TDWI INFOGRAPHIC
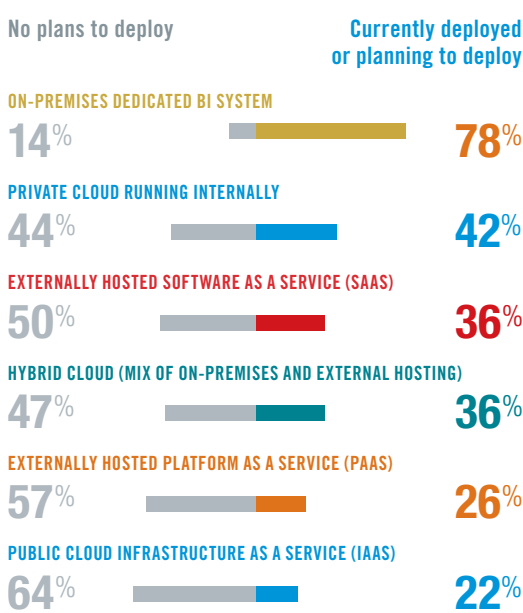
VISUAL ANALYTICS FOR MAKING SMARTER DECISIONS FASTER

Visual analytics can help business users become more productive with data by using software to integrate data analytics with modern, graphical ways of expressing information. Where are users succeeding with BI and analytics, and where can visual analytics improve their decisions? TDWI's recent Best Practices Report, *Visual Analytics for Making Smarter Decisions Faster*, found these survey results.

Deployment Options

ON-PREMISES REMAINS THE OVERWHELMING ENTERPRISE CHOICE; NEARLY TWO-THIRDS OF RESPONDENTS ARE NOT INTERESTED IN THE PUBLIC CLOUD.

How are BI and visual analytics tools and systems in your organization currently deployed, and how is your organization planning to deploy them?
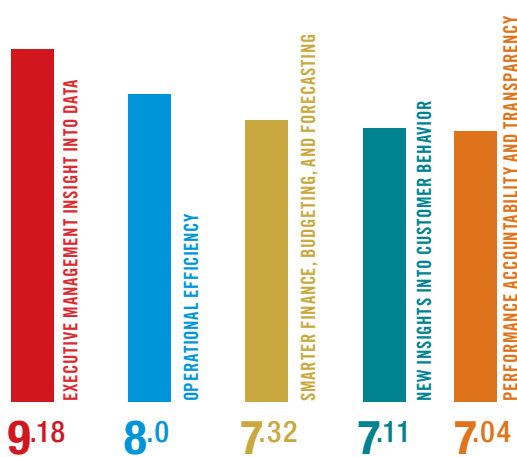
No plans to deploy / Currently deployed or planning to deploy

ON-PREMISES DEDICATED BI SYSTEM
14% — 78%

PRIVATE CLOUD RUNNING INTERNALLY
44% — 42%

EXTERNALLY HOSTED SOFTWARE AS A SERVICE (SAAS)
50% — 36%

HYBRID CLOUD (MIX OF ON-PREMISES AND EXTERNAL HOSTING)
47% — 36%

EXTERNALLY HOSTED PLATFORM AS A SERVICE (PAAS)
57% — 26%

PUBLIC CLOUD INFRASTRUCTURE AS A SERVICE (IAAS)
64% — 22%

Source: Figure 2, page 9

The Push Behind the Expansion

GIVING EXECUTIVES THE INSIGHT THEY NEED IS THE TOP BENEFIT DRIVING VISUAL ANALYTICS.

What are the most important business benefits that you and your organization seek to achieve through use of BI and visual analytics? (*Weighted averages of answers from 402 respondents asked to rank selections in order of importance*)

- EXECUTIVE MANAGEMENT INSIGHT INTO DATA — 9.18
- OPERATIONAL EFFICIENCY — 8.0
- SMARTER FINANCE, BUDGETING, AND FORECASTING — 7.32
- NEW INSIGHTS INTO CUSTOMER BEHAVIOR — 7.11
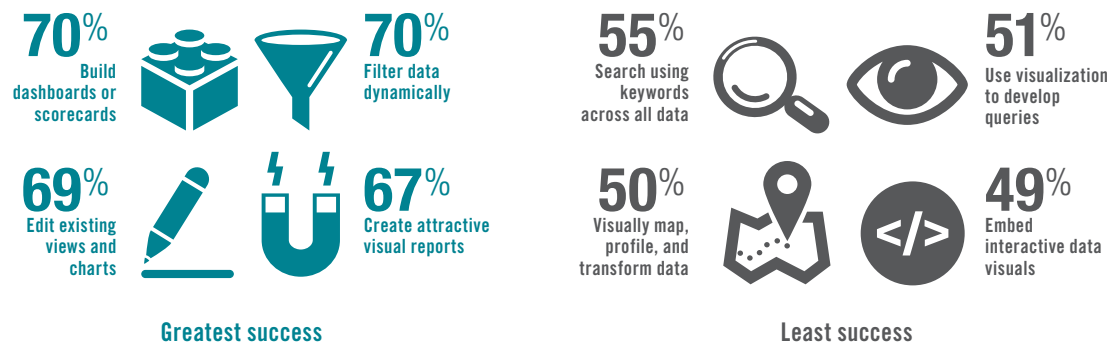- PERFORMANCE ACCOUNTABILITY AND TRANSPARENCY — 7.04

Source: Figure 4, page 12

User Satisfaction

USERS HAVE THE GREATEST SUCCESS USING VISUAL ANALYTICS TO BUILD DASHBOARDS AND SCORECARDS, BUT KEYWORD SEARCH REMAINS A CHALLENGE.

How successful are you and users in your organization with the ability to use tools to visually interact with data in the following ways?
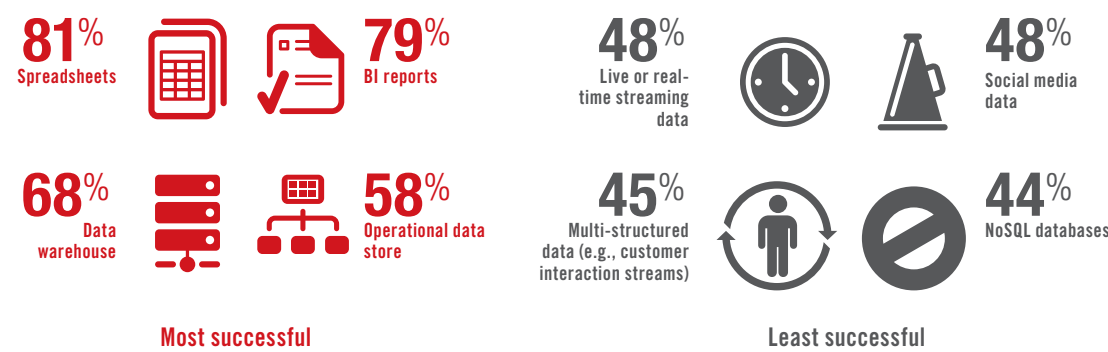
Greatest success
- 70% Build dashboards or scorecards
- 70% Filter data dynamically
- 69% Edit existing views and charts
- 67% Create attractive visual reports

Least success
- 55% Search using keywords across all data
- 51% Use visualization to develop queries
- 50% Visually map, profile, and transform data
- 49% Embed interactive data visuals

Source: Figure 5, page 17

Accessing and Analyzing Data

USERS HAVE THE GREATEST SUCCESS VISUALLY INTERACTING WITH DATA IN SPREADSHEETS, AND LIVE OR REAL-TIME DATA STREAMING REMAINS TROUBLESOME.

How successful are you and users in your organization with the ability to use your tool's visual interaction capabilities to access and analyze the following data sources?
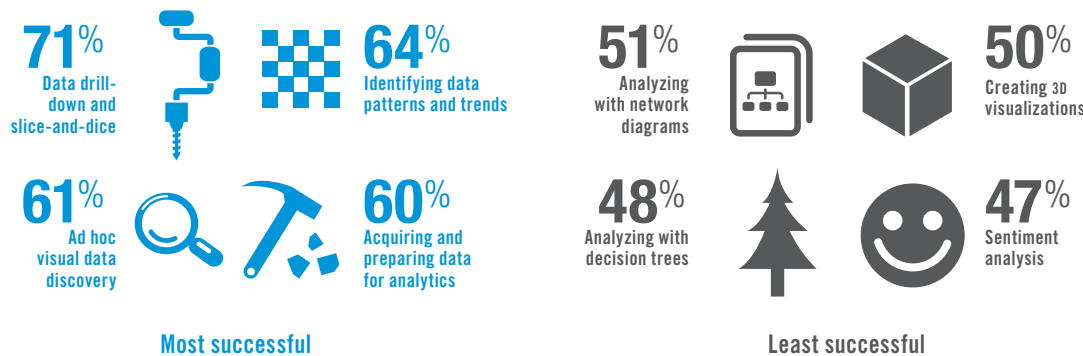
Most successful
- 81% Spreadsheets
- 79% BI reports
- 68% Data warehouse
- 58% Operational data store

Least successful
- 48% Live or real-time streaming data
- 48% Social media data
- 45% Multi-structured data (e.g., customer interaction streams)
- 44% NoSQL databases

Source: Figure 6, page 19

What Visual Analytics Does Best

DATA DRILL-DOWN AND SLICE-AND-DICE REMAIN VISUAL ANALYTICS' STRENGTHS; ANALYZING WITH NETWORK DIAGRAMS IS TOUGH FOR MORE THAN HALF OF ALL RESPONDENTS.

How successful are you and users in your organization with the ability to use your tool's visual analytics capabilities to perform the following activities?
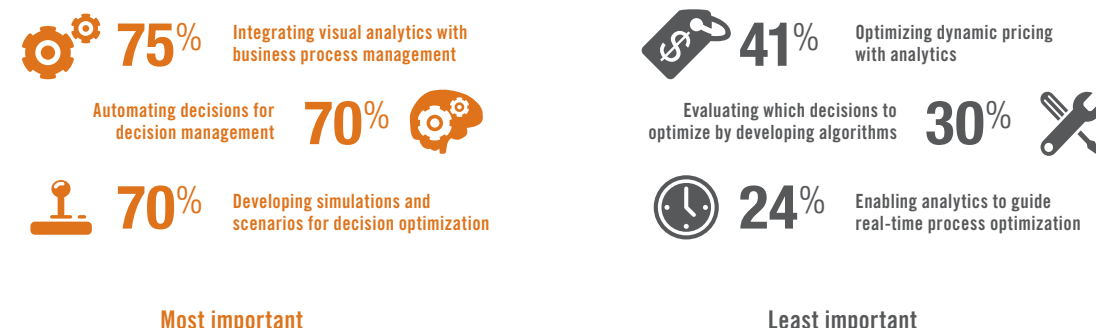
Most successful
- 71% Data drill-down and slice-and-dice
- 64% Identifying data patterns and trends
- 61% Ad hoc visual data discovery
- 60% Acquiring and preparing data for analytics

Least successful
- 51% Analyzing with network diagrams
- 50% Creating 3D visualizations
- 48% Analyzing with decision trees
- 47% Sentiment analysis

Source: Figure 10, page 26
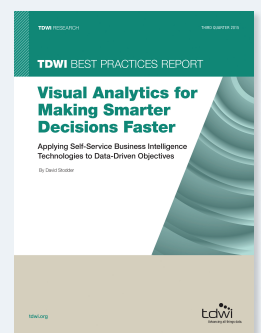
Visual Analytics Integration Plans

WHEN IT COMES TO INTEGRATION, COMBINING VISUAL ANALYTICS AND BUSINESS PROCESS MANAGEMENT IS THE TOP ENTERPRISE CONCERN.

How important to your organization are the following steps for integrating analytics with business applications, processes, and workflow to improve operational performance?

Most important
- 75% Integrating visual analytics with business process management
- 70% Automating decisions for decision management
- 70% Developing simulations and scenarios for decision optimization

Least important
- 41% Optimizing dynamic pricing with analytics
- 30% Evaluating which decisions to optimize by developing algorithms
- 24% Enabling analytics to guide real-time process optimization

Source: Figure 12, page 33