Becoming an analytics-driven organization to create value

A report in collaboration with Nimbus Ninety
Research from EY and Nimbus Ninety provides new insight on big data trends and challenges and how your business can build a successful data strategy.

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How much is an organization worth?

How will that change tomorrow? And which strategic decisions will deliver the greatest value for stakeholders and customers?
In the past, answers to these tough questions were based on a simple analysis of the balance sheet and a focus on the company’s future expected revenues and profits. Assumptions were also made about the value of intangible assets, from intellectual capital and employee skills to customer loyalty and future growth potential, leading to highly subjective valuations.

To identify new sources of value that exist in an organization and can be exploited, and to cultivate future opportunities for value creation and protection, many forward-looking companies are turning to big data and analytics. In essence, analytics can enable an organization to effectively grow, optimize and protect value.

Firstly, big data has become an invaluable tool for creating value in a business. By providing a comprehensive view of market conditions, customer needs and preferences, and potential project risks, big data can eliminate reliance on “gut feel” decision-making. Organizations can understand and embrace emerging opportunities and align products and services with changing customer needs creating additional value for stakeholders in the process.

Secondly, big data can help organizations protect value based on effective risk mitigation and compliance with ever-changing regulations. This is especially important for companies grappling with the implications of the new European Union (EU) General Data Privacy Regulation set to be formalized by the EU in 2015.

Thirdly, analytics can help organizations find and measure intangible sources of value more effectively, bringing together hard facts from the balance sheet with a range of qualitative evidence, such as employee skills, customer sentiment, product innovation and geographical footprint. The result is a more comprehensive understanding of what drives a company’s valuation while offering a clear way to manage value and communicate it to a wide range of stakeholders and the market.

In this summary we give you an overview of research from EY and Nimbus Ninety, which looks at how companies are currently using big data analytics to find, measure, create and protect value across functional areas. Strikingly, the research shows that while 81% of organizations think data should be at the heart of every business decision, most are still using analytics in an isolated way to address specific business issues, limiting the potential value to increase performance and efficiency.

In the following sections, we look at the key challenges companies face in their quest to embrace value-driven decision-making as well as the game changing impact of the European Union directives and regulations impacting data security. Using our latest research, we hope to shed light on how businesses are working to become analytics-driven organizations.

Herman Heyns
Partner, Data Analytics, Ernst & Young LLP (UK)

Chris Mazzei
Global Chief Analytics Officer, EY
Becoming an analytics-driven organization to create value

Introducing the research

How many people does your organization employ?

<table>
<thead>
<tr>
<th>Employee Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-10</td>
<td>4.8%</td>
</tr>
<tr>
<td>11-100</td>
<td>8.5%</td>
</tr>
<tr>
<td>101-500</td>
<td>11.5%</td>
</tr>
<tr>
<td>501-1,000</td>
<td>8.9%</td>
</tr>
<tr>
<td>1,001-5,000</td>
<td>25.9%</td>
</tr>
<tr>
<td>5,001-10,000</td>
<td>11.9%</td>
</tr>
<tr>
<td>10,001-20,000</td>
<td>6.3%</td>
</tr>
<tr>
<td>20,000+</td>
<td>22.2%</td>
</tr>
</tbody>
</table>

What department of the organization do you work in?

- **IT**: 32.2%
- **Other**: 11.5%
- **Finance**: 10%
- **Cross-departmental management (e.g., CEO, MD)**: 23.3%
- **Marketing/PR**: 10%
- **Research and development**: 2.2%
- **Sales**: 1.5%
- **Operations**: 3.7%
- **Procurement**: 1.1%
- **Supply chain**: 0.4%
To understand how many companies are currently using big data to measure, create and protect value across their businesses, EY commissioned new big data research from leading insight firm Nimbus Ninety. A total of 270 senior executives responded to 27 questions on all aspects of their data strategy. Around 68% of respondents are active stakeholders in big data projects, and all departmental functions and industry sectors are represented, with the majority of respondents working in finance, marketing and IT, as well as in cross-departmental management roles.

“Data can be the lifeblood of an organization if it is allowed to flow freely across the entire ecosystem.”

Herman Heyns
Partner, Data Analytics, Ernst & Young LLP (UK)
Becoming an analytics-driven organization to create value

Key findings

The top 10 drivers for your organisation to implement big data analytics

- To understand customers better: 73%
- To improve products and services: 72%
- To improve the management of existing data: 47%
- To create new revenue streams: 41%
- It is a necessity for our business model: 40%
- To monetise existing data: 35%
- To become leaner - improve internal efficiencies: 35%
- To find and exploit new data sources: 34%
- For better management of governance, risk and compliance: 29%
- To improve the detection and prevention of fraud: 20%
Our latest research shows businesses are not yet realizing the true potential of big data to measure, create and protect value across diverse operational areas.

Herman Heyns
Partner, Data Analytics, Ernst & Young LLP (UK)

Big data ambitions versus current realities

The findings of EY research show that 81% of companies understand the importance of data for improving efficiency and business performance and that most are embarking on some kind of big data strategy. Of respondents from companies with an annual turnover of more than £2 billion, only 3% have no big data strategy at all. The figure rises to 14% in the £100 million to £2 billion category and to 16% for those with annual turnover under £100 million.

While the vast majority have big data on their radar, however, only 3% describe their data strategy as “mature.” Among companies currently working on big data projects, just 21% are in the operational phase, showing a major gulf between companies’ big data ambitions and their current achievements.

In practice, this means that less than a third of companies are currently harnessing big data to offer services around existing business models and, for example, upsell products and services to customers, while just 8% are using big data to optimize supply chain efficiency. Other opportunities to create value are also being missed, from improved board-level decision-making to improved management of working capital.

Drivers for big data projects

Our research sheds new light on the drivers for big data adoption. “Understanding customers better” was the most common driver for big data projects, cited by 73% of respondents as a key area where additional value could be created. “Improving products and services” came a close second, while almost half of respondents also cited “improving the management of existing data” as a key focus.

35% of respondents recognize the financial value of big data, citing “to monetize existing data” as a key driver.

10% were more blatant in their intention to “sort data so it can be sold to or used in partnership with a third party.”

20% are using data “to improve the detection and prevention of fraud”, an increase from “7% of respondents who are aware of any specific data technologies as cited in our EY, Forensic Data Analytics Survey 2013.”

Key big data challenges

The findings of the research suggest widespread underinvestment in the structures, processes and controls needed to support value-driven decision-making. Poor data quality and a lack of strong data governance are undermining trust in the value of data across entire organizations, while the widespread lack of specialist big data skills makes it difficult to budget and plan for big data projects and effectively calculate ROI.

32% of respondents admitted to being overwhelmed by data.

32% of respondents saw organizational structure as being the key influence on success for big data projects.

47% cite “adapting organizational culture to integrate big data” as a key challenge.

50% view poor data quality as a key concern, with the same percentage quoting ROI as a key challenge to projects.
Challenge 1

Building the right organizational structure and governance framework to support value-driven decision-making

Centralized big data governance with local delivery

While centralized governance is needed to collect data from across the business and convert it into valuable business insight, companies can also benefit from a local, “federated” delivery model. Centralized governance ensures that common standards, methods and tools are used across all big data projects and that data drives all key decisions, while local delivery of big data projects improves the speed of analytics and ensures that insight is available to decision makers across the business.

While local or federated delivery of big data projects effectively supports value-driven decision-making across the entire business, it is not an approach that has been widely adopted by companies. Only 27% combine centralized governance with federated project delivery across all company sizes, although the approach is much more common (38%) among large companies with annual turnover of more than £2 billion.

Making big data a boardroom issue

According to EY research, the use of analytics to drive board-level decision-making will double in the foreseeable future.

With a clear view of operational performance, board members are in an ideal position to identify and sponsor big data and analytics strategies to create and protect value across a business. Executive support is critical for bringing clarity of vision to the overall data strategy and for bringing stakeholders in multiple disciplines and departments together to maximize value creation.

EY research shows a 50% increase in how organizations intend to use analytics to drive board-level decision-making (16% to 33% in the future).

Our research shows widespread agreement on this point, with 56% of respondents citing executive sponsorship as a critical success factor for big data projects.

EY research also shows that the business case for a big data project is built and scoped internally by a massive 83% of respondents even though only 32% of those responsible for planning and delivering big data projects work in IT, raising concerns about where, and how, analytics decisions are being made.

To maximize the potential of analytics to create and protect value across organizations, stronger working relationships must be forged between senior-level decision makers and operational teams delivering projects on the ground.

“Analytics is not a technology issue, it’s a strategy and operational issue.”

Chris Mazzei, Global Chief Analytics Officer, EY
While 41% of respondents recognized the importance of ‘cross-functional working’ for delivering successful big data projects, just 23% of organizations have implemented an organization-wide data strategy.

81% agree that data should be at the heart of all decision-making but only 31% of companies have significantly restructured their operations to help do this.

Without the right organizational structures, processes and governance frameworks in place, it is impossible to collect and analyze data from across the enterprise and deliver insight where it is most needed. This results in a siloed approach to big data deployment that limits a company’s ability to find, measure, create and protect value across diverse operational areas.

While 41% of respondents recognized the importance of ‘cross-functional working’ for delivering successful big data projects, just 23% of organizations have implemented an organization-wide data strategy.

... only 31% of companies have significantly restructured their operations to incorporate big data.

... At the same time, just 23% of organizations have implemented an organization-wide data strategy.
Challenge 2
Analytics, security and compliance

Mark Brown
Executive Director, Cybersecurity & Resilience

The European Union's Network and Information Security directive is changing the game for businesses that hold significant volumes of personal data, with a specific focus on technology and telecommunications sectors.

For the first time in the UK, data security breaches will have to be reported to both the regulator and all of the individual customers affected – a seemingly impossible feat for many organizations when identifying that a breach has even taken place is not always achievable.

Even more importantly, sister legislation (the European General Data Privacy Regulation) is on the way. Written from the point of view of the customer, this makes the concept of data privacy a basic human right as prescribed within Article 8 of the European Human Rights Act. Consumers will have a right to choose which companies have access to their data and exactly what they use it for. A big part of this legislation is the “right to be forgotten,” which allows consumers to effectively erase their data from a company’s records once and for all.

In addition, the potential financial penalty for a personal data breach will be increased to 5% of global annual turnover, capped at €100 million, which could mean financial ruin for companies that don’t take data security seriously.

EY research stats

The regulatory landscape is constantly changing, and the introduction of the new EU General Data Privacy Regulations will be the toughest challenge yet for organizations. Predictably, our research shows that 17% of organizations are concerned about the complexity of regulations and the risk of non-compliance, while 19% fear misusing or losing data, resulting in damage to the corporate reputation.

While 44% of companies think big data will increase data security risks, analytics techniques can actually help to enhance security and streamline compliance. However, only 12% of companies are currently using big data analytics to increase cybersecurity, 18% to improve regulatory compliance and 10% to detect accounting fraud.

By implementing organization-wide data strategies and governance, organizations can add significant value in each of these key areas.
Despite their best intentions, many organizations will find it challenging to comply with the new regulations. For example, having multiple databases and IT systems spread across a vast array of supplier ecosystems often makes it difficult to simply erase a customer’s records, and use of cloud-based infrastructure may lead to storage of data outside a required jurisdiction.

As an additional challenge, a growing landscape of cyber-security threats means that organizations should expect a data breach at some time, and implement measures to limit the negative impacts, focusing more on resilience and brand damage limitation than simply trying to prevent an incident in the first place.

The problem is that while companies have raced ahead with digital business strategies, effective governance and risk mitigation are often not yet in place. This largely explains why the regulator has stepped in, and why companies can no longer ignore their digital governance challenges.

So what can companies do to mitigate cybersecurity risks and ensure that their customers' data is kept private at all times?

For many companies, the answer is the appointment of a chief data officer (CDO) with end-to-end responsibility for data governance, data management, data exploitation and data security. The CDO’s remit covers a range of risk mitigation activities, from stress testing compliance policies and shutting down security gaps, to reassuring CEOs and regulators that adequate protection is in place for sensitive operational and customer data.

Whether companies decide to appoint a CDO or not, many are reviewing their current operating models and defining data ownership, governance and management responsibilities across their businesses. In addition, companies are looking at how disruptive technologies such as cloud computing and big data are affecting their data security policies, and mapping the flow of data around their organizations to ensure compliance with jurisdictional and data management regulations.

Whether a CDO is appointed or not, new roles will be required by the legislation as all companies processing more than 5,000 personal records per annum will be required to appoint a Data Protection Officer (DPO) reporting to the management board to govern compliance with the EU General Data Privacy Regulation.

For more information on the pending European legislation on data security and privacy, visit ey.com/GL/en/Services/Advisory/EY-cybersecurity or contact:

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Challenge 3
Delivering actionable insight to all decision-makers across an organization

To adopt the data-centric culture required to effectively find, measure and create value, organizations must be able to share actionable insight with decision-makers at all levels of the business. However, EY research shows that current approaches to data collection and management make this a major challenge, largely due to widespread concerns about data quality and consistency.

Specifically, data quality is cited as a challenge by 50% of companies, making it the top big data issue along with “measuring ROI on big data projects.” Lack of consistency in underlying data comes third on the list, cited as a key challenge by 46% of companies.

Using all available data to support decision-makers

Our research shows that most companies are currently working with limited data sets for their big data projects. Half of respondents said they use data from back-office systems such as enterprise resource planning (ERP), and the same percentage use data from their customer relationship management (CRM) systems, suggesting that user experience improvements and customer insight are high on their priority lists.

So far, however, newer forms of data that can drive additional value creation are largely being overlooked. Only 19% are using third-party data, 29% are using data from social networks and 19% are using machine-generated data, location/spatial data, and data from communications systems such as email and messaging apps.

With the right organizational structures, skills and data governance in place, organizations will be able to extend the data sets they use in the future and build a more successful data strategy that is trusted, valued and supported by key stakeholders.

What are your main sources of data?

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<thead>
<tr>
<th>Data Source</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Machine generated data</td>
<td>19%</td>
</tr>
<tr>
<td>Open/third-party data</td>
<td>19%</td>
</tr>
<tr>
<td>Mobile apps</td>
<td>25%</td>
</tr>
<tr>
<td>Sales and billing</td>
<td>28%</td>
</tr>
<tr>
<td>Social media</td>
<td>29%</td>
</tr>
<tr>
<td>Website usage</td>
<td>44%</td>
</tr>
<tr>
<td>Customer relationship systems</td>
<td>50%</td>
</tr>
<tr>
<td>Back office systems, e.g., ERP</td>
<td>50%</td>
</tr>
</tbody>
</table>

Poor data quality is a major obstacle to delivering actionable insight with 50% of companies citing this as a major challenge.
Becoming an analytics-driven organization to create value

Challenge 4

Developing the talent needed to convert data into business value

Specialist skills are needed to develop a compelling business case for big data projects and to plan and execute them cost effectively. However, a lack of skills was the fifth most commonly cited main barrier to big data projects.

While some companies lack the skills required to adopt value-driven decision-making, the vast majority still rely on in-house teams to identify business requirements for big data projects, develop business cases, conduct ROI modeling and deliver projects. In an attempt to bridge the skills gap, 38% of companies are looking to hire people with big data skills, while 21% are retraining their existing technical staff.

As an additional concern, only 26% of organizations are training business staff in big data-related disciplines. This shows that companies are still unprepared to adopt big data across their organizations, limiting the potential to create additional business value.

Keeping up with technology remains a challenge

Our research shows that the lack of big data skills in most companies creates significant technology challenges. For example, 36% of respondents cite “identifying big data technologies” as a challenge, and 32% report issues with technology implementation. This is not surprising given the pace of big data technology developments.

To overcome these challenges and maximize the potential for value creation, organizations must acquire the skills needed to deliver every stage of a big data project, from building an effective business case and modeling ROI, to selecting and implementing a successful technology strategy and appropriate, cost-effective architectures. This can be achieved by bringing new skills on board and changing the organizational structure to embed big data into the decision-making processes. Another useful strategy is to partner with third-party companies who are big data specialists, including consultancies, boutique big data providers, systems integrators and software-as-a-service providers.

While big data skills are needed to overcome technology challenges, there is some good news for smaller companies wishing to embrace value-driven decision-making. With only a 9% gap between big data activities in small and large companies, we are seeing a democratization of advanced analytics through developments such as pay-as-you-go cloud computing and software-as-a-service.

While half of companies are concerned about the quality and consistency of their data, 69% continue to manage their big data projects in-house.
The research shows that the scale and complexity of larger operations augment several of the key big data challenges, including:

- Data quality (a major issue for 64% of companies with revenues of over £2 billion, compared to 50% for the overall sample)
- The ability to adapt the organizational structure (56% compared to 47% overall)
- Finding suitable skills and personnel (50% compared to 41% overall)

While increased complexity increases big data challenges, larger companies’ investments in big data are paying off. Specifically, larger companies are outperforming smaller ones in terms of using big data to reduce business risk and achieve growth. However, in respect of operational efficiency, our data shows that larger companies appear to place less importance on this.

To understand how companies of different sizes are using big data and the challenges they face, we have segmented our research by company size (£0 to £100 million, £100 million to £2 billion and over £2 billion).
Large companies are slightly ahead, but investment remains limited

The positive results achieved by larger companies can be attributed to the scope of investments in big data. Yet overall these are relatively limited. Only 3% of the largest companies invest less than £50,000 a year in big data. However, the percentage of companies investing less than £50,000 a year increases to 34% for the £0 to £100 million revenue bracket and to 14% of companies in the £100 million to £2 billion bracket. Around 16% of the largest companies invest between £1 million and £5 million a year in big data, with 14% investing more than £5 million a year.

- **16%** of the largest organizations are using big data to improve cybersecurity (compared to 12% for the overall sample)
- **44%** are using big data to improve customer targeting (compared to 20% overall)
- **31%** are using big data to monitor their marketing activities (compared to 13% overall)
- **36%** are using big data to create new products (compared to 16% overall)
- **22%** are using big data to improve regulatory compliance (compared to 18% overall)
- **13%** are using big data to monitor competitor behavior (compared to 8% overall)
- **45%** of companies are using big data today to improve CRM (compared to 22% overall)

The positive results achieved by larger companies can be attributed to the scope of investments in big data. Yet overall these are relatively limited. Only 3% of the largest companies invest less than £50,000 a year in big data. However, the percentage of companies investing less than £50,000 a year increases to 34% for the £0 to £100 million revenue bracket and to 14% of companies in the £100 million to £2 billion bracket. Around 16% of the largest companies invest between £1 million and £5 million a year in big data, with 14% investing more than £5 million a year.
For several years, Bupa has been looking at how data can support its mission and positively influence people’s health. Barry Panayi, Bupa’s Head of Data Science, says, “We have amazing data resources at Bupa, but in the past they were all sitting in different areas of the business, with no real incentive for people to do anything with them. We needed to get all areas of the business involved to harness the data and use it for the benefit of our patients and the general public.”

The first step was to establish a group-wide community where physicians, administrators and technical staff from across Bupa could share ideas on using data to improve patient care. “We created a data group on our internal social media platform and there were 300 members within a year,” says Panayi. “Managers, doctors, nursing staff and administrators were soon getting in touch to tell us how data in their areas of the organization could help improve outcomes for patients.”

Based on input from people in all areas of Bupa, the data science team has been able to deliver big data projects that directly benefit patients. “We have been able to compare medical outcomes across multiple physicians and facilities around the world, helping us make better decisions about where and how patients should be treated,” says Panayi. “We have also looked at the cost and performance of medical supplies, including prostheses of all kinds, to improve value for patients and ensure that their treatments are successful.”

In one example of a recent big data project, staff in Bupa nursing homes are working with the data science team to improve care for elderly patients suffering from dementia.

“Nurses in one of our care homes noticed that patients with advanced dementia typically display repeated behaviors, such as opening and closing windows, and they need staff interventions to improve their situation,” says
Panayi. “Working with nursing teams, we have developed a solution that uses under-floor pressure pads and pattern recognition software to generate vast quantities of data. This can be analyzed to identify repeated behaviors and to make sure patients get the help they need.”

When Bupa updated their award-winning rehabilitation programme on behalf of the National Health Service for people suffering with the severe lung condition COPD, big data was able to improve medical outcomes. Alan Payne, Bupa’s Corporate Digital Director, says, “We gave nurses tablets, where they could enter patient information and test results directly into a clinical-grade database, rather than just making notes. By analyzing data on patients’ capabilities and breathing, we were able to focus on the types of exercises that would be most beneficial for them.”

Using accurate patient data, it was possible to design effective outcome-based regimens for 2,600 people attending the pilot rehabilitation course. “On average, the prescribed exercises helped patients reduce their oxygen use by 1.5 liters per day during the course, representing a potential, NHS-wide cost saving of £115 million a year,” says Alan. “More importantly, the data showed that the Bupa rehabilitation course can help to improve the physical capabilities and quality of life for COPD sufferers.”

While the benefits of Bupa’s big data initiatives are profound, Panayi says consent is critical before any patient data is used. “Patients must trust us to make the best health care decisions on their behalf, but they must also trust that their personal data is being protected and used appropriately,” he says. “That’s why we’ve built patient consent into every one of our big data initiatives, and why we explain to patients exactly how the data will help them overcome their health challenges.” Panayi likens it to a contract: “Our patients agree to give us their valuable data, and we agree to use it in their best interests to positively influence their health,” he says.

The data science team stresses that patients – not technology – are at the heart of Bupa’s big data initiatives. “Through our online community and working group, we identify issues and patient needs first and discover where data and technology can add value for them,” he says. “We see ourselves as health care providers first and data scientists second, and we are very proud of the contribution we are making to helping patients live longer, healthier, happier lives.”
Becoming a true value-driven organization

Our research shows that ... 

In response to the research findings, EY has developed our big data capability framework. This outlines the components needed to support value-driven decisions, including centralized governance and technology infrastructure. It also shows how strategy and specific big data functionality combine to support value-based decision-making.

By proposing a best practice model for big data, the big data capability map helps big data teams demonstrate the potential for value creation among senior-level managers, stakeholders, customers, market observers and regulators.

Why is the big data capability framework critical?

- All organizations will have to address value and place bets to win and survive in the current market.
- The technology is developing at an outstanding speed. For example, in 2011 there were approximately 100 marketing science data analytics providers whereas at the start of 2014 there were 1,000. This incredible growth is set to continue.
- If you chase after the technology without purpose, you will burn lots of money and not know where to focus.
- The framework helps you think in a clear, prioritized and structured manner about where to place bets.

We use value to anchor the big data strategy

01

Big data allows us to create and protect value in ways that were not possible before:

- We can now understand more comprehensively what drives customer, supplier and employee behavior.
- By focusing on the value drivers that will have the greatest impact, we can place our bets appropriately.

02

For example, if for a fast food chain, one of the key value drivers is restaurant location and placement. Previously you would have tracked footfall traffic by physically fusing market surveys and counts. Now you can track mobile phone movement as well as other sources to understand where the best location is.

The value framework allows us to be clear about the most important decisions and focus the data strategy around these decisions. Frequently big data initiatives are determined by what data is available, i.e., it is technology-driven. This can be turned around by looking at the business issues first and then aligning the data and technology to help answer them.
The value framework enables us to choose the appropriate type of analytics for the challenge. Do you need to know the next best action, or do you need to know why something is happening? Do you need to do this repeatedly or is it a one-off question? By being clear about the type of analytics required, this will help focus on the right tools, skillsets and solutions.

The main reason organizations struggle with data quality is because there is neither ownership nor accountability for quality. Many organizations are now focusing their offering behind the chief data officer and ensuring that data is seen as an asset equal to others.

The visible protection of data is critical to retain customers, employees and suppliers trust. It is fundamental to have access to this data, and not being able to prove to these stakeholder groups that you can protect their data will place you at a competitive disadvantage.
Get ahead of cybercrime — EY Global Information Security Survey 2014

Reports in the media regularly illustrate that cyber threats are increasing in their levels of persistence, sophistication and organization; the damage caused by a cyber attack can severely impact a business. Even if you have not experienced an attack yet, you should assume that your organization will have been targeted, or that your security has already been breached.

Big risks require, big data thinking — Global Forensic Data Analytics Survey 2014

For business executives in multiple functions, across many industries and geographies, “big data” presents tremendous opportunities. For those charged with deterring, detecting and investigating misconduct, mining such data can be a particularly powerful tool to be utilized in their overall compliance and anti-fraud efforts.

Privacy trends

The accelerating speed of technological advances is now an unquestioning reality. It is fundamentally transforming every aspect of our personal and business lives, every industry, and every country across the globe. However, it also has the effect of fundamentally transforming the notion of privacy – what it means to affected stakeholders (individuals, regulators, organizations) and how each party can remain accountable in a world that technology has turned on its head.

Scientific retailing and advanced analytics

Most analytics is descriptive (understanding the past and present) or predictive (projecting a current operation into the future). Scientific retailing is prescriptive and identifies the best course of action, helping companies formulate the right strategy. This is critical where a step-change in performance is needed or “business as usual” is no longer possible.
Big data: ready for takeoff study

Big data is the phenomenon of our time. The combination of the astonishing explosion of data and the rapid development of new technologies capable of storing and processing this information will transform the way enterprises run their businesses. After an initial period, when big data was an optional extra for most businesses, its value is now widely accepted.

Using data analytics to enhance compliance with corporate social media policy

Social media, the websites and Internet services that allow users to form networks and share information, views, opinions, photos and other media with each other and the public at large, presents unique challenges and opportunities to business enterprises. Businesses may seek to leverage social media to market services, identify buyers, and present a desirable image of the company to users of these services.

The science of winning in financial services

Financial services companies recognize the tremendous potential value of the data they hold and are working hard to exploit that value. Initiatives in better data management and analytics are beginning to bear fruit. However, as this research highlights, realizing and creating value from data – turning information into insight and practical action – is challenging and most companies have much more work ahead.
Becoming an analytics-driven organization to create value

Becoming a true value-driven organization

Our research shows that while almost all businesses now recognize the power of analytics to grow, optimize and protect value, many continue to be overwhelmed by the far-reaching changes required to transition to value-driven decision-making.

Lack of strong leadership and limited investment are hindering companies at every stage of the big data journey, from building a credible business case to ROI modeling, capability development, project planning and project delivery. This, in turn, is undermining the potential for measuring existing value, creating additional value and protecting value that already exists in an organization.

“Analytics is changing how organizations make decisions and take actions. Data by itself has limited value but when managed as a strategic asset, data can change how organizations compete and win.”

Chris Mazzei, Global Chief Analytics Officer, EY
Becoming an analytics-driven organization to create value

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