

Whitepaper

Guide to Modernizing Operational Reporting & Strategic Analytics in the SAP-Run Enterprise

Modern enterprise applications are generating, gathering, and storing more information than ever before. Your ERP system alone produces data at an astounding rate because it contains all the data you need to manage your core business activities such as financial accounting, manufacturing, supply chain management, and human resources.

Ironically, this abundance of data is more likely to obscure business insights than illuminate them. In fact, you are most likely to be “data rich” but “insight poor”. Why? Because accessing your data and actually making sense of it has become increasingly complex, laborious, and expensive.

Generating the actionable insights your business needs to respond to volatile market conditions and outpace your competition is typically a complex process managed by IT. Custom reports or dashboards are requested by business leaders, then delivered by teams of data analysts from the IT team or a partner. The process can often take weeks, if not months, and, in many cases, the report or dashboard is limited to a single use case and applicable only to a single business unit or user – often only the requestor.

As Business Intelligence (BI) tools, data warehousing solutions, and enterprise data and application landscapes have advanced, it’s worth taking the time to rethink that old model, starting with the dichotomy between operational reporting and strategic analytics. There is a clear difference between operational reporting and BI, but they can and should work together. What you need is real-time reporting and deep business insights, so let’s explore what that means and how you can achieve it.

“**Magnitude enables you to unify fragmented data, deliver actionable insights for critical business decisions, and transform enterprise data into competitive advantage.**”

Acting in Real-Time

Since the beginning of commerce, business owners have asked questions to gather information about the status of their day-to-day operations.

How much money do I have? How much product do I have? These are obviously critical, yet simplistic, examples, but represent the basis of operational reporting. Business units rely on operational reports to view short-term, often granular, information about conditions within their businesses - typically near real-time, hourly, daily, weekly or monthly data sets. These reports provide a glimpse into current conditions and allow leaders to make decisions about the near future in order to improve daily operational processes and meet short-term goals.

Today, however, the questions being asked are more complex, and the urgency more profound.

Supply Chain

- What are the supply and demand quantities for a given plan and item category?
- What are the consumption details for a given planned forecast?
- What are the exceptions for which the action was not taken for a plan?
- What is the difference between planned and actual demand?
- Do we have any bottlenecks in our supplychain (and why)?

Finance & GRC

- What are the budgeted and actual amounts for a specified period?
- How much money have we lost due to misallocated discounts?
- What is our current credit exposure and outstanding debt situation?
- Which active customers do not have a credit limit?

Procurement

- Which purchase orders are critical and which ones can we delay or cancel?
- Is invalid or incomplete master data causing errors and delay?
- Which invoices have been created without a purchase order?
- Who are our worst performing suppliers (internal and external)?

Sales and Distribution

- How much stock is being held by unneeded or blocked sales orders?
- What is the order backlog per customer and the predicted delivery date?
- Do I have enough warehouse capacity and resources?
- What is the volume and value of finished inventory that is no longer in demand or saleable?

Thinking for the Future

More recently, companies have placed an equal, if not greater, emphasis on examining historical data and trends in hopes that the implications of past performance will predict what is likely to happen in the future.

While strategic analytical pursuits of this sort are not new, they have grown exponentially in importance following much publicized successes at companies like Google and Intel. Rather than focusing on addressing or improving day-to-day processes, analysts focused on business intelligence will identify and measure against key performance indicators (KPIs) which – if designed accurately with the correct inputs and supported with accurate and upto-date data – can track efficiency, effectiveness, timeliness, quality, project performance, and the behavior of customers and suppliers, amongst many more patterns.

The outputs of KPIs will allow leaders within a specific business unit or across the company to answer questions that can shape a company's future.

Supply Chain

KPIs

Spend by Vendor, Item, Buyer, Ship-to and Bill-to; PO Lead Times; On-Time Shipments vs. Need-by Date; On-Time Shipments vs. Promise Date; Order Complete Percentage; Quantity Ordered, Billed, Received, Accepted and Rejected

Questions

- Who are our largest suppliers?
 - What is the cost of an item across our suppliers?
 - What are our vendor lead times?
 - What is our vendor quality performance – quantity and % of items rejected?
-

Procurement

KPIs

Compliance Rate, Supplier Defect Rate, PO and Invoice Accuracy, Supplier Lead Times, PO Cycle Time, Cost per Invoice and PO, Price Competitiveness, Vendor Availability, Procurement ROI

Questions

- What is the ratio of disputed invoices to total invoices?
 - What is the difference between the price paid and the price quoted?
 - What is the ratio of products delivered outside the pre-defined target?
 - What is the ratio of substandard products delivered by a supplier to the number of total units tested?
-

Finance & GRC

KPIs

Revenue, Gross Margin, Operating Expenses, Net Operating Income, Current and Long-Term Liabilities, Spend by Vendor, Discounts Taken, Receivables Balances and Aging, On-Time Payments, Revenue by Customer, Top Customers, Cost of Poor Quality, Customer Retention, Risks

Questions

- How do my actuals compare to my budget?
 - What customer invoices are past due and by how much?
 - What is the margin by customer by product?
 - What is the total loss of revenue due to either internal or external quality issues?
 - What is the average time between failures of assets without possibility of repair?
-

Sales & Distribution

KPIs

Inventory Turnover Ratio, On-Time Shipping Ratio, Profitability by Item, Bonus Ratio, Discount Rate, Sales Ratio, Assortment Depth, Units Per Purchase, Customer Churn Rate, Customer Value, Cross-Selling Revenue, Order Lead Time, Back Order Rate, Picking and Packing Cost

Questions

- What is the average amount of time it takes an order to reach a client once the order has been made?
 - What is the number of deliveries made on-time as a function of total deliveries?
 - What is the percentage of orders that can be filled based on the current stock?
 - What is the number of returns due to improper items being shipped as a percentage of total items shipped?
-

A New Way of Doing Things

As mentioned previously, creating business intelligence reports and dashboards has traditionally been the domain of IT, with business analysts delivering information to business leaders. Even taking advantage of reporting and analytics tools, implementing BI in the traditional manner requires a near-constant involvement from IT staff and a complex IT environment, including space for data warehousing.

The model is slow and inefficient and keeps the power of business data in the hands of a skilled few. More importantly, traditional BI systems do not provide business users with full decision support while documenting the process of creating a successful decision. One could argue that the category itself is somewhat misnamed – the data analyst is responsible for applying business intelligence to the data visualizations and reporting; the general-purpose BI platform has no inherent business logic.

As early as 2016, Gartner began to declare that traditional BI is dead. They went so far as to remove tools that rely on IT intervention from their annual Magic Quadrant for BI and Analytics in favor of a Market Guide for Enterprise-Reporting Based Platforms and, in a report published that year, declared “The causal link between available data, analytics models and business outcomes is often not understood or articulated.

Worse, the recognition that process, application and data need to be reimaged for digital decisions is completely lacking” (How CDOs Engage With Their Stakeholders to Deliver Real Business Value, Gartner, June 15, 2016). In short, modern BI needs to bridge the gap between operational reporting and strategic analytics to deliver business insights that allow you to respond faster and with greater confidence.

Modern BI shifts the focus away from IT and data scientist analysis and reporting and offers mainstream tools with self-service access and flexibility so that business users can produce reports and analysis on-the-fly and share data to make decisions and optimize business results. It supports the principles of DataOps and data democratization and offers a continuous intelligence stream consumable by business users. Key platform characteristics include integration, intelligence and ease of use.

Key Platform Characteristics Include Integration, Intelligence and Ease of Use.

INTEGRATED

Building on solid principles of digital transformation, your BI environment should strive to break down data silos rather than recreate them. To this end, it should support data from disparate sources, including legacy systems and hybrid ERP systems. In addition, it should be cloud-ready, and should support multi-cloud and hybrid implementation scenarios.

INTELLIGENT

Data accessible from an ERP is often the most important information for business intelligence, however, it doesn't always provide the full picture of a process or condition necessary for real insights without context or additional information. For this reason, the ideal BI platform should be built on real business context from a powerful data model and provide both cross-process and cross-application reporting.

EASY-TO-USE

For insights to be available to all business users within an organization, the BI and reporting environment must be simple to customize and run with little to no involvement from IT. And, to provide the business intelligence your BI tool requires, it must be flexible enough to work with the tool of your choice, both now and in the future.

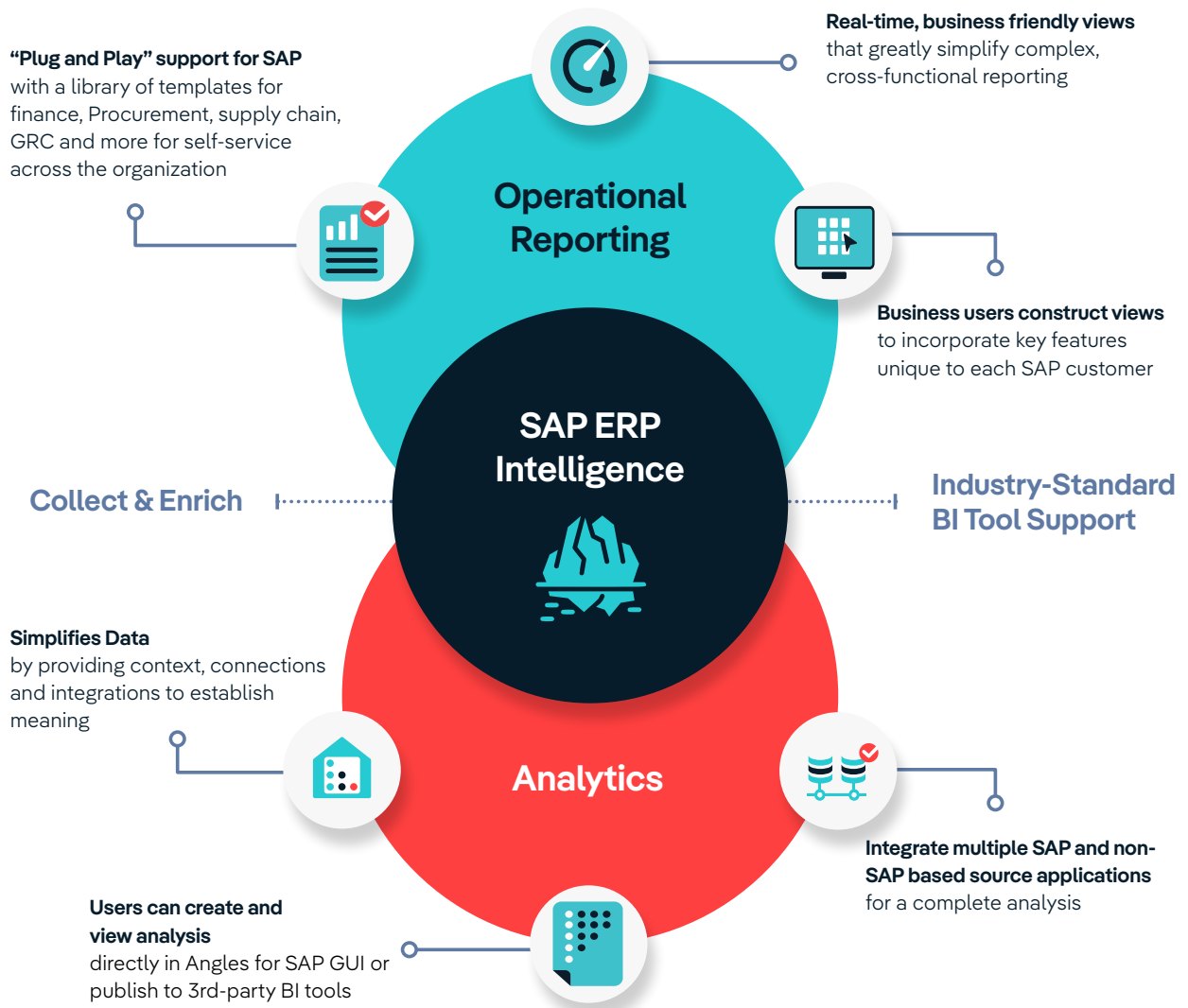
Turn Insights into Action

Magnitude Angles for SAP transforms and enhances your organization's SAP data, turning it into simple-to-use, actionable insight. It puts the power of prescriptive analytics into the hands of the people who need it most – the business users.

Angles for SAP provides self-service, cross-process, analytical power that enables your team to analyze, combine and interrogate information from across the value chain. It's able to do this because it uniquely understands the way YOUR SAP system is configured, extracting configuration settings as well as data.

This enables it to understand complex process relationships, which allows for the addition of new calculations, statuses and fields that highlight exceptions, bottlenecks, shortages, inconsistencies and delays, something no other product on the market can do. Then it simplifies the data – transforming complicated SAP speak into understandable business language that doesn't require you to be an SAP expert to decipher.

See More Clearly with Magnitude Angles for SAP



Unlike other reporting or data visualization tools, Angles for SAP doesn't just report on lag measures, but highlights issues as they occur – providing insights and lead metrics that other tools simply cannot provide.

This allows business users to know more and act faster, enabling them to take action based on real understanding. Understanding that enables your business to control service levels, production efficiency, supplier performance, inventory, data and risks – creating dramatic improvements in your financial performance



Supports the shift to cloud technologies

- **Save time and money** with establishing a data warehouse or data lake in the cloud with minimal data preparation
- **Make the best decision** for your organization on which cloud vendor you choose
- **Leverage our partnerships with Snowflake, HVR** to quickly deploy to the cloud



Accelerates self-service reporting and analytics

- **Covers both operational, analytical reporting needs** with centralized, extendable data models
- **Fast, real-time access to application data** avoids IT assistance, time-consuming data preparation, and ensures accurate reporting
- **Enabled end users can quickly modify, extend business views** to fit their needs without the typical delays



Use your BI tool of choice and deployment option

- **Avoid vendor lock-in** from proprietary toolsets, private clouds, questionable support, infrequent updates and limited knowledge bases
- **Democratize your user groups BI tool choice** to leverage the right tool for the task at hand
- **Generator technology accelerates** the report development curve for each supported toolset



Integrates hybrid ERP environments

- ERP, source application integration allows **visibility across the enterprise for critical analysis**
- **Hybrid business views support migrations to cloud applications** while allowing historical, consolidated reporting
- **Business views available for cloud applications** to easily allow for synchronized, operational reporting outside of the application interface and to be able to handle more complex use cases