How Analytics and Automation Can Improve Shareholder Value

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Advanced data science technologies like artificial intelligence (AI), machine learning and robotic process automation are delivering significant benefits to many banks.

As part of their mandate to protect shareholder value and improve financial performance, bank directors can play an important role in the adoption of these promising new technologies.

Technology's expanding influence

With fintech companies generating new competitive pressures, most traditional banks have recognized the need to adopt some new techniques to meet changing customer habits and expectations. Declines in branch traffic and increased online and mobile banking are the most obvious of these trends.

Yet, as important as service delivery methods are, they are in a sense only the top layer of bigger changes that technology is bringing to the industry. New data-intensive tools such as AI, machine learning and robotic process automation can bring benefits to nearly all areas of a bank, from operations to sales and marketing to risk and compliance.

Advanced data analytics can also empower banks to develop deeper insights and make better, more informed strategic decisions about their customers, products and service offerings.

The power of advanced analytics

Historically, business data systems simply recorded and reported what happened regarding a customer, an account, or certain business metrics. The goal was to help managers understand what had happened and develop strategies for improving performance.

Today's business intelligence systems advance this to predictive analysis – suggesting what is likely to happen in the future based on what has been observed so far. The most advanced systems go even further to prescriptive analysis – recommending or implementing actions that increase or decrease the likelihood of something happening.

For example, AI systems can be programmed to identify certain customer characteristics or transaction patterns, which can be used for customer segmentation. Based on these patterns, a bank can then build predictive models about those customer segments' likely actions or behaviors – such as closing an account or paying off a loan early.

Machine learning employs algorithms to predict the significance of these customer patterns and prescribe an appropriate response. **With accurate segmentation models, a bank can tailor marketing, sales, cross-selling and customer retention strategies more precisely aligned to each customer**.

Automating these identification, prediction, and prescription functions frees up humans to perform other tasks. Moreover, today's advanced analytics speed up the process and can recognize patterns and relationships that would go undetected by a human observer.

Industry leaders are using these tools to achieve benefits in a range of bank functions, such as improving the effectiveness of marketing and compliance functions. Many large banks already use predictive modeling to simplify stress testing and capital planning forecasts. AI and machine learning technology also can enhance branch operations, improve loan processing speeds and approval rates and other analytical functions.

Getting the data house in order
While most banks today are relatively mature in terms of their IT infrastructures and new software applications, the same levels of scrutiny and control often are not applied to data itself. This is where data governance becomes crucially important – and where bank directors can play an important role.

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