

Decision intelligence is the missing piece of an organization's technology stack, giving users the insights they need to make the best decisions with the best possible outcomes. This technology will change how information is synthesized, insights are developed, and decisions are made at scale.

Decision Intelligence as the New Killer App

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Introduction

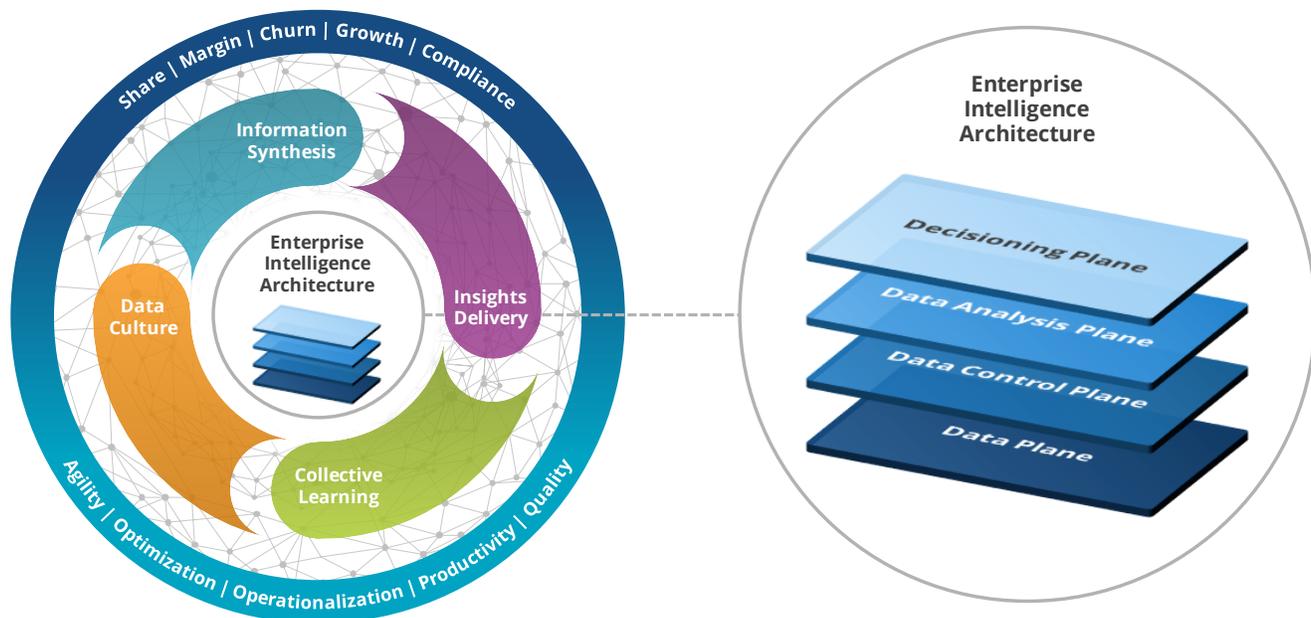
IDC's framework for enterprise intelligence shows that to drive strong business outcomes (whether it's increasing the top line, reducing risk, or improving productivity), organizations must be able to synthesize insights from different data sources, deliver those insights and recommendations at scale to decision-makers, capture learnings from actions and decisions, and foster a strong data-driven culture (see Figure 1). The challenge is around building a decision framework that has the ability to change quickly but with control.

AT A GLANCE

KEY TAKEAWAY

Decision intelligence enables organizations to apply a systematic approach with the required technology to support all stages of decision-making to improve decision consistency, velocity, governance and control, and quality.

FIGURE 1: *IDC's Enterprise Intelligence Framework*



Source: IDC, 2024

Data-driven decision-making has been conflated with data delivery via dashboards and reports to stakeholders. Existing business intelligence solutions, even artificial intelligence (AI)-enabled ones, have not addressed how that data is consumed and whether it is contextual, timely, or complete. In this rapidly evolving digital economy, the data that business users receive is often already obsolete and unusable, particularly in situational decision-making, which tends to be the most time sensitive. The exponential growth in combined greater data volume, variety, and velocity makes the situation progressively worse.

Rather than asking business decision-makers what data they need, the question should be what decisions they make and then determining the necessary data to make those decisions. Organizations can leverage decision intelligence software to design, engineer, and orchestrate decisions, especially time-sensitive and high-volume operational decisions. Decision intelligence helps organizations synthesize knowledge and use it to drive decisions and actions. It enables organizations to apply a systematic approach with the required technology to support all stages of decision-making to improve decision consistency, velocity, governance and control, and quality. Further, organizations struggle to implement decision intelligence at scale because of the complexity of their decision processes, their workflows, and the lack of trust in automation. To scale decision intelligence, organizations must have the required governance, testing, and controls to ensure that there is full auditability and transparency of how decisions are made and recommendations are generated, particularly by AI.

Decision Types

There are three different types of decisions in organizations:

- » **Strategic:** These are broad executive-level decisions that have significant implications across the enterprise, such as M&A-related decisions, product launches, and business expansion. These decisions, which decision intelligence typically supports, generally take weeks or months of data gathering, what-if analyses, simulation, and strategizing.
- » **Operational:** These are mid-level managerial decisions that include tasks such as planning, optimization, and resource allocation. They are often made on a repeated schedule that could vary between daily, monthly, and quarterly and are typically augmented by decision intelligence.
- » **Tactical:** These are staff-level decisions that occur repeatedly, even multiple times daily. Parts of these decision workflows can be automated with no human intervention, or decision intelligence can support humans.

Benefits

Decision intelligence promises to accelerate decision velocity and improve decision quality by combining speed and control in decision-making in response to changing external stimuli. Decision intelligence software can play a critical role in:

- » **Decision velocity:** Decision velocity is about attaining a productive balance between speed and control in decision-making. A decision is only effective if made at the right time with the right data. Decision intelligence software allows organizations to optimize their decision-making processes and improve their decision velocity.

- » **Decision standardization:** Implementing decision intelligence software allows organizations to review their decision-making processes as they exist in ongoing operations. Decisions are often ad hoc, with different people making the same decision differently based on their experiences and knowledge. By reviewing outcomes, determining which decision processes generated the best outcomes, standardizing those workflows, and eliminating inefficiencies, organizations can improve their overall business outcomes.
- » **Better documentation:** Every organization has a wealth of institutional knowledge residing in employees, which is lost when employees retire or move on to other jobs. Decision intelligence helps retain knowledge of how decisions are made and allows new employees to leverage the experience of their predecessors.
- » **Reduction of variability and inconsistency:** Decision intelligence helps reduce inconsistencies that come with nonstandard decision processes, allowing improved planning and forecasting accuracy.

Trends

Decision intelligence is a relatively new term, and the technology is embedded with AI/ML in its current form. As organizations explore this class of technologies, they must be aware of the following trends:

- » AI used in decision intelligence platforms must be explainable and auditable. With the increasing use of AI/ML in decision-making processes, the need for explainability and auditability becomes critical to ensure there is no bias in the underlying data that trains decision models. Emerging regulations, such as European Union policymakers' proposed AI Act, will increase the need for auditability and explainability in decision intelligence platforms.
- » Some decision flows enable fine-tuning to the extent that humans can be eliminated from the end-to-end process because machines can analyze all possible outcomes and there is no possibility of ambiguity. However, in most cases, humans still need to be in the loop and make the final decision based on machine-generated options or recommendations.
- » The adoption of low-code and, in some use cases, no-code interfaces in decision intelligence platforms is growing. Line-of-business personas who can leverage low-code/no-code products to build and orchestrate decisions typically use decision intelligence software.
- » Even with the growing adoption of AI/ML in decision-making, many organizations still use decision and rules tables as their decision logic. This will continue, especially in many regulated industries.
- » There is an emergence of a new class of users called decision engineers or decision scientists who work closely with business users but can model workflows and decision processes.

Considering InRule

Founded in 2002, InRule is a decision intelligence software provider focusing on industries such as insurance, financial services, and government. The company has over 500 customers across the enterprise and midmarkets. InRule's low-code platform is designed for decision support and augmentation in use cases that have a high volume of operational decisions and complexity.

Challenges

- » Data quality continues to be one of the biggest challenges to decision automation and augmentation.
- » Change management and process changes often meet with the most resistance.
- » The cost of adopting new technologies is an inhibitor, especially in a tough economic environment. Organizations may reduce the number of use cases for decision intelligence if they don't see commensurate value.
- » InRule is relatively small compared with some other competitors, especially in the financial services decision management technology space.

Conclusion

AI-enabled decision intelligence software can help organizations accelerate decision velocity, improve decision quality, and reduce variability and inconsistency while improving outcomes. As organizations embark on decision intelligence initiatives, they must consider the following:

- » Guide technologists involved in data engineering and management and, even more importantly, those involved in data analysis to pivot from asking what data their constituents need to what decisions they need to make.
- » Invest in data literacy initiatives to ensure all staff become more comfortable with embracing uncertainty, understanding statistics and probability, and developing a healthy skepticism of recommendations or other outputs that opaque systems generate.
- » Start considering and evaluating decision intelligence software as a necessary part of the organization's overall enterprise intelligence architecture.
- » Ensure the decision intelligence software provides the necessary transparency via decision monitoring and cataloging to generate trust among all users. Organizations should reconsider the goal of their data, analytics, and AI initiatives and investments — if they are not helping improve decision velocity, they should consider reallocating resources to projects that are.
- » Evaluate decision attributes to identify the best opportunities for decision automation and decision augmentation.
- » Identify what data is missing from their decision-making models and where to access it internally or through external procurement.

Start considering and evaluating decision intelligence software as a necessary part of the organization's overall enterprise intelligence architecture.

About the Analyst



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Chandana Gopal's core research coverage includes factors that influence enterprise intelligence such as technologies such as decision intelligence, business intelligence, and data intelligence and cultural elements such as data literacy and knowledge sharing.

MESSAGE FROM THE SPONSOR

Decision Intelligence: The Right Decision at the Right Time with the Right Insights

Decision intelligence is reshaping organizational decision-making by enabling enterprises to orchestrate, act and govern mission-critical systems to drive key business outcomes.

Decision intelligence empowers enterprises to optimize internal, operational decisions, as well as external decisions that influence the entire customer lifecycle. And while there is no shortage of use cases for which decision intelligence can add value, many enterprises are opting for an incremental approach by identifying several core use cases for which decision intelligence can add value and expanding into additional use cases over time.

Regardless of the approach, enterprises embarking on a decision intelligence journey should ensure they select a vendor who can not only fulfill today's requirements, but who can provide the scalability and configurability to meet the challenges of tomorrow.

Learn why more than 500 enterprises around the world trust InRule for decision intelligence by visiting www.inrule.com.



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