Tableau User Group UC San Diego: Executive Dashboard

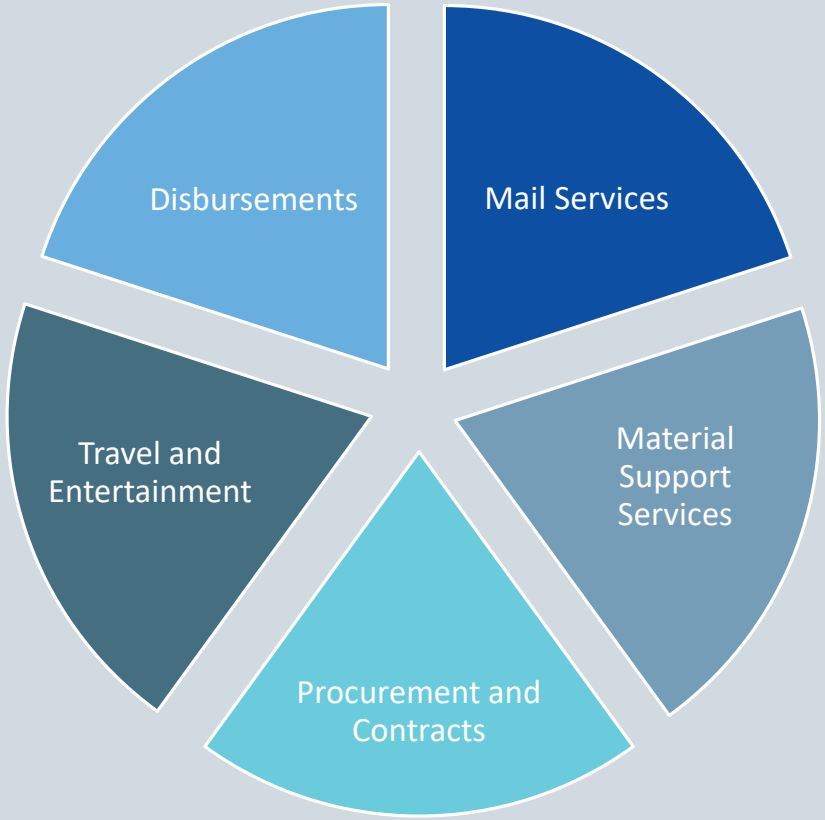
UC SAN DIEGO - IPPS ANALYTICS

IRVIN PALACIOS

Integrated Procure-to-Pay Solutions

Our mission:

Integrated procure-to-pay solutions and customer care in support of world-class education and research



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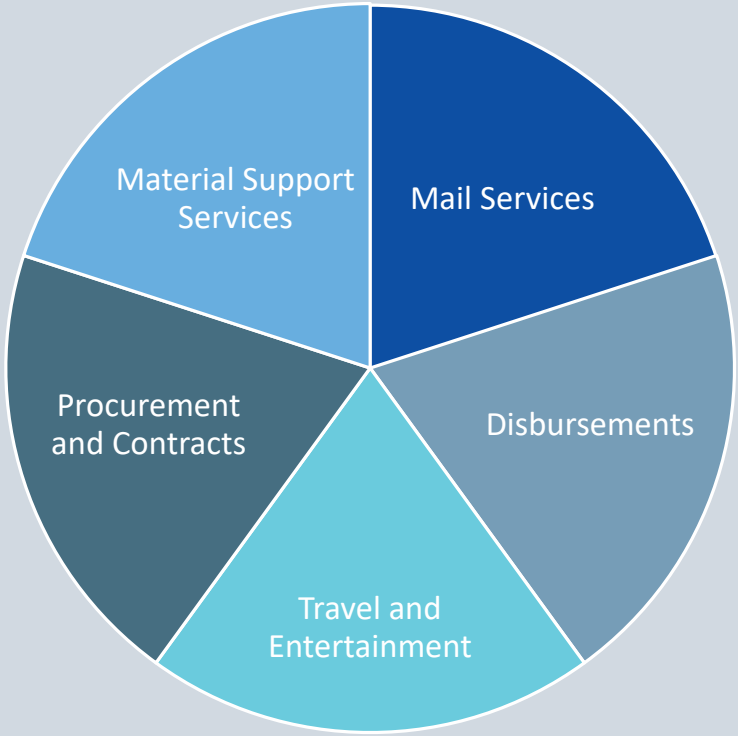

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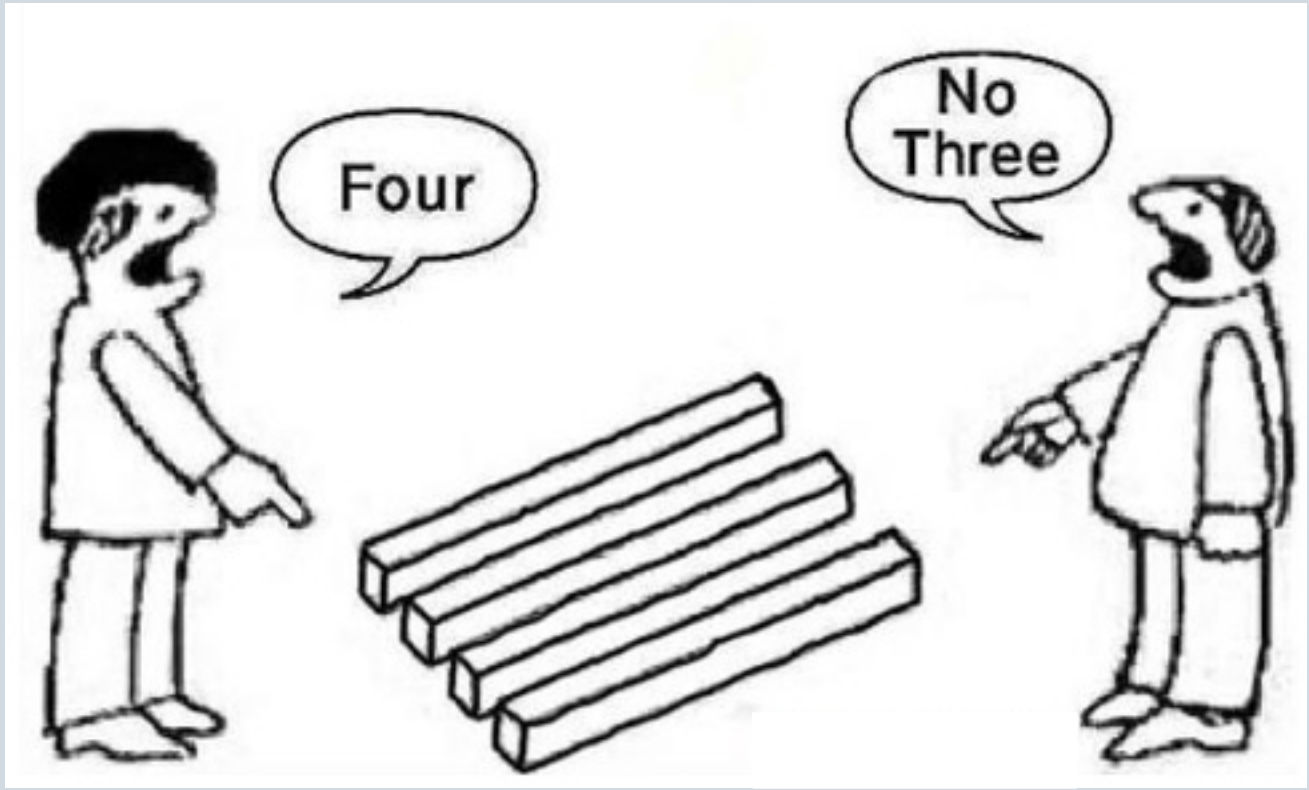
What Is The Truth?



IPPS Executive Dashboard

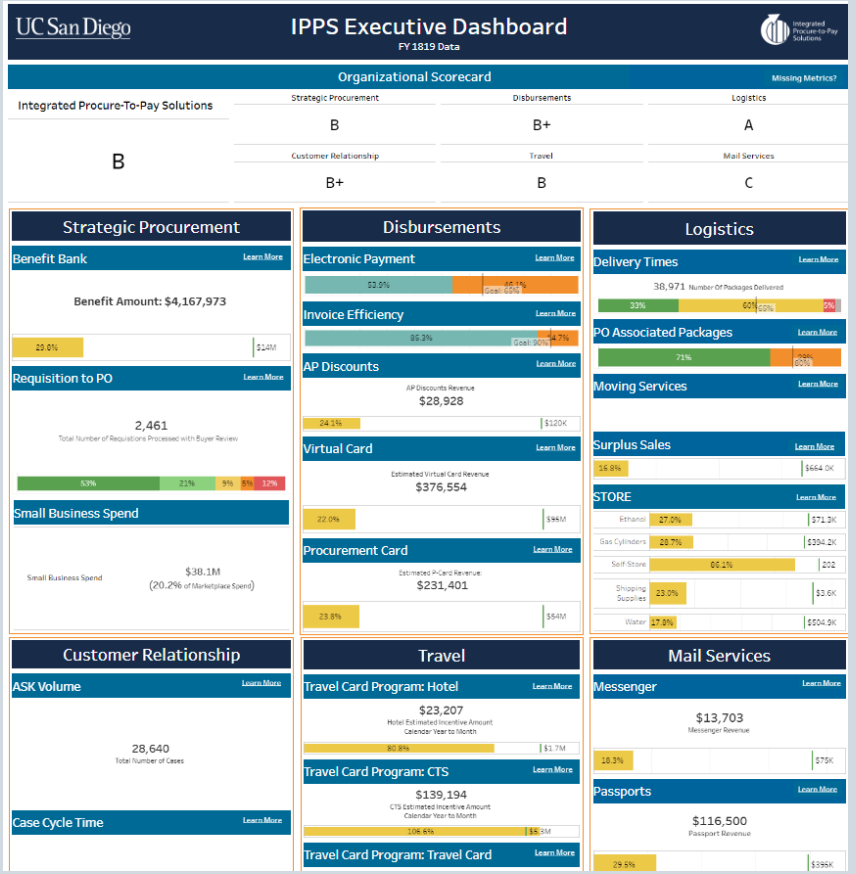
Houses strategic metrics in ONE dashboard

Owned by IPPS Core Leadership Team

Maintained by the IPPS Analytics Team

Dashboard Features:

- 30+ Metrics
- 14 Unique Data Sources
- Visual Grading System
- Underlying Supporting Dashboards



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Adventure Time

1. Defining Metrics Process
2. Leveraging Business Intelligence Features
3. Tiers & Building Data Sources
4. Grading System
5. The Lessons We Learned

Metric Collection

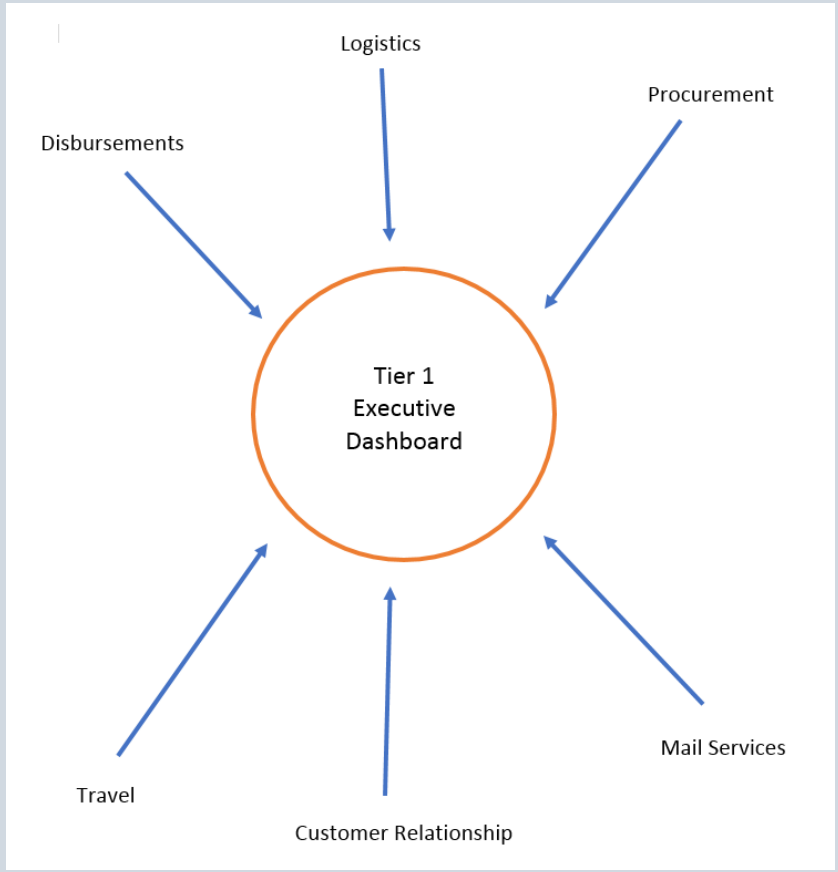
Leadership Buy-in is Essential

- Core knowledge and decision maker

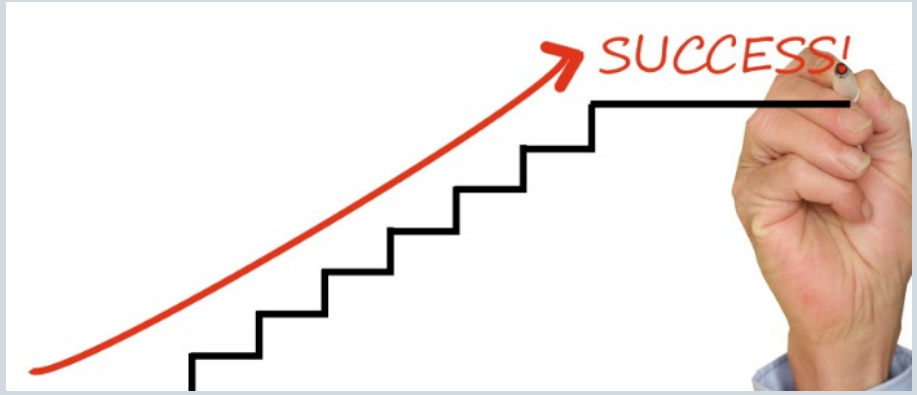
What Metrics to Develop?

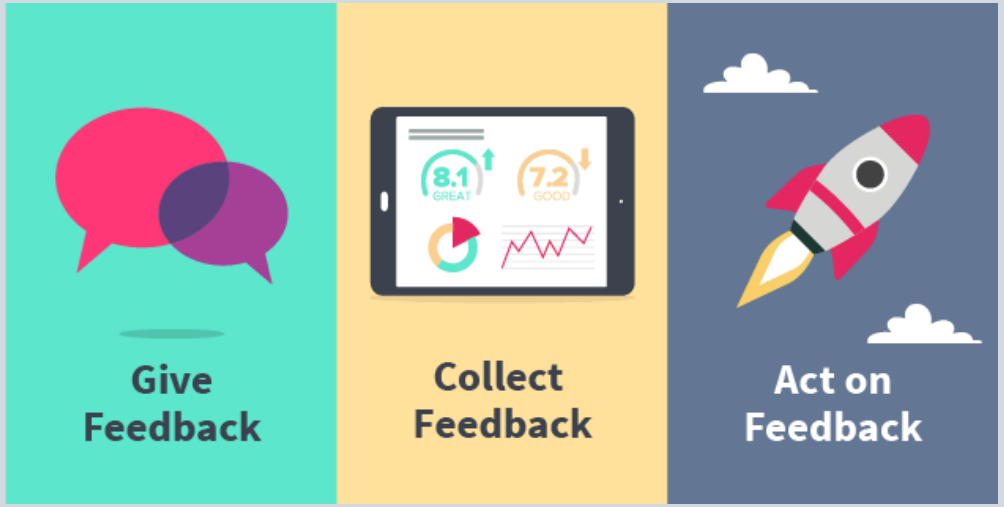
- Wish list

Juggling The List



Metric Collection





How Feasible are the Metrics?

- Importance to the organization?
- Impact to Analytics Team workload?
  - Complexity & Data Access

Continuous Engagement

- Meet with division leaders 2-3 times a week

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Leveraging Analytics Tools

Business Intelligence tool:

Tableau features embedded URL's

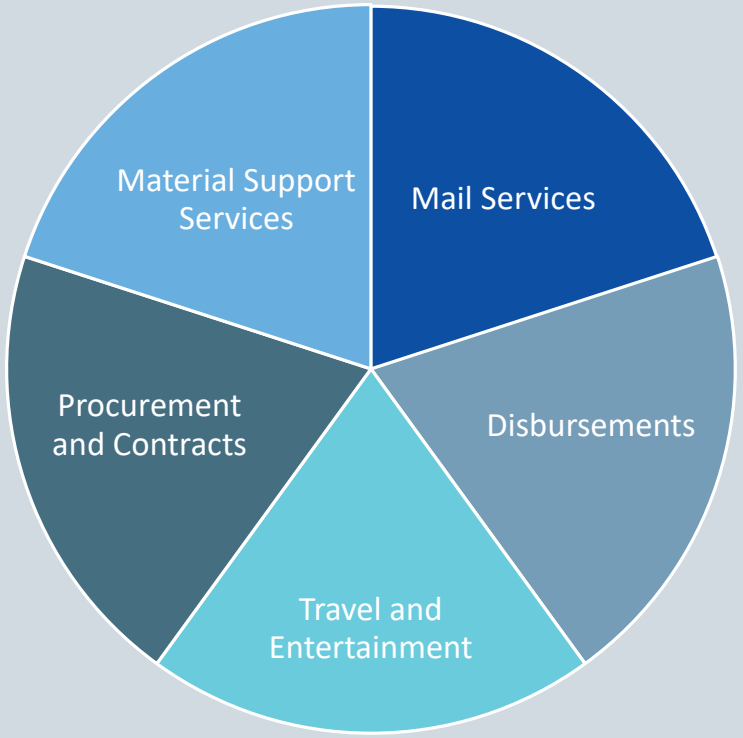
- This is the foundation of the dashboard tier system

Avoiding The Pitfall

Pitfall: High Data Volume

High Volume of data = Slow Performance

How Much Data?!?



*No computers were harmed in the making of this dashboard

Avoiding The Pitfall

Solution:
Tier Dependent Data Sources

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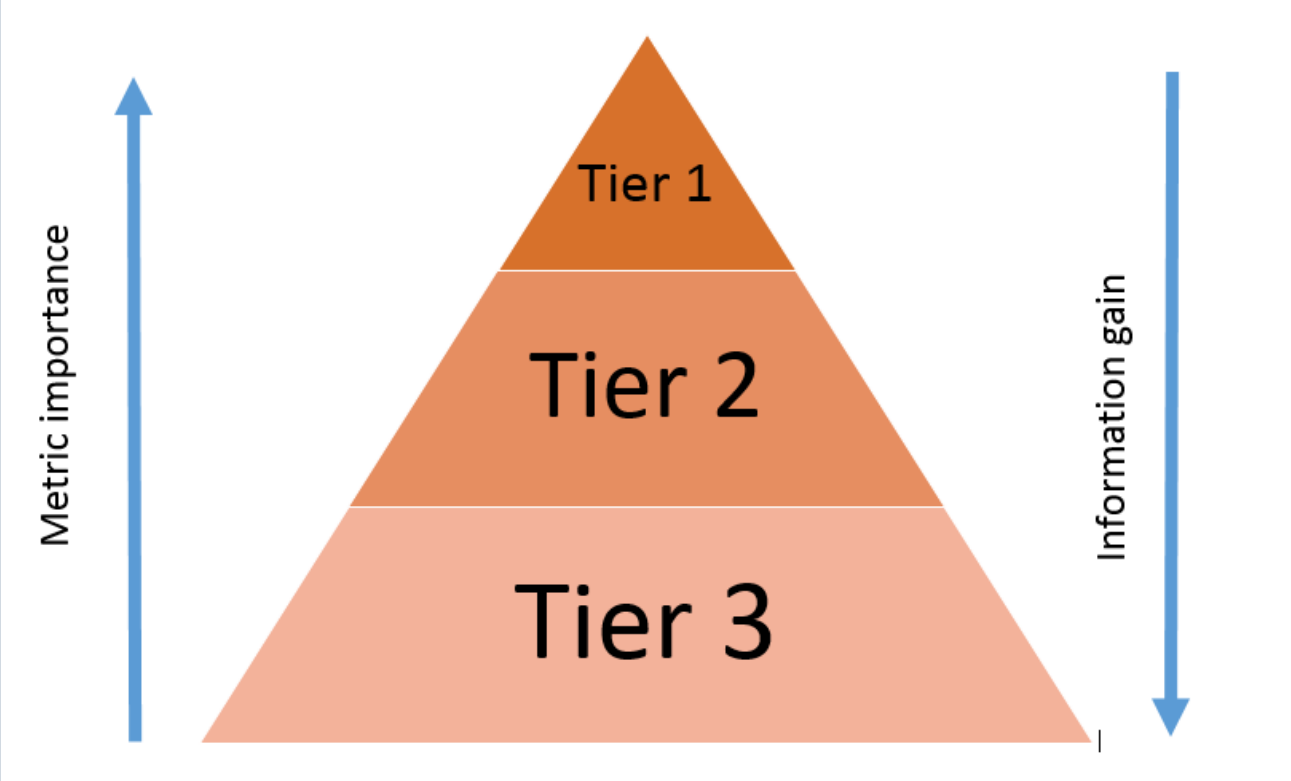
Data Tiers



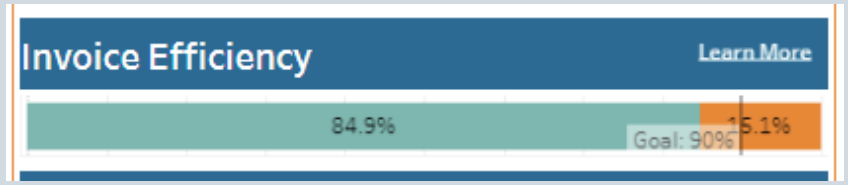
Tier 1 = Executive Dashboard (1)

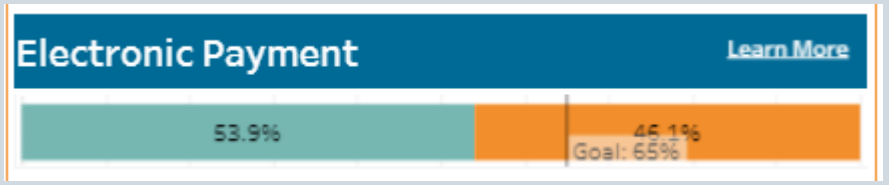
Tier 2 = Director Level Dashboard (36)

Tier 3 = Project Based Dashboard

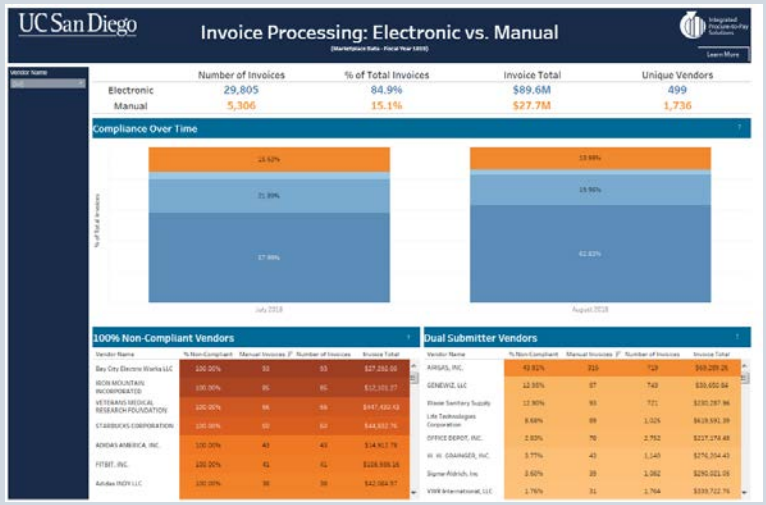
Tier Examples

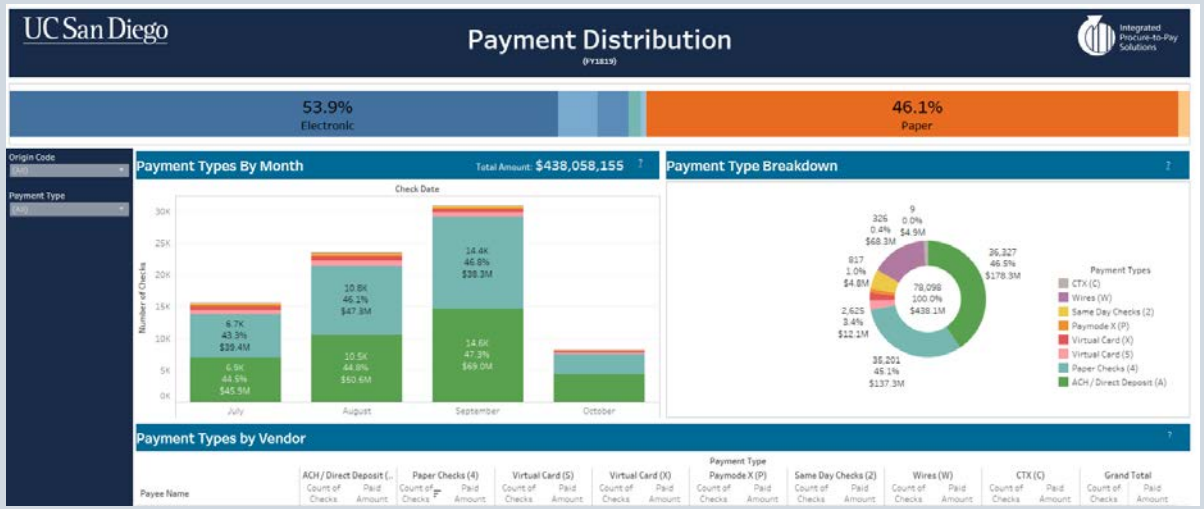
Tier 1



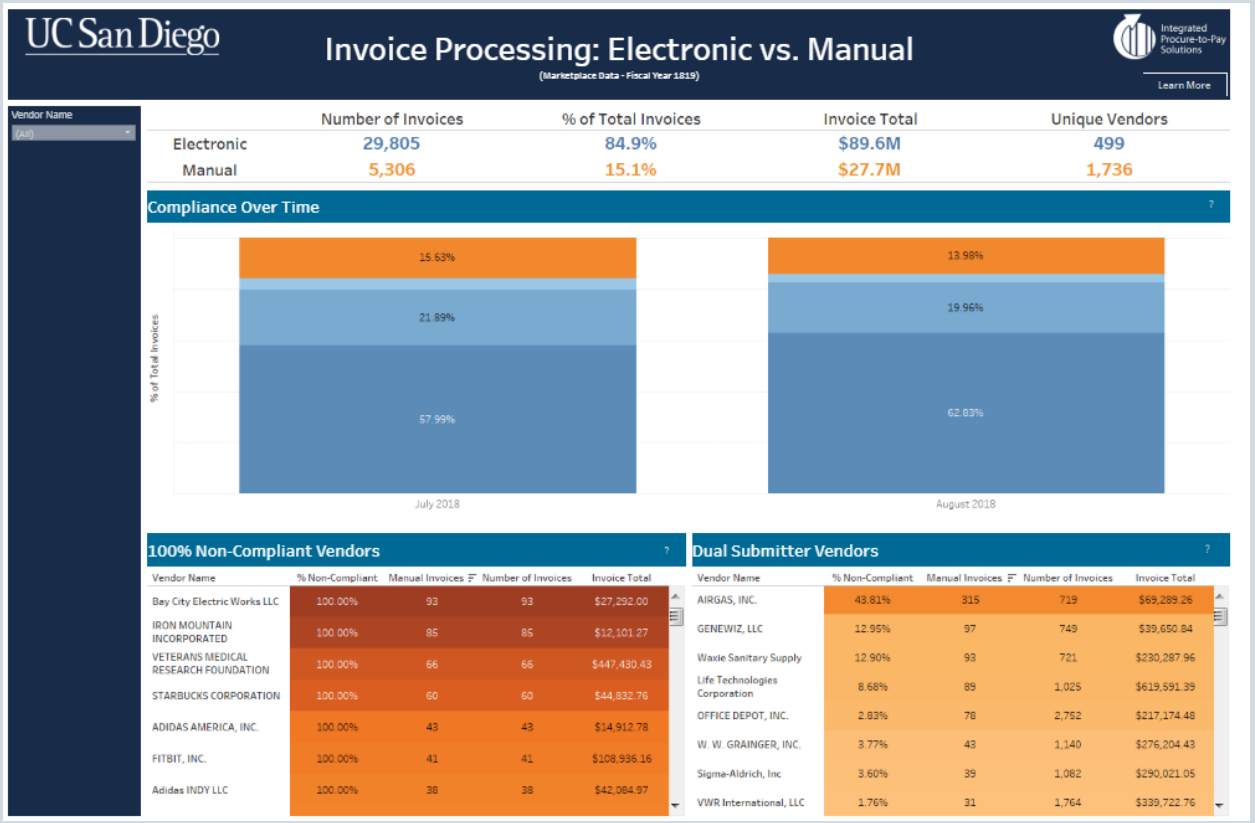


Tier 2





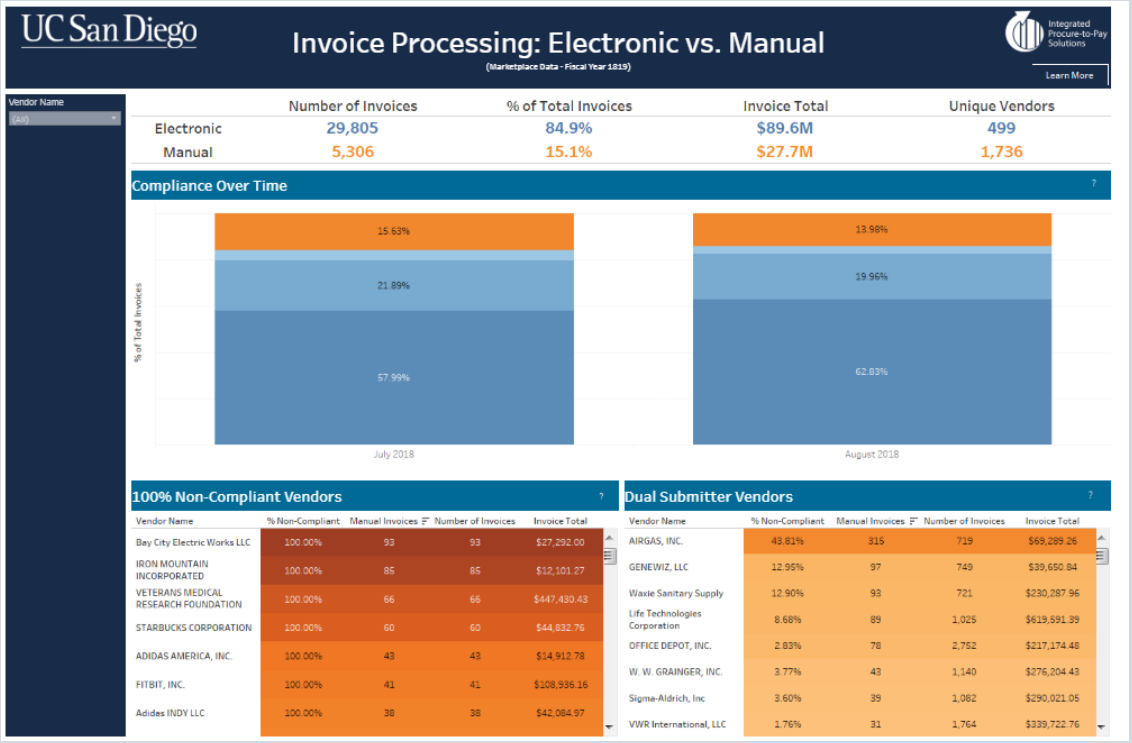
Data Structures: Tier 2



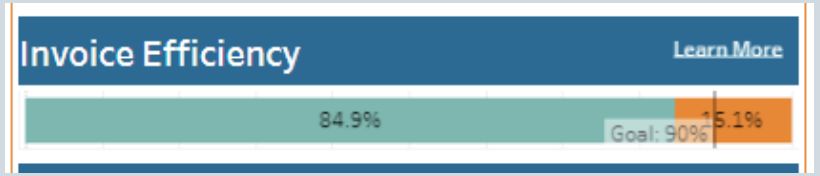
Tier 2

- Supporting details for Tier 1 metrics
- Explain WHAT is happening & WHY it is happening
- Information based on transactional level
- There is a lot of data stored in this tier

Data Structures: Tier 1



Tier 1 Metric:



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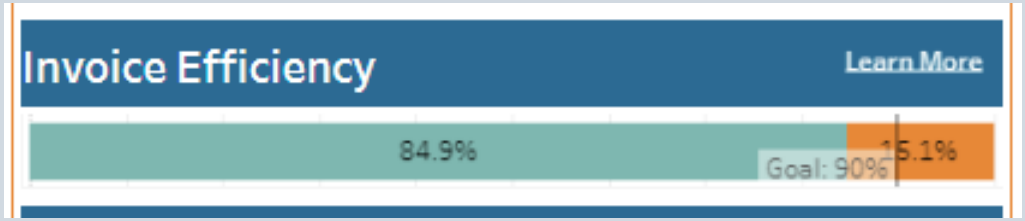
Data Structures: Tier 1

Data Structures: Tier 1

Tier 1
- High level single metric visual



Key: Summarize data to build one visual

View Data: Sheet 109

64,437 rows | Show aliases | Show all fields

Electronic v Manual	Ih Invoice Create Date	Ih Invoice Source	Invoice Date	Invoice Line Id	Invoice Number
Electronic	7/1/2018 12:00:00 AM	cXML	7/1/2018 12:...	198364329	82004028
Electronic	7/1/2018 12:00:00 AM	cXML	7/1/2018 12:...	198364393	82004029
Electronic	7/1/2018 12:00:00 AM	cXML	7/1/2018 12:...	198364391	82004029
Electronic	7/1/2018 12:00:00 AM	cXML	7/1/2018 12:...	198364394	82004029
Electronic	7/1/2018 12:00:00 AM	cXML	7/1/2018 12:...	198364392	82004029
Electronic	7/1/2018 12:00:00 AM	cXML	7/1/2018 12:...	198364390	82004029

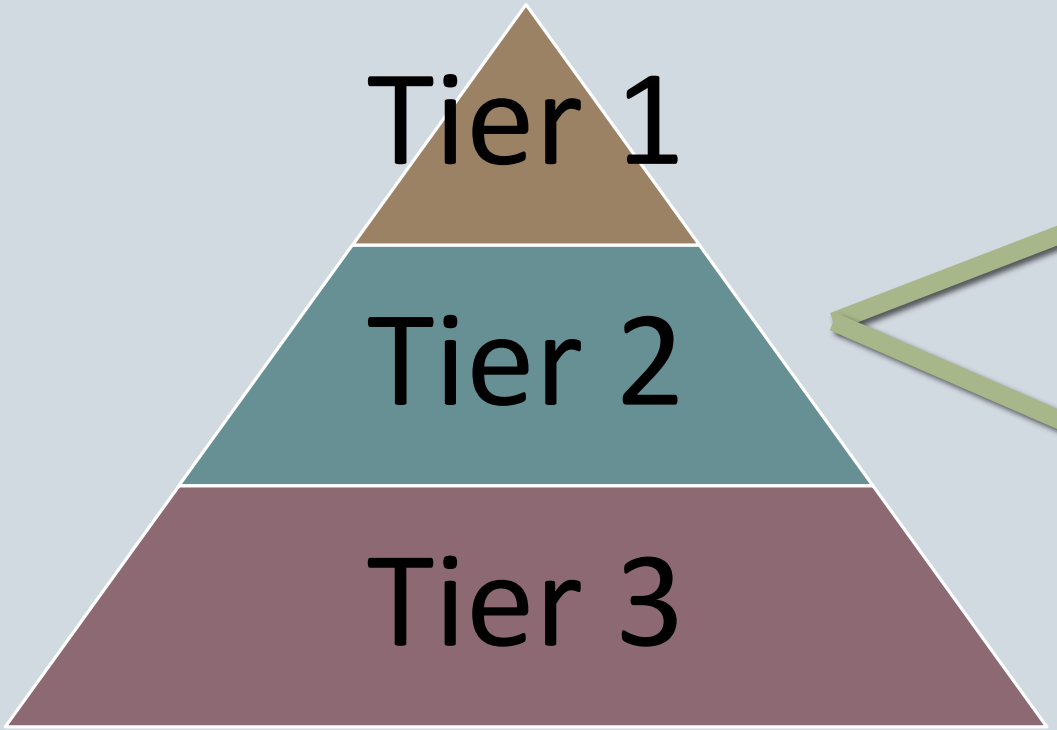
Summarize Data

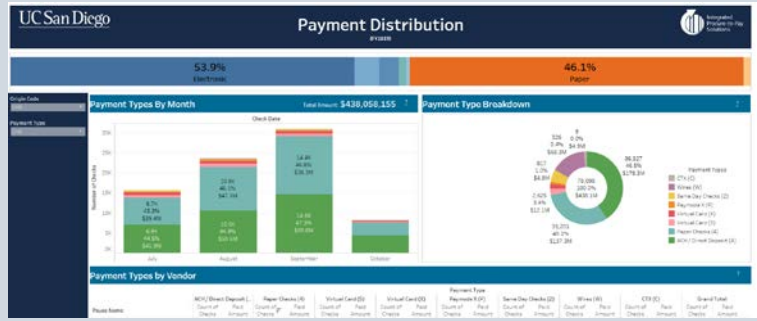
View Data: qry_Exec_InvoiceSourceTypeAmountCountPart2 (Executive_Disb_DB)

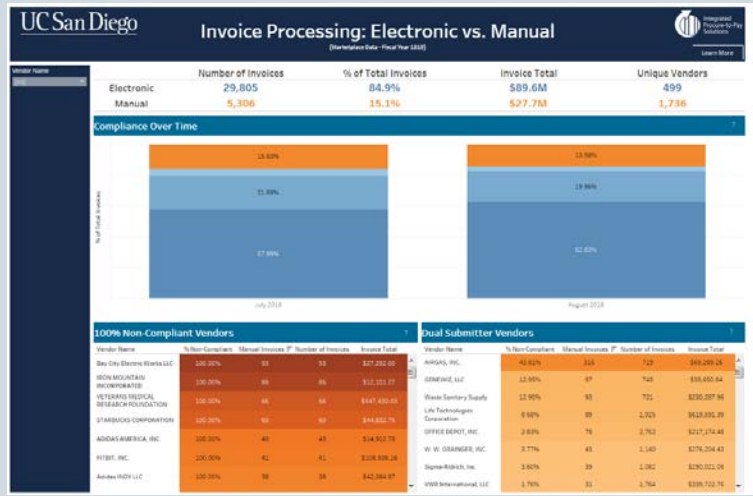
4 rows | Show aliases | Copy | Export All

Electronic v Manual	Ih Invoice Source	CountOfINVOICE NUMBER	Electronic Goal	Number of Records
Electronic	Electronic	20,896	0.900000	1
Electronic	Invoice Imp	7,472	0.900000	1
Manual	Manual	5,306	0.900000	1
Electronic	Supplier Po	1,437	0.900000	1

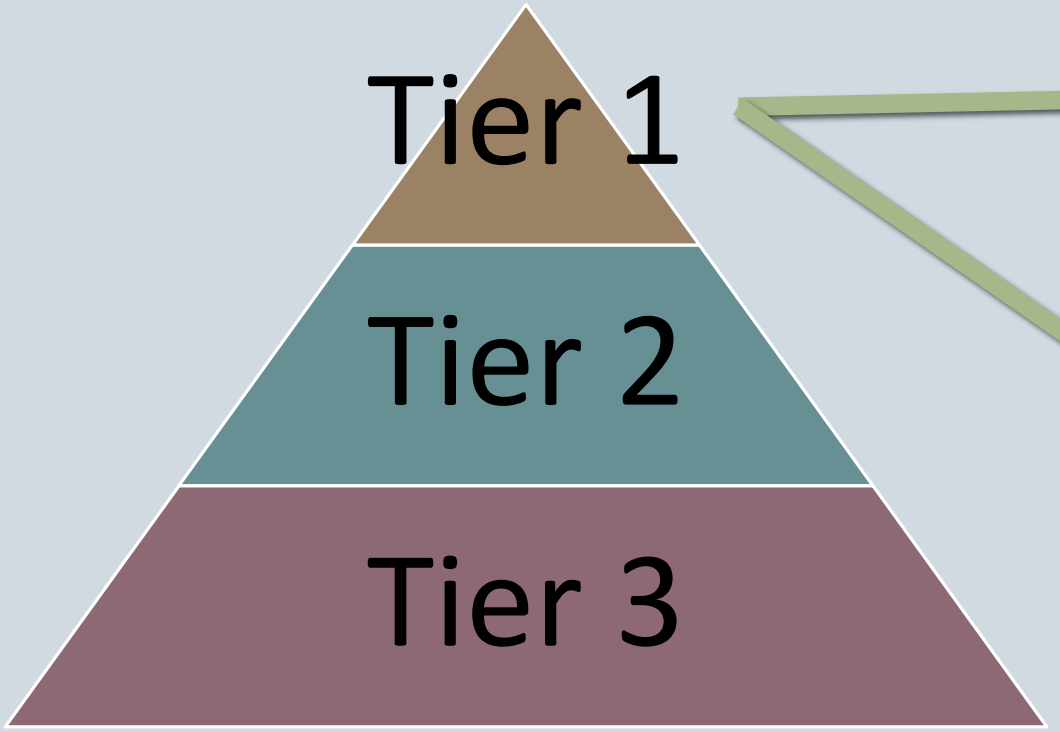
Recap Slide

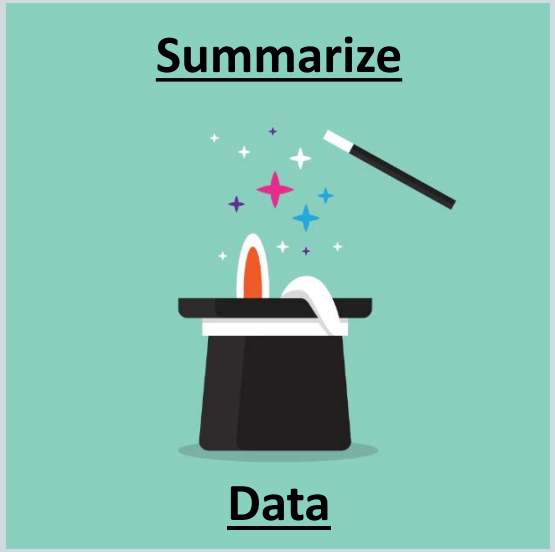

Tier 1
Tier 2
Tier 3

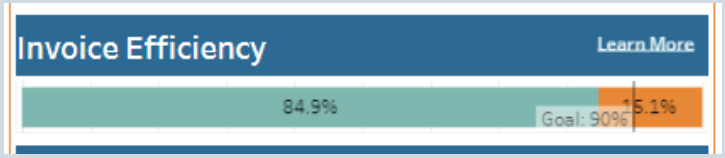

UC San Diego
Payment Distribution
53.9%
46.1%
Payment Types By Month
Payment Type Breakdown
Payment Types by Vendor


UC San Diego
Invoice Processing: Electronic vs. Manual
Number of Invoices
% of Total Invoices
Invoice Total
Unique Vendors
Electronic
29,805
84.9%
$89.6M
499
Manual
5,306
15.1%
$27.7M
1,736
Compliance Over Time
100% Non-Compliant Vendors
Dual Submitter Vendors

Recap Slide


Tier 1
Tier 2
Tier 3


Summarize
Data


Invoice Efficiency
Learn More
84.9%
Goal: 90%
95.1%

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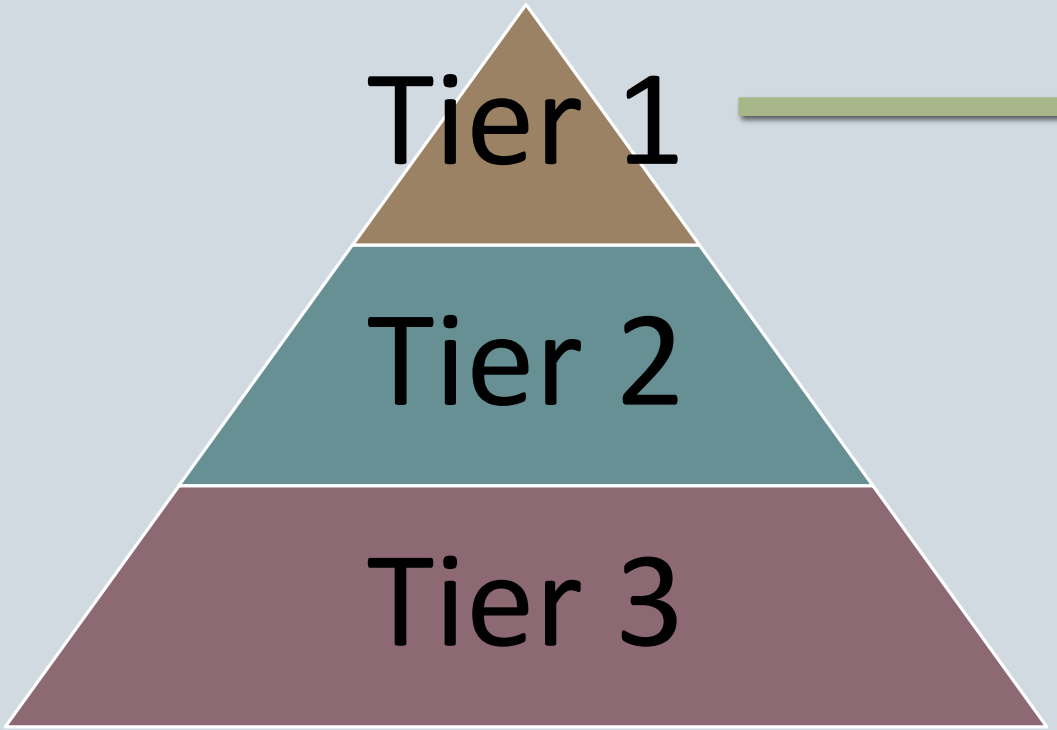
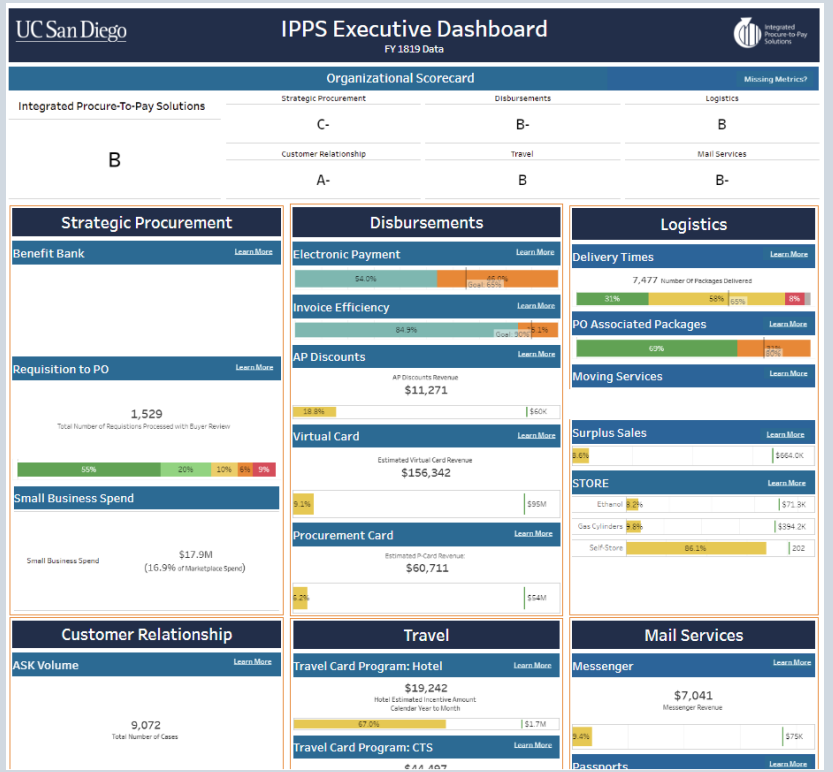
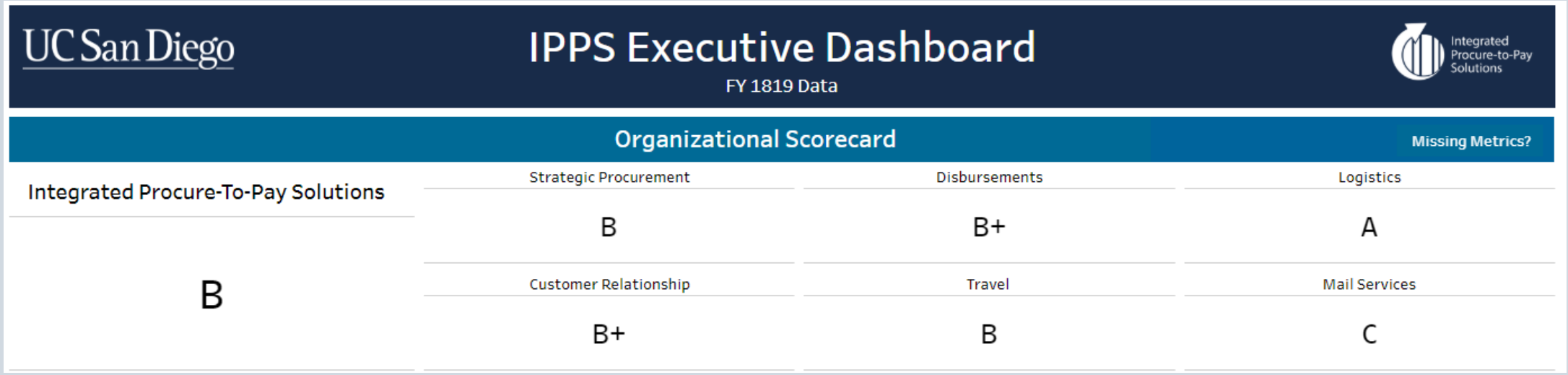
Recap Slide





Grade Creation



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IPPS Executive Dashboard

FY 1819 Data

Integrated Procure-to-Pay Solutions

Organizational Scorecard

Missing Metrics?

Integrated Procure-To-Pay Solutions	Strategic Procurement	Disbursements	Logistics
	B	B+	A
B	Customer Relationship	Travel	Mail Services
	B+	B	C

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Grade Creation

Grade Creation

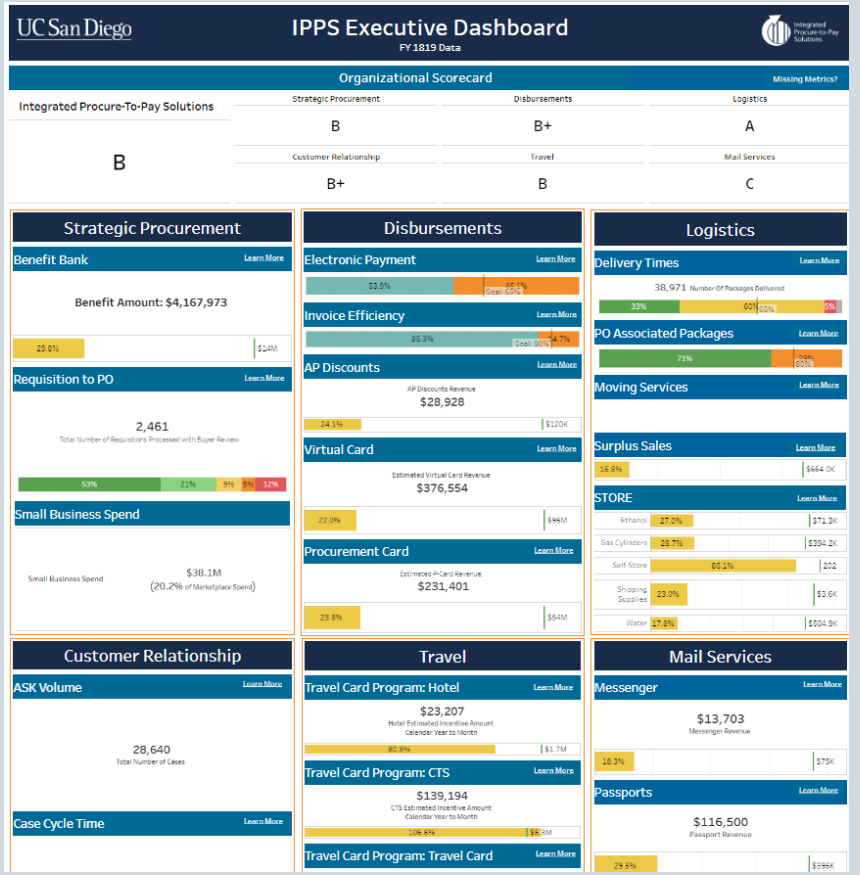
Monthly Milestone

- Financial goals
- Sales goals

Transactional Grading Buckets

- Transactional Metrics

Executive Dashboard Time!



Lessons Learned

Defining Metric Goals & Benchmarks is Critical

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Subject Matter Experts are Key

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External Data Sources

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Can’t Measure What You Don’t Track

Lessons Learned

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Document, Document, Document

Lessons Learned

Defining Metric Goals & Benchmarks is Critical

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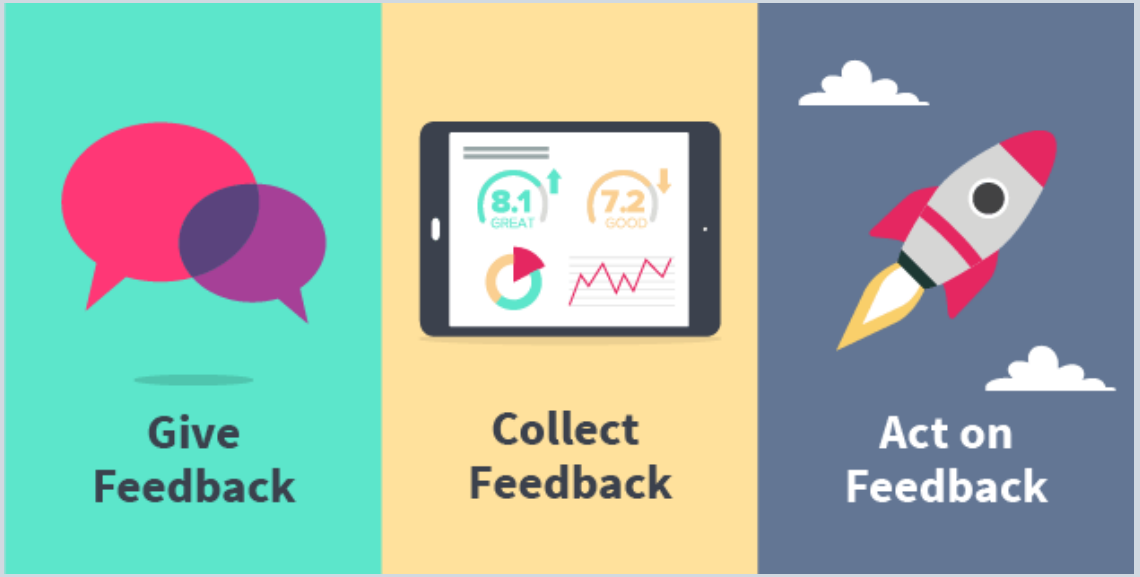
Document, Document, Document

Continuous Organizational Engagement



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Mission Accomplished

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Resources

Tableau Conference 2018

- https://www.youtube.com/playlist?list=PL_qx68DwhYA_NN2iHc9hdIRSQl9FOIm1t

Tableau Training Videos

- https://www.tableau.com/learn/training

InterWorks Blog

- https://www.interworks.com/blog

Evolytics Blog

- https://www.evolytics.com/blog

Makeover Monday

- http://www.makeovermonday.co.uk/data/

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All Done!