

HOW TO EMPOWER DECISION MAKING WITH PREDICTIVE ANALYTICS



Collecting data is no longer a serious challenge for businesses, but analyzing it is. Technology not only makes it possible to collect and store data, it can be used to draw insights and make data-driven decisions through the use of predictive analytics.

Businesses that previously haven't had to rely on data, information technology and analytics are discovering that this new method of predictive insights can help increase efficiency and profitability.

DEFINING PREDICTIVE ANALYTICS

PREDICTIVE ANALYTICS...

Employs historical data mining and other techniques to predict outcomes & inform decision making for businesses and other organization



INDUSTRY STATISTICS AND MARKET PREDICTIONS

Research by MarketsandMarkets found that the predictive analytics market is projected to grow from **\$4.56 BILLION** in 2017 to **\$12.41 BILLION** in 2022, a Compound Annual Growth Rate (CAGR) of **22.1%**

The International Data Corporation (IDC) predicts that big data and business analytics worldwide revenues will grow from **\$130.1 BILLION** in 2016 to **\$203 BILLION** in 2020, a CAGR of **11.7%**

McKinsey Global Institute's 2016 *The Age of Analytics: Competing in a Data-Driven World* report predicts that **2 to 4 MILLION** business translators will be needed to translate the information gathered by data scientists over the next 10 years.

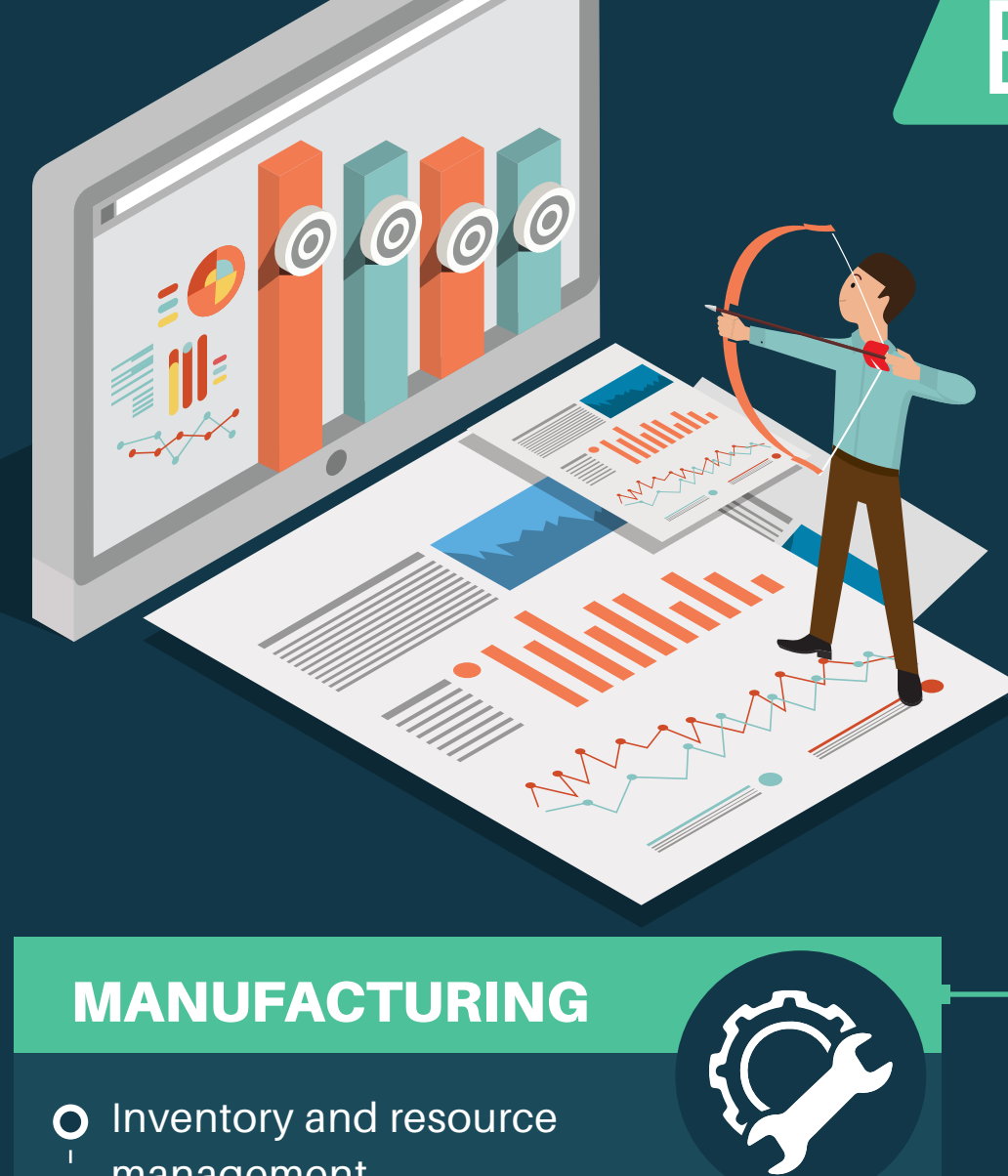


According to the 2017 *Advanced and Predictive Analytics Market Study* by Dresner Advisory Services:



of enterprises interviewed consider in-memory analytics and in-database analytics the most critical predictive analytics platforms.

EXPLORING THE POSSIBILITIES



INDUSTRIES THAT BENEFIT FROM PREDICTIVE ANALYTICS

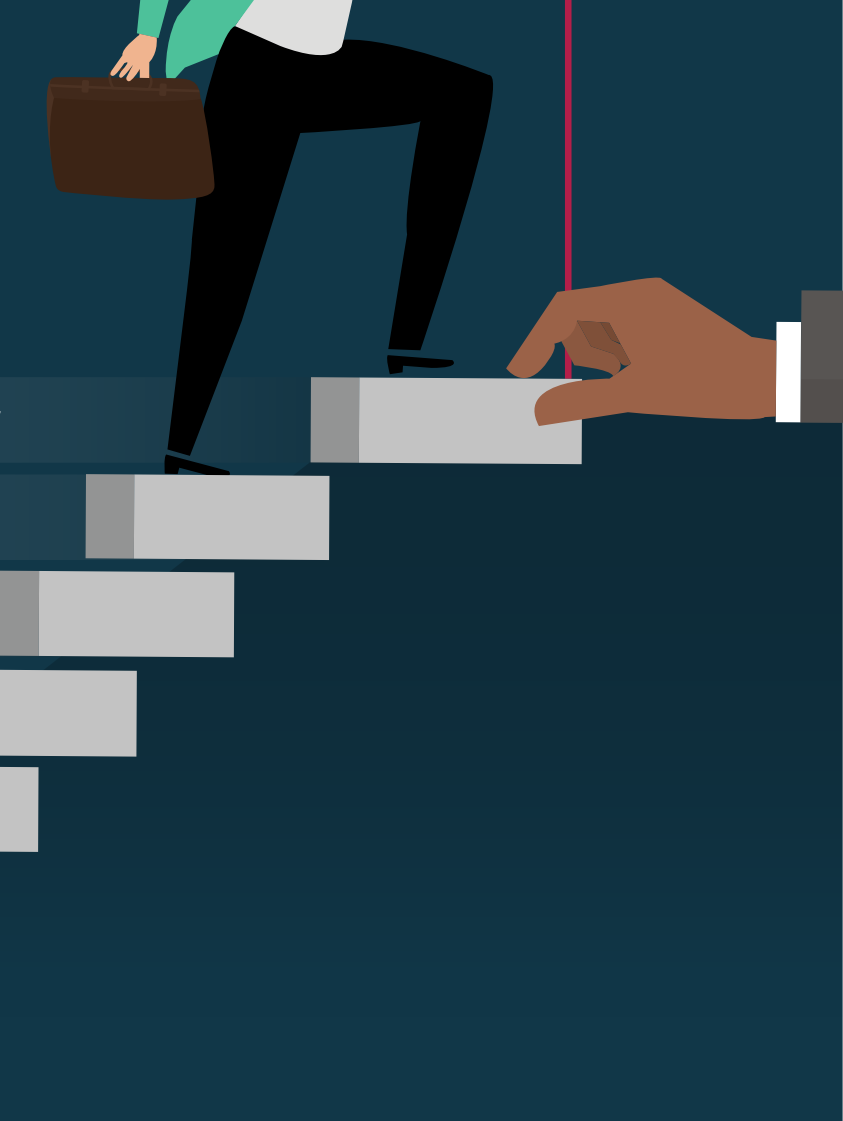
- RETAIL**
 - Effectiveness of marketing and promotional events
 - Determining which products to feature
- MANUFACTURING**
 - Inventory and resource management
 - Optimizing production and distribution
- HEALTH INSURANCE**
 - Detecting fraudulent claims
 - Identifying at-risk patients and finding effective interventions
- GOVERNMENT AND PUBLIC SECTOR**
 - Enhancing cybersecurity
 - Understanding population trends

- OIL AND GAS**
 - Minimizing safety risks
 - Predicting equipment maintenance through machine sensors
- BANKING**
 - Detecting and reducing fraud and credit risk
 - Maximizing up-sell and cross-sell opportunities

INDICATORS OF POTENTIAL TO BENEFIT FROM PREDICTIVE ANALYTICS

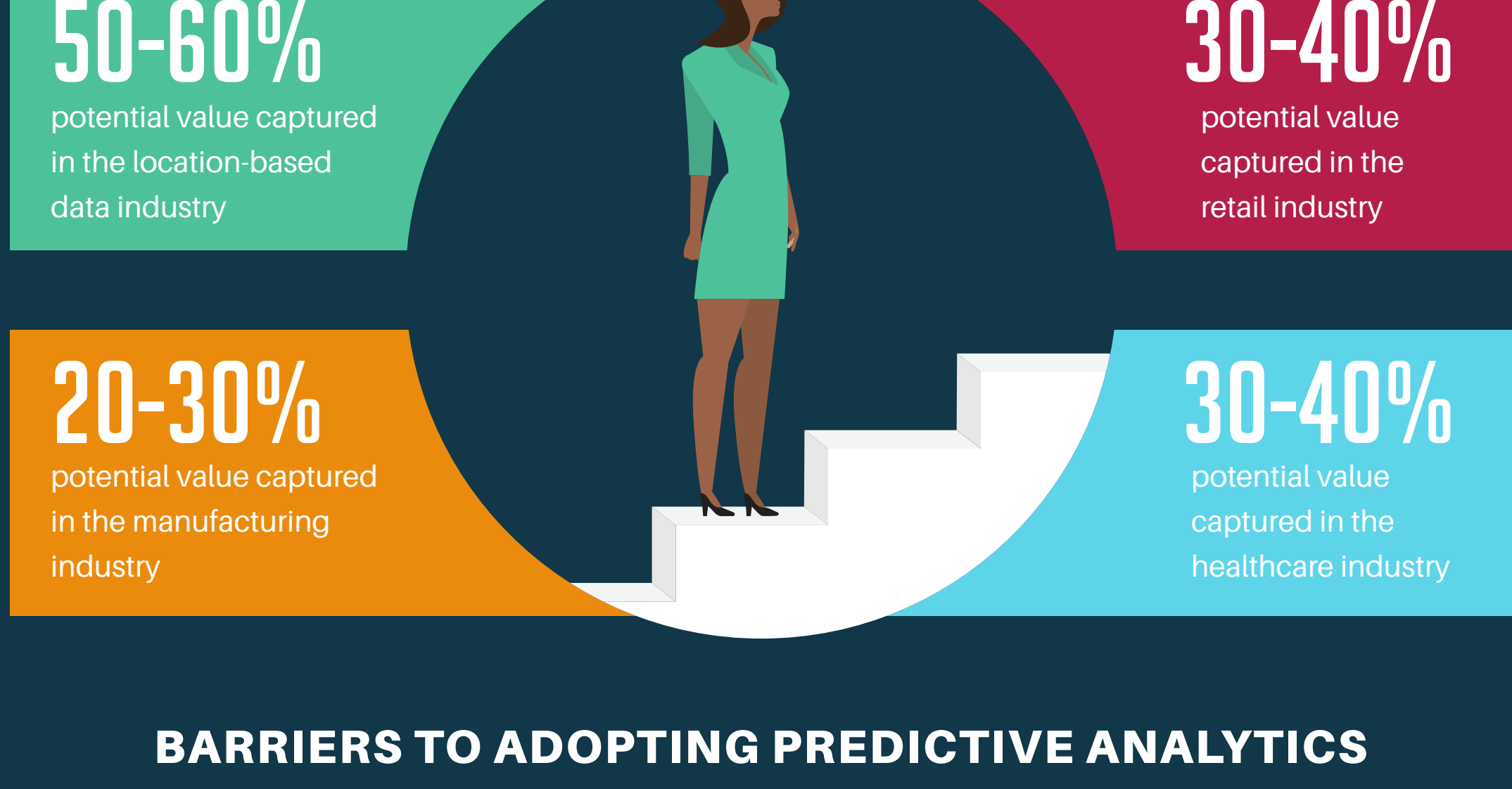
Business will benefit from predictive analytics if they have:

- Performance needs dependent upon improving prediction accuracy
- Potential for large value from combining data from multiple sources
- A business model that relies heavily on research and development
- Underutilized assets due to inefficient signaling
- A dependence on personalized data
- Mismatched of supply and demand
- Fragmented or sliced data



BUSINESSES ONLY CAPTURE A PORTION OF POTENTIAL VALUE FROM PREDICTIVE ANALYTICS

According to McKinsey Global Institute's 2016 *The Age of Analytics: Competing in a Data-Driven World* report:



BARRIERS TO ADOPTING PREDICTIVE ANALYTICS

Older generation of leaders and executives are hesitant to trust in data and analytics for decision making.



According to a KPMG and Forrester Consulting survey of more than 2,000 decision makers from 10 countries:

- 34%** Trust in data and analytics for insights into business operations
- 38%** Have confidence in customer insights from data and analytics
- 43%** Believe data and analytics are useful for risk and security

OTHER BARRIERS INCLUDE

- High implementation costs
- Difficulty in collecting the right data
- Turning insights into actionable business plans can be challenging
- Lack of data scientists and other talent for deciphering data and analytics
- Complexity of predictive analytics

HOW IT WORKS WITH PREDICTIVE ANALYTICS



3 PREDICTIVE ANALYTICS CASE STUDIES

GENERAL ELECTRIC (GE)

- They collect data from sensors installed on gas turbines and jet engines.
- Their analytics team uses data reports to develop tools to increase efficiency.
- GE predicts a 1.5% boost in productivity over a 20-year period.



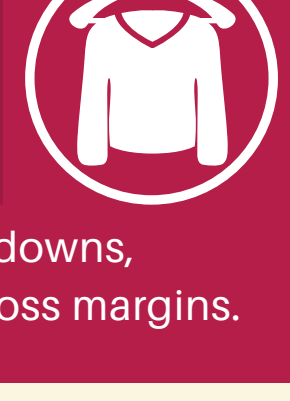
STARBUCKS

- They use predictive analytics to choose locations for their stores.
- They collect data on location, traffic, demographics, and customer behavior.
- This data is analyzed to predict the success rate and revenue growth to choose new store locations.



RALPH LAUREN, LUCKY BRAND AND TRUE RELIGION

- These companies use the platform Makersights to make product design and development decisions.
- Makersights enables customers to give short, structured feedback and insight on brands.
- They apply sales data and machine learning to the feedback to minimize markdowns, take advantage of top selling products, inform product design and increase gross margins.



Predictive analytics brings deep insights to the way companies operate. Many aspects of business, from finding and retaining customers to streamlining manufacturing to avoiding risk and loss, can benefit from the analysis of data. As the amount of available data continues to grow, the businesses that are able to make translate that information into useful, strategic insights will thrive.

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