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Enhancing competitive advantage through analytical insights

Are you unlocking the value of your data?

A joint report by Deloitte Singapore and ACCA Singapore

Confidentiality

This survey was conducted on a confidential basis. Accordingly, we do not provide information on individual survey responses.

Acknowledgments

ACCA and Deloitte Singapore thank the respondents of this online survey. We also thank the roundtable participants who shared their insights on specific questions.

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Foreword by ACCA

ACCA is privileged to partner with Deloitte Singapore and Deloitte Analytics on this report which explores the state of play in the use of analytics by organisations in Singapore and the challenges that they face in fully capitalising on the potential of analytics.

The research identifies two key types of talent required to capture value from data: those with technical skills in statistics, for example, those who are capable of analysing large volumes of data to derive business insights, and also those with business and finance background – people who have the skills to be effective consumers of big data insights, i.e. capable of posing the right questions for analysis, interpreting and challenging the results, and making appropriate decisions. Accountants and finance professionals, who are well-versed in these skills, therefore provide a key resource to drive organisations to a higher level of analytical sophistication.

Furthermore, the finance function is rapidly evolving and beginning to leverage on technology to drive strategic business insights to support true business transformation. Data analysis can reveal surprising insights about what does and does not improve organisational performance. As businesses are transformed by the impact of business analytics; so will the role of finance professionals. Accountants and finance professionals are well-placed to take an active role by 'distilling' vast amounts of information into actionable insights, using business analytics.

We believe this report will provide useful information to organisations to benchmark their own level of analytical sophistication as well as to provide an impetus to further explore and exploit business analytics to enhance productivity and profitability. The knowledge that we have been able to gather from this pioneering research survey will prove to be valuable and insightful in facilitating best practices using business analytics.

Leong Soo Yee
Head, ACCA Singapore

Foreword by Deloitte

Business analytics is fast becoming the 'next big thing' for organisations and a real differentiator that is transforming the way companies compete. Fact-based decision-making is one of the most significant developments in business today and that is what puts business analytics in the centre of the action.

We are honoured to partner ACCA in undertaking a first-of-its-kind survey in Singapore to understand the state of analytics readiness at leading corporations today.

This report also contributes to Deloitte's mission to help Chief Finance Officers (CFOs) and professionals responsible for driving analytics in their organisation understand how their organisations can achieve new insights, identify opportunities for innovation, and ultimately improve business performance and productivity by applying analytics to the business.

As the report illustrates, there are varied ways in which analytics is structured and managed within organisations. Ultimately, competitive advantage is what drives further development of analytics within any major organisation and it is clear that many organisations are beginning to embrace analytics as a key to organisation growth.

I hope you find this report a useful guide as you assess your organisation's analytical sophistication today and determine how you can shape and strengthen your analytics initiatives moving forward.

Wilds Ross
Lead Partner SEA, Deloitte Analytics

Executive summary

Analytics is about making good business decisions. Just giving reports with numbers doesn't help. We must provide information in a way that best suits our decision-makers.

– Director of HR analytics for an entertainment company

In today's complex business environment, the field of business analytics is growing in acceptance and importance. It is playing a critical role as a decision-making resource for executives, especially those managing large organisations.

Even under the most supportive circumstances, the application of analytics is a long journey. It can take years to gather data, put the appropriate technologies in place, build the necessary skills, and embed analytical decision-making into key organisational processes.

This survey represents a guidepost for organisations that are looking not only to create business value from analytics, but also for a more innovative way to compete in the market. This survey can help these organisations gain better understanding about the analytics landscape in Singapore and benchmark their own progress towards analytical sophistication. Globally, Deloitte had also commissioned a pulse survey[1] in 2013, as part of its Analytics Advantage Executive Board programme, to gauge the state of analytics readiness in leading corporations in North America, the United Kingdom and Asia.

To assess the analytical sophistication of each responding organisation, we measured their sophistication level across four dimensions:

- **Strategy**: The degree in which business analytics is integral to strategy development, decision-making and execution.
- **People**: The extent in which there is a critical mass of personnel trained to apply business analytic techniques.
- **Technology**: The sophistication and proliferation of business analytics tools and technologies.
- **Process**: The level in which business analytics and analytic approaches are embedded in core business processes.

and grouped them into three distinct levels of analytical sophistication according to how they responded to those questions across the four dimensions:

- **Analytically Challenged** organisations are struggling to use data beyond basic reporting resulting in unpredictable performance.
- **Analytics Practitioners** are using data, mostly to address tactical and operational issues, but are not innovating with analytics at the same level as Analytics Innovators.
- **Analytics Innovators** are those organisations who have well defined analytics capabilities and gain competitive advantage to a great extent as a result. There is also continuous improvement in methodologies to adapt to future changes.

We found from the organisations participating in this survey that while they acknowledged the growth in importance of analytics and its prospects for the future, there is still a variety of ways in which analytics is structured and managed within these organisations that places them in a variety of positions and levels of sophistication in their analytics journey.

1 More information on the Deloitte Analytics Advantage survey can be found at www.deloitte.com/analyticssurvey

Key findings

1. Level of analytical sophistication varies significantly within and between organisations

Most of the organisations surveyed are applying analytics to one or more business processes. However, many areas within these businesses remain untouched. A great deal of data is still not used for decision-making; and many organisations have only rudimentary analytical technology. The use of analytics, in terms of scope as well as sophistication, also varies quite significantly from one organisation to another.

Finance was identified as the function most driven by business analytics and the top three uses of analytics in the finance department are in the areas of financial planning and analysis, financial control and statutory reporting.

2. Structure is a challenge and there is a lack of integration across systems

Analytics is managed by a variety of executive roles within organisations, and while a wide range of functions do benefit from analytics, more structure around coordination and alignment is needed to realise the impact and full benefits of analytics.

CFOs can play an important role in enhancing structural integration. There is an increasing demand for CFOs to take the lead and solidify partnerships between finance and business teams. While individual functions/departments tend to work in silos and are usually reluctant to share information across functions, it is the finance department that is uniquely positioned to have full access and visibility over the organisation's data.

3. Key barriers need to be overcome to realise full potential of analytics

Organisations will be slow to fully capitalise on the potential of analytics unless they are able to overcome several key barriers of which data management and quality, access to talent and IT infrastructure are the most problematic.

A shortage of people with the skills necessary to take advantage of the insights that large datasets generate is one of the most important constraints on an organisation's ability to capture the full potential from big data.

Business analytics – what is it?

Business analytics can be broadly defined as the use of data and quantitative analysis for decision -making within organisations. It involves harnessing analytics to meet defined business objectives.

Business analytics allows people in the organisation to make better decisions, improve processes and achieve desired outcomes. It brings together the best of data management, analytic methods, and the presentation of results – all in a closed-loop cycle for continuous learning and improvement.

The respondents associated business analytics with five key terms:

1. Performance management
2. Data analysis
3. Decision-making
4. Business planning
5. Strategy formulation

Figure 1. In your opinion, what is business analytics?

The above descriptions by respondents are close to what we would generally associate with analytics in the authoritative literature. These show that respondents to this survey have a good understanding of what analytics is about and consequently the survey findings that follow would provide fairly reliable feedback on the various questions that have been posed.

State of Play – Levels of analytical sophistication

Based on the organisations' responses to the questions in the four dimensions – Strategy, People, Technology and Processes – we have categorised the organisations into three levels of analytical sophistication: the Analytically Challenged, Analytics Practitioners and Analytics Innovators.

- **Analytically Challenged** organisations are struggling to use data beyond basic reporting resulting in unpredictable performance.
- **Analytics Practitioners** are using data, mostly to address tactical and operational issues, but are not innovating with analytics at the same level as Analytics Innovators.
- **Analytics Innovators** are those organisations who have well defined analytics capabilities and gain competitive advantage to a great extent. There is also continuous improvement in methodologies to adapt to future changes.

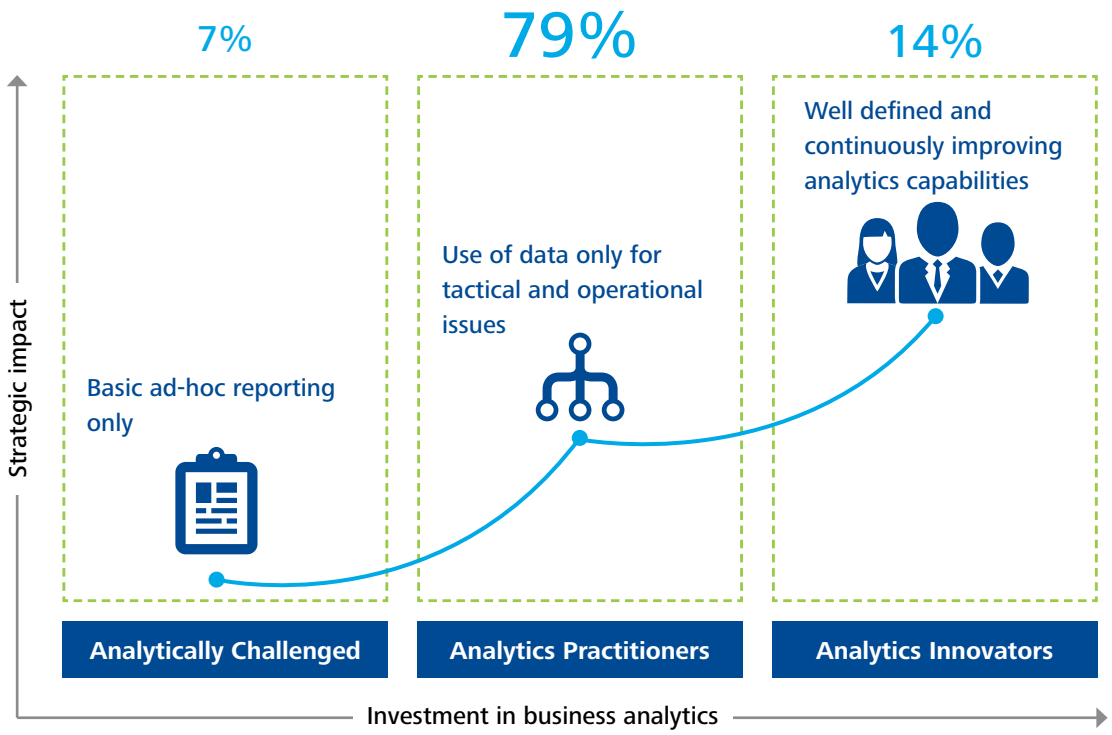

Figure 2: Levels of analytical sophistication

Figure 2 shows that most organisations surveyed are applying analytics to their business processes and are mostly at the Analytics Practitioner level (79%). Analytics Innovators differ from Analytics Practitioners in the following ways:

1. More effective use of data in large volumes for historical reporting as well as predictive modelling.
2. Support for analytics by executives displayed through allocation of resources – technology and people.
3. Shared belief that data is a core asset that can be used to enhance operations and strategy.

It is interesting to note that eight of the organisations (or 7.4%) surveyed said that they never use data-driven insights and the main reasons cited are that it is not a priority and they face difficulties in obtaining the budget as well as finding the right talent. However, they recognise that if they were to use analytics, it will help them better understand their customers, assess their performance and increase productivity. For the purpose of this report, these eight organisations that do not use data analytics in their organisations have been excluded from the rest of the survey analysis.

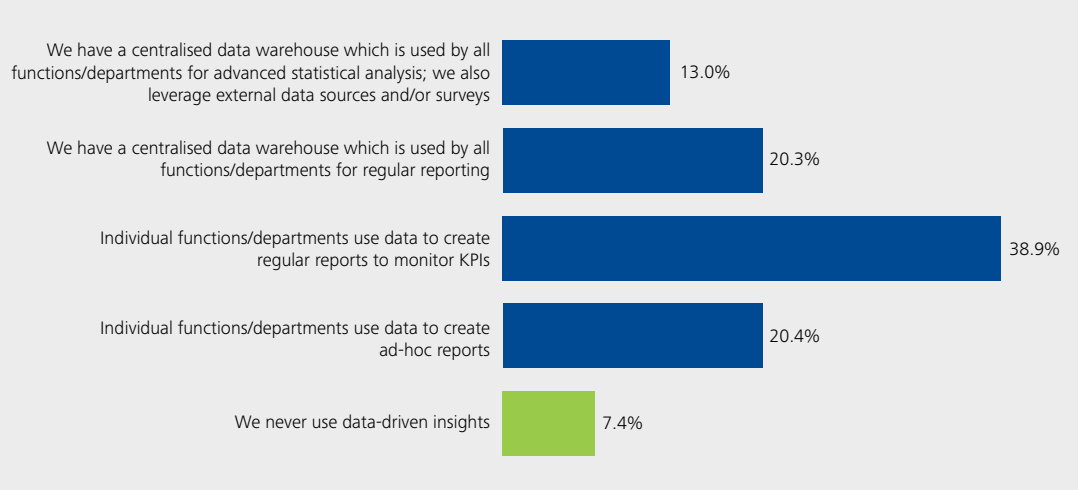

Figure 3: What best describes the usage of data in your organisation?

The diagram below summarises the key differences between Analytics Practitioners and Analytics Innovators.

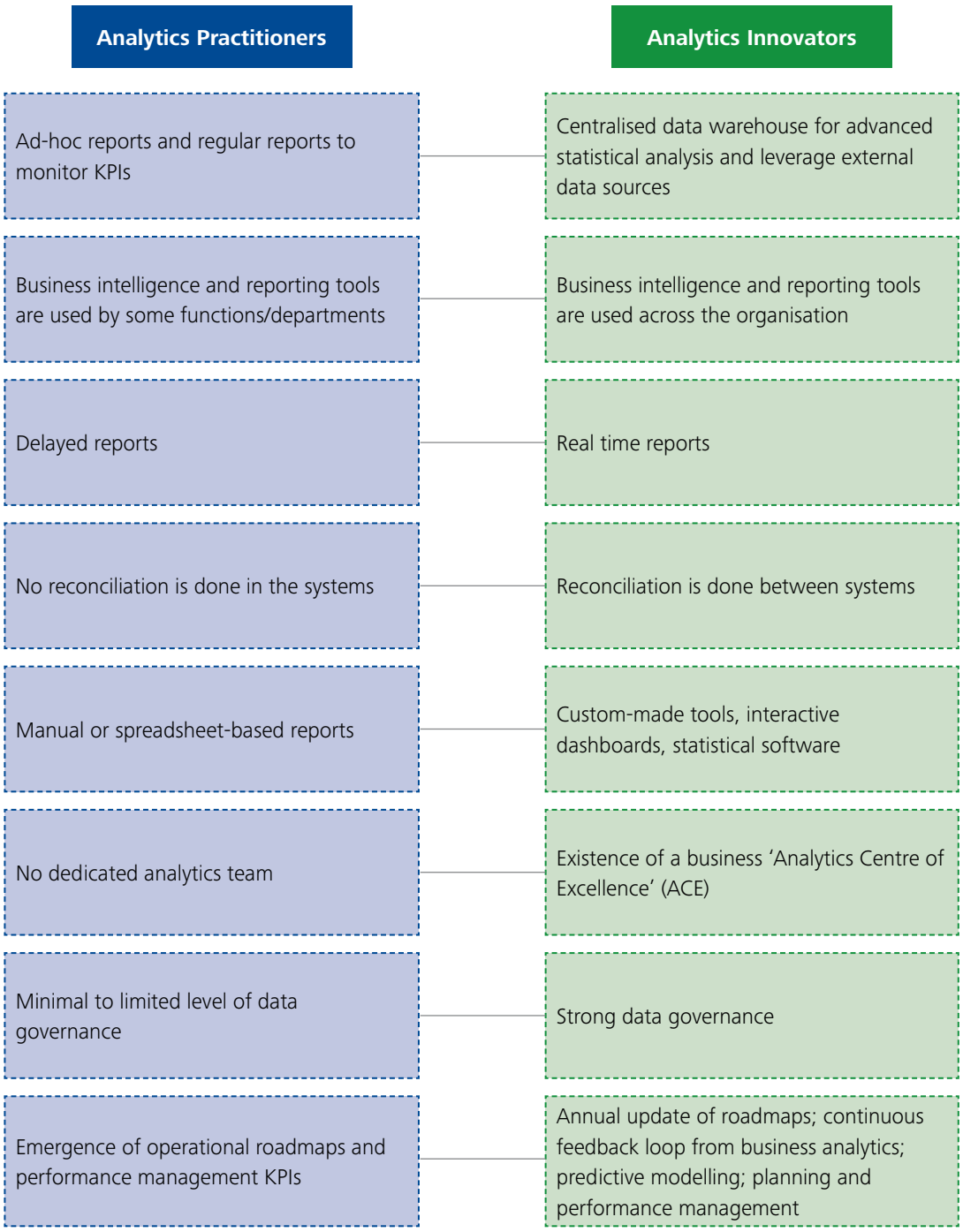

Figure 4: Key differences between Analytics Practitioners and Analytics Innovators

How can companies move further along the analytics journey?

Organisations that want to move further along the analytics journey must consider the following:

- Firstly, they must ask "*In what areas can business analytics deliver quantum leaps in performance?*" The exercise should take place within each significant business unit and functional organisation and be led by a senior executive with the influence and authority to inspire action.

- Determine what is missing from their current way of collecting and analysing data, and the necessary expertise required to make sense of the data. The ability to collect data, relating its meaning and studying trends over time can help organisations transform the data into a fact-based, business intelligence tool for analysing past events and predicting the future.

- Consider the use of analytics to drive strategy in organisations. In order to ensure that this is achieved, there needs to be a connection between analytical plans and strategy development processes. Firms need to identify not only today's projects, but also those that will follow them over the next few years. Hence, a multi-year perspective is necessary for planning the growth of analytical capabilities over time.

Organisations that are able to implement the above would be on their way towards moving along the analytics journey to reap greater benefits.

In Figure 5, below, the size of the circle represents the number of respondents.

How has using business analytics benefitted your organisation?	Analytically Challenged	Analytics Practitioners	Analytics Innovators
Very strong benefits; all our business decisions are powered by business analytics			
Strong benefits; used across all functions/ departments and core processes (e.g. quality and process improvement, accounting management, financial analysis and reporting, etc.)			
Significant benefits; used across all functions/ departments but only some processes			
Some benefits; used within some functions/ departments			
Minor benefits; very sparsely used			

Figure 5: Analytics Innovators report greater benefits from using business analytics

Figure 5 shows that organisations that are more analytically inclined and have business analytics embedded in the organisation roadmap see stronger benefits than those who have just started on their analytics journey. For these organisations, analytics is now 'a must have' and is no longer 'a good to have'.

Structure and integration

It has generally been specific functions/departments (finance, marketing, IT, etc.) that have advocated and adopted analytics. These functions/departments have also invested in tools and developed analytical techniques and procedures, with a focus on solving business problems specific to their own group.

The survey results show that analytics efforts, resources, and applications tend to be scattered across the organisation and only 17% of the organisations surveyed have some form of central business analytics centre or Analytics Centre of Excellence (ACE) that is responsible for and support business analytics throughout the organisation.

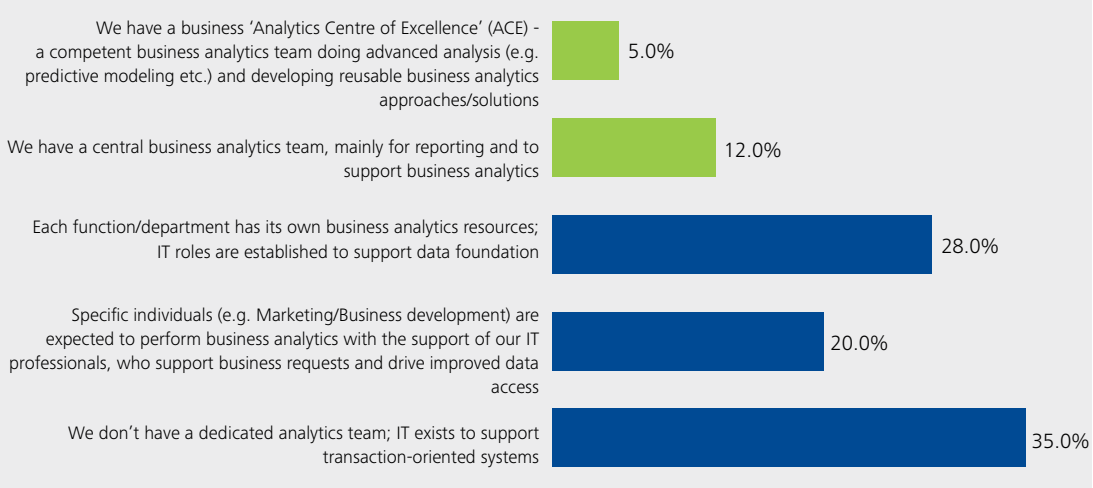

Figure 6: What is the structure of your business analytics team?

These silo-based initiatives may have benefited the departments concerned, but rarely do they reconcile the efforts to benefit the rest of the organisation. Data reconciliation allows companies to ensure the consistent and efficient use of data but as seen from Figure 7 below, only 11% of organisations who have two or more different end-user IT systems in their organisations are synchronising and reconciling their systems across the organisation. While individual functions have a higher tolerance for manual reconciliation, automation is preferred when implementing an enterprise level reconciliation.

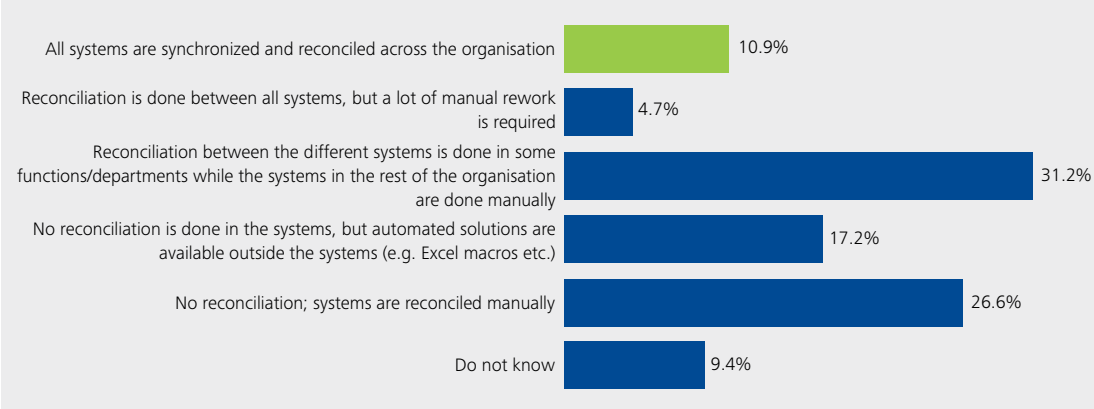

Figure 7: Do the end-user IT systems automatically reconcile with each other (for organisations with 2 or more different end-user IT systems in their organisations)?

This means that data requirements are defined within silos and IT teams or external data providers may often find that they are getting separate requests for data from various teams. There may also be instances when two teams in different parts of the same organisation are requesting or purchasing similar data. Effort is often duplicated between silos, which creates inefficiencies.

How can organisations integrate analytics efforts?

More structure around coordination and integration of information from multiple sources is needed for organisations to realise the impact and benefits of using data and this will often require investment in new data capabilities.

In the long term, plans may highlight a need for the massive reorganisation of data architectures over time: sifting through complex repositories, creating unambiguous source data, and implementing data governance standards to maintain accuracy. However, in the short term, a lighter solution may be possible for some organisations: outsourcing the problem to data specialists to help unify enough data to capture initial analytics opportunities. There are also many hardware options available today that can meet performance demands within a solution that is both easy to deploy and reasonably priced.

Another area that is often overlooked is that output is only valuable if the employees understand and use it. Output that is too complex can be overwhelming or even mistrusted. Hence, what is needed are intuitive tools that integrate data into day-to-day processes and translate outputs into tangible business actions. Many organisations fail to complete this step in their thinking and planning, which leads to managers and operational employees not using the new models, and as a result, effectiveness predictably falls.

It is important to note that integrating data alone does not generate value. Analytical systems are needed to enable data-driven optimisation or predictions; however there must be a plan that identifies where systems will create additional business value, who will need to use them, and how to avoid inconsistencies and unnecessary proliferation as models are scaled up across the enterprise. It is also important to resist the temptation of analytic perfection: too many variables will create complexity while making the system harder to apply and maintain.

Looking ahead

- **Take stock of your organisation's information access and distribution.**
- **Are employees stifled in their jobs because they don't have the appropriate information to make decisions?**
- **Look at information distribution and develop strategies that will help empower employees with insight.**

The role of CFOs in driving the adoption of analytics

Finance has long been data-driven, but the availability of data and the growth of business analytics capabilities have further heightened its importance; and we are increasingly seeing the role of CFOs evolve towards driving the use of analytics and helping to bridge the gap between strategic and operational decision-making with analytics.

The survey results show that in most organisations, Finance is identified as the function most driven by business analytics.

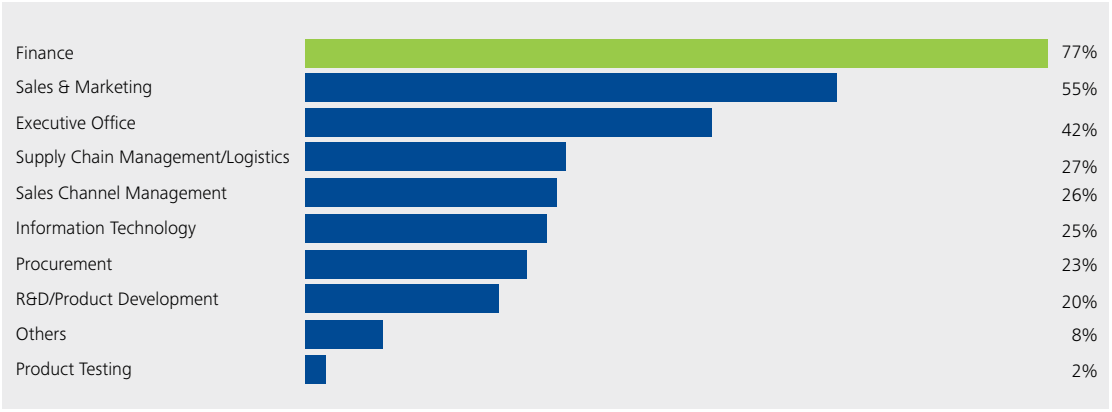

Figure 8: Which functions/departments are driven by business analytics?

The top three uses of analytics in the finance department are in the areas of financial planning and analysis, financial control and statutory reporting.

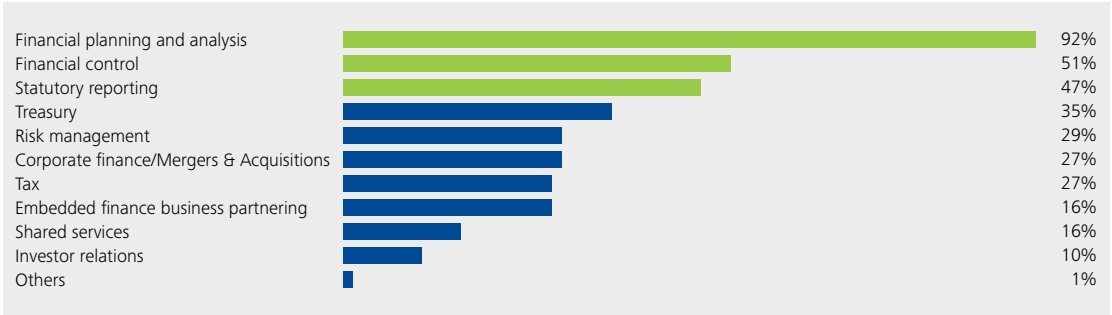

Figure 9: Which areas of the finance function are driven by business analytics?

The significant use of business analytics for financial planning and analysis could signify a fundamental change in the role between "managing the business" – the big, upper-level strategic decisions, such as planning, budgeting, and forecasting, that are the CFO's traditional responsibilities – and "running the business" i.e. the day-to-day, operational decision-making that typically resides outside the finance chief's purview, for instance, in the business units, or sales and marketing.

There is an increasing demand for CFOs to take the lead and solidify the partnership between finance and business teams because while individual functions/departments tend to work in silos and are usually reluctant to share information across functions, it is only the finance department that is uniquely positioned to have full access and visibility over the organisation's data.

CFOs can drive the benefits of analytics throughout the enterprise either directly, from Finance's analytics team, or by establishing an Analytics Centre of Expertise (ACE) led by Finance and reporting directly to the finance chief. Delivering analytical insights to operational decision-making is a matter of articulating and capturing the required data, performing the analysis, and, finally, working with business teams to deploy the analytics-based model.

While CFOs can drive the use of analytics throughout an organisation, it is not clear that they should ultimately be solely responsible for managing and maximising an organisation's data assets. Wide variations exist in the "ownership" of analytics, and from the Deloitte's Analytics Advantage survey report (cited on page 6), the most common analytics champion is the business unit or division head, who also typically has significant budgetary responsibility.

The ownership of analytics and whether or not analytics should be a more centralised function or one that is embedded within various corporate work streams continue to be an ongoing matter of debate, as evidenced by the feedback from roundtable participants who addressed this question for the purpose of this report.

Key barriers to overcome

While analytics has grown in importance and relevance in recent years, its acceptance and impact have been curtailed by a number of barriers preventing widespread adoption. Survey responses identified a number of key hurdles to overcome in order for analytics to play a more significant role in the organisation, starting with the quality of the data itself.

Quality of data: About one-third of the organisations surveyed (see Figure 10, below) said they do not have controls in place to ensure data integrity. Analytics is only meaningful if the quality of the underlying data is unquestionable but many organisations continue to struggle with the amount of data at their disposal, and how best to categorise, integrate, access, and analyse it, and then to implement decisions that stem from those findings.

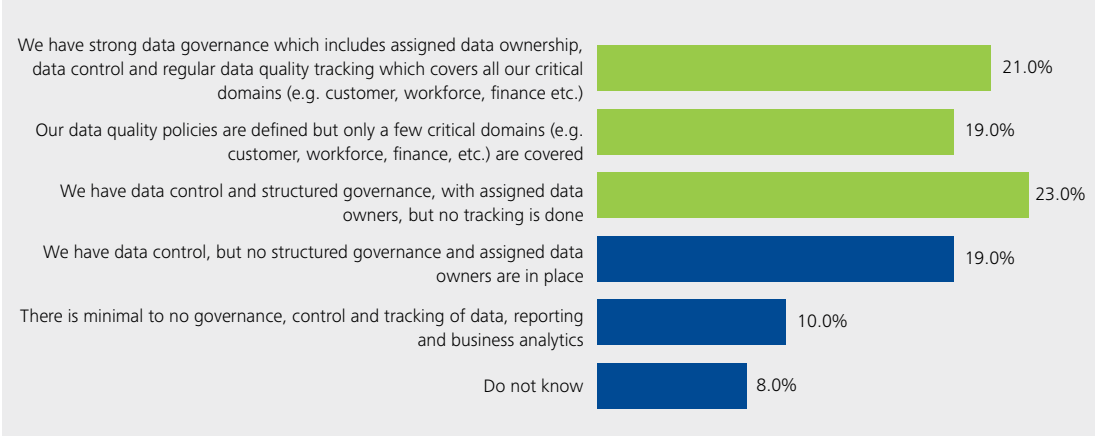

Figure 10: How mature is your organisation's data quality management?

Data governance is much more than simple security, compliance or risk management. It is all of them and more. It is about how an organisation uses data to benefit and protect itself. With high-profile data breaches all over the news, data governance is now on every executive's agenda. To manage risks, organisations must govern data usage and ensure effective governance by putting in place a consistent method of documenting organisational best practices and technology that supports the human decision-making process. Safeguarding corporate information and using improved data quality will help organisations not only keep auditors and regulators satisfied, but also retain customers and drive new business opportunities.

Ultimately, data governance is largely about organisational behaviour. Organisations change every day, and therefore their data, its value and risk also shift rapidly. Unfortunately, most organisations assess themselves only once a year. We believe that if a business is unable to change organisational controls to meet demands on a daily or weekly basis, it isn't governing change.

Looking ahead

- **Conduct a data audit.**
- **Do a quality check on the data you are using to drive decisions. How long have you been using the same data sources?**
- **Identify gaps in what you have and what you need, and consider other possible sources of data, which might provide a new perspective on your business.**

Inadequate talent pool and expertise: More than half of the respondents said they lack the number of individuals or the skill levels required for business analytics within the organisation. This is another key barrier to analytical progress.

A shortage of people with the skills necessary to take advantage of the insights that large datasets generate is one of the most important constraints on an organisation's ability to capture the full potential from big data. Figure 11 (below) identifies two key types of talent required to capture value from data:

- Deep analytical talent – people with technical skills in statistics, for example, who are capable of analysing large volumes of data to derive business insights.
- Business and finance background – people who have the skills to be effective consumers of big data insights, i.e. capable of posing the right questions for analysis, interpreting and challenging the results, and making appropriate decisions.

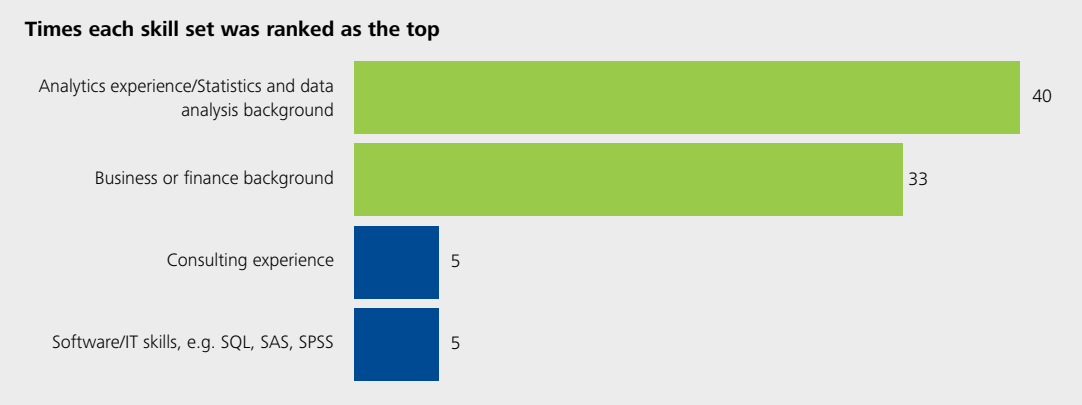

Figure 11: What are the top skill sets that you look out for when hiring for the business analytics team?

Leading organisations are already reporting challenges in hiring these types of talent and the gap is playing a significant role in slowing the maturity of analytics in many organisations.

The lack of skills and expertise could also be related to a frequent observation that analytics skills are concentrated in too few employees. Typically, when a new form of analytics enters the workplace, companies start by hiring experts versed in using it, reasoning that the skills will trickle down to all. But too many companies are stuck in the "expert" phase and they have a handful of highly skilled analytics professionals but have not begun to train everyone else to make use of their analytics methodology.

This is reflected in the survey results, which shows that more than half of organisations invest less than 1% of their annual revenue in business analytics training to build expertise. We believe that this is a very small amount considering that business analytics is playing an increasingly large role in corporate decision-making and is becoming even more important in driving business strategy. Hence, greater emphasis will need to be placed in this area to ensure that organisations can realise better returns on their investment in analytics.

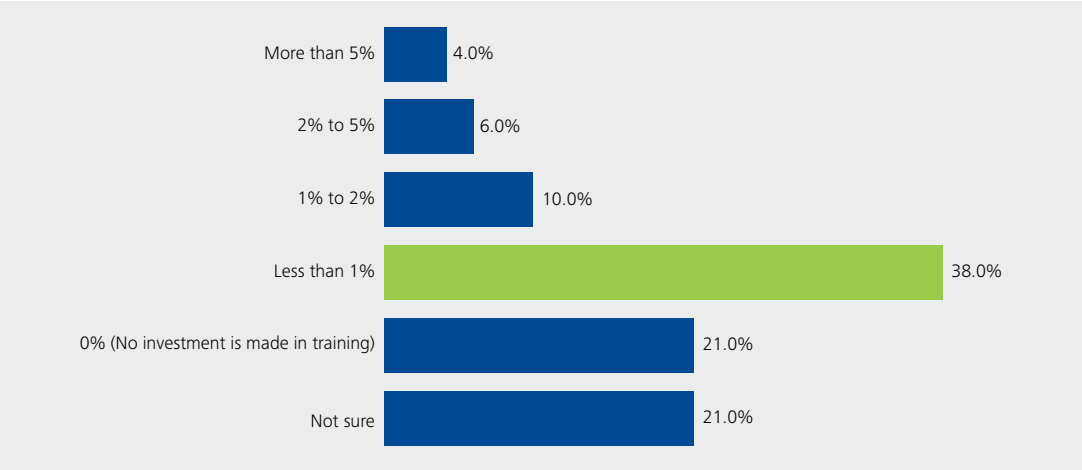

Figure 12: What percentage of your latest annual/annualised revenue did your organisation invest in business analytics training in the last 12 months?

Basic IT infrastructure: Another key impediment to analytics within organisations lies in IT. 57% of respondents said the technology infrastructure within their organisation supporting analytics is either "rudimentary" or "basic" with limited or no predictive tools.

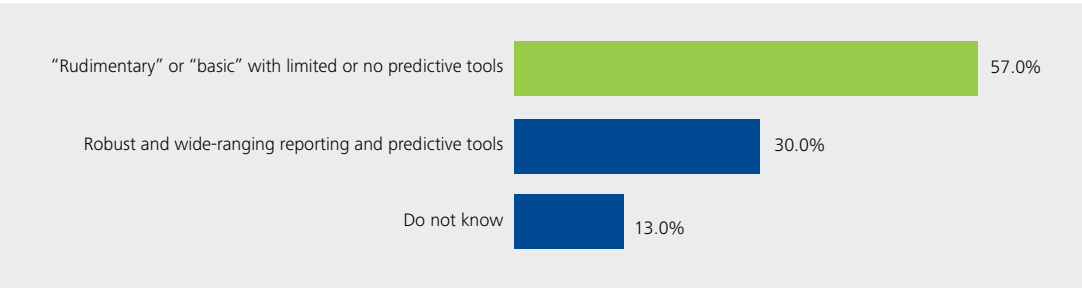

Figure 13: Use of analytics tools and software

30% of respondents who indicated that they are using robust and wide-ranging reporting and predictive tools have either implemented statistical software (e.g. SAS, SPSS) or interactive dashboards like Tableau, QlikView and MicroStrategy. Many of the respondents also indicated that they are using some form of custom-made tools in the organisation. About half are still using mainly manual or spreadsheet-based reports.

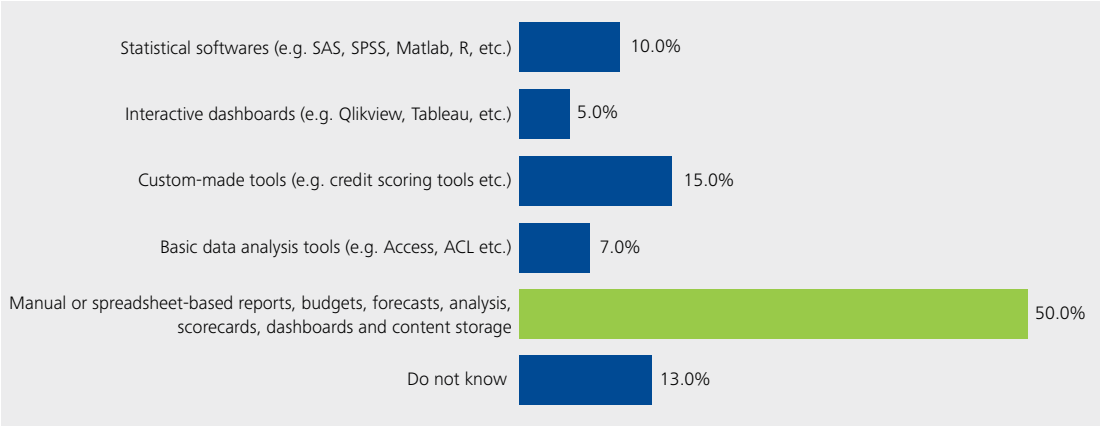

Figure 14: What specific tools/software are you using for data mining and business analytics?

Businesses should consider investing more in technological tools that can help firms to move their accumulated and created big data from disparate sources to a single data warehouse, where analytics processes can then be performed. This will also ensure the results are based on the most timely and accurate information available.

With regard to the need for timely information, it is surprising to see that only a small proportion (19%) of the organisation have real-time reporting and many organisations get reports that are useful for daily operations delayed by weeks (see Figure 15 below). This could be because many organisations are still using manual or spreadsheet-based reports, which are not capable of producing real-time results.

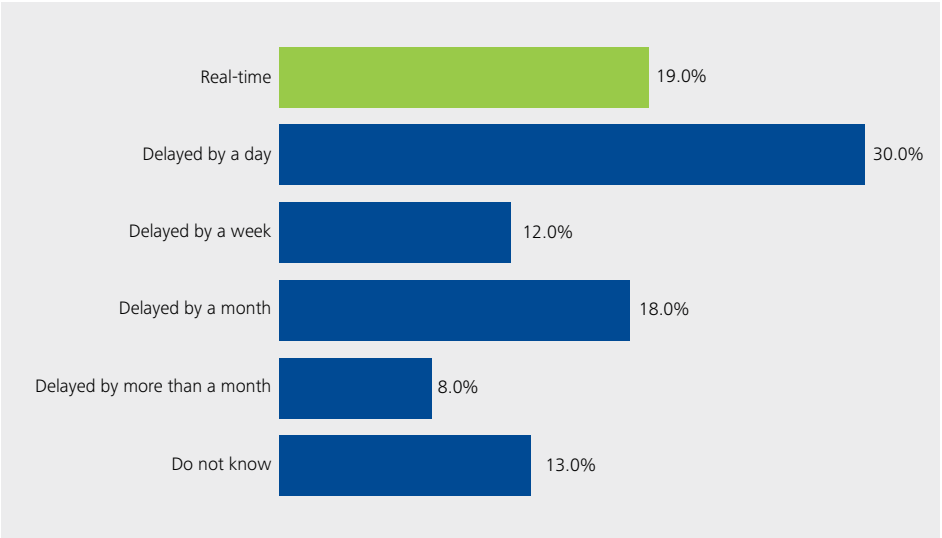

Figure 15: Do your on-demand reports for daily operations provide real-time or delayed information?

Timely access to information is essential for executives to take the right actions in the highly competitive environment and the availability of timely information is closely linked to the technological tools that organisations are using.

Lack of executive advocacy: Senior management support is almost always critical in developing the kind of data-driven culture and in obtaining the necessary funding to bolster IT infrastructure, build analytics capabilities and other analytics resources that will help to generate significant economic return. This requires executive buy-in and this is another major barrier to widespread adoption or growth of analytics, especially within large, complex organisations.

It is very important that at all organisations, senior management, and probably board members as well, have a good understanding of the scale of what is needed to ensure data-analytics success.

The survey reported similar sentiments and increased commitment from senior management was identified to be an important factor for driving the increased use of business analytics in their organisation in the next three to five years (refer to Figure 16). Only when that top-level perspective is in place can durable behavioural changes radiate through-out the organisation.

Convincing leaders of analytics' value often requires skillful maneuvering, such as giving them small doses of analytics that reap immediate rewards. After all, it is senior leadership that controls the purse strings that fund major initiatives like analytics.

Looking ahead

- **Take stock of your own analytical expertise.**
- **Do you or your staff have the right skills to employ sophisticated analytical techniques?**
- **Search for talent that combines an understanding of your business with a passion for data exploration and technical skills.**

Analytics wishlist

Here's an exploration of the top five changes that respondents would like to see change in the next three to five years in order to embrace the use of business analytics. It is evident (from Figure 16) that an increased focus on forward looking operational and financial information and increased commitment from senior management will drive a greater use of analytics. Furthermore, Figure 17 shows the close linkage between business objectives and the changes required in the finance system that can only be bridged by a more mature and sophisticated use of analytics.

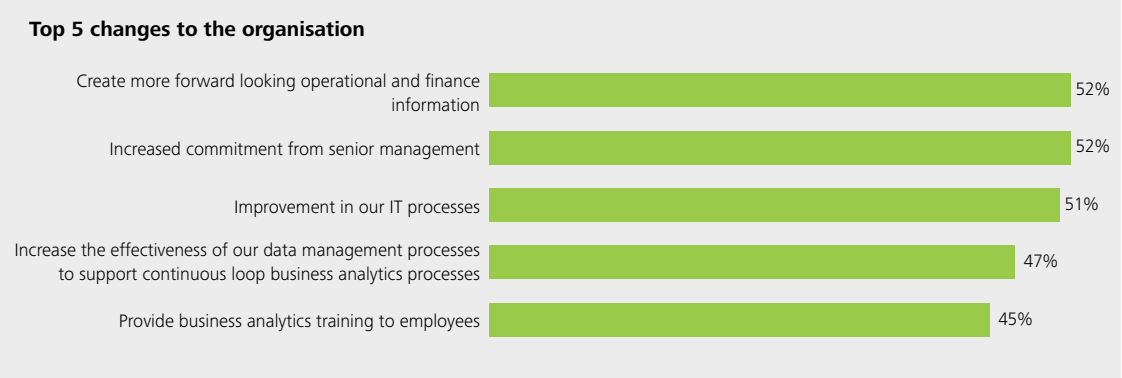

Figure 16: What would you like to change in your organisation to increase the use and performance of business analytics in the next 3 to 5 years?

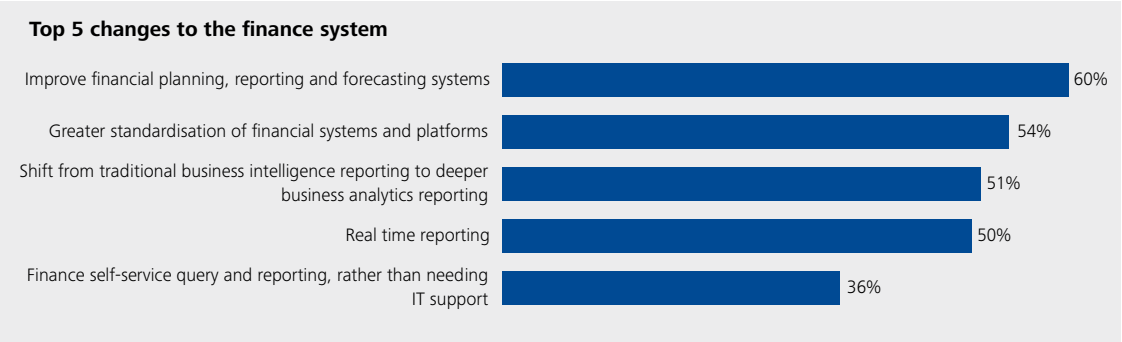

Figure 17: What changes in your finance systems do you think are necessary to achieve your business objectives in the next 3 to 5 years?

Recommendations and conclusion

Data is very much a part of all business, and now that the systems and technology have caught up to the need, businesses are really able to make some sense of the data they have but it requires companies to focus in order to create the impact they desire.

The application of business analytics and its importance will increase in the coming years. The only way to stay ahead of the competition and continue to drive productivity in your business will be to invest in analytical capabilities and integrating analytics in the decisions and processes.

In light of these findings, there are several steps your business can take to position itself for analytical competition:

- **Create more central coordination for analytics.** Analytics is managed by a variety of executive roles within organisations, and a wide range of functions benefit from the capability. More structure around coordination and alignment – though not necessarily full centralisation – is needed to realise the impact and benefits of the data available throughout the organisation. Think about a small Analytics Centre of Excellence (ACE) if you're not ready to fully centralise the capability. Plan your strategy for analytics over an extended timeframe.

- **Tie your analytics work to decision-making.** The survey reveals that the greatest benefit of using analytics is that it helps the organisation and senior management understand the market and make better decisions. But better decisions do not happen automatically with better data and analysis; they are the result of specific attempts to improve decision cultures and processes, and to change the understanding and behaviours of employees.

- **Acquire the necessary talent now.** It's clear that talent for analytics and big data is already in short supply; and the shortage will become even more pronounced over the next few years. In the survey, access to talent was listed as one of the greatest barriers to building analytical capability. Since people with the necessary skills are difficult to hire, the organisation may want to begin a program to train and develop them, sooner rather than later.

The amount of data and the need for data will not diminish. Hence it seems very likely that analytics will evolve from its early development stages and will continue to mature as long as it generates tangible financial benefits for the corporation. While data analytics may not be replacing common sense and gut instinct as a decision-making tool, it is becoming an irreplaceable strategic weapon in the corporate world. The organisations that plan for this evolution today will be the Analytics Innovators of the future.

About the survey

Research methodology

An online survey was conducted between 9 September and 25 October 2013 and a total of 108 organisations were surveyed, of which 100 organisations fit the required respondent profile.

This survey report was augmented by a roundtable discussion held on 25 October 2013 with 13 participants to exchange views on specific questions relating to the survey.

Profile of respondents

This survey was conducted with CFOs and professionals responsible for driving analytics in their organisations, from leading companies in Singapore as well as multinational companies. About 12% of these organisations recorded revenues of $1 billion or more in the latest financial year or period.

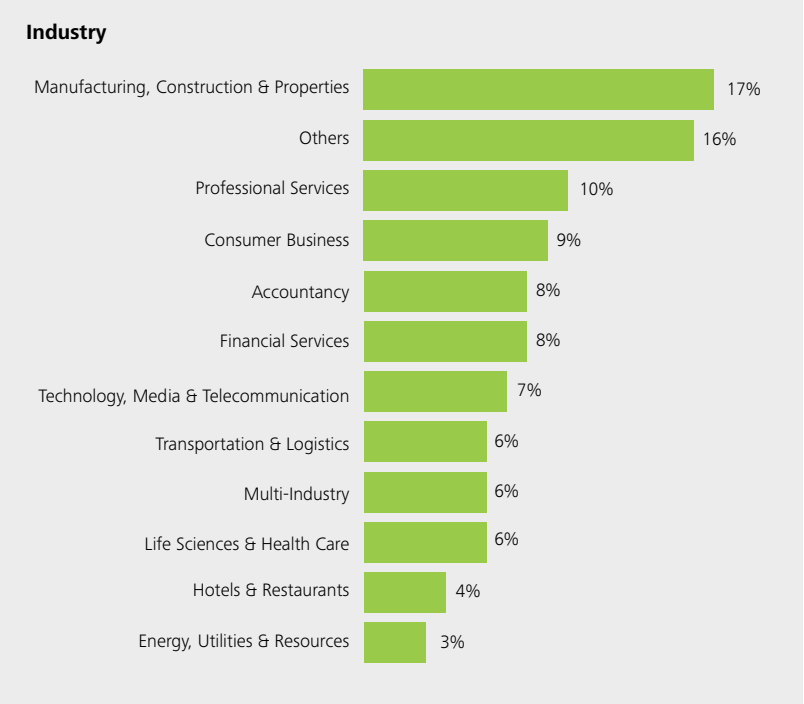

Figure 18: Please indicate the industry your organisation is in

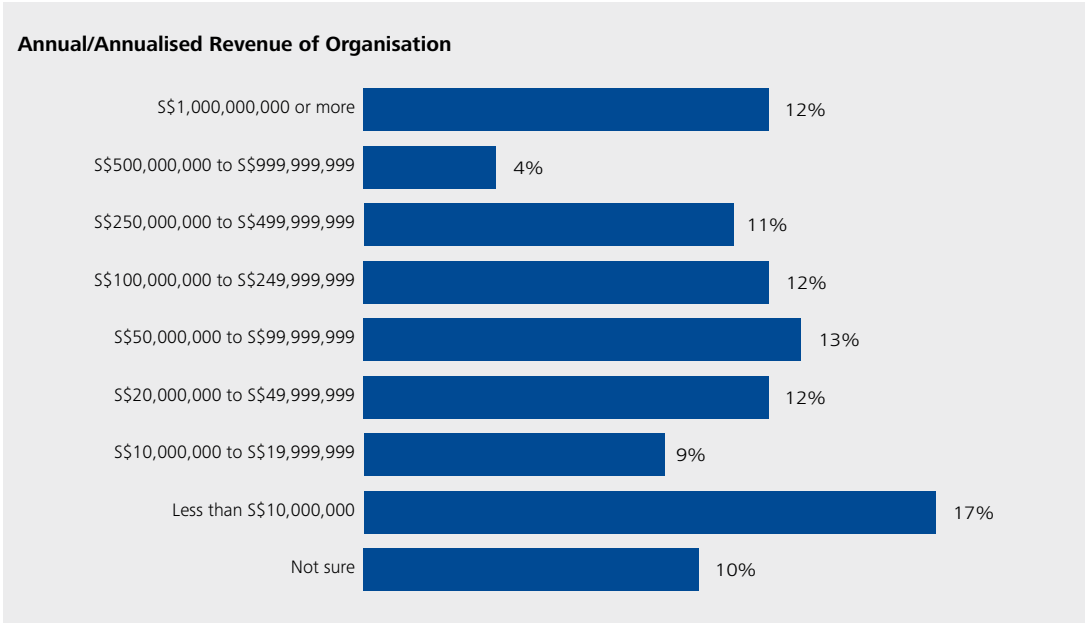

Figure 19: Please indicate your organisation's latest annual/annualised Singapore revenue

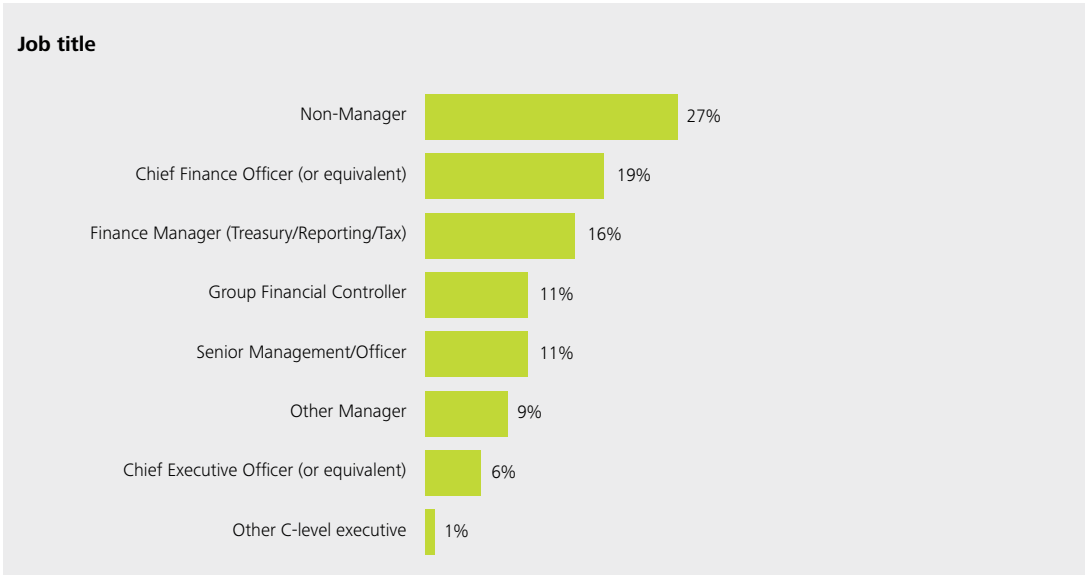

Figure 20: Please indicate your job title

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About Deloitte Analytics

Analytics is the practice of turning everyday information into useful and actionable insights for business leaders. At Deloitte, we offer a full suite of analytics services delivered through our three analytics work streams:

- *Deloitte Analytics Delivery* that specialises in sourcing information and optimising it to extract the maximum value from one of an organisation's most important asset – data.
- *Deloitte Analytics Client Experience* that offers a unique experience by combining a scientifically designed learning environment with interactive technology delivered in a consciously designed training facility known as the Deloitte Greenhouse.
- *Deloitte Analytics Institute* that operates at the intersection of business, government and academia as an authoritative voice on the application of analytics as a source of managerial insight and competitive advantage.

About ACCA

The Association of Chartered Certified Accountants (ACCA) is the global body for professional accountants. We aim to offer business-relevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management. To achieve this we work with global bodies such as the International Federation of Accountants (IFAC) and with 77 global partnerships. Above all, we seek to bring long-term value to economies in which we develop and support professional accountants.

We support our 162,000 members and 426,000 students in 173 countries, helping them to develop successful careers in accounting and business, with the skills needed by employers. We work through a network of 89 offices and centres and 8,500 Approved Employers worldwide, who provide high standards of employee learning and development.

ACCA works in the public interest, assuring that its members are appropriately regulated for the work they carry out and, promoting principles-based approaches to regulation. We actively seek to enhance the public value of accounting in society through international research and we take a progressive stance on global issues to ensure accountancy as a profession continues to grow in reputation and influence.