Seabury Group Overview

Seabury works with leading airlines, aerospace companies, airports, cargo operators, lessors, investors and other aviation participants all over the world

Summary data

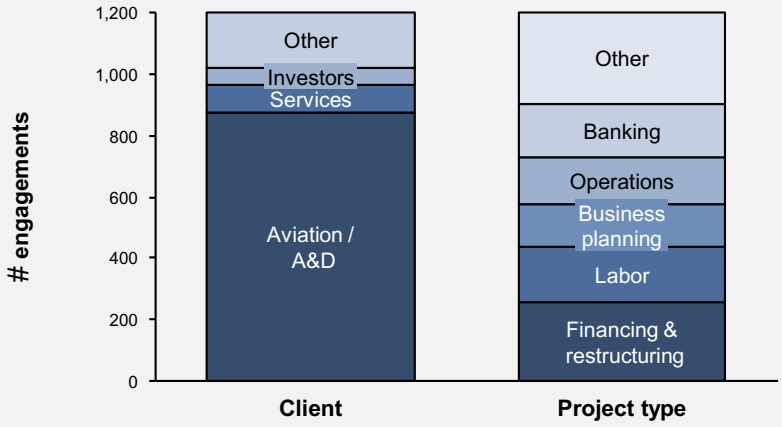
Founded:	1995
Ownership:	Private
Clients:	>300 in > 50 countries

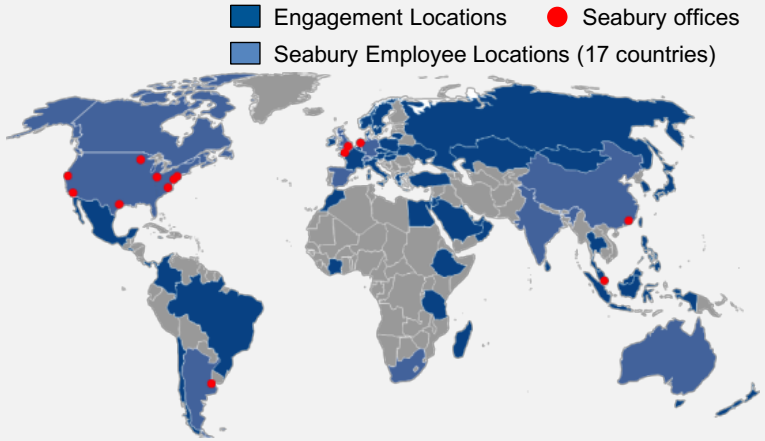
Seabury Group is a leading global advisory firm principally focused on the aviation, aerospace and defense industries. Seabury provides clients with a comprehensive approach to driving business solutions and unlocking value, no matter how complex or challenging the issues. Seabury's professionals are a combination of bankers, consultants, software solutions experts, and former industry executives who have executed over 1,250 client engagements globally, including some of the largest airline restructurings in history.

Select top-tier clients

American Airlines · Delta · Southwest · US Airways · Air Canada · chorus aviation inc. · Virgin America · Azul · IAG International Airlines Group · Monarch · TAP Portugal · Etihad Airways · Cathay Pacific · Qantas · Airbus · Embraer · Bombardier the evolution of mobility · Rolls-Royce · Zodiac Aerospace · Safran · Centerbridge · TPG Capital

Deep engagement experience





Note: Amsterdam and Hong Kong have two offices each

Seabury MRO Solutions

Established in 2002, Seabury Enterprise Solutions was chartered to develop robust IT applications for the aviation industry and has since grown to include focused products for Maintenance organizations as Seabury MRO Solutions, a sub group within SES

Capabilities

- IT strategy and advisory
- Project management

- Custom software development
- Software / hardware evaluation and procurement
- Cost containment

- Business area expertise
  - Financial systems
  - Maintenance
  - Revenue accounting
  - Sales and Distribution

Products

EPAS

a performance management tool that helps decision makers drive continuous improvement to the organization

eAuthority

An all-encompassing solution for civil aviation authorities to manage aircraft registrations, licensing and oversight

Alkym®

a comprehensive, full functional Integrated, cost-effective aviation maintenance management Software solution

Center

Next generation passenger revenue accounting application (***In Development***)

Clients

DELTA, Monarch, SOUTHWEST, BoA Boliviana de Aviación, American Airlines, VIVA aerobus Lo que necesitas para volar., TOLL, SATENA ES COLOMBIA, LAM Linhas Aéreas de Moçambique, enterair, Cayman Airways, AirPanama ESTAMOS VOLANDO, GMF AeroAsia GARUDA INDONESIA GROUP, KALSTAR AVIATION

SES personnel have worked in top tier consulting firms as well as all the major US carriers with extensive IT and airline experience

Maintenance practice overview

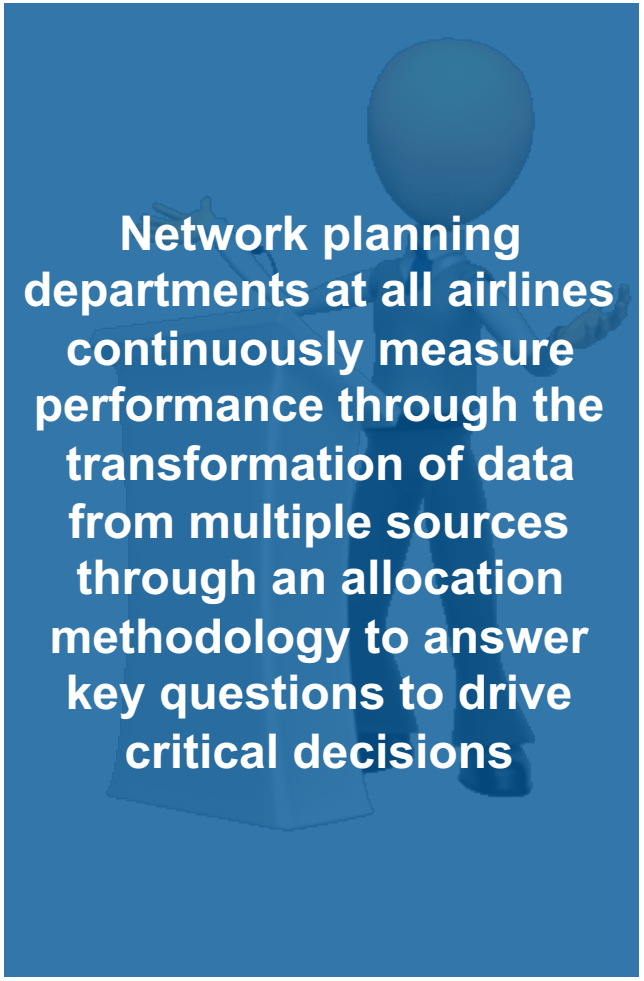
Seabury's MRO practice provides a broad client base with comprehensive capabilities and high-quality advise on all critical maintenance issues

- **Deep understanding of the MRO industry coupled with recent and extensive experience makes Seabury the right choice for the global aviation industry**
- **Hybrid teams of trained aviation focused management consultants, with experienced former MRO executives**
  - Ensures rigorous analytics are balanced with practical judgment to deliver real business solutions
- **MRO practice has broad and deep experience and industry knowledge, tools and resources, and a proven track record**
  - Direct expertise in strategy, operational improvements, vendor management, supply chain optimization, maintenance planning and investor support
- **Consulting with real expertise (vs. consulting as "experts") leverages our MRO expertise and our clients unique competencies and capabilities**

A “Crash” course in leading edge route performance measurement

American, Delta and Southwest use EPAS for route profitability to measure the performance of their respective complex operations

- Which routes are profitable?
- Is this the right equipment for this route?
- Where are costs increasing/ decreasing?
- What is the impact of a new competitor in our market?
- How efficient is the operation?
- What is the impact of delays on profitability?
- How beneficial are flow passengers on unprofitable routes?

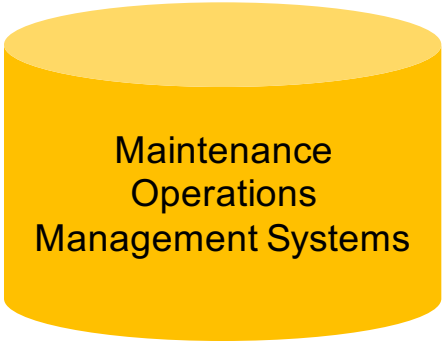


When it comes to decision making, can Maintenance Operations embrace the same methods and models as route profitability?

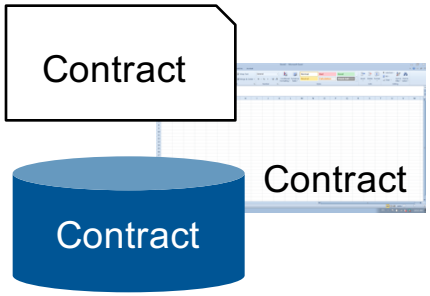
Maintenance performance analysis: Typical challenge 1

Our observations from our extensive experience of what we see in many organizations

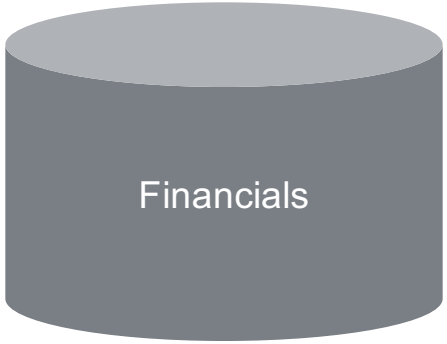
Detailed data needed for deep dive analytics is buried in disparate systems throughout the organization



What was done, by whom and for how long?



How much do we bill/ pay?

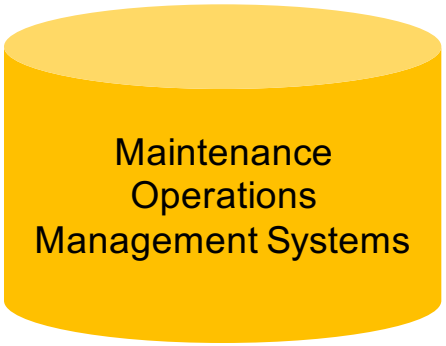


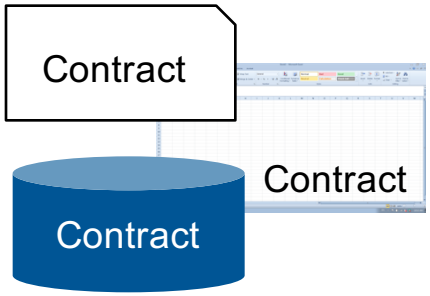
What was the total cost and revenue?

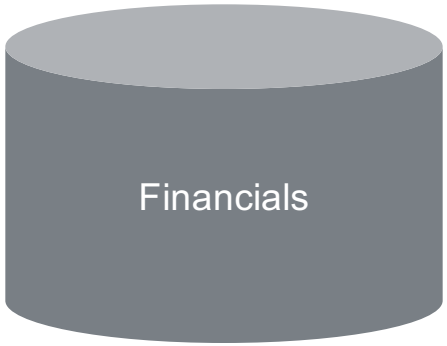
Maintenance performance analysis: Typical challenge 1

Our observations from our extensive experience of what we see in many organizations

Detailed data needed for deep dive analytics is buried in disparate systems throughout the organization







What was done, by whom and for how long?

How much do we bill/ pay?

What was the total cost and revenue?

Questions NOT easily answered:

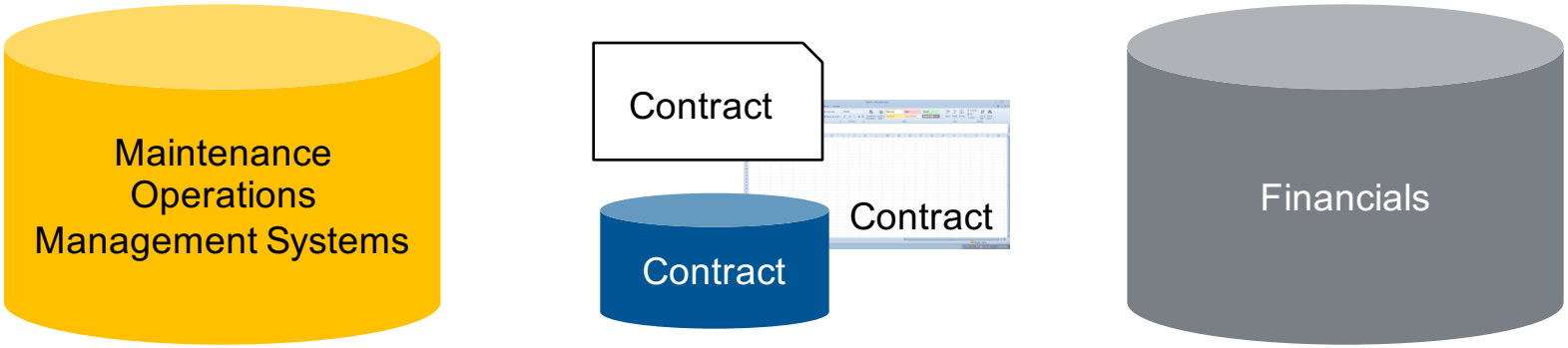
What is the profitability of project N-1234?

For my current projects in progress, what is the cost and revenue run rate? Are we behind or ahead?

What is the fully allocated cost by Base? By Aircraft? By Customer? Etc…

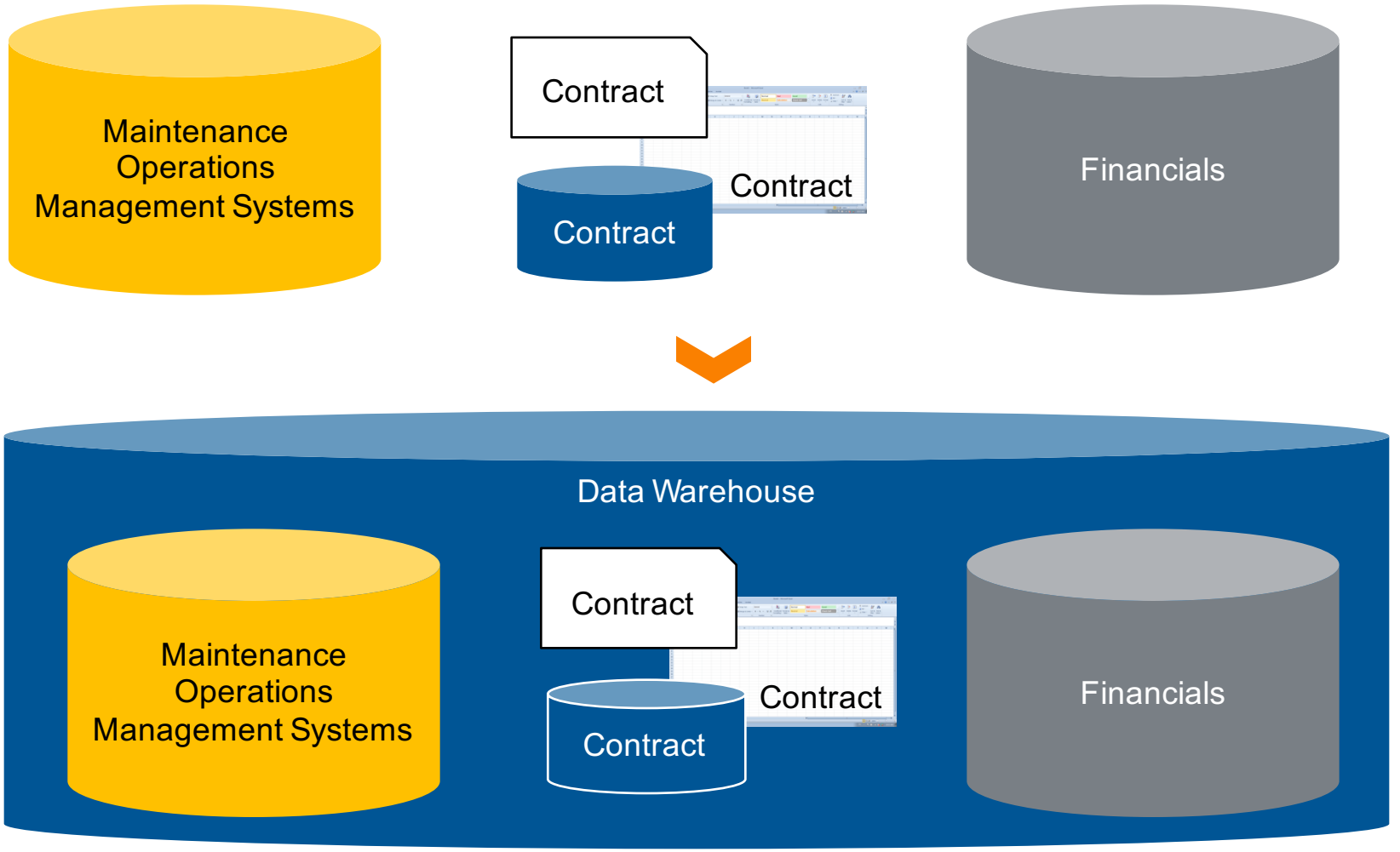
Maintenance performance analysis: Typical challenge 2

Our observations from our extensive experience of what we see in many organizations



Maintenance performance analysis: Typical challenge 2

Our observations from our extensive experience of what we see in many organizations



Warehousing of the data is not sufficient to model the operation

Maintenance performance analysis: Typical challenge 3

Our observations from our extensive experience of what we see in many organizations

Analytics are performed as a “snapshot” view and difficult to repeat

1 Question: What is our fully loaded man hour rate?

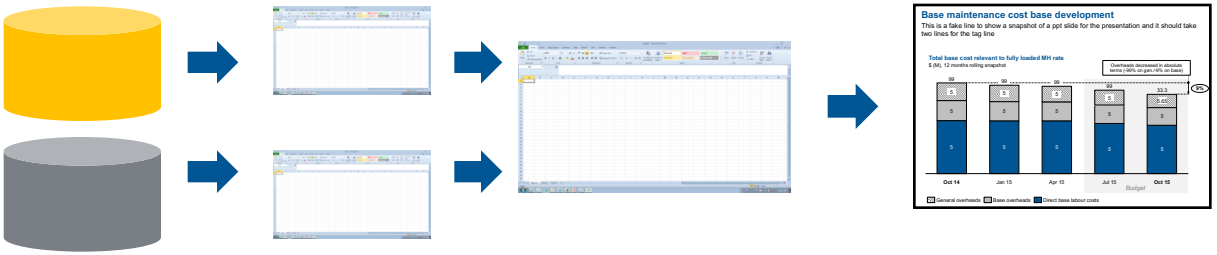
Maintenance performance analysis: Typical challenge 3

Our observations from our extensive experience of what we see in many organizations

Analytics are performed as a "snapshot" view and difficult to repeat

1. Question: What is our fully loaded man hour rate?

2. Analyst tasked with this effort pulls data…to build a presentation



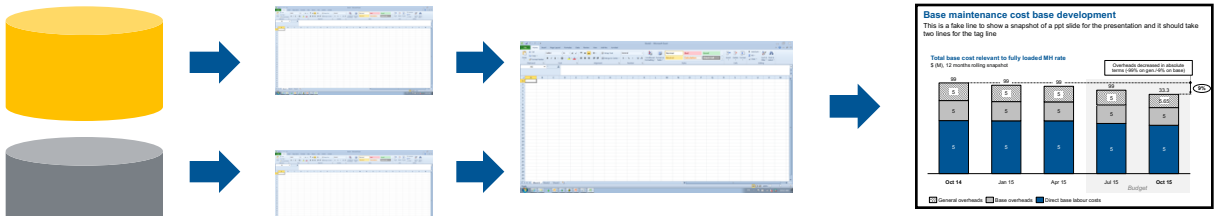
Maintenance performance analysis: Typical challenge 3

Our observations from our extensive experience of what we see in many organizations

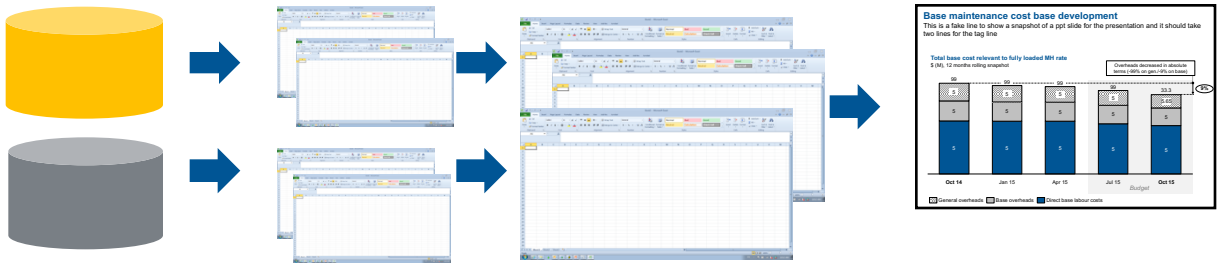
Analytics are performed as a "snapshot" view and difficult to repeat

1. Question: What is our fully loaded man hour rate?

2. Analyst tasked with this effort pulls data…to build a presentation



3. Decision makers seek clarification



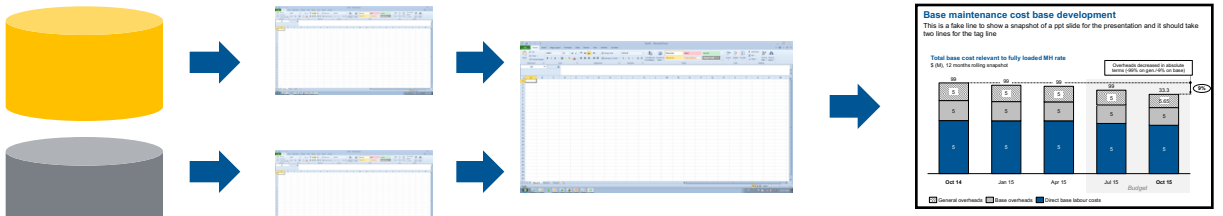
Maintenance performance analysis: Typical challenge 3

Our observations from our extensive experience of what we see in many organizations

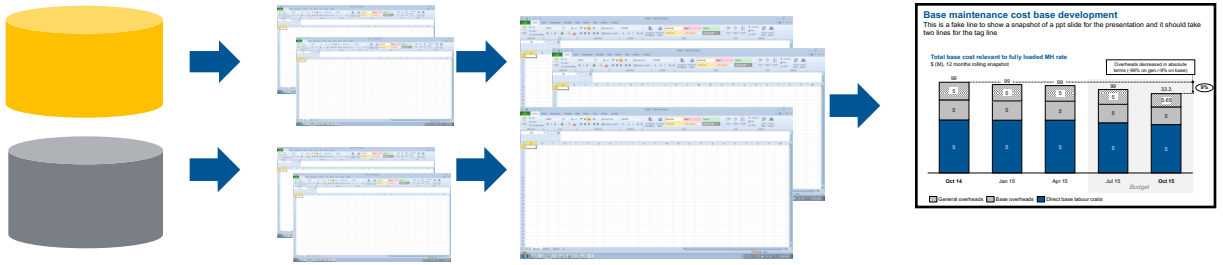
Analytics are performed as a "snapshot" view and difficult to repeat

1. Question: What is our fully loaded man hour rate?

2. Analyst tasked with this effort pulls data…to build a presentation



3. Decision makers seek clarification



4. The analysis is "filed" for later reference as all relevance is lost when the next Question is asked

Can Maintenance Operations embrace the same methods and models as route profitability?

Maintenance Operations can embrace route profitability methods and use of structured models to drive decisions

Route Profitability

Flight Operations	Financials	Coupon Level Revenue
Fuel	Payroll	Contracts

Granular, detailed, disparate data from various sources in various formats

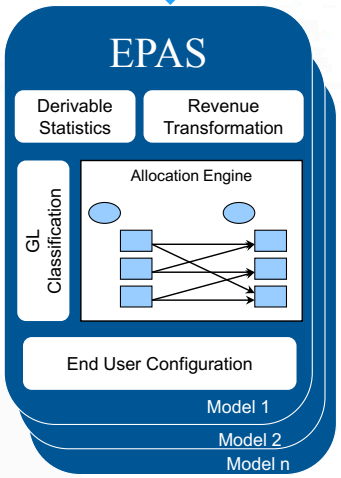
Maintenance Performance

Maintenance Operations	Financials	Third Party Revenue Detail
Aircraft Operations	Payroll	Contracts

Maintenance Operations can embrace route profitability methods and use of structured models to drive decisions

Route Profitability

Flight Operations	Financials	Coupon Level Revenue
Fuel	Payroll	Contracts

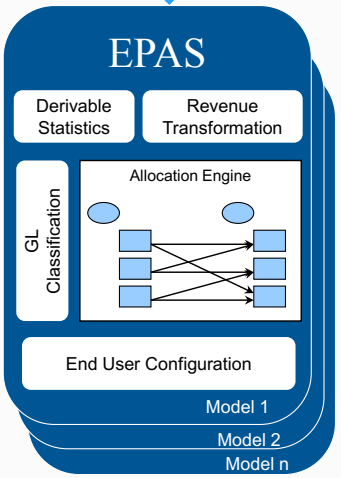


Granular, detailed, disparate data from various sources in various formats

Models Consolidate and transform inputs to measure performance

Maintenance Performance

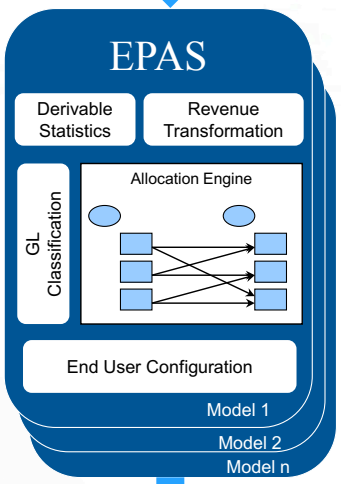
Maintenance Operations	Financials	Third Party Revenue Detail
Aircraft Operations	Payroll	Contracts

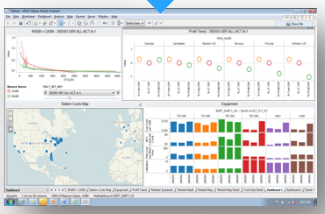


Maintenance Operations can embrace route profitability methods and use of structured models to drive decisions

Route Profitability

Flight Operations	Financials	Coupon Level Revenue
Fuel	Payroll	Contracts





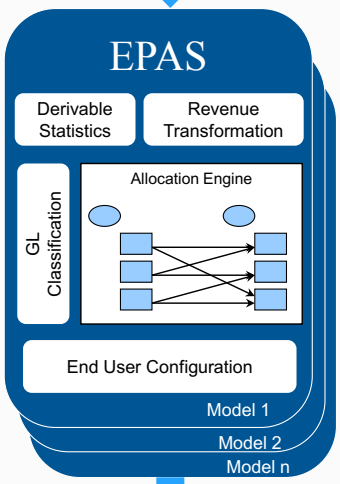
Granular, detailed, disparate data from various sources in various formats

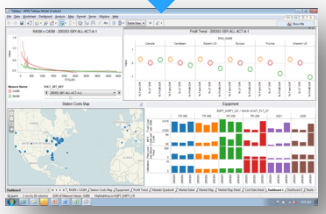
Models Consolidate and transform inputs to measure performance

Detailed, multi-dimensional data for dashboard as well as detailed analysis

Maintenance Performance

Maintenance Operations	Financials	Third Party Revenue Detail
Aircraft Operations	Payroll	Contracts



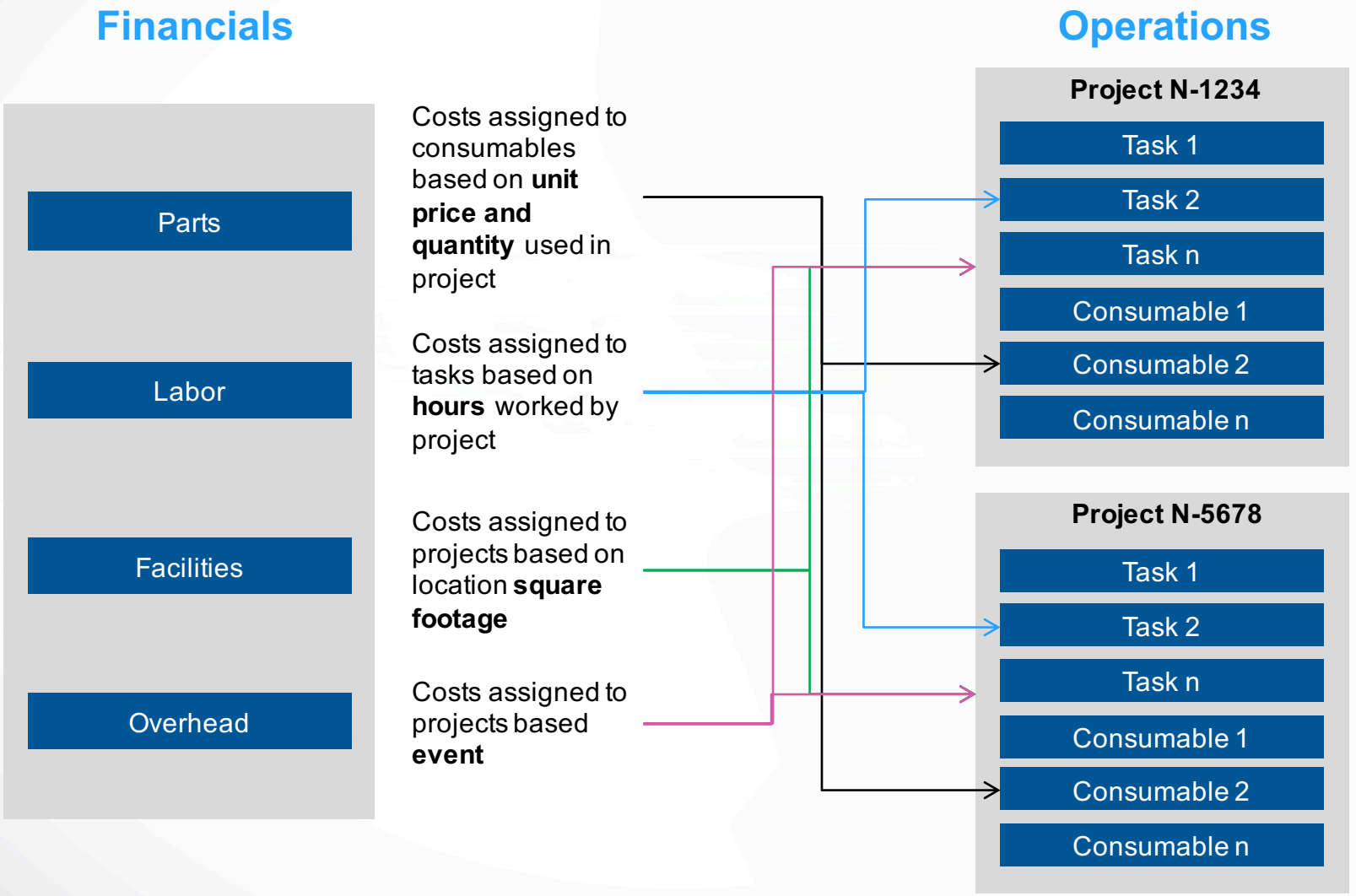


What is a “Model”?

What is a “Model”?

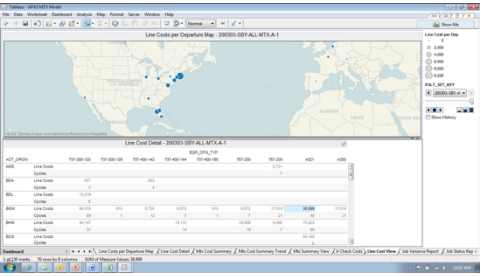
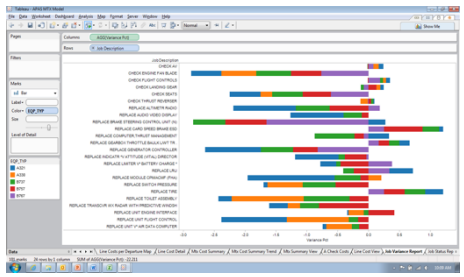
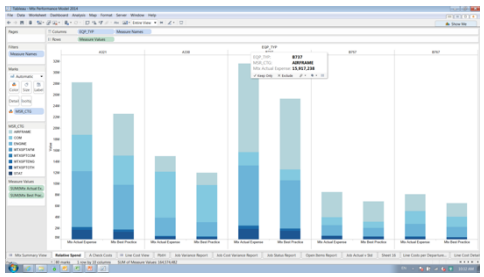
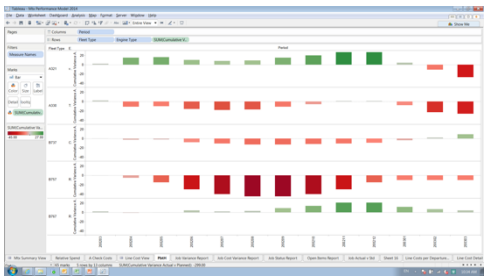
What is a “Model”?

Allocation of sources of costs and revenues to all activities of operation



Models produce insight to drive decisions

Financial benefits are achieved through the continuous, comprehensive measurement of the operations that lead to actionable decisions

What is the fully loaded man hour rate?

- How is this relative to the bill rate of our biggest customers?

Which base is the most/least efficient?

- What activities are driving the underperforming locations?

How is Project N-1234 performing relative to bid?

- Were job estimates accurately performed?

Which customer is least profitable?

- What activities are performed? Where? Can we re-negotiate contractual terms with underperforming customers?

How much unused capacity is there at each base?

- What is the cost of the unused capacity? What steps can be taken to fill?

How are my engine contracts performing relative to schedule?

- Are we ahead or behind on our commitments?
- What is the overall spend with this vendor?

Some Case Study Examples

The EPAS maintenance module, “MPAS” was implemented at a recent client as part of a consulting study

- **Seabury was engaged to assess some key functional areas of an airline’s third party maintenance operation**

- **MPAS was implemented to support the study with a working model up and running inside of 3 weeks**
  - Maintenance management detail data
  - Financials
  - Contractual data

- **Combining operational activity data and detailed financial data into the MPAS model enabled the team to have visibility at the “atomic” level to analyze the operation at multiple levels**
  - Allocated costs and revenues to every hour billed, worked and consumable used

A number of “myths” were exposed using a structured model in EPAS…

NOTE: THE FOLLOWING SLIDES AND SUPPORTING DATA ARE FOR ILLUSTRATIVE PURPOSES

Exploring the Myths in the MRO Operation


A Myth....
....a widely held but false belief or idea.
Myth # 1
Our fully loaded man-hour rate is $49 per hour

The Truth Behind The Myth…..

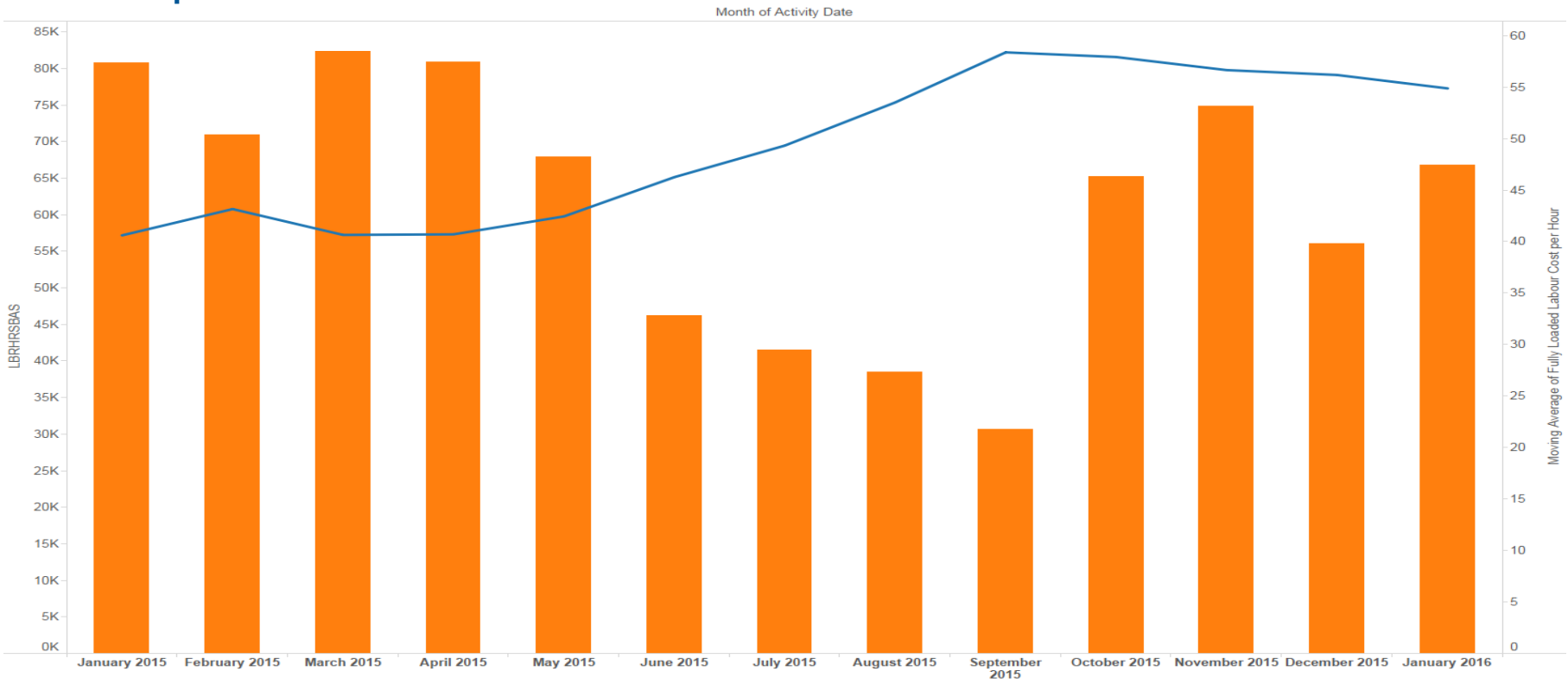
Using the financials allocated to activity in MPAS, we discovered that the real fully burdened labor rate was $54 per hour

- **This assumption was based on “common knowledge” and really had no recent, quantifiable basis**

The Truth Behind The Myth…..

Using the financials allocated to activity in MPAS, we discovered that the real fully burdened labor rate was $54 per hour

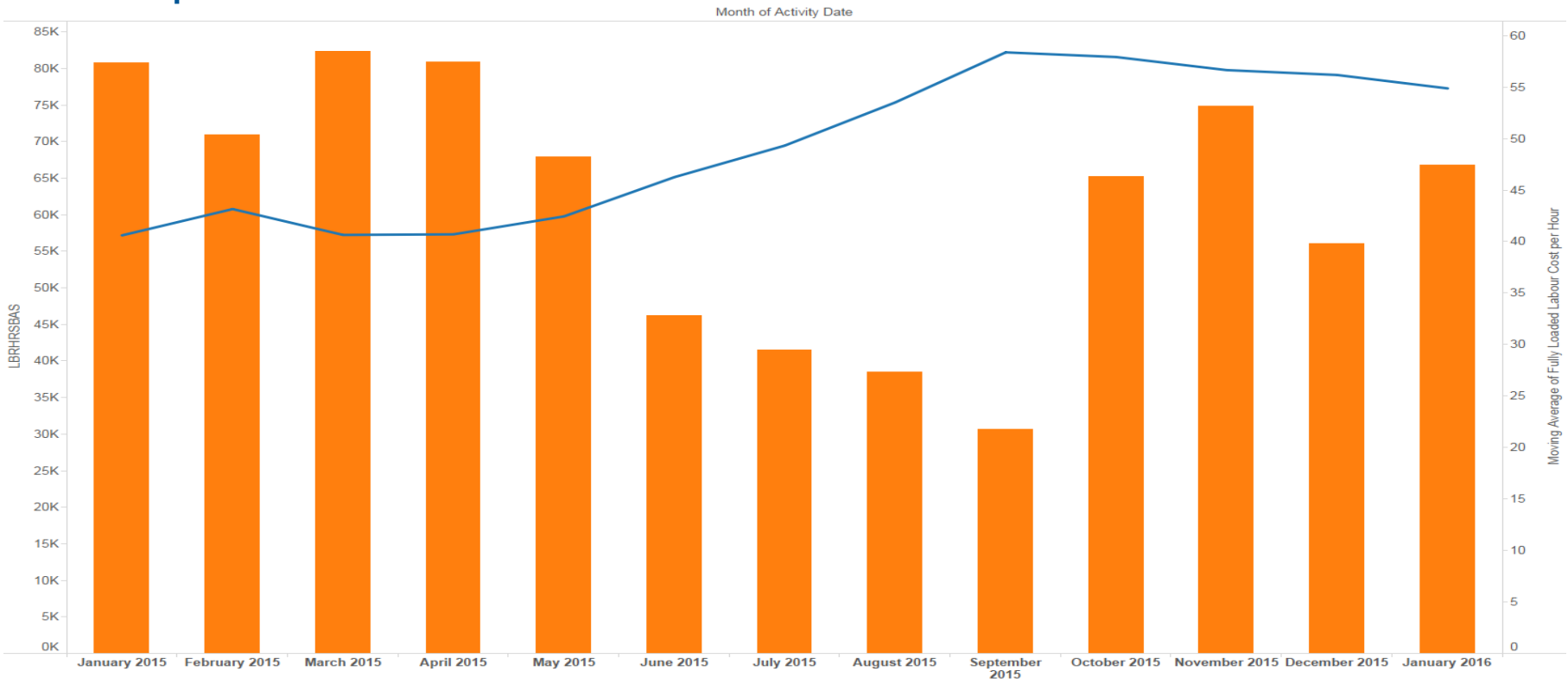
- **This assumption was based on "common knowledge" and really had no recent, quantifiable basis**
- **Factors such as overhead and slack time were not fully accounted for in the previous assumptions**



The Truth Behind The Myth…..

Using the financials allocated to activity in MPAS, we discovered that the real fully burdened labor rate was $54 per hour

- This assumption was based on “common knowledge” and really had no recent, quantifiable basis
- Factors such as overhead and slack time were not fully accounted for in the previous assumptions



- A “living” model is continuously refreshed to avoid regression to “common knowledge”


A Myth....
....a widely held but false belief or idea.
Myth # 2
We can see project profitability in the detail of our financials

The Truth Behind The Myth…

While the data was loosely kept in financials, it was not usable for profitability analysis

- **The necessary financial detail was buried at the transactional level of the GL with no structure to create connections or properly group to projects**

The Truth Behind The Myth…

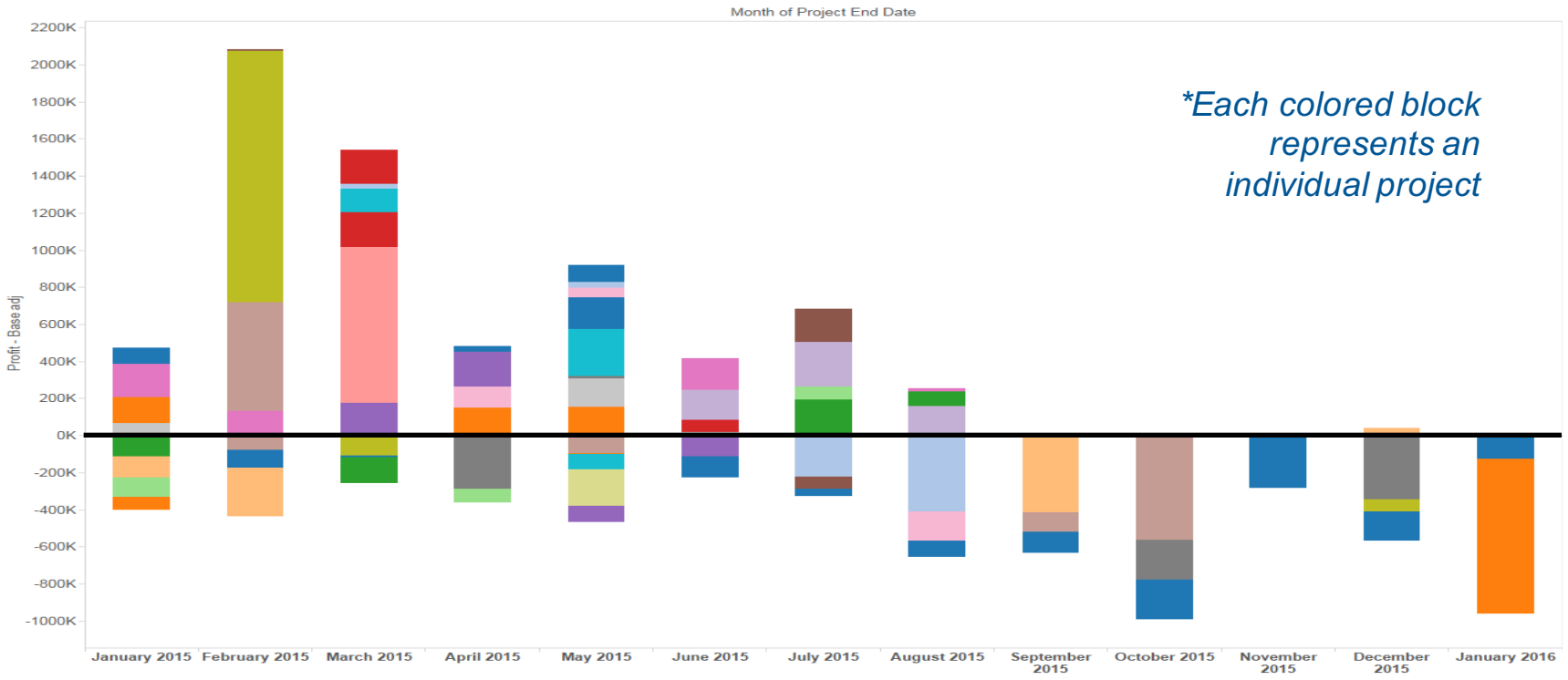
While the data was loosely kept in financials, it was not usable for profitability analysis

- **The necessary financial detail was buried at the transactional level of the GL with no structure to create connections or properly group to projects**
- **There was no ability to connect detailed activity metrics (hours worked, parts used etc.) to the financial booking**

The Truth Behind The Myth…

While the data was loosely kept in financials, it was not usable for profitability analysis

- The necessary financial detail was buried at the transactional level of the GL with no structure to create connections or properly group to projects
- There was no ability to connect detailed activity metrics (hours worked, parts used etc.) to the financial booking
- IT WAS SIMPLY NOT BEING DONE

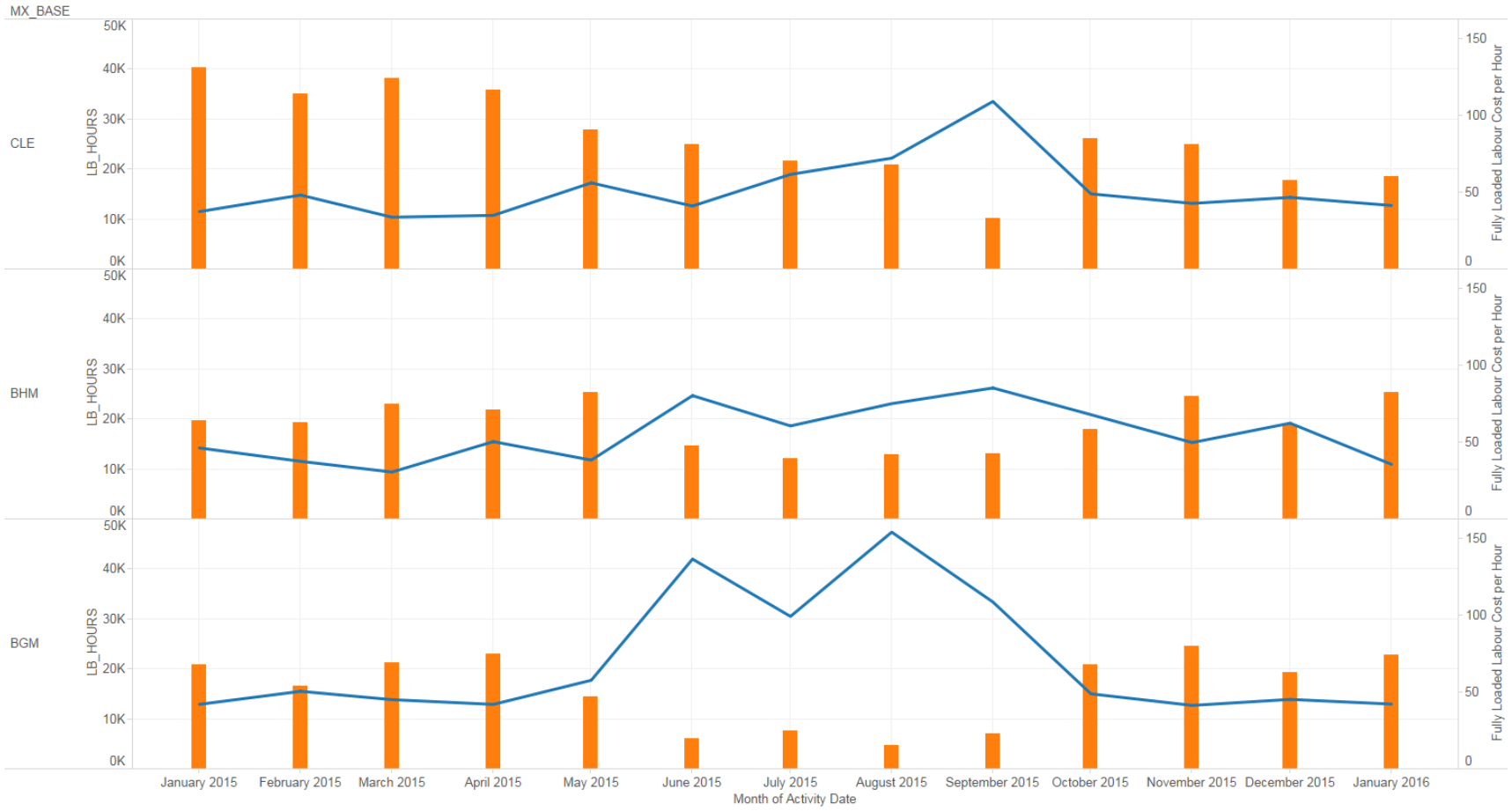



A Myth....
....a widely held but false belief or idea.
Myth # 3
Our maintenance bases are all equally managed to ensure maximum resource usage.

The Truth Behind The Myth…

While BHM and CLE were deemed relatively efficient in terms of managing labor costs with billable hours, BGM had a considerable spike in labor costs per billable hour in the slow summer months

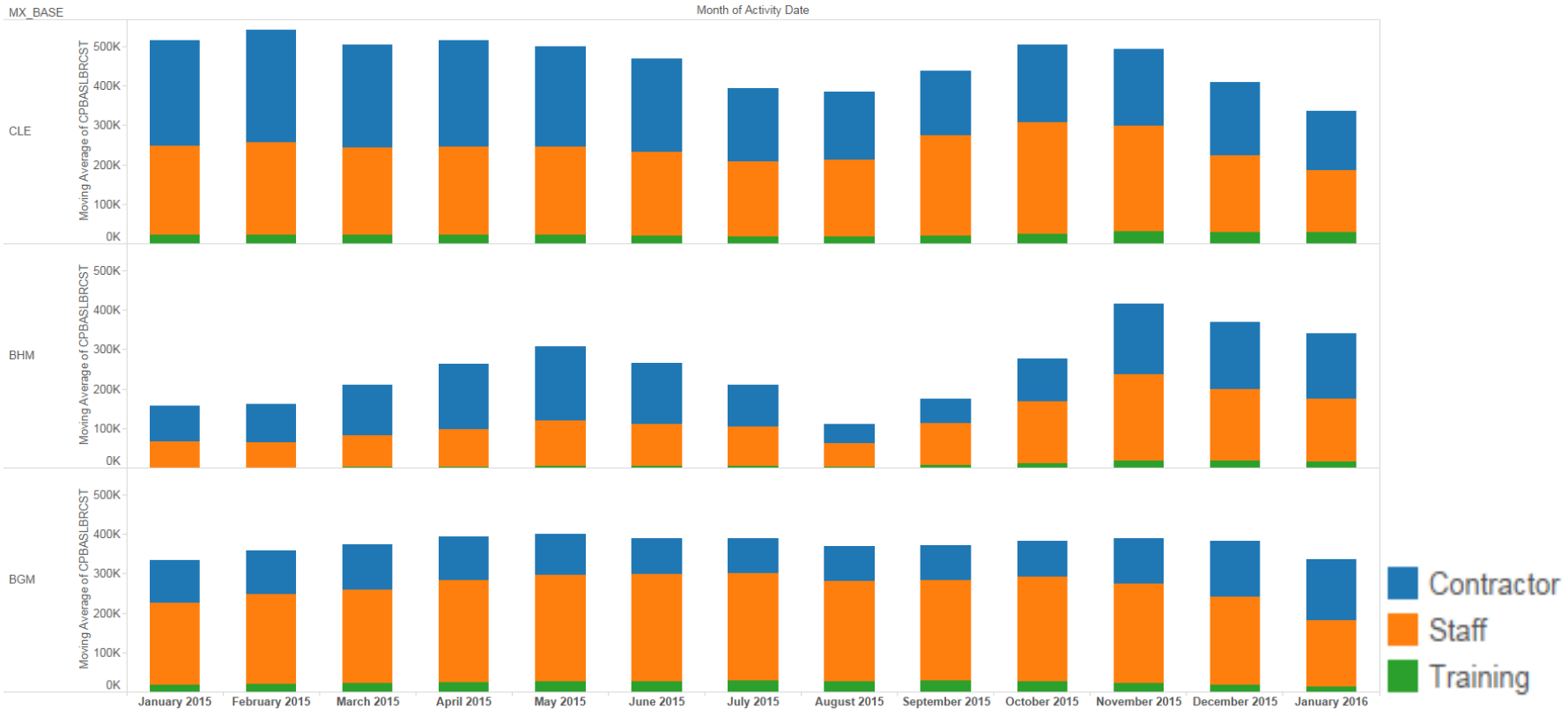
- **The spike in the summer months at BGM could be attributed to exceptionally low billable hours, but we needed to drill further…**



The Truth Behind The Myth…continued

While BHM and CLE were deemed relatively efficient in terms of managing labor costs with billable hours, BGM had a considerable spike in labor costs per billable hour in the slow summer months

- **The permanent staff ratio was markedly high in BGM driving higher carrying costs**
- **In summer months contractor costs remained unchanged when, given the work load, should have been managed down**



In Summary…

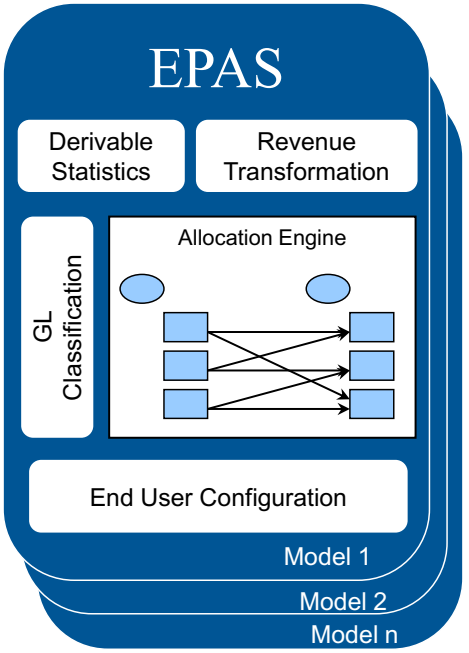
We picked just some typical examples of myths from past case studies

HOW DO YOU UNRAVEL THE MYTHS IN YOUR ORGANIZATION?

Conduct Operations

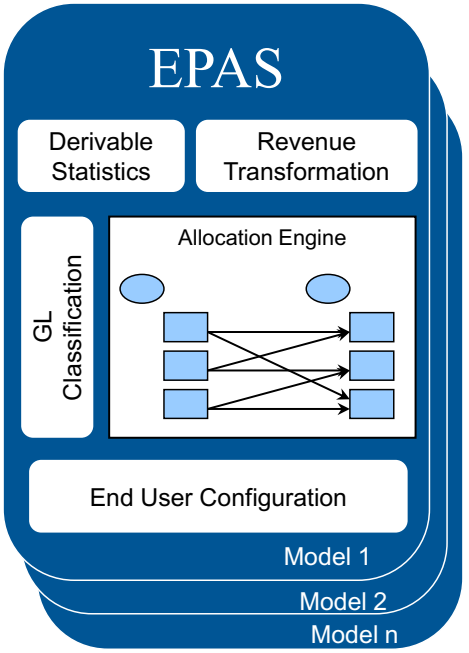
Conduct Operations

Measure Performance



Conduct Operations

Measure Performance



Continuous Improvement

Q&A

Bijoy Mechery
CEO Seabury Enterprise Solutions
bmechery@seaburygroup.com
+1 908 487 8482
www.seaburymro.com