Analytics in finance and accountancy: So, what should I do?

Consolidating insights from the in-depth interviews supporting this study and the analytics in finance survey, five key areas of focus and action emerge as essential to ensure the creation of truly data-centric, analytics-driven organisations in 2020 and beyond (Figure 1). They are governance and data management, big data is a reality, hybridisation of talent, decision-making enablement, and predictive/prescriptive analytics.

FIGURE 1: Five areas of focus and action for the future development of analytics in finance teams

The trends have applicability not only across different sectors but for small businesses and large enterprises alike. An overarching strategy is to embrace and encourage transdisciplinary analytics crossing traditional boundaries, eg finance, analytics and cybersecurity.

To ensure proper data governance the CFO and finance team should:

- ensure that you have appropriate data governance procedures in place to classify data correctly and align its use to strategic objectives
- ensure that data ownership across the organisation is clearly established
- align data collection with needs for data-driven insight and avoid collecting data for which no users exist
- minimise security risks by avoiding use of personally identifiable information (PII) in analyses
- ensure that data cleaning and preparation do not remove important data that could be used to identify outliers and anomalies
- champion the development of a playbook for the correct use of data in conjunction with other functions and teams.
Given the emergence of **big data** is a reality for the CFO and finance team, they should:

- develop and execute a strategy for the finance function that focuses on appropriate technologies, such as Cloud-based services, that support the development of a real-time analytics capability
- consider how data extraction can be best managed from legacy systems to ensure that analytics capabilities can be developed
- generate a catalogue of certified external data sources complementing internal data, refreshed on a regular basis to ensure that new sources are captured. Finance should own the catalogue and update process as the use of external data leads to a direct impact on financial decisions and beyond
- ensure that analytics projects support accessibility to more diverse structured and unstructured data, recognising the need to collaborate across the organisation in data collection
- evaluate activities that lead to descriptive analytics to determine whether they continue to add value to the organisation.

Beyond this, to move towards hybridisation of **talent** the CFO and finance team should:

- roll out a data literacy programme for everyone, using examples ranging from improvements to in-house financial decision making to automation of activities by any other areas of the organisation
- extend analytic capabilities to a wider group of users; this will require investment in the right mix of skills and capabilities to ensure that you adjust the appropriate balance for changing business needs
- curate self-service resources for the organisation, including podcasts and online communities
- host regular educational events, hackathons and an analytics book club, alternating between external guest speakers and those from different teams in the organisation to ensure that skills remain current.

**Decision-making enablement** for the CFO and finance team will enable them to:

- communicate with internal stakeholders about how data analytics, in particular predictive analytics, can assist in the strategic decision-making process
- ready the finance team to help enable better and faster decisions across the entire organisation by developing a model for using real-time data to make decisions
- categorise decision making for strategic (C-level), managerial (functional), operational (business process), development (new product or service) and customer differentiation (external customers)
- revise business-case documentation to identify projects that focus on predictive and ideally prescriptive analytics
- keep track of any disruptive innovations to help achieve better, faster decision making.

Use of **predictive and prescriptive analytics** across the organisation will enable the CFO and finance team to:

- standardise the master data (the most valuable information shared across the organisation) in the organisation
- begin to identify outliers across the organisation on a continuous basis, to give a potential early warning of an emerging problem or opportunity
- devise Excel templates for the decision-making model to help operationalise thinking about decision making.
- explore the potential for using open source components for the entire analytics value chain – a structured query language (SQL) database, machine learning and end-to-end processing; this is especially important if you are providing analytics software and services either as a business serving practices and SMEs or a BI Competency Centre servicing internal clients
- pilot collaboration between experts and business users using open-source software such as RapidMiner or KNIME.