



ATUM

Apptio TBM Unified Model

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ATUM is a Business Information Model for Technology

What to Measure

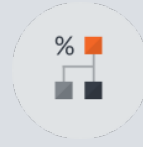
Cost Categories



Standard management
categories
(aka taxonomy)

How to Measure

Cost Model



Standard **costing rules**
to map and apportion GL costs to
Business Model categories

Data Required

Data Model



Pre-defined source data **elements,**
formats, and relationships
needed by Cost Model



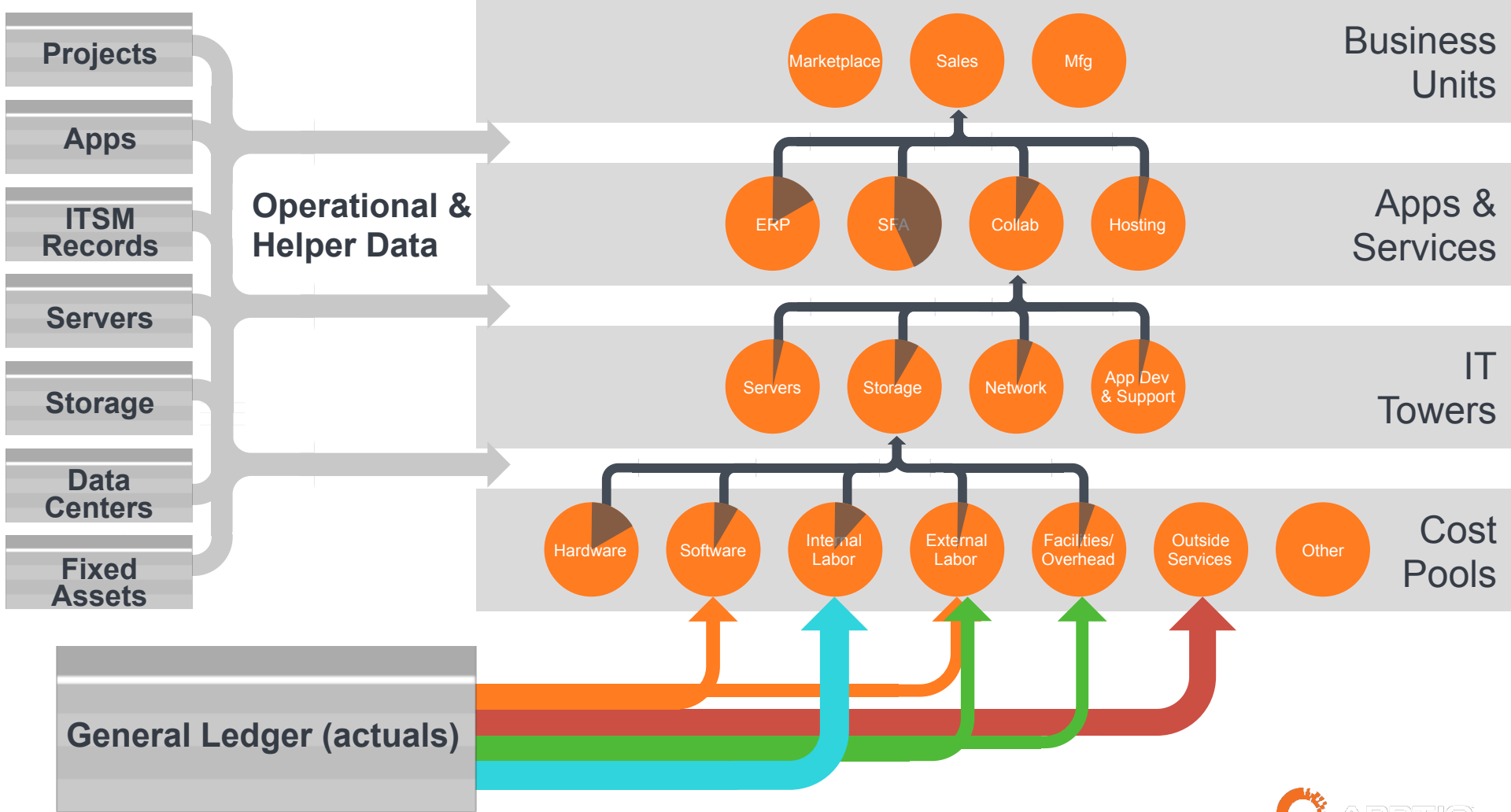
APPTIO

TBM Unified Model™ (ATUM™)

Apptio unifies and automates all 3 areas needed to drive consistent meaning and a repeatable approach to IT costing

Why ATUM?

- **Alignment to peer comparisons via normalized meaning**
- **Faster time to value via prescriptive data and allocations**
- **Lower cost of ownership**
- **Simplifies**
- **Extensible**
- **Optional**



Cost Routing Strategies To Match Any Data



Assumption-Based

Costs routed based on assumptions

Labor costs allocated using a **25% / 75% spread** across Wintel and Unix Compute

Data Center costs estimated with a "**rate card**" value (e.g. \$50/kW-Mo)

Application support labor costs allocated to apps based on "**peanut butter spread**"

Business Application costs allocated across LOBs based on **% Revenue**

Attribute-Based

Costs weighted by an attribute of an item

Data Center cost allocations weighted by **# of CPUs or kWhr power rating**

Desktop cost allocations weighted by **desktop make/model**

Application support labor cost allocations weighted by **size or complexity of an app**

Business Application cost allocations weighted across LOBs based on **# of assigned login accounts**

Consumption-Based

Cost allocated by measured consumption

Data Center costs allocated based on **measured power consumed** during month

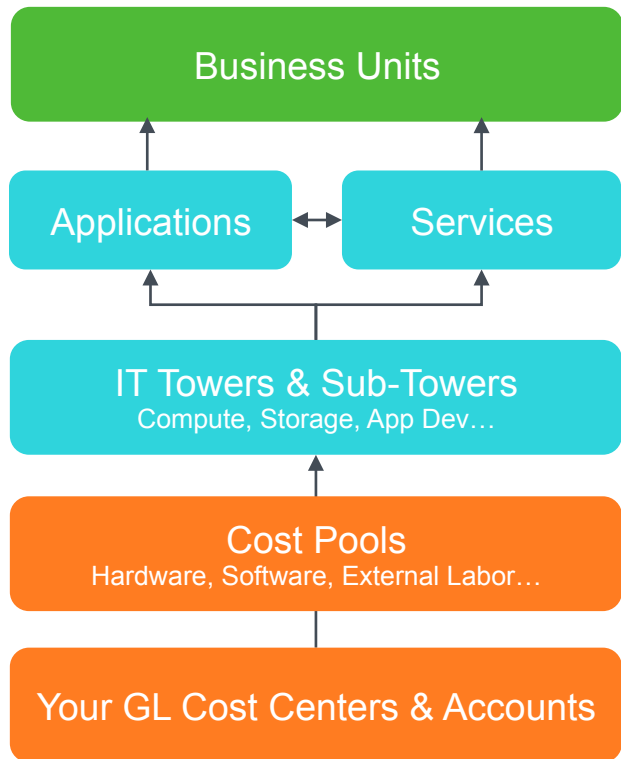
Server costs allocated to applications based on total **compute hours** per month

Application support labor costs allocated to apps based on **support tickets**

Business Application cost allocated across LOBs based on **# of business transactions** per month

ATUM Single Thread Example

How a Linux Server Costs can be Routd to a BU



Route Costs from Apps to BUs

Basic: map apps to BUs and Business Capabilities (when 1:1 relationships)

Basic: estimated % of an app used per BU (when apps shared across BUs)

Intermediate: list of app users correlated to BUs via Active Directory

Advanced: weighted by app logins

Route Costs from Linux to Apps

Basic: estimated % of all Linux servers used by each app

Intermediate: list of servers by app drives direct mapping

Advanced: when multiple apps supported by one expensive server, weight by avg. CPU or memory usage using server performance by app ID

Route Costs from GL Actuals to Linux Cost Pools

- **Linux Hardware:** Dev, test and production servers, internal storage...
- **Linux Software:** Operating System, Virtualization...
- **Linux Labor:** Engineering, tech support

Source Data Guide for Apptio Analytics Applications

Data Source	Data Set	Cost Transparency			Business Insights	
		Foundation	+Apps & Svcs	+BUs*	+Infra	+App
General Ledger	Chart of Accounts	Required				
	Extract of Actuals	Required				
	Fixed Assets List	Required				
Budget & Forecast	Budget Amounts by Month	Required				
HR	IT Employees by Role	Required				
	Business Units List			Required		
Vendor	Vendor list with Classifications (e.g. Type & Function)	Recommended				
Projects	Project Name and Code List (required for project reports)	Recommended				
	With Project Spend & Headcount Plan Amounts	Recommended				
	With Employee & Vendor Time or Assignments	Optional				
IT Asset						
Cloud						
Applications & Mappings	List of Apps with Classifications (e.g. Type, Lifecycle)		Required			
	Application & Infrastructure Mappings		Recommended			
	Number of Licenses Allowed & Assigned per App					Recommended
	List or Number of Active Users per App			Recommended		Recommended
	End User Logins			Optional		Optional
Service Desk	Incidents & Requests by User, Priority & Impact		Optional	Recommended	Recommended	Optional
	Support and Operations Time by Asset, App or Service		Optional			
Monitoring	Storage Consumption by App		Recommended			
	Server Utilization (Virtual & Physical)				Required	
	Storage Utilization				Required	

Google “Apptio Source Data Guide”

Apptio
Cost Transparency

Business Units

Business Units



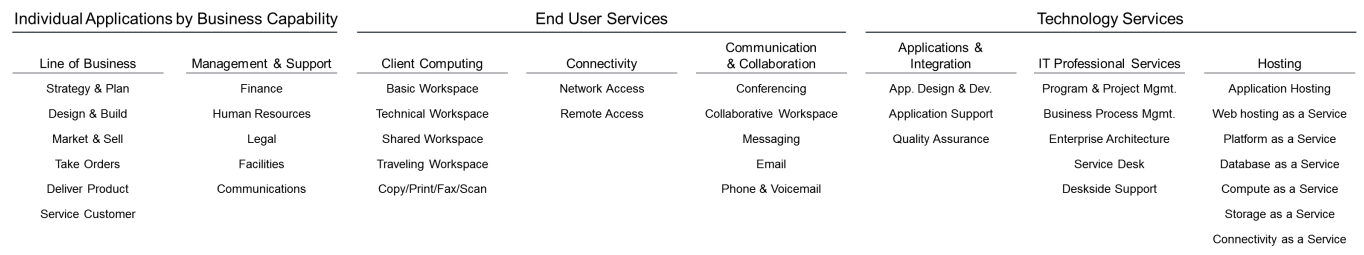
Business Unit Breakouts

Application (<i>& related breakouts</i>)	Service (<i>& related breakouts</i>)
Project (<i>& related breakouts</i>)	Tower (<i>& related breakouts</i>)

Apptio
Cost Transparency

Applications & Services

Applications & Services



Drills Down To

 **Benchmarks Available**

Application & Service Breakouts

Server and Storage Assets by App	Build / Run
Individual Application	Lifecycle (<i>Dev, Test, Prod</i>)
Type (<i>SaaS, COTS, Custom</i>)	Category (<i>LOB, IT, End User...</i>)
Criticality (<i>Critical, Essential, Archival</i>)	Objective (<i>Tolerate, Invest, Migrate, Eliminate</i>)

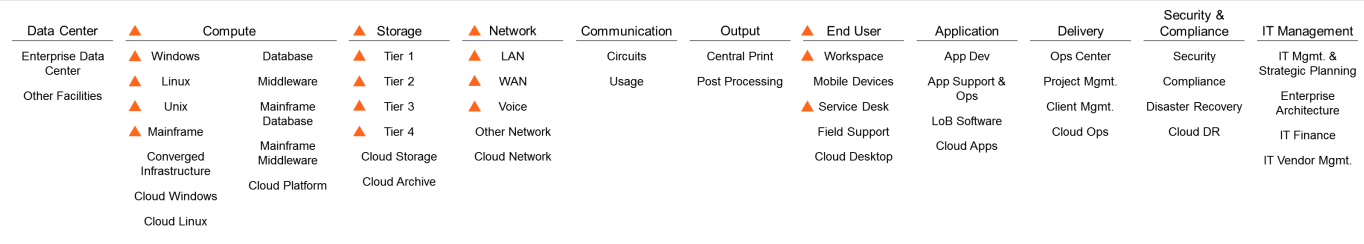
Infrastructure Breakouts

Individual Assets	Asset Purpose (<i>Dev, Test, Prod</i>)
Virtual / Physical	Platform
Server Class (<i>App, DB, Web, Mail...</i>)	Support Ticket Category & Priority

Apptio
Cost Transparency

Foundation

IT Towers & Sub-Towers



Drills Down To

Cost Pools & Sub-Pools



Common Breakouts

Actuals vs. Plan Variance	OpEx / CapEx
Fixed / Variable	Location
GL Cost Centers	GL Accounts
Month / Quarter / YTD	GL Line Item Detail

Cloud Breakouts

Provider	Service
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Vendor Breakouts

Strategic / Preferred / Transactional	Function (<i>Consulting, Hardware, SaaS...</i>)
IT Tower	Projects by Vendor

Project Breakouts

Run / Grow / Transform	Business Initiative
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Data Quality Breakouts

Uniqueness, Completeness, Validity	Unallocated Costs by Model Layer & Method
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ATUM Organizing Taxonomy

Business Capabilities

Apps & Services

IT Towers & Sub-Towers

Cost Pools

BUSINESS CAPABILITIES

APPS & SERVICES

IT TOWERS & SUB-TOWERS

COST POOLS

INTERNAL LABOR	EXTERNAL LABOR	HARDWARE	SOFTWARE	OUTSIDE SERVICES	FACILITIES & POWER	TELECOM	OTHER
Internal Labor	External Labor	Depreciation	Depreciation	Consulting	Depreciation	Telecom	Other
		Lease	Lease	Managed Service Provider	Lease		
		Expense	Expense	Cloud Service Provider	Expense		
		Maintenance & Support	Maintenance & Support		Maintenance & Support		

BUSINESS CAPABILITIES

APPS & SERVICES

IT TOWERS & SUB-TOWERS

DATA CENTER	COMPUTE		STORAGE	NETWORK	COMMUNI-CATION	OUTPUT	END USER	APPLICATION	DELIVERY	SECURITY & COMPLIANCE	IT MGMT
Enterprise Data Center	Windows	Database	Tier 1	LAN	Circuits	Central Print	Workspace	App Dev	Ops Center	Security	IT Mgmt. & Strategic Planning
Other Facilities	Linux	Middleware	Tier 2	WAN	Usage	Post Processing	Mobile Devices	App Support & Ops	Project Mgmt	Compliance	Enterprise Architecture
	Unix	Mainframe Database	Tier 3	Voice			Service Desk	LoB Software	Client Mgmt	Disaster Recovery	IT Finance
	Mainframe	Mainframe Middleware	Tier 4	Other Network			Field Support	Cloud Apps	Cloud Ops	Cloud DR	IT Vendor Mgmt
	Converged Infrastructure	Cloud Platform	Cloud Storage	Cloud Network			Cloud Desktop				
	Cloud Compute Windows		Cloud Archive								
	Cloud Compute Linux										

COST POOLS

BUSINESS CAPABILITIES

APPLICATIONS & SERVICES

END USER SERVICES

TECHNOLOGY SERVICES

**APPLICATIONS /
BUSINESS FACING SERVICES**

IT TOWERS & SUB-TOWERS

COST POOLS

Definitions

Service Portfolio	Used to manage the entire Lifecycle of all Services, and includes three Categories: Service Pipeline (proposed or in Development); Service Catalog (live or available for Deployment); and Retired Services ¹
Service Catalog	A database or structured document with information about all Live IT Services. The Service Catalog is the only part of the Service Portfolio published to Customers, and is used to support the sale and delivery of IT Services ¹
Service Taxonomy	An organizing taxonomy or hierarchical list of IT Service Offerings
Apptio Service Library	A part of the Apptio Cost Transparency application that maintains the taxonomy and attributes of services for reporting and analytics

1. Source: Pink Elephant

Apptio Service Library Hierarchy

Hierarchy

1. Service Type

2. Service Category

3. Service

4. Service Offering

Example

➤ *End User Services*

➤ *Client Computing*

➤ *Traveling Workspace*

➤ *Ultraportable Laptop*

Standard
categories

Customer
specific
modifications

BUSINESS CAPABILITIES

APPLICATIONS & SERVICES

END USER SERVICES

Client Computing

- Fixed Workspace
- Mobile Workspace
- Virtual Workspace
- Cop/Print/Fax/Scan

TECHNOLOGY SERVICES

Communication & Collaboration

- Collaborative Workspace
- Conferencing
- Email & Calendaring
- Messaging
- Phone & Voicemail

APPLICATIONS / BUSINESS FACING SERVICES

Connectivity

- Network Access
- Remote Access

IT TOWERS & SUB-TOWERS

COST POOLS

Service Library – End User Services

Svc. Category	Portfolio	Service	Service Offering
End User Services	Client Computing	Basic Workspace	<ul style="list-style-type: none"> Standard Desktop Virtual Desktop
		Technical Workspace	<ul style="list-style-type: none"> Developer / Power User Workstation Virtual Developer Workstation
		Shared Workspace	<ul style="list-style-type: none"> Shared Workspace
		Traveling Workspace	<ul style="list-style-type: none"> Standard Laptop Ultraportable Laptop Tablet Standard Smart Phone High-use Smart Phone BYOD Activation
		Copy/Print/Fax/Scan	<ul style="list-style-type: none"> Copy/Print/Fax/Scan
	Connectivity	Network Access	<ul style="list-style-type: none"> Wireless (may include with Desktop service) Hotspot
		Remote Access	<ul style="list-style-type: none"> Aircard (may include with Laptop service)

Svc. Category	Portfolio	Service	Service Offering
End User Services	Communication & Collaboration	Conferencing	<ul style="list-style-type: none"> Desktop Video Audio Conference Live Event Broadcast Telepresence Video Conference Room
		Collaborative Workspace	<ul style="list-style-type: none"> Social Communities Internal Collaborative Workspace External Collaborative Workspace Public Shared Folder
		Messaging	<ul style="list-style-type: none"> Instant Messaging Unified Messaging
		Email	<ul style="list-style-type: none"> Standard Personal Mailbox Premium Personal Mailbox Group Mailbox Application Mailbox
		Phone & Voicemail	<ul style="list-style-type: none"> Work analog phone and voicemail Work VOIP phone and voicemail Home office phone and voicemail Mobile phone and voicemail Pager

BUSINESS CAPABILITIES

APPLICATIONS & SERVICES

END USER SERVICES

Apps & Integration

- App Design & Development
- SaaS Integration
- System Integration
- Application Testing

TECHNOLOGY SERVICES

IT Professional Services

- Program & Project Mgmt
- Business Process Mgmt
- Enterprise Architecture
- Service Desk
- Deskside Service
- Governance, Risk & Compliance

APPLICATIONS / BUSINESS FACING SERVICES

Hosting Services

- Application Hosting
- Web Hosting as a Service
- Platform as a Service
- Database as a Service
- Compute as a Service
- Storage as a Service
- Connectivity as a Service

IT TOWERS & SUB-TOWERS

COST POOLS

Service Library – Other Services

Svc. Category	Portfolio	Service	Service Offering
Apps. & Integration	Apps. & Integration	App. Design & Dev.	<ul style="list-style-type: none"> Original Development SaaS Integration
		Application Support	<ul style="list-style-type: none"> Application Support
		Quality Assurance	<ul style="list-style-type: none"> Quality Assurance
IT Professional Services	IT Professional Services	Program & Project Mgmt.	<ul style="list-style-type: none"> Program & Project Mgmt.
		Business Process Mgmt.	<ul style="list-style-type: none"> Business Process Mgmt.
		Enterprise Architecture	<ul style="list-style-type: none"> Enterprise Architecture
		Service Desk	<ul style="list-style-type: none"> Service Desk- Regular Business Hours Service Desk- After Hours / 7x24
		Deskside Support	<ul style="list-style-type: none"> Standard Deskside Support Premium Deskside Support

Svc. Category	Portfolio	Service	Service Offering
Hosting	Hosting	Application Hosting	<ul style="list-style-type: none"> (Generic, includes all supporting infrastructure)
		Web hosting as a Service	<ul style="list-style-type: none"> Web Service - Physical Web Service - Virtual
		Platform as a Service	<ul style="list-style-type: none"> App Platform - Physical App Platform - Virtual
		Database as a Service	<ul style="list-style-type: none"> Database Service – Physical Database Service - Virtual
		Compute as a Service	<ul style="list-style-type: none"> Wintel Service - Physical Wintel Service - Virtual Linux Service - Physical Linux Service - Virtual
		Storage as a Service	<ul style="list-style-type: none"> Platinum Storage Gold Storage Silver Storage Bronze Storage
		Connectivity as a Svc.	<ul style="list-style-type: none"> Connectivity by Node

BUSINESS CAPABILITIES

APPLICATIONS & SERVICES

END USER SERVICES

TECHNOLOGY SERVICES

Working with TBM Council
industry vertical working
groups to define

Line Of Business

Strat & Plan	Design & Build	Market & Sell
Take Orders	Deliver Product	Service Customer

Finance	HR	Legal
Facilities	Communications	Relations

***Individual business applications grouped and mapped to business functions they enable.
Industry verticals may have specialized terminology for their respective business functions.***

IT TOWERS & SUB-TOWERS

COST POOLS



ATUM

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Cost Transparency for IT: Accelerate Better Decisions

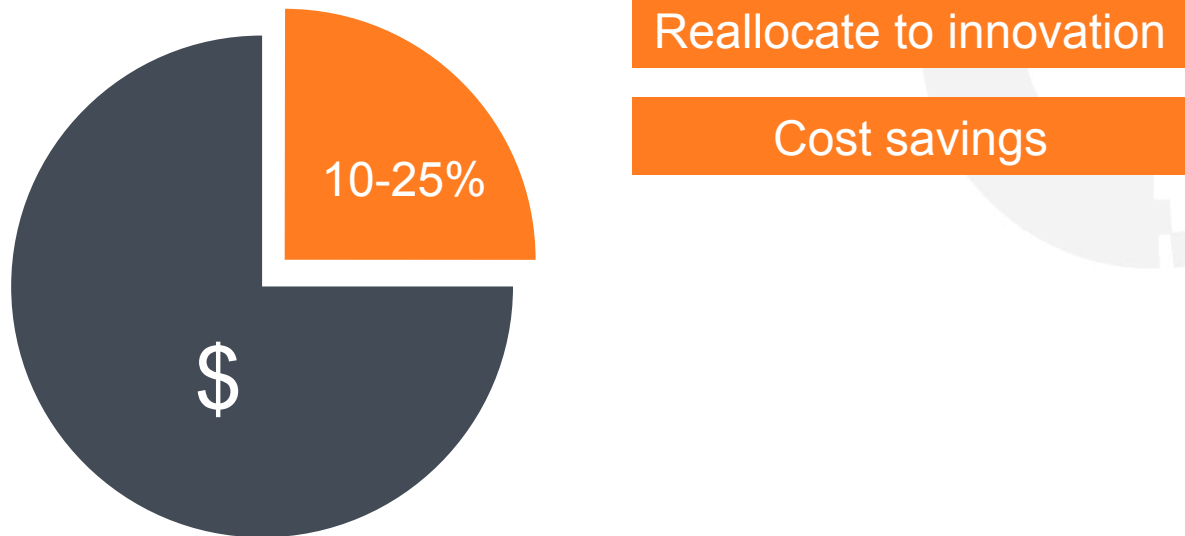
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The Transparency Effect



IT cost transparency can change infrastructure consumption to reduce non-discretionary run costs 5-10% Year 1, 10-25% Overall

McKinsey

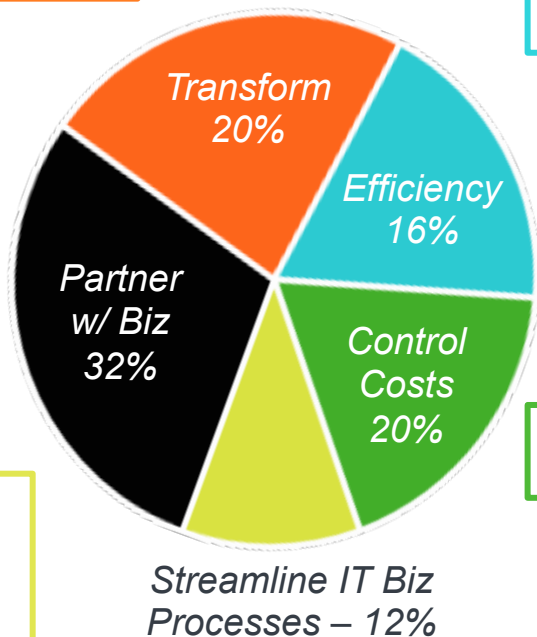
Why Would You Invest in Cost Transparency?

- Accelerate Services Transformation – **Nationwide**
- Run IT like a Business - **Farmers**
- Optimize sourcing strategy / service broker - **Starbucks**
- Accelerate and make better decisions - **Visa**

- Reduce RTB to fund CTB - **Nintendo**
- Align resources to business needs - **Axa**
- Manage vendor spend and value - **Comcast**
- Justify budgets and investments – **CME Group**
- Improve return on assets - **Aetna**

- Fact-based conversations about cost & consumption – **Park Nicollet**
- Defend allocations – **LyondellBasel**
- Influence demand with informed choice – **Christus Health**
- Plan capacity per business demand – **Family Dollar Stores**

- Replace inflexible custom systems – **AmEx**
- Streamline cost reporting – **US Steel**
- Streamline chargeback– **Bank of America**
- Streamline budgeting & forecasting – **Group M**



- Reduce costs and preserve service– **AT&T**
- Control rising costs – **Allianz**

How Does Cost Transparency Drive Value?

Seeing cost drives a bias for action that pure operational data cannot

Less passive resistance because stakeholders have shared understanding of cost

Policies are made and accepted with unit cost visibility

Business consumption is changed with unit cost visibility

New insight is surfaced that becomes a catalyst for change

When Do YOU Talk About Cost?



MONTHLY

- Forecasting
- Management reporting

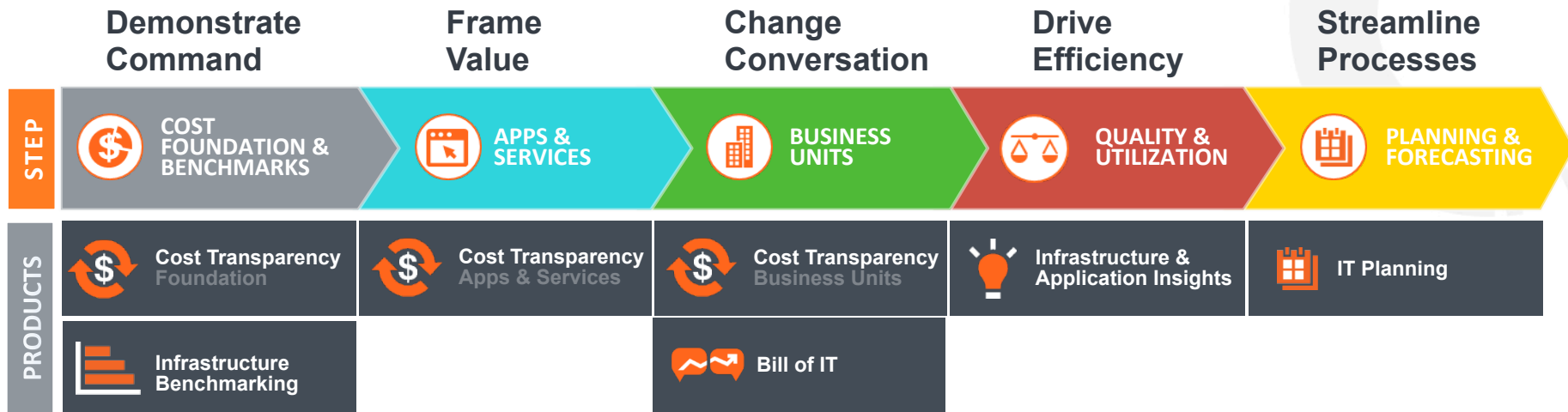
ANNUAL AND QUARTER

- IT & Business Planning
- QBR
- Project portfolio
- Meetings with BUs, app teams
- Capital Review Board

AD HOC

- Initiative (M&A, ERP migration...)
- Questions from BUs, CFO
- Business case
- App design/deploy/migrate
- Capacity requests

Accelerate Value with Modular Approach



Jumpstart services for Cost Transparency start at \$75K

Cost Transparency for the Business of IT



APPTIO COST TRANSPARENCY

How much are
our customers
consuming?

BUSINESS UNITS



Business Units

What is driving the
total costs of
products we **provide**?

APPLICATIONS & SERVICES



App Total Cost



App Portfolio



Services

What is driving
the cost of
what we **do**?

FOUNDATION



IT Towers



Vendors



Projects



Cloud



Spend



Labor

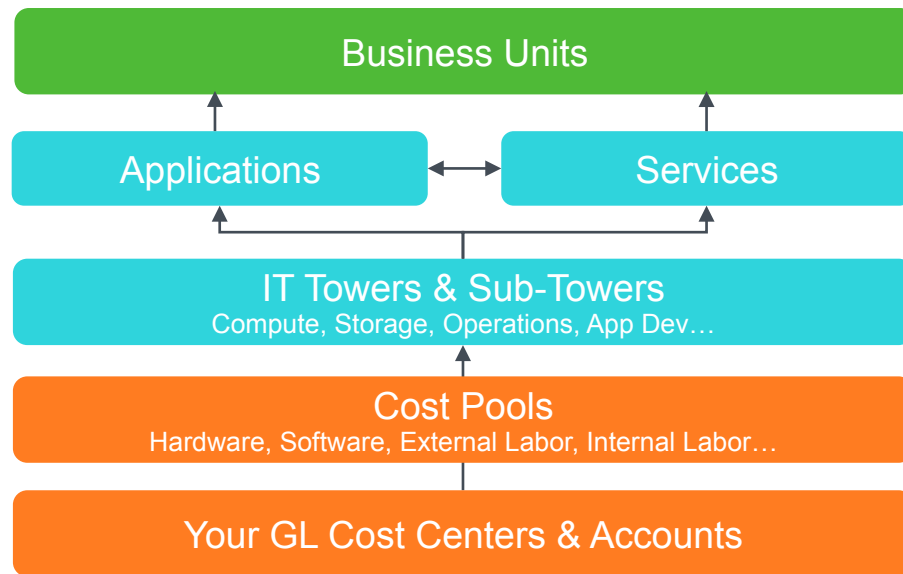


Data Quality

From Raw Data to Cost Transparency

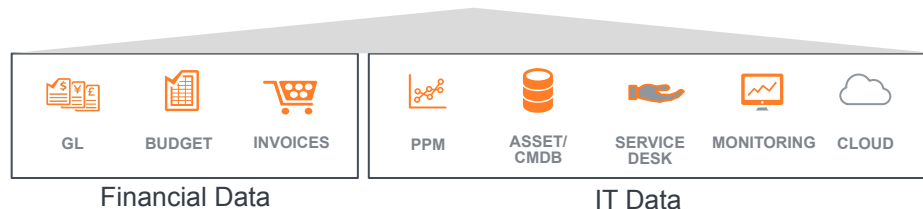
Simplified View of Cost Model

Expenses flow from GL through a standard cost model



Maintains a single source of truth with role-based views for alignment and action

Start from your source of truth to capture 100% of actuals



IT data drives cost model and actionable context

Accelerate Best Practice with a standard *Business Information Model* for Technology

What to Measure

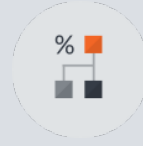
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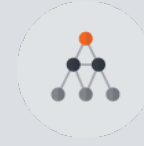
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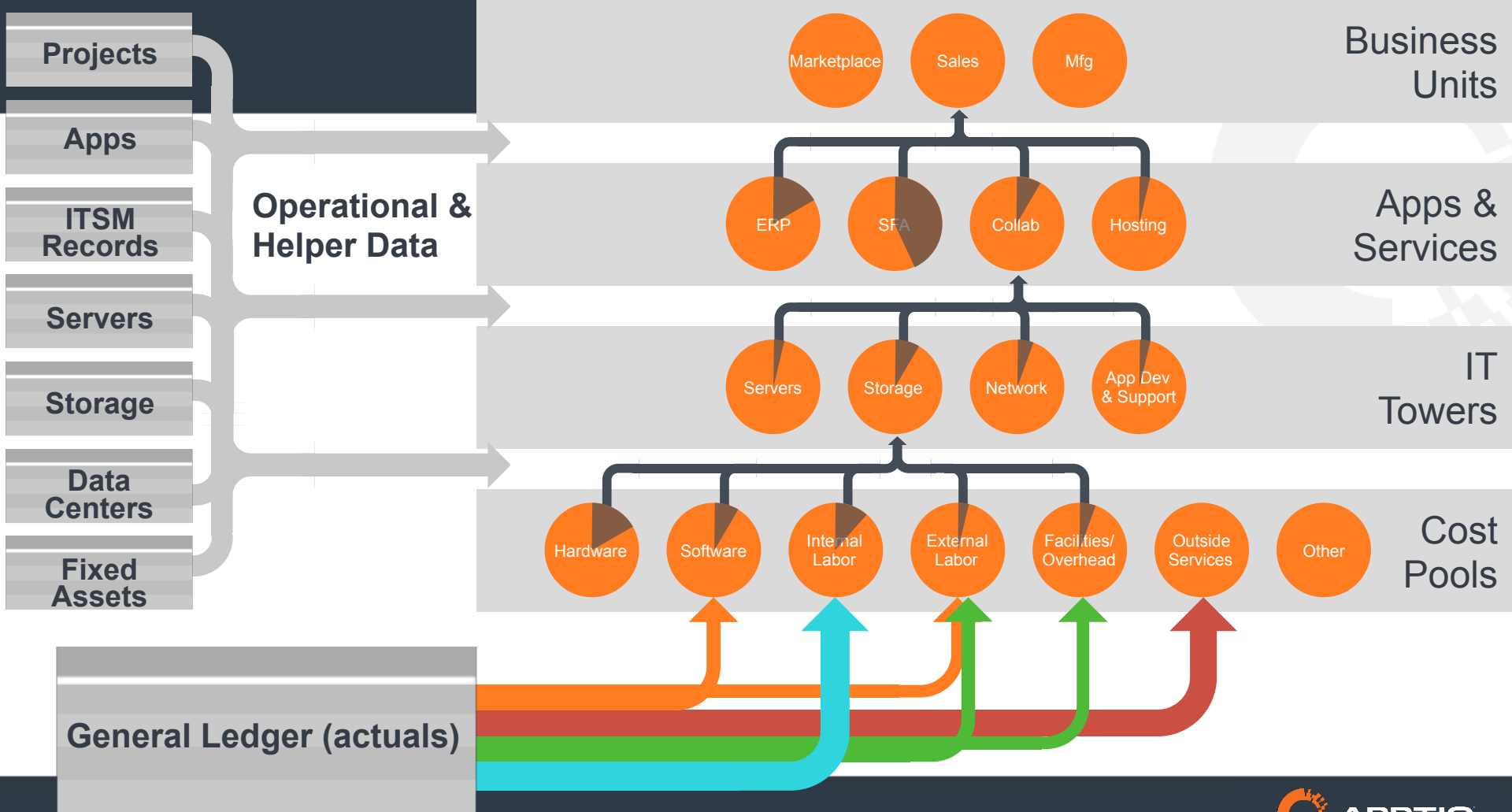
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APPTIO

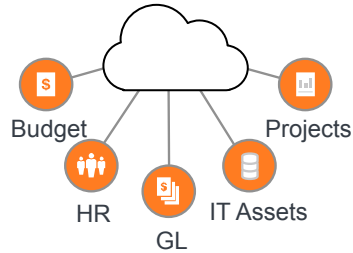
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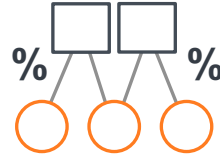


Apptio Cost Transparency Advantages

CONSUMES RAW DATA



STANDARD COST MODEL



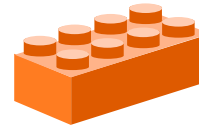
SELF-SERVICE ANALYTICS



FLEXIBLE & EXTENSIBLE



MODULAR



7 Reasons Not To Wait for Better Data

1. Eliminate Guesswork

Apptio Data Advisor shows you precisely what data is needed and why

2. Use Raw Source Data

Apptio automates data cleansing and transformation, preserves source data

3. Improve Source Data & Processes

Apptio measures and shows gaps, duplicates and invalid values

4. Money talks

Apptio shows where data gaps are leaving costs unallocated

5. Eyes on the Prize

Apptio shows how data affects reports in real time

6. Beat the status quo

You are making decisions with your current data

7. Tap into latent value

There is more insight hiding in your data than you may think

Source Data Guide for Apptio Analytics Applications

Data Source	Data Set	Cost Transparency			Business Insights	
		Foundation	+Apps & Svcs	+BUs*	+Infra	+App
General Ledger	Chart of Accounts	Required				
	Extract of Actuals	Required				
	Fixed Assets List	Required				
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	Application & Infrastructure Mappings		Recommended			
	Number of Licenses Allowed & Assigned per App					Recommended
	List or Number of Active Users per App			Recommended		Recommended
	End User Logins			Optional		Optional
Service Desk	Incidents & Requests by User, Priority & Impact		Optional	Recommended	Recommended	Optional
	Support and Operations Time by Asset, App or Service		Optional			
Monitoring	Storage Consumption by App		Recommended			
	Server Utilization (Virtual & Physical)				Required	
	Storage Utilization				Required	

Apptio TBM Unified Model™ (ATUM™) Cost Categories

Business Units

Business Unit 1

Business Unit 2

Business Unit 3

Business Unit 4

Business Unit 5

Drills Down To

Applications & Services

Individual Applications by Business Capability

Line of Business	Management & Support
Strategy & Plan	Finance
Design & Build	Human Resources
Market & Sell	Legal
Take Orders	Facilities
Deliver Product	Communications
Service Customer	

End User Services

Client Computing	Connectivity	Communication & Collaboration
Basic Workspace	Network Access	Conferencing
Technical Workspace	Remote Access	Collaborative Workspace
Shared Workspace		Messaging
Traveling Workspace		Email
Copy/Print/Fax/Scan		Phone & Voicemail

Technology Services

Applications & Integration	IT Professional Services	Hosting
App. Design & Dev.	Program & Project Mgmt.	Application Hosting
Application Support	Business Process Mgmt.	Web hosting as a Service
Quality Assurance	Enterprise Architecture	Platform as a Service
	Service Desk	Database as a Service
	Deskside Support	Compute as a Service
		Storage as a Service
		Connectivity as a Service

Drills Down To

 Benchmarks Available

IT Towers & Sub-Towers

Data Center	▲ Compute	▲ Storage	▲ Network	Communication	Output	▲ End User	Application	Delivery	Security & Compliance	IT Management
Enterprise Data Center	▲ Windows Database	▲ Tier 1	▲ LAN	Circuits	Central Print	▲ Workspace	App Dev	Ops Center	Security	IT Mgmt. & Strategic Planning
Other Facilities	▲ Linux Middleware	▲ Tier 2	▲ WAN	Usage	Post Processing	Mobile Devices	App Support & Ops	Project Mgmt.	Compliance	
	▲ Unix Mainframe Database	▲ Tier 3	▲ Voice			▲ Service Desk	LoB Software	Client Mgmt.	Disaster Recovery	Enterprise Architecture
	▲ Mainframe	▲ Tier 4	Other Network			Field Support	Cloud Apps	Cloud Ops	Cloud DR	IT Finance
	Converged Infrastructure	Mainframe Middleware	Cloud Storage	Cloud Network		Cloud Desktop				IT Vendor Mgmt.
Cloud Windows	Cloud Platform	Cloud Archive								
Cloud Linux										

Drills Down To

Cost Pools & Sub-Pools

▲ Internal Labor	▲ External Labor	▲ Hardware	▲ Software	▲ Outside Services	▲ Facilities & Power	▲ Telecom	▲ Other
Internal Labor	External Labor	Depreciation	Depreciation	Consulting	Depreciation	Telecom	Other
		Lease	Lease	Managed Service Provider	Lease		
		Expense	Expense	Cloud Service Provider	Expense		
		Maintenance & Support	Maintenance & Support		Maintenance & Support		

Where do You Need Better Cost Transparency?



BUSINESS UNITS

What levers does the BU have to influence cost?



SERVICES

How do our IaaS costs compare to Amazon's?

IT EXECS



BUSINESS

IT FINANCE



APPS & INFRA



CLOUD

What is our consumption trend for each Amazon service?



APPLICATION TOTAL COST

Where do we have infra costs on "retired" apps or old instances?



APPLICATION PORTFOLIO

What are we spending on customer- vs. employee-facing apps?



IT TOWER

What's driving our cost per GB of Tier 1 storage vs. peers?



VENDORS

How concentrated or fragmented is spend across similar vendors?



PROJECTS

Where are projects exceeding cost or headcount plans?



SPEND

What is driving variance vs. plan?



LABOR

How are internal vs. contract labor costs trending by role and region?



DATA QUALITY

Which data gaps are creating cost blind spots?

What can YOU DO with Better Cost Transparency?



BUSINESS UNITS

Drive fact-based tradeoff conversations



SERVICES

Influence demand for different service offerings

IT EXECS



BUSINESS

IT FINANCE



APPS & INFRA



CLOUD

Control public cloud sprawl



APP TOTAL COST

Align storage tier to app type



APP PORTFOLIO

Rationalize applications



IT TOWER

Demonstrate efficiency to justify investment



VENDORS

Consolidate vendors



PROJECTS

Reign in runaway projects



SPEND

Improve forecasting accuracy



LABOR

Adjust mix of internal vs. contract labor



DATA QUALITY

Identify areas for data and process improvement

If we understood what drove the total cost of _____
we could _____!



Cost Transparency for IT: Accelerate Better Decisions

Dave Wilt

Senior Director, Product Marketing

Ed Hayman

Senior Director, Product Management

Apptio
Cost Transparency

Business Units

Apptio
Cost Transparency

Applications & Services

Apptio
Cost Transparency

Foundation

Business Units

Business Unit 1

Business Unit 2

Business Unit 3

Business Unit 4

Business Unit 5

Drills Down To

Business Unit Breakouts

Application
(*& related breakouts*)

Project
(*& related breakouts*)Service
(*& related breakouts*)

Tower
(*& related breakouts*)

Applications & Services

Individual Applications by Business Capability

Line of Business	Management & Support
Strategy & Plan	Finance
Design & Build	Human Resources
Market & Sell	Legal
Take Orders	Facilities
Deliver Product	Communications
Service Customer	

End User Services

Client Computing	Connectivity	Communication & Collaboration
Basic Workspace	Network Access	Conferencing
Technical Workspace	Remote Access	Collaborative Workspace
Shared Workspace		Messaging
Traveling Workspace		Email
Copy/Print/Fax/Scan		Phone & Voicemail

Technology Services

Applications & Integration	IT Professional Services	Hosting
App. Design & Dev.	Program & Project Mgmt.	Application Hosting
Application Support	Business Process Mgmt.	Web hosting as a Service
Quality Assurance	Enterprise Architecture	Platform as a Service
	Service Desk	Database as a Service
	Deskside Support	Compute as a Service
		Storage as a Service
		Connectivity as a Service

Drills Down To

 **Benchmarks Available**

Application & Service Breakouts

Server and Storage Assets by App	Build / Run
Individual Application	Lifecycle (<i>Dev, Test, Prod</i>)
Type (<i>SaaS, COTS, Custom</i>)	Category (<i>LOB, IT, End User...</i>)
Criticality (<i>Critical, Essential, Archival</i>)	Objective (<i>Tolerate, Invest, Migrate, Eliminate</i>)

Infrastructure Breakouts

Individual Assets	Asset Purpose (<i>Dev, Test, Prod</i>)
Virtual / Physical	Platform
Server Class (<i>App, DB, Web, Mail...</i>)	Support Ticket Category & Priority

IT Towers & Sub-Towers

Data Center	▲ Compute	▲ Storage	▲ Network	Communication	Output	▲ End User	Application	Delivery	Security & Compliance	IT Management
Enterprise Data Center	▲ Windows	Database	▲ Tier 1	▲ LAN	Circuits	Central Print	▲ Workspace	App Dev	Security	IT Mgmt. & Strategic Planning
Other Facilities	▲ Linux	Middleware	▲ Tier 2	▲ WAN	Usage	Post Processing	Mobile Devices	Project Mgmt.	Compliance	
	▲ Unix	Mainframe Database	▲ Tier 3	▲ Voice			▲ Service Desk	Client Mgmt.	Disaster Recovery	Enterprise Architecture
	▲ Mainframe	Mainframe Middleware	▲ Tier 4	Other Network			Field Support	Cloud Ops	Cloud DR	IT Finance
	Converged Infrastructure		Cloud Storage	Cloud Network		Cloud Desktop				IT Vendor Mgmt.
	Cloud Windows	Cloud Platform	Cloud Archive							
	Cloud Linux									

Drills Down To

Cost Pools & Sub-Pools

▲ Internal Labor	▲ External Labor	▲ Hardware	▲ Software	▲ Outside Services	▲ Facilities & Power	▲ Telecom	▲ Other
Internal Labor	External Labor	Depreciation	Depreciation	Consulting	Depreciation	Telecom	Other
		Lease	Lease	Managed Service Provider	Lease		
		Expense	Expense	Cloud Service Provider	Expense		
		Maintenance & Support	Maintenance & Support		Maintenance & Support		

Common Breakouts

Actuals vs. Plan Variance	OpEx / CapEx
Fixed / Variable	Location
GL Cost Centers	GL Accounts
Month / Quarter / YTD	GL Line Item Detail

Cloud Breakouts

Provider	Service
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Vendor Breakouts

Strategic / Preferred / Transactional	Function (<i>Consulting, Hardware, SaaS...</i>)
IT Tower	Projects by Vendor

Project Breakouts

Run / Grow / Transform	Business Initiative
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Data Quality Breakouts

Uniqueness, Completeness, Validity	Unallocated Costs by Model Layer & Method
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