PYRAMID 2018.05

PYRAMID ANALYSIS

DECEMBER 2018 RELEASE

The December release of Pyramid includes over 50 new and upgraded features and numerous functional upgrades and fixes, designed to make Pyramid's **Analytics OS** the leading solution for Enterprise customers looking for analytics that go well *beyond visualization*.

NATURAL LANGUAGE QUERYING: New tools for asking analytic questions in plain English

Uptick: 'NLQ' can greatly increase the adoption of analytics by making access to data analysis as simple as asking the 'brain' a question in plain, natural language and getting an analytic answer represented as a report visualization. Also, use NLQ functionality in your environment without sending your data to the public domain

CONVERSATIONS & COMMENTS: Comments in analytic reports and dashboards through threaded conversations with colleagues.

Uptick: Conversations greatly expand the depth of analytics by creating social hubs around analyses. Sharable insights make it easier to discuss results and to create actionable lists for users on the platform. Data and report snapshots allow users to track changes over the lifecycle of a conversation thread.

DATA-DRIVEN ALERTS: Tools for data-driven alerts to automatically notify users about changes in data and numeric outcomes in reports.

Uptick: Alerting allows 'distant' users to keep in touch with data and analytic outcomes by automating the notification process.

CUSTOM VISUALIZATIONS: A custom visualization designer to draw your own data visualizations to best represent the way an organization and its users 'see' data

Uptick: I he ability to build a custom visual and deploy it instantly across the organization in a secure and governed fashion makes this feature the ultimate solution to highly specific visual requirements.

CUSTOM MAPS: Capabilities to upload and access custom shape maps greatly enhances the possibilities for geospatial analytics beyond the standardized maps of the world

Uptick: Many organizations need to see geospatial analytics within the context of their unique regional groupings and domains. Custom mapping extends the flexible mapping solution to bespoke, customer defined maps.

PHONE APP: iOS and Android phone apps to run analytics on-the-go, complete with interactivity.

Uptick: The phone app is designed to run the real-time Discover reports and Present dashboards with real-time querying and full data interactivity. Complete with its own two-factor authentication framework, it offers a secure and powerful way to access analytics through your mobile device.

PHONE DASHBOARD DESIGNER: Designer interface for building dashboards specifically for mobile phones

Uptick: Being able to custom build dashboards to fit device form factors greatly improves their appearance and usability

NEW VISUALIZATIONS: New data visualizations that take full advantage of context calculations.

Uptick: Beyond the Sunburst and Stream charts, three new advanced visualizations were added to take full advantage of the new context calculation engine: Candlestick, Waterfall and Boxplots. Each represents a stellar example of the power and flexibility of Pyramid's visualization and calculation capabilities

CONTEXT CALCULATIONS: Context calculations extend the power and flexibility of analytic business logic to report-aware calculations that will automatically recalibrate based on the context of the report.

Uptick: Numerous tools solve calculation challenges in the database and the data 'model'. However, there are some classic analytic problems that can only be solved when the 'context' of the report is included in the equatior Pyramid's context calculations resolve this problem-set with elegance, simplicity and ingenuity.

MOTION AXIS: Motion or Play axis drop zone to animate your visualizations with data changes.

Uptick: The motion axis greatly improves the user's ability to see changes in data over time in different visualizations and charts.

NEW DATASOURCES: Support for Vertica, SAS dataset files, Facebook, Twitter and ODB(connections

Uptick: Expanding the data connector footprint makes it easier for organizations to connect their data sources into Pyramid and accelerate their use of the platform.

ODBC capabilities now offer more options for connecting idiosyncratic data sources to Pyramid.

TIME INTELLIGENCE WIZARDS: The new Time Intelligence wizard in Discover greatly simplifies the process of building time based calculations.

Uptick: The Discover-based Time Intelligence wizard makes creating the often-messy time-based calculations a1 minute, point-and-click process. Completing the time intelligence capabilities in Model and NLQ, the new wizard will greatly accelerate the deployment of advanced time-based analytics.

DATA FLOW VARIABLES: New variables feature to facilitate smarter flows and incremental data processing.

Uptick: Variables in the data flow of Model allow users to 'set' or 'get' values in the flow or from external databases. These can subsequently used to calibrate data ingestion and creaet incremental data processing.

PROGRAMMABLE SECURITY: New capabilities to formulaically set member-level security on any database.

Uptick: Member level security is mostly unavailable on many data stacks. The new programmable security option delivers this feature in a highly scalable, accessible mode that can make any data engine enterprise-worthy for analytics.

SAML AUTHENTICATION: Support for SAML as an authentication provider.

Uptick: The addition of SAML (Security Assertion Markup Language) further enhances the security authentication options available in Pyramid and support the enterprise deployment options required in an Analytics OS.

Top to Bottom: Sunburst, Stream, Candlestick, Waterfall and Boxplot Visualizations

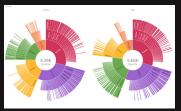
AT A GLANCE

Management: Improved tools for collaboration will encourage greater sharing of insights in the organization while a private instance of Natural Language Querying will simplify access to analytics and improve adoption without compromising public access to your data and analytics.

Citizen Data Scientists & Business Users: New wizards, visuzalitions and context calculation capabilities will greatly enhance report design and analysis. Conversations and Alerts will also help to create shared insights and actions lists with colleagues

Developers: New custom visualization tools and APIs will greatly enhance the ability to deliver specific apps and tools for the organization. Data Flow variables will facilitate incremental data ingestion.

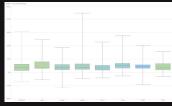
Adminstrators: Suppot for SAML and programmable member level security will expand the opportunities to deploy SSO for the platform while securing any data source to the member-level grain with simplicity. Access to analytics via the phone apps with dual factor authentication will make mobile deployment a breeze.











Client

FEATURE	CATEGORY	Benefit			
Main Application					
 Updated Bulletin Board for Alerts and Conversations 	Adoption	Easy access to new conversations and user defined alerts.			
A new interactive tutorial for Publications		Immersive, quick tutorials to ramp up first time users on how the application works.			
 Annotations and Conversations with report and data snapshotting ** 					
Alerts and data-driven notifications **					
Native Apps for iPhone and Android **	Adoption & Mobility	Access your analytics on the go with native mobile applications			
Model					
Data Flow					
 New data sources: Vertica, Facebook, Twitter, SAS Datasets & Fixed-width text files. Support for ODBC connections * 		Increased data access options. New options for accessing more data, means bringing more of the organization's data footprint into a single platform.			
 Improved data-frame support for scripting tools in R and Python 					
 Column Statistics and auto-suggestion feature * 		Better insight into data distribution and properties during the data preparation process.			
 PQL Script Editor interface for custom column calculations 					
 Data Flow Variables & Incremental Data loading 		New feature to set and get 'variable' values. These can be used for multiple activities - most notably for incremental data loading and for manipulating R and Python scripts			
 5 new Python scripts for stock and demographic data in the Marketplace 					
Data Modeling					
'Security' table and column type **	Data Security & Governance	Security tables can be easily used to better configure data- level security in models			
Discover					
Analytics & Functionality					
 Time Intelligence wizard for building time- based calculations and lists *# 		Reduced complexity and increased speed in creating time- oriented calculations.			
 Natural Language Querying for building queries with plain English text ** ## 	Adoption				
 Updated filter/slicer options to disable filters/slicers and control auto-run per filter/slice 		Greater flexibility in the usage of model elements simplifies the way visualizations and analytics work for deeper insights without complexity			
Textbox slicer and parameter option					



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•	Updated data-source start and explorer page, with recent and favorite options	Adoption	Faster access to commonly used data models.	
•	Improved custom calculation and lists panel with 'flattened' interface option	Adoption		
•	New 'Context' calculations and aggregation options			
•	Alerts, Annotations and Conversations **	Adoption		
•	Header and Footer options for printing	Adoption	Better control of layout and appearance of printed output.	
•	Export/Print to PNG graphic files	Adoption		
Visual	izations			
•	Sunburst, Waterfall, Candlestick, Boxplot and Stream visuals	Visualizations	Further visualization options increase the scope for clear communication of analytic results.	
•	Motion Axis for data driven animations		Enhances the impact of understanding how data changes across attributes or time.	
•	Geospatial Lasso for selecting geolocations within a given radius			
•	Custom Map Shapes for customized geospatial choropleth map visuals			
•	Grid improvements including 'Flat' and 'Accounting' grid styles, new 'data bar' grid indicator type.			
•	'Mini map' large grid navigator widget			
•	Improved visual customizations with series- level data labels, line styling and chart ordering			
•	Tooltip hide/show option		Further user interface control enhances the ability to aid the user by removing unwanted visual elements.	
Present				
•	Phone layout editor **			
•	New 'Data Card' visualization for miniaturized visuals		Showing summary data from analytic objects with the ability to zoom to detail enables more information to be displayed simultaneously.	
•	Annotations and Conversations **	Adoption		
•	Click actions extended to text and graphics	Adoption		

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Formulate				
•	Custom Visuals Designer **	Advanced Analytics	Provides unlimited scope for visualization of analytic data results.	
	3 new Custom Visual examples in the Marketplace **	Advanced Analytics	Provide a guide to how to create your own custom visualizations as well as being immediately available for use.	
	New PQL functions covering new string, user security and aggregate operations	Advanced Analytics	More flexible string manipulation, support more dynamic security options and better control aggregation processing.	
Content Management & Governance				
	Upgraded performance for key content- based operations		Faster, more responsive UI improves the user experience.	
•	Data models included in data lineage tools			

Administrative & Backend

FEATUR	E	CATEGORY	Benefit			
Administrative Tools						
	New Custom Map Shapes configuration pages **		Customized mapping options offers end-users map visualizations for non-standardized regions and locations.			
	Programmatic security options for member level security on data sources **		Smarter tools for setting up highly scalable member-level security on non-SSAS data sources that includes a programmatic interface.			
•	New Alerts Manager **		Control and manage system wide and user defined alerts.			
	Updated 'User Profile' options for new features. Includes new application simplification option.	Management & Adoption				
•	In-memory server statistics					
•	New client security options *		New optional switches to harden the security envelope of the browser client.			
Server Functionality						
•	SAML authentication provider **	Management & Security	Greater support for authentication providers offers better and easier enterprise integration options.			
•	Updated REST API framework - version 2.0 #	Management & Extensibility	Improved APIs to extend and simplify the original APIs in the product ("1.0").			
Documentation						
•	Upgraded Online help	Adoption				
•	New tutorial video snippets in help	Adoption				

[#] Preview features and/or upgrades: Although these features or upgrades are in preview, they are upgradable in the future and fully supported

^{##} The new Natural Language Querying Engine requires at least an extra 4-GGB of memory per deployed Pyramid runtime server machine



^{*} Item available in the Standard or Enterprise Editions.

^{**} Item available in the Enterprise Edition only