APPROACHABLE ANALYTICS

PUT THE POWER OF INSIGHT IN EVERY USER'S HANDS

BERNARD BLAIS
SAS GLOBAL TECHNOLOGY PRACTICE

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Accenture - SAS Partnership

> **15 year** strategic alliance
> **Exec to Exec** commitment

> **2,500+** SAS-trained delivery consultants
> **12** joint offerings
> **10+** Accenture centers with SAS expertise

> **200+** projects completed
> **New** commercial models and flexible pricing

- Shared Vision
- Analytics and Big Data
- High Performance Computing
- Cloud
- Internet of things
- State of the Art Technology Labs

accenture
High performance. Delivered.

sas
THE POWER TO KNOW.

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TODAY'S THEMES

- Visualization
- (Big?) Data
- Self-Service
- Democratization of Analytics
- Deployment Options / Architecture

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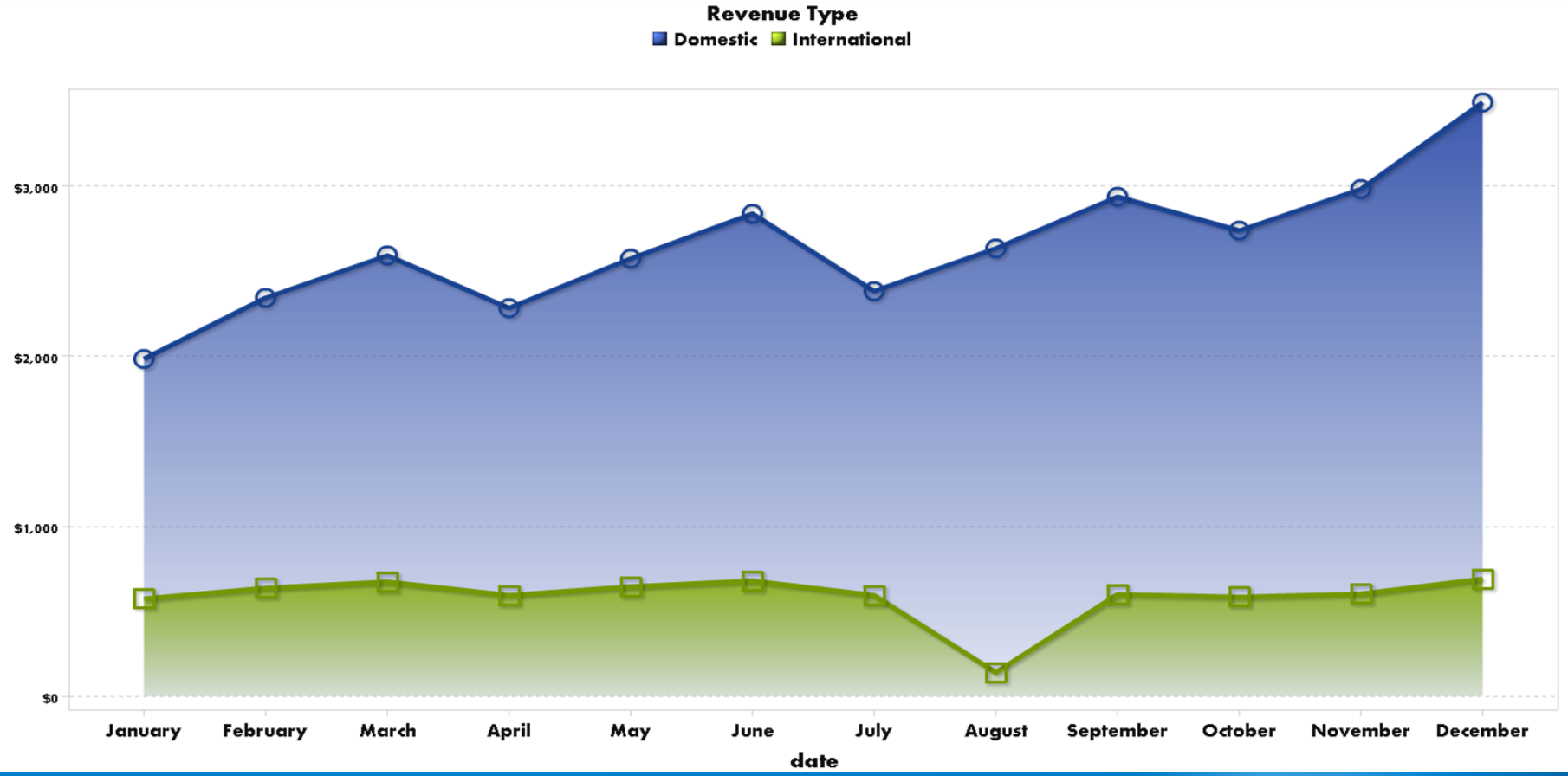
VISUALIZATION WHY IT MATTERS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Domestic	$1,983	$2,343	$2,593	$2,283	$2,574	$2,838	$2,382	$2,634	$2,938	$2,739	$2,983	$3,493
International	$574	$636	$673	$593	$644	$679	$593	$139	$599	$583	$602	$690



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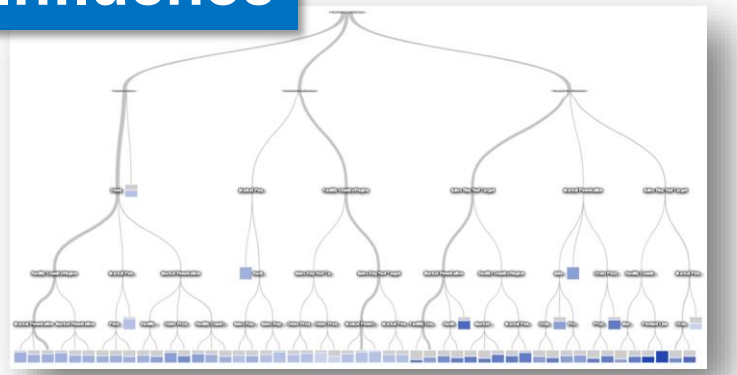
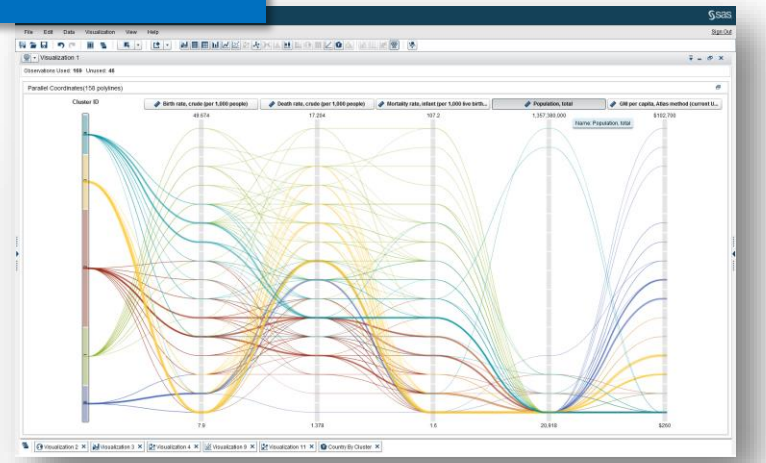
VISUALIZATION | WHY IT MATTERS

Influence

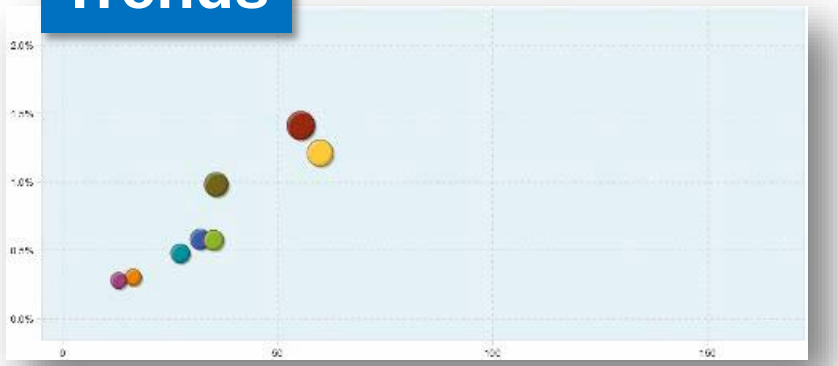


Relationships

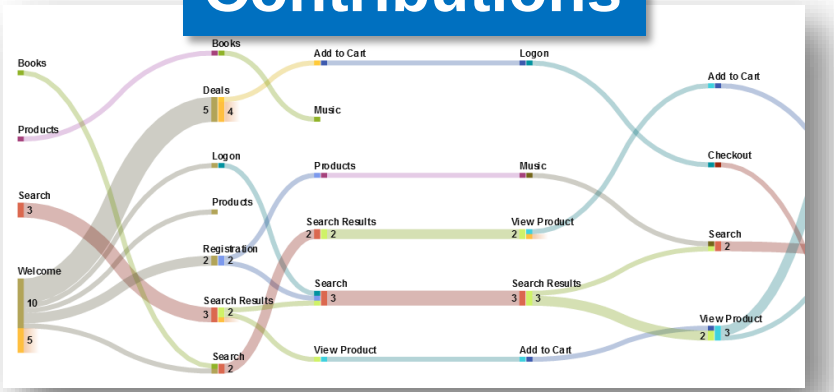
Patterns



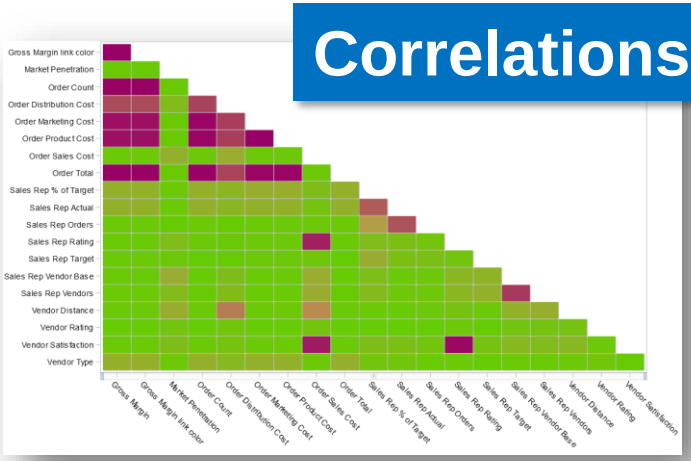
Trends



Contributions



Correlations



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TODAY'S THEMES

- Visualization
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- Democratization of Analytics
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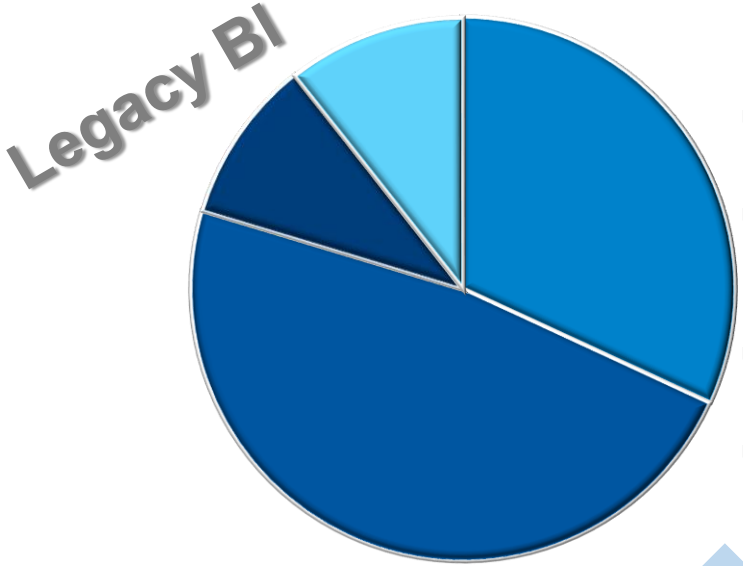
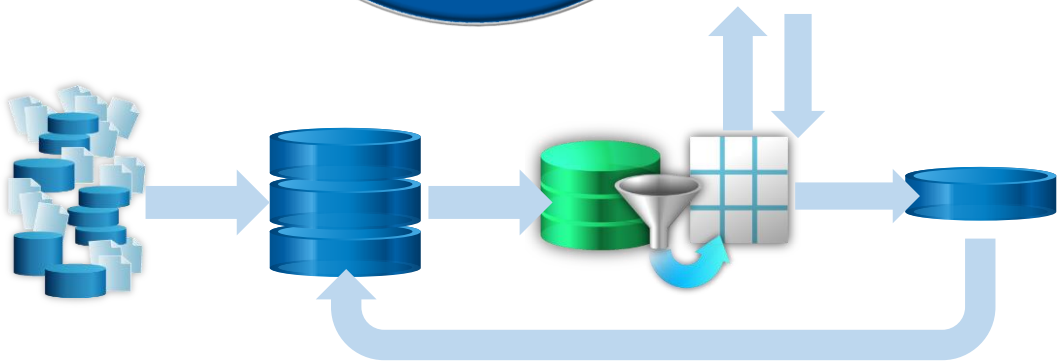
QUIZ SPOT THE DIFFERENCE

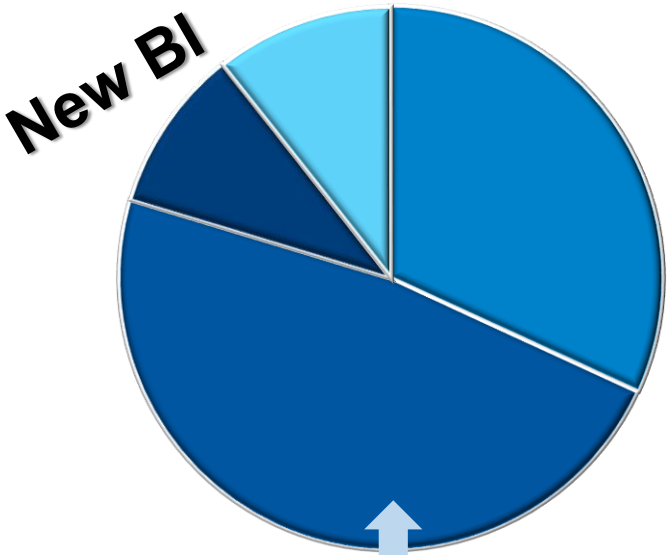
Sales



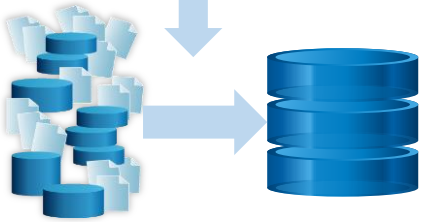
- batch (long) process
- difficult/awkward drill through to details
- ad hoc analysis limited
- heavy dependence on IT



Sales



- quick process
- easy access to details
- ad hoc analysis at users' fingertips
- self-service



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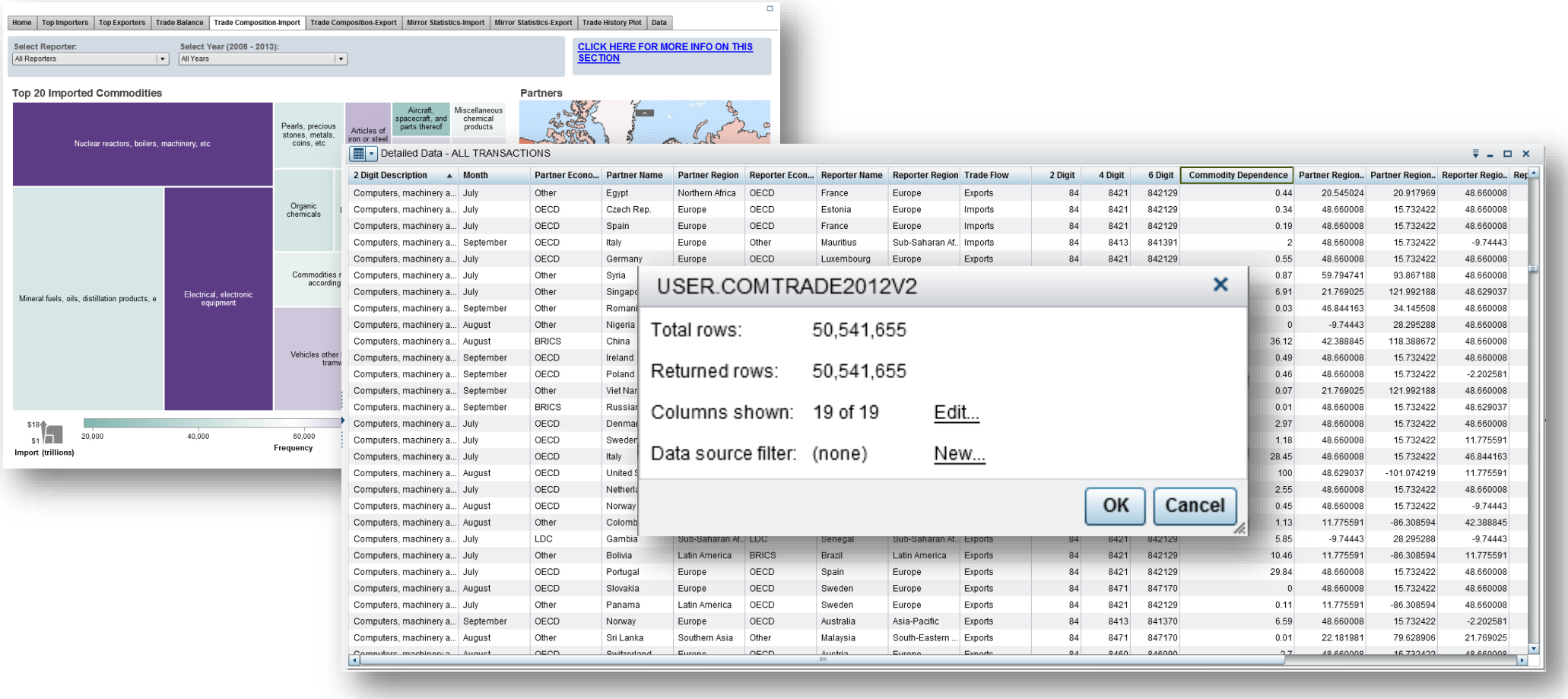
BIG DATA | ACCESS ALL THE *RELEVANT* DATA



http://www.sas.com/software/visual-analytics/demos/united-nations.html

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US TREASURY DO NOT PAY PROGRAM

BUSINESS ISSUES

- Twenty-seven different agencies administer billions of dollars in benefits to US citizens through 425 programs.
- There is an enormous amount of fraud in part because most benefit systems are set up in the "pay and chase" model. Once the payment is made, it's nearly impossible to recoup.
- With petabytes of payment data, the US Treasury needed to be able to ingest and analyze the data in real time as well as surface knowledge from the data.
- The customer sought a completely integrated platform so payments could be stopped before they go out the door.

EXPECTED RESULTS

- Real-time analysis of payment data allows US Treasury to determine whether an individual should be paid benefits.
- With SAS, US Treasury will save hundreds of millions of tax dollars by stopping improper payments and gain a sharper view of future fraud.

UNITED STATES FEDERAL GOVERNMENT

"This deal is critical to the federal government in terms of enabling business analytics and high-performance technologies to help to dramatically reduce the amount of improper payments, which has historically been more than $100 billion a year."

US Treasury

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AVIVA CANADA

BUSINESS ISSUE

- Quickly help thousands of affected customers get their lives back on track after a major natural disaster.
- Easily monitor incoming claims and map them using geospatial data to see the customers most affected.

RESULTS

- Quick assessment of risk exposure.
- Speedier claim fulfillment.
- Better customer retention.
- Enhanced fraud detection.
- Improved competitive pricing.

Read the full story

INSURANCE

"SAS Visual Analytics is so fast you move from asking a few questions of the data to entering into a 'chat' with the data."

Charles Dugas

Assistant Vice President of Research & Development

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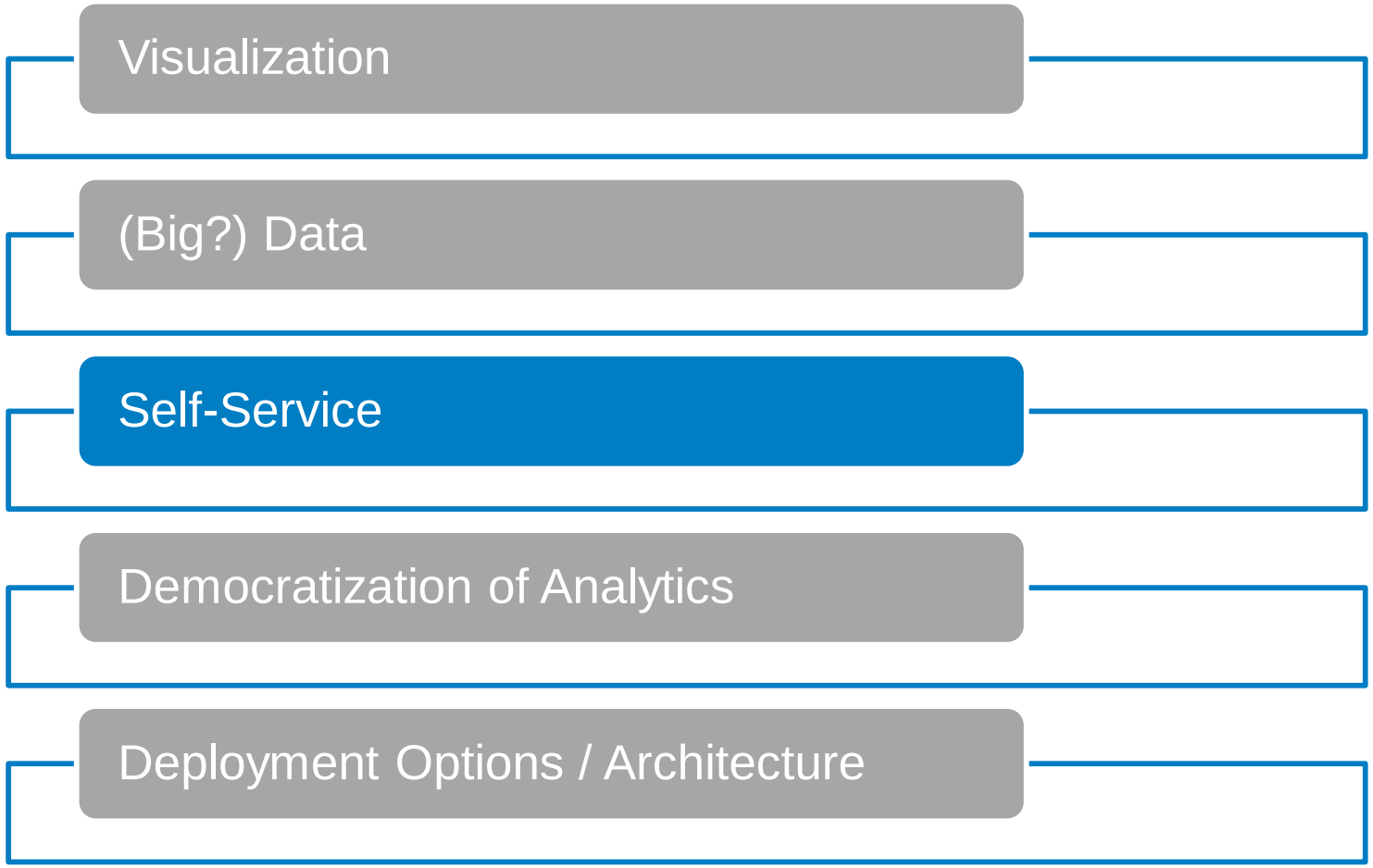
TODAY'S THEMES



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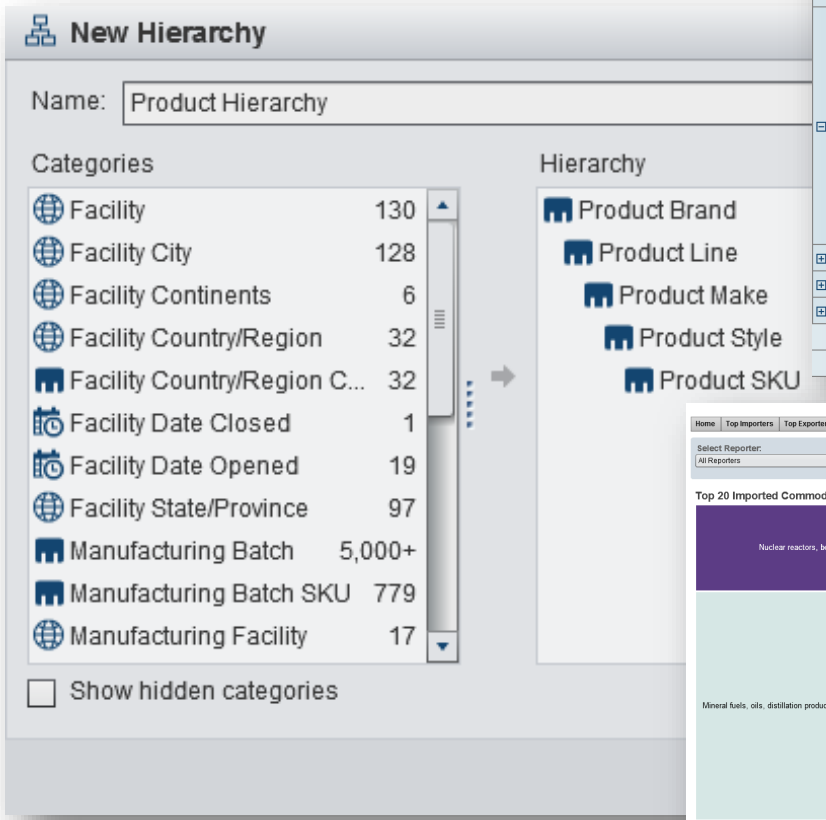
APPROACHABLE ANALYTICS

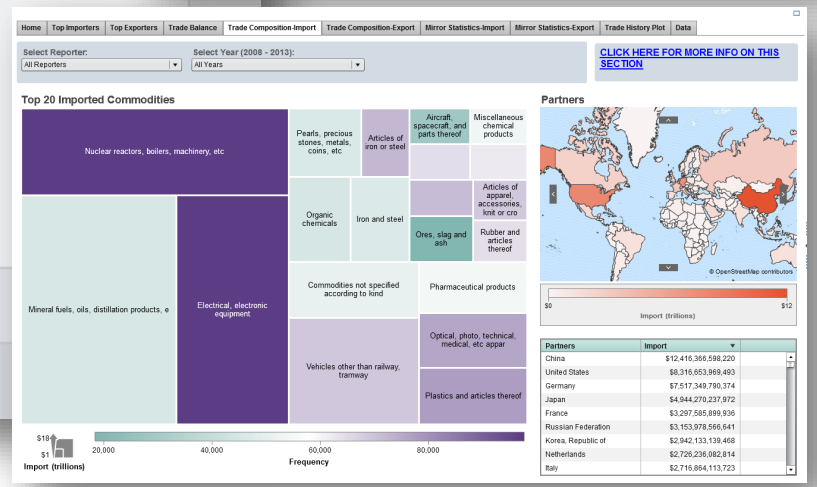
EMPOWERING END USERS – SELF-SERVICE

- Create New Hierarchies



- Create New Columns and Calculations

Product Line	Product Make	Product Style	Transaction Month: January Actual	January Target	January Production Ratio	February Actual	February Target	February Production Ratio
Bead			4,821	7,935	60.8%	3,825	6,723	56.9%
Gift	Bar Mitzvah		449	878	51.1%	1,006	1,676	60.0%
	Bat Mitzvah		1,677	2,606	64.4%	1,291	1,956	66.0%
	Birthday		1,682	2,604	64.6%	610	1,044	58.4%
	Gag		1,062	1,720	61.7%	772	916	84.3%
	Retirement		982	2,178	45.1%	1,159	1,853	62.5%
	Sweet16	Princess Key Ring	217	358	60.6%	476	927	51.3%
		Princess Magnet	259	554	46.8%	112	236	47.5%
		Princess Pony	362	380	95.3%	281	595	47.2%
		Tierra	137	482	28.4%	298	436	68.3%
Kiosk			150,616	264,833	56.9%	123,044	217,131	56.7%
Promo			2,951	4,625	63.8%	2,699	4,332	62.3%
Store			20,847	37,299	55.9%	17,624	30,854	57.1%
			29,359	44,062	66.6%	16,465	24,243	67.9%
			215,421	370,514	58.1%	169,662	292,922	57.9%



- Create their own Private or Shared Reports & Templates

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VALENCIA COLLEGE

BUSINESS ISSUES

- Empower administrators with information to improve student outcomes.
- Adjust the availability for class and resource efficiency so students have the classes and resources they need.
- Rapidly determine whether to open more sections of certain classes, or close others.

RESULTS

- **Requests for ad hoc reports dropped by more than 60 percent**.
- Administrators can interact with data in real time and drill down into visual reports to conduct deeper analysis.
- Users can get access to any data and answer any questions they might have by just drilling in, checking or unchecking a box, or using a drop-down menu; times spent duplicating the same reports for different users is eliminated.
- Easy to adjust the availability for class and resource efficiency so students have the classes and resources they need.

READ THE FULL STORY

EDUCATION

"Administrators can answer complex questions: Why are students successful in certain demographics? Are we meeting certain college key thresholds that we have set? Are students who have experienced certain initiatives within the college more successful?

"Our leadership needs data to make informed decisions on whether current initiatives to help first-generation or low-income students are working,"

Daryl Davis
Director of Institutional Research

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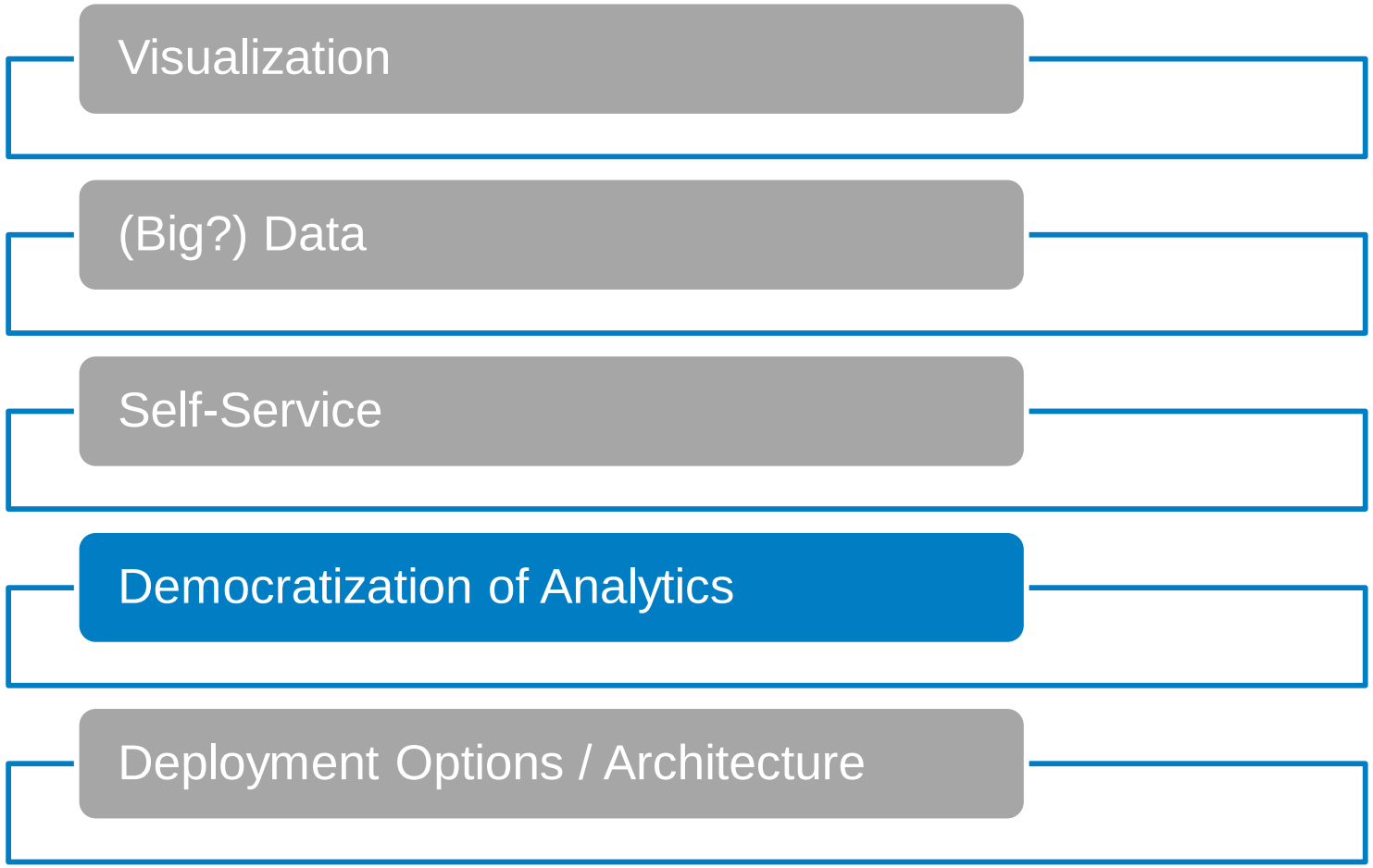
APPROACHABLE ANALYTICS

TODAY'S THEMES



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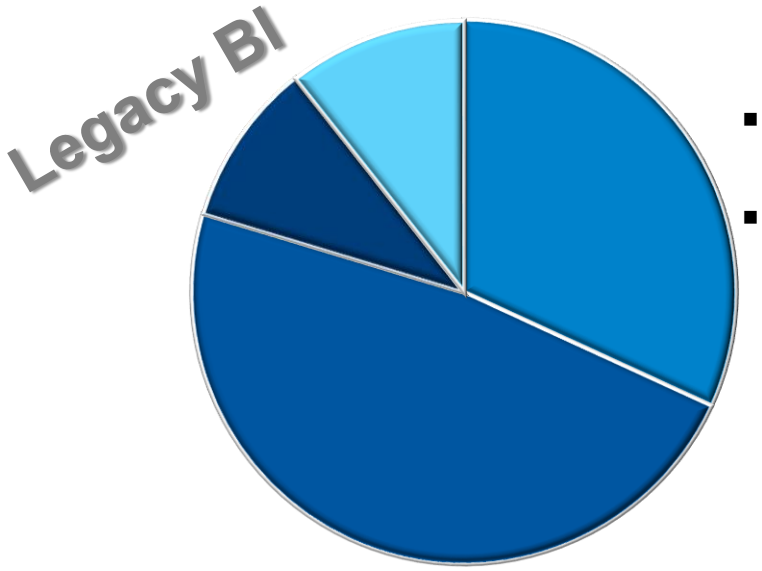
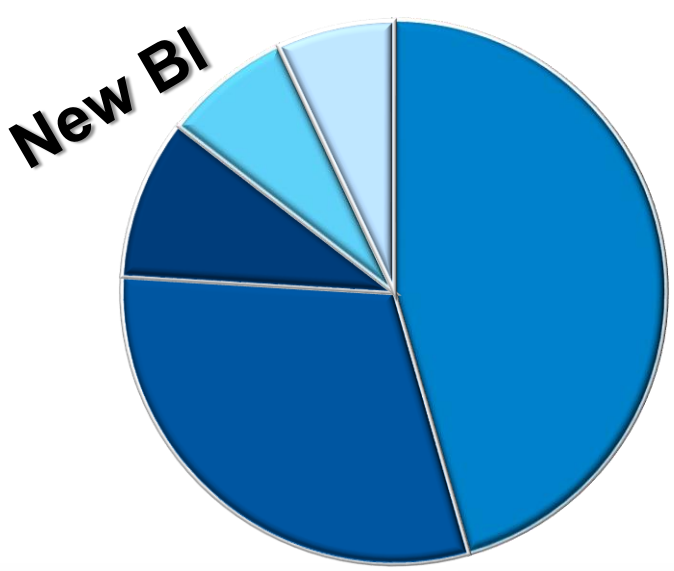
QUIZ SPOT THE DIFFERENCE

Sales Projection

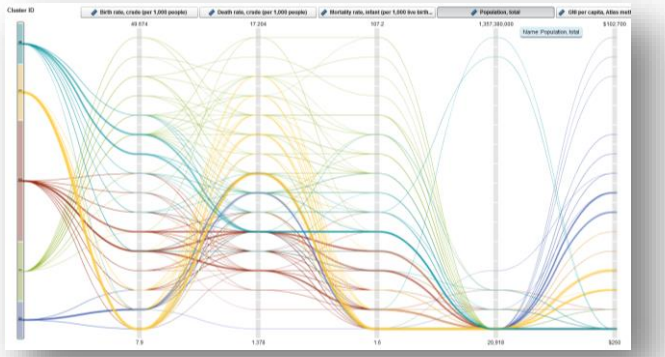


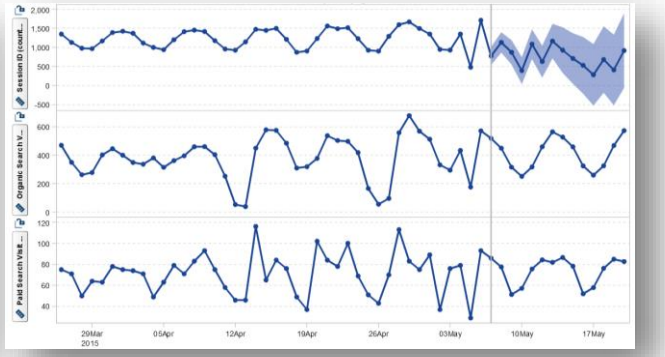
- segments defined by users
- sales projection based on budget, or simple forecast

Sales Forecast



- segments derived from data
- forecast based on multiple models per segments





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DEMOCRATIZATION OF ANALYTICS

ANALYTICS MATURITY ACCORDING TO GARTNER

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DEMOCRATIZATION OF ANALYTICS

THE CITIZEN DATA SCIENTIST

"A person who creates models that **use predictive or prescriptive analytics**, but whose **primary job function is outside of the field of statistics** and advanced analytics. They are "power users" who will be able to perform simple and moderately sophisticated analytic applications that would previously have required more expertise. They often reside in the lines of business and have **deep domain expertise**"

- Gartner Group

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DEMOCRATIZATION OF ANALYTICS

SO…

What happens to the ***REAL*** Data Scientist ?

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APPROACHABLE ANALYTICS

DEMONSTRATION

In which we show a real case scenario where a citizen data scientist was able to find in a few minutes of exploration and analysis the root drivers of customer satisfaction at a retailer, and propose actions to improve it.

Leverages Visualization, Big Data, Self-Service and Democratized Advanced Analytics

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ROYAL BANK OF SCOTLAND

BUSINESS GOALS

- Transform into the most trusted and liked bank by improving customer advocacy and increasing positive interactions.
- Use analytics to proactively understand and fix the most critical issues to improve service and reputation.
- Reduce the costs and impact of issue and complaint resolution. The current staff to handle issues was budgeted to increase threefold. The current staff could address 5% of outstanding issues.

RESULTS and EXPECTED RESULTS

- Analyze unstructured customer data to drive new treatment processes and policy improvements.
- By analyzing 100% of the issues and complaints, more relevant policies, products and services are made available to customers.
- Technology is enabling the bank to be so close to the customer that the customer wants to "buy" more services and products versus the bank conducting all outbound "selling." By year end, the goal is to have 22,000 employees using SAS® Visual Analytics.
- Reduction of complaints by 25%.
- Improvement of customer and employee satisfaction scores by over 100% in 2+ years.
- The bank is able to retain more and higher balances (up to 2x increase) of customers who would have otherwise left by proactively addressing issues to save time and money.
- 90% of the 40-person existing customer care staff were redeployed to higher-value operations performing real-time analysis of digital customer interactions.

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FINANCIAL SERVICES

" The bank's goal is to obtain the No. 1 customer engagement score across all retail banks globally. Doing this means harnessing and understanding customers' issues, along with becoming advocates for their well-being."

"Now, 99% of the time we are able to find the root cause of their issues and address them with new policies that generate revenue over the longer term for the bank by having 'happy' customers."

Royal Bank of Scotland

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SM RETAIL GROUP MCI

BUSINESS ISSUES

- Drive innovation
- Attract new customers; retain loyal and happy customers
- Grow customer wallet size
- Loyalty Programs Management and Rebate Coupons production
- > 500 retail stores, > 200 millions transactions / year.

PROCESS & DELIVERABLES

- All the data, down to SKUs level, are now loaded and accessible for analysis

IMPACT & RESULTS

- Business Analysts are now much more curious, audacious in exploring the data
  - Drive better financial results
  - Understand the customer (shopper insights, segmentation, etc.)
  - Liberate IT
  - Gain competitive advantage from massive customer transactions and retailer's own executive savvy

"momentum of insight seeking"

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RETAIL

"I am very happy with the results and the support that SAS gave to the project. The business users were very impressed – they can now visualize the potential benefits from the analytics resulting from their use of VA."

CEO, SM Retail Group MCI

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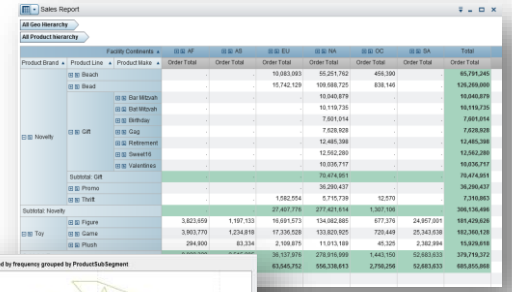
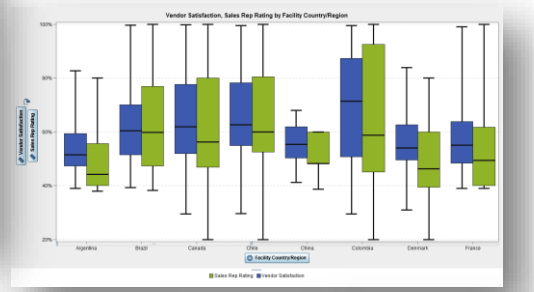
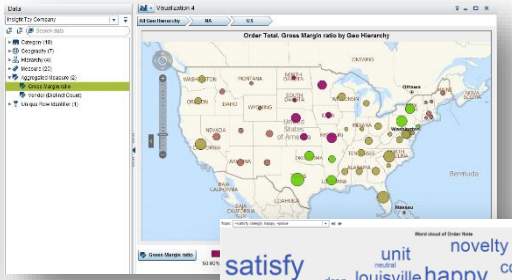
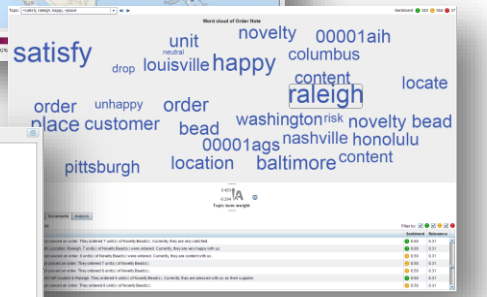
APPROACHABLE ANALYTICS

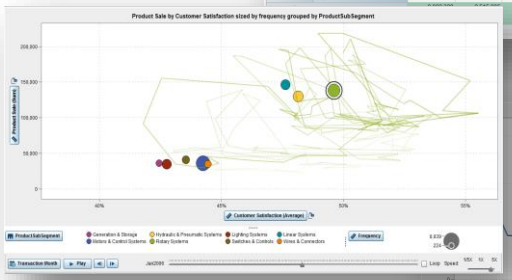
EMPOWERING END USERS

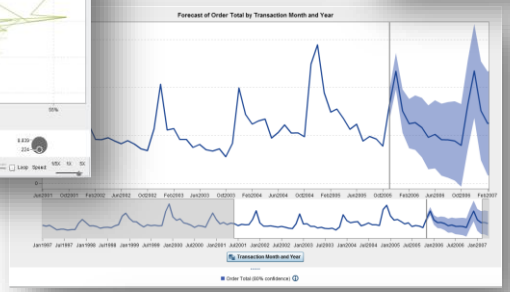


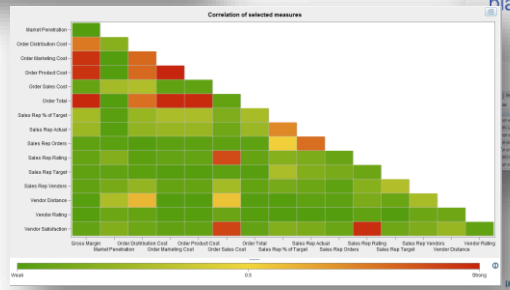


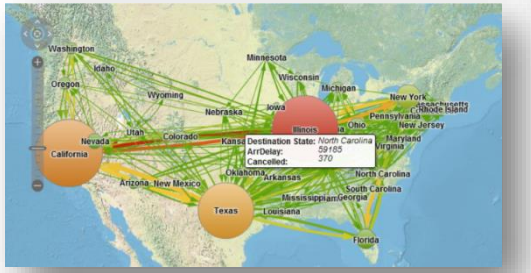


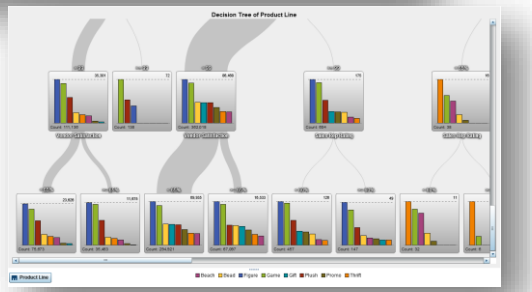


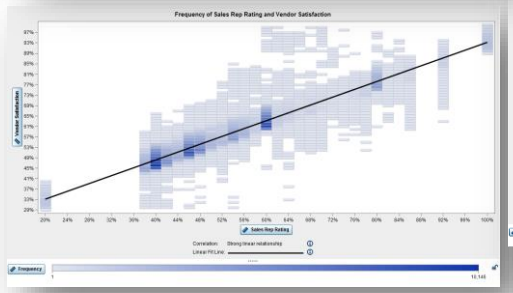


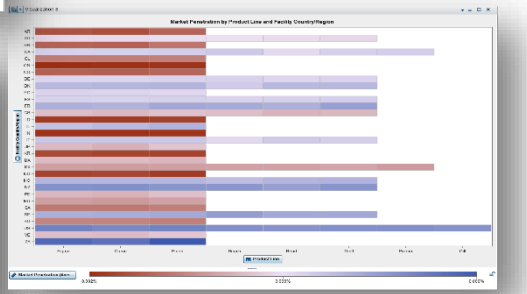












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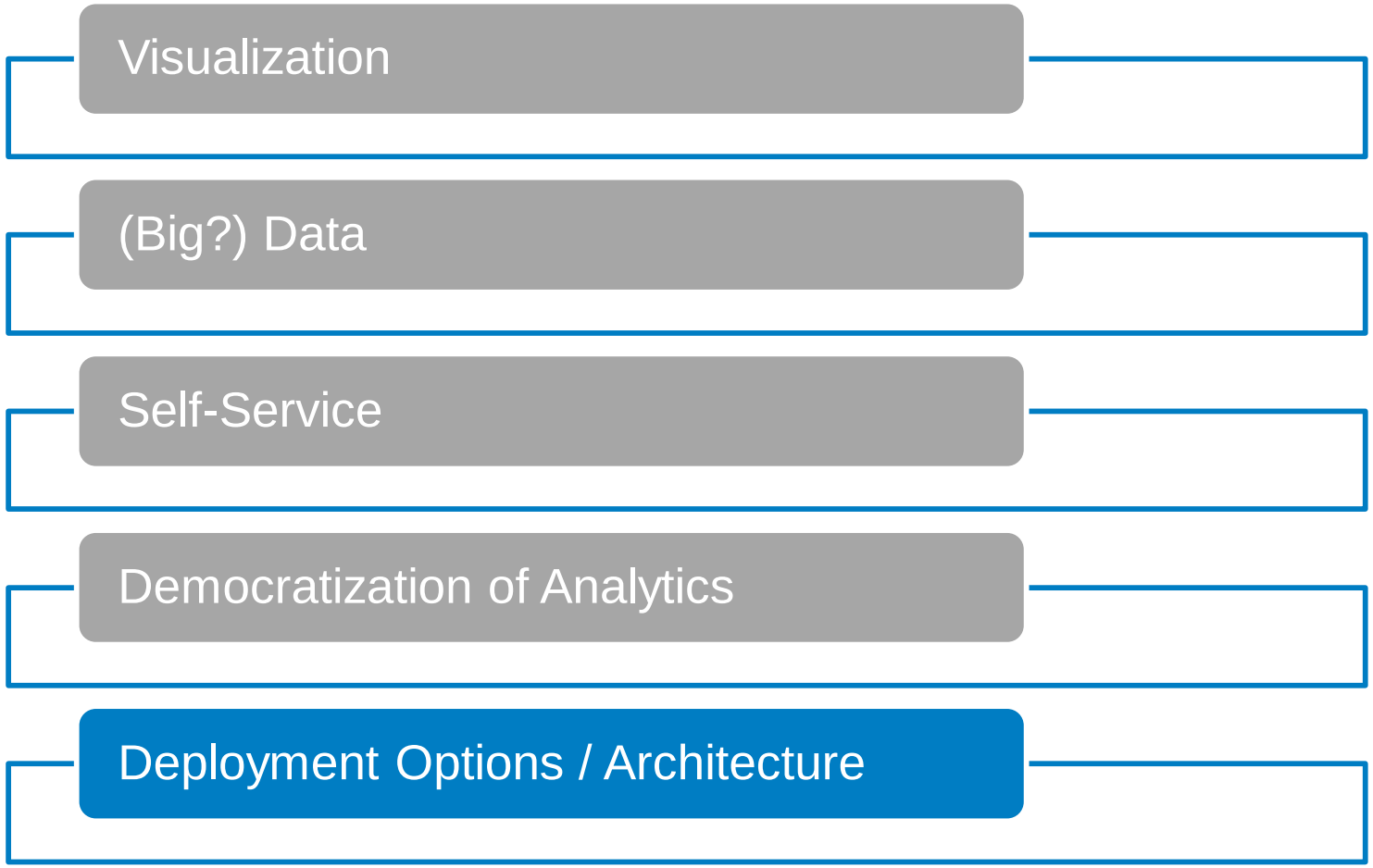
TODAY'S THEMES



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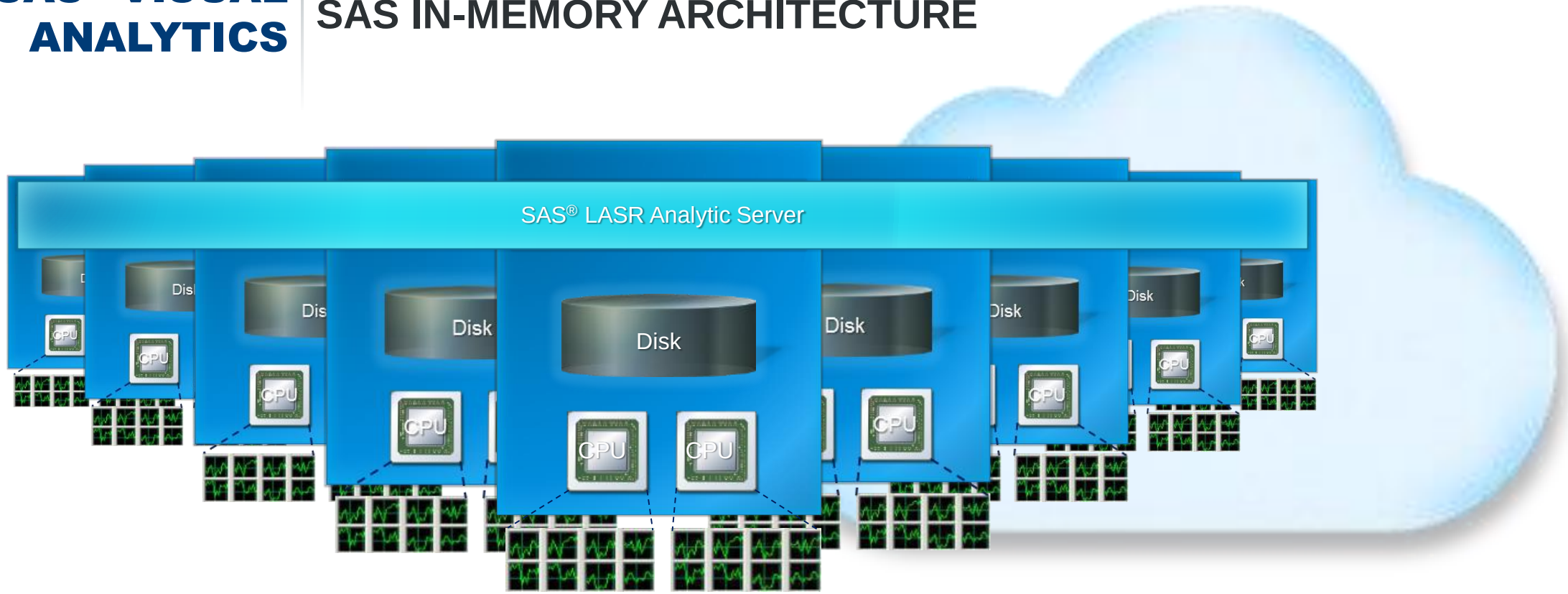
SAS® VISUAL ANALYTICS

SAS IN-MEMORY ARCHITECTURE



- **Data in-memory**
  Ultra-fast processing
- **Extreme Parallelism**
  Leveraging all processor cores
- **Distributed Environment**
  Start small and grow
  On-Premise, Public, Private
  Accenture or SAS cloud

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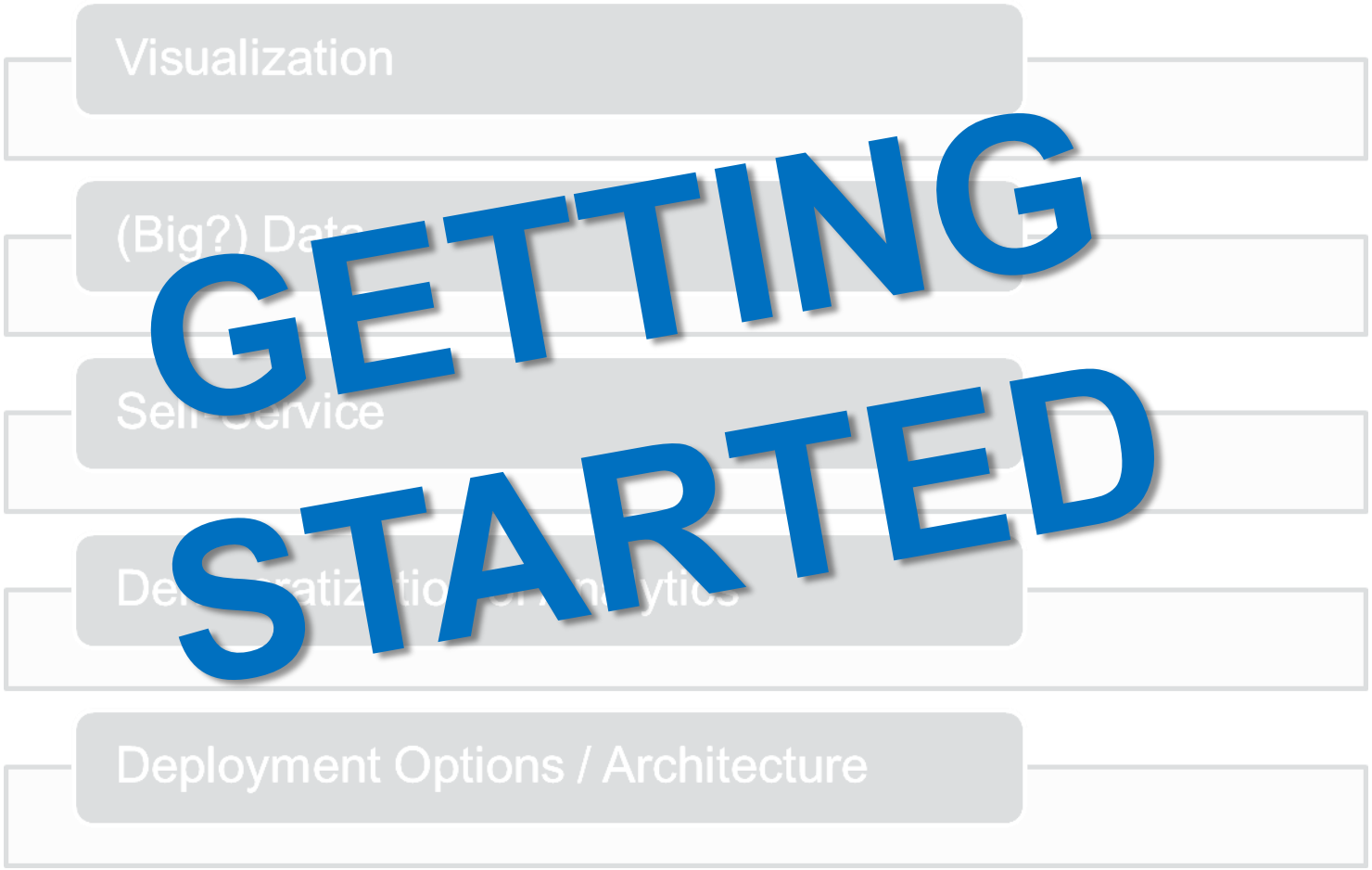
THE NEXT STEPS



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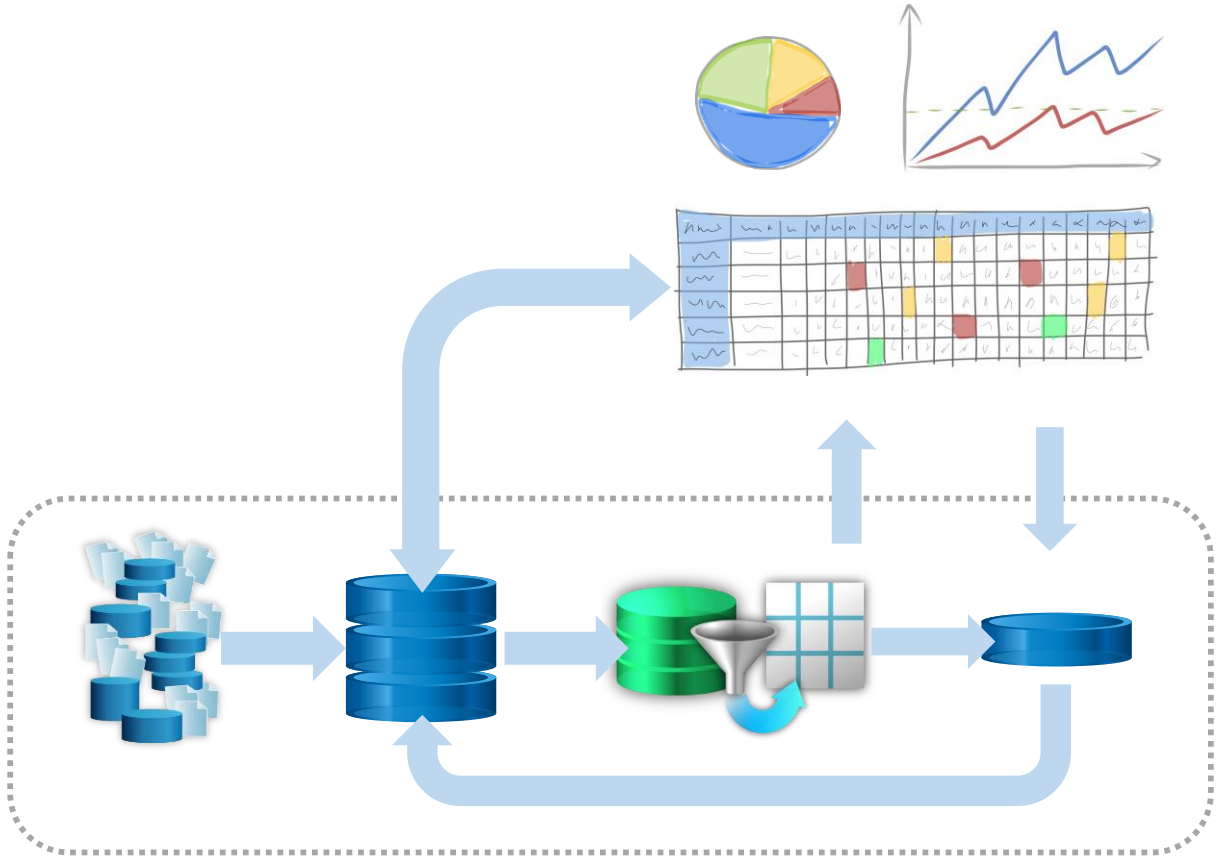
APPROACHABLE ANALYTICS

PUT THE POWER OF INSIGHT IN EVERY USER'S HANDS



- ❑ Do not replace legacy BI (yet)
- ❑ Introduce 'the new BI'
- ❑ Give access to all the data
- ❑ Pick your Citizen Data Scientists
- ❑ Challenge the established process

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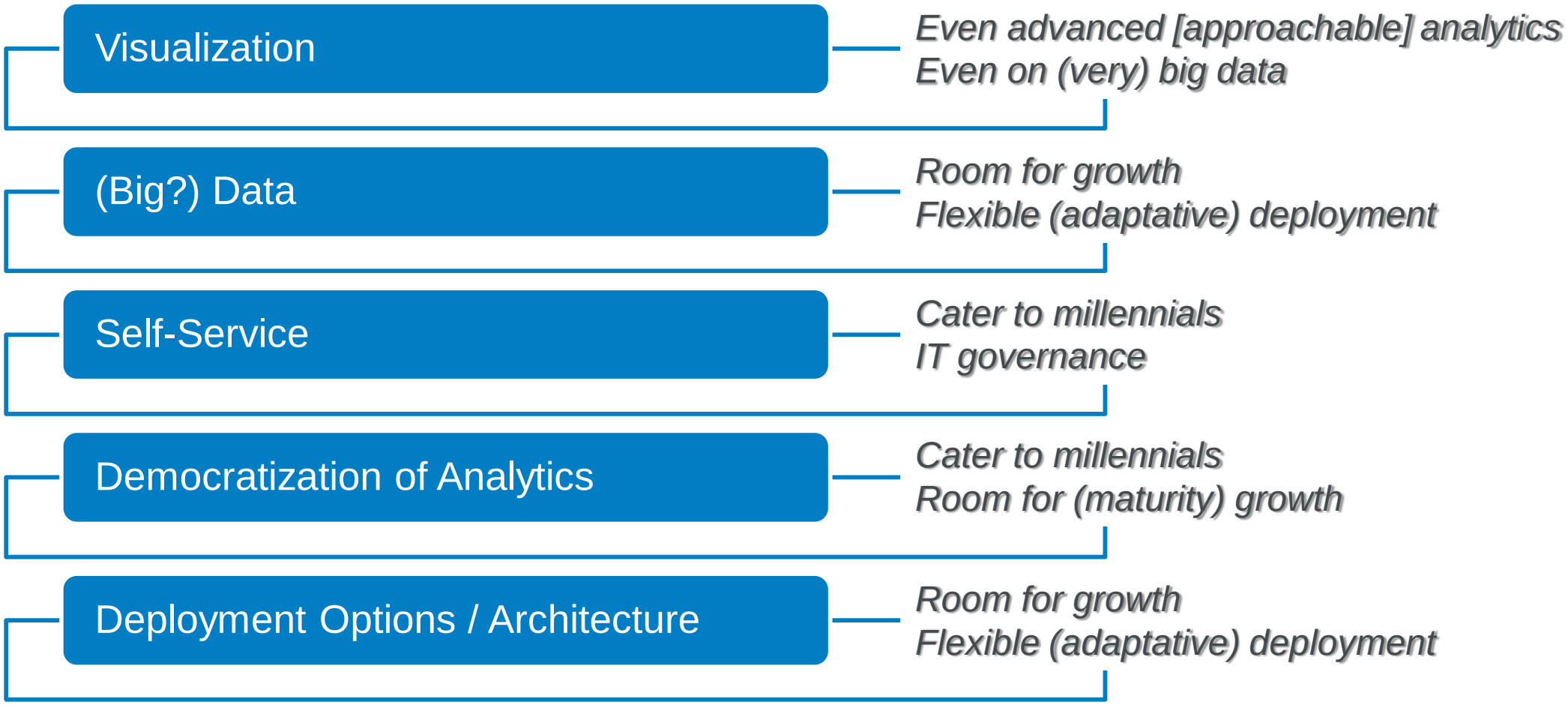
APPROACHABLE ANALYTICS

SAS DIFFERENTIATORS



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APPROACHABLE ANALYTICS

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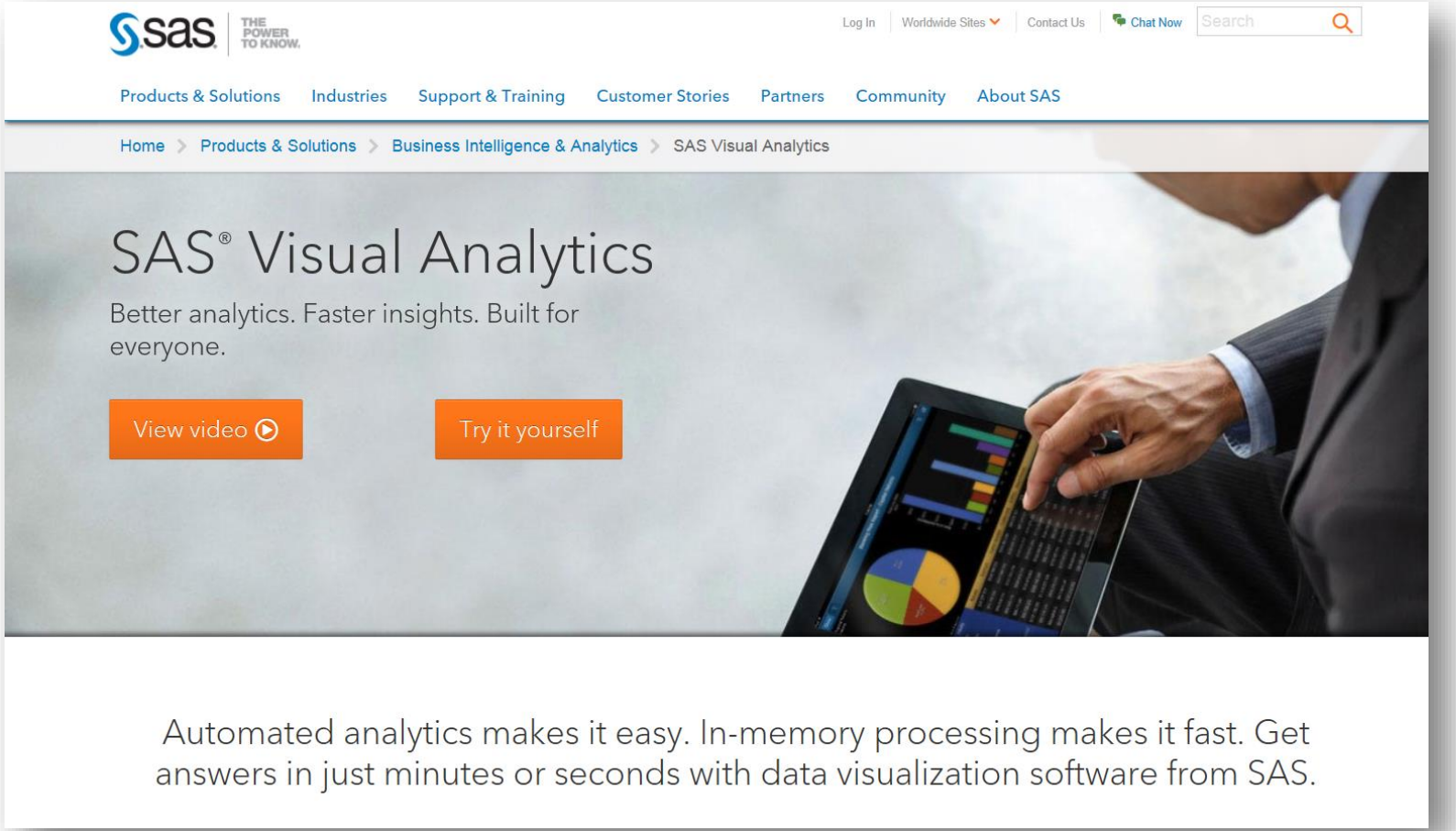

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