Much has been written about the potential of big data analytics to enhance customer experience, unearth new business opportunities and create a more digital organization. But the reality is that most businesses are applying these new technologies in operational areas whose impacts on the bottom line are more immediate and quantifiable.

New research by IDG Strategic Marketing Services and Maana, Inc., provides an important reality check on where big data analytics is actually driving business value today. The research, across a domain of IT and business decision-makers with big data experience, establishes that operational applications—not business reinvention—dominate current big data use cases. In fact, four of the five top use cases that respondents cited as the most compelling have nothing to do with touching the customer.

Operational analytics is a type of business analytics that uses data to gain insight into operations with the aim of improving productivity and reducing cost. Examples include optimizing field service efficiency, optimizing finance processes to accelerate cash collections, or implementing predictive maintenance to reduce equipment failure.

IT organizations and operations typically play a significant role in driving operational analytics projects because of their traditional expertise in automating and enhancing processes. However, the survey indicates that the CIO’s role is evolving, with senior IT executives at many large organizations, in particular, now taking an active role in using analytics to generate new revenue.

The Quick Pulse survey was conducted to gauge how organizations are using big data analytics as
well as to understand which areas of the business are driving and funding analytics projects. Respondents were limited to senior executives at organizations with 1,000 or more employees involved with data analytics usage or implementation. Sixty qualified respondents completed the online survey.

Unlocking Operational Value
Nearly two-thirds of the respondents are using big data analytics for operations purposes, far exceeding the second-most-common use case: customer analytics. In fact, four of the five top use cases relate to operational improvements.

Further validation of the value of operational improvement is seen in areas where analytics projects are implemented: 57% of the average organization’s projects relate to reducing costs or increasing productivity, compared to just 31% that seek revenue growth or new lines of business.

Big Data and Analytics Project Focus
Different groups drive different use cases. Not surprisingly, the survey found that revenue-focused initiatives are most often championed by marketing (67%) and sales (54%) whereas operations groups are the principal sponsors of projects that reduce costs or improve productivity (both 63%).

Respondents reported that IT is a primary driver of revenue-generating projects less than one-third of the time. However, that figure surges from 27% to 46% at companies with more than 5,000 employees. This may reflect the typically tighter budgets at smaller companies, which tend to use IT in more of a traditional automation and support role, whereas larger organizations have the resources to think more strategically about data. The results are encouraging evidence of IT’s growing importance across the business.

Who Pays
The same trends are evident in an analysis of budget priorities. Line-of-business organizations write checks for revenue-generating initiatives 52% of the time, or nearly twice as often as any other group. In contrast, productivity-enhancing projects are most likely to be funded by IT.

Not surprisingly, CFOs and finance departments are the biggest funders of projects that increase working capital. In fact, nearly half of the data analytics projects funded by the CFO are focused on this goal.
Overall, executives show a strong interest in analytics applications that guide decision-making and translate into business value. The top four areas of big data and analytics investment, as measured by the percentage of executives spending on them, are:

- Predictive analytics (63%)
- Decision management (58%)
- Advanced analytics (50%)
- Prescriptive analytics (48%)

However, the priorities shift a bit when decision makers are challenged to choose where they would invest if they had just one choice. Advanced analytics, predictive analytics, and decision management all make the top-five list again, but prescriptive analytics is deemed slightly less urgent in this scenario. Instead, "data access and preparation" makes the top-five list. This indicates that data quality and lack of integration are a problem and that streamlining cumbersome extract/transform/load processes would open more opportunities to apply analytics.
In Summary

It has been said that the real money-makers in the Great California Gold Rush were not the prospectors but the people who sold picks and shovels. The current big data analytics gold rush is about big ideas such as digital business transformation and revolutionizing the customer experience. Those are all worthy goals, but it’s meat-and-potatoes projects to improve productivity and streamline operations that are getting the most attention from executives with dollars on the line.

One of the principal impediments to more effective use of operational analytics is data silos. In many companies, analytics are still being carried out in silos, and tools and applications have been brought in to solve problems without much regard to integration. This results in a problem that is common to many companies: The same customer record may exist in a dozen places within the organization.

With the arrival of big data, companies are realizing the enormous value that can be created by analyzing data across organization silos and identifying redundancy and waste. This potential is being achieved by technologies like the Maana Knowledge Graph. Instead of extracting data from silos and placing them into a “data lake”, Maana takes the most relevant asset data from disparate silos and organizes it into a knowledge graph. This enables analysts, subject-matter experts and data scientists to collaborate in optimizing assets and business processes, and dramatically accelerates building hundreds of data models by different groups.

Whether using traditional data technologies or new game-changing applications of big data, most executives are placing their biggest bets on use cases that deliver bottom-line results.

For more information, visit www.maana.io