

Drilling FOR DATA

ANALYTICS TO EXTRACT INSIGHT

Big Data Reserves

- 1 Volume**
3D seismic data sets, surface monitors, drill measurements, weather, market prices, etc.
- 2 Velocity**
Real-time streaming data SCADA systems, drill heads, flow & condition sensors, etc.
- 3 Variety**
Structured, unstructured, semistructured (processed) data.



EACH PRODUCTIVE WELL GENERATING THE **FULL TEXT DATA OF WIKIPEDIA EVERY WEEK**

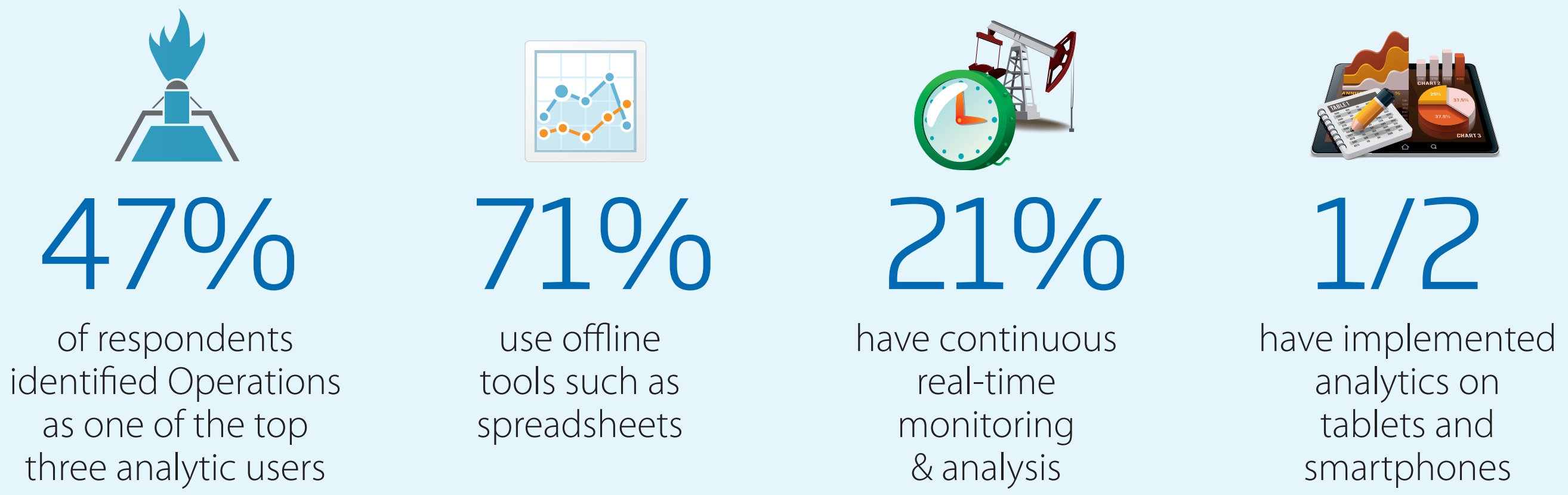


11,475 wells will be drilled across Canada in 2013
PETROLEUM SERVICES ASSOCIATION CANADA (PSAC) ESTIMATE

"Increased growth in the volume, variety and velocity of technical data, and a larger role for unconventional resources like shale gas and tight oil will drive oil & gas companies to focus their IT investments on data management and analytics, as well as mobility."
– Jill Feblowitz, Vice President, IDC Energy Insights.

The Need for Analytics

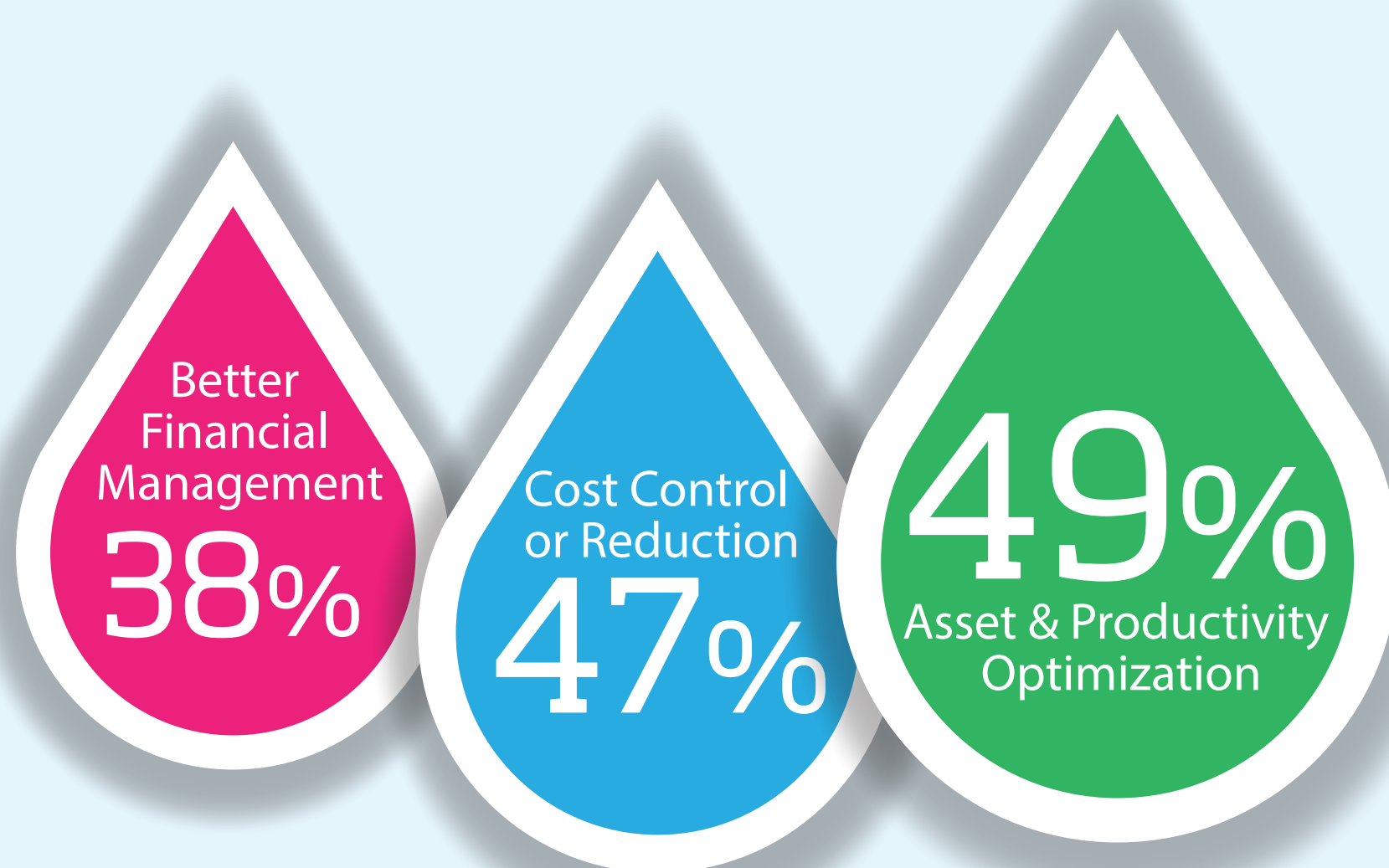
2012 Canadian study of Oil & Gas businesses with revenue of \$100 million+ that regularly use analytics to inform their decision making:



Source: SAP Canadian Analytics Study, 2012

Extracting Value

What are the three most critical objectives your organization looks to achieve through the use of business intelligence and analytics?



Source: SAP Canadian Analytics Study, 2012

"To be globally competitive, the Oil and Gas sector needs to focus on deriving value from operational data with analytics supported by online tools, real-time data streams, mobile deployments"
– Nigel Wallis, Research Director, IDC Canada