RESEARCH NOTE
ANALYTICS PAYS BACK $10.66 FOR EVERY DOLLAR SPENT

THE BOTTOM LINE

A recent examination of Nucleus Research ROI case studies found organizations earn an average of $10.66 for every dollar spent on deployments of analytics applications such as business intelligence (BI), performance management (PM), and predictive analytics. With such high returns to be earned on the deployment of analytics, management teams should consider these technologies to be one of the most attractive investment opportunities available to the CFO.

As recently identified in its recent Analytics Value Matrix (Nucleus Research l111 - *Technology Value Matrix 2H2011 – Analytics*, October 2011), analytics technologies are well understood and widely available, yet less broadly adopted than enterprise applications such as ERP and CRM. Despite relatively low adoption rates, Nucleus Research sees a significant investment opportunity in analytics. An examination of 60 analytics-related ROI case studies found that for every dollar invested in technologies such as BI, PM, and predictive analytics, organizations get back an average of $10.66.

Nucleus found that for every dollar a company spends on analytics, it gets back $10.66.

Nucleus found that returns on analytics can be significant for two reasons. First, vendors such as IBM and Tableau provide users with new approaches and technologies that make it easy to integrate data sources with analytics applications, typically the most complex part of a deployment (Nucleus Research *l100 – How analytics makes midsize companies more profitable,* September 2011). Second, once deployed, analytics tools are capable of changes to decision making that result in unexpected improvements in profitability. For example, when Concept One adopted IBM Cognos Express, granular cost analyses of the company's licensing agreements enabled the organization to become more selective about license renewals and increase its gross margin (Nucleus Research l54 - *IBM ROI case study - Concept One*, April 2011). After SAS was deployed at Daiichi Sankyo and used to make more clinical research data available internally, third-party research costs were reduced by more than anticipated (Nucleus Research j71 - *SAS ROI case study - Daiichi Sankyo*, December 2010).

Nucleus's analysis included ROI case audits of analytics deployed by customers of leading vendors including IBM, Microsoft, Oracle, SAS, Tibco Spotfire, and

Information Builders. Non-US deployments were normalized in dollars for comparison purposes.

ANALYTICS DELIVERS ON VISIBILITY

Software buyers may think that vendors overhype visibility as a benefit of analytics, but Nucleus found that, in fact, the highest-ROI analytics deployments made data more available to decision makers and enabled them to find ways to increase revenues or reduce costs. Nucleus found analytics enabled improved visibility in three areas:

- Revenues. The more managers knew about what customers where buying and why, the better able they were to accelerate sales cycles, cross sell, and maximize pricing.

- Gross margin. By serving up highly granular data on costs of goods sold, analytics applications helped decision makers identify the highest margin products so that they could push the right products and increase gross profit.

- Expenses. Operating costs were also important. The more managers of cost centers and lines of business learned about their operating costs as a result of an analytics deployment, the better able they were to reduce or eliminate expenditures that were unnecessary or generated low returns.

PRODUCTIVITY BENEFITS ARE STILL KEY

Although improved decision making and increased bottom lines were drivers of high-ROI analytics deployments, productivity increases were also important. Despite the broad availability of analytics applications, most organizations still rely on manual processes for reporting, analysis, planning, budgeting, and the financial close. Nucleus found one reason analytics deployments can be so profitable is their ability to eliminate manual processes for report builders and accelerate analytical processes for decision makers in a variety of roles.

ANALYTICS IS FOR EVERYONE

Analytics benefits are not sector or size-specific. Organizations in the study that achieved high returns on analytics investments included federal agencies, providers of social services, not-for-profit organizations, and for-profit companies in a variety of industries. Organizations in the analysis also ranged in size from a 100-person nonprofit agency to a publicly held oil exploration company with 5,000 employees. Nucleus found no significant correlations between the level of benefit achieved and a company's size or industry. Nucleus also found that the vast majority of users in the study were new to analytics, indicating that an internal skill set for these tools is not required in order to achieve high returns. Many of the companies that were new to analytics turned to outsiders such as consultants for assistance in managing data sources, fine tuning application configurations, and training end users.

GETTING TO $10.66

Nucleus found that companies which integrated their analytics applications with three or more data sources tended to achieve higher returns than users which integrated only one or two data sources. Obviously, the more data sources there are on an analytics deployment, the higher its costs will be, so a deployment team needs to strike the right balance and scope their deployment properly. Ways to maximize returns on an analytics deployment include:

- Focusing on revenue-related data. Nucleus found that the more analytics was used to learn about revenue drivers, including who the customers are, what they buy, and their price sensitivities, the more line-of-business managers were able to increase their top lines. Champions looking to maximize returns on their investments in analytics should plan to integrate their deployments with revenue-related data sources, typically available from order-entry data sets within ERP-related data warehouses. Integration with CRM data sets will also be important in order to identify which customers present the richest opportunities for growing revenues.

- Focusing on cost-related data. Cost data was also important. By gaining more knowledge about margins of the different products and services within a company's offering, the better able an organization was to dedicate efforts towards higher-margin activities. Teams deploying analytics should plan to complement revenue-related data sources with cost-related data sets, which are also available from ERP data stores, in order to get a true picture of their firm's cost structure.

- Embracing consultants. In order to integrate their analytics applications with high-value data sources and increase profits, technology buyers will need to curb their skepticism when it comes to consultants. Consultants are better equipped than most IT departments to manage metadata, data quality, and taxonomies so that a company can use analytics to get granular information on key data points such as the gross margins of individual products or services. Although it makes sense for buyers to have their guard up when account representatives are cross selling consulting services, the study indicates that returns on consulting during an analytics deployment can be high.

CONCLUSION

Although skepticism can be warranted for technologies that are new or unproven, managers who continue to balk at investing in analytics technologies are doing their organizations a disservice. Given returns of 10.66 dollars for every dollar invested in analytics, these technologies represent one of the richest investment opportunities available to organizations. Analytics also represents an opportunity to acquire a competitive edge. With so many organizations opting not to invest in analytics, the companies that use analytics to learn more about their customers, products, and costs will be in a position to cost effectively grow their business at the expense of rivals.