Massport: Eliminating Data Silos to Drive Results

Speaker Name:
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Massport, PMA, and Gryps

Project Controls EXPO
Washington, DC - USA

Season 1



Gryps

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PMA Est. 1971

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Aviation

- Boston Logan Airport
- Hanscom Field
- Worcester Airport

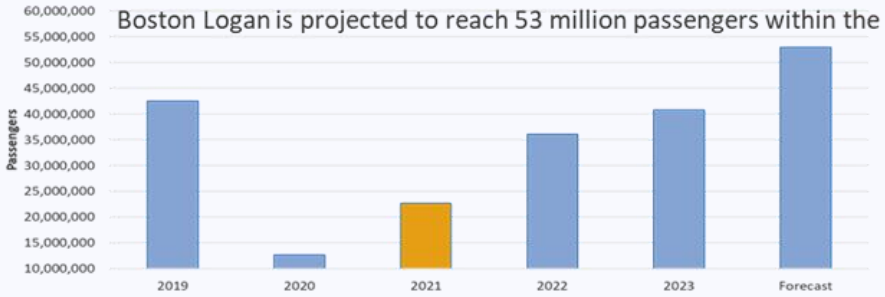
Maritime

- Conley Terminal
- Flynn Cruiseport
- Seafood Landlord
- Boston Autoport

Real Estate

- South Boston
- East Boston
- Charlestown

Boston Logan is projected to reach 53 million passengers within the next 10 to 15 years



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The Problem

Data silos, inconsistent data quality, and manual reporting processes that limited visibility and made it difficult to proactively manage financial and project risk across its large capital program.

- **Fragmented & Inconsistent Systems**
  - Critical project data split across Oracle Primavera P6, PMWeb, and other legacy tools
  - No unified source of truth to align finance, project controls, and leadership
- **Data Quality & Consistency Challenges**
  - Cost codes and budget data captured differently across platforms
  - Data discrepancies erode trust in reports
- **Manual, Error-Prone Reporting**
  - Heavy reliance on spreadsheets to reconcile siloed information
  - Significant time lost producing reports instead of managing projects
- **Limited Visibility to Manage Risk**
  - Incomplete or delayed insights into cash flow and budget vs. actuals
  - Difficult for teams to identify risks across dozens of active jobs and billions in capital work

Owner Challenges to Address

- Tight Budgets Require Increased Efficiency/Automation
  - $1M+ lost on finding information & documents
  - Manual Processes/Human Error
    - Financial Reconciliation
    - Reporting
    - Data Collection
    - Closeout
- Employee Turnover
  - Onboarding/Training
  - Access to data
  - Retention and access to institutional knowledge
- Data Permission Challenges
- Costly and time consuming integrations

47%

of CXOs say data readiness is the top challenge in applying generative AI.

(Accenture - The New Data Essentials. 2024)



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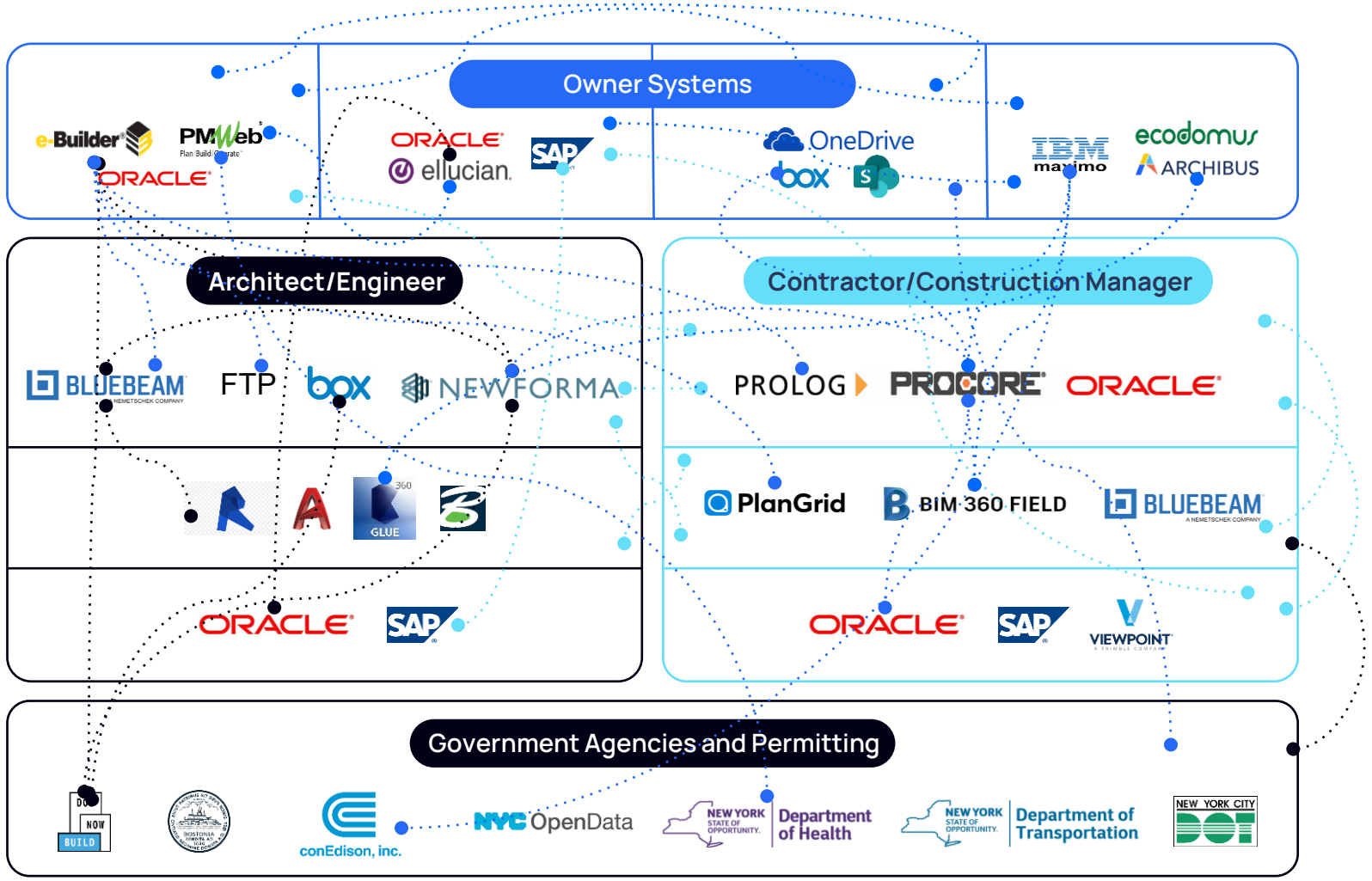
Operational mistakes can cost *$1-10M+ each

*depending on the facility

- **Data quality challenges**
- **No smart data for decision making**

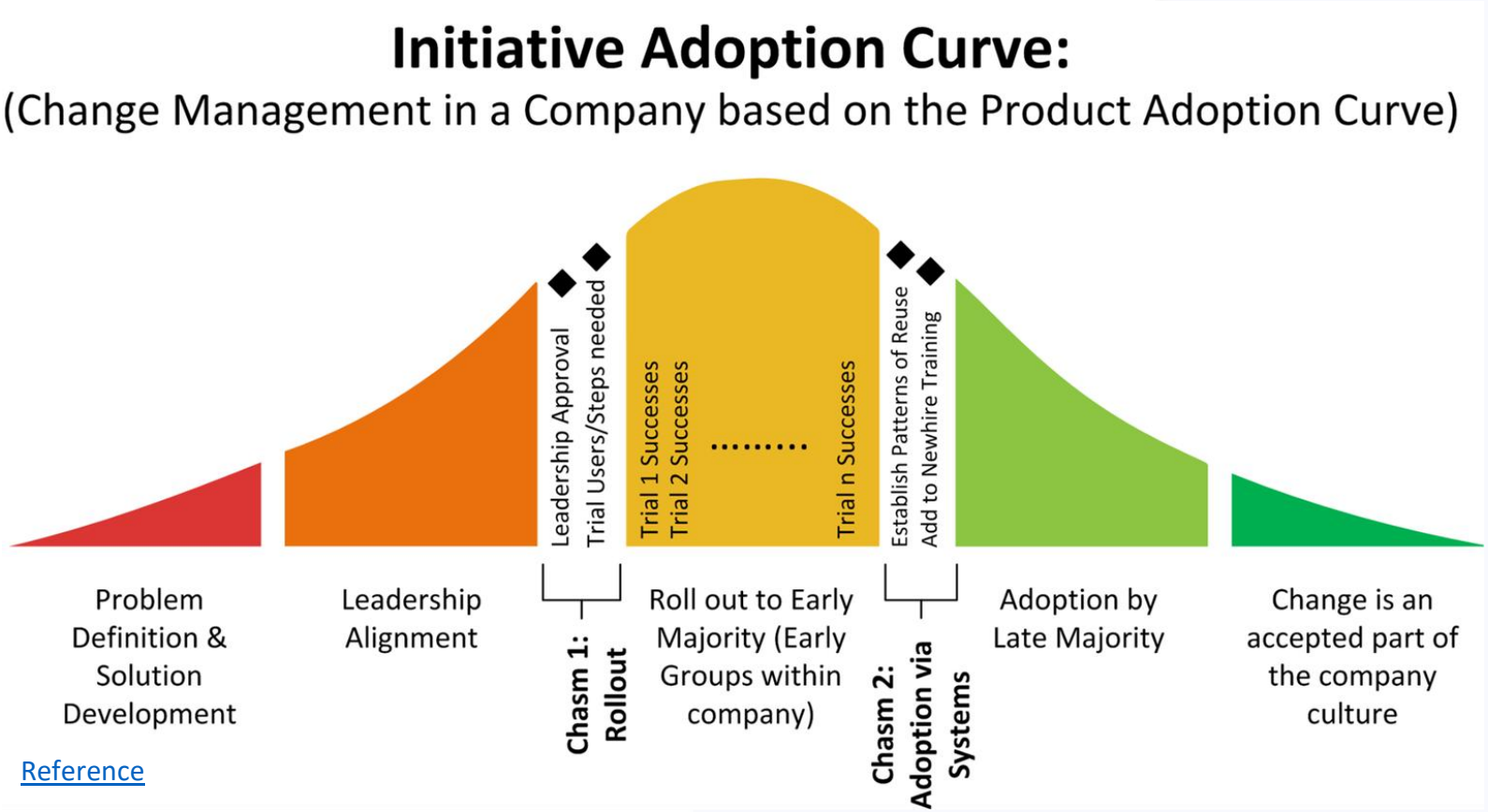
- Collecting data is highly manual
- Costly and time consuming integrations

› $3M lost
annually per project



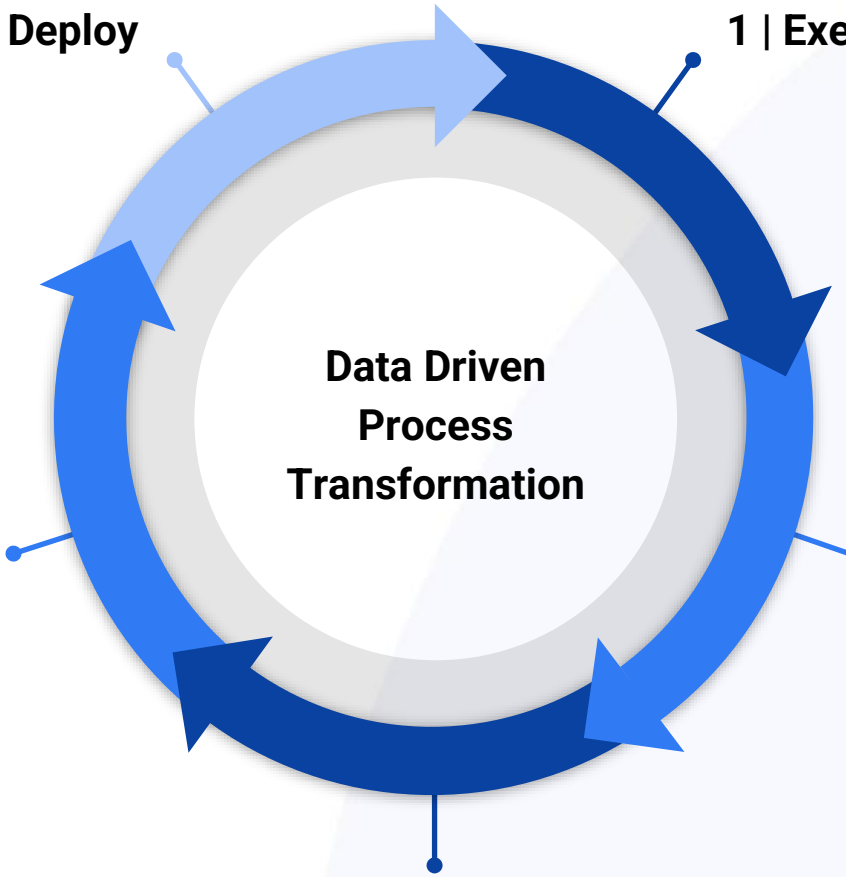


Changing the Culture



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Our Process



5 | Deploy

1 | Executive Vision Alignment

4 | Data Source Gaps & Process Improvement

2 | Identify Data Sources

3 | Sample Dashboards

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Tracking the Capital Spending



- Audience & Users
- Purpose of the Visuals
- Data Update Cadence
- Maintenance of Dashboards
- Additional Use Cases

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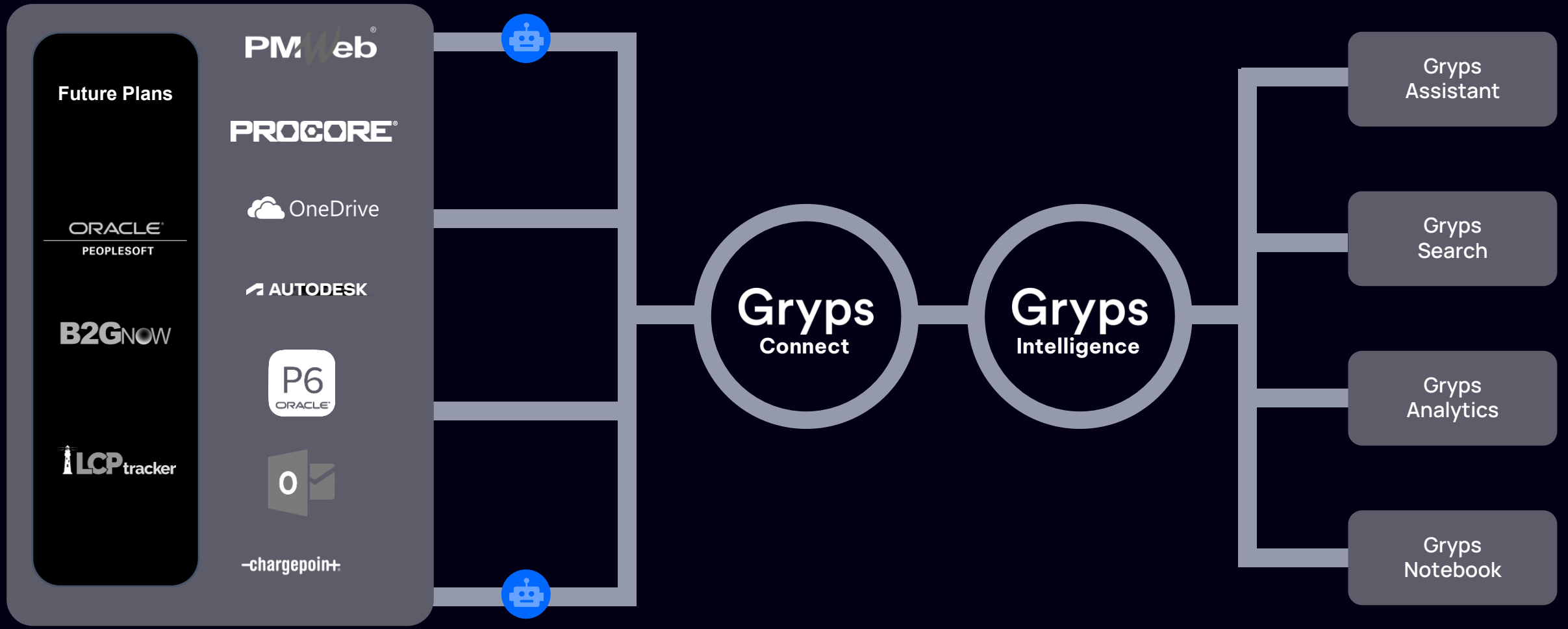
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Why Change the Current Setup?

- Maintenance of Current Setup
- Scale of Data Ingestions and Updates
- Ability to add more system connections
- Extracting Data from Files
- User Permissions/Data Security/Privacy

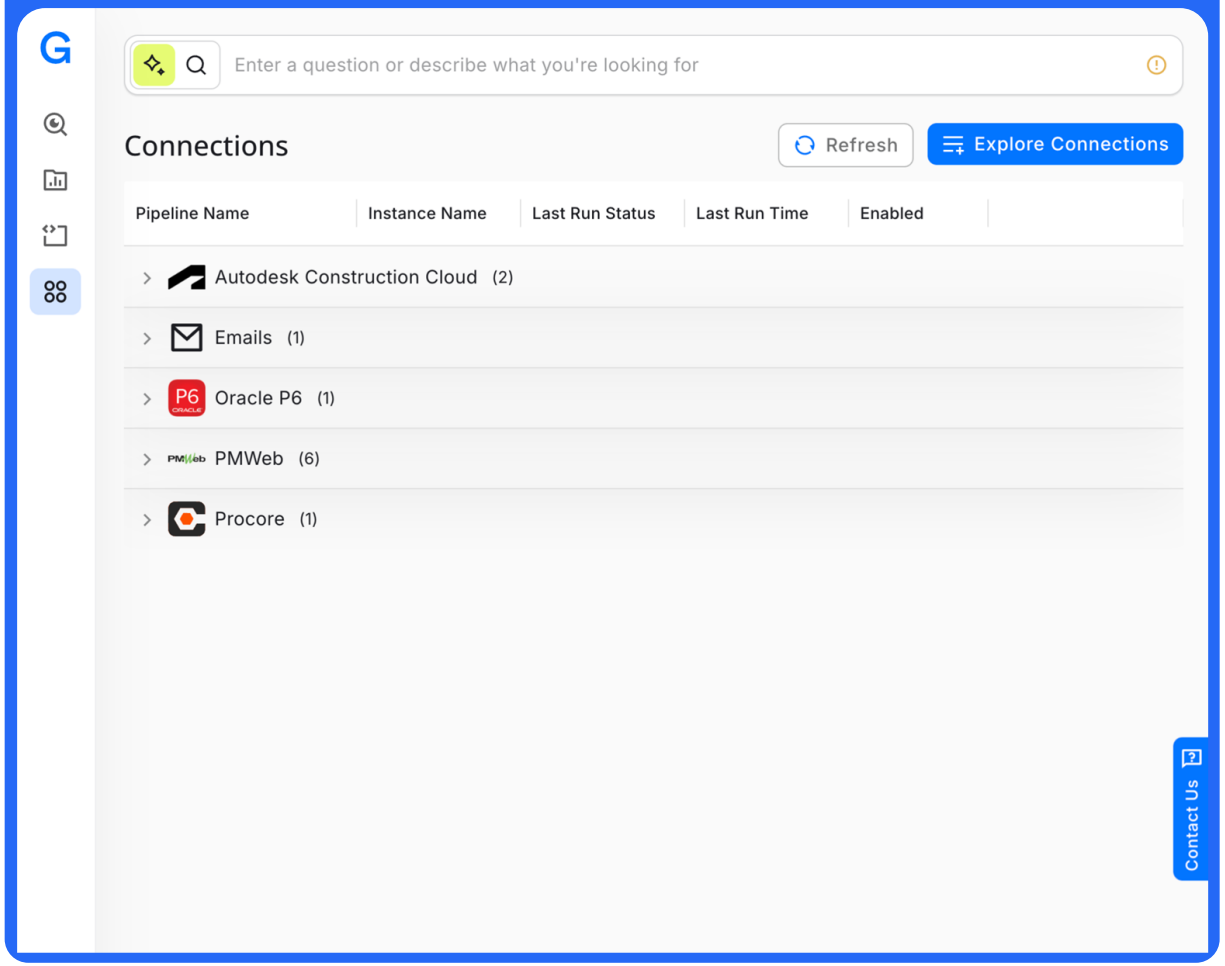
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Gryps Platform at Massport - 800K files, 8M Pages

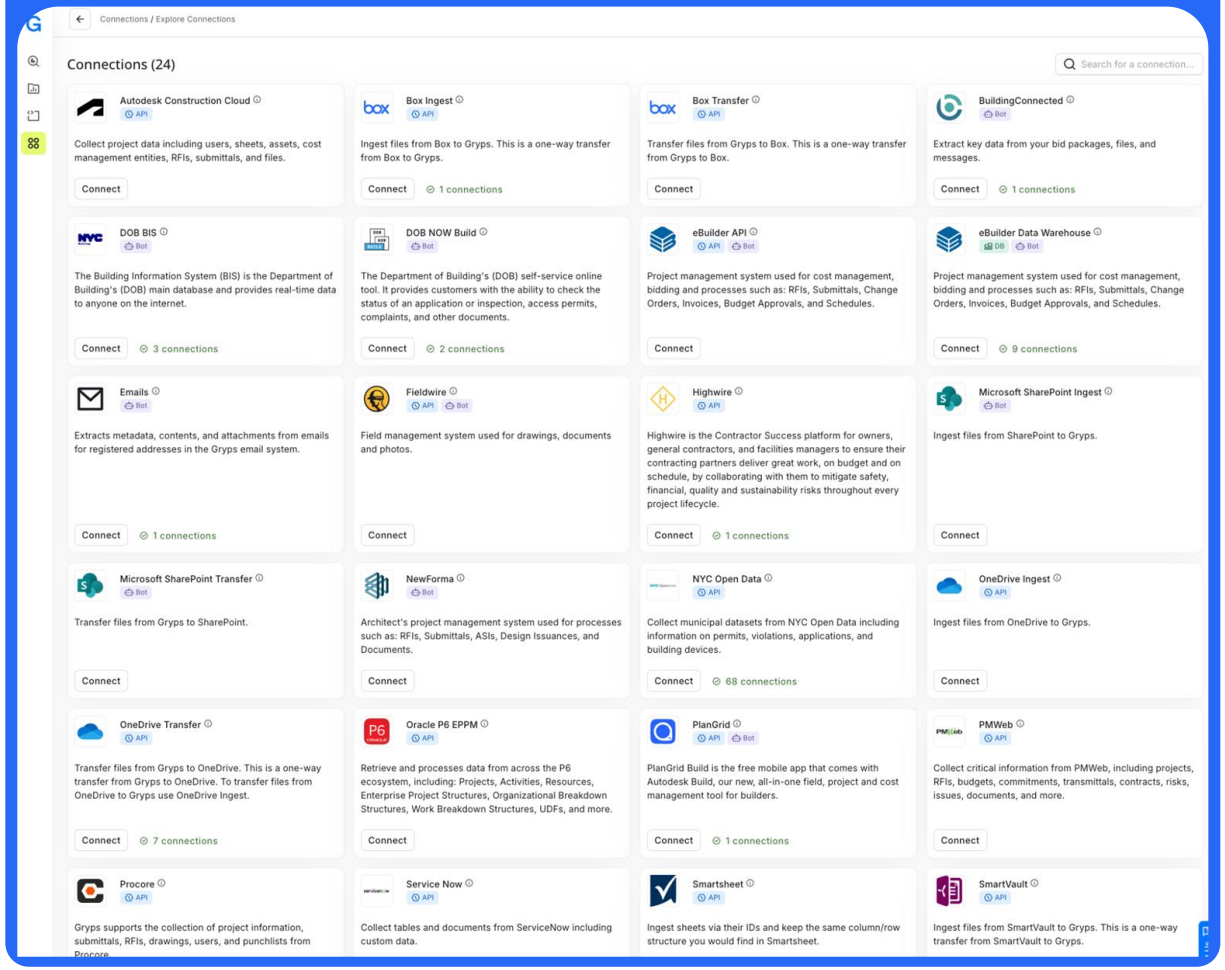


Gryps Solution at Massport

Manage Connections

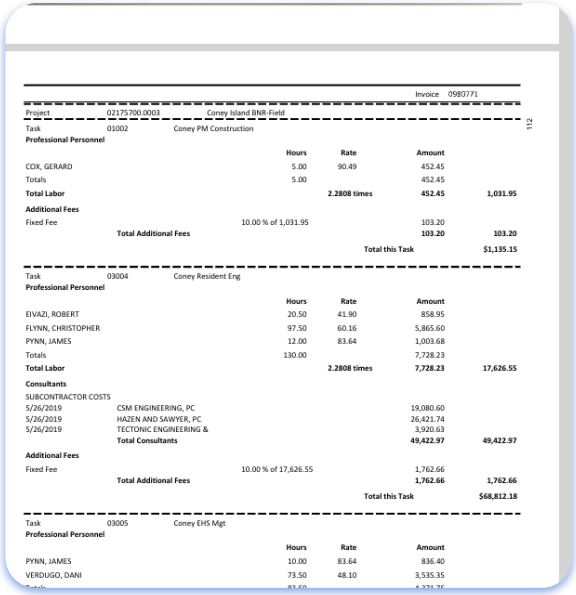


Make a Connection



Analytics from Unstructured Data

Extraction of Hourly Rates from Files



Invoice 0980771

Project 02175700.0003 Coney Island BNR-Field

Task 01002 Coney PM Construction

Professional Personnel

	Hours	Rate	Amount	
COX, GERARD	5.00	90.49	452.45	
Totals	5.00		452.45	
Total Labor		**2.2808 times**	**452.45**	**1,031.95**

Additional Fees

Fixed Fee	10.00 % of 1,031.95	103.20	
Total Additional Fees		**103.20**	**103.20**
	Total this Task		**$1,135.15**

Task 03004 Coney Resident Eng

Professional Personnel

	Hours	Rate	Amount	
EIVAZI, ROBERT	20.50	41.90	858.95	
FLYNN, CHRISTOPHER	97.50	60.16	5,865.60	
PYNN, JAMES	12.00	83.64	1,003.68	
Totals	130.00		7,728.23	
Total Labor		**2.2808 times**	**7,728.23**	**17,626.55**

Consultants

SUBCONTRACTOR COSTS

5/26/2019	CSM ENGINEERING, PC	19,080.60	
5/26/2019	HAZEN AND SAWYER, PC	26,421.74	
5/26/2019	TECTONIC ENGINEERING &	3,920.63	
Total Consultants		**49,422.97**	**49,422.97**

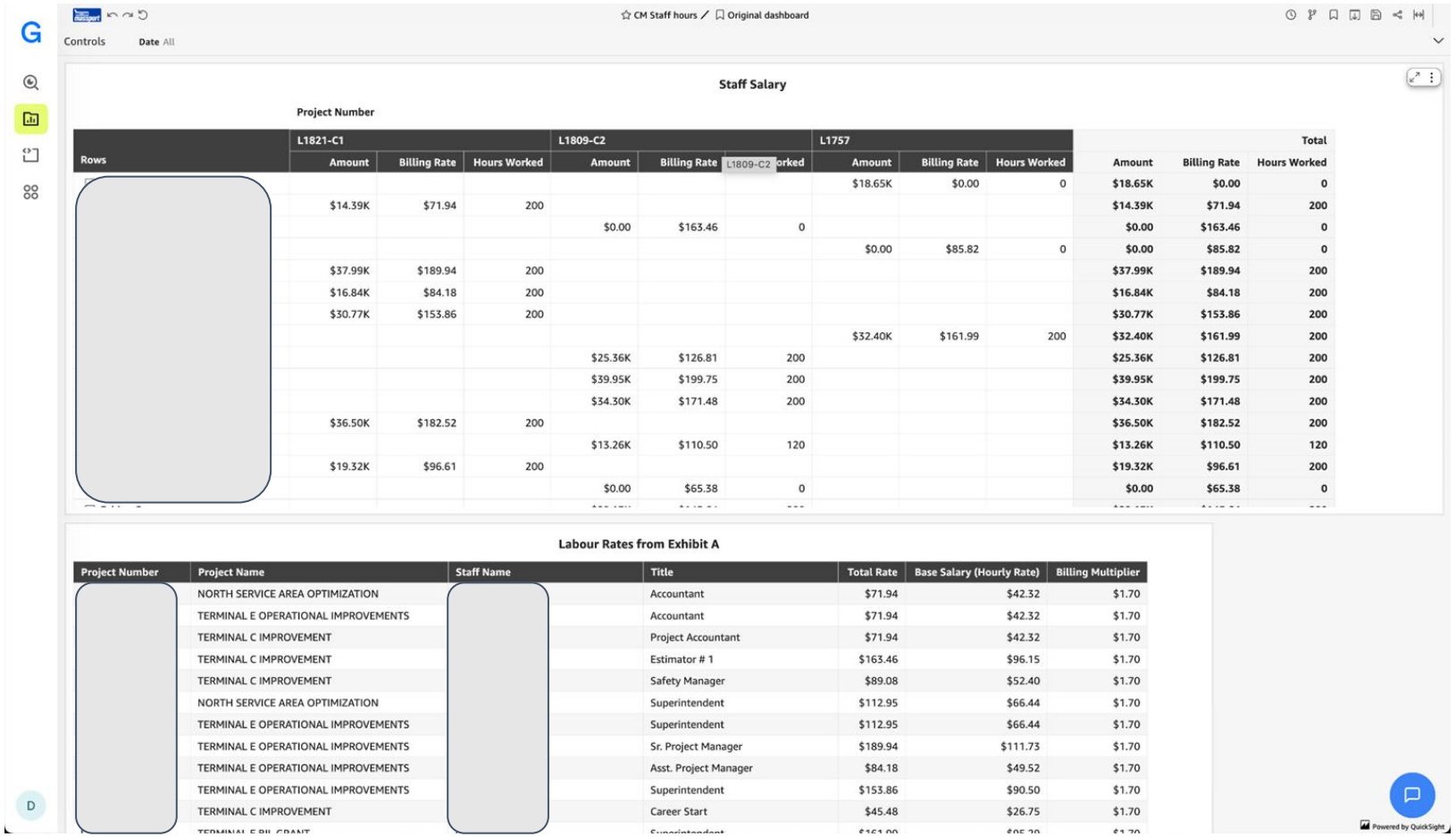
Additional Fees

Fixed Fee	10.00 % of 17,626.55	1,762.66	
Total Additional Fees		**1,762.66**	**1,762.66**
	Total this Task		**$68,812.18**

Task 03005 Coney EHS Mgt

Professional Personnel

	Hours	Rate	Amount
PYNN, JAMES	10.00	83.64	836.40
VERDUGO, DANI	73.50	48.10	3,535.35



CM Staff hours / Original dashboard

Controls Date All

Staff Salary

Project Number

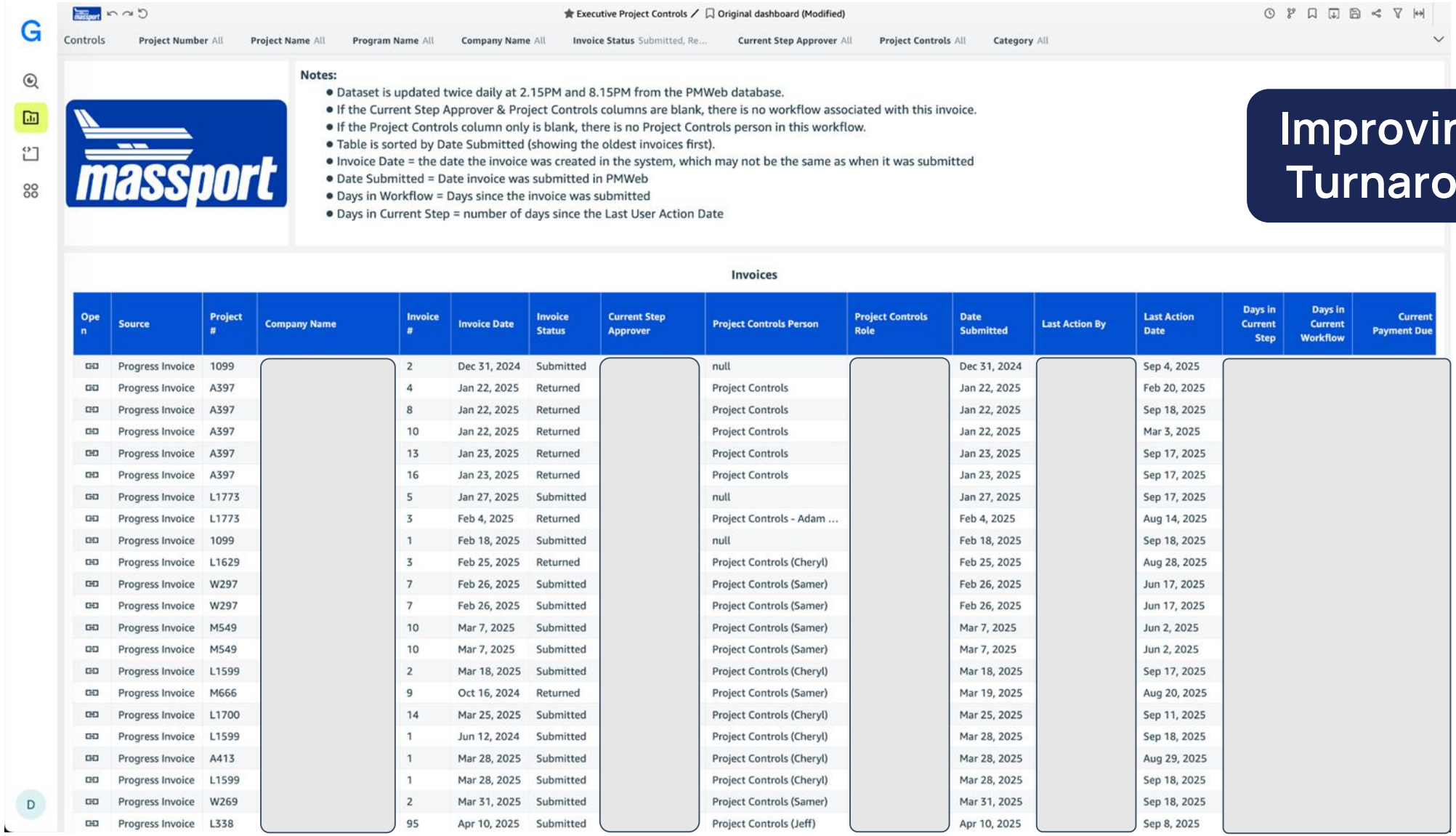
Rows	L1821-C1			L1809-C2			L1757			Total		
	Amount	Billing Rate	Hours Worked	Amount	Billing Rate	Hours Worked	Amount	Billing Rate	Hours Worked	Amount	Billing Rate	Hours Worked
							$18.65K	$0.00	0	$18.65K	$0.00	0
	$14.39K	$71.94	200							$14.39K	$71.94	200
				$0.00	$163.46	0				$0.00	$163.46	0
							$0.00	$85.82	0	$0.00	$85.82	0
	$37.99K	$189.94	200							$37.99K	$189.94	200
	$16.84K	$84.18	200							$16.84K	$84.18	200
	$30.77K	$153.86	200							$30.77K	$153.86	200
							$32.40K	$161.99	200	$32.40K	$161.99	200
				$25.36K	$126.81	200				$25.36K	$126.81	200
				$39.95K	$199.75	200				$39.95K	$199.75	200
				$34.30K	$171.48	200				$34.30K	$171.48	200
	$36.50K	$182.52	200							$36.50K	$182.52	200
				$13.26K	$110.50	120				$13.26K	$110.50	120
	$19.32K	$96.61	200							$19.32K	$96.61	200
				$0.00	$65.38	0				$0.00	$65.38	0

Labour Rates from Exhibit A

Project Number	Project Name	Staff Name	Title	Total Rate	Base Salary (Hourly Rate)	Billing Multiplier
	NORTH SERVICE AREA OPTIMIZATION		Accountant	$71.94	$42.32	$1.70
	TERMINAL E OPERATIONAL IMPROVEMENTS		Accountant	$71.94	$42.32	$1.70
	TERMINAL C IMPROVEMENT		Project Accountant	$71.94	$42.32	$1.70
	TERMINAL C IMPROVEMENT		Estimator # 1	$163.46	$96.15	$1.70
	TERMINAL C IMPROVEMENT		Safety Manager	$89.08	$52.40	$1.70
	NORTH SERVICE AREA OPTIMIZATION		Superintendent	$112.95	$66.44	$1.70
	TERMINAL E OPERATIONAL IMPROVEMENTS		Superintendent	$112.95	$66.44	$1.70
	TERMINAL E OPERATIONAL IMPROVEMENTS		Sr. Project Manager	$189.94	$111.73	$1.70
	TERMINAL E OPERATIONAL IMPROVEMENTS		Asst. Project Manager	$84.18	$49.52	$1.70
	TERMINAL E OPERATIONAL IMPROVEMENTS		Superintendent	$153.86	$90.50	$1.70
	TERMINAL C IMPROVEMENT		Career Start	$45.48	$26.75	$1.70

Powered by QuickSight

Invoice Tracker

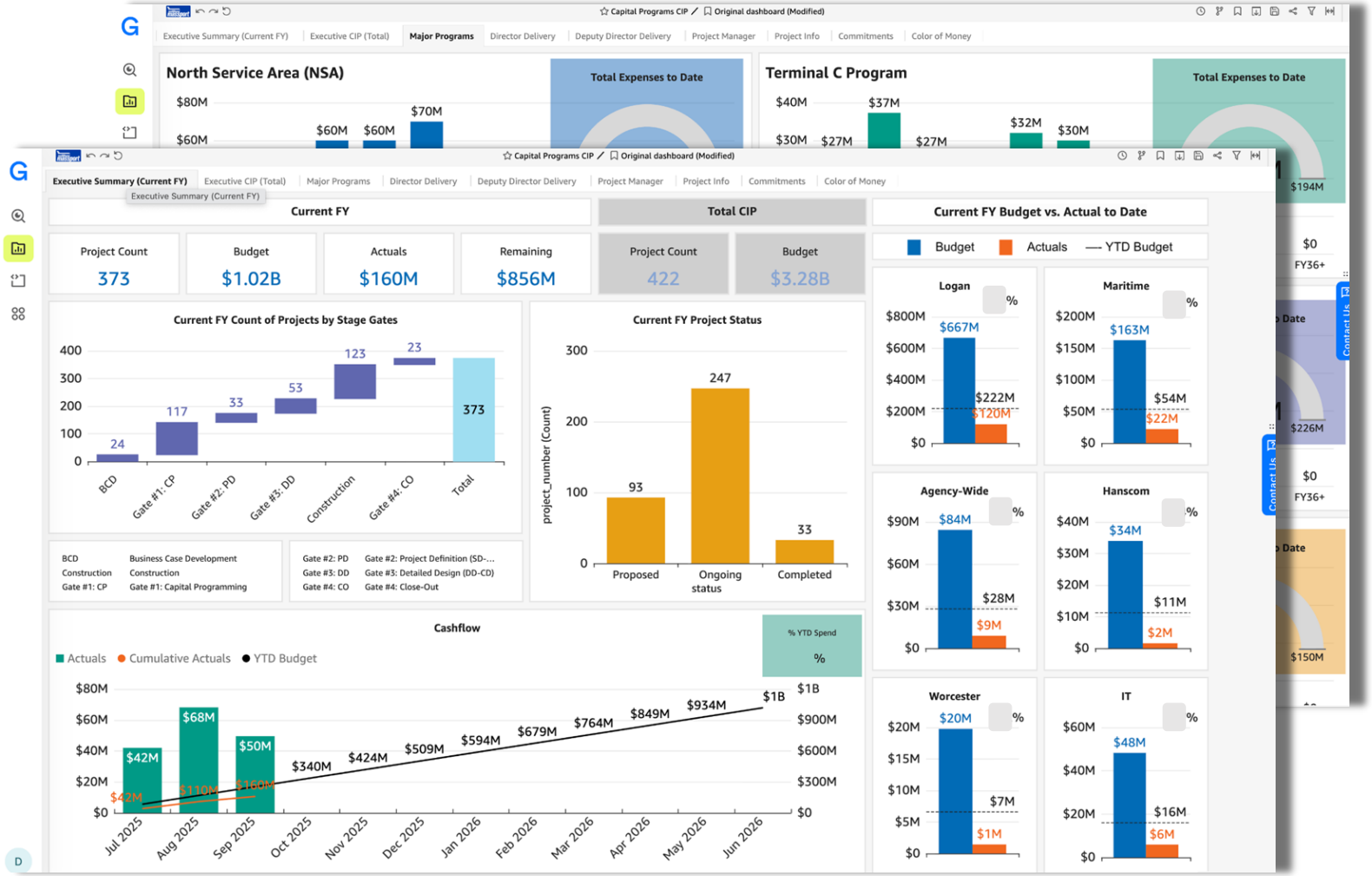


Invoices

Open	Source	Project #	Company Name	Invoice #	Invoice Date	Invoice Status	Current Step Approver	Project Controls Person	Project Controls Role	Date Submitted	Last Action By	Last Action Date	Days in Current Step	Days in Current Workflow	Current Payment Due
	Progress Invoice	1099		2	Dec 31, 2024	Submitted		null		Dec 31, 2024		Sep 4, 2025			
	Progress Invoice	A397		4	Jan 22, 2025	Returned		Project Controls		Jan 22, 2025		Feb 20, 2025			
	Progress Invoice	A397		8	Jan 22, 2025	Returned		Project Controls		Jan 22, 2025		Sep 18, 2025			
	Progress Invoice	A397		10	Jan 22, 2025	Returned		Project Controls		Jan 22, 2025		Mar 3, 2025			
	Progress Invoice	A397		13	Jan 23, 2025	Returned		Project Controls		Jan 23, 2025		Sep 17, 2025			
	Progress Invoice	A397		16	Jan 23, 2025	Returned		Project Controls		Jan 23, 2025		Sep 17, 2025			
	Progress Invoice	L1773		5	Jan 27, 2025	Submitted		null		Jan 27, 2025		Sep 17, 2025			
	Progress Invoice	L1773		3	Feb 4, 2025	Returned		Project Controls - Adam ...		Feb 4, 2025		Aug 14, 2025			
	Progress Invoice	1099		1	Feb 18, 2025	Submitted		null		Feb 18, 2025		Sep 18, 2025			
	Progress Invoice	L1629		3	Feb 25, 2025	Returned		Project Controls (Cheryl)		Feb 25, 2025		Aug 28, 2025			
	Progress Invoice	W297		7	Feb 26, 2025	Submitted		Project Controls (Samer)		Feb 26, 2025		Jun 17, 2025			
	Progress Invoice	W297		7	Feb 26, 2025	Submitted		Project Controls (Samer)		Feb 26, 2025		Jun 17, 2025			
	Progress Invoice	M549		10	Mar 7, 2025	Submitted		Project Controls (Samer)		Mar 7, 2025		Jun 2, 2025			
	Progress Invoice	M549		10	Mar 7, 2025	Submitted		Project Controls (Samer)		Mar 7, 2025		Jun 2, 2025			
	Progress Invoice	L1599		2	Mar 18, 2025	Submitted		Project Controls (Cheryl)		Mar 18, 2025		Sep 17, 2025			
	Progress Invoice	M666		9	Oct 16, 2024	Returned		Project Controls (Samer)		Mar 19, 2025		Aug 20, 2025			
	Progress Invoice	L1700		14	Mar 25, 2025	Submitted		Project Controls (Cheryl)		Mar 25, 2025		Sep 11, 2025			
	Progress Invoice	L1599		1	Jun 12, 2024	Submitted		Project Controls (Cheryl)		Mar 28, 2025		Sep 18, 2025			
	Progress Invoice	A413		1	Mar 28, 2025	Submitted		Project Controls (Cheryl)		Mar 28, 2025		Aug 29, 2025			
	Progress Invoice	L1599		1	Mar 28, 2025	Submitted		Project Controls (Cheryl)		Mar 28, 2025		Sep 18, 2025			
	Progress Invoice	W269		2	Mar 31, 2025	Submitted		Project Controls (Samer)		Mar 31, 2025		Sep 18, 2025			
	Progress Invoice	L338		95	Apr 10, 2025	Submitted		Project Controls (Jeff)		Apr 10, 2025		Sep 8, 2025			

Improving Invoice Turnaround Time

Executive Dashboard



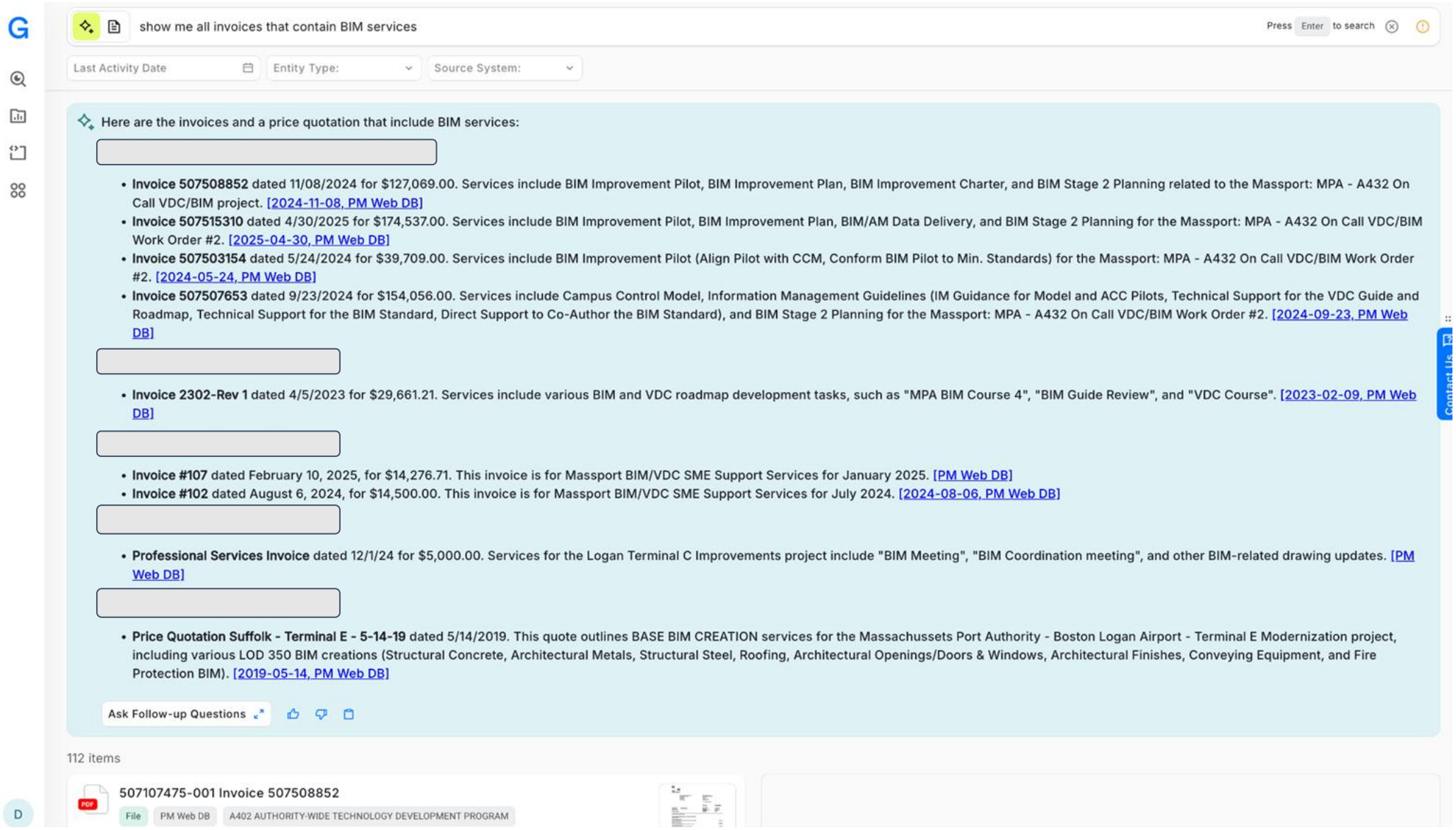
Executives View

Director View

Project Manager View

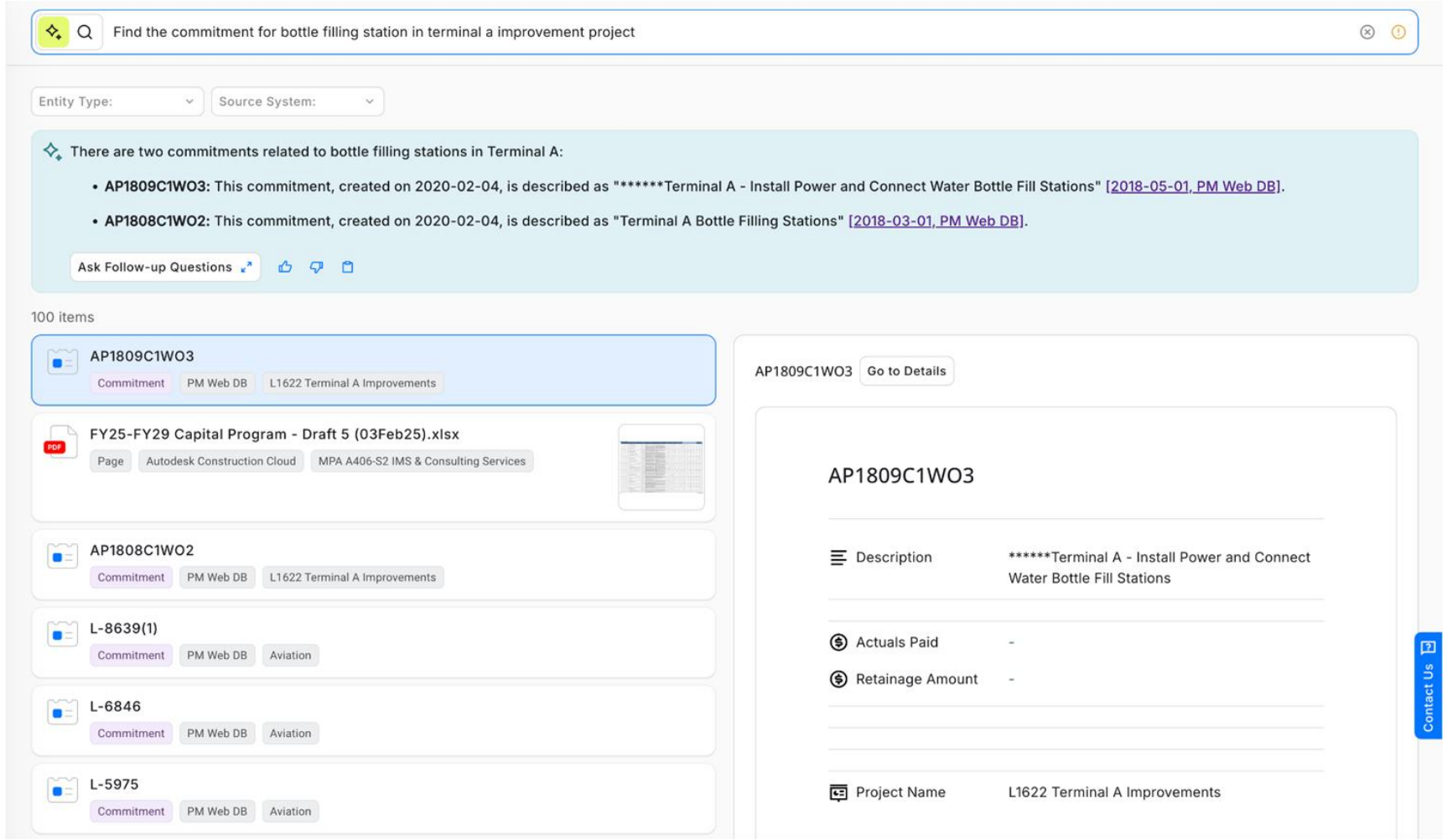
Project Controls View

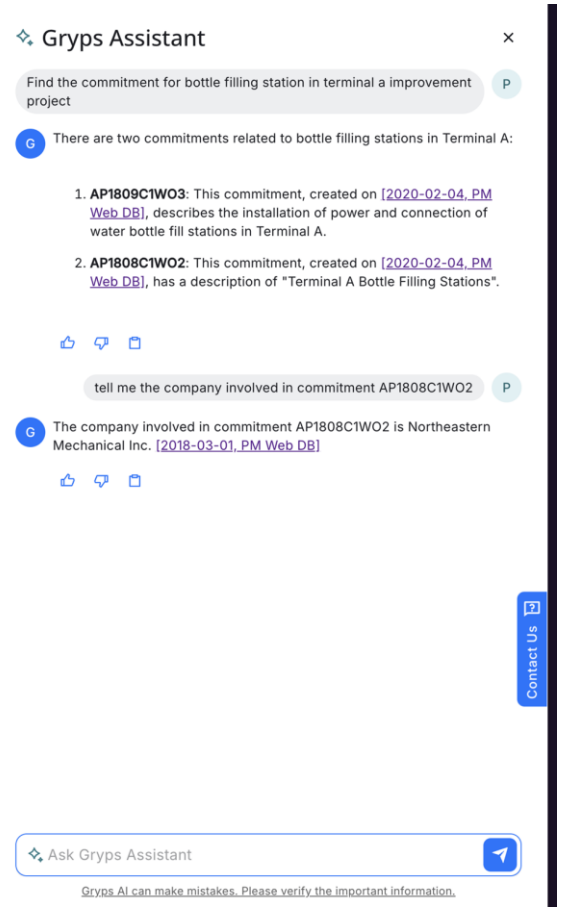
Use Case: Looking for Invoices



Use Case: Looking for Commitments

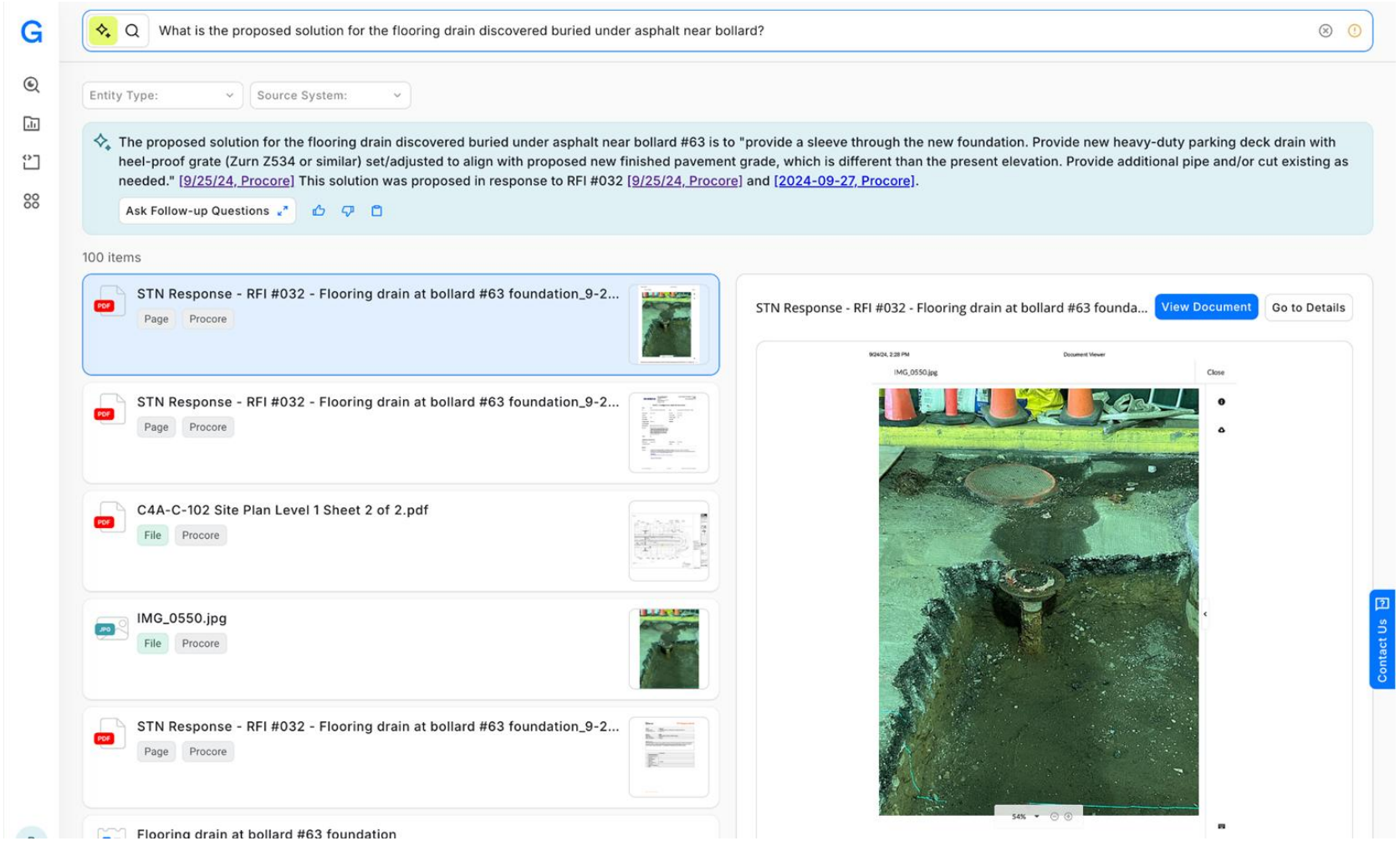
Question: Find the commitment for bottle filling station in terminal a improvement project

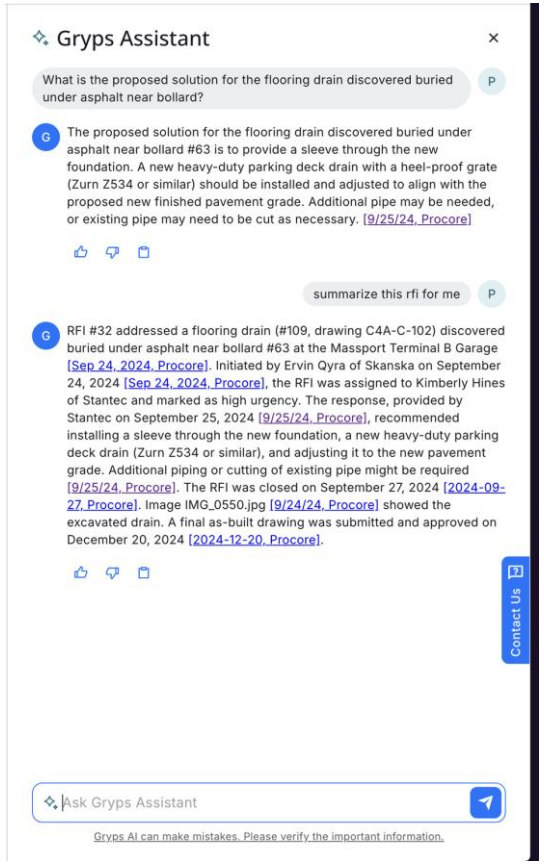




Use Case: Looking for RFIs

Question: What is the proposed solution for the flooring drain discovered buried under asphalt near bollard?



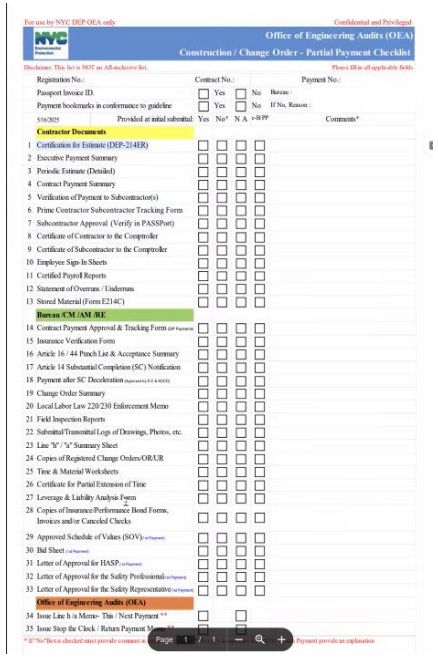


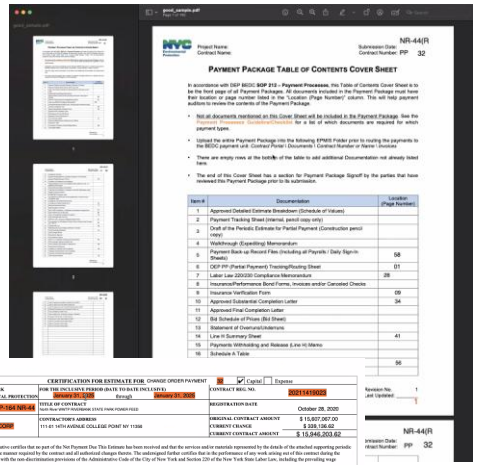
Future Use Cases

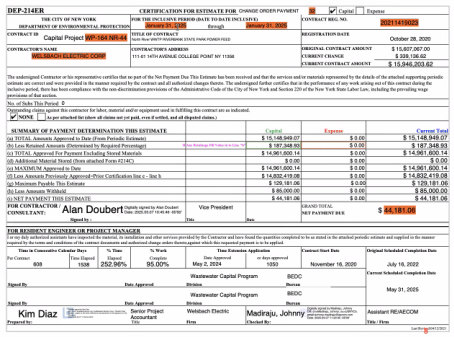
Invoice Review Agent

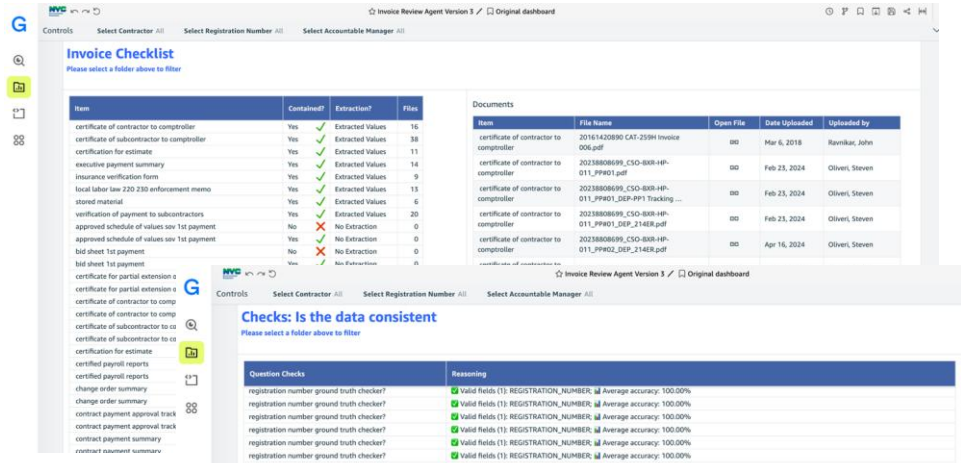
Tasks Completed by Gryps Agent

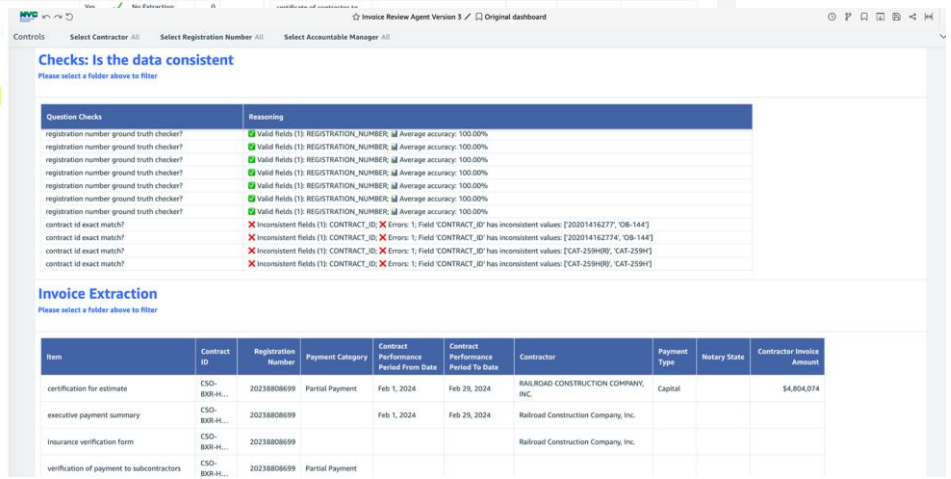
Understand Agency Requirements → Collect Information → Review Information Flag Issues → Provide Results











Lessons Learned

- ★ **Collaboration**
- ★ **Stakeholder Buy-in**
- ★ **Connecting to any system for the first time**
  - **Data Quality**
  - **Technical Approach**

Thank You

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