




Sustainability

SAP Point of View | PUBLIC

SAP Business Technology Platform

Helping the World More Sustainably

A photograph of three people in a meeting. On the left, a man with a beard and brown hair, wearing a red sweater, is looking down at a white model of a wind turbine. In the center, a man with glasses on his head and a mustache, wearing a blue and red striped shirt, is resting his head on his hand and looking at the model. On the right, a woman with curly hair is partially visible, also looking at the model. They are all gathered around a wooden table. The background is a bright, out-of-focus window.

As investors and consumers seek out more socially and environmentally responsible companies and businesses learn to account for their impacts on people and the planet, all are seeking precise ways to express what sustainability looks like in data and dollars.

The purpose of this paper is to help you make an informed decision about SAP Business Technology Platform (SAP BTP) to complement your existing SAP solutions, with a focus on sustainability.

SAP BTP allows you to not only improve your business performance, but to also future-proof your investment in digital technologies and stay ahead of the competition. The target audience for this paper are executives and business professionals who spearhead and manage sustainability programs and initiatives. Some knowledge of sustainability concepts will be assumed.

SAP Business Technology Platform

Our purpose is to help the world run better and improve people's lives – with people and technology at the heart of it. We're seeing digital technologies transform entire industries right now. And we're seeing how digital technologies can help us address our biggest challenges.

Today, SAP solutions are managing the most mission-critical economic, social, and environmental data spanning businesses and organizations across the globe. This provides us a unique opportunity to help our customers bring sustainability into the core of their business, not run it as a separate initiative or approach. From our ERP and business applications to our sustainability-specific solutions, SAP has a comprehensive approach to helping our customers drive sustainable practices inside their organization and across the entire value chain. Together, we aspire to enable every customer to achieve zero emissions, zero waste, and zero inequality.

SAP Business Technology Platform (SAP BTP) brings together all the critical areas of technology that you need to accelerate innovation, in a single unified environment, optimized for SAP applications. It's a comprehensive solution that gives you everything you need to support new business processes and workflows and leverage your existing data and applications. This includes a unified application development environment, data and analytics, integration tools, and everything you need to take advantages of the latest machine learning and artificial intelligence opportunities.



Scott Russell

Executive Board Member,
Customer Success, SAP SE

“Businesses don’t just want to run. They want to **grow, expand, and innovate.** All of this is possible with SAP Business Technology Platform.”

We lead with
purpose ...



Table of Contents

6 Executive Summary

7 Sustainability as a Business
Imperative

10 SAP Business Technology Platform

16 Customer Value Proposition

20 Next Steps



... to help the world
run better and
improve people's
lives

Executive Summary

Making a profit is simply not enough. There are increasing expectations being placed on companies to support environmental protection, social equity and economic viability. Investors, consumers, employees, governments and other stakeholders are now demanding that previous words are put into action. When companies become more sustainable, they experience improvements to their brand image, customer loyalty, and employee engagement.

Poor-quality data and lack of integration are amongst the main barriers to effective implementation of sustainability initiatives. These barriers should be addressed as part of a wider digital transformation strategy. SAP BTP is the foundation for a sustainable enterprise. The platform enables organizations to integrate and enhance the applications across business networks, optimize sustainable growth and innovation, and enable visibility of disaggregated data for compliance, such as ESG (Environment, Social and Government) reporting, holistic steering, etc.

For any organization that truly wants to instill purpose into the business, replacing enterprise-wide solutions is not always an option. SAP BTP allows organizations to augment and integrate current solutions with platform-built cloud services to provide deeper sustainability capabilities.

OBJECTIVES

- Bring purpose to data to enhance insights across applications and data sources
- Connect purchases to evolving business needs
- Connect processes to improve visibility of business operations and sustainability impacts
- Integrate and enhance current digital capabilities and innovate new ones to maintain peak performance

With a robust and agile foundation, organizations can improve reliability and performance across their sustainability programs. They can sense and respond to changing conditions by using embedded Artificial Intelligence (AI) and real-time insights from intelligent products and services.

SOLUTIONS FOR POSITIVE IMPACT

- **Data and Analytics** provide a consolidated view of ESG data to enable organizations to achieve insights and make real-time decisions relating to sustainability
- **Application Development** allows organizations to build and enhance all of their application investments to meet their specific sustainability requirements
- **Integration** is essential to enhance sustainability performance across the value chain (hire to retire, design to operate, source to pay, etc.) by connecting all applications, data and processes seamlessly through SAP BTP

BENEFITS TO YOUR BUSINESS

- Brings everything together across different applications to create a holistic sustainability program
- Automates and streamlines sustainability processes with a flexible, scalable platform
- Boosts sustainability performance using fast, data-driven insight and action
- Delivers more agile, resilient, and sustainable business operations
- Addresses the specific needs of organizations delivering value for sustainability

Sustainability Defined

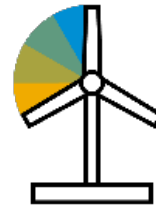
There are many definitions of sustainability which are in use. Most make reference to the long-term well-being of individuals and communities, and to the promotion of a better economy where there is little waste and pollution, fewer emissions and more decent work.

Sustainability is often represented as consisting of three pillars: environmental protection, social equity, and economic viability. These pillars are also informally referred to as planet, people and profit. It is important to note that these pillars are interlinked and should not be viewed in isolation:

ENVIRONMENTAL SUSTAINABILITY

Energy and Climate Change

This includes the responsible management of an organization's operations to minimize climate change, sustainably consume natural resources, and support the development of eco-friendly products and services. Recycling and waste reduction, including the “circular economy” and elimination of single-use plastics, are becoming increasingly important to reduce the amount of pollutants in our oceans and landfills.



SOCIAL SUSTAINABILITY

Human and Workplace Rights

The commitment to respect human and work place rights across all aspects of the supply chain includes the areas of diversity and inclusion, forced labor, wage discrimination, and workplace practices, including health and safety. When organizations support local communities in which they operate, social advancement is possible for all members of the community.



ECONOMIC SUSTAINABILITY

Decent Work and Fair Employment

This represents the commitment to create and maintain “decent” jobs, fair employment (living wage, employment contracts), fair treatment of suppliers (formal and fair contracts, prompt payment), and business ethics that are free from fraud and corruption. Support for minority-owned suppliers and smaller suppliers creates a sustainable and diverse supply chain.



Sustainability as a Business Imperative

Over the years, sustainability has seen a large increase in focus compared with other strategic priorities. It is now discussed regularly at board level. But historically, this was not the case. For example, manufacturing organizations would only employ “best available technology not entailing excessive costs” and globalization led to “low cost country sourcing”. But in 2013, the Rana Plaza factory collapse in Bangladesh made companies aware their brand reputation can be impacted by events outside of the four walls of their organization.

Consumers are more aware of sustainability issues such as global warming, unfair labour practices, plastic waste in our oceans, etc. Today’s customers are both well-informed and well-connected, broadcasting their experiences with products, services, and brand interactions across social networks and other platforms. Also, governments around the world are responding to the need to introduce and enforce legislation relating to sustainability e.g waste management legislation, environmental protection, modern slavery, etc.

Investors have been voicing concerns about sustainability for several decades. Recently, they have translated their words into action as part of the “Investor Revolution” where sustainable investments now dominate the stock market. Making a profit is not good enough; companies are now expected to do good, too. Here, the ESG rating is used by investors and it relates to a set of standards for companies’ behaviour used by socially conscious investors to screen potential investments. Some investors may actively seek out companies making progress on these critical issues; some may simply choose to avoid companies with poor ESG scores.



What Sustainability Brings to a Business

As previously mentioned, an organization is now expected to show how it makes a positive contribution to society. Making a profit is simply not enough. Investors are looking for more, and there are increasing expectations of consumers, employees, Governments and other stakeholders. There is more value placed on brand image, customer loyalty, and employee engagement. When a business becomes more sustainable, more revenues can be earned and the bottom line can be boosted.

KEY BENEFITS OF SUSTAINABILITY

Enhances brand value and reputation. Organizations with strong sustainability performance outperform the market.



Reduces the costs of capital through a lower risk profile and provides access to cheaper equity financing.



Leads to cost efficiencies. Sustainable business practices align to more efficient operations which conserve resources, enhance employee productivity and reduce costs.



Promotes innovation and attracts new customers. According to some studies, corporate responsibility practices can help organizations boost overall sales revenue.



Reduces average turnover over time and **reduces annual quit rates**



Responds to rising consumer expectations, with most consumers believing they have a responsibility to purchase products that are good for the environment and society.



Stays ahead of emerging sustainability risk and disclosure regulations. Most investors view nonfinancial disclosures as essential or important to investment decisions.



SAP Business Technology Platform

Many organizations are already making positive contributions to the environment and society by creating jobs in areas where quality opportunities are scarce, making significant investments in projects, such as improving water quality in at-risk communities, and championing zero waste programs and renewable energy. But, there is more work to be done to create a more equitable world and a thriving planet. Today, the expectations of the consumers, governments, local, and international non-government organizations (NGOs) are much higher.

There are now more challenging expectations to deliver against, and companies need to go beyond simply managing their business operating models. Traditional approaches and IT systems are being challenged. Delivering against the new strategic priorities requires new and more advanced capabilities. With SAP BTP, these new capabilities can be built on top of existing investments to meet or exceed the new expectations organizations do not necessarily need to “rip and replace” their current enterprise application suites, but rather, augment-and-integrate them with platform-built cloud services.

SAP BTP is an open, integrated and business-centric platform. It brings together application development, data management, analytics and planning, integration, process automation, and AI capabilities into one unified environment, optimized for SAP landscapes and applications. The platform empowers users to integrate, create value from data, and develop applications in SAP landscapes. SAP has brought together its existing technology products (e.g. SAP Integration Suite and SAP Analytics Cloud) in concert with new capabilities (e.g. low-code/no code, marketplace) in one place for consumption – all built on a stable multi-cloud, multi-runtime foundation.

SAP BTP helps to build new capabilities which:

- 1) Enhance the capabilities of SAP core solutions to improve sustainability outcomes through data-to-value outcomes, integration enablement, and extensible and personalized application solutions
- 2) Enable customers to integrate and extend their applications across business networks, optimize sustainable growth and innovation
- 3) Provide visibility of disaggregated data for compliance, such as ESG reporting, holistic steering, and supply chain transparency
- 4) Drive a progression toward a unified system of data, applications, and business processes that overcomes typical barriers to a holistic approach to sustainability

With access to platforms, such as SAP BTP, it has never been simpler and faster to impact long-term business success in sustainability.

SAP BTP Solution Areas

There are more challenging expectations being placed on organizations to do more with respect to sustainability. It is recognized that organizations need to respond to such challenges in their own and unique way, and with increased capabilities. Organizations trying to acquire more advanced capabilities will need technologies which are supported by open platform capabilities. Poor quality data and lack of integration are amongst the main barriers to the effective implementation of sustainability initiatives. These can only be addressed effectively as part of a wider digital transformation strategy.

SAP BTP allows customers and partners to integrate, develop applications, and give purpose to data at scale across sustainability processes. Sustainability subject matter experts will empowered to become “citizen data scientists” to utilize low-code/no-code functionality to build and customize applications for their specific needs. SAP BTP brings together application development, data and analytics, integration, and AI capabilities into one unified environment optimized for SAP applications. Our focus for sustainability will be on data and analytics, application development, and integration as shown below:

SAP BTP provides outcomes across three main solution areas:



Adopting SAP BTP is a straightforward process because the platform is included in all cloud solutions from SAP through free trials and a flexible consumption model.

Grow Business Value with Real-Time Data and Analytics

Data and analytics solutions provide robust, flexible analytics which enable visibility across regions and business units. Smarter decisions can be made by tracking key metrics and using a complete view of ESG data and processes together with Artificial Intelligence (AI) driven insights. Also, it allows access to reliable data, and in real-time.

Analytics has an important role to play in sustainability. For example, Energy Management Analytics is an analysis and predictive tool based on IoT data for energy management to reduce increasing network emissions and energy consumption, and to enable customers to reduce their emissions. The energy analytics data model correlates and visualizes key data sources including usage, consumption, technology, time of day, etc., demonstrating significant potential energy consumption savings per year.

With data and analytics, you can::

- Deliver 360-degree insights across business units to make better, more informed decisions
- Enable visibility of sustainability activities to easily track the key metrics that matter
- Make smarter decisions with AI-driven insights and predictions to ensure optimal sustainability performance



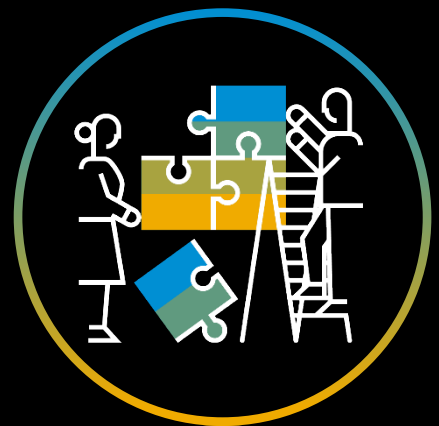
Accelerate Innovation and Personalization with **Application Development**

Application development allows companies to build and enhance all their investments to meet sustainability needs and provide continual value. Used in this way, the platform enables customers to build solutions or extend the capabilities of existing solutions, to help achieve their sustainability-related goals.

More than 30% of the world's food produced is lost or wasted before it's consumed. With a global population expected to grow to 9.8 billion by 2050, improving the food supply chain efficiency will greatly contribute to the reduction of food scarcity and to the attainment of sustainability goals. Application development drives the use of a machine learning forecasting algorithm to predict the daily demand for products of a specific category. This reduces the waste of products.

SAP application development enables you to:

- Tailor processes and adapt solutions to your sustainability goals
- Automate and create new business processes to enhance the user experience
- Augment existing features and functions
- Provide a centralized persona-based entry point for the user to work efficiently on key sustainability activities



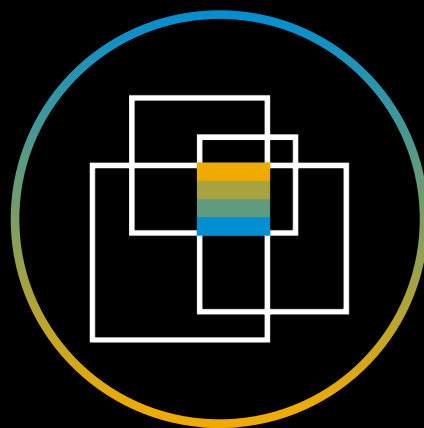
Strengthen Insights and Outcomes with Broad Integration

SAP BTP enables customers to integrate applications across business networks, optimize sustainable growth and innovation. Data and processes can be linked to external sources and third-party systems to enhance the capabilities of business networks

For example, an intergovernmental organization is using SAP BTP to integrate with its NGO partners and to become a global operation. Complicated data sets are brought together from many organizations which run on different ERP systems. This allows entities to communicate more effectively and provide greater transparency for accountability to donors.

Through SAP's integration capabilities, you can:



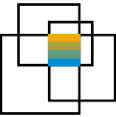
- Reroute existing business processes to adapt to your sustainability needs
- Seamlessly link critical data and processes to external sources and third-party systems
- Increase visibility of sustainability activities



Value Drivers for Your Business

Traditional management approaches and IT systems are being challenged. Organizations now need to deeper digital technologies beyond generic core solutions. The good news is that customers do not necessarily need to “rip and replace” their current enterprise application suites, but rather, augment-and-integrate them with SAP BTP. In this way, SAP BTP supports the sustainability transformation programs of its customers by enhancing SAP core solutions.

SAP BTP enables organizations to make better decisions relating to their sustainability activities based on data from multiple sources, integrate systems across business units, automate workflows, and adapt business processes as the sustainability program matures. The value proposition for SAP BTP is illustrated below for each BTP solution area, together with examples of the value drivers:

Process Area	SAP's Value Proposition	Value Drivers
Data and Analytics 	<ul style="list-style-type: none"> ▪ Answer sustainability questions quickly with easy, self-service data exploration for spend and transaction management ▪ Quickly track key metrics by combining SAP Analytics Cloud with the SAP Data Warehouse Cloud solution ▪ Enhance spend and transaction data and prepare it for analysis 	<ul style="list-style-type: none"> ▪ Improve integration and harmonization of data ▪ Provide real-time insights for decision making ▪ Provide visibility of disaggregated data for compliance, such as ESG reporting, holistic steering
Application Development 	<ul style="list-style-type: none"> ▪ Develop add-ons with the same tools used for SAP applications ▪ Automate and create new business processes to enhance the user experience ▪ Create an experience that offers users an array of options 	<ul style="list-style-type: none"> ▪ Develop unique applications for current and future sustainability initiatives ▪ Empower business users to be innovative in meeting sustainability challenges ▪ Enable sustainability performance through tailored solutions
Integration 	<ul style="list-style-type: none"> ▪ Link critical data and processes to external sources and third-party systems ▪ Integrate across SAP solutions to efficiently manage sustainability information ▪ Enable deep out-of-the box integration, easy extension, and consistent APIs across value chain processes 	<ul style="list-style-type: none"> ▪ Improve user experience and productivity in managing sustainability programs ▪ Enable tighter and improved collaboration to overcome typical barriers to a holistic approach to sustainability ▪ Optimize and simplify processes with intelligent workflows

How SAP BTP Unlocks Sustainability for Customers (1/2)

Although the sustainability transformation journey is specific to the customer, the following examples serve to illustrate how BTP can meet both the strategic and tactical needs of the organization. These examples are based on real situations where SAP customers are realizing sustainability-related benefits from SAP BTP:

Sustainability Use Case Example	Challenges and Opportunities	Solution Scope	Value-Driven Results
Delivering innovation with social responsibility Working with diverse suppliers allows organizations to use their everyday procurement spend in a way which drives social impact.	<ul style="list-style-type: none"> ▪ Spend relatively easy to manage but difficult from a diversity perspective ▪ Supplier diversity spend not accurate ▪ Data not ready and needed be cleansed for supplier diversity classification ▪ Critical success factors were data cleansing and enrichment 	<ul style="list-style-type: none"> ▪ SAP Ariba Sourcing suite ▪ SAP Analytics Cloud ▪ SAP Data Warehouse Cloud ▪ SAP ECC ▪ SAP Qualtrics XM 	<ul style="list-style-type: none"> ▪ Integration and harmonization of data ▪ Accurate allocation of spend across various diversity groups (including indigenous suppliers, minority-owned businesses, etc.) ▪ Customer able to look at trends/performance from data using Machine Learning
Enabling innovation through green manufacturing and a high level of quality with SAP solutions Stabilize and optimize a highly complex and waste-intensive production process while meeting sustainability targets for water, energy and waste reduction.	<ul style="list-style-type: none"> ▪ No connection between the factory's sensors and its core SAP software operations ▪ Lack of real-time insights ▪ Little standardization across the production operations ▪ Opportunity for real-time monitoring of factory sensor data with customized performance dashboards from the SAP Analytics Cloud solution 	<ul style="list-style-type: none"> ▪ SAP BTP ▪ SAP HANA ▪ SAP Analytics Cloud ▪ SAP Manufacturing Execution ▪ SAP Manufacturing Integration and Intelligence (SAP MII) ▪ SAP Extended Warehouse Management (SAP EWM) applications 	<ul style="list-style-type: none"> ▪ 80% energy and water reductions through smart, automated consumption fine-tuning ▪ €750,000 production cost savings in the first year ▪ Reduction of scrap waste almost down to zero by using best-practice machine learning algorithms ▪ 24x7 production cycle leveraging autonomous, laser-guided vehicles (LGVs) controlled by SAP EWM
Emergency and Disaster Management Governments and the humanitarian sector need solutions to help predict disasters and their impact, and share real-time environmental and operational insights	<ul style="list-style-type: none"> ▪ Insights/updates are often not shared; lack of collaboration results in slow or inadequate responses or in waste ▪ Humanitarian supply chain is highly dynamic, requiring ad-hoc insights, decisions, partnerships and resources ▪ Need for flex and surge capabilities, quickly mobilizing sufficient resources with the right skills, from different sources, employed and volunteering, impacts the ability to quickly and adequately respond 	<ul style="list-style-type: none"> ▪ SAP BTP ▪ SAP Qualtrics XM ▪ SAP Ariba Discovery ▪ SAP Analytics Cloud ▪ SAP Investigative Case ▪ Management 	<ul style="list-style-type: none"> ▪ Significant time reduction in data handling ▪ Consolidated and cleaned data can be presented instantly in maps for dynamic analyses based on stakeholder needs ▪ Near real-time insights across a large number of humanitarian organizations ▪ Improves matching of mission activities with humanitarian needs

How SAP BTP Unlocks Sustainability for Customers (2/2)

Our collaboration with partners is also unlocking positive impacts as shown below.

Sustainability Use Case Example	Challenges and Opportunities	Solution Scope	Value-Driven Results
Delivering innovation with social responsibility Create a solution able to maintain the job security of handicapped employees and address high call volumes with an improved customer experience.	<ul style="list-style-type: none"> Companies often face challenges regarding high customer call volumes Need to improve efficiency and customer experience in providing customers with information, such as order status Limited ability to digitize processes to secure the jobs of handicapped employees Challenge was to optimize the existing process which is characterized by personal telephone contact 	<ul style="list-style-type: none"> Chat box developed SAP Integration and Application Development SAP Data Intelligence SAP intelligent technologies 	<ul style="list-style-type: none"> Job security for handicapped warehouse workers guaranteed Employees can focus on direct customer service More sustainable and efficient processing of customer inquiries. Customers can get order status anytime, 24/7, with no hold time More time for employees in the office to focus on other customer services
Connecting families in need to local resources during the pandemic Develop an intuitive and easy-to-use Web and native mobile applications that would serve to both capture and share information about available assistance across the country.	<ul style="list-style-type: none"> Families struggled to put food on the table with schools in lockdown during COVID-19 pandemic Customer saw an opportunity to help ensure that kids were getting enough food as well as other much-needed resources by connecting those in need with community resources Needed to provide a quick way for organizations to submit information on feeding sites and other assistance Needed an interactive map to help people find nearby resources. 	<ul style="list-style-type: none"> SAP Integration and Application Development Qualtrics Customer XM 	<ul style="list-style-type: none"> Established a Web application that will cater to both current and future resource needs Created an assistance entry form app, where administrators from schools and aid organizations can quickly and easily upload details of aid available Built a resource locator app that uses geolocation technology to show the closest help centers on an interactive map Collected ongoing feedback from partners and users which links to a survey enabled by Experience Management (XM) solutions

Why Adopt SAP BTP Now?

“DO NOTHING” IS NOT AN OPTION

Many organizations lack the more advanced capabilities to meet the new and challenging expectations of sustainability. With SAP BTP, these new capabilities can be built on top of existing investments to meet or exceed the new expectations through an open platform:

- 1) Digitalization of new processes is progressing slowly as complex landscapes and outdated technologies delay innovation and prevent the smooth integration of new and old. High performing sustainability organizations have strategies in place to overcome these challenges while others continue to be overwhelmed with poor data quality, low productivity and low credibility amongst stakeholders.
- 2) Traditional management approaches and IT systems are being challenged across entire business functions. This puts pressure on IT resources and budgets. SAP BTP empowers business teams to be “citizen data scientists” and to utilize low-code/no-code functionality to build and customize applications for specific sustainability needs. Without SAP BTP, organizations will be slow to acquire new and deeper digital capabilities, if at all.
- 3) Sustainability processes are fragmented across siloed business applications, and organizations are using error-prone manual tasks to fill the missing links. It will not be long before the associated costs and inefficiency to operations become significant issues.
- 4) Expectations of the CEO role have increased over the past couple of years; high performing organizations are investing in new capabilities whilst others are simply being left behind.
- 5) Organizations and their business partners are constantly confronted with different interfaces and follow complex procedures to get to what they need. If this trend is allowed to continue, then some organizations will struggle to retain customers and increase employee engagement.

Next Steps

At SAP, we recognize that we have an important role in supporting leaders in their journey to becoming an intelligent sustainable enterprise. Together with our customers, we can transform business processes and business models and partner for a more just, equitable, and sustainable world. For this reason, we have developed a collaborative approach for working with customers focused on purpose-led value and key themes such as climate impact, the circular economy, and accelerating diversity and inclusion.

- 1) Review options to leverage existing BTP subscriptions
- 2) Review successes and barriers to adoption and agree an action plan
- 3) Consider options using BTP to move you further your own supply chain transformation journey

Continue the conversation with the following next steps:

- Contact your SAP Account Executive or Customer Success Partner for a **demo that brings to life the benefits of SAP BTP with a practical use case**
- Collaborate with SAP in **reviewing the effectiveness** of your current processes and systems for sustainability
- Identify **improvement opportunities** to be addressed by SAP solutions
- Consider how **additional opportunities for leading practices** can be met through the unique analytics, extension and/or integration capabilities of SAP BTP
- Build the business case with SAP to increase the **buy-in and likelihood of success** for the SAP BTP business transformation
- For **more solution overview information**, visit our [SAP Business Technology Platform](#) and [sustainability](#) pages, including our [sustainability microsite](#)

“I’m asking you and all of us to become more **resilient, sustainable, and profitable** companies. Together, as intelligent enterprises, we can turn the world’s biggest challenges into our greatest opportunities.”

Christian Klein, CEO SAP