Analytics in finance and accountancy

The increased availability of data and of analytic tools have opened up a range of opportunities for the finance function. Analytics have facilitated a more forward-looking finance function, enabling the generation of greater insights and the provision of immense value to stakeholders. Leveraging data analytics in decision making provides significant opportunities for the finance function to cement its position as a true strategic partner.

The use of analytics by finance teams is not new. As computerisation has developed, so too have the tools available to capture, refine and interpret data. From the business intelligence software of the 1980s, itself preceded by data mining where structured queries were run on data sets, to the start of the use of predictive models based on historical trends in the 1990s we have seen a gradual growth of data analytics over time. What has changed is the access to a greater variety and volume of data in our everyday lives, coupled with an exponential increase in computing power and affordability. This combination has enabled large amounts of data to be manipulated and developed into more strategically aligned decision-making models, providing opportunities for individuals and organisations alike. However, the question remains – are the finance function capitalising on this opportunity – or are they risking their relevance by leaving it to others?

Big data revolution
The term ‘big data’ describes large data sets that can be analysed to reveal patterns trends and associations to help organisations understand their performance and plan for their future. We now collect data from a variety of sources and in a variety of ways, and the use of unstructured data such as emails, text, audio and video, reveals much about our customers’ behaviour. As our organisations become ever more customer-centric it is important that we, as accountancy and finance professionals, understand and capitalise on this opportunity.

Four types of analytics
There are four types of analytics that we can use, shown below. Descriptive and diagnostic analytics look at past performance. Predictive and prescriptive look towards the future.
This represents a significant opportunity for finance professionals to adjust the weighting of time spend on analysis of the past to a more even balance of looking back and looking forward. After all, looking in the rear-view mirror, a term often associated with accounting, is not an effective way of driving. Modern analytics is about looking through the windscreen and making decisions based on what you see in front of you. This has been exacerbated by the pandemic, which has taught us that we need to agile and responsive in our decision making.

A survey of ACCA and Chartered Accountants Australia and New Zealand members suggested that whilst 79% of the respondents used descriptive analytics, only 43% used predictive and 31% prescriptive. Predictive and prescriptive analytics present a considerable opportunity to be leveraged by finance teams to ensure their ongoing relevance. If finance is to play a significant role in enabling decisions across organisations the use of predictive analytics must grow dramatically. Finance teams must leverage the data and increasingly sophisticated analytic tools at their disposal to become more forward looking.

81% of those surveyed used Excel as their analytics platform, whilst less than half used visualisation tools, illustrating the benefits of using cloud-based analytics technologies such as, processing speed, automation, sharing and secure storage are not being fully utilised by finance teams.

**Case for analytics in finance**
67% of the respondents suggested that improving business efficiencies was their reason for using analytics and a similar number suggested improving planning and forecasting. 37% saw developing new revenue opportunities as a reason and 30% used analytics to develop customer opportunities. As organisations increasingly become focused on the 3Ps of people, purpose, and profit, understanding their customer and exploring new opportunities is vital. As the guardians of organisational data, finance teams have an important role to play in this regard. They must partner with the business and leverage data analytics to provide the forward looking and actionable insights required to support strategic and operational decision making. It is no longer solely the domain of marketing and similar departments to undertake this. The evolving organization is agile and able to use analytics to improve decision making and the finance professional has the opportunity to place key analytics in the hands of decision makers.

Some 40% of the respondents felt that the chief financial officer (or equivalent) was responsible for implementing data analytics across the organisation. Accordingly, finance teams must make the case for the investment in analytics from both a technology and skills perspective and find a way to overcome barriers to implementation such as siloed data, legacy technologies, and poor data collection.

**Skills needed**
The skills needed to support analytics are a combination of technical and behavioural skills. Over 60% of the surveyed feel deep knowledge of business is the most important along with thinking creatively to solve the problem through analytics.

Not all these skills are required in equal measure. Those viewed as essential include the accounting and finance professionals’ suite of traditional technical skills, supported by business skills enabling a robust understanding of the business, its strategy and the consequent data model. In addition, the accountancy and finance professional must be familiar with the range of tools and techniques required to extract, manipulate, interpret and present data. They must also be able to apply this knowledge to solve problems. Finally, personal skills such as they ability to communicate effectively are essential – the finance and accountancy professional must be able to present the data and insights creatively, using it to tell a story and to address the issue.

Many of these skills are not new. However, the finance professional must combine them in ways that support predictive and prescriptive analytics, looking forward with reference to the past. It is also important that are involved in the governance of data ensuring its accuracy and integrity.

The opportunity for the accountancy and finance professional to use data analytics to support faster and better decision making in the finance function and beyond is clear. It is one that they must seize.

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