KPMG

Driving business performance

Using data analytics

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About data analytics

Many companies are overlooking a significant opportunity to enhance decision making and improve performance that is captured in their enterprise resource planning (ERP) systems.

These systems collect and store vast amounts of data derived from running important business functions, such as managing payroll, paying suppliers, invoicing customers, preparing the financials, paying taxes, and so on. The data contains extremely valuable insights that companies are often unable to tap due to complexity or lack of skills.

The technique of data analytics is the key to unlocking this additional value. By deploying advanced technology and statistical methodologies to collect, integrate, analyze, and present the data, companies can gain powerful insights into important elements of a business and the way in which it operates. These insights can yield significantly better bottom-line performance, thereby strengthening a company's competitive advantage.

A KPMG LLP (KPMG) survey of 304 executives around the world shows that market leaders are managing risk as they enhance performance. Fifty-nine percent of market leaders use data analytics to connect the management of enterprise risk and performance, compared with only 47 percent of others surveyed. Between 2014 and 2017, companies in the survey expect the main benefits of data analytics efforts will be to develop new revenue streams, improve operational efficiency, and gain greater customer insights.[1]

Data analytics can help companies in a range of different operational areas. It can, for example, enhance data quality and system integrity, uncover fraud and other irregularities, improve supply chain and inventory management, standardize and develop system use, and enable the benchmarking of key information. Data analytic capabilities can also be embedded in continuous auditing/continuous monitoring (CA/CM) solutions. CA/CM is used, for example, to keep track of credit limits, changes in sales trends, the timely delivery of orders, the number of credit notes raised, or occurrences of breaches in process controls.

The key areas where companies can benefit from data analytics include:

- Process very large data sets efficiently and consistently
- Identify lack of harmony between processes and transactional data
- Incorporate predictive analytics based on historical trends

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[1] Driving performance while managing risk, KPMG, November 2015

Survey results

Fifty-nine percent of **market leaders**

59%

use **data analytics** to connect the **management of enterprise risk and performance.**

compared with only **47 percent**

47%

of **others surveyed.**[1]

Between 2014 and 2017

Companies in the survey expect the main benefits of data analytics efforts will be to develop **new revenue streams,**

improve operational efficiency and gain greater **customer insights.**

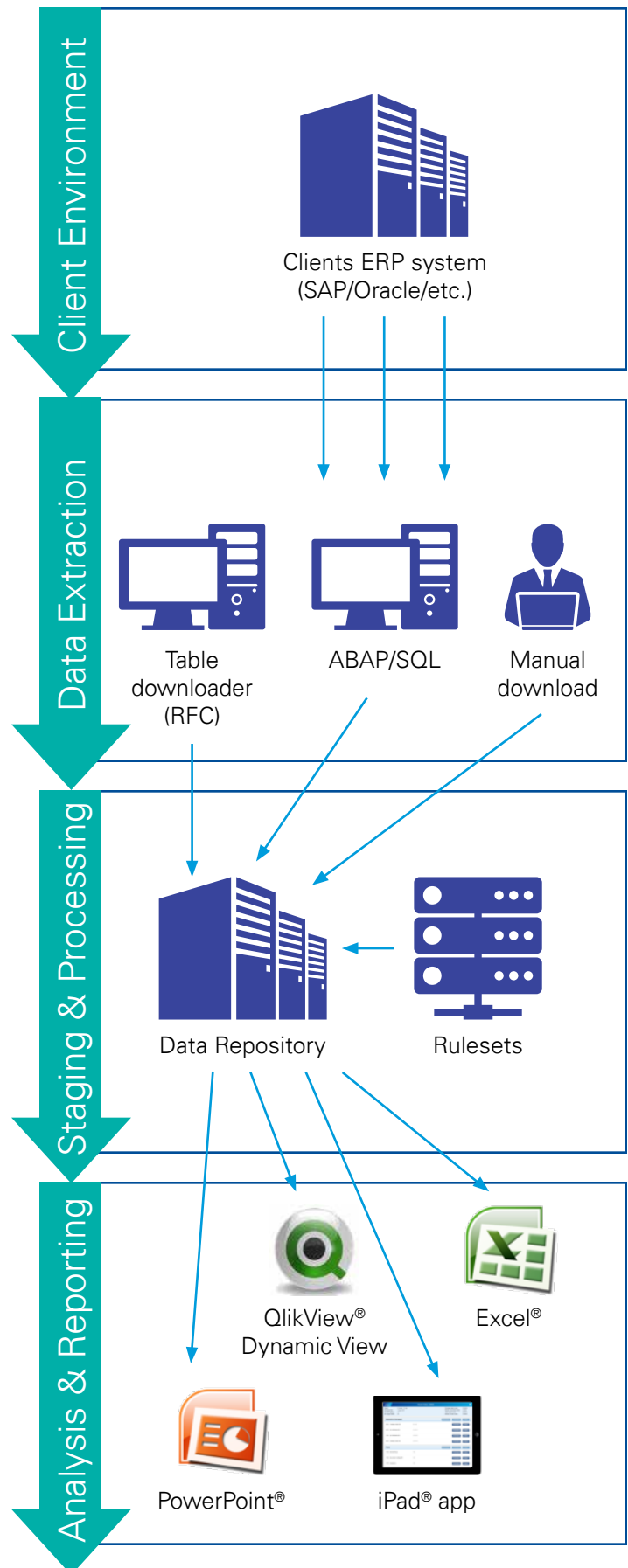## Better risk management and process controls

Data analytics enables companies to examine an entire database of transactions and to identify exceptions and anomalies in them. This is very important in the United States, where companies must comply with an array of regulations, including the Sarbanes-Oxley Act, which, among other things, expands the oversight right of corporate boards. Data analytics can generate facts based business insights that would allow the company to share with regulators showing how their transactional information flow and their controls perform to prevent noncompliance, detect compliance issues when they arise, and respond quickly and decisively in the event of a breach.

Improved operating performance and processes

Many companies find that their ERP processes are not working as well as they were designed to do. Data analytics is able to analyze how processes are actually operating in the ERP system and compare them with the way they were designed to work. Specialists in the use of data analytics can examine an entire population of purchase orders or vendor payments, for example, and look for anomalies and workarounds as result of the needs of the business, stringent configurations in the system, or new requirements not considered in the original implementation. By analyzing the data, companies are able to improve the processes, streamline work flows, and enhance back-office performance.

Make your working capital work harder

The factors influencing working capital levels are often opaque to managers. Information extracted from ERP systems via appropriate data analytic techniques allows managers to isolate key working capital indicators, such as days payable outstanding (the difference between actual payment date and invoice date plus payment terms), days inventory outstanding (the relationship between sales turnover and inventory), and days sales outstanding (the difference between collection date and delivery date plus credit terms). In periods of financial stress, this information can be vital for preserving liquidity and increasing cash flows.

Client Environment

Clients ERP system (SAP/Oracle/etc.)

Data Extraction

Table downloader (RFC)

ABAP/SQL

Manual download

Staging & Processing

Data Repository

Rulesets

Analysis & Reporting

QlikView® Dynamic View

Excel®

PowerPoint®

iPad® app

Introducing Facts 2 Value

A large, global life sciences distribution company launched an SAP implementation at their headquarters. After two months of operation, the company's controller wanted to determine the return on the investment. The company sought answers to two questions: (1) are employees using the system as configured and (2) has access to the SAP program been restricted from the implementation team. KPMG's Facts 2 Value assisted the client by analyzing the configurations and transaction flows through the various processes (such as procure to pay). It also assessed the segregation of duties conflicts through the "can do" and "did do" analyses. The assessment found that employees were using SAP as designed and there were no significant segregation of duties related to the implementation team.

KPMG's Facts 2 Value did, in addition, identify an opportunity to reduce a build-up in the volume of invoices for approval. It saw that the approval threshold was very low for one vendor, creating a bottleneck. The controller appreciated the insight provided, because the low threshold had escaped attention. KPMG's findings enabled the controller to evaluate the threshold parameters and quantify the effect of the bottleneck on invoice approvals.

Introducing Facts 2 Value

KPMG has developed a methodology for improving the quality and reliability of data analysis. It is called Facts 2 Value and consists of more than 600 separate analyses that can be applied across a wide range of ERP platforms.

The Facts 2 Value analyses are the basis for discussions with risk managers, process owners, and executives. Once the objectives and scope of a Facts 2 Value analysis are agreed upon, the relevant data is downloaded and processed on KPMG's dedicated Facts 2 Value servers. The analysis routines are run, validated, and reported to the client in an appropriate format to provide fact-based insights into relevant areas for improvement.

Facts 2 Value results are often presented in dynamic dashboard solutions and can also be provided via an iPad app that is updated after every scan performed. When data analytics is embedded in client solutions, the results can be provided real-time on mobile devices. The number of solutions capable of providing instant dashboard updates (automatic or manual) is growing fast and is expected to play an important role in future management reporting.

The KPMG approach

In the U.S., the work is supported by a U.S. Centre of Excellence that monitors the quality and integrity of the work.

Besides our Facts 2 Value approach, KPMG has taken a leading role in the implementation of various solutions for CA/CM, governance risk and compliance, and business intelligence. These provide clients with real-time results, dynamic dashboards, and work flow methodologies for follow-up.

Data analytics is a rapidly evolving field, and KPMG helps clients dispel much of the mystery surrounding the discipline to increase the potential benefits derived from it. By analyzing vast amounts of data and providing insights through competitive visualizations, companies can gain greater mastery over their processes and functions, thereby driving better business performance.

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About KPMG

KPMG LLP, the audit, tax, and advisory firm (www.kpmg.com/us), is the U.S. member firm of KPMG International Cooperative (KPMG International). KPMG International's member firms have 162,000 professionals, including more than 9,100 partners, in 155 countries.

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