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Quick Facts

SAP Solution Brief

SAP Analytics | SAP Predictive Analytics

# Predictive Analytics Reimagined for the Digital Enterprise





# Predicting and acting in a business moment through automation

Digital transformation is driving profound changes across multiple aspects of business and pushes every enterprise to **reimagine its customer value and operating model**. Digitally connected customers, employees, and partners are providing unparalleled opportunities for value creation and capture, but they also represent a source of risk for organizations that choose not to act.

Customer, employee, and partner expectations have created tremendous pressure on business leaders to innovate by creating new forms of value and engagement. Businesses are responding not only by generating new value propositions but also by transforming their operating models. And predictive analytics is a key enabler of this digital transformation.

To accomplish this, companies need to be able to redefine the customer experience, optimize the supply chain, and enable fast and data-driven

decisions. By using predictive analytics, your organization can predict outcomes, identify untapped opportunities, expose hidden risks, anticipate the future, and act in the moment.

Successful companies realize the potential of using predictive analytics across business processes, applications, and line-of-business solutions to sustain competitive advantage. Your organization can use SAP® Predictive Analytics software to transform your business.

**Predicting and acting in a business moment through automation**



# Accurate results in days, not weeks

SAP Predictive Analytics enables you to be more productive and get accurate results by automating the entire predictive modeling process (see [figure](#) on page 6). Its data preparation capabilities allow you to create thousands of derived variables faster – and without writing a single line of code – from a wide variety of data sources. In so doing, it provides reusable predictive data sets that can be used by employees at all levels.

SAP Predictive Analytics offers self-service using a guided workflow to create models in just minutes through automation. The guided workflow allows you to pick predictive functions relevant

to your use cases using a simple three-step approach. The predictive models provide a high degree of accuracy and actionable insights. And the guided workflow allows you to accelerate the productivity and fine-tuning of the models.

With native Apache Spark modeling, you can automate model building directly on Apache Hadoop using the Spark engine – without moving data – to get insights across the full predictive lifecycle. With ultrawide data-set support (up to 15,000 columns), the data-modeling tool can guide you in determining the key influencers for your analysis without reducing the number of variables.

## Accurate results in days, not weeks

Machine learning at scale

Predictive insights when and where you need them



# Machine learning at scale

The factory-based approach of SAP Predictive Analytics enables you to govern, manage, retrain, and score the probability of thousands of models in a browser-based, modern user interface and empowers you to ask more “what if” questions. Knowing models can vary across segments, you can create thousands of segmented models with a few mouse clicks without even going into the modeling environment.

With its browser-based, single-sign-on environment and user-friendly scheduling interface designed for business analysts, the software helps automate model management. That way you can try a variety of scenarios, incorporate the incremental improve-

ments in real time, schedule a refresh, manage models by exception, and deploy scores instantly.

With SAP Predictive Analytics, you can scale and maintain optimal performance for every model with a few clicks, and you can manage an end-to-end predictive lifecycle with your enterprise governance. Flexibility and loose coupling of predictive factory architecture make it easier to integrate with existing IT landscapes, such as rules systems, business intelligence, Big Data ecosystems, data sources, applications, and business processes. Moreover, they enable tight integration with SAP software and SAP Hybris® solutions.

Accurate results in days, not weeks

## **Machine learning at scale**

Predictive insights when and where you need them



# Predictive insights when and where you need them

SAP Predictive Analytics allows you to deliver predictive results at decision-making points in systems and applications. With the open interface, you can generate predictive probability scoring for a wide variety of target systems and directly embed the results wherever they will be most useful, such as databases, business processes, and line-of-business solutions. It allows you to perform in-memory scoring with the SAP HANA® platform and in-database scoring with third-party relational database management systems and data sources.

With SAP Predictive Analytics, you generate stored procedures for each predictive model and directly embed them into SAP HANA and SAP S/4HANA

software without moving the data. You can generate continuous computation language (CCL) code for the predictive model, which can be deployed to SAP HANA smart data streaming software for Internet of Things use cases.

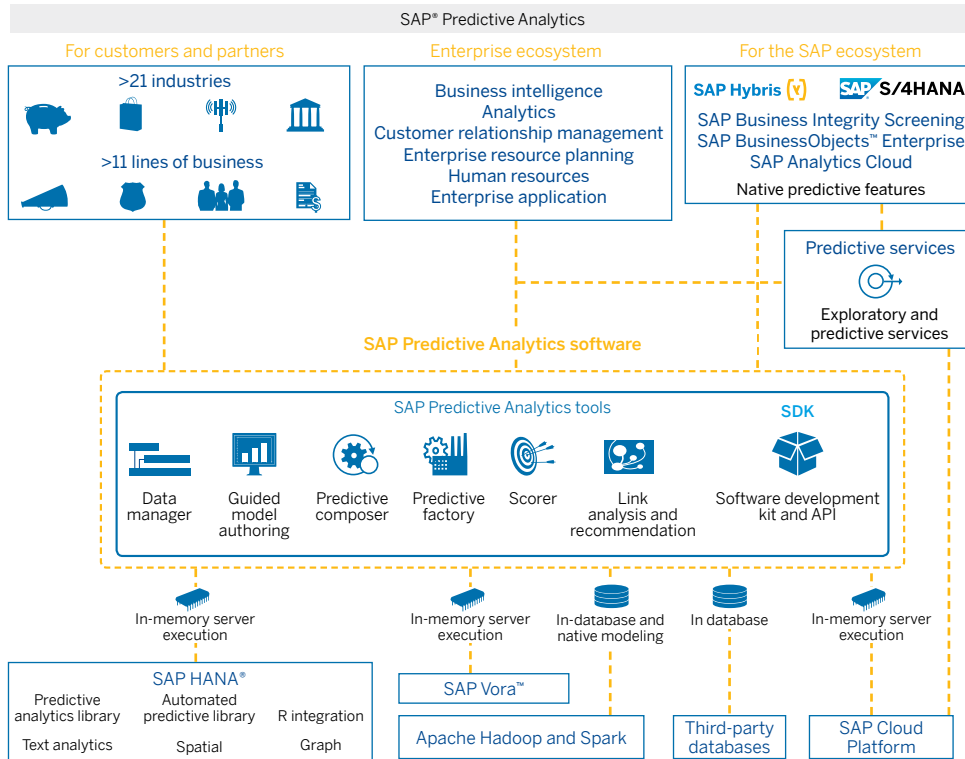
Organizations can extend predictive insights to the cloud by deploying models in SAP Cloud Platform. With the SAP Analytics Cloud solution, customers can leverage predictive insights from SAP Cloud Platform and identify key influencer variables with a mouse click.

Accurate results in days, not weeks

Machine learning at scale

**Predictive insights when and where you need them**

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Accurate results in days, not weeks

Machine learning at scale

**Predictive insights when and where you need them**

Figure: SAP Predictive Analytics – comprehensive, predictive software



# Achieving in-moment predictive insight to drive digital transformation

Organizations can no longer focus solely on delivering the best product or service. To succeed, they must uncover hidden customer, employee, vendor, and partner trends and insights; anticipate behavior and then take proactive actions; and empower the teams with intelligent next steps to exceed customer expectations.

SAP Predictive Analytics provides:

- Faster delivery of predictive insights by reducing errors through automated techniques with quality measures (KI and KR)
- Value across the enterprise with machine learning that scales to thousands of predictive models
- Expanded pool of people able to contribute to the predictive value chain using guided workflows and automated techniques

- Improved operating margins across the enterprise by utilizing thousands of models as your business units require
- Best-in-class native integration with SAP software, including SAP HANA, SAP S/4HANA®, SAP BusinessObjects™ business intelligence solutions, and the SAP Business Warehouse application
- Increased productivity by not having to use multiple point solutions to create predictive data sets and models and deploy them across the enterprise

SAP customers are already reaping the rewards of SAP Predictive Analytics. Why not join them?

**Achieving in-moment predictive insight to drive digital transformation**



### Summary

SAP® Predictive Analytics software brings predictive insight to business users, analysts, data scientists, and developers in your company. Unlock the potential of Big Data from virtually any source with the power of predictive automation. By automating the building and management of sophisticated predictive models to deliver insight in real time, this software makes it easier to make better, more profitable decisions across the enterprise.

### Objectives

- Get accurate results in days, not weeks
- Scale machine learning with the predictive factory
- Gain predictive insights where people interact

### Solution

- Automation of data preparation, model building, deployment, scoring, and retraining
- Support for R and predictive analysis and automated predictive libraries for the SAP HANA® platform
- Full connectivity to Big Data and third-party data sources
- Native Apache Hadoop and Spark modeling
- Link and network analysis
- Native integration with the SAP ecosystem
- Export and embedding capabilities for models such as Structured Query Language, Java, SAS, and more

### Benefits

- Gain faster, more accurate outcomes
- Scale and manage the end-to-end predictive lifecycle
- Embed and extend predictive results into applications

### Learn more

To find out more, call your SAP representative today or visit us online at [www.sap.com/predictive](http://www.sap.com/predictive).





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