

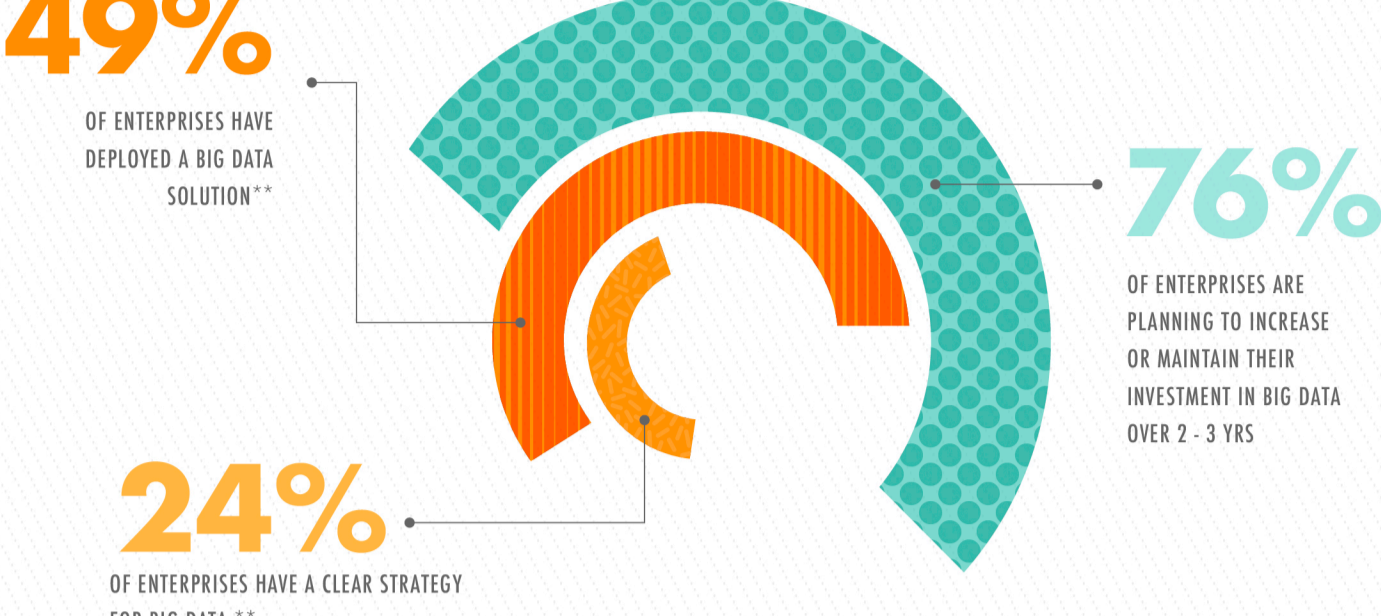
How is **BIG DATA** shaping IT?

WITH BIG DATA EXPECTED TO GROW INTO A \$200 BILLION DOLLAR MARKET IN 2020[†] AND OVER 90% OF THE DATA IN THE WORLD BEING CREATED IN THE LAST TWO YEARS^{**}.

Illuminas decided to take a deeper look into how enterprises in US are leveraging Big Data and how this is shaping IT departments. Illuminas asked a group of Senior IT Executives on it's Insight Exchange community how their organizations were approaching Big Data.

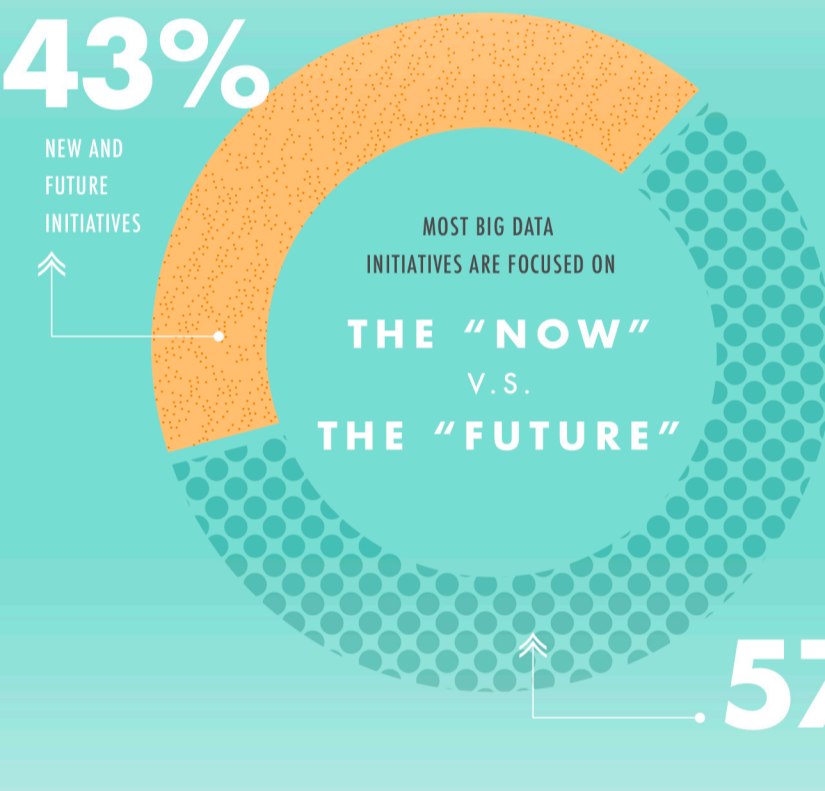
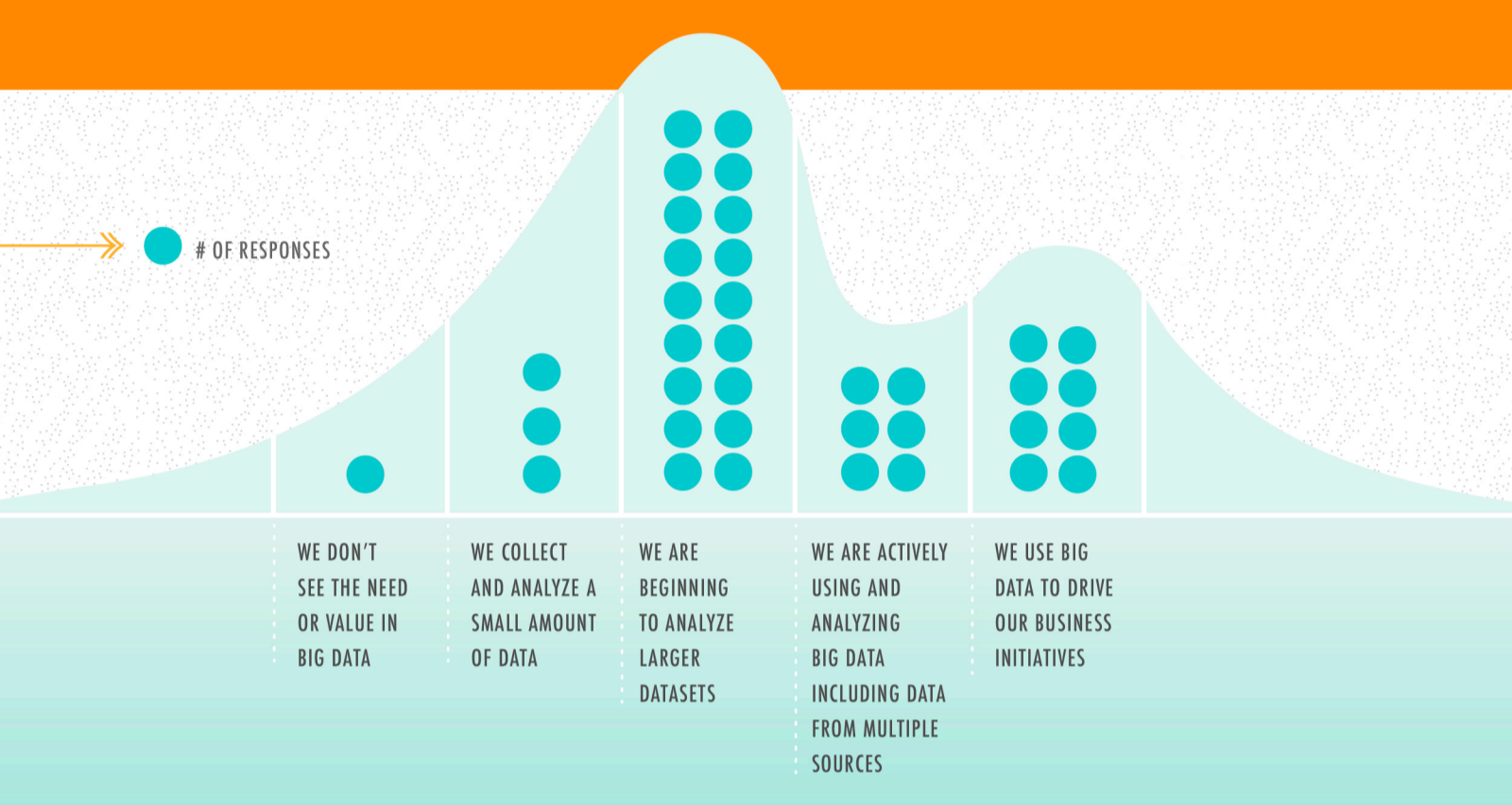
WHILE BIG DATA STRATEGIES IN THE ENTERPRISE ARE NOT CURRENTLY CLEAR...

The outlook on big data is positive with the majority planning to maintain or increase investments.



“ We're currently fairly new in the [Big Data] game and just working on setting up foundational systems (Hadoop), along with the necessary training and analyst tools to start moving forward in this area. ”

THIS IS EVIDENT IN THE FACT THAT MOST ARE COLLECTING LARGE AMOUNTS OF DATA BUT UTILIZATION HAS YET TO FULLY MATURE



“ [Current Big Data Initiative] Primary initiative is tied to customer engagement. Looking at all types of business transactions and determining, based on things like location, time of day, type of transactions, etc. and then creating new products or improving existing products and marketing to capitalize on those trends. ”

Customer insights and retention efforts dominate Big Data initiatives

- BUSINESS INITIATIVES UTILIZING BIG DATA FOR
- + Customer Insights/Retention
 - + Product Usage Trends
 - + New Product/Service Development
 - + Competitive Advantage



Primary data collection focus is on transactional and behavioral data

- TYPES OF BIG DATA CURRENTLY UTILIZED
- + Transactional or financial data
 - + Internet or web behavior data

Top investments in Big Data include:

- + BI software
- + Additional Storage/Databases
- + Employees with data expertise
- + Servers
- + Data Analytics Software



“ [Top investments] Finding the right technology to analyze and take advantage of the results. Finding the right type of technologists to program and model that data and retaining those staff based on current market conditions. ”

WHAT'S HOLDING BIG DATA INITIATIVES BACK?

Costs



~1/3 STATED CAPITAL REQUIREMENTS FOR HANDLING, STORING AND ANALYZING LARGE AMOUNTS OF DATA

Data Integration



~1/4 STATED INTEGRATING DATA FROM MULTIPLE DATA SETS IMPEDE BIG DATA INITIATIVES

Knowledge



~2/3 STATED A LACK OF QUALIFIED PERSONNEL BOTH INTERNALLY AND FOR HIRE THAT UNDERSTAND HOW AND WHAT DATA TO ANALYZE

OVERCOMING THE OBSTACLES.

Companies are looking for ways to automate the things they don't know how to do by investing in:

- BI (BUSINESS INTELLIGENCE)
- PREDICTIVE ANALYTICS
- DATA-AS-A-SERVICE

“ [These investments allow for] Transforming the organization to better leverage offerings and expertise outside our four walls where it is most appropriate. ”

[†]<http://www-01.ibm.com/software/data/bigdata/what-is-big-data.html> ^{††}<https://www.forbes.com/sites/gilpress/2017/01/20/6-predictions-for-the-203-billion-big-data-analytics-market/#47ccca52083>
^{**}<https://www.dnvg.com/news/companies-are-eying-big-data-opportunities-but-few-are-able-to-tap-the-potential-63067> ^{***}<http://www.zdnet.com/article/research-49-percent-of-large-companies-implementing-big-data-solutions/>