

# TCO | Best Practices for TCO Costing

Your Guides: Doug Greer & Jen Scarlato

# Introductions

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



# Agenda

---

- TCO Introduction
- Benefits
- The Right Approach to TCO
- Cost Transparency Deployment
- Architecture
- Best Practices
- Reasons TCO Initiatives Fail
- Case Study: Health Insurance Provider



# TCO Introduction & Benefits

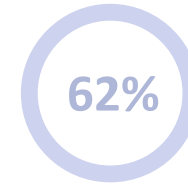
*rego*University 2018

Let Rego be your guide.

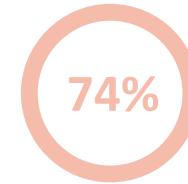


# Industry IT Spending

- We all know the three pillars of People, Process, and Technology – but as more and more people and processes get automated, investment in technology increases.
- IT spend has become one of the largest budget line items in organizations today.
- IT organizations worldwide spend \$3.6 trillion dollars annually, and that figure is on the rise.
- Despite rising IT spend, many IT organizations lack the capability to clearly and easily articulate where that spend is going, how it correlates to the services they are delivering, or what value the business realizes from the services.



CIOs do not believe that there is adequate transparency of IT costs, contributions and performance.



IT organizations cannot clearly define their IT services and their associated business value.



IT organizations can't consistently report/chargeback the full costs of IT services to business units

ITScore CIO survey  
Source: Gartner

# Why do Organizations Pursue TCO

- There are many reasons to evaluate Total Cost of Ownership (TCO). The most common reasons we get brought in to assist are:
  - An application rationalization effort
  - IT has been tasked with reducing cost across the board by X%, but are having trouble deciding where to cut
  - The business is evaluating external service providers, and needs to have an apples to apples comparison of cost
  - With SaaS, PaaS, and IaaS vendors knocking on the door, IT needs to define and defend IT spend
  - IT leaders want to compare costs against industry benchmarks

# TCO Definition

Calculating TCO involves digging deep to uncover all costs, both direct and indirect, of ownership. It's frequently applied to:



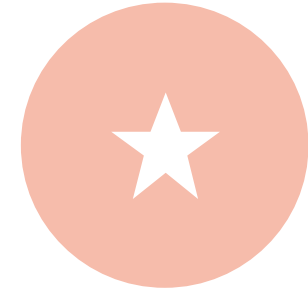
## Applications

Traditionally TCO has referred to the cost of owning and running an application, and that is still a valid and important measure.



## Services

Many IT organizations have adopted a service-based approach to delivering IT. They define business services and have service owners that oversee them. TCO of a service is then an important metric to evaluate the service and its owner.



## Business Function or Capability

Business functions or capabilities vary by industry, and include things like Sales Pipeline Management or Customer Service. As positions like “business relationship manager” (BRM) become more common, and explaining IT in business terms becomes more important, TCO of business capabilities is an increasingly common ask.



# Larger TCO Picture

- TCO is a specific financial metric, But oftentimes when we talk about TCO, it's really in the context of an overall effort to improve the transparency of IT Costs.
- IT cost transparency initiatives are on the rise – often referred to as Running IT like a Business, IT Financial Management (ITFM), Technology Business Management (TBM), or IT Business Management (ITBM).



# The Benefits

Calculating TCO or going through a cost transparency initiative will allow you to:



## Transparency

Offer complete transparency of IT operations



## Explain

Explain, quantify, and predict IT costs



## Compare

Compare and defend the cost of internal IT Services to third party providers in the open market



## Accountability

Drive accountability of investment decisions by having the ability to continuously monitor the impact of business decisions on IT spend.



## Assets

Leverage IT assets as efficiently as possible



## Evaluate

Evaluate the business value derived from applications/services to the costs incurred to deliver them.



## Change

Change the way business units consume IT resources, drive down IT unit costs, and focus on IT spending that delivers real business value.

# Gartner Findings and Recommendations

- Key Findings

- While IT organizations are making progress toward improved IT financial transparency and service-based costing, **few organizations have achieved the level of IT financial management (ITFM) maturity necessary to support ongoing cost optimization efforts** and new investments in digital business.
- **Most IT organizations lack sufficient understanding of foundational IT finance principles** such as funding, cost aggregation, allocation and pricing.
- The move to service-based cost allocation and pricing will **require greater IT financial transparency.**
- **Most organizations have low ITFM maturity**, where cost unpredictability means lower budget goals, more waste and less investment in innovation.
- Due to increased pressure on IT to demonstrate cost control, transparency and business value, **the IT financial management (ITFM) market continues to grow an estimated 15% to 20% year over year.**

- Recommendations

- **Provide meaningful IT financial transparency** and potentially service pricing to inform and drive change in IT consumption behavior.
- Collaborate with finance teams to **develop an allocation approach that supports the detail and transparency requirements** of the business.

Key Concepts in IT Financial Management: Transparency, Budgeting, Funding and Allocation  
Source: Gartner 2016



# The Right Approach to TCO

*rego*University 2018

Let Rego be your guide.

# The Right Approach to TCO

- Some organizations attempt to get to TCO from a bottom-up approach. (Brainstorming all possible related costs. Make some educated guesses.)
- This can be a good approach if you are going to just evaluate a single application/service.
- The better approach looks top-down at total IT cost first, then divvies that up across apps, services, and capabilities.
- In this approach, all IT costs have to go somewhere. Hidden costs like overhead are accounted for.
- To accomplish this, we often use what's called a cost model. This helps us take the data source of IT cost (GL entries) which is very 2-dimensional (cost center and account) and translate it from a finance view, to an IT view, and eventually to a business view of cost.
- Each step in translation is called a tier in the cost model. Typical tiers include Cost Pools, IT Shared Services, Applications, Business Services, and Business Capabilities.

# What Does a Cost Model for TCO Look Like?



Business Capabilities



Business Services



Applications



IT Shared Services



Cost Pools

## Cost Model

Takes the finance focused view of costs and build out IT and Business focused views

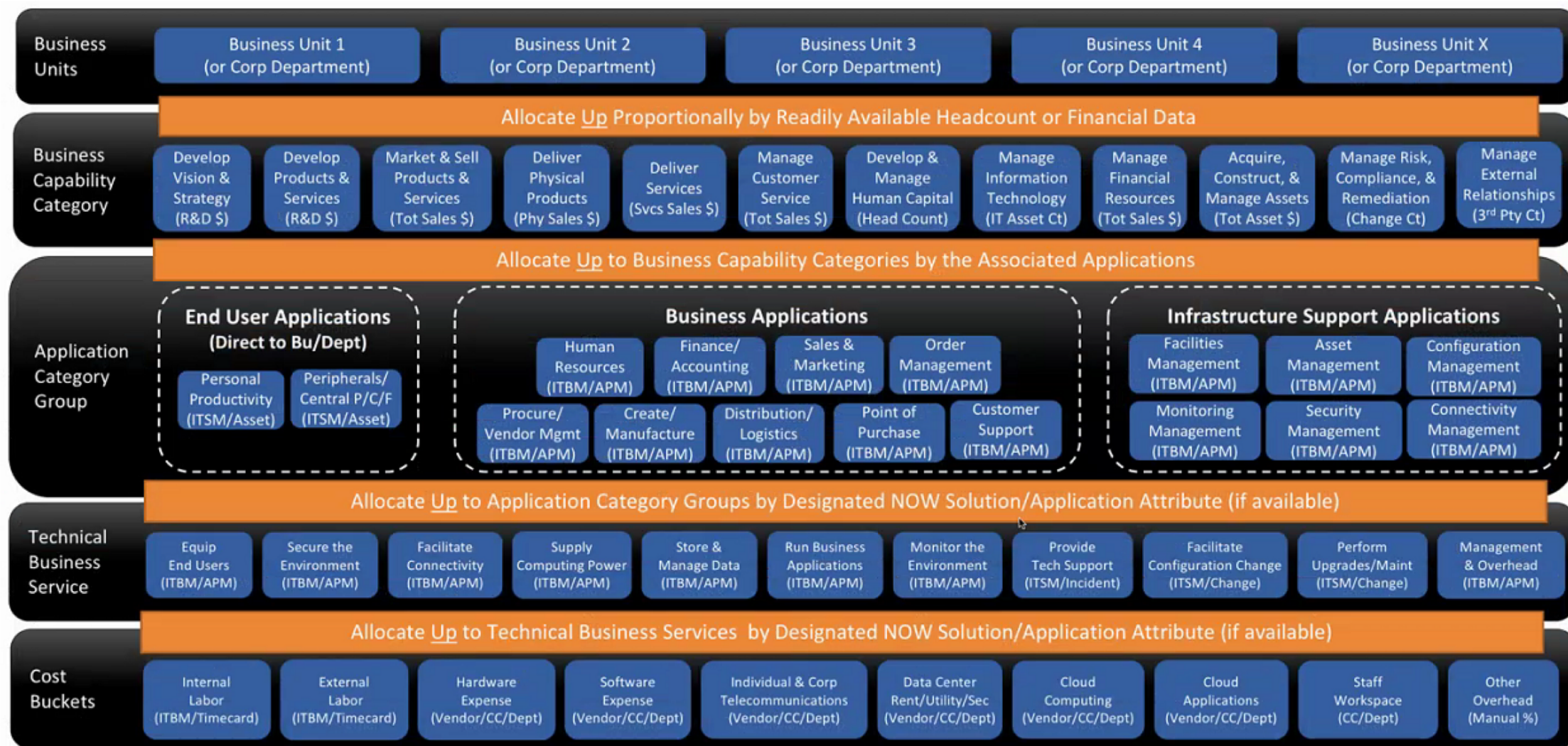
Costs move from one layer to the next by allocating costs either directly or indirectly using allocation metrics.



# Example: Apptio ATUM

Business Units & Capabilities												
Business Unit 1			Business Unit 2		Business Unit 3		Business Capability 1		Business Capability 2		Business Capability 3	
Services												
End User Services			Business Application Services									
Client Computing	Communication & Collaboration	Connectivity	Product Management	Sales & Marketing	Manufacturing & Delivery	Customer Service	Finance		Human Resources	Facilities & Assets	Cross-Function Capabilities	
Computer Mobile Bring Your Own Device Virtual Client	Collaboration Communication Productivity Print	Network Access Remote Access	Product Development Product Planning	Customer Analytics Marketing & Advertising Sales Force & Channel Management Customer Sales	Resource Planning Manufacturing Inventory & Warehousing Product Delivery Service Delivery	Order Management Customer Care	Financial Planning General Accounting Revenue Accounting Fixed Assets Payroll Procurement	Accounts Payable Treasury Tax Consolidation Internal Control	Recruiting Talent Management Workforce Management	Equipment Facilities	Enterprise Knowledge Management Corporate Communications Legal	
Delivery Services					Platform Services		Infrastructure Services				Emerging	
Strategy & Planning	Development	Support	Operations	Security & Compliance	Data	Applications	Data Center	Network	Compute	Storage		
Technology Business Management Innovation & Ideation Enterprise Architecture Program & Project Management Business Solution Consulting IT Vendor Management	Design & Development System Integration Testing	Service Desk Application Support IT Training Central Print	IT Service Management Monitoring Capacity Management Deployment & Administration	Security Governance, Risk & Compliance Business Continuity & Disaster Recovery	Database Distributed Cache Data Management Data Warehouse Data Analytics & Visualizations Machine Learning	Application Hosting Message Bus & Integration Content Management Search Streaming	Enterprise Data Center Other Data Center	Data Network Voice Network Internet Connectivity Virtual Private Network Domain Services Load Balancing	Physical Compute Virtual Compute & Containers Compute on Demand Mainframe	Networked Storage File & Object Storage Backup & Archive Distributed Storage (CDN)	Internet of Things (IoT) Virtual Reality / Augmented Reality Block Chain	
IT Towers & Sub-Towers												
▲ Benchmark Data Available from Apptio												
▲ Data Center	▲ Compute	▲ Storage	▲ Network	▲ Output	▲ End User	▲ Application	▲ Delivery	▲ Security & Compliance	▲ IT Management			
Enterprise Data Center Other Facilities	▲ Servers (Windows/Linux) ▲ Unix ▲ Midrange ▲ Converged Infrastructure ▲ Mainframe	▲ Online Storage ▲ Offline Storage ▲ Mainframe Online Storage ▲ Mainframe Offline Storage	▲ LAN/WAN ▲ Voice ▲ Transport	Central Print	▲ Workspace ▲ Mobile Devices ▲ End User Software ▲ Network Printers ▲ Conferencing & AV ▲ IT Help Desk ▲ Deskside Support	▲ Application Development ▲ Application Support & Operations ▲ Business Software ▲ Database ▲ Middleware Mainframe Database Mainframe Middleware	▲ IT Service Management Operations Center Project Management Client Management	Security Compliance Disaster Recovery	IT Management & Strategic Planning Enterprise Architecture IT Finance IT Vendor Management			
Cost Pools & Sub-Pools												
▲ Benchmark Data Available from Apptio												
	▲ Internal Labor	▲ External Labor	▲ Outside Services	▲ Hardware	▲ Software	▲ Facilities & Power	▲ Telecom	▲ Other	▲ Internal Services			
OpEx	Expense	Expense	Consulting Managed Service Provider Cloud Service Provider	Expense Lease Maintenance & Support Depreciation & Amortization	Expense Subscription Maintenance & Support Depreciation & Amortization	Expense Lease Maintenance & Support Depreciation & Amortization	Expense Lease Maintenance & Support Depreciation & Amortization	Other	By Shared Service			
CapEx	Capital	Capital	Capital	Capital	Capital	Capital	Capital					
Actual & Planned Costs												

# Example: ServiceNow ITFM Maturity Model



# Allocation Metrics

- Many costs that go into TCO are indirect, making it difficult to tie to a single application, service, or capability
- To handle these costs, we develop allocation metrics – intelligent ways of assigning out shared costs
- Similar to activity based costing used for manufacturing, we define activities (metrics) that drive IT spending, and use these metrics as a basis for assigning costs within a tier, or in moving costs from one tier to another.
- Allocation metrics come in three flavors, from least accurate to most accurate they are:



## Assumption Based

e.g. IT shared service costs allocated to applications based on “thumb in the wind” percentages



## Attribute Based

e.g. application costs allocated across business units based on the number of assigned login accounts per business unit



## Consumption Based

e.g. support costs allocated to applications based on the number of support tickets per application



# Benefits of Modeling IT Costs

Approaching IT cost transparency in this way has these benefits:



## ALL COSTS

Ensures no costs are lost or overlooked. The entire IT budget is accounted for in each and every tier of the model. There is nowhere to hide costs.



## INCREMENTAL

Gives a incremental approach to arriving at more complex, hard-to-define TCO dimensions such as “business capability”. It would difficult to take GL entries and map them directly to business functions in a single step. The model lets you gradually get there.



## ANALYSIS

Provides multi-dimensional analysis. Since each tier includes the entire IT spend, and each tier links to every other tier, spend can be sliced and diced, drilled-down and drilled-up.

Bringing this back to TCO, a cost transparency model gives you multiple views of TCO – by application, service, business function, and more. And you can trace that TCO down to its root costs and drivers.

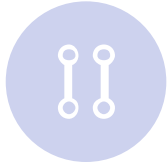
# Best Practices

For IT Cost Transparency

*rego*University 2018

Let Rego be your guide.

# TCO Best Practices



## Defensible Cost Model/Metrics

document and validate cost allocation methodologies and assumptions



## Repeat

Not just a one time effort – track progress over time



## Track Usage Metrics

usage of IT services changes over time. If the TCO of a service increases, did IT become less efficient, or did the organization just use more of it? Without tracking usage you won't know



## Calculate Unit Costs

cost per employee, cost per incident, cost per X. This gives TCO perspective, and is useful in benchmarking against other organizations or industry standards



## Put TCO in context

show the quality & business value services and applications produce



## Build Roadmap

a three- to five-year plan for cost model evolution. Don't expect high maturity on your first attempt

# Benchmarking TCO in Context

- TCO is a common industry metric, and easy to benchmark against other IT organizations. That makes it a powerful scoring mechanism for evaluating the effectiveness of IT.
- When comparing TCO with industry benchmarks or external service providers, it is important to remember that cost is just one part of the equation. Cost, quality, and value delivered are the three key measures, and they are dependent on each other.
  - If you increase one, all increase. If you decrease one, all decrease.
  - If you reduce cost, either quality or value delivered goes down.
  - If you increase quality, the value delivered goes up, and so does cost.
  - While an external provider may have a lower TCO, do they really provide the same quality and value?
- The trick is to find the right balance for your organization
  - Business partners need to understand that while reducing the cost of IT is possible, it has consequences.
  - By making these choices and trade-offs crystal clear for organizational leaders, IT and business partners can make better informed decisions.

# Reasons TCO Initiatives Fail

**Through 2018, 40% of ITFM tool implementations will fail due to the lack of a clear mandate, bad data discipline, and poorly designed cost models.**

Five Critical Actions to Increase ITFM Tool Success  
Source: Gartner 2016



## **Fear of Bad Data**

“My data isn’t ready” is a common excuse for not tackling TCO. But data will never improve in a vacuum. Just like muscles need exercise to grow strong, data must be put to use in order for it to improve. So, don’t wait for your data to be perfect. Instead, use your data to make it perfect.



## **Labor/Time Intensive**

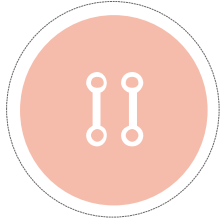
It takes effort to set up good allocation metrics, especially if you aren’t using a tool specifically designed for it. Organizations may find it’s too costly to get even close to right. Often, the result is the full budget is spent on the initial effort with nothing remaining to keep track of TCO on an ongoing basis. Or worse, the TCO effort is abandoned all together.



## **Fear of Transparency**

Masters of the old game won’t embrace the visibility. IT leaders often know that they have some “skeletons in the closet”—inefficient areas requiring better stewardship—that they are reluctant to bring to light. And business partners can be afraid to face that their decisions have real financial impacts on IT cost, and the days of IT saying “yes” to every request are over.

# Reasons TCO Initiatives Fail



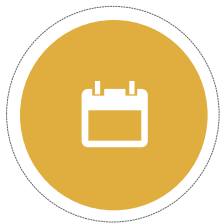
## Analysis Lag Time

Data freshness is key. What often happens is that TCO is assessed when a reconciliation with finance occurs (annually), when it's already too late to address issues. If the ITFM team is loading the GL monthly and looking at their costs, then TCO can provide actionable insight.



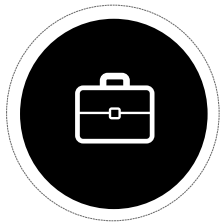
## Indefensible

TCO alone, without clear context of how it was calculated will not be trusted by application owners, service owners, or IT leaders .



## Over-Simplified

Just peanut butter spreading costs across apps and services doesn't add enough insight to make TCO useful.



## Complicated

Complex calculations using inaccessible tools/data like spreadsheets lead to a TCO model that few understand. No one will accept the output if they can't understand how you got there.



# Case Study

Health Insurance Provider

*rego*University 2018

Let Rego be your guide.

# Background



**Non-profit**



**Health Insurance  
Provider**



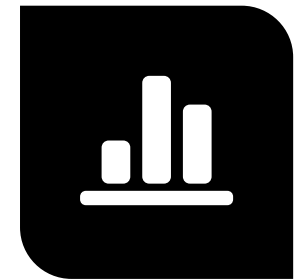
**Founded in 1934**



**Employees: 3,200**

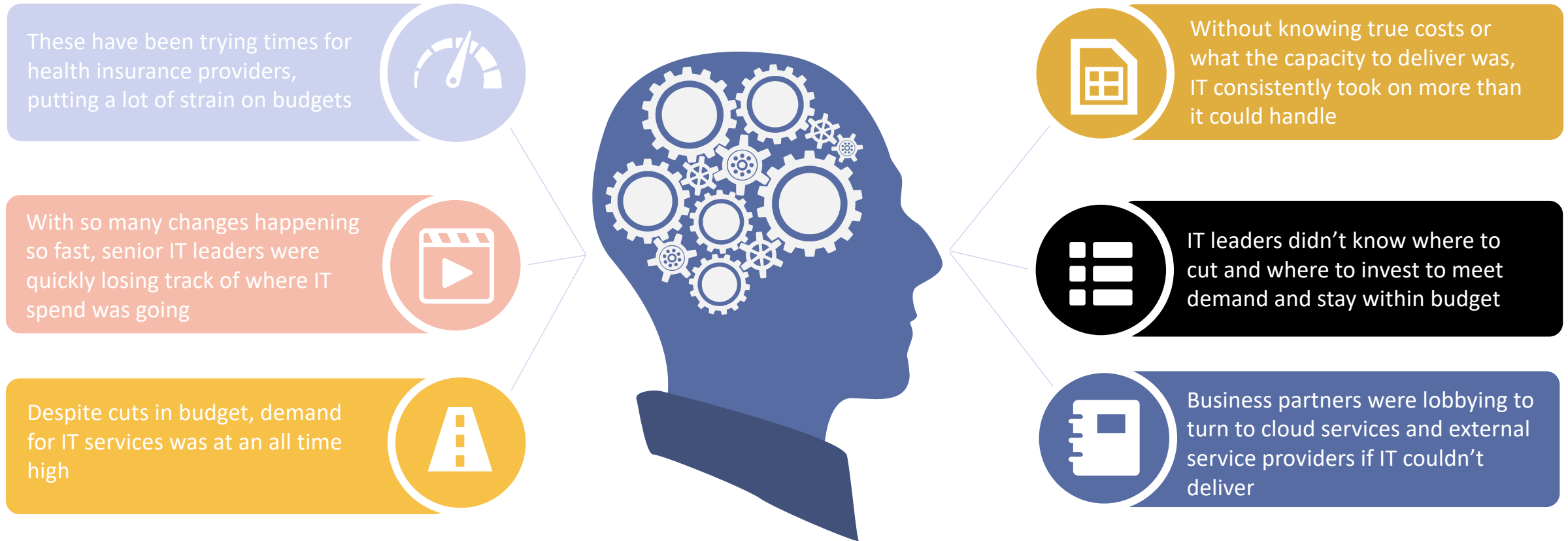


**IT Staff: 800**



**Annual IT Budget:  
\$90 million**

# The Challenge



# The Solution

- To turn things around, they set out to determine the TCO of applications and services and what factors were driving IT cost
- They wanted to provide business partners not only TCO but per unit costs of their activities, which would help curb their demand for IT services – allowing money to be allocated to the most important objectives
- Determining what cost drivers to use was both a top down (what business questions need to be answered) and bottom up (what activities truly drive IT cost) exercise, and cost allocation needed to be done horizontally as well as vertically.
- By using data already being captured (e.g. CMDB, support tickets, service catalog requests, IT projects, IT procurement, etc.) they could intelligently link IT costs to applications, services, and business capabilities.

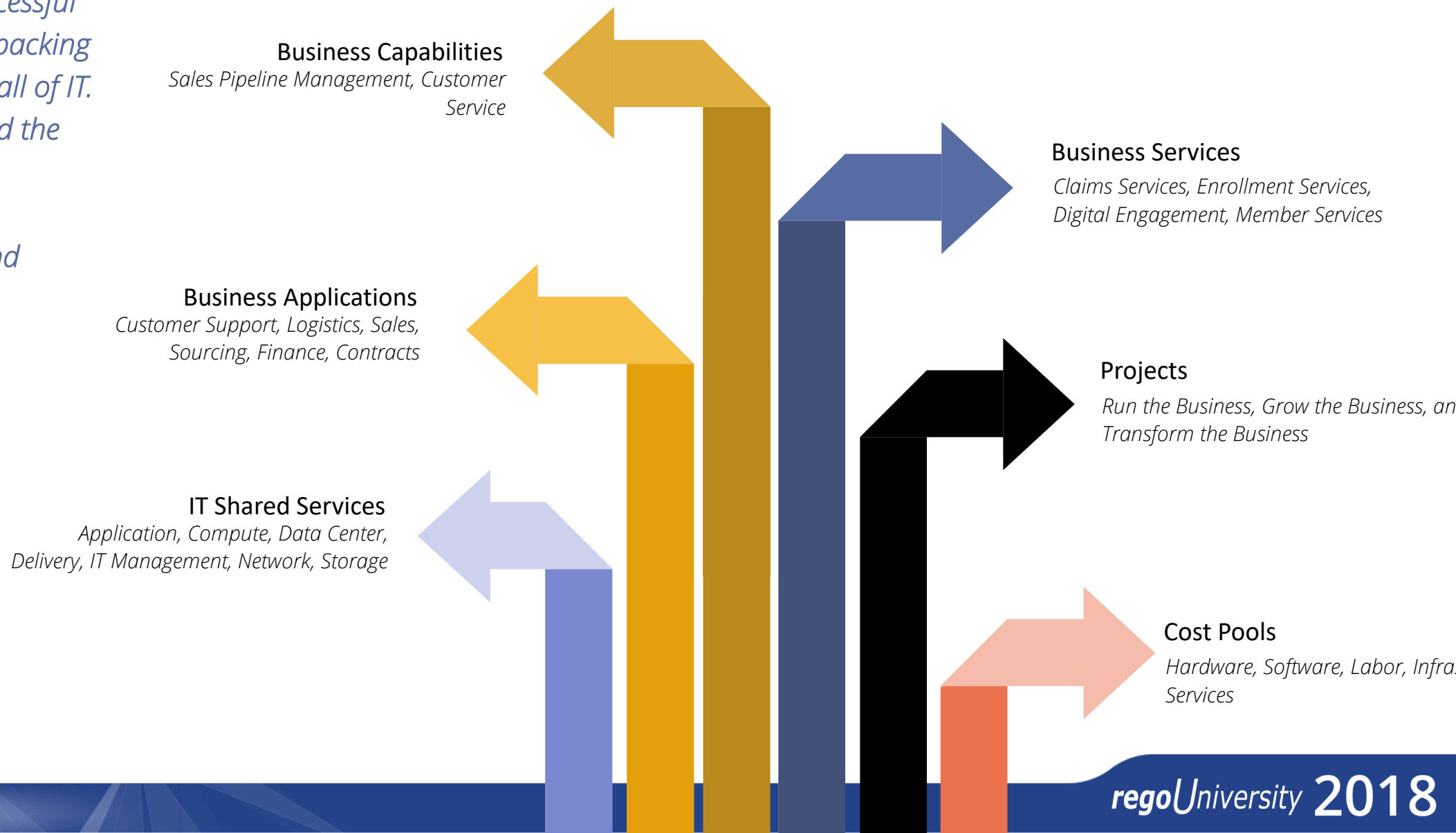
# Proof of Concept

- Picked a large, visible business service called Community Connect to use as a proof of concept for evaluating TCO. This service is one of the main ways they interact with customers
- Provided metrics specific to this service, such as:
  - TCO of the Service
  - Cost per Physician Practice
  - Cost per Physician
  - Breakdown of TCO into individual applications and shared services
- The output of this gave our stakeholders a glimpse into the insight IT cost transparency can provide.



# Cost Model for All of IT

*They leveraged the successful POC to gain executive backing for modeling costs for all of IT. This cost model allowed the calculation of TCO by Capability, Service, Application, Project, and Shared Service*





# Outcomes



## IT Enabled Business Strategy

In the end they were able to show customers how IT enables business strategies, and this facilitated more productive conversations with them. They even provided customers with per unit costs of standard activities, which helped curb IT demand and allowed money to be reallocated to more strategic objectives.



## IT Perception Changed

By improving visibility into IT costs, and aligning IT costs with business objectives and even revenue creation activities (like bringing in additional customers) , IT's perception has begun to change



## IT Indispensible

By running IT like an external service provider (including giving per unit costs, usage, and showbacks), IT demonstrated how indispensable it was – showing it is competitive with or superior to external cloud options and service providers.

# Questions?



*rego*University 2018

Let Rego be your guide.

# 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 Name = **regoUniversity**
- Course Number = **Session Number**
- 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@regouniversity.com](mailto:info@regouniversity.com)



### Website

[www.regouniversity.com](http://www.regouniversity.com)