

# Oracle分析平台Analytics Server(OAS)能力介绍

OAS智能分析平台助力客户探索与构建企业分析

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资深解决方案工程师

# 主题

- 自助分析能力
- •集中治理能力
- •增强分析能力





### OAS 平台:能力列表





复杂报表 企业模型

Office集成 地图

平台审计 大数据集成

权限管控 平台擴展

Essbase链接 移動支持

## 增强分析

机器学习一键智能

智能问答

数据丰富

聚类异常

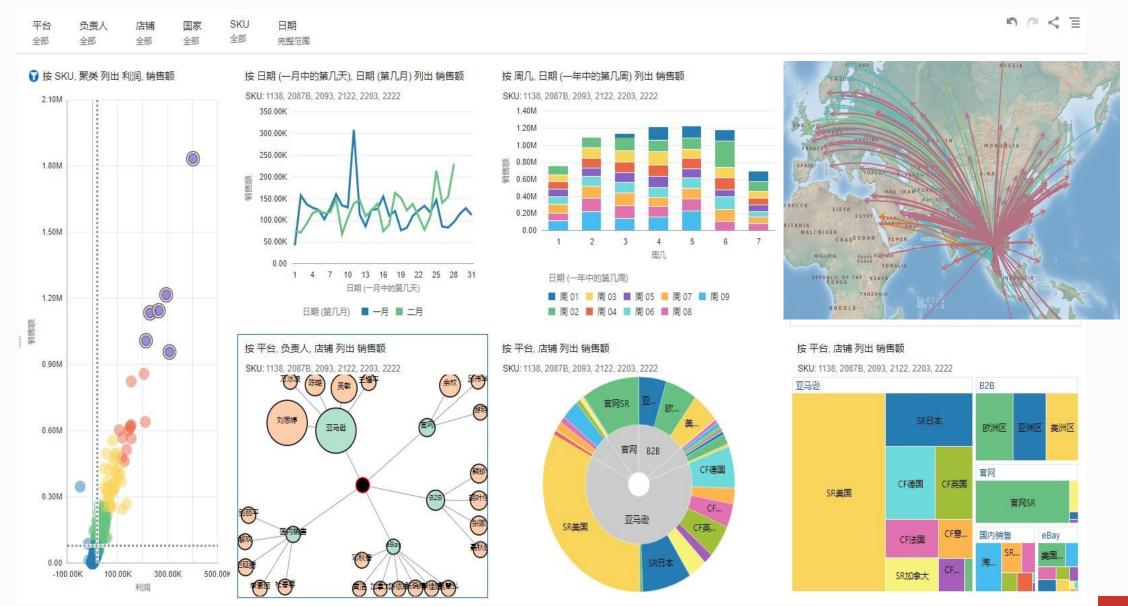
趋势预测

自动解释

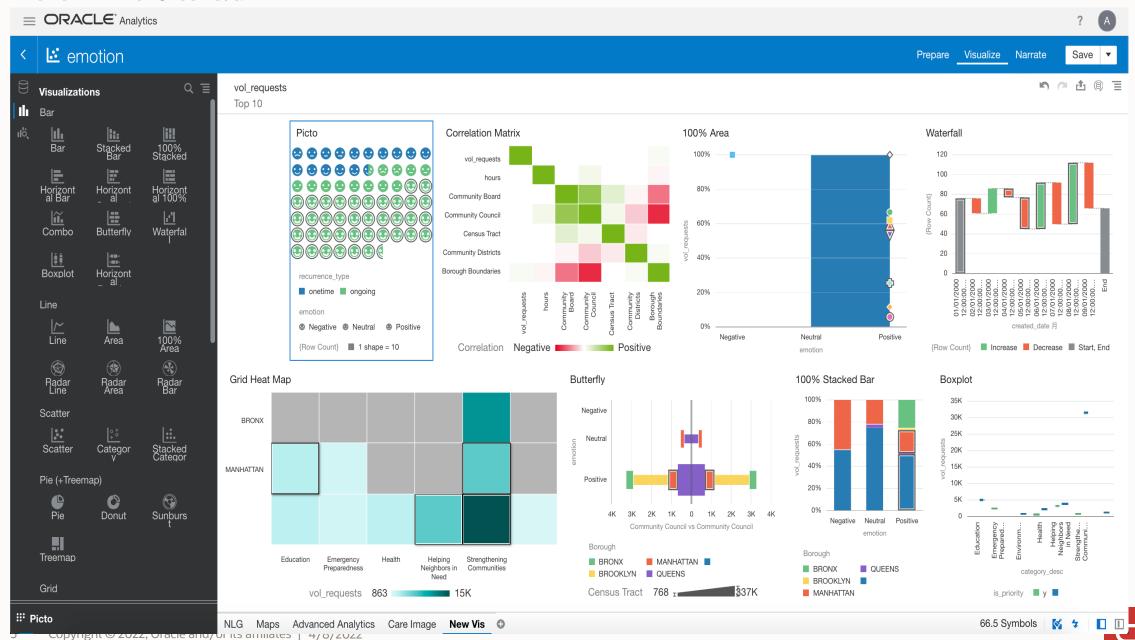
模型训练



### OAS 平台:丰富图形



### OAS 平台:丰富图形

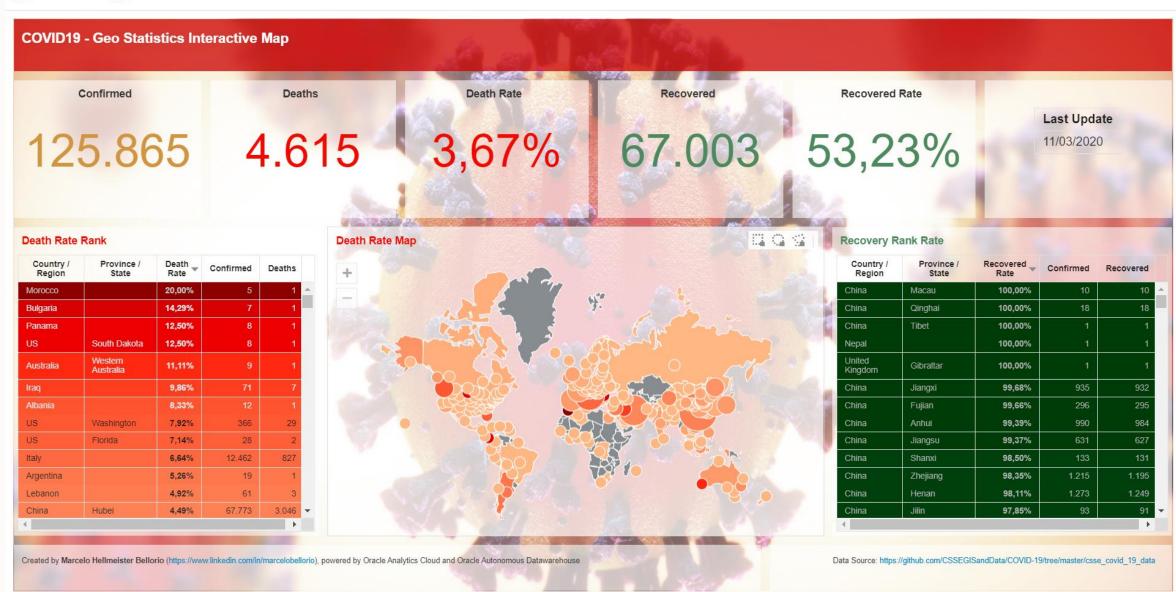


### OAS 平台:丰富图形

Country / Region

Province / State





## OAS 平台:扩展能力





扩展



### Mart Org Chart

Oracle July 08, 2020

Org Chart Plugin visualizes the reporting hierarchy of an organization, relationship between the entities and categorization based on color

Presentation Variable

Oracle

Dec 02, 2019

Use this custom plugin to set

the value of any presentation

dynamic columns or dynamic

Mark Auto Refresh

July 08, 2019

The Auto Refresh custom

refresh your data in DV

in analysing

sample plugin allows you to

projects automatically in a given time interval. This helps

changing/streaming data or

sliding windows of time series

Sales by Profit

8,500,000

1,300,000

total profit

Custom Tiles

Oracle

Mar 12 2019

Download

constants in any Oracle DV

variables allow to make

custom calculation

Download





\* Image Gallery Plug-in

June 16, 2020

An interactive gallery viewer

for exposing images as DV

### Graph Network viz

Feb 26, 2020

Use this custom visualization plugin to visualize complex relationships between huge amount of elements in the form of graph structures. Entities are displayed as

Download



### DV Governance

Nov 21, 2019 get an indepth analysis of your DV deployment, idenfity # of projects, datasources. data flows and much more. Includes DV sample

Download



### Funnel Sample Plugin

June 22, 2019 Custom sample plugin showing a Funnel Visualization to depict stages/phases within an overall process.



### # "Elbow" Dendrogram

G.Adashek & D.Flores June 16, 2020 The "Elbow" Dendrogram

creates a hierarchy based Parent-Child like structure with 'links-arms' that are bent at a 90° angle. This plugin can render a #measure element and is zoomable.

> Download Pareto Chart

### Calendar Heatmap Sample

Nov 30, 2019 Visualization to represent time series data in calendar

Read me Download

### Motion Chart

August 13, 2019 Motion chart is an animated bubble chart showing data

transformation over a period of time using X axis, Y axis, size and color of the bubble

Read me Download



> Dimension Player

Mar 28, 2019

A custom sample plugin that

plays through the values of a

dimension column like time,

region etc and automatically

### \* Circle Pack Plugin Oracle

July 5, 2019 A custom sample plugin showing a CirclePack analyze hierarchically structured data. This is the default sample shipped with





Racing Bars

Oracle

Mar 17, 2020

Oracle

Feb 05, 2020

Visual your 80/20 distribution

Kinetica plugin

Nov 27, 2019

datasets hosted in a Kinetica cluster in the form of maps.

Kinetica viz and vice versa is

enabled in the form of filters.

Download

Kinetica plugin helps you

visualize large complex

Interactions fron DV to

Download

on any dimension in your

Download

Dynamic bar chart showing

moving bar values over a

### Gantt Chart Sample Plugin

Nov 11, 2018 Custom sample plugir showing a Gantt Visualization to depict the timeframe of asks/elements.Customized tooltip displaying metrics change major/minor time axis and color coding of categorical information make it compelling visualization.



### Force Directed Graph Plugin

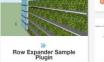
Jan 18, 2018 The Force Directed Graph nlugin allows you to easily Each node's location can be dragged and pinned. The visualization automatically moves nodes to prevent overlap and each node is clickable to expand (and collapse) to display

subordinate data allowing you



Auto-Cluster Map Plugin

Read me Download



Oracle Jan 11, 2019 Custom visualization plugin that enables a fully interactive experience in Oracle DV.



### **Custom Points Map Plugir** Sept 05, 2018

Updated to include Support of WMS and XYZ Tile Map layers and Color and Size edge implemented. Custom sample plugin that allows you to display your location data in multiple interesting ways with cool features like Map wrap around auto zoom to displayed theme,feature animation etc. Offers a choice of background maps like Open Street Map, Google map, Oracle Map, Carto Positron, Carto Dark,

Download

Read me



time. This plugin makes all the visualizations in DV

canvas behave like Dynamic

G.Adashek & D.Flores

Jan 9, 2019

The Vertical Waterfall is the

as the traditional horizontal

By rotating the visualization

allows for easy to read text along the y-axis spine of the visualization.

'tipped' (top-to-bottom)

Feb 12, 2019 Custom sample plugin showing an interactive Dial Gauge Visualization in a trellis



Oct 22, 2018

option for downloading

viz plugin.

output data from the custom

### Value Hierarchy convertor



Download

### Mobile Grid Bars Plug-in

Feb 05, 2018 Designed specifically for mobile devices highlighting the use of a variety of bar charts.

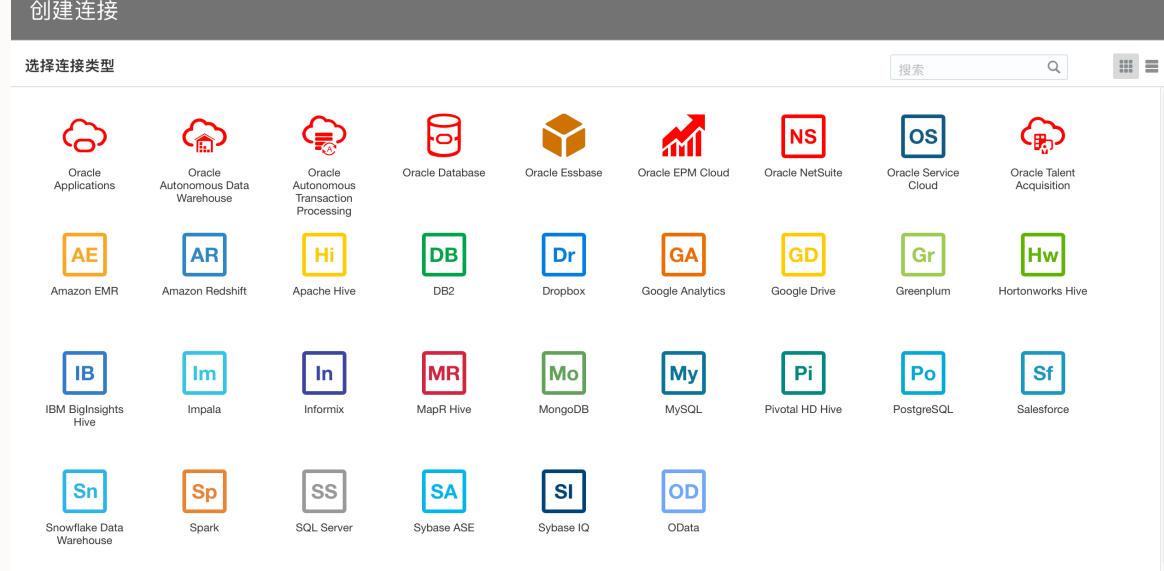






### OAS平台:多数据源



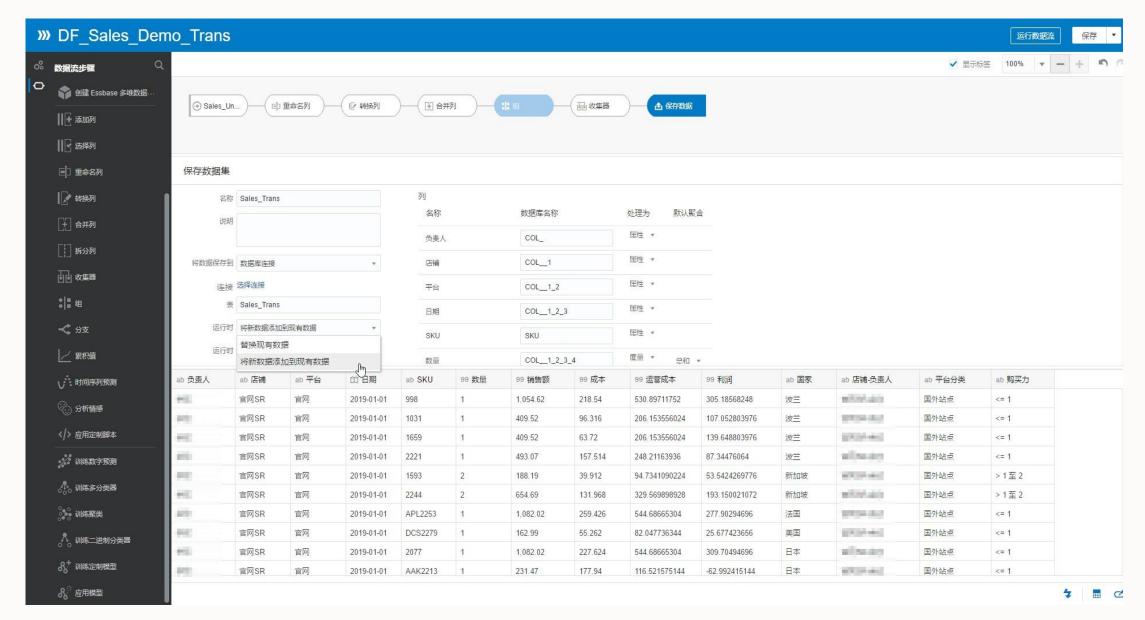


## OAS平台:数据表格

■ 数据透视表 ▼	ਊ按付款方式,部门,状态 3	川出 应收金额, 实收金额, 未	收金额											<b>8</b> 1
				处理中			完成			新建		A \ 1 = -1 = A = -2	A)	A)   -       A # #
列	付款方式▲	部门	应收金额	实收金额	未收金额	应收金额	实收金额	未收金额	应收金额	实收金额	未收金额	合计 应收金额	合计 实收金额	合计 未收金额
▲状态			7,920,000	5,643,000	2,277,000							7,920,000	5,643,000	2,277,000
/=±=\text{\tint{\text{\text{\text{\text{\text{\tint}\text{\tint{\text{\tin}\text{\texi}\text{\texi}\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\tint{\text{\text{\texi}\tint{\text{\text{\ti}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}									1,795,200	0	1,795,200	1,795,200	0	1,795,200
值标签	中间款 总计		16,500,000	11,253,000	5,247,000				11,695,200	0	11,695,200	28,195,200	11,253,000	16,942,200
	尾款		5,280,000	3,168,000	2,112,000							5,280,000	3,168,000	2,112,000
蕞行			7,728,600	3,864,300	3,864,300							7,728,600	3,864,300	3,864,300
A 付款方式			7,524,000	6,276,600	1,247,400							7,524,000	6,276,600	1,247,400
			5,148,000	3,267,000	1,881,000							5,148,000	3,267,000	1,881,000
▲ 部门			8,844,000	8,019,000	825,000							8,844,000	8,019,000	825,000
									897,600	0	897,600	897,600	0	897,600
# 值	尾款 总计		34,524,600	24,594,900	9,929,700				897,600	0	897,600	35,422,200	24,594,900	10,827,300
# 应收金额	服务收款								471,900	0	471,900	471,900	0	471,900
						161,700	161,700	0				161,700	161,700	0
# 实收金额	服务收款总	ì				161,700	161,700	0	471,900	0	471,900	633,600	161,700	471,900
# 未收金额	首付款					9,240	9,240	0				9,240	9,240	0
						52,800	52,800	0				52,800	52,800	0
Ø +54						8,910,000	8,910,000	0				8,910,000	8,910,000	0
● 颜色			6,930,000	6,270,000	660,000							6,930,000	6,270,000	660,000
41						660,000	660,000	0				660,000	660,000	0
』、大小						1,795,200	1,795,200	0				1,795,200	1,795,200	0
+									214,500	0	214,500	214,500	0	214,500
‡♣ 形状						858,000	858,000	0				858,000	858,000	0
— TB#						16,500	16,500	0				16,500	16,500	0
≡ 工具提示	首付款 总计		6,930,000	6,270,000	660,000	12,301,740	12,301,740	0	214,500	0	214,500	19,446,240	18,571,740	874,500
▼ 筛选器	台计		57,954,600	42,117,900	15,836,700	12,463,440	12,463,440	0	13,279,200	0	13,279,200	83,697,240	54,581,340	29,115,900



### OAS平台:数据清洗





## OAS 平台:能力列表



### 自助分析

多数据源 插件扩展

丰富图形 项目协同

数据加工 灵活简单

数据联动 结果共享





### 增强分析

机器学习一键智能

智能问答

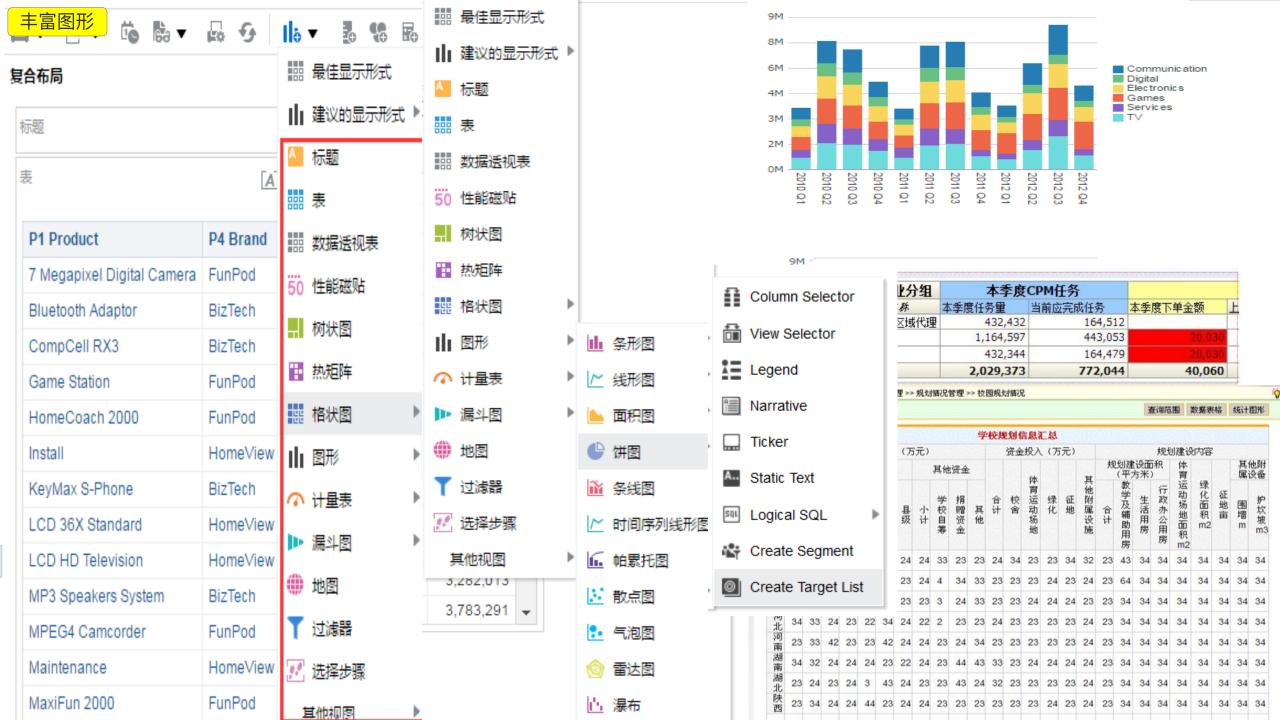
数据丰富

聚类异常

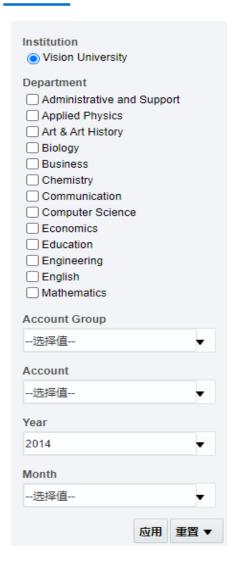
趋势预测

自动解释

模型训练



Overview Trending



Avg Revenue per Student

<sup>9</sup>

\$7,969

2014 Fall Term

**Enrollment Yield** 

**●34.1**%

2014 Fall Term

4-Year Graduation Rate

<sup>9</sup>59.0%

Academic Year 2014

Students per Instructor

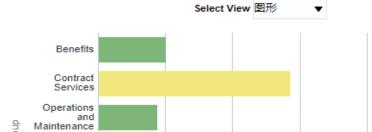
**○**20

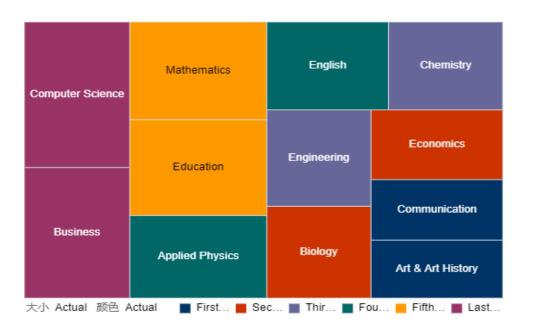
2014 Fall Term

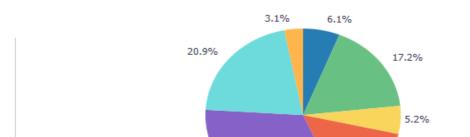
### **Expenses by Academic Department**

	201	4
Department	Actual	% of Total
Applied Physics	\$12,359,361	8.6%
Art & Art History	\$8,372,122	5.8%
Biology	\$10,462,581	7.2%
Business	\$15,065,587	10.4%
Chemistry	\$10,978,774	7.6%
Communication	\$8,703,713	6.0%
Computer Science	\$16,776,665	11.6%
Economics	\$10,054,380	7.0%
Education	\$14,316,558	9.9%
Engineering	\$10,970,266	7.6%
English	\$11,686,987	8.1%
Mathematics	\$14,624,897	10.1%
合计	\$144,371,891	100.0%

### **Expenses by Account Group**





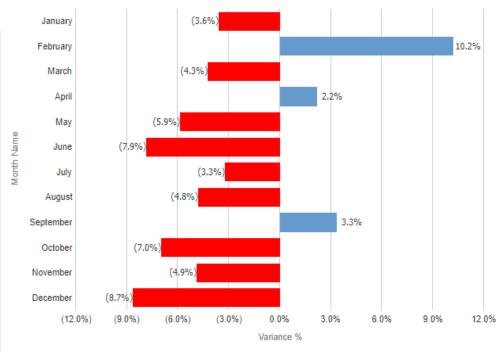


### **Expenses Actual vs Budget Detail**

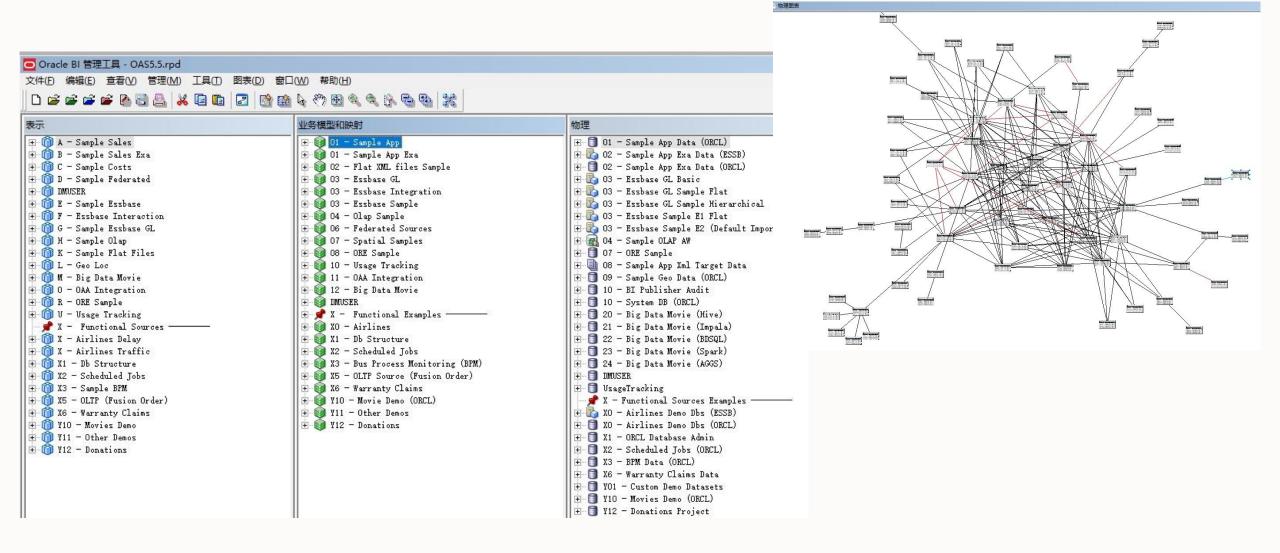
Vision University

2	Λ	4		
_	u	П	4	

Department	Account Group	Account	Month Name	Actual	Budget	Variance	Variance %
	Contract Services	600030 Contracted Services	January	\$441,535	\$420,493	(\$21,042)	(4.8%)
			February	\$306,221	\$331,581	\$25,360	8.3%
			March	\$429,219	\$391,138	(\$38,082)	(8.9%)
			April	\$336,260	\$368,940	\$32,680	9.7%
			May	\$513,843	\$459,187	(\$54,656)	(10.6%)
			July	\$415,440	\$385,486	(\$29,955)	(7.2%)
		Α	August	\$497,433	\$469,643	(\$27,790)	(5.6%)
			September	\$342,461	\$373,487	\$31,026	9.1%
			October	\$349,534	\$370,092	\$20,558	5.9%
			November	\$364,729	\$335,392	(\$29,337)	(8.0%)
			December	\$434,712	\$399,803	(\$34,910)	(8.0%)
	Operations and Maintenance	650025 Operations & Maintenance	January	\$77,796	\$91,627	\$13,831	17.8%
			February	\$107,399	\$127,027	\$19,628	18.3%
			March	\$127,846	\$121,610	(\$6,236)	(4.9%)
			April	\$115,570	\$119,391	\$3,820	3.3%
			May	\$140,577	\$134,489	(\$6,087)	(4.3%)
			July	\$94,917	\$118,298	\$23,381	24.6%
			August	\$118,572	\$133,696	\$15,124	12.8%
			September	\$132,760	\$131,672	(\$1,088)	(0.8%)
			October	\$142,134	\$116,823	(\$25,311)	(17.8%)
			November	\$94,280	\$108,508	\$14,228	15.1%
			December	\$140,839	\$119,994	(\$20,845)	(14.8%)
	Other Operating Expenses	600050 Alumni Activities Expense	January	\$60,980	\$51,714	(\$9,266)	(15.2%)
			February	\$35,228	\$42,382	\$7,154	20.3%
			March	\$54,214	\$46,501	(\$7,713)	(14.2%)
			April	\$31,091	\$36,767	\$5,676	18.3%
			May	\$47,530	\$44,463	(\$3,067)	(6.5%)
			June	\$34,528	\$43,292	\$8,764	25.4%

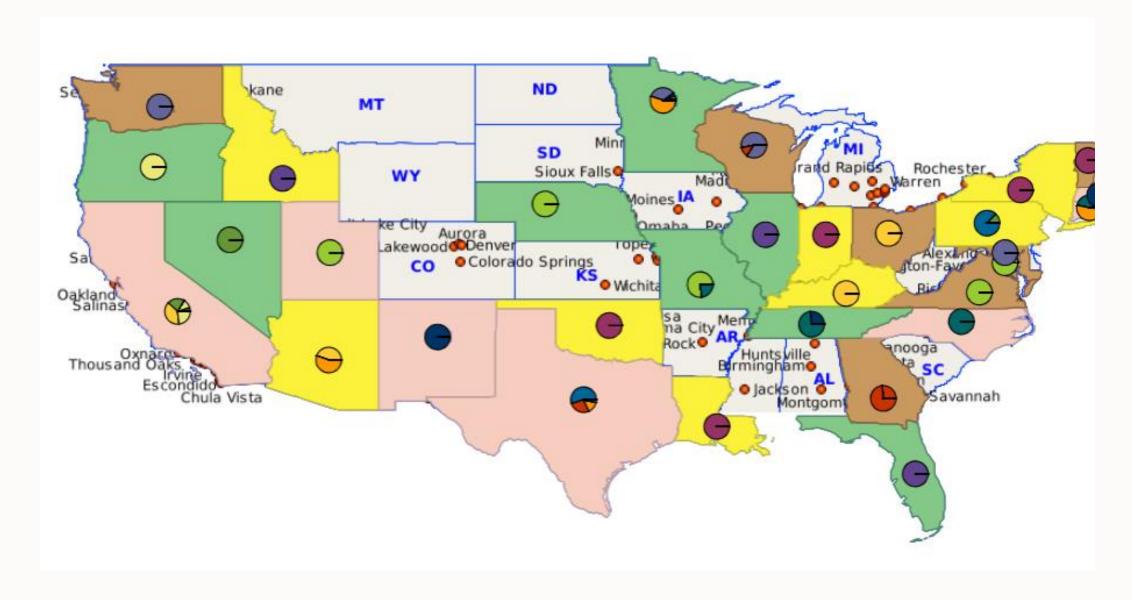


### OAS平台:企业模型



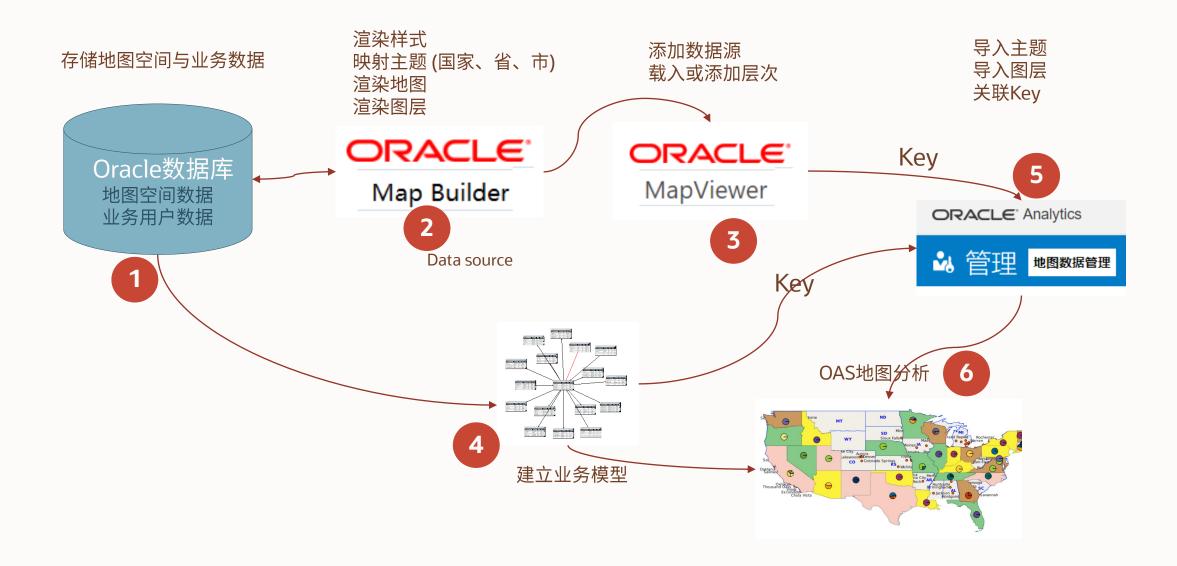


### OAS平台: 地图能力





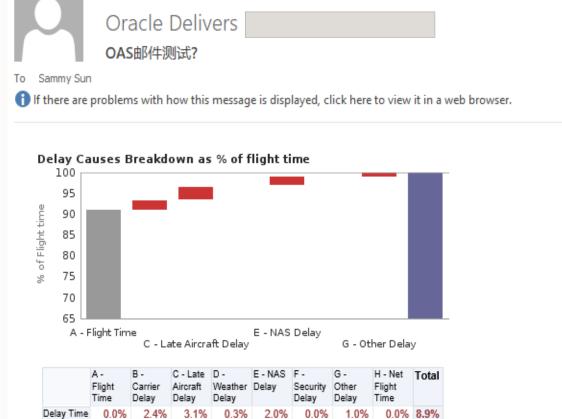
### OAS平台: 地图制作过程



## OAS平台: 预警机制

2 <u>邮件调度配置</u>创建邮件调度配置调度一般信息配置调度计划配置触发条件配置邮件传送内容配置邮件人





Reply Reply All Reply All Reply All Reply Reply All Reply Reply All Reply Reply All Reply Reply

Sat 7/18/2020 8:47 PM



## OAS平台:复杂式报表

FROM:

My Toy Supplier 300 Oracle Parkway Redwood Shores CA 94065

CARRIER: 1324324232-354354

PRO NUMBER: 1324324232-354354

B/L NUMBER: 1324324232-354354

### TO: KMART STORE # 1234

100 El Camino Real Redwood City CA 94404

SHIP TO POSTAL CODE



PO#: 12345678

ORDER TYPE: 123

> DEPT: 123

### SERIAL SHIPPING CONTAINER



ORACLE
Vision Operations (USA)

AT&T Universal Card 5645 Main Street Jacksonville FL 32209

Dear Sirs/Madam.

According to our records as of 01-JAN-04, we show the following open balances. Your CAD balance is \$31,500.00, made up as follows:

Invoice Number	Invoice Type	Invoice Amount	Bank Charge	Open Balance Amount
502444	Standard	\$19,125.00	\$0.00	\$19,125.00
502445	Standard	\$12,375.00	\$0.00	\$12,375.00

Involce Balance \$31,500.00

On-Account Credits and Receipts \$0.00 \$31,500.00

Your USD balance is \$3,365,647.81, made up as follows:

Invoice Number	Invoice Type	Invoice Amount	Bank Charge	Open Balance Amount
10019903	Standard	\$132,733.84	\$0.00	\$132,733.84
10020178	Standard	\$71,577.42	\$0.00	\$71,577.42
10020219	Standard	\$89,344.81	\$0.00	\$89,344.81
10020407	Standard	\$223,563.03	\$0.00	\$223,563.03
10020408	Standard	\$176,353.55	\$0.00	\$176,353.55
10020487	Standard	\$112,902.54	\$0.00	\$112,902.54
10020520	Standard	\$147,740.25	\$0.00	\$147,740.25
10020522	Standard	\$281,904.71	\$0.00	\$281,904.71
10020523	Standard	\$160,505.87	\$0.00	\$160,505.87
10020548	Standard	\$176,353.55	\$0.00	\$176,353.55

Oracle Corporation 500 Oracle Parkway Redwood City

Private and Confidential

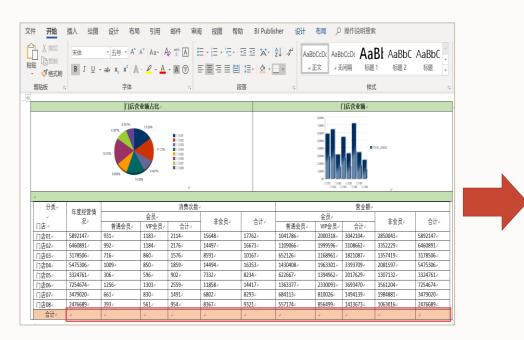
Page 7 of 12

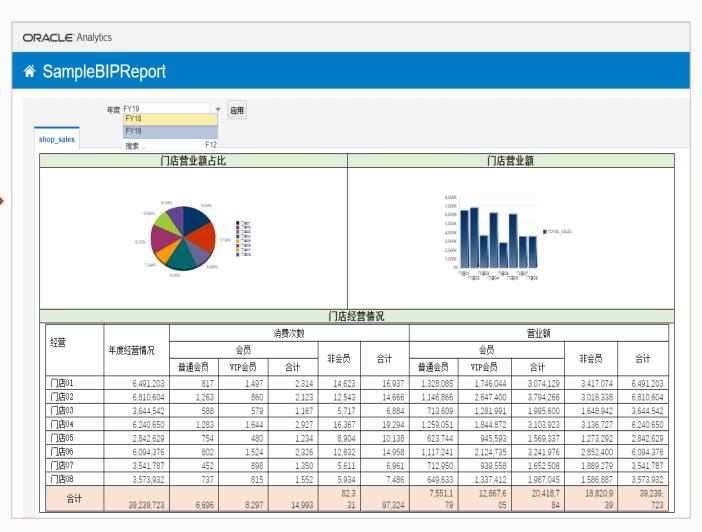
October 31, 2005

internet Application Server Standard Edition - Processor Perpetual Lebrase Oily 1 CSE : 3001459 Users: 2  NETWORK ACCESS FEE-DEPARTMENTAL PERPETURE OF STANDARD USERS OF STANDARD OF STAND	1	1023,89 1026,66 1026,66	1023.89 1026.66	GST GST
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CDD/ Repository - Novetandard User Poduct Support - 2003/11/5 to 2003/05/30 Februs Dtv 1 CSI: 3903/19/5 Users: 1 CONCURRENT DEVICE DEPLOYMENT		1	1026.66	GST
	1	1026.66	1026.66	GS
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Partitioning - Concurrent Device Product Support - 2003/11/25to 2003/05/30 License Uty I CSt 3301499 Users: 48	1	1215.33	1215.33	GST
Programmer Nonstandard User Product Support - 2003/11/25 to 2003/05/30 Joense dty: T. CS: 34937 Users: 1 CONCURRENT DEVICE FULL USE	1	143.25	143.25	GS1
Express Server - Concurrent Device Software Updates (Updates Subscription Service) - 2003/11/25 to 2003/05/30 License Oly 1 CSL 3301459 Users: 5 APPS SPECIFIC FULL USE	1	1502.47	1602.47	GST
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ST Registration No: R104008985 CUSTOMER CCPY/COPIE DU CUEN ST Registration No: 1003633493	AT:	$\perp_{\tau}$	Invoice Total	\$304,121,323

a Control number 000001	55555 And []	For Official Use Only OMB No. 1545-0008	•			5 7411			
b Employer identification number fed0001			\$10	Wages, tips, other compensatio 000	0.070.70	2 Federal income tax withheld \$ 10,000			
c Employer's name, address, and ZIP code Oracle Corp				Social security wages 000		4 Social security tax withheld \$ 10,000			
500 Oracle Parkway Redwood Shores			\$ 10	Medicare wages and tips ,000		6 Medicare tax withheld \$ 10,000			
Redwood City, CA 94065				Social security tips ,000		8 Allocated tips \$ 10,000			
d Employee's social security number 000-00-0000			9 Advance EIC payment \$10,000			10 Dependent care benefits. § 10,000			
e Employee's first name and initial ncheol				Nonqualified plans 000	12a Se 2 12a	12a See instructions for box 12 3 12a \$12a_meaning			
500 Oracle Parkway Redwood Shores			13 Stationy Stationers Third party plan or Skit pay		12b 12b				
Redwood City, CA 94065			14 01	Other 01_desc	12c 2 12c				
			02 02_desc		12d \$ 12d	s 12d_meaning			
f Employee's address and ZIP code	400000000000000000000000000000000000000		03	03_desc					
5 State Employer's state ID number	16 State wages, tips, etc. \$10,000	17 State income \$10,000			18 Local wages, tips, etc. \$ 10,000		19 Local inc \$ 10,000	ome tax	20 Locality name 10,000
1111 Jyyyy	\$ 10,000	\$ 10,000		\$ 10,000			10,000		

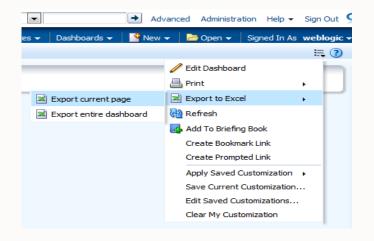
### OAS平台:复杂式报表







### OAS平台:与Office无缝集成







OAS内容导出到Office

从OAS中获取内容到Office

Office中报表发布到OAS

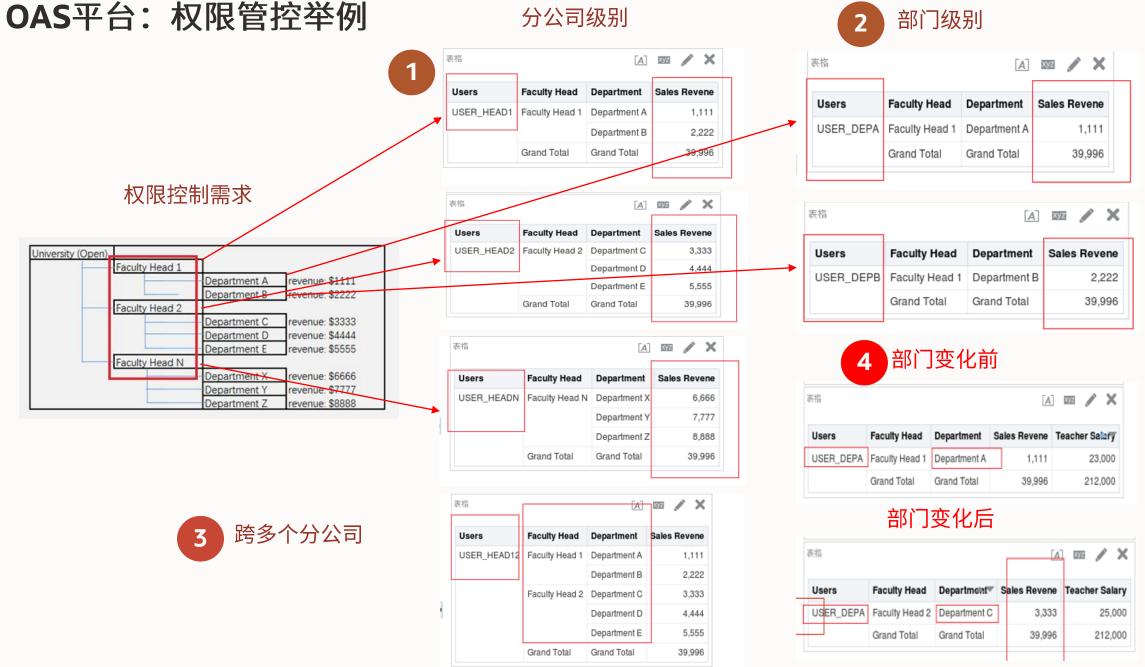


### OAS平台: 权限管控

## 列



行



### OAS平台:后台监控能力

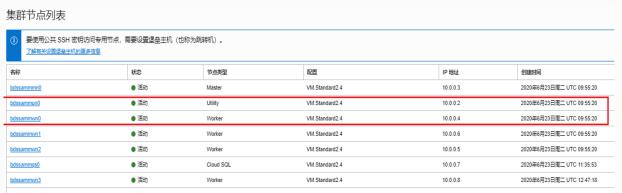






OAS平台:大数据对接能

1 大数据云(BDS)集群





2 Hive/Impala公共IP





3 Hive/Impala OAS端连接

	Hi		Im
	Apache Hive 数据库		Cloudera Impala 数据库
* 连接名称	BDS_Hive	* 连接名称	BDS_impala
说明		说明	
验证类型	基本  ▼	验证类型	基本▼
* 主机	193.122.102.125	* 主机	140.238.26.253
* 端口	10000	* 端口	21050
* 用户名	hive	* 用户名	Cloudera
* □令	••••	* □令	•••••
	▼ 启用 SSL		□ 启用 SSL



### OAS 平台:能力列表



### 自助分析

多数据源 插件扩展

丰富图形 项目协同

数据加工 灵活简单

数据联动 结果共享



### 集中治理

复杂报表

企业模型

丰富图形

地图

平台审计

大数据集成

权限管控

平台扩展

Office集成

Essbase链接

移动支持



### 增强分析

机器学习

一键智能

智能问答

数据丰富

聚类异常

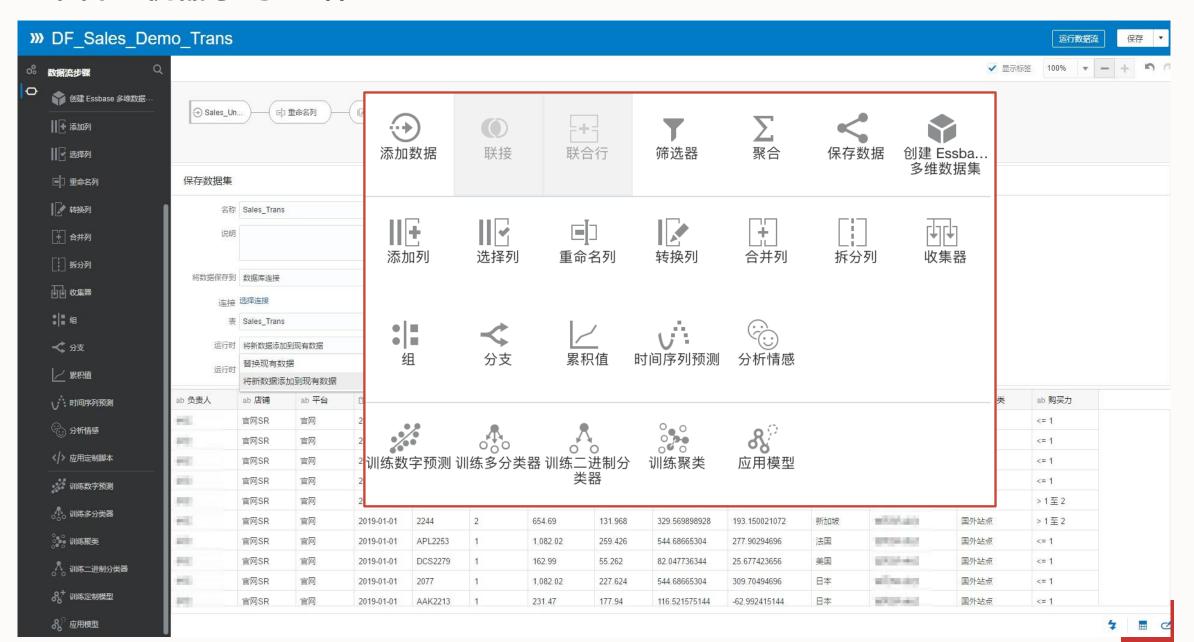
趋势预测

自动解释

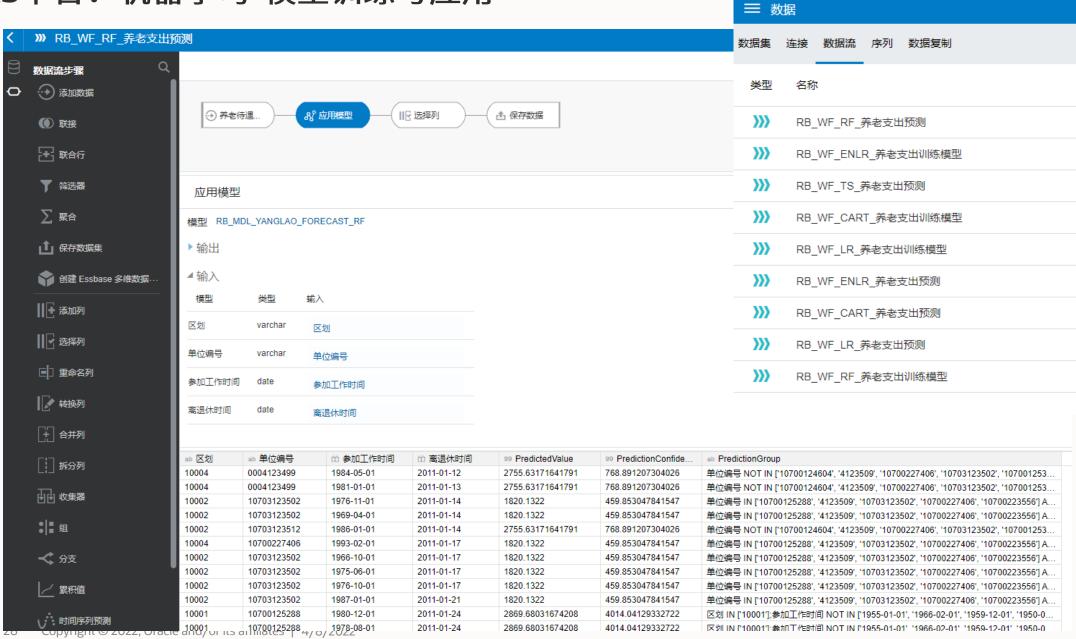
模型训练



### OAS平台: 机器学习-组件

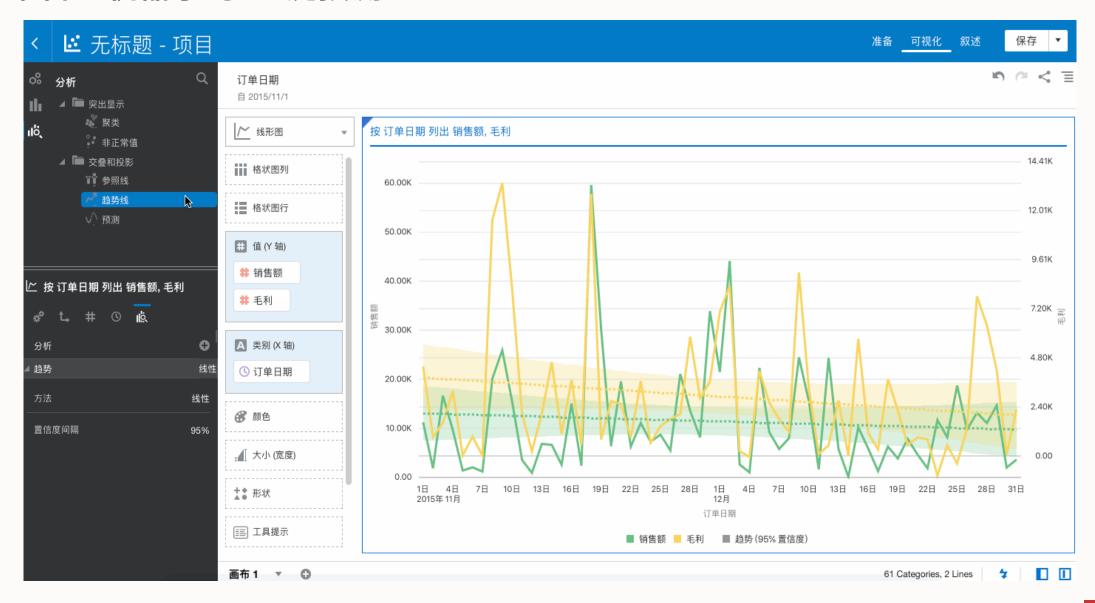


### OAS平台: 机器学习-模型训练与应用



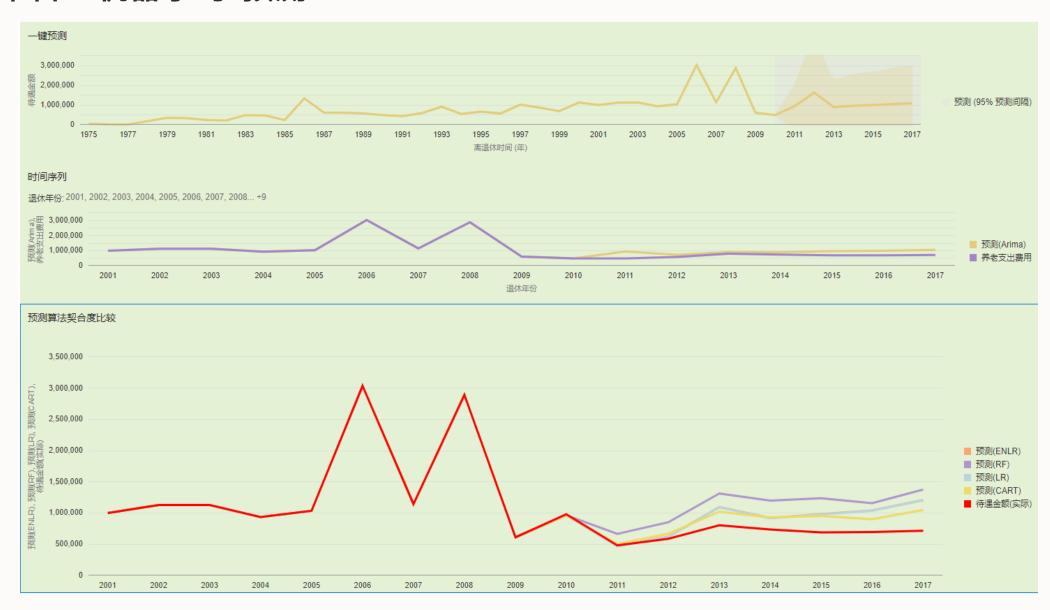


## OAS平台: 机器学习-一键预测





## OAS平台: 机器学习-预测



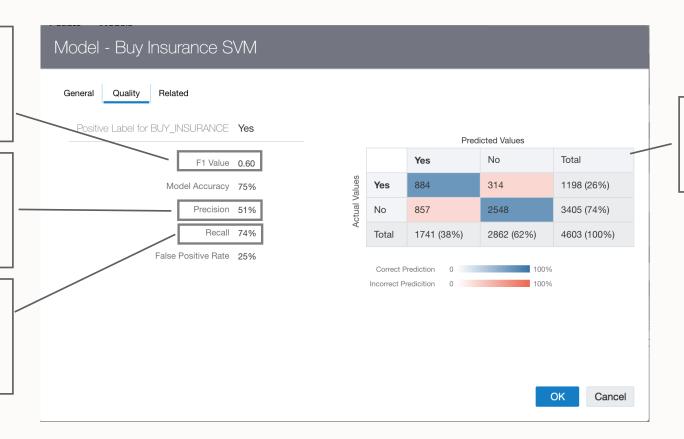


### OAS平台: 机器学习-模型评估

F1值给出了我们的整体准确性, 以及预测结果的好坏 (2\*((精确\*召回)/(精确+ 召回))

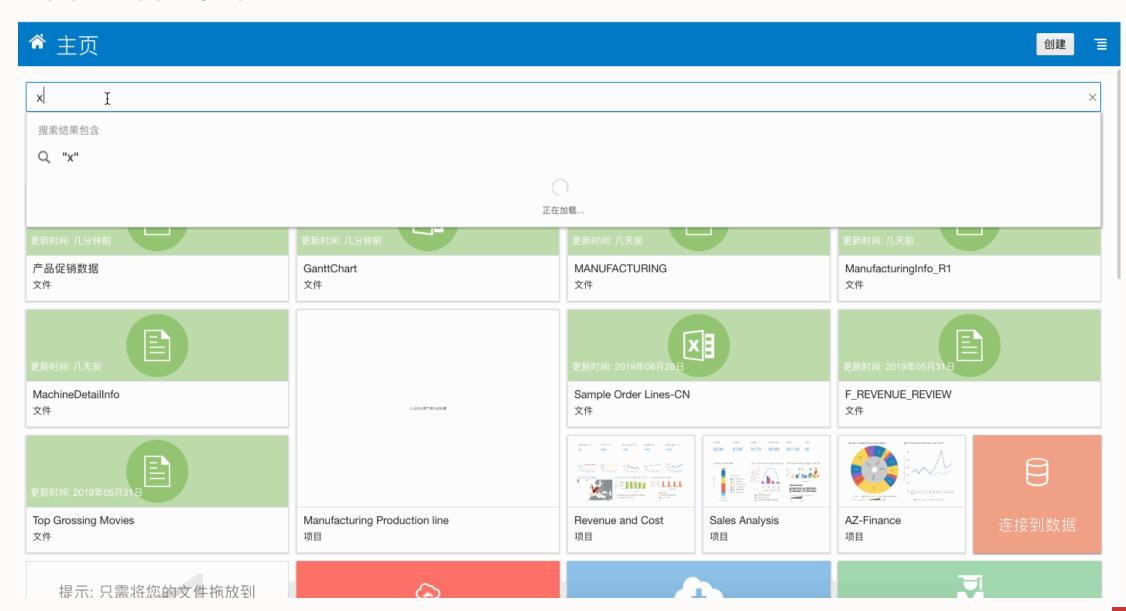
精度给出了所有预测值正确的百分比,例如所有预测值是51%, 实际是(884/1741 = 0.51)

召回(又称灵敏度)为我们提供了正确预测值的百分比。 例如所有实际是的模型可以预测74%(884/1198 = 0.74)

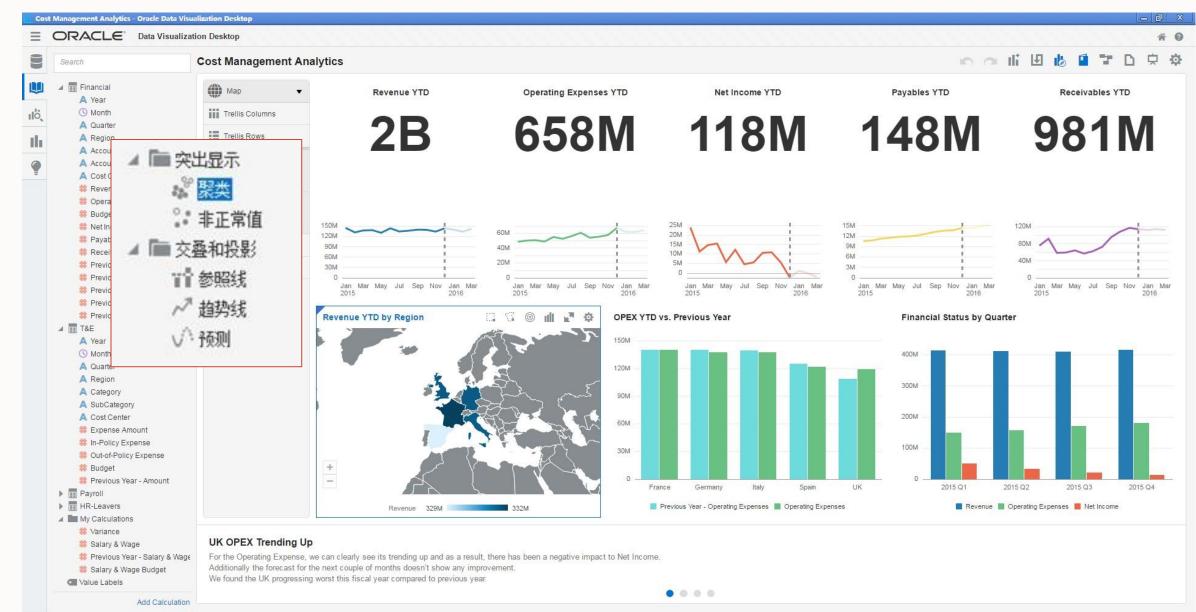


混淆矩阵按类显示正确和错误预测的数量

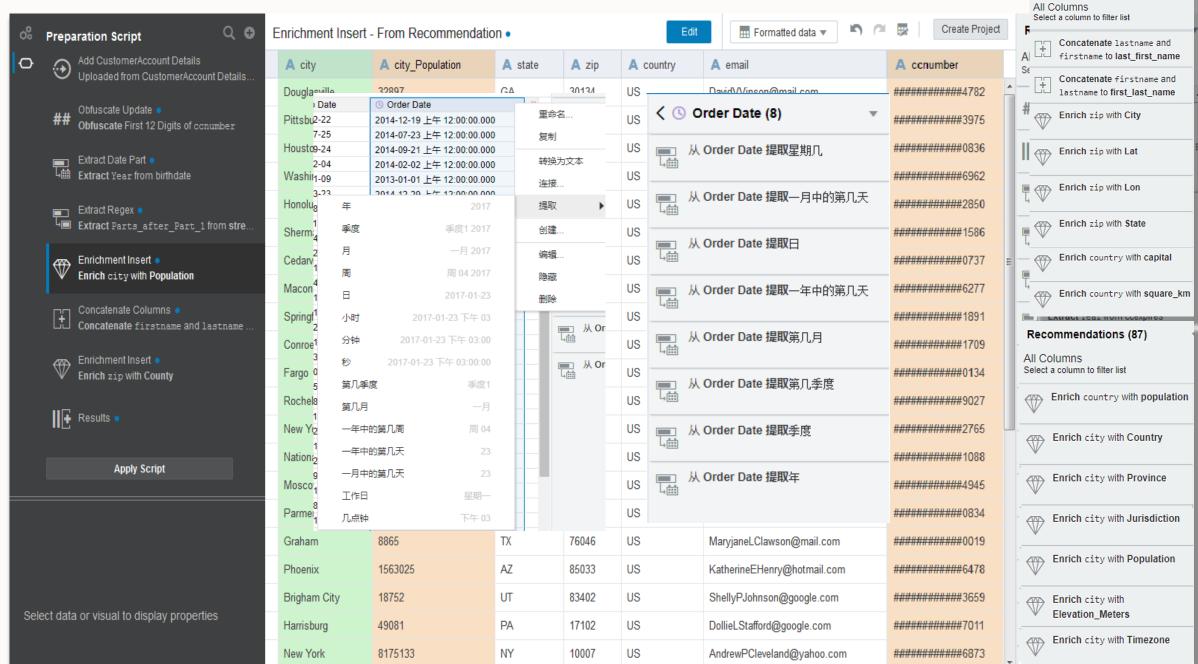
### OAS平台:智能问答



### OAS平台:一键智能,聚类异常

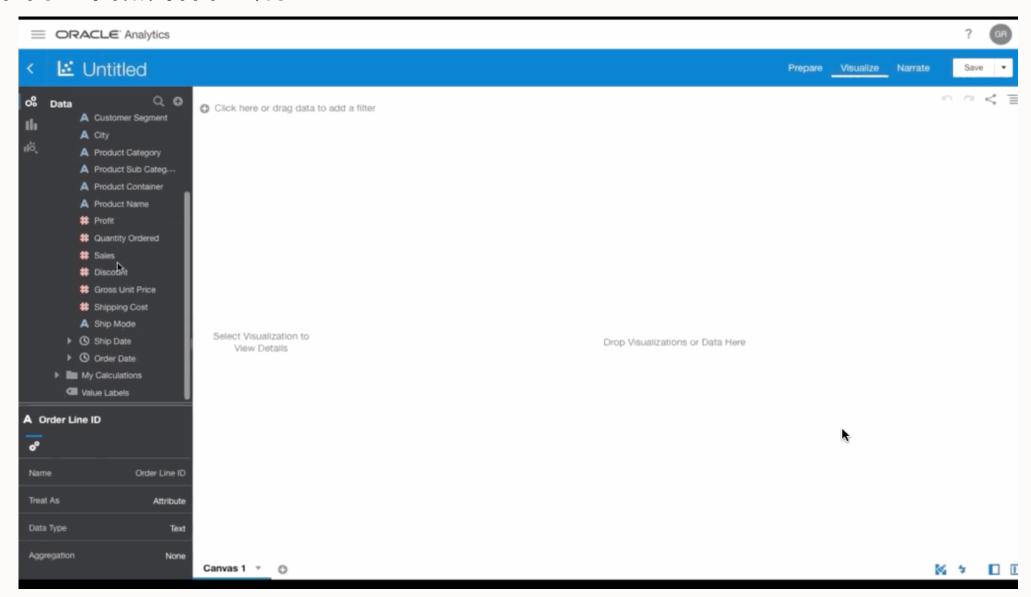


### OAS平台:数据智能丰富



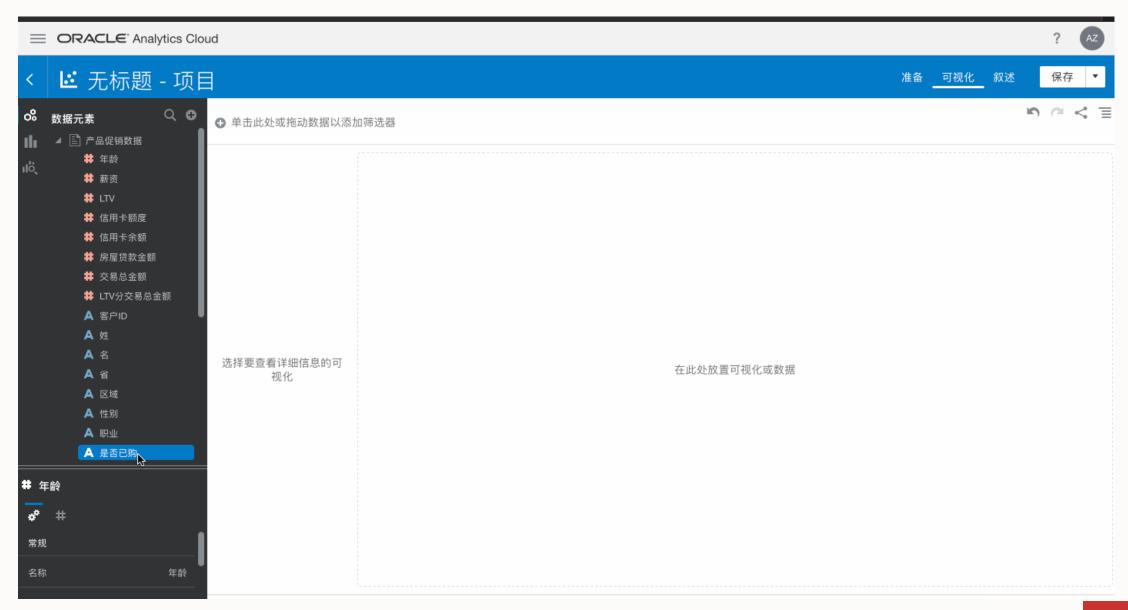
Recommendations (87)

## OAS平台: 自然语言生成



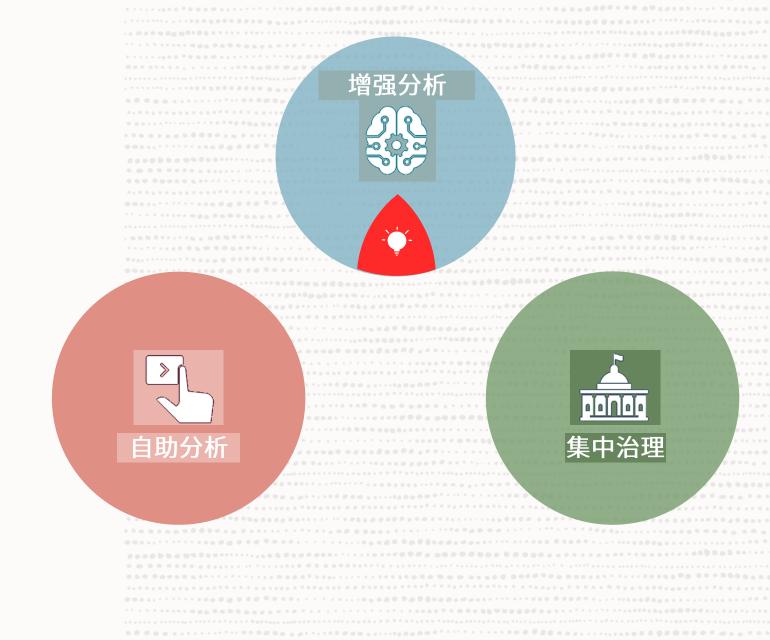


## OAS平台:一键解释



# 总结

- •自助分析能力
- •集中治理能力
- •增强分析能力





# ORACLE