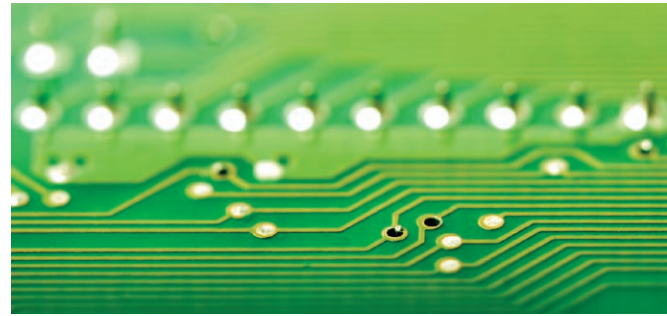


Information Automation

From automating “what I need to do” to automating “what I need to know”

Information technology has grown up in a process-dominated era where automation has focused on the question “What do I need to do?” and the “I” of IT has been something of an afterthought. We believe we have now decisively entered a new era, where automation can help answer a bigger question: “What do I need to know?” In this era, the ability to expose, associate, analyze, and present volumes of structured and unstructured content is one of the untapped sources of competitive advantage.

Accordingly, we are seeing organizations shift their information perspective from tactical, technical concerns to questions at the core of their business strategy. Instead of being driven by reports and data warehouses, they’re tackling strategic issues such as global supplier spend analysis, sales force optimization, and strategic research investment allocation. This trend is resulting in a move from the hindsight of a reporting mindset and the insight of performance management to the foresight of predictive analytics. Information is no longer considered a passive historian, it is recognized as a tool for understanding, reacting, and anticipating across departmental and business silos. For example, combining supply chain, sales, and finance information allows contribution margins to be integrated with production data, producing a more complete picture of product profitability – helping to meet a real business need with real business implications.



Whether the result of a larger transformation effort or a focused stand-alone initiative, the era of information automation has arrived, and organizations are recognizing that it is not optional. CIOs are accepting the mandate to provide both operational stability and insight to their business counterparts – which can only come from a concise view of what has happened in the past, the state of the business as it stands today, and intelligent predictions to feed future decisions. Welcome to the world of “What do I need to know?”

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History repeating itself?

The need for process automation and improved “what do I need to do” are not going away. In fact, there is an even more compelling investment case today than there was 15 years ago. But information has moved from a side benefit to a prime driver.

	What were the challenges?	What’s different in 2010?
ERP as <i>the</i> Information Foundation	<ul style="list-style-type: none"> Operational and transactional needs – not information – were the focus of most ERP implementations. Those reports that were included were based on the business processes being automated, not business analytics or key performance indicators (KPIs). ERP platforms had capabilities for historical reporting and decision support, but solutions had limited descriptive or predictive analytics functionality. Efforts to expand tools within the ERP suite often lagged behind the features and usability of dedicated advanced analytics solutions. Executives assumed information would be an output of ERP efforts. However, most implementations did not have an information vision (or budget). Many implementations did not include historical information as part of the data conversion. Visibility was limited to transactions occurring after ERP go-live. ERP solutions propagated the behavior of siloed data and didn’t address organic, home-grown systems and other hidden sources of data. 	<ul style="list-style-type: none"> Forward-thinking organizations realize that a large-scale, all-consuming enterprise software package is not a prerequisite for achieving information capabilities. They have launched best-of-breed efforts to realize business intelligence (BI) and analytics solutions in which ERP is viewed as one of the many enterprise data sources. Enterprise technology players have made significant investments and acquisitions in support of their information capabilities. Once integrated into their process execution platforms, there should be much improved ability to realize an enterprise information vision. Multi-year ERP implementations are fast-tracking the master data and business analytics components to accelerate time-to-value, allowing visibility to be a precursor to the roll-out schedule. Enterprises are adopting a business KPI approach beyond operations, incorporating information needs of the business that extend far beyond what the package vendor requires for process execution. Information automation is a different discipline than ERP, requiring a different set of skills, rigors, and methods – especially when not in parallel with an ERP implementation. Organizations realize that ERP represents only a subset of the data required to meet the business’ information needs.
Business Intelligence Reporting/Data Warehouse	<ul style="list-style-type: none"> The term “business intelligence” has been used to describe a variety of investments. In many organizations it has been relegated to siloed tool-based efforts to create single-use reports or departmental data stores. Creating an integrated view across structured and unstructured data has required costly investments in enterprise information management – where value was difficult to justify without higher-order information goals. 	<ul style="list-style-type: none"> Enterprise information management is viewed as a necessary, strategic capability. Data management, however, is only the base layer of the information value chain. BI supports quantitative performance management, which leads to descriptive and predictive analytics. The distinction between legacy transactional reporting efforts and advanced information integration/analytics can reframe priorities – changing the question from “how many open POs?” to “what is the cross-organizational customer profitability?” A larger and more appropriate set of stakeholders is engaged and invested in information value propositions.

Technology implications

Governance and changing mindsets about the potential of information are critical to realize advanced information objectives. In addition, there are foundational technology factors that need to be addressed.

Topic	Discussion
Governance	<p>Master data management As represented in the 2010 Technology Trend on Information Management Goes Enterprise, having the ability to correlate and manage business entities such as customers, products, and suppliers is necessary if information is to be relevant across organizational boundaries.</p> <p>Information quality management Tools and processes for maintaining clean and consistent data are a necessity if information is to be trusted – especially as the scale and scope of usage grows.</p>
Applications	<p>Analytics tools Recent consolidation of the market has led to advanced features being integrated into established platforms. Visualization and analytics engines have reached maturity. Usage and management of the tools are becoming the big challenge.</p> <p>Integration Realizing an end-to-end information automation vision requires access to data across and beyond the organization’s boundaries. Increasingly, information solution architectures are not built from movement of data into physical repositories (the data warehouse, operational data store model), but involve in-memory, column-based, virtual data consolidation and processing.</p> <p>Content management The ability to tap into cross-enterprise content (including customers, business partners, suppliers, and public resources) can be essential for historical and predictive analytics – especially given the proliferation of unstructured content (e.g., images, documents, audio, collaboration assets) in most organizations’ operations.</p>
Infrastructure	<p>While the majority of information automation’s impacts are at the operational and system level, the shift to virtual information views provides the potential to address overall data sprawl and storage proliferation – leading to a rationalization of hardware. Storage architectures will continue to be adaptive to information architectures, solid state storage will impact the Information Lifecycle Management (ILM) strategy and assumptions, and “storage clouds” will require reassessment of both security and privacy requirements and trade-offs.</p>

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Learn more

This is an excerpt from *Depth perception – A dozen technology trends shaping business and IT in 2010*. Visit www.deloitte.com/us/2010technologytrends to explore other top technology trends.

Where do you start?

Most organizations already have access to the raw tools and technologies to begin information automation. The challenge lies in putting them together into a cohesive foundation, while addressing strategic aspirations that involve asking and answering the question, “How do we find out what we need to know?” This requires taking a step back and setting a higher bar for what a mature information offering can do for the business.

Each industry has a different set of core questions that are fundamental – and potentially unanswered by current IT solutions. Here are some examples: “Is the strategic effort around closed-loop marketing paying off?” “How can I bring products to market earlier?” Or the deceptively complex: “What is the real profitability across my customers or products?” The answers to these questions represent significant potential value – and can be used to justify transformative investments in information automation governance, skills, and foundational technology.

The fact that most organizations believe that they already have a mature information management offering can present a potential roadblock. Only if an organization is prepared to consider and measure what is currently known – versus what they really need to know – can a call for change be enacted.

Bottom line

The significance of the move to automating “What do I need to know?” is embodied in the large investments now made by traditional software giants – for example, SAP’s acquisition of Business Objects, Oracle’s acquisition of Hyperion and GoldenGate, IBM’s acquisition of Cognos and SPSS. Owning the information story has become a critical success factor for these platforms that have traditionally focused on process automation.

The growing demand for information management will only accelerate with maturing developments in cloud computing and service orientation. Increasingly, an organization’s decision-making and operating visibility are dependent on business partners, assets, and data that are outside their organizational boundaries.

As efficiency gains based on process automation give way to differentiating visibility and foresight into the health of a business, information becomes the currency on which business strategy can be conducted. And the engine by which growth is driven. Only by acting on this shift in priorities can organizations expect to be ready for the next cycles of competition – and collaboration.