair and accurate allocation of the DC cost

Cons: Data may be difficult to obtain, so consider using the number of U's (amount of rack space) as a next best alternative

Data Source

Information sources required so that costs can be allocated

Common Source Systems

- ServiceNow CMDB
- BMC Atrium CMDB
- APC Power Management / Rack Management Monitoring software
- Proprietary Data Centre Inventory

Status Report

From	To	Good	Better	Best	Obs.
Data Centers	Mainframes				
Data Centers	Physical Servers				
Data Centers	Storage Devices				
Data Centers	Network Devices				

End User Devices to Business Units

Good

Relationship: End User Devices (EUD) ID to Business Units (possibly via End User Service @ Services layer)

Weighting: Even Spread

Pros: Costs will flow into Business Units

Cons: No precision on the allocation causing lack of accuracy (confidence) in the reports.

Better/Best

Relationship: EUD ID to EUS or Business Units

Weighting: Users within each Business Unit

Pros: End User costs are allocated directly to users within a Business Unit, assuming we can tie this at the EUD object. Alternatively using a department weighting we can assign more cost to departments within BUs

Cons: Per user data may not be available

Data Source

Information of end user devices such as Desktops, laptops and mobile devices, and the user to whom each is assigned

Common Source Systems

- IBM Tivoli
- SCCM
- Microsoft Active Directory
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB

Status Report

From	To	Good	Better	Best	Obs.
End User Devices	Business Services				



Hypervisors to Servers

Good

Relationship: Hypervisors to all Virtual Servers

Weighting: Even Spread

Pros: The costs will flow to the target object

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better

Relationship: Hypervisors to virtual servers on host

Weighting: Even Spread

Pros: A reasonable mechanism for allocating hypervisor costs to the virtual servers hosted on that hypervisor

Cons: Data can change frequently in the virtual environment and limited precision on the allocations causes a lack of accuracy (confidence) in the reports.

Better/Best

Relationship: Hypervisors to virtual servers on host

Weighting: Virtual Machine Memory

Pros: A fair and accurate mechanism for allocating Hypervisor costs to the virtual servers they host

Cons: Data can change frequently in the virtual environment causing a lack of accuracy (confidence) in the reports.

Data Source

Information for virtualised platforms tend to come from the management systems

Common Source Systems

- VMware vCenter
- MS Hyper V

Status Report

From	To	Good	Better	Best	Obs.
End User Devices	Business Services				

Mainframes to Applications

Good

Relationship: Allocate Mainframe costs across all mainframe hosted applications

Weighting: Even Spread

Pros: The costs will flow to the target object

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better/Best

Relationship: Allocate Mainframe costs across all mainframe hosted applications

Weighting: MIPS (or similar application time processing metric)

Pros: A fair and accurate mechanism for allocating mainframe costs to the applications they host

Cons: Requires the MIPS for each application

Data Source

Mainframe MIPS (or similar application time processing metrics) are required for Better or Best allocations

Common Source Systems

- Mainframe Management Console
- Outsourced / 3rd party provider billing information

Status Report

From	To	Good	Better	Best	Obs.
Mainframes	Applications				



Network Devices to Compute and Storage Assets

Good

Relationship: Network Devices to all Compute and Storage assets

Weighting: Even Spread

Pros: The costs will flow to the target objects

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better

Relationship: Network Devices to Compute assets and Storage assets using separate allocation lines

Weighting: Even Spread

Pros: The costs will flow to the target objects

Cons: Limited precision on the allocations, causing lack of accuracy (confidence) in the reports.

Best

Relationship: Network Devices to Compute assets and Storage assets using separate allocation lines

Weighting: To Compute assets based on Memory; to Storage assets based on size / amount of storage

Pros: A fair and defensible mechanism for allocating network costs for the core assets they connect

Cons: Requires two allocation lines and thus adds computational overhead

Data Source

Information on Network LAN, Network WAN and Network Voice costs

Common Source Systems

- SolarWinds
- CA Spectrum
- CiscoWorks
- NetScout Systems
- Riverbed
- Viavi Solutions

Status Report

From	To	Good	Better	Best	Obs.
Data Centers	Mainframes				
Data Centers	Physical Servers				
Data Centers	Storage Devices				

Projects to Applications and/or Business Units

Good

Relationship: Project ID to AppID or BU ID

Weighting: Even Spread

Pros: The costs will flow to the target object

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better/Best

Relationship: Project ID to AppID or BU ID

Weighting to Apps: 1:1 allocation

Weighting to Business Units: based on beneficiary BU

Project costs absorbed by a single beneficiary BU allocated on a direct / 1:1 basis; project costs shared across BUs should be weighted by # of benefiting users in each BU

Pros: Fairest and most accurate apportionment of costs

Cons: N/A

Data Source

IT project data that will flow to BU or Apps

Common Source Systems

- CA PPM/Clarity
- Changepoint Daptiv PPM
- HPE PPM
- Microsoft Project Server
- Planview Enterprise

Status Report

From	To	Good	Better	Best	Obs.
Projects	Applications				
Projects	Business Units				

Servers to Applications

Good

Relationship: Allocate servers costs across all applications

Weighting: Even Spread

Pros: The costs will flow to the target object

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better/Best

Relationship: Allocate costs to applications that are hosted by each server

Weighting: Direct / 1:1

Pros: A fair and accurate mechanism for allocating fully loaded server costs to the applications they host

Cons: Requires reliable and up-to-date server to application mapping

Data Source

Common Source Systems

- VMware vRealize Suite
- SCCM
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB

Status Report

From	To	Good	Better	Best	Obs.
Servers	Applications				



Storage to Applications

Good

Relationship: Storage Device to App IDs

Weighting: Even Spread

Pros: The costs will flow to the target object

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better/Best

Relationship: Storage ID to App ID

Weighting: Direct / 1:1

Pros: A fair and accurate mechanism for allocating Storage costs directly to the applications they support

Cons: Needs data that is rarely available. May be preferable to allocate Storage to Servers (where the linking data exists) and then allocate to Applications

Data Source

Common Source Systems

- EMC VMAX/VNX/Isilon
- Hitachi Data Systems Command Suite
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB
- HP 3PAR StoreServ
- NetApp OnCommand Insight
- Veritas Operation Manager

Storage to Servers

Good

Relationship: Storage Devices to Servers

Weighting: Even Spread

Pros: The costs will flow to the target object

Cons: No precision on the allocation, causing lack of accuracy (confidence) in the reports.

Better/Best

Relationship: Storage ID to Server ID

Weighting: Direct / 1:1

Pros: : A fair and accurate mechanism for allocating Storage costs directly to the Servers to which the device is connected

Cons: Adds cost to Servers rather than direct to Applications making Storage cost per Application a drill report

Data Source

Common Source Systems

- EMC VMAX/VNX/Isilon
- Hitachi Data Systems Command Suite
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB
- HP 3PAR StoreServ
- NetApp OnCommand Insight
- Veritas Operation Manager

Status Report

From	To	Good	Better	Best	Obs.
Storage	Applications				
Storage	Physical Servers				

Storage Devices to Storage

Good

Relationship: Storage device ID to Storage (partition / logical unit) ID

Weighting: Even Spread

Pros: Costs will flow to the target object.

Cons: At best, this only adds computational overhead so should be avoided until a Better/Best strategy can be deployed.

Better/Best

Relationship: Storage Device ID to Storage (partition / logical unit) ID

Weighting: Size of the partition, logical unit or storage units defined

Pros: A fair and accurate mechanism for allocating Storage Device costs to the storage units within it

Cons: Requires large volumes of data to cover all device types

Data Source

Common Source Systems

- EMC VMAX/VNX/Isilon
- Hitachi Data Systems Command Suite
- ServiceNow CMDB
- BMC Atrium CMDB
- BMC Discovery
- HP UCMDB
- HP 3PAR StoreServ
- NetApp OnCommand Insight
- Veritas Operation Manager

Status Report

From	To	Good	Better	Best	Obs.
Storage Devices	Storage				

Questions?



Thank You For Attending regoUniversity

Instructions for PMI credits

- Access your account at pmi.org
- Click on **Certifications**
- Click on **Maintain My Certification**
- Click on **Visit CCR's** button under the **Report PDU's**
- Click on **Report PDU's**
- Click on **Course or Training**
- Class Provider = **Rego Consulting**
- Class Name = **regoUniversity**
- Course **Description**
- Date Started = **Today's Date**
- Date Completed = **Today's Date**
- Hours Completed = **1 PDU per hour of class time**
- Training classes = **Technical**
- Click on **I agree** and **Submit**



Let us know how we can improve!
Don't forget to fill out the class survey.



Phone

888.813.0444



Email

info@regoconsulting.com



Website

www.regouniversity.com