

## CIMA RESEARCH INITIATIVE

### Analytics

Analytics is broadly concerned with the identification and reporting of data patterns. Applied to organisations, it contributes to data-driven decision making – a practice often referred to as business analytics. Information produced by management accountants has always been leveraged for control purposes including its deployment for advancing competitive advantage. Much of enterprise data has however until now been derived from systems which do not intuitively combine data from different sources in both structured and unstructured forms to produce business intelligence. Today, organisations are increasingly forced to operate in environments which necessitate decision making premised on the production of integrated, real time, digitised data with data acquisition being reliant on data extraction from different systems and formats which need cleansing, integration and further analysis to deliver information on patterns and relationships that have managerial relevance.

Tools and approaches enabling effective analytics include statistical analysis, data mining, predictive modelling and multivariate testing which assist in control decisions tied to the management of cash, stock, pricing, employee resource allocation, as well as broader operational, marketing, financial and risk management decisions. This presents challenges for management accounting. First, the significance accorded to data is such that it must be treated as a corporate asset. Second, questions are being raised as to what information expertise is best aligned with the

requirements of effective business analytics. Third, in what ways can analytics uphold the pursuits of enterprise effectiveness. A number of specific questions arise in this respect.

#### • Risk Management

What risks does analytics pose in relation to accessing alternative databases including operational and customer data? Is there a need to reconsider cybersecurity assessment and investment? How should firms evaluate the risks posed by accessing alternative analyses in decision making? How does the risk profile of an enterprise that increasingly relies on data as an asset alter?

#### • Expertise Re-alignment

What are the educational and qualification requisites for management accounting expertise in a world deploying novel approaches to data sourcing, analysis and reporting? Do management accountants need to forge different ways of interfacing with data scientists? Do they need to reconsider management accounting fundamentals to better harness analytics-based intelligence? Analytics is multi-dimensional encompassing mathematics and statistics – what are the consequences for the management accounting professional focused on delivering strategic information? 'Big Data' needs will evolve as enterprises engage in more advanced analytics to tease out insights on emerging trends – how will this change management accountants' roles in those enterprises?

#### • Organisational Performance

How does management accounting information on performance outcomes identify the gains from using analytics? How do performance systems encompass analytics-led action? Should unstructured data which feed into analytics be drawn upon more extensively? What are the performance implications for collaborative decision making where analytics data development, provision and deployment rest on a complex interaction of information and management executives? How does strategy formulation and management alter in a data-driven enterprise that heavily draws on analytics intelligence?

*CIMA invites applications from around the world for research projects that adopt methods and methodologies which are appropriate to address these issues and relevant research questions. The complexity and scope of this topic mean that all methodologies are potentially relevant, similarly there are no restrictions on the theoretical frameworks that might be fruitfully drawn upon. Detailed research proposals are invited.*

### APPLICATIONS

Grants are typically between £5,000 and £40,000 depending on the scope of the project and its outputs.

Applicants are strongly advised to read the Guidance Notes prior to application. Details and application forms can be found at [www.cimaglobal.com/research](http://www.cimaglobal.com/research)

The closing date for applications is 31 August 2016. Shortlisted applicants will be invited to present their proposals to a CIMA review panel in October 2016.

For further information please contact CIMA's research team:  
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