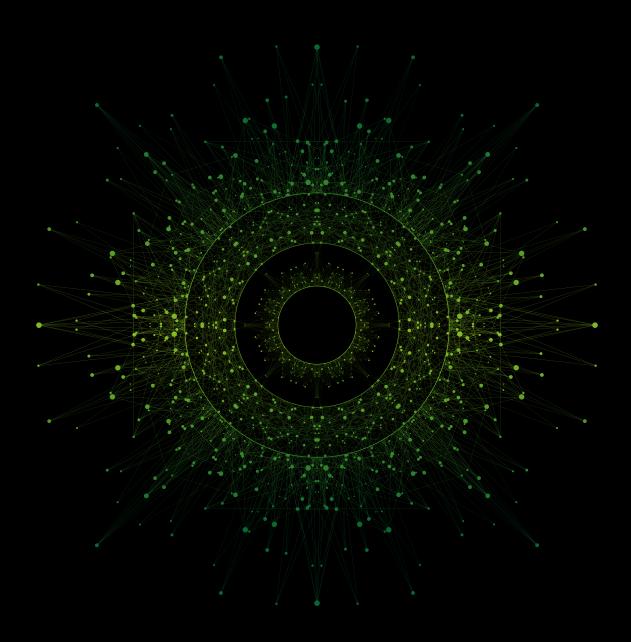
Deloitte.



Whitepaper Analytics First



A kinetic enterprise is intelligent and uses the full potential of analytics.

Stay ahead of the game with Analytics	04
Why Analytics first?	05
Analytics first – KPI Analytics	08
Analytics first – Process Intelligence	12
Analytics first – Intelligent Data & Analytics Platform	13
Analytics first – Insights faster than ever	15
Analytics first – Benefits	16
What you can expect from us	17
Contact	18

Stay ahead of the game with Analytics

Driven by market dynamics, many organizations are undertaking major business transformation programs with the primary goal of staying ahead in their rapidly changing business. These transformations will only be successful if the end-to-end business processes are changed. Processes need to become more agile, better, more intelligent and smarter.

With a clear and transparent picture of how your current end-to-end processes work, process mining and artificial intelligence will provide significant improvements to harmonize and streamline future processes. Thereby, industry-specific process models and process-specific KPIs are leveraged as the foundation of a Kinetic Enterprise¹, which represents the core of each digital transformation.

The key to a Kinetic Enterprise is harnessing the power of data through Analytics and deriving actionable insights out of them. Organizations use Analytics to drive decision-making and to understand their businesses, markets, and customers in the best possible way. Subsequently, market leaders leverage Analytics comprehensively and use its power to surpass their competitors.

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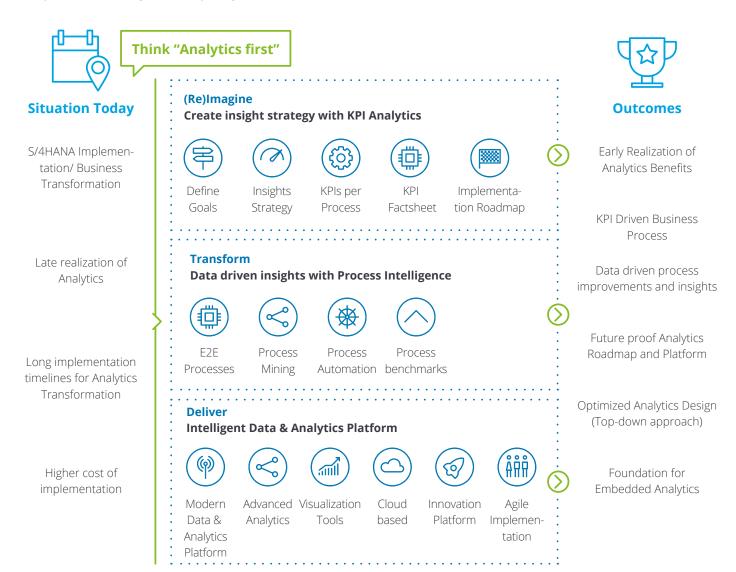
Why Analytics first?

Very often, organizations implement analytical solutions after the digital transformation of its ERP platform is completed. This results in long implementation timelines and late realization of benefits from

analytics. With Deloitte's Analytics first approach, organizations achieve process improvements, platform modernization and early deployment of analytics solutions

Maximize human potential through intelligent technologies and embrace the future of work with artificial intelligence.

Fig. 1 – Analytics first: Stay ahead of the game with Analytics- using the Power of Analytics and deriving actionably insights out of them



Very often, organizations implement analytical solutions after the digital transformation of its ERP platform is completed.

With Analytics first, organizations achieve process improvements, platform modernization and early deployment of analytics solutions.

Analytics first links KPIs to organization's processes and provides early insights into future steering of the enterprise. Create insight strategy with KPI Analytics to provide faster and richer insights for the management to understand the recent performance and make decisions to change its direction quickly and decisively.

Optimizing and streamlining the end-toend processes during a S/4 transformation with analytical capabilities requires the right use cases, right technology and right skills within the organization to create datadriven insights with Process Intelligence. Modern technology helps to focus on prescribing future courses of action rather than performing reactive analyses of historical data to explain past performance. The technical landscape has changed over the past few years, with some platforms growing in popularity while others have lost users. A modern Intelligent Data & Analytics Platform applies technologies like Machine learning and AI, process mining and RPA and use the advantages of the Cloud.

Early definition and alignment of future KPI-framework to steer the company with the support of our business consulting team.

Fig. 2 – Analytics first: Gain advantage with faster insights - the key to become a Kinetic Enterprise is to leverage the power of data and utilize the full potential of Analytics

KPI Analytics

- Process specific KPIs
- Business questions and analytical applications

Analytics first

nalytics first Enabled by



- Analytics use cases based on Cloud technology like S/4 Cloud, DWC and pre-defined data models
- Process analytics: Process mining (e.g. Celonis, SAP BPI) Process automation (e.g. iRPA), Artificial intelligence

Process Intelligence

- Industry specific process models
- Improve E2E processes to become more streamlined, harmonized faster and smarter

Alignment with S/4HANA standard and showcase-proven analytics

An important success factor is thereby the early alignment with business stakeholders by demonstrating existing and new analytical use cases based on the new analytical foundation. This drives the buy-in from business and supports the change in an organization's digital transformation.

- Early definition and alignment of future KPI-framework to steer the company with the support of our business consulting team
- Alignment with S/4 standard and showcase proven analytics with dashboards, power of S/4HANA embedded analytics, process mining and process automation
- Run senior stakeholder alignment sessions and demonstrate the "art of possible" in terms of analytics.
- Direct insights from first day of the S/4HANA go-live

For organizations going through an SAP S4/HANA journey, the Analytics first approach helps to setup a modern platform and to define relevant KPIs for each ofthe business processes. The Analytics first phases go along with those of typical SAP S/4HANA transformations. By doing so, the benefits from analytics can be realized much earlier than expected.

These are the significant value drivers that motivate the adoption of the Analytics first approach

- Include Analytics early on in the project to streamline and harmonize the end-toend processes and measure the business process KPIs and rolling up to the key value drivers
- Build a foundation for an Intelligent Data & Analytics Platform enabling advanced analytics capabilities (e.g. emphasis on having deeper understanding of the business and identifying the future trends with predictive analytics, machine learning and artificial intelligence, utilize new ways of process mining and business process intelligence to analyze business processes end-to-end processes automation via robotics, IoT use cases - streaming of data not only enterprise systems but also from machines, web feeds and other non-conventional data sources)

- Deloitte's proven assets and showcases allow a MVP within first 90 days
- Lay the groundwork for S/4HANA transformations
- Enable flexibility and faster data consumption to respond rapidly to new business requirements
- Give users modern analytical applications with self-service capabilities, that will boosts productivity
- Accelerate insights that generate efficiencies, cost savings, and growth

This results in lower risk and faster project-timeline and lower project costs overall with the "Analytics first" approach.

To accomplish these goals, the Analytics first follows a structured approach. In the below sections Deloitte's Analytics first approach is presented and it is described how it is different from the traditional approach.

Run senior stakeholder alignment sessions and demonstrate the "art of possible" in terms of analytics.

Direct insights from first day of the S/4HANA go-live.

Analytics first – KPI Analytics

At the beginning of a digital journey (e.g. SAP S/4HANA Digital Core) the innovations of Analytics first are available to demonstrate ready-to-deploy, analytical solutions for various, day-to-day business requirements. Deloitte has several assets, which were developed based on project experience in numerous, international projects.

The KPI Value Map

Key Performance Indicators (KPI) measure a company's success versus a set of targets, objectives, or industry peers. KPIs can be financial (including net profit revenues minus expenses, or the current ratio) or non-financial measuring foot traffic in a store, employee retention, repeat customers, and quality of customer experience, among others. The KPI Value MAP is Deloitte's industry specific catalogue of top – level and operational KPI's which are interlinked to each other.

The Value Map is the reference for companies to compare or enhance their own KPI structures and are the basis for the future steering model.

The KPI Fact Sheet

A collection of business questions per end-to-end processes, relevant KPIs and process indicators are part of the asset based Analytics first approach. The KPI Fact sheet represents the collection of relevant business questions and KPI definition and is used as the basis for the KPI catalogue.

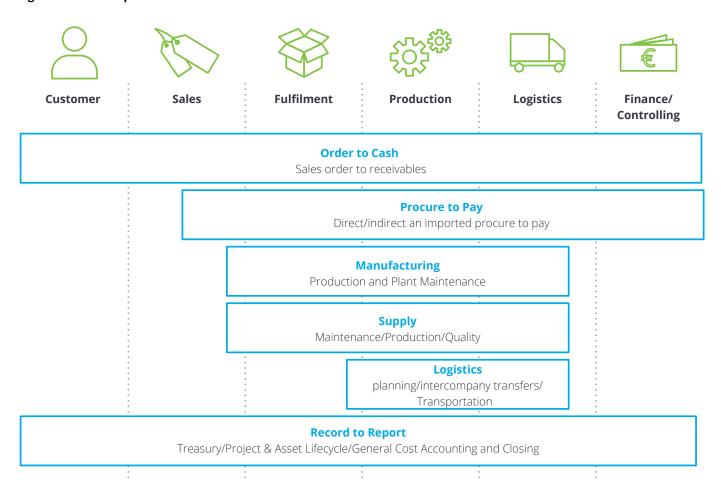
The KPI Catalogue

The KPI catalogue contains the functional definitions, technical documentation and comprehensive descriptions of KPIs and associated metrics. This consists of both technical information such as how a KPI is measured, and information on the significance of the KPI for your enterprise. The KPI catalog is thereby the central point of reference for all of the business-relevant key figures in the organization.

End-to-end processes

By integrating end-to-end processes, organizations can become more agile, allowing them to better meet high-level business objectives, streamline processes, and make rapid business decisions. By revealing duplicative efforts, end-to-end processes can improve both the speed and quality of business process execution, as well as decreasing overall operational costs. The ability to respond to change, get to market quickly, and reduce costs is the mantra of business leaders worldwide. By managing end-to-end processes and taking a global view of process ownership, companies can unlock savings, increase performance, lower costs, and gain more meaningful business insights. Companies today are looking for a cloud solution that provides integrated end-to-end business process coverage along with continuous innovation and self-service intelligence.

Fig. 3 - End-to-end processes overview



For the majority of the end-to-end processes, Deloitte has preconfigured libraries of analytical use cases linked to the business questions per process and utilizes the power of analytics to tackle the related business problem. Analytical applications and industry specific data models are part

of our asset based Analytics first approach. Streamlining the order to cash process, prediction of liquidity, analyzing buying behavior and optimizing supply chains are examples of proven possible efficiencies throughout an organization's end-to-end processes.

Fig. 4 – Pre-configured Analytical Solutions for selected end-to-end processes

Sales Overview Right First Time

Sales Overview and Right First Time

- Pre-Configured solutions in S/4HANA and SAC to optimize the Lead to Cash processes
- Map your business process KPIs against the KPI Library
- Customize the KPIs to the industry specifics
- Example 1: sales overview (L3) provides transparency of the sales orders in real time
- Example 2: right first time (L2) analyze the order to cash process and improve the data quality to close the sales orders faster

Procure to PayDirect/indirect

PO, Contracts



Supplier

Purchase Order Overview and Spend Management

- Pre-Configured solutions in S/4HANA and SAC to effectively manage the Purchase orders and spend KPIs
- Identify open invoices and analyze the root cause
- End-to-end visibility on the spend management (supplier scorecards, supplier rating)
- Example 1: Purchase Order Overview (L3) provides the transparency in real time
- Example 2: Supplier Scorecard (L2) analyze the spend management to trace spend accrorss the organization by combining data from multiple sources (ariba)

Manufacturing



Manufacturing





Effective manufacturing to meet supply demand

- Pre-Configured solutions in S/4HANA and SAC for manufacturing planning process in real time
- Plant maintenance and equipment effectiveness tracing in real time
- Example 1: Manufacturing Planner (L3) rela time application to plan the manufacturing according to the supply demand
- Example 2: OTIF OEE (L2) end-to-end visibility on the equipment effectiveness, supply/ customer view production loss and on time in full to meet the demand/supply

Operational Reporting

With real-time information directly from the SAP landscape the business can immediately review the embedded KPIs and understand relevant information that's associated with daily business processes. To demonstrate the ease of use applications for filtering, layout, graphs, navigation, and other information to enforce the UX consistency to improve end user adoption.

Enterprise Reporting

Enterprise Reporting combines all analytics for business intelligence (BI), planning, and predictive capabilities on one cloud native solution. Planning and analysis capabilities in SAP Analytics Cloud are directly embedded in SAP S/4HANA Cloud. This enables organizations to plan, execute, and analyze using one financial management system to align operational plans with financial results and break free from stand-alone spreadsheets or disconnected planning-only tools – Combining on-premise and cloud analytics into a hybrid solution that leverages the strengths of both platforms.

These analytical use cases allow business to access all business relevant KPIs in real time and provide the user a consistent and fast way to analyze operational and management information across several dimensions. Deloitte has already used this successfully many times before carrying out comprehensive transformations in the direction of a Kinetic Enterprise. In this context, the benefits of Analytics have been proven successfully and groundbreaking accents for upcoming organizational redesigns through data-driven insights have been created. Analytics first can also serve your organization well as an "enabler" of digitization and lift shared services or finance and controlling departments to a new level in their daily work at an early stage.

When designing and implementing standardized business processes (e.g. orderto-cash, procure-to-pay), it is essential to identify and define the underlying control and monitoring mechanisms right from the start. Deloitte contributes a comprehensive catalog of industry-specific control and steering parameters (KPIs) to every digital transformation. These can be directly integrated into ongoing SAP S/4HANA implementations via predefined models. Your advantage, direct use of proven control models that are based on and intelligently complement the SAP standard.

Planning and analysis capabilities in SAP Analytics Cloud are directly embedded in SAP S/4HANA Cloud.

Analytics first – Process Intelligence

The identified potentials for process improvements by Analytics first will help to enable the benfits of a Kinetic Enterprise and provide early insights into the future-steering of an organization. Only when end-to-end processes like Order-to-Cash, Procure-to-Pay processes become more agile, intelligent and smarter, the digital transformation will be a success. Many companies use tools like Aris and Signavio for documenting their processes in a consistent and transparent way. Process mining and artificial intelligence will help to improve significantly these processes fact-based to harmonize, streamline and accelerate future processes.

For that reason, Deloitte has a transparent step-by-step approach using data driven process analytics to identify process diversities and artifacts. As part of Analytics first, our Global Process Library (IP5) provide a collection of best practices of industry processes on detailed level. In addition process KPI benchmarks for a specific industry provide a transparent and fact based view of existing process artefacts and process deviations. A key component is the continuous optimization of business processes with Business Process Intelligence (BPI) and tools for Process documentation.

The identification of automation potentials (Robotic Process Automation - RPA) within SAP or outside SAP provide immediate and tangible benefits to business. On this account, an automated and integrated testing approach ensures the quality of the provided insights. Within Analytics first, Deloitte leverages Process Analytics also for continuous conformance checking during process reviews.

Based on this, data-driven analyses of the processes are execute to gain insights and drive actions to improve the business processes. The detailed process knowledge of the end-to-end processes, the different industry blueprints, the tools and assets which can be applied for process mining and artificial intelligence is in the DNA of Deloitte's consultants.

Analytics first – Intelligent Data & Analytics Platform

The Intelligent Data & Analytics Platform is a pre-packaged accelerator enabling Deloitte's Analytics first approach, providing clients quick wins through our best practices for Embedded and Strategic Analytics based on SAP Technology.

The Intelligent Data and Analytics Platform allows Organizations to generate Value from S/4HANA sooner and create tangible and data-driven insights right from the beginning of the tranformation journey.

Fig. 5 - Intelligent Data & Analytics Platform to accelerate Analytics first

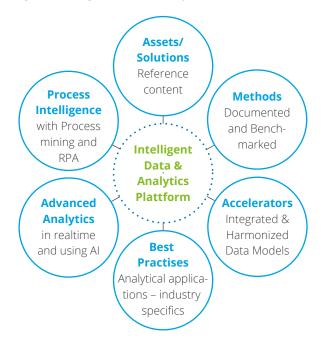
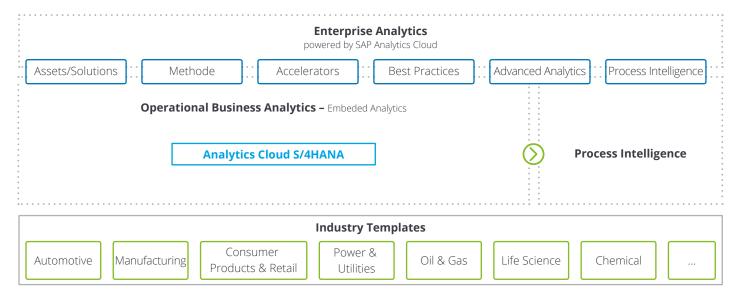
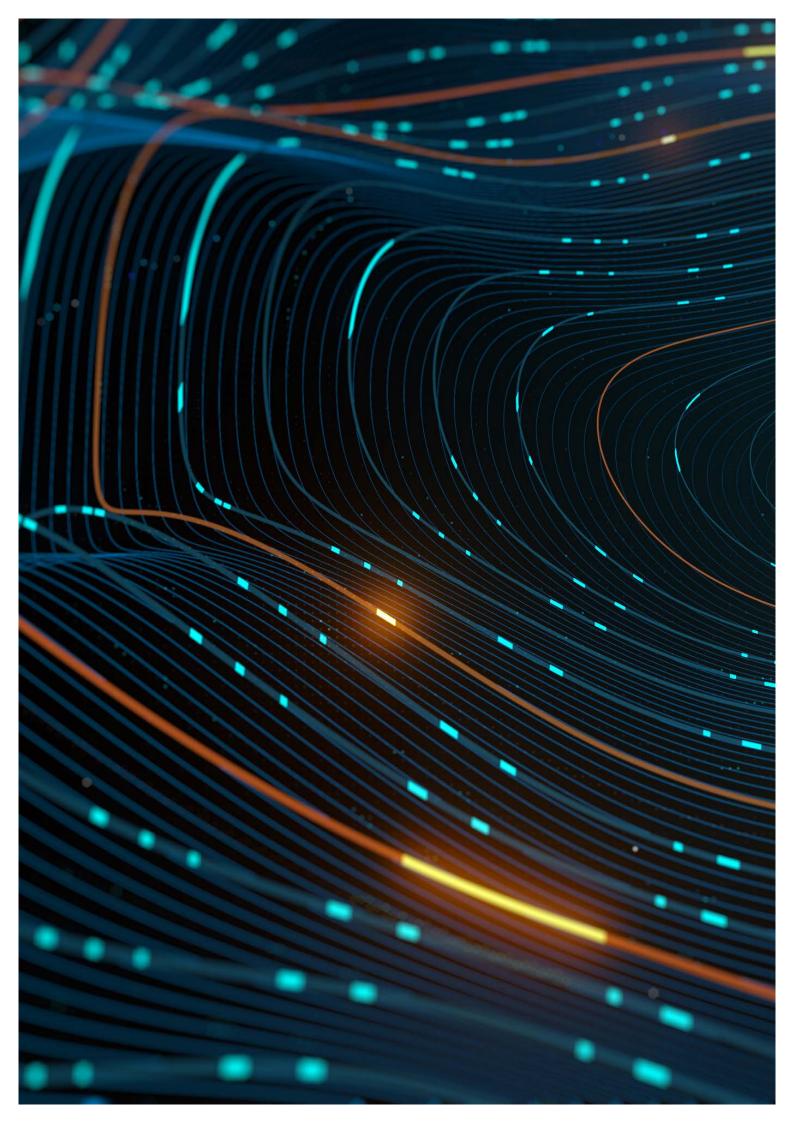


Fig. 6 -Intelligent Data & Analytics Platform: using the Power of Analytics and deriving actionably insights out of them





Analytics first – Insights faster than ever

Deloitte's Analytics first approach enables organizations to transform data into realtime insights without transforming the entire landscape from the very beginning.

Organizations going through an SAP S/4HANA implementation should consider implementing analytics and reporting right from the beginning of their digital transformation. Analytics first enables organizations to transform data into real-time insights right from the start of the transformation journey.

With our expertise in analytics, business transformation, and SAP technology enablement, Deloitte assists organizations along all phases of the Analytics first approach.

Taking the Analytics first approach allows your organization to lead with insights and accelerate the transformation of your business. Setting up new capabilities, however, requires a diverse mix of business and technology skills – from strategic to tactical.

Analytics first enables your organization to be successful and competitive in the market with Analytics capabilities and fast-tracks the business transformation. It covers all aspects starting from strategy to execution. Our concept contains three distinctive phases.

Prepare Phase

- Review client specific business models and industry specifics
- Review reference content to identify areas to focus on in initial client conversations
- Analyze industry-specific business processes based on Deloitte Industry Blueprint (IP5)
- Get quickly up to speed with system access and hands-on examples
- Enable Process Mining and define KPIs for specific processes

Explore Phase

- Demonstrate predefined analytics solutions to clients and focus on key topics
- Advice clients with Deloitte point-of-view on questions based on leading practices

Realize Phase:

- Leverage existing best-practice models and front-end developments as starting point for analytics developments
- Use industry reference process models
- Use harmonized naming conventions to develop conform to Deloitte's development standards

Run Phase

 Provide continuous process conformance checking and identify process deviations in real time

Business processes becomes the foundation for subsequent project deliverables including; configuration, custom development, security profiles, training, change management, communication and testing.

- Translate business goals, objectives and requirements into action
- Develop and communicate a detailed roadmap for how work will be done
- Provide the foundation for parallel and future project activities, like continuous improvement
- Identify in-scope processes
- Apply industry leading practices and identify improvement opportunities
- Identify and resolve gaps between requirements and the best practice processes

Analytics first – Benefits

Stakeholders of S/4HANA implementation projects appreciate the potential and benefits of Analytics first. Organizations can deliver value sooner and make the effect of transformation efforts more tangible. The key bottom-line benefits are –

- Reduce the S/4 transformation timeline and reduce the overall project risk
- Early Business Buy-in and C-Level alignment
- Empower the workforce with modern analytics tools and interactive user interface to increase their productivity and decision-making abilities.
- Accelerate insights that can generate efficiencies, cost savings and growth while mitigating potential risks. Significant fact based process improvements
- Providing in-build process analytics and reduce the number of reports in a Business Intelligence tool, reduction of the separate Business Intelligence Layer
- Support the current and future analytics use cases with a modern analytics foundation. Reduce user testing and training efforts by going simultaneously live of SAP S/4HANA and the "Intelligent Data & Analytics Platform"



What you can expect from us



If building an insight-driven advantage is a priority for your organization, we should talk. Deloitte brings extensive skills, knowledge, and industry-specific experience that can help you enable an Analytics first approach to accelerate business results.

- Establish and link measurable KPIs with new business processes.
- Accelerate insights that can generate efficiencies, cost savings and growth while mitigating potential risks.
- Support the current and future Analytics use cases with a modern Analytics foundation
- Empower the workforce with modern Analytics tools and interactive user interface to increase their productivity and decision-making abilities.
- Reduce user testing and training efforts by going simultaneously live of SAP S/4HANA and the "Intelligent Data & Analytics Platform"

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