Doing Wrong Things Faster
Big data *versus* little data
Why companies should unleash the full potential of little data

Big data is bugging CEOs

Many have invested large sums in systems in an attempt to automate their way out of situations caused by poor work processes, underutilized existing data and inadequate front-line supervision. In a recent survey published by The Conference Board, big data analytics was rated as the number one global issue for CEOs. A phrase on the lips of many business leaders, big data is already big business. Gartner recently reported that the total spend related to big data and analytics, including software, social media and IT was as high $US28 billion worldwide. As the big data trend continues to grow, the state of preparedness of many CEOs across multiple sectors appears to be quite low. It appears that some CEOs risk diverting their attention towards big data at a time when they are not effectively managing the information they already have.

Big data capabilities are currently lacking globally

Companies around the world are already spending considerable sums on big data. Management consultancy firm Bain estimates that in 2015, organizations across the financial services sector will spend a sizeable $US6.4 billion on big data.[1] Other big spenders include software companies, governments, and communications and media businesses. Looking forward to 2020, those sectors where the growth in spend is anticipated to be largest include energy and utilities at 54%, communications and media at 40%, and financial services at 22%. Yet in the same survey, Bain also concludes that only 4% of companies, most of which have revenues in excess of $1 billion, have sufficiently robust data and analytics capabilities to handle big data requirements. Out of all of the companies, 56% claimed not to have the right systems to capture the data needed or were not collecting useful data, and 66% lacked the appropriate technology to store and access data. A similar report published recently mentions the glaring gap between aspiration and action; with only 28% of those polled confident they had made any headway with big data.[2] As business leaders look to prepare their organizations for the year ahead, many CEOs foresee their future success inextricably linked to their organization's capacity and ability to innovate. But, as part of the overall effort to

Ray Wilcox (USA), former CEO Chevron Phillips Chemical Company: "There has always been a lot of data, but what has changed is the capacity to identify, capture, store, organize, manipulate and analyze data in very large quantities. Good leaders have always used data-driven information in the course of making both short and long-term decisions. The risk today is letting the higher capacity confuse, overwhelm and/or paralyze the decision-making process. Using macro data will help develop and monitor long-term strategies and decisions; but there is no 'data magic or substitute' in the short term for being able to establish the precious few key performance indicators that really make a difference, and then executing those basic business processes that ensure the company and its people are actually doing what they say they will do."

[1] Bain - The value of Big data: How analytics differentiates winners   [2] PricewaterhouseCoopers - 17th Annual Global CEO survey

Big data. Big spending.

22% Financial Services

40% Communications and Media

54% Energy and Utilities
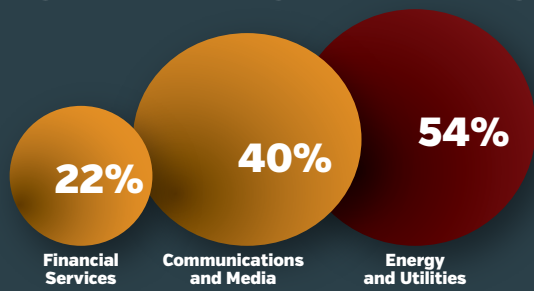
Estimated growth in spend on Big Data by 2020 in key industries.

better prepare their organization for the new demands of big data, a logical first step is to both optimize and maximize their use of existing company data.

But, rather than find themselves down a blind "big data alley," would it not be a better use of a CEO's time to ensure that his or her company optimizes its use of existing "little data?"

Wealth of data available

Ultimately no company is short of data, but in many instances current reporting does not support strategic decision making. Many existing systems capture too much of the wrong information and not at the right interval or level of frequency; severely limiting the company's ability to respond readily to changing circumstances. For example, companies overly reliant upon traditional financial performance data, compiled weekly or monthly, risk identifying issues and problems with such a delay that any response is limited in impact before it has even started.

In reality, most clients collect far more data than they actually need. Yet, the executives often think there is not enough data to manage operations and support effective decision-making. In truth, the priority is for senior management to define the essential key performance indicators (KPIs); focusing attention specifically on those that link directly to the primary drivers of performance and not being distracted by others that provide valuable, but not necessarily essential information. KPIs should be the leading indicators that have a predictive value for the business.

Likewise, the notion of assuming the latest software will provide a silver bullet is flawed. The added value generated by significant investments in software usually falls short of company and management expectations. All too often management platforms have not caught up with the technology platforms. Thus the transition to a fully responsive, high-performance organization is more complex and demands a cultural shift in conjunction with a redefinition of work processes, data requirements and business rules.

Jean Peyrelevade (France), former CEO Credit Lyonnais: "Any information system has to be designed with the following principles in mind, big data or not: 1) At each level of management, the information provided are only those necessary to make decisions. This starts of course at the CEO level. 2) All the information processes have to be organized from a client perspective throughout the entire company. 3) All the different information systems have to be consistent. If you are reasonably sure that those three conditions are met, then you can move to Big Data – not before – unless you love problems."

Frank Feder (Brazil), former Alcoa CEO Latin America: "There isn't an internal leadership meeting where the ranks aren't getting beaten up by their CEO about their falling behind in the 'big data race.' The fact that the organization is currently failing to act on the information available obviously goes unmentioned."

Brand Pretorius (Africa), former CEO of McCarthy Holdings: "Whether it is classified as big data or small data is of academic interest to me. The critical requirement is whether I, in my capacity as the CEO, get relevant data I can trust in time, in an easily digestible format. Data that will enable me to lead more effectively from a strategic perspective and manage more efficiently from an operational perspective. The acid test is whether shareholders are going to get a good return on their investment in data collection, management and analytics."

Uniform management operating system

No CEO can effectively manage a business without clear sight of the leading operational indicators in real time. Just as a skipper at the helm of a yacht may alter his course in the event of changing weather conditions, so too must a company be able to adapt and respond to new insight. It is imperative for any business leader to have an intimate understanding of operations to effectively run a business. When CEOs have a firm grasp of their daily operations, they can then provide management with one uniform system capable of providing timely data.

There is a critical need for quality data. In contrast to the widespread perception that investment in big data meta-analysis will invariably benefit the business, it should also be noted that the quality of the data needs to be sound, comprehensive and reliable. Data requirements must be defined precisely – area by area and process by process. Data collection must be at the point of execution with responsibilities clarified so there is no mistaking who across the operation is responsible for providing what data. As one of our former clients once explained, "You can't manage an oncoming train if you don't know where the train is or was along the way, or where it's going."

Evidenced-based decision making

Most companies today could significantly improve their business performance by focusing on a well-defined series of critical operational indicators, which they then use to direct and inform their day-to-day decision making. Indeed, research shows companies that consistently use data to guide their decision making, the notion of evidenced-based decision making tends to be more profitable than those that do not embrace this type of culture.[3]

Since it is evident that not every company is consistently using data to guide the decision making process, this same piece of research concluded that the following four practices were worthy of urgent CEO attention:

- Establishing one uniform, real-time source of performance data;

- Providing all decision makers at all levels with near real-time feedback;

- Making sure business rules are clearly articulated and regularly updated in response to facts;

- Providing high quality coaching to employees who make decisions on a regular basis.

Rolf Stomberg (Germany), current Chairman, Lanxess: "Effective performance management needs relevant KPIs and systems telling management where the company stands against them. As important as short-term performance management is though, the CEO's focus needs to be on the future. He must think hard about what he needs to know or find out so he can decide on options and the future paths for the company. This is a thinking job – and no amount of data mining provides these insights."

Andres Velasco (Chile), former Presidential Candidate and Finance Minister: "Information and data are tools for informed decision making. Many executives complain of 'drowning in data', too many reports and the like. This is particularly acute at points of decision-making and execution, where managers need streamlined, understandable and actionable information in order to ensure timely achievement of targets."

David Turnbull (Hong Kong), former CEO Swire Pacific and Cathay Pacific Airways: "During one major review of data collected and reports produced and distributed we found that much of the data was simply not used in any meaningful way, or was immediately filed. We concluded in many cases that whilst employees, creating these reports, were doing what they had been asked to do and were doing it well and diligently the fact remained that we did not need that task done at all."

---

[3] Harvard Business Review: You May Not Need Big Data Afterall – Jeanne W. Ross, Cynthia M. Beath and Anne Quaadgras

Conclusion

Opinion remains particularly polarized as to the merits of big data and perhaps rightly so. There is no denying there are real risks associated with data analysis and there is the potential for companies to reach misleading conclusions and spurious correlations. However, rather than be distracted while the big data debate persists our advice is simple: by focusing attention on better leveraging existing data sources to support front-line operations, companies have the potential to deliver significant leaps in business performance. Until these opportunities are fully exploited, why would you think of looking elsewhere?

Michael Miles (United Kingdom), former Chairman Schroders and former CEO Cathay Pacific Airways: "There is no short-cut to effective execution of a company's strategy or business plan. This includes state-of-the-art IT systems. Good IT systems add speed, and significant economies of scale, but are only as good as the underlying work processes, actionable KPIs, and good training and supervision to ensure compliance. Smart companies get the processes, KPIs and effective worker skills and execution in place and then automate."