

The Critical Role of Information in Corporate Decision-Making: Technology as the Problem and the Solution



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In economic theory, perfect information is crucial for perfect competition. That means businesses and consumers have the full picture of what is happening in the market. Unfortunately, to approach this level of information – especially in a rapidly changing world – requires dedicated effort by business leaders.

Top businesses benefit from clearly delineated information flows that empower timely decision-making. With the acceleration of data creation, leaders are tasked with ensuring their information continues to be timely, accurate and actionable, especially as the amount of information now generated every two days is roughly the same as that created since the dawn of human civilization to 2003.

That means the challenge for many businesses is less about not having access to all the information they need but having to wade through too much information – a shift for many leaders that have succeeded in identifying and acting on the right data in the past. Innovations like artificial intelligence (AI) introduce new challenges, including questions of accuracy at a scale not seen before, that will make these problems worse in the short term.

While technology can sometimes hinder the flow of information in organizations, it equally holds the potential to be a powerful solution. With the right strategy and application of technology, business leaders have the opportunity to revolutionize how

information circulates within their organizations, enhancing decision-making processes and securing a competitive edge. This dual nature of technology underscores its role not just as a challenge to be managed, but as a critical asset that, when leveraged appropriately, can drive organizational success.

————— *The Challenges of Information Flow* —————

Information comes in many forms for organizations. In the post-COVID world, flexible work environments have meant the often tech-enabled places where employees receive information (e.g., virtual meetings, instant messaging apps) have exploded. These changes have become mainstays for many businesses. However, leaders face the challenge of navigating not only the internal ramifications of these burgeoning data sources but also understanding their broader implications on the external information landscape. That includes grappling with how external market data, social media trends and global news impact organizational strategy and operations. Balancing the internal flow of information with external insights has become a pivotal task for decision-makers striving to maintain an informed, cohesive and agile organization in a rapidly changing world.

For example, one report found employees waste an average of 5.3 hours per week waiting on information from colleagues or recreating information that exists elsewhere in the organization. These costs can add up to nearly \$47 million per year for large U.S. businesses. These problematic information flows can also be exploited by malicious actors, as in the now-famous case of the man who sent \$100 million

of fraudulent invoices to Google and Facebook and confused the companies into paying them.

These challenges can be broken down into a few categories: too much information, inaccurate information, misplaced information and unactionable information.

Information Overload

One of the most significant challenges leaders face today is the overwhelming deluge of data originating not just from within their organizations but also from the vast number of sources outside of them. In the past, data has been a powerful ally for business leaders to glean actionable insights. However, given all the information that can be collected today, more is not always better. For example, information overload has been shown to impact the quality of decision-making since it acts as a stressor that aggravates risk-taking. Further, a study from the Journal of Occupational Health Psychology found that demands from information communication technology were linked with higher stress, strain and burnout.

Too much information can also lead to alignment challenges throughout an organization. The sheer volume of data and communications, without clear prioritization, can obscure critical priorities and key messages, leading to confusion and misalignment. This situation is compounded by poor information flows, where there's ambiguity about the sources of information and what needs to be prioritized. In other words, the lede gets buried. The result is a scenario where important directives and insights fail to stand out, making it difficult for teams to focus on what truly matters for execution.

Inaccurate Information

The World Economic Forum cited misinformation and disinformation, especially that driven by AI, as the top immediate risk to the global economy. For business leaders and decision-makers, inaccurate information produced by AI has the potential to impact the stock market and companies' valuations in moments of induced panic, like when an AI-generated image of smoke billowing from a government building near the Pentagon triggered a short-lived selloff. The rapid creation and dissemination of false information through AI applications and social media platforms also present a dire reputational risk for brands. Misinformation can undermine years of brand building and consumer trust overnight, leading to significant long-term financial and reputational damage.

The challenge extends beyond isolated incidents. The systemic nature of AI-driven misinformation campaigns can affect entire industries, influencing public perception and consumer behavior on a massive scale. The agility and sophistication of AI in generating and spreading misinformation necessitate equally advanced countermeasures.

Misplaced Information

Information must be in the right place and accessible to the right people to be usable. Data silos mean that information is contained within business units, teams, levels or even individuals instead of being democratized across an organization. These silos can be rooted in formal structure, like those created with a stringent organizational chart, or informal and based in cultures of information flows. Internally, when

leaders don't have access to the correct information, it becomes harder to work and creates inefficiency that hits businesses on their bottom lines. For example, one Formula 1 team was using a colossal Microsoft Excel file to track nearly 20,000 parts – a system that was painful both to navigate and update.

Data silos can also lead employees to replicate work, business units to make duplicative purchases and complex processes to become even more convoluted – all challenges that also add costs to businesses' bottom lines. For example, hosting too much information, including through data silos, means businesses are paying for an excess of storage.

Unactionable Information

As sources of data proliferate, leaders may face a new challenge of how to sort through all that information. Leaders who have been successful in prioritizing and organizing information are often well-equipped to manage this inflow.

Information flow challenges may be the result of both volume and burden, or the work it takes to manage the information. In other words, it's not just the information, but also how it is handled. Research from Harvard Business Review found that 40% of leaders reported a high level of information burden. The same research found these leaders are 7.4 times more likely to feel high decision regret compared to peers with lower burden.

Technology often contributes to this unactionable information, since technology enables leaders to be able to track just about any metric they want related to their business. But just because it can be tracked



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does not mean it should be. Many leaders throughout the C-suite fall into the trap of following information that is not necessarily pertinent in the hopes of capturing emerging trends. While there are insights that might be gained, there is also a lot of noise that can be distracting and contribute to the challenge of too much information.

Having information in unactionable forms is both frustrating and debilitating for leaders and their businesses. From conflicting information coming from different sectors to duplicative or irrelevant information that takes effort to parse through to incorrect or outdated data, these information flow challenges create costs and delays that prevent effective decisions.

— ***Integrated Approach to Information Management*** —

In today's fast-paced digital economy, managing information effectively is crucial for making informed decisions and maintaining a competitive edge. The challenges of too much information, inaccurate information, misplaced data and unactionable insights can indeed be daunting. By employing a strategic blend of advanced analytics and AI, organizations can navigate these complexities, transforming them into opportunities for growth

and innovation. It's essential for corporations to not only gather but also analyze and act upon the data at their disposal. This strategy requires a balanced approach that combines technology with human insight, ensuring that data effectively serves the strategic goals of the organization.

Information Overload

Organizations inundated with data face significant challenges in distilling actionable insights from vast information pools. This scenario often leads to decision paralysis, where leaders struggle to make timely, informed decisions due to information overload. The strategic deployment of data management and analytics technologies becomes imperative in this context. For instance, big data analytics can filter through terabytes of data in real time, highlighting trends, anomalies and insights critical to decision-making processes. Machine learning algorithms further enhance this capability by learning from data patterns and improving their predictive accuracy over time.

Businesses need deep tech expertise to assist their leaders in navigating this challenge. By implementing smart data filters and AI-driven analytics tools tailored to specific business needs, leaders can focus on information that drives strategic value. For example, the imminent

launch of Consello's proprietary tech solution will revolutionize how businesses manage data overload. Serving as an AI-based advisor, our platform empowers leaders with anticipatory intelligence, allowing them to sift through the noise and focus on insights. This approach not only alleviates the burden of too much information but also ensures that decision-making is both agile and informed.

In one example, a member of our team recalled a project they previously worked on, involving a global manufacturing firm that was facing production inefficiencies caused by an overload of data. The solve was the recommendation and implementation of AI-driven solutions that analyzed production data, customer feedback and supply chain logistics. This approach enabled the firm to identify critical operational adjustments, forecast demand with greater accuracy and streamline its supply chain processes. As a result, the firm saw a notable improvement in operational efficiency and a significant reduction in costs.

Inaccurate Information

The proliferation of inaccurate information, especially in the digital age, poses a significant risk to organizational integrity and decision-making. Misinformation can lead to faulty decisions and substantial financial losses. Addressing this situation requires a multi-pronged approach that includes technological solutions, organizational culture shifts and rigorous data governance policies. Implementing AI and machine learning for real-time data verification and analysis significantly mitigates the risks associated with inaccurate information. These technologies can sift through vast datasets, identifying discrepancies,

anomalies and patterns that may indicate misinformation. For example, utilizing AI for real-time fact-checking can significantly reduce the overall risk affecting decision-making.

Combating inaccurate information involves a strategic mix of technology integration and organizational training. By fostering a culture of data literacy and critical thinking, alongside the deployment of advanced AI tools, firms can enhance their resilience against misinformation. An internal AI solution adds an extra layer of defense, offering predictive insights that help leaders anticipate and counteract the spread of inaccuracies before they impact decision-making.

For instance, in a previous role, I partnered with a financial institution faced with the dual challenges of fraudulent transactions and misinformation about market conditions. We deployed a comprehensive solution that harnessed advanced AI algorithms to scrutinize transaction patterns and identify potential fraud indicators. This system was adept at flagging irregularities, enabling rapid response to mitigate risks.

These solutions have positive impacts on the bottom line. As a result of this project, the firm saw a significant reduction in fraudulent activities, with a 40% decrease in fraud-related losses within the first six months post-implementation. Additionally, the enhanced detection capabilities led to a 25% improvement in operational efficiency, as the system streamlined the verification process, reducing the time and resources previously allocated to manual reviews. This strategic intervention not only safeguarded the institution's financial health but also reinforced its reputation for security and reliability among its customers.

Misplaced Information

Data silos and disjointed communication channels can cripple an organization's ability to act cohesively and responsively. The solution lies in fostering an integrated information ecosystem where data flows seamlessly across departments, enhancing accessibility and enabling informed decision-making. Implementing centralized data repositories, coupled with intuitive, user-friendly interfaces, can significantly improve information retrieval and sharing. Integrating these systems with AI-driven search and recommendation engines can further streamline data access, ensuring that employees find the information they need when they need it.

Businesses must focus on breaking down informational silos through strategic technological integration and organizational restructuring. By aligning technology deployment with business objectives, information systems can enhance, rather than hinder, operational efficiency. Cutting-edge AI solutions play a pivotal role in this context by serving as a smart advisor that guides users to the most relevant information based on their queries and specific needs. These solutions not only improve productivity but also foster a culture of knowledge-sharing and collaboration.

In another example of past experience, I collaborated with a healthcare provider facing significant challenges due to disparate patient records and inefficient information sharing across departments. The solution involved the recommendation and implementation of a unified patient data management system. This system was designed with advanced AI capabilities for smart search, enabling clinicians and healthcare

staff to swiftly access and correlate patient information across various records and departments.

This AI-enhanced system allowed for the aggregation of patient histories and real-time data in a single, accessible platform. By doing so, it provided healthcare professionals with comprehensive insights into patient health trends, potential risks and necessary interventions. The integration of this technology facilitated a smoother, more efficient workflow among departments, reduced the risk of errors and ensured a higher standard of patient care through informed decision-making.

Unactionable Information

The difficulties of unactionable information arise when organizations collect data without a clear strategy for its use, leading to wasted resources and missed opportunities. Transforming this data into actionable insights requires sophisticated analysis tools and a strategic framework that aligns data collection with business objectives. Implementing strategic decision-support systems that leverage AI and machine learning algorithms can help analyze complex datasets, identifying patterns and insights. Customizing these systems to deliver insights in context, aligning with specific business goals and user needs, ensures that the information is not only actionable but also relevant.

Utilizing technology as a pivotal driver for innovation and growth aligns with the need to make information actionable. Drawing upon our expertise in software delivery acceleration and technology integration, Consello's AI solution helps to uncover hidden connections and opportunities, ensuring decision-

makers never miss a chance to drive their business forward.

I recall another example of my previous work that involved assisting a retail chain that was struggling to effectively leverage its customer data. The solution consisted of implementing a comprehensive analytics platform that harmonized sales, inventory and customer feedback data into a unified system. This platform was further augmented with AI capabilities, enabling it to accurately forecast shopping trends, optimize inventory management and tailor marketing campaigns to individual customer preferences. As a result of this transformation, the retail chain experienced a marked improvement in operational efficiency and customer engagement: The platform's insights led to a 20% increase in sales and a 30% reduction in excess inventory costs within the first year of implementation.

— **Tech-Enabled Solutions** —
to Technology Challenges

The ever-evolving digital and tech landscape presents a complex array of challenges in information

management, from the deluge of data to the intricacies of ensuring information accuracy, relevance and accessibility. While many of these information management challenges exist because of technology, well-deployed technology can be part of the solution.

By harnessing the power of advanced analytics, AI and strategic technology integration, leaders can not only navigate but also transform these obstacles into opportunities for growth, innovation and competitive advantage.

The real-world examples cited in this essay are a testament to the tangible impacts of such interventions, showcasing the importance of transformative change through technology solutions. As organizations continue to grapple with information management complexities, partnering with seasoned leaders offers a pathway to leveraging technology as a catalyst for strategic decision-making and sustained business success.

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