General Information About This Management Report

Basis of Presentation

This combined group management report by the SAP Group (collectively, “we,” “us,” “our,” “SAP,” “Group,” or “Company”) and the management report of SAP SE have been prepared in accordance with sections 289, 315, and 315a of the German Commercial Code and German Accounting Standards (GAS) No. 17 and 20. The management report is also a management commentary complying with the International Financial Reporting Standards (IFRS) Practice Statement Management Commentary. All of the information in this report relates to the situation as at December 31, 2016, or the fiscal year ended on that date, unless otherwise stated. The report contains references to additional information in other parts of the SAP Integrated Report that is available online. This additional information is not part of the management report.

Forward-Looking Statements

This management report contains forward-looking statements and information based on the beliefs of, and assumptions made by, our management using information currently available to them. Any statements contained in this report that are not historical facts are forward-looking statements as defined in the U.S. Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements on our current expectations, assumptions, and projections about future conditions and events. As a result, our forward-looking statements and information are subject to uncertainties and risks, many of which are beyond our control. If one or more of these uncertainties or risks materializes, or if management’s underlying assumptions prove incorrect, our actual results could differ materially from those described in or inferred from our forward-looking statements and information. We describe these risks and uncertainties in the *Risk Management and Risks* section.

The words “aim,” “anticipate,” “assume,” “believe,” “continue,” “could,” “counting on,” “is confident,” “development,” “estimate,” “expect,” “forecast,” “future trends,” “guidance,” “intend,” “may,” “might,” “outlook,” “plan,” “project,” “predict,” “seek,” “should,” “strategy,” “want,” “will,” “would,” and similar expressions as they relate to us are intended to identify such forward-looking statements. Such statements include, for example, those made in the *Operating Results* section, our quantitative and qualitative disclosures about market risk pursuant to the International Financial Reporting Standards (IFRS), namely IFRS 7 and related statements in our Notes to the Consolidated Financial Statements; *Expected Developments and Opportunities* section; *Risk Management and Risks* section; and other forward-looking information appearing in other parts of this report. To fully consider the factors that could affect our future financial results, both this report and our Annual Report on Form 20-F should be considered, as well as all of our other filings with the Securities and Exchange Commission (SEC). Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date specified or the date of this report. We undertake no obligation to publicly update or revise any forward-looking statements as a result of new information that we receive about conditions that existed upon issuance of this report, future events, or otherwise unless we are required to do so by law.

This report includes statistical data about the IT industry and global economic trends that comes from information published by sources including Gartner, the European Central Bank (ECB); and the International Monetary Fund (IMF). This type of data represents only the estimates of Gartner, ECB, IMF, and other sources of industry data. SAP does not adopt or endorse any of the statistical information provided by sources such as Gartner, ECB, IMF, or other similar sources that is contained in this report. The data from these sources is subject to risks and uncertainties, and subject to change based on various factors, including those described above, in the *Risk Management and Risks* section, and elsewhere in this report. These and other factors could cause our results to differ materially from those expressed in the estimates made by third parties and SAP. We caution readers not to place undue reliance on this data.

Overview of the SAP Group

>76%
of worldwide transactions touch an SAP system

>345,000
customers worldwide

>180
countries where SAP customers are located

Our vision is to help the world run better and improve people's lives. Together with our broad ecosystem of partners, this comes to life as we help our customers master complexity and innovate and transform to become sustainable digital businesses. SAP is involved in driving innovation in all fields of the digital economy, such as the Internet of Things, machine learning, and artificial intelligence. For more information on our vision and strategy, see the *Strategy and Business Model* section.

Founded in 1972, SAP is a global company headquartered in Walldorf, Germany. Our legal corporate name is SAP SE. SAP is the market leader in enterprise application software[1]. The company is also the fastest-growing major database company. Globally, more than 76% of all business transactions worldwide touch an SAP software system. With more than 345,000 customers in more than 180 countries, the SAP Group includes subsidiaries in all major countries and employs more than 84,100 people.

Our ordinary shares are listed on the Frankfurt Stock Exchange. American Depositary Receipts (ADRs) representing SAP SE ordinary shares are listed on the New York Stock Exchange (NYSE). SAP is a member of Germany's DAX, the Dow Jones EURO STOXX 50, and the Dow Jones Sustainability Indexes. As at December 31, 2016, SAP was the most valuable company in the DAX based on market capitalization. For additional information regarding our stock, see the *Investor Relations* section.

As at December 31, 2016, SAP SE directly or indirectly controlled a worldwide group of 245 subsidiaries to develop, distribute, and provide our products, solutions, and services. For a list of our subsidiaries, associates, and other equity investments, see the Notes to the Consolidated Financial Statements, *Note (34)*.

[1] Enterprise application software is computer software specifically developed to support and automate business processes

Strategy and Business Model

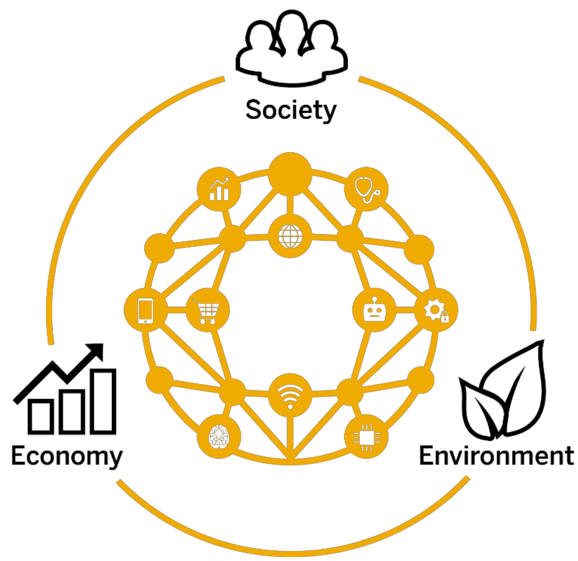
Impact Through Innovation

SAP's vision is to help the world run better and improve people's lives. We strive to make our world a better, more sustainable place and help solve some of its most complex problems. Our innovations give us the power to help tackle these issues by giving our customers, partners, and consumers the tools they need to have an impact.

We execute on our vision by empowering our customers to become digital businesses through SAP technology, so they can address the challenges facing our world today and have an impact in three vital areas:

- **Economy**: Economic empowerment comes from purpose-driven work. SAP software and technology enables customers to innovate and build strong industries and infrastructure and to protect the privacy of individuals and organizations.
- **Society**: Health, education, and public safety are critical for a vibrant society. SAP software and technology is addressing complex challenges around disease prevention and detection, as well as providing solutions for smarter government and smarter cities.
- **Environment**: Climate change touches everyone and will impact the lives of future generations. SAP software and technology is helping our customers make the world more energy efficient, and drive more sustainable supply chains around the world.

The United Nations has defined 17 Sustainable Development Goals (SDGs) to transform the world's economy, society, and environment. These goals are a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity. We consider the most relevant of these goals in the context of our own vision and higher purpose and they inspire us to achieve this vision.



Achieving the Vision

Supporting our customers' digital transformation

To execute our vision, we are helping customers meet the challenges of today's changing world, and at the same time, enabling them to have a positive impact across the economy, society, and the environment.

Technology is transforming both our society and the way we do business. People and things are connected like never before. Entire industries are being disrupted by innovations that seemed unimaginable only a few years ago. Technology trends such as cloud computing, Big Data, the Internet of Things (IoT), and artificial intelligence go hand in hand with social trends that are changing how we live and work.

Organizations need to digitally transform their business processes and business models to be able to succeed in today's marketplace. They need to become agile organizations that are laser focused on driving customer value. They also must become data-driven and run their business on real-time information to react to market and customer demands.

By providing a technology platform for innovation and digitalization, we help our customers with the challenges of digital transformation. Our solutions enable businesses, governments, and non-profit organizations in more than 180 countries to become data-driven "live" businesses.

Our platform leverages existing SAP assets that are complemented by new cloud capabilities and the real-time applications available in our next-generation business suite SAP S/4HANA. Our solutions and services – combined with the talent and expertise of more than 84,100 colleagues and a broad global ecosystem of partners – puts us in a unique position to enable our more than 345,000 customers to fulfill their goals.

We want to build on the trust of our existing customers and earn the trust of new customers. For more information, see the *Customers* section.

Executing on our strategy

In the past years, we have built our success in the business applications market by expanding our product portfolio to help companies meet the needs of the digital economy. We have organically innovated with groundbreaking technology such as SAP HANA and software such as SAP S/4HANA. We have also expanded our portfolio through acquisitions by integrating valuable assets in the cloud and business network spaces.

In 2016, we have increased our focus on innovation as it is the key to long-term success. Our strategy to be the most innovative cloud company powered by SAP HANA, will help us deliver the digital innovation that our customers need. To execute on this strategy, we are focusing our efforts on the following key areas:

- Continue to develop market-leading applications
- Scale our platform as the innovation platform for our ecosystem partners
- Invest in disruptive technologies
- Recruit and retain the right talent

Continue to develop market-leading applications

Our core ERP software is the historic foundation of our strength. To maintain our market leadership position as this market rapidly shifts to the cloud, we will continue to innovate and offer the agility and flexibility our customers require.

We will continue to deliver market-leading applications for ERP, whether in the cloud or on premise. Further, we will continue to develop best-in class, line-of-business (LoB) cloud applications combined with real-time analytics, IoT capabilities, and industry add-ons. Finally, we will leverage our expertise to deliver solutions to help small businesses and midsize companies be successful.

Scale our platform as the innovation platform for our ecosystem partners

We built an open cloud platform with cloud application programming interfaces (APIs), which means the platform can communicate with multiple sources to support a strong ecosystem – allowing developers from companies of all sizes to extend our applications or create new solutions for the digital economy. Moreover, as the rapidly growing data management and database market moves to the cloud, our cloud platform offers companies planning, predictive, visualization, and mobile capabilities.

We will continue to deliver transformational innovations in the platform, database, and analytics space. We want developers in our entire ecosystem and our customers to turn to SAP as their reference cloud platform and API hub. Finally, we want to ensure that security remains a trusted feature of all SAP platforms and applications.

Invest in disruptive technologies

To enable sustainable success, we must prepare for the future. We will continue to incubate disruptive technologies across a number of initiatives. We have begun incubating new businesses using an "open innovation" approach under the umbrella of the SAP.io program with focus on both internal and external startups. We are aggressively investing in making our business applications "intelligent" with machine learning. We are investing in delivering personalized medicine through a connected health platform – aligned with our vision of improving society and healthcare. At the same time, we continue to create reliable security solutions across all of our products.

For more information about these investments, see the *Products, Research & Development, and Services* section.

Recruit and retain the right talent

We cannot bring innovations to our customers without capable, driven employees. As we strive to be the best place to work in the enterprise software industry, we look to a diverse and engaged workforce to drive innovation and value for our customers. Recruiting the right talent and unleashing their innovative power is as crucial for SAP as continuing to develop the talent of existing employees to allow them to realize their full potential.

For more information, see the *Employees and Social Investments* section.

Keeping a balanced focus on growth

We take a balanced approach on how to grow. We will continue to focus on organic investments in technology and innovations to drive our short-term and midterm growth ambitions. We will continue to look at unleashing the full potential of our employees' talent as well as strategic partnerships with our ecosystem to foster innovation.

Additionally, we may also acquire targeted "tuck-in" technologies to add to our broad solution offerings and improve coverage in key strategic markets. In 2016, SAP made the following smaller tuck-in acquisitions:

- **Altiscale**, a company providing high-performance, scalable Big Data-as-a-service (BDaaS) solutions, will help SAP accelerate and operationalize the deployment of Big Data in the enterprise.
- **Fedem Technology**, a forward-thinking IoT company, will help SAP build next-generation, end-to-end IoT solutions that not only support predictive maintenance but also Industry 4.0 scenarios.
- **Hipmunk**, a leader in innovative travel search, will bring a consumer-like experience for business travelers.
- **PLAT.ONE**, a leading enterprise-grade IoT provider, will help SAP enhance complex IoT capabilities in SAP Cloud Platform (formerly called SAP HANA Cloud Platform).

Investing in the next generation of technology leaders

For 20 years, through venture capital funds managed by Sapphire Ventures, SAP has supported entrepreneurs that aspire to build industry-leading businesses. Sapphire Ventures currently has over US$2 billion under management and has invested in more than 130 companies on five continents – in growth-stage technology companies as well as early-stage venture capital funds. Sapphire Ventures pursues opportunities in which it can help fuel growth by adding expertise, relationships, geographic reach, and capital. It places a particular focus on companies in Europe, Israel, and the United States.

Additionally, we launched a new SAP.io Fund to focus on strategic, early stage investments aligned with our SAP.io innovation initiatives. This US$35 million fund will focus on "catalyzing" a startup ecosystem that can leverage or enrich SAP data sets, platform technologies, or business workflows. It is operated in partnership with Sapphire Ventures.

For more information about our consolidated investment funds, see the Notes to the Consolidated Financial Statements, *Note* (34).

Financial Business Model

We derive our revenue from fees charged to our customers for:

- Support, professional services, development, training, and other services
- Licensing of on-premise software products and solutions
- Use of our cloud solutions
- Activity in our business networks

Measuring Our Success

We believe the most important indicators to measure our success comprise both financial and non-financial indicators:

- Growth
- Profitability
- Customer loyalty
- Employee engagement

The table below provides an overview of the specific key performance indicators (KPIs) used to measure performance, as well as our goals and actual performance.

Outlook and Results for 2016

Strategic Objective	KPI	2016 Outlook* (non-IFRS, at constant currencies)	2016 Achievement (non-IFRS, at constant currencies)
Growth	Cloud subscriptions and support revenue	€3.00bn to €3.05bn	€3.01bn
	Cloud and software revenue	+6.5% to +8.5%	+8%
Profitability	Operating profit	€6.5bn to €6.7bn	€6.60bn
Customer Loyalty	Customer Net Promoter Score	25%	19.2%
Employee Engagement	Employee Engagement Index	82%	85%

* The outlook was communicated in January 2016 and raised in October 2016.

Outlook for 2017 and Ambitions for 2020

Strategic Objective	KPI	2016 (non-IFRS)	2017 Outlook (non-IFRS, at constant currencies)	2020 Ambition (non-IFRS)
Growth	Cloud subscriptions and support revenue	€2.99bn	€3.8bn to €4.0bn	€8.0bn to €8.5bn
	Cloud and software revenue	€18.43bn	+6% to +8%	
	Total revenue	€22.07bn	€23.2 to €23.6bn	€28bn to €29bn
	Share of more predictable revenue*	61%		70% to 75%
Profitability	Operating profit	€6.63bn	€6.8bn to €7.0bn	€8.5bn to €9.0bn
Customer Loyalty	Customer Net Promoter Score	19.2%	21% to 23%	35% to 40%
Employee Engagement	Employee Engagement Index	85%	84% to 86%	84% to 86%

* Support and cloud subscriptions – share of total revenue

Products, Research & Development, and Services

>5,400	>2.5 m	€3,044 m
SAP S/4HANA customers	connected companies using Ariba Network	R&D expense in 2016 (IFRS)

Empowering Our Customers to Become Digital Businesses

In 2016, we continued to give top priority to supporting our customers on their individual paths into the digital economy, defining our strategy around the following cornerstones:

- Enabling business with a digital data foundation
- Running business with modern business applications and business networks
- Differentiating business with a digital enterprise platform
- Steering business with real-time analytics
- Reinventing business with machine learning and the Internet of Things
- Making companies' digital transformations possible with SAP Digital Business Services

SAP HANA – Enabling Business with a Digital Data Foundation

SAP HANA is our in-memory computing platform that lets companies accelerate business processes, deliver more business intelligence, and simplify their IT environment. SAP HANA removes the burden of maintaining separate legacy systems and siloed data, so companies can run live and business people can make better business decisions in the new digital economy. Emphasizing our cloud-first strategy, SAP HANA can be deployed on several public cloud infrastructures.

With our second version of SAP HANA, we launched a truly next-generation platform. It enables the reduction of time-consuming database and data management tasks and delivers intelligent applications that leverage advanced analytic processing and empowers all users with deeper insight into any data from anywhere.

Our cloud-first strategy requires a very strong offering to handle Big Data in the cloud. With SAP Cloud Platform Big Data Service, which is powered by SAP HANA, we run multitenant-aware Hadoop systems and provide end-to-end capabilities to efficiently manage and scale Big Data initiatives.

Running Business with Modern Business Applications and Business Networks

SAP S/4HANA – Reimagining the Business Suite for the Digital Age

SAP S/4HANA, our next-generation business suite, allows our customers to embrace the digital economy. The digital core is the foundation for running a Live Business:

- **Immediate** – Empowering business users with insights to act in the moment
- **Intelligent** – Going beyond automation to provide predictive suggestions
- **Integrated** – Connecting not only customer functions but also people, things, and businesses

Based on SAP HANA, SAP S/4HANA software can store and process huge amounts of data while significantly reducing an organization's data footprint. This means our customers can save time and cost.

Available in the cloud, on premise, or as a hybrid deployment, in 2016, SAP S/4HANA evolved from a finance-focused offering into a full digital-age ERP system. It enables insight and understanding so businesses can predict outcomes and use that data to make decisions live, which helps companies stay competitive in the digital economy. SAP S/4HANA can replace a traditional ERP solution across all lines of business (LoBs), such as finance, human resources, sales, service, procurement, manufacturing, asset management, supply chain, and research and development (R&D).

Customers recognize the benefits and power of SAP S/4HANA and, at the end of 2016, more than 5,400 customers had chosen the suite to support their digital transformation.

SAP S/4HANA Cloud – Delivering the Power of the Digital Core

In addition to our on-premise suite SAP S/4HANA, we further strengthened our SAP S/4HANA Cloud offering, delivering the power of a digital core with the key benefits expected from a software-as-a-service solution. It provides the scalability, ease of management, and security required in today's digital economy. A quarterly release cycle helps ensure that customers can benefit from regularly delivered innovations with minimum disruption to their business.

SAP S/4HANA Cloud is comprised of various solutions targeted to meet the specific business needs of our customers and enable their journey to the cloud. For example, the SAP S/4HANA Enterprise Management Cloud solution provides a next-generation ERP suite in the cloud with integrated, end-to-end processes.

SAP S/4HANA Cloud was developed to co-exist in a heterogeneous system landscape with native integration to other SAP solutions and open interfaces for further integration and extensions using SAP Cloud Platform (formerly called SAP HANA Cloud Platform). The solution also supports specific industry and LoB requirements with preconfigured content from SAP Best Practices packages and uses the award-winning SAP Fiori user experience (UX) to provide simplified, role-based usability.

Extending Our Reach Through a Broad Ecosystem

SAP's ecosystem and partners extend our reach in the marketplace. We work closely with more than 15,000 partners worldwide to provide SAP solutions for our customers. Partners continue to drive SAP S/4HANA and our solutions for small businesses and midsize enterprises (SMEs) – SAP Business ByDesign and SAP Business One – to prospects on behalf of SAP, accounting for more than 88% of all new SAP customers.

Innovating for LoBs and Industries

As a modular integrated suite, SAP S/4HANA is the backbone of a company. And, at the same time, we are building functional innovations for LoBs and industries to address our customers' specific and evolving needs.

SAP covers 25 industries grouped in six industry sectors and 12 lines of business:

Industry Sector	**Industry Portfolio**
Consumer	SAP for Consumer Products
	SAP for Life Sciences
	SAP for Retail
	SAP for Wholesale Distribution
Discrete manufacturing	SAP for Aerospace & Defense
	SAP for Automotive
	SAP for High Tech
	SAP for Industrial Machinery & Components
Energy and natural resources	SAP for Chemicals
	SAP for Mill Products
	SAP for Mining
	SAP for Oil & Gas
	SAP for Utilities
Financial services	SAP for Banking
	SAP for Insurance
Public services	SAP for Defense & Security
	SAP for Healthcare
	SAP for Higher Education & Research
	SAP for Public Sector
Services	SAP for Engineering, Construction & Operations
	SAP for Media
	SAP for Professional Services
	SAP for Sports & Entertainment
	SAP for Telecommunications
	SAP for Travel & Transportation
Lines of Business	Asset Management
	Commerce
	Finance
	Human Resources
	Manufacturing
	Marketing
	R&D/Engineering
	Sales
	Service
	Sourcing and Procurement
	Supply Chain
	Sustainability

In addition, we are building other functional innovations that serve specific lines of business, for example:

Human Capital Management
Our human capital management (HCM) offerings, including SAP SuccessFactors solutions, help organizations increase the value of their total workforce by developing, managing, engaging, and empowering their people. SAP SuccessFactors HCM Suite addresses a full range of HR needs and encompasses the following:

- **Core human resources** – SAP SuccessFactors Employee Central and SAP SuccessFactors Employee Central Payroll solutions cover the administrative tasks required to manage an organization's workforce. More specifically, this includes HR administration, payroll, position management, global benefits, time and attendance, shared services, and employee and manager self-service capabilities. The solutions act as the key source of employee and worker data and typically integrate with hundreds of external and internal systems, including SAP S/4HANA. At the end of 2016, customers for SAP SuccessFactors Employee Central numbered more than 1,580.
- **Talent management** – Our suite comprises solutions for all pillars of talent management, recruiting (marketing and management), onboarding, performance management, development, succession planning, compensation planning and administration, learning, and workforce analytics.

We focus on delivering a simple and intuitive UX for our HCM suite through mobile device or desktop.

Customer Engagement and Commerce (CEC)
Today's customers are digitally connected, socially networked, and individually empowered, changing the rules of engagement. Our integrated front-office suite encompasses a holistic offering across customer experience, commerce, marketing, sales, billing, and services.

By providing leading omnichannel customer engagement and commerce solutions across any touch point and channel, we enable organizations (both business-to-consumer and business-to-business) to deliver contextual, consistent, and relevant experiences – regardless of channel or device – throughout the customer journey.

Connecting Companies with Business Networks

Our business networks are best-in-class cloud applications that connect a global ecosystem of customers, suppliers, and partners. The products and services go beyond the four walls of a business to integrate and connect systems, services, partners, and data – creating more efficient, more powerful, and far simpler ways to manage key business functions. They provide the outcomes and experiences business users need through open and connected platforms.

Included in the business networks portfolio are SAP's market-leading Concur, SAP Ariba, and SAP Fieldglass solutions, which are at the center of our business network strategy.

Ariba Network is the world's largest business network, with more than 2.5 million connected companies trading over US$885 billion of commerce on the network, which has grown its commerce volume close to 20% year-over-year. In 2016, we unveiled innovations that help businesses achieve efficient, intelligent connections and frictionless transactions across the entire source-to-pay process:

- **Guided buying** – A new buying experience automatically leads employees to goods and services they need to do their jobs and execute purchases in compliance with company policies.
- **Light enablement** – This interactive e-mail service eliminates the complexity that buyers face in onboarding and connecting suppliers, letting them send purchase orders and receive order confirmations and invoices in just a few clicks.
- **Open platform** – Ariba Network offers an open application-programming interface (API) capability that allows partners to add functionality and extend solutions for all industries and business needs.

With more than 45 million users worldwide, our acquired company Concur is the world leader in travel and expense management solutions. In 2016, Concur continued to deliver on our vision of an open cloud platform for travel and expense management that enables an effortless experience for end users as well as finance departments. It provides total transparency into employee travel and spending, wherever and whenever it happens.

New innovations for travel, expense, and accounts payable automation in Concur solutions include:

- User interface improvements and the addition of many region-specific partners to our ecosystem
- Integration with the SAP ERP Financials and Intuit Quickbooks solutions
- Expansion of global tax capabilities
- Additional features in the Concur Invoice solution to help ensure a three-way match between purchase, receipt, and invoicing

SAP Fieldglass solutions help simplify procuring and managing external workforce services, connecting businesses in real time. In 2016, more than 3.1 million workers in approximately 135 countries were connected using the solution.

Market changes, including globalization and access to talent, have led many organizations to increasingly rely on contingent workers and service providers to achieve business goals. SAP Fieldglass cloud-based solutions also help companies engage and optimize all forms of talent. The software dynamically matches business needs with the right combination of resources while helping to ensure visibility, compliance, and cost control.

In 2016, we continued to redefine how work gets done in the enterprise, with innovations in SAP Fieldglass solutions including streamlined services procurement templates and extended flexible talent-sourcing capabilities.

Data Network

Our business data network offers a comprehensive, people-first data-as-a-service solution that provides real-time, industry-specific, and data-driven benchmarks built on the world's largest repository of networked business data and enriched by key industrial and economic indicators. In 2016, we produced a beta version of the first data-driven service based on contingent workforce data. The highly personalized user experience helps customers discover their standing in the market so that they can take advantage of live recommendations and collaboration workflows that turn insights into action. Using data strategically in this way, customers can operate more efficiently and create new data-driven business models.

SAP Connected Health

Building on many years of work in the healthcare and life sciences industries, SAP has deepened its investment in these areas. In 2016, we launched a SAP Connected Health platform with trusted partners. The platform supports new developments such as using very large data sets to conduct in-depth analysis of the human genome, proteome, and other biological data. It also enables a broad ecosystem of partners – including developers, researchers, and healthcare organizations – to accelerate the development and delivery of innovative, patient-centered solutions for improving health outcomes, reducing costs, and delivering connected healthcare services.

Building Better Solutions for Small and Midsize Enterprises

We offer a portfolio that extends the power of SAP HANA to support SMEs with their digital transformation that includes the followings solutions:

- **SAP Anywhere**: Our front-office solution for small businesses has been on the market for just over a year in China, the United Kingdom, and the United States. Currently, more than 185 customers are running SAP Anywhere.
- **SAP Business ByDesign**: Our ERP cloud solution is targeted to the midmarket and subsidiaries of large enterprises. At the end of 2016, 99% of SAP Business ByDesign customers ran the solution on SAP HANA.
- **SAP Business One**: Our integrated ERP application is available on premise or through a partner-hosted cloud. Today, more than 2,000 SAP Business One customers run the application on SAP HANA.

Our focus for SMEs, as with larger enterprises, is on cloud technology and simplified business processes for end users and partners. End-to-end accountability and increased investments in these core cloud ERP, on-premise ERP, and front-office solutions helps foster innovation and growth for the digital economy. Customers using SME solutions include small businesses and midsize companies in more than 100 countries.

Keeping User Experience in Focus

User experience (UX) is about meeting the user's needs in the most effective and enjoyable way. Our understanding of how to create true innovation manifests itself in the award-winning SAP Fiori UX. The concept and design principles are key components in our design-led development process, which helps ensure the delivery of SAP Fiori innovations through all SAP applications.

With SAP Fiori 2.0, users can get their work done faster and more effectively, with:

- Direct access to relevant information and apps
- Transparency on items needing attention and timely notifications
- Support in deciding what needs to be done next
- Ability to perform quick and informed actions

At the same time, our UX strategy focuses on empowering our customers and partners to design their own UX journey and execute on it – through a rich portfolio of services, educational offerings, and tools and technologies to design, develop, and deliver a simplified UX.

SAP Cloud Platform – Differentiating Business with a Digital Enterprise Platform

In the digital economy, in addition to standard applications, companies need a highly flexible platform that allows them to do the following:

- Extend cloud and on-premise SAP applications
- Build new applications for differentiating LoB processes
- Integrate cloud and on-premise SAP applications

With SAP Cloud Platform, our in-memory platform-as-a-service, companies can rapidly build, run, and extend modern business applications. It offers comprehensive capabilities to help business users and developers create better, more agile applications in less time. Customers can apply, among other things, mobile services, advanced analytic tools, state-of-the-art authentication mechanisms, and social functionality. For maximum flexibility, portability, and agility, we use open technologies.

SAP Cloud Platform is a digital enterprise platform offering the following:

– Analytical capabilities
– Access to SAP applications, processes, and data
– Robust business services that customers and independent software vendors can consume to build solutions

Furthermore, we are positioning the SAP Cloud Platform Integration service as the default integration infrastructure for SAP solutions, whether in the cloud or on premise. We deliver content to support end-to-end integration scenarios. Being able to connect and integrate all best-of-breed applications to our digital core and to any custom-built solution makes SAP Cloud Platform the center of gravity for a modular suite of business applications.

Close partnerships with customers and other leading technology companies are key to providing best-in-class solutions. In 2016, we announced a strategic partnership with Apple Inc. to build a SAP Cloud Platform software development kit for iOS that enables businesses, designers, and developers to quickly and efficiently build their own native iOS apps for iPhones and iPads.

Steering Business with Real-Time Analytics

Business leaders need to be able to discover and communicate meaningful and actionable insights in data so they can make decisions in real time. Our analytics offerings help companies to apply analytics to business data to describe, predict, and improve business performance, recommend action, and guide decision making.

With SAP BW/4HANA, we launched next-generation data warehouse software, delivering a simpler and more powerful way to achieve real-time analytics by connecting historical data with live data stored in SAP and third-party software environments. This integrated data warehouse solution is optimized to fully leverage the SAP HANA platform and simplifies development, administration, and the user interface, resulting in enhanced business agility.

We consolidated analytical functionalities across our product portfolio in one cloud analytics solution – SAP BusinessObjects Cloud. Built on SAP Cloud Platform, it helps companies overcome the challenge of point solutions and data silos spread throughout the organization with enterprise-wide access to analytics delivered through a public cloud experience.

For the SAP Digital Boardroom solution, which offers executive decision makers ease and elegance in accessing company data in real time, we released new industry-specific and LoB-specific content for consumer products, chemicals, engineering, construction, operations, and public sector, as well as HR, finance, and marketing LoBs.

Reinventing Business with the Internet of Things and Machine Learning

There is no topic that typifies the digital transformation more than the Internet of Things (IoT). The IoT is a network of physical objects with embedded sensors to detect their environment and interact with business processes and systems. This builds a foundation for entirely new business models and completely digitized, connected businesses. Intelligent sensors, ubiquitous connectivity, and unlimited data storage are driving innovation and leading to a deeper integration of people, processes, data, and things – in one connected world.

Our IoT solutions, now marketed under the new SAP Leonardo brand, help companies digitally transform their manufacturing, logistics, and asset management processes and respond to the needs of a digital business in a highly individualized, consumer-driven economy. We strive to become a trusted partner for IoT that helps our customers link sensor data with business processes and thereby add value. With our end-to-end SAP Leonardo solutions for connected logistics, connected manufacturing, and connected assets, for example, we offer a comprehensive portfolio of standard IoT software, both cross-industry and industry specific. Furthermore, in November 2016, we announced the SAP IoT Application Enablement toolkit, providing services that allow our customers to build their own IoT applications.

Research and Innovation – Innovating for Future Growth

With businesses shifting, leading our customers through change is more important than ever before. We do this every day by empowering our employees and collaborating with our customers to develop world-class software and next-generation solutions. We further strengthened our global research and development (R&D) efforts in 2016 by investing in our SAP Labs network and expanding our SAP Innovation Center locations in India, Israel, and the United States.

Through the SAP Innovation Center concept, we explore unconventional ideas and develop inspiring proofs of concept in a startup-like environment. We strive to open up new markets for SAP software and accelerate the integration of emerging technologies into our core products. Some of these innovations include:

– **Machine learning** – Making all existing SAP solutions intelligent, bringing machine-learning services and APIs to our platform, and building intelligent business solutions in new and adjacent markets. To emphasize the importance of this topic, we have introduced the new brand SAP Clea that represents our entire machine learning portfolio.
– **Blockchain** – Exploring the potential of digital finance to radically change how business transactions are conducted in the future and its impact on existing products and innovation potential of blockchain across industries.

– **Future enterprise applications** – Enabling companies to successfully lead the next economic revolution by developing game-changing business applications to process intangible assets, provide contextual user assistance, and manage new business models.

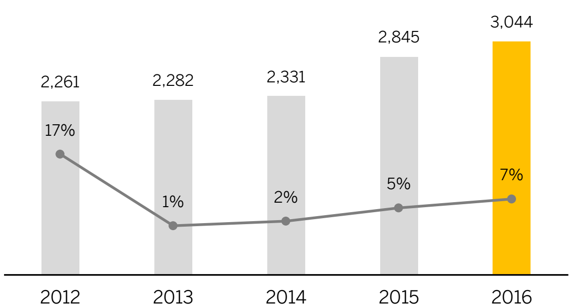
We draw on the ideas of customers, partners, startups, academia, and, most importantly, our own employees. We want to foster organic innovation and support the transformation of great ideas into profitable business.

Investing in Research and Development

SAP's strong commitment to R&D is reflected in our expenditures (see figure below).

Research and Development (IFRS)

€ millions | change since previous year



In 2016, our non-IFRS R&D expense as a portion of total operating expenses increased from 18.3% to 18.4% year over year. Our IFRS R&D expense ratio increased from 17.2% to 18.0%. At the end of 2016, our total full-time equivalent (FTE) headcount in development work was 23,363 (2015: 20,938). Measured in FTEs, our R&D headcount was 28% of total headcount (2015: 27%).

Total R&D expense not only includes our own personnel costs but also the external cost of work and services from the providers and cooperation partners we work with to deliver and enhance our products. We also incur external costs for the following:

– Translating, localizing, and testing products
– Obtaining certification for products in different markets
– Patent attorney services and fees
– Strategy consulting
– Professional development of our R&D workforce

Patents

SAP actively seeks intellectual property protection for innovations and proprietary information. Our software innovations continue to strengthen our market position in business solutions and services. Our investment in R&D has resulted in numerous patents. As at December 31, 2016, SAP held a total of more than 8,000 validated patents worldwide. Of these, 841 were granted and validated in 2016.

While our intellectual property is important to our success, we believe our business as a whole is not dependent on one particular or a combination of patents.

Making Digital Transformation Possible with SAP Digital Business Services

SAP offers a comprehensive portfolio of services and support designed to help our customers deploy their software faster and more efficiently – so they can focus more on innovations and realize faster, greater ROI. We provide tailored support to our customers to help them run live in the digital economy.

Through our SAP Digital Business Services unit, SAP aims to standardize services, not recreate them each time – helping companies and organizations reimagine their businesses in the new economy using a digital business framework.

We are accelerating the realization of the digital enterprise with game-changing engagements for predictive maintenance and warranty, analytics to manage Big Data, and connected intelligent manufacturing, among others.

Innovations from SAP Digital Business Services

SAP Digital Business Services offers an entire portfolio of services. Some of our top innovations in 2016 to help customers transform to a digital business include:

– SAP Value Assurance service packages for SAP S/4HANA
– Latest generation of SAP Solution Manager and SAP Model Company
– Next-generation support
– SAP Digital: Expanding the reach of SAP Store and messaging services

SAP Value Assurance Service Packages

Our SAP Value Assurance service packages for SAP S/4HANA cover all project phases and scenarios to help customers migrate from SAP ERP to SAP S/4HANA. This includes:
– System conversion
– Landscape transformation
– New implementations
– On-premise, cloud, and hybrid deployment options

The approach consolidates services and embedded support in four distinct phases:

- **Plan and safeguard** – Defining the implementation strategy, including dependencies and prerequisites for the target architecture
- **Technical implementation** – Focusing on the technical aspects of implementation, including data and system migration, high availability, and disaster recovery
- **Migrate and implement** – Implementing functions with preconfigured setup and ready-to-use business process templates, and analyzing operational impact
- **Innovate and optimize** – Expanding the context of innovation beyond the digital core to reimagine business models across the enterprise

The packages utilize the SAP Activate methodology, an innovation adoption framework that combines SAP Best Practices packages, implementation methodology, and guided configuration to help streamline deployment.

Partners also play a key role in innovation adoption. Our open engagement approach has motivated many of our larger services partners to focus more on establishing SAP S/4HANA as the digital core.

SAP Solution Manager and SAP Model Company

SAP Solution Manager manages SAP software implementations from cloud to on premise and hybrid, and is currently rolled out as the delivery platform for SAP Digital Business Services. It addresses both IT and business needs.

The solution gives customers real-time transparency, automation, and control to adopt and manage innovations. Process experts and solution architects can explore new industry models earlier, accessing all SAP Best Practices packages.

We also offer a new modeling environment. SAP Model Company is an accelerator service that helps simplify innovation adoption. It combines standard SAP software, SAP Best Practices packages, SAP Rapid Deployment solutions, and content from SAP Activate. Customers can develop repeatable implementation scenarios and access the latest innovations for their future projects. It helps to decrease effort and ensure project success on time and within budget. The service enables customers to accelerate implementations, reduce total cost of ownership, and get up and running quickly.

It is a ready-to-use solution that supports critical decision phases such as discovery and prototype. We provide the full system landscape with detailed business content and documentation and help lower time to value with versions specific to industries and lines of business.

Next-Generation Support

Traditional businesses are becoming digital enterprises. With more business processes "running live," product support must be less reactive and much more proactive, predictive, and available at any moment; in other words, live support.

Our product support has implemented a next-generation support approach that includes real-time support. Named Expert Chat, this live support channel offers direct access to our experts, available for the majority of our solutions. Moreover, a universal, toll-free phone number harmonizes interaction with support across almost all of our products. We also offer customers a way to search for answers to product-related questions, by making knowledge located within SAP searchable using Google. Automating tasks with intelligent, context-sensitive tools provides customers with solutions proactively.

Customers also demand a seamless, omnichannel support experience. We plan to address this by implementing functions such as built-in, mobile, and social media-enabled support.

In addition, we launched an SAP Preferred Care offering as a premium support option for on-premise customers transitioning to digital business models. It complements the already existing SAP Preferred Care Cloud offering. The offering is an enhancement to our foundation support offerings, namely SAP Enterprise Support, and includes:

- Advanced service-level agreements
- Additional services
- Dedicated contacts

SAP Digital

End users can buy both SAP and partner offerings using one-click contracts and digital payments by credit card or PayPal. Customers can discover, try, buy, use, and renew solutions in a simple online interaction. In 2016, customers from 95 different countries placed more than 55,000 orders digitally.

At the same time, SAP also provides a wide variety of intelligent, interconnected messaging and communication services that reach 97% of the world's mobile subscribers and connect billions of things. Top social media companies rely on SAP solutions to reach their customers worldwide. In 2016, more than 350 billion messages passed through our networks.

We are incubating several new initiatives to more rapidly grow our digital business and expand into new areas – for example, integrating messaging services into our own applications.

A Partner on the Journey to Digital Transformation

SAP will continue to support our customers' digital transformation through innovative software, ongoing R&D, and proactive services. By reimagining our business suite and providing world-class software, we empower businesses to continue to succeed in the new digital economy. Together, we are a force that helps further economic development, social progress, and minimizes environmental impact – and makes the world run better.

Security, Privacy, and Data Protection

Meeting Today's Data Protection Challenges

Every day, organizations all around the world trust SAP with their data – either in their own premises, in the cloud, or on the move using mobile devices. Our customers need to know that we will keep that data safe, process it in a manner that complies with local legislation, and protect it from malicious use.

For this reason, data protection and security is of paramount importance to us. We have implemented safeguards to help enable the privacy rights of everyone whose data is processed by SAP, whether they are our customers, prospects, employees, or partners. In addition, we work towards compliance with all relevant legal requirements for data protection. Our global security officer and data protection and privacy officer report to our Executive Board and regularly monitor the compliance of all activities in these areas.

Facing Increasing Risks in IT Security

Safeguarding data is an increasingly challenging task today. Companies are collecting and storing more data than ever before from more and more sources. No longer is data locked away in an on-premise mainframe requiring physical security.

Data now proliferates outside the four walls of businesses with multiple endpoints exposed and vulnerable to attack. Moreover, the sheer number of and the sophistication of attacks facing businesses are at an all-time high. We are seeing the "commercialization of hacking" while new advanced persistent threats can bypass many traditional security protection techniques.

Establishing a Comprehensive Security Vision

At SAP, we want our customers and employees to be able to use our software and services anywhere, from any device, at any time, with confidence and trust. However, the growing risk and occurrence of cyberattacks reinforces the need to keep critical information systems secure.

Consequently, for SAP and for our customers, security means more than just meeting compliance demands. To secure the SAP software landscape, we offer a comprehensive portfolio of security products, services, and secure support as well as security consulting. They help our customers build security and privacy protection capabilities into their businesses.

Several of our security measures extend across all sectors of our company and thus to all of our products and services. These measures include, among other things, the regular training of employees on the subject of IT security and data protection, including the handling of confidential information and ensuring controlled and restrictive access to customer information. In addition, we have developed a three-pronged strategy focusing on the security of our products, operations, and organization:

Secure Products Strategy: Champion Product Security
Businesses use SAP applications to process mission-critical transactional data which can be highly attractive to cyber attackers. Our secure products strategy focuses on incorporating security features into our applications to minimize the risk of a security breach.

Our secure software development lifecycle is at the heart of this strategy. This provides a comprehensive methodological approach for incorporating security features into our applications. Before a release decision is made, our software is validated by independent IT security experts. This team then addresses any recommendations made before we release the application.

This approach conforms to the ISO/IEC 27034 standard for application security and is closely embedded into our ISO 9001-certified process framework for developing standard software.

Secure Operations Strategy: Running Secure Operations
Our secure operations strategy focuses on the security principles of "confidentiality, integrity, and availability" to ensure overall protection of our business, as well as our customers' businesses. Our mission is to provide a comprehensive end-to-end cloud and IT operations security framework – from system and data access and system hardening to security patch management, security monitoring, and end-to-end incident handling. This involves the implementation of key security measures across all layers including physical assets as well as process-integrated controls.

Furthermore, our secure operations approach concentrates on the early identification of any deviations from the standards defined in our security framework. Deviations are identified through a combination of automated and manual reviews. Performed by third parties as well as by SAP colleagues, these reviews verify compliance with international standards and SAP global security standards.

Industry best-practice certifications are key success factors for our secure operations strategy. Many of our cloud solutions undergo Service Organization Control (SOC) audits ISAE3402, SSAE16 SOC I Type II, and SSAE16 SOC II Type II. The SOC standards are harmonized with a number of ISO certifications including ISO 9001, 27001, and 22301.

Secure Company Strategy: Taking a Holistic Approach to the Security of Our Business

At SAP, we take a holistic approach to the security of our company, encompassing processes, technology, and employees. At the heart of our secure company strategy is an efficient information security management system and a security governance model that brings together all of the different aspects of security. These include the following three main areas:

- **Security culture**: Awareness and compliance with our security policy and standards are fostered through regular mandatory training, assessments, and reporting.
- **Secure environments**: Comprehensive physical security measures are in place to ensure the security of our data centers and development sites so that we can protect buildings and facilities effectively.
- **Business continuity**: A corporate continuity framework aimed at having robust governance in place at all times is reviewed on an annual basis to adapt to new or changed business needs.

Complying with Data Protection and Privacy Legislation

When processing data about employees, applicants, customers, suppliers, and partners, SAP respects and protects their right to data protection and privacy while implementing appropriate security measures. We develop and support our data protection and privacy strategy in accordance with our business strategy.

To comply with applicable data protection laws, SAP has adopted a global data protection and privacy policy. It outlines a Group-wide minimum standard for handling personal data in compliance with data protection and privacy laws. The policy defines requirements for all operational processes that affect the processing of or access to personal data, as well as providing clear responsibilities and organizational structures. We actively monitor changes to applicable laws and regulations so that we can update our standards on an ongoing basis.

We have also implemented a wide range of measures to protect data controlled by SAP and SAP customers from unauthorized access and processing, as well as from accidental loss or destruction. These include, among others, the implementation of our data protection management system in areas critical to data protection. This system is certified on a yearly basis by the British Standards Institute.

In 2016, SAP did not experience any significant incidents regarding breaches of customer privacy or losses of customer data. There were no incidents reported subject to the provisions of the German Federal Data Protection Act.

Customers

>345,000
customers around the world

19.2%
Customer Net Promoter Score 2016

Continuing to Build Strong Customer Relationships

Customer loyalty is one of our four corporate objectives, along with growth, profitability, and employee engagement. In 2016, our combined on-premise and cloud Customer Net Promoter Score (Customer NPS) was 19.2% (2015: 22.4%). As we further harmonize processes in acquired entities, the customer segments used for customer surveys has not yet been completely harmonized across the SAP Group. Specifically, due to the nature of the business, the Concur customer sample includes a higher proportion of general business customers in comparison to other Group entities. As a result, Concur responses make up a large proportion of the total customer sample.

While we continue to have a positive Customer NPS, we did not reach our target of 25% in 2016. As a response to the feedback received from our customers throughout 2016, we have focused on improving the quality of our follow-up process to ensure a timely resolution of customer issues. We have provided more insight into how customers can migrate to our innovations without disrupting their business processes. With a sustained emphasis on follow-up, we are targeting a combined Customer NPS of 21% to 23% in 2017, with our medium-term goal of reaching a combined Customer NPS of 35% to 40% by 2020.

For more information about the Customer NPS, see the *Performance Management System* section.

Continuing Strong Customer Demand

We help companies transform into digital businesses. In 2016, we saw customers do so by licensing or subscribing to the full range of SAP software, from comprehensive solutions for large enterprises to the latest mobile apps.

Some examples by region include the following customers:

North America and Latin America (Americas) Region

– **The Dow Chemical Company**, based in the United States, has decided to deepen their relationship in SAP through the investment in SAP HANA, including a future state vision around SAP S/4HANA in support of their business objectives
– **Hershey**, headquartered in the United States, is upgrading to the SAP S/4HANA suite to achieve enterprise connectivity through access to actionable information at the right time for everyone, anywhere. The large chocolate manufacturer will gain real-time insights from both operational and other data and can simplify global business processes to drive efficiencies and scale.
– **Itaú Unibanco Holding**, based in Brazil and one of the top 20 banks in the world by market value, is currently using the SAP HANA platform. It recently added Ariba Network, through which Itaú joins the SAP marketplace for business-to-business transactions.
– **Live Nation**, the global leader for live entertainment based in the United States, has purchased Concur Travel & Expense to meet the needs for an end-to-end travel solution from travel request, to online and agent assisted travel planning through to trip reimbursement. Important in the selection process *was a* full-featured mobile app, exceptional end-user experience, robust analytics and reporting, the ability to integrate with existing Live Nation systems, and the flexibility to configure to their travel policy and business practices.
– **Mexico Proyectos Y Desarollos** chose SAP Ariba Buying, advanced edition, SAP Ariba Strategic Sourcing, and the SAP HANA platform to standardize operative, strategic sourcing, and management processes while achieving better corporate negotiations and reducing maverick purchases. The construction infrastructure company expects to transform procurement processes by leveraging

technological innovation and fully achieve its functional and automatization needs.

Asia Pacific Japan (APJ) Region

- **Cathay Pacific**, based in Hong Kong, chose SAP S/4HANA and the SAP HANA platform to simplify its business process, enable operational-level reporting directly from the airline company's operational system, and provide the foundation for further system migrations.
- **China National Chemical Corporation (ChemChina**), China's biggest chemical group and a Fortune Global 500 company, has invested heavily in overseas acquisitions. It chose SAP S/4HANA, the SAP HANA platform, the SAP NetWeaver Master Data Management component, and the SAP BusinessObjects Planning and Consolidation application to keep pace with rapid organizational expansion. Through this partnership, ChemChina is leveraging SAP's leading technology to redefine its IT strategy, optimize IT infrastructure, improve efficiency and business insights, and prepare for a transition to Industry 4.0.
- **NTUC Fairprice**, one of Singapore's largest retailers, chose the SAP HANA platform, SAP Payroll Processing, and SAP SuccessFactors Recruiting Posting solutions to improve employee productivity and engagement. As a customer-oriented retailer, the company also strives to boost productivity and raise overall customer-satisfaction levels by simplifying processes, automating manual practices, and obtaining detailed insights from integrated analytics.
- **Rockland Distilleries** in Sri Lanka has chosen the SAP Hybris Cloud for Customer solution over competitors to lead the company through its digital transformation journey. The solution will help increase the productivity of its salespeople and gather business insights that will enable it to make strategic and transformational decisions.
- **Roy Hill Mining Operation** is an independent iron ore operation with a project to become the largest single ore mine in Australia. The project is turning to SAP software, including SAP S/4HANA, the SAP Multiresource Scheduling application, and the SAP Integrated Business Planning solution, to view its inventory in real time, make informed decisions on maintenance activities, and manage its supply chain costs more effectively.

Europe, Middle East, and Africa (EMEA) Region

- **Barry Callebaut**, based in Switzerland, is one of the world's leading suppliers of high-quality chocolate and cocoa products. It has implemented SAP solutions to integrate 65,000 small-scale cocoa farmers in Côte d'Ivoire, enable sustainable cocoa farming, and improve the livelihood of farmers, their families, and their communities. The company recently went live with the SAP Rural Sourcing Management solution, an integrated, cloud-based solution running on SAP Cloud Platform. It provides farming organizations with mobile and desktop access to important data immediately to help simplify and digitalize business processes.
- **Bilfinger**, a German industrial services provider, selected SAP SuccessFactors HCM Suite, including the SAP SuccessFactors Employee Central solution, to standardize HR processes and increase workforce transparency. A further aim is to establish a global talent management model and increase workforce performance. The solutions will help Bilfinger drive its strategic objectives for productivity, consolidation, and compliance.
- **Inter Cars**, the largest importer and distributor of automotive spare parts in Poland, chose the SAP Hybris Commerce Cloud solution to establish a full omnichannel platform that will address the business strategy and help the company achieve its goal to double its revenue within the next few years.
- **L'OCCITANE**, a French natural and organic ingredient-based cosmetics and well-being retailer, chose the SAP SuccessFactors Employee Central and SAP SuccessFactors Recruiting solutions to streamline human resources processes and gain global visibility into its workforce. It also expects to attract and hire top talents and develop a workforce that helps to support the company's digital transformation and growth strategy.
- **Targin**, a large Russian multiproduct integrated oilfield service holding, will implement SAP S/4HANA as an introduction to the next generation of SAP software. SAP S/4HANA will support Targin in transforming its business enterprises and increasing the efficiency of its business processes to reduce downtime and increase inventory turnover and the company's market share.

Helping Customers Invest

To help companies invest in SAP solutions and associated services and hardware, SAP Payment services offers customers payment plans. SAP Payment services can help preserve liquidity, provide an alternative to credit from customers' existing banking relationships, and balance their budgetary priorities, while giving them the flexibility to choose their preferred solution.

Performance Management System

We use various performance measures to help manage our performance with regard to our primary financial objectives, which are growth and profitability, and our primary non-financial objectives, which are customer loyalty and employee engagement. We view growth and profitability as indicators for our current performance, while customer loyalty and employee engagement are indicators for our future performance.

Measures We Use to Manage Our Financial Performance

Measures We Use to Manage Our Operating Financial Performance

In 2016, we used the following key measures to manage our operating financial performance:

Cloud subscriptions and support revenue (non-IFRS): This revenue driver comprises the main revenues of our fast-growing cloud business. We generate cloud subscriptions and support revenue when we provide software functionality in a cloud-based infrastructure (software as a service, or SaaS) to our customers; when we provide our customers with access to a cloud-based infrastructure to develop, run, and manage applications (platform as a service, or PaaS); and also when we provide hosting services for software hosted by SAP (infrastructure as a service, or IaaS). Cloud subscriptions and support revenue are also generated when providing additional premium cloud subscription support beyond the regular support, which is embedded in the basic cloud subscription fees as well as business network services to our customers. We use the cloud subscriptions and support revenue (non-IFRS) measure both at actual currency and at constant currency.

Cloud and software revenue (non-IFRS): We use cloud and software revenue (non-IFRS) and constant currency cloud and software revenue (non-IFRS) to measure our revenue growth. Our cloud and software revenue includes cloud subscriptions and support revenue plus software licenses and support revenue. Cloud subscriptions and support revenue and software revenue are our key revenue drivers because they tend to affect our other revenue streams. Generally, customers that buy software licenses also enter into related support contracts, and these generate recurring revenue in the form of support revenue after the software sale. Support contracts cover standardized support services that comprise unspecified future software updates and enhancements. Software licenses revenue as well as cloud subscriptions and support revenue also tend to stimulate services revenue earned from providing customers with professional services, premium engagement services, training services, messaging services, and payment services.

Total revenue (non-IFRS): We use nominal total revenue (non-IFRS) and constant currency total revenue (non-IFRS) to measure our growth. The total of cloud subscriptions and support revenue and software support revenue divided by total revenue is the share of more predictable revenue. This measure provides additional insight into our sustained business success.

New cloud bookings: For our cloud activities, we also look at new cloud bookings. This measure reflects the committed order entry from new customers and from incremental purchases by existing customers for offerings that generate cloud subscriptions and support revenue. In this way, it is an indicator for cloud-related sales success in a given period and for secured future cloud subscriptions and support revenue. We focus primarily on the average contract value variant of the new cloud bookings measure that takes into account annualized amounts for multiyear contracts. Additionally, we internally monitor the total contract value variant of the new cloud bookings measure that takes into account the total committed order entry amounts regardless of contract durations. There are no comparable IFRS measures for these bookings metrics. In addition to new cloud bookings, we use the measure "cloud backlog" to evaluate our sales success in the cloud business. We define cloud backlog as a measure that represents the volume of business that, as of period end, is contracted but not yet billed.

Operating profit (non-IFRS): We use operating profit (non-IFRS) and constant currency operating profit (non-IFRS) to measure our overall operational process efficiency and overall business performance. See below for more information on the IFRS and non-IFRS measures we use.

Cloud subscriptions and support gross margin (non-IFRS): We use our cloud subscriptions and support gross margin (non-IFRS) to measure our process efficiency in our cloud business. Cloud subscriptions and support gross margin (non-IFRS) is the ratio of our cloud subscriptions and support gross profit (non-IFRS) to cloud subscriptions and support revenue (non-IFRS), expressed as a percentage.

Measures We Use to Manage Our Non-Operating Financial Performance

We use the following measures to manage our non-operating financial performance.

Financial income, net: This measure provides insight into the return on liquid assets and capital investments and the cost of borrowed funds. To manage our financial income, net, we focus on cash flow, the composition of our liquid assets and capital investment portfolio, and the average rate of interest at which assets are invested. We also monitor average outstanding borrowings and associated finance costs.

Days Sales Outstanding (DSO): We manage working capital by controlling the days sales outstanding (DSO) for operating receivables (defined as the average number of days from the raised invoice to cash receipt from the customer).

Measures We Use to Manage Overall Financial Performance

We use the following measures to manage our overall financial performance:

Earnings per share (EPS) (IFRS and non-IFRS): EPS measures our overall performance because it captures all operating and non-operating elements of profit as well as income tax expense. It represents the portion of profit after tax allocable to each SAP share outstanding. EPS is influenced not only by our operating and non-operating business as well as income taxes but also by the number of shares outstanding.

Effective tax rate (IFRS and non-IFRS): We define our effective tax rate as the ratio of income tax expense to profit before tax, expressed as a percentage.

Operating, investing, and financing cash flows and free cash flow: Our consolidated statement of cash flows provides insight as to how we generated and used cash and cash equivalents. When applied in conjunction with the other primary financial statements, it provides information that helps us evaluate the changes of our net assets, our financial structure (including our liquidity and solvency), and our ability to affect the amounts and timing of cash flows to adapt to changing circumstances and opportunities. We use our free cash flow measure to determine the cash flow remaining after all expenditures required to maintain or expand our organic business have been paid off. This measure provides management with supplemental information to assess our liquidity needs. We calculate free cash flow as net cash from operating activities minus purchases (other than purchases made in connection with business combinations) of intangible assets and property, plant, and equipment.

Measures We Use to Manage Our Non-Financial Performance

In 2016, we used the following key measures to manage our non-financial performance in the areas of employee engagement, customer loyalty, and leadership trust:

Employee Engagement Index: We use this index to measure the motivation and loyalty of our employees, how proud they are of our company, and how strongly they identify with SAP. The index is derived from surveys conducted among our employees. Applying this measure is recognition that our growth strategy depends on engaged employees.

Customer Net Promoter Score (NPS): This score measures the willingness of our customers to recommend or promote SAP to others. It is derived from our annual customer survey that identifies, on a scale of 0–10, whether a customer is loyal and likely to recommend SAP to friends or colleagues, is neutral, or is unhappy. We introduced this measure in 2012, as we are convinced that we can achieve our financial goals only when our customers are loyal to, and satisfied with, SAP and our solutions. To derive the Customer NPS, we start with the percentage of "promoters" of SAP – those who give us a score of 9 or 10 on a scale of 0–10. We then subtract the percentage of "detractors" – those who give us a score of 0 to 6. The method ignores "passives," who give us a score of 7 or 8.

Leadership Trust Score: We use this score to further enhance accountability and to measure our collective effort to foster a work environment based on trust. It is derived from a question in our annual global employee survey that gauges employees' trust in our leaders. We measure leadership trust by using the same methodology as we do determining the Net Promoter Score (NPS).

Value-Based Management

Our holistic view of the performance measures described above, together with our associated analyses, comprises the information we use for value-based management. We use planning and control processes to manage the compilation of these key measures and their availability to our decision makers across various management levels.

SAP's long-term strategic plans, including a multiyear financial plan through 2020, are the point of reference for our short-term and midterm planning and controlling processes. We initially identify future growth and profitability drivers at a highly aggregated level. In a first step, the resulting financial plan is broken down to (i) our deployment models "On Premise," "Software as a Service/Platform as a Service," "Infrastructure as a Service," and "Business Networks", and (ii) functions such as development, sales, or administration. In a second step, the planned total revenues and total expenses are allocated to the individual board areas. Budget administration and control, including budget adjustments applied during the year to reflect changes in priorities, to achieve efficiency targets and to reflect endogenous and exogenous factors, are handled at board area level. It is then the individual board member's responsibility to break down, in their board area, the allocated budgets and budget adjustments. The Executive Board's efforts to assess the performance of the company and components thereof is also done on the level of the board areas. Based on an integrated portfolio process running in parallel to the budgeting process we ensure aligned investment behavior across board areas with regards to specific solutions or solution areas. In a final step, customer-facing revenue targets and cost of sales and marketing targets are broken down into sales regions.

Based on our detailed annual plans, we determine the budget for the respective year. We also have processes in place to forecast revenue and profit on a quarterly basis, to quantify whether we expect to realize our financial goals, and to identify any deviations from plan. We continuously monitor the concerned units in the Group to analyze these developments and define any appropriate actions. Our entire network of planning, control, and reporting processes is implemented in integrated planning and information systems, based on SAP software, across all organizational units so that we can conduct the evaluations and analyses needed to make informed decisions.

Non-IFRS Financial Measures Cited in This Report

As in previous years, we provided our 2016 financial outlook on the basis of certain non-IFRS measures. Therefore, this report contains a non-IFRS based comparison of our actual performance in 2016 against our outlook in the *Financial Performance: Review and Analysis* section.

Reconciliations of IFRS to Non-IFRS Financial Measures for 2016 and 2015

Due to rounding, the sum of the numbers presented in the following table might not precisely equal the totals we provide.

Reconciliation of IFRS to Non-IFRS Financial Measures for the Years Ended December 31

€ millions, unless otherwise stated					2016			2015
	IFRS	Adj.	Non-IFRS	Currency Impact	Non-IFRS Constant Currency	IFRS	Adj.	Non-IFRS
Revenue measures								
Cloud subscriptions and support	2,993	2	2,995	12	3,007	2,286	10	2,296
Software licenses	4,860	2	4,862	31	4,893	4,835	1	4,836
Software support	10,571	1	10,572	82	10,654	10,093	0	10,094
Software licenses and support	15,431	3	15,434	113	15,546	14,928	2	14,930
Cloud and software	**18,424**	**5**	**18,428**	**125**	**18,553**	**17,214**	**11**	**17,226**
Services	**3,638**	**0**	**3,638**	**39**	**3,678**	**3,579**	**0**	**3,579**
Total revenue	**22,062**	**5**	**22,067**	**164**	**22,231**	**20,793**	**11**	**20,805**
Operating expense measures								
Cost of cloud subscriptions and support	–1,313	247	–1,066			–1,022	232	–789
Cost of software licenses and support	–2,182	238	–1,944			–2,291	283	–2,008
Cost of cloud and software	–3,495	485	–3,010			–3,313	516	–2,797
Cost of services	–3,089	113	–2,976			–2,932	167	–2,765
Total cost of revenue	**–6,583**	**598**	**–5,985**			**–6,245**	**683**	**–5,562**
Gross profit	**15,479**	**603**	**16,081**			**14,548**	**694**	**15,242**
Research and development	–3,044	201	–2,843			–2,845	202	–2,643
Sales and marketing	–6,265	549	–5,716			–5,782	462	–5,320
General and administration	–1,005	119	–886			–1,048	116	–932
Restructuring	–28	28	0			–621	621	0
Other operating income/expense, net	–3	0	–3			1	0	1
Total operating expenses	**–16,928**	**1,494**	**–15,434**	**–192**	**–15,626**	**–16,541**	**2,084**	**–14,457**
Profit numbers								
Operating profit	**5,135**	**1,498**	**6,633**	**–28**	**6,605**	**4,252**	**2,095**	**6,348**
Other non-operating income/expense, net	**–234**	**0**	**–234**			**–256**	**0**	**–256**
Finance income	230	0	230			241	0	241
Finance costs	–268	0	–268			–246	0	–246
Financial income, net	**–38**	**0**	**–38**			**–5**	**0**	**–5**
Profit before tax	**4,863**	**1,498**	**6,361**			**3,991**	**2,095**	**6,087**
Income tax expense	–1,229	–474	–1,703			–935	–651	–1,586
Profit after tax	**3,634**	**1,024**	**4,658**			**3,056**	**1,445**	**4,501**
Attributable to owners of parent	3,646	1,024	4,671			3,064	1,445	4,509
Attributable to non-controlling interests	–13	0	–13			–8	0	–8
Key ratios								
Operating margin (in %)	**23.3**		**30.1**		**29.7**	**20.5**		**30.5**
Effective tax rate (in %)	**25.3**		**26.8**			**23.4**		**26.1**
Earnings per share, basic (in €)	**3.04**		**3.90**			**2.56**		**3.77**

Explanation of Non-IFRS Measures

Non-IFRS Adjustments by Functional Areas

€ millions	2016					2015				
	IFRS	**Acqui-sition-rel.**	**SBP[1]**	**Restruc-turing**	**Non-IFRS**	IFRS	Acqui-sition-rel.	SBP[1]	Restruc-turing	Non-IFRS
Cost of cloud and software	–3,495	395	89	0	–3,010	–3,313	441	74	0	–2,797
Cost of services	–3,089	12	101	0	–2,976	–2,932	54	113	0	–2,765
Research and	–3,044	10	190	0	–2,843	–2,845	36	166	0	–2,643
Sales and marketing	–6,265	257	292	0	–5,716	–5,782	202	260	0	–5,320
General and administration	–1,005	6	113	0	–886	–1,048	4	111	0	–932
Restructuring	–28	0	0	28	0	–621	0	0	621	0
Other operating income/expense, net	–3	0	0	0	–3	1	0	0	0	1
Adjustments of total operating expenses	**–16,928**	**680**	**785**	**28**	**–15,434**	**–16,541**	**738**	**724**	**621**	**–14,457**

[1] Share-based payments (SBP)

We disclose certain financial measures, such as revenue (non-IFRS), operating expenses (non-IFRS), operating profit (non-IFRS), operating margin (non-IFRS), and earnings per share (non-IFRS), as well as constant currency revenue, expense, and profit that are not prepared in accordance with IFRS and are therefore considered non-IFRS financial measures. Our non-IFRS financial measures may not correspond to non-IFRS financial measures that other companies report. The non-IFRS financial measures that we report should only be considered in addition to, and not as substitutes for, or superior to, our IFRS financial measures.

We believe that the disclosed supplemental historical and prospective non-IFRS financial information provides useful information to investors because management uses this information, in addition to financial data prepared in accordance with IFRS, to attain a more transparent understanding of our past performance and our anticipated future results. We use the revenue (non-IFRS) and profit (non-IFRS) measures consistently in our internal planning and forecasting, reporting, and compensation, as well as in our external communications, as follows:

- Our management primarily uses these non-IFRS measures rather than IFRS measures as the basis for making financial, strategic, and operating decisions.
- The variable components of our Executive Board members' and employees' remuneration are based on revenue (non-IFRS), operating profit (non-IFRS), as well as new cloud bookings measures rather than the respective IFRS measures.
- The annual budgeting process for all management units is based on revenue (non-IFRS) and operating profit (non-IFRS) numbers rather than the respective IFRS financial measures.
- All forecast and performance reviews with all senior managers globally are based on these non-IFRS measures, rather than the respective IFRS financial measures.
- Both our internal performance targets and the guidance we provided to the capital markets are based on revenue (non-IFRS) and profit (non-IFRS) measures rather than the respective IFRS financial measures.

Our non-IFRS financial measures reflect adjustments based on the items below, as well as adjustments for the related income tax effects.

Revenue (Non-IFRS)

Revenue items identified as revenue (non-IFRS) have been adjusted from the respective IFRS financial measures by including the full amount of software support revenue, cloud subscriptions and support revenue, and other similarly recurring revenue that we are not permitted to record as revenue under IFRS due to fair value accounting for the contracts in effect at the time of the respective acquisitions.

Under IFRS, we record at fair value the contracts in effect at the time entities were acquired. Consequently, our IFRS software support revenue, IFRS cloud subscriptions and support revenue, IFRS cloud and software revenue, and IFRS total revenue for periods subsequent to acquisitions do not reflect the full amount of revenue that would have been recorded by entities acquired by SAP had they remained stand-alone entities. Adjusting revenue numbers for this revenue impact provides additional insight into the comparability of our ongoing performance across periods.

Operating Expense (Non-IFRS)

Operating expense numbers that are identified as operating expenses (non-IFRS) have been adjusted by excluding the following expenses:

- Acquisition-related charges
  - Amortization expense/impairment charges of intangibles acquired in business combinations and certain stand-alone acquisitions of intellectual property (including purchased in-process research and development)
  - Settlements of preexisting business relationships in connection with a business combination
  - Acquisition-related third-party expenses
- Share-based payment expenses
- Restructuring expenses, that is, expenses resulting from measures which comply with the definition of restructuring according to IFRS

We exclude certain acquisition-related expenses for the purpose of calculating operating profit (non-IFRS), operating margin (non-IFRS), and earnings per share (non-IFRS) when evaluating SAP's continuing operational performance because these expenses generally cannot be changed or influenced by management after the relevant acquisition other than by disposing of the acquired assets. Since management at levels below the Executive Board does not influence these expenses, we generally do not consider these expenses for the purpose of evaluating the performance of management units. For similar reasons we eliminate share-based payment expenses as these costs are impacted by share price developments and other factors outside our control. We also eliminate restructuring expenses because they are volatile and mostly cannot be influenced by management at levels below the Executive Board.

Operating Profit (Non-IFRS), Operating Margin (Non-IFRS), Effective Tax Rate (Non-IFRS), and Earnings per Share (Non-IFRS)

Operating profit, operating margin, effective tax rate, and earnings per share identified as operating profit (non-IFRS), operating margin (non-IFRS), effective tax rate (non-IFRS), and earnings per share (non-IFRS) have been adjusted from the respective IFRS measures by adjusting for the aforementioned revenue (non-IFRS) and operating expenses (non-IFRS) and the income tax effects thereon.

Constant Currency Information

We believe it is important for investors to have information that provides insight into our sales. Revenue measures determined under IFRS provide information that is useful in this regard. However, both sales volume and currency effects impact period-over-period changes in sales revenue. We do not sell standardized units of products and services, so we cannot provide relevant information on sales volume by providing data on the changes in product and service units sold. To provide additional information that may be useful to investors in breaking down and evaluating changes in sales volume, we present information about our revenue and various values and components relating to operating profit that are adjusted for foreign currency effects.

We calculate constant currency revenue and operating profit measures by translating foreign currencies using the average exchange rates from the comparative period instead of the current period.

Free Cash Flow

Among others we use the measure free cash flow to manage our overall financial performance.

Free Cash Flow

€ millions	**2016**	2015	Δ in %
Net cash flows from operating activities	4,628	3,638	27
Purchase of intangible assets and property, plant, and equipment (without acquisitions)	–1,001	–636	57
Free cash flow	**3,627**	**3,001**	**21**

Usefulness of Non-IFRS Measures

We believe that our non-IFRS measures are useful to investors for the following reasons:

- Our revenue (non-IFRS), expense (non-IFRS), and profit (non-IFRS) measures as well as the measures "new cloud bookings" and "cloud backlog" (see above) provide investors with insight into management's decision making because management uses these measures to run our business and make financial, strategic, and operating decisions. We include the revenue adjustments outlined above and exclude the expense adjustments outlined above when making decisions to allocate resources. In addition, we use these non-IFRS measures to facilitate comparisons of SAP's operating performance from period to period.
- The non-IFRS measures provide investors with additional information that enables a comparison of year-over-year operating performance by eliminating certain direct effects of acquisitions, share-based compensation plans, and restructuring plans.
- Non-IFRS and non-GAAP measures are widely used in the software industry. In many cases, inclusion of our non-IFRS measures may facilitate comparison with our competitors' corresponding non-IFRS and non-GAAP measures.

Limitations of Non-IFRS Measures

We believe that our non-IFRS financial measures described above have limitations, including but not limited to, the following:

- The eliminated amounts could be material to us.
- Without being analyzed in conjunction with the corresponding IFRS measures, the non-IFRS measures are not indicative of our present and future performance, foremost for the following reasons:
  - While our profit (non-IFRS) numbers reflect the elimination of certain acquisition-related expenses, no eliminations are made for the additional revenue or other income that results from the acquisitions.
  - While we adjust for the fair value accounting of the acquired entities' recurring revenue contracts, we do not adjust for the fair value accounting of deferred compensation items that result from commissions paid to the acquired company's sales force and third parties for closing the respective customer contracts.
  - The acquisition-related amortization expense that we eliminate in deriving our profit (non-IFRS) numbers is a recurring expense that will impact our financial performance in future years.
  - The remaining acquisition-related charges that we eliminate in deriving our profit (non-IFRS) numbers are likely to recur should SAP enter into material business combinations in the future. Similarly, the restructuring expenses that we eliminate in deriving our profit (non-IFRS) numbers are likely to recur should SAP perform restructurings in the future.
  - The revenue adjustment for the fair value accounting of the acquired entities' contracts and the expense adjustment for acquisition-related charges do not arise from a common conceptual basis. This is because the revenue adjustment aims to improve the comparability of the initial post-acquisition period with future post-acquisition periods, while the expense adjustment aims to improve the comparability between post-acquisition periods and pre-acquisition periods. This should particularly be considered when evaluating our operating profit (non-IFRS) and operating margin (non-IFRS) numbers as these combine our revenue (non-IFRS) and expenses (non-IFRS) despite the absence of a common conceptual basis.
  - Our restructuring charges resulted in significant cash outflows in the past and could do so in the future. The same applies to our share-based payment expense because most of our share-based payments are settled in cash rather than shares.
  - The valuation of our cash-settled share-based payments could vary significantly from period to period due to the fluctuation of our share price and other parameters used in the valuation of these plans.
  - In the past, we have issued share-based payment awards to our employees every year and we intend to continue doing so in the future. Thus, our share-based payment expenses are recurring although the amounts usually change from period to period.

We believe that constant currency measures have limitations, particularly as the currency effects that are eliminated constitute a significant element of our revenue and expenses and could materially impact our performance. Therefore, we limit our use of constant currency measures to the analysis of changes in volume as one element of the full change in a financial measure. We do not evaluate our results and performance without considering both constant currency and nominal measures in revenue (non-IFRS) and operating profit (non-IFRS) measures on the one hand, and changes in revenue, operating expenses, operating profit, or other measures of financial performance prepared in accordance with IFRS on the other. We caution the readers of our financial reports to follow a similar approach by considering nominal and constant currency non-IFRS measures only in addition to, and not as a substitute for or superior to, changes in revenue, operating expenses, operating profit, or other measures of financial performance prepared in accordance with IFRS.

Despite these limitations, we believe that the presentation of our non-IFRS measures and the corresponding IFRS measures, together with the relevant reconciliations, provide useful information to management and investors regarding present and future business trends relating to our financial condition and results of operations.

Employees and Social Investments

84,183
employees at SAP (in FTEs)

78%
Business Health Culture Index

85%
Employee Engagement Index

Supporting Customers by Nurturing Our Employees

Our employees play a pivotal role in helping our customers succeed in the new digital economy. Our employees empower our customers to Run Simple and work more innovatively. At the same time, they enable SAP to become "the most innovative cloud company powered by SAP HANA."

We believe that by providing an environment where our people can engage, develop their skills, and draw on the support they need to create and innovate, SAP can help to make the world run better. For this reason, we are fully committed to nurturing our people at every stage of their career at SAP.

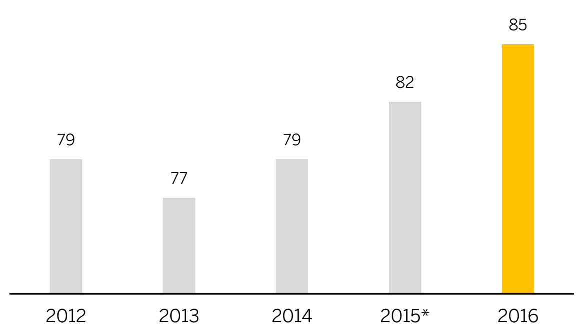
An HR Strategy Designed Specifically for Our People

Our human resources (HR) strategy uses cloud technology to help us Run Simple. It helps us change the way we hire new talent, and to transform the way we develop and retain our employees. At the same time, it allows us to create a culture at SAP that is able to deal with the complexity, speed, and scope of a digital workplace. This culture inspires innovation, leads change, and ultimately creates employee satisfaction. Our HR team stays focused on delivering a seamless, simple employee experience by following three guiding principles: customer satisfaction, simplification, and standardization.

Listening to Our Employees

The People Survey 2016 results are extraordinarily positive. Employee satisfaction went up in nearly all aspects and questionnaire topics. This especially holds true for one of our most important dimensions, the Employee Engagement Index (EEI). In 2016, we see a significant increase of the EEI by three percentage points to 85%.

Employee Engagement Index
Percent



**The EEI score for 2015 was recalculated from 81% to 82% based on updated questions. This calculation method has been applied moving forward.*

Ensuring that our employees are highly engaged remains one of our company-wide strategic goals. For 2017 through to 2020, we aim to reach an Employee Engagement Index between 84% and 86%.

A change by one percentage point of the EEI would have an impact of €45 million to €55 million on SAP's operating profit. For more information on how we calculate this impact, see the *Connectivity of Financial and Non-Financial Indicators* section of the SAP Integrated Report online.

The People Survey 2015 results revealed two focus areas for 2016: simplification and innovation. In 2016, we started a company-wide “Run Simple at SAP” initiative to help the business improve processes and services, as well as numerous efforts to boost and promote innovation initiatives. Conducted from October to November, our People Survey 2016 revealed moderate improvements in both simplification and innovation. We will continue with simplification and innovation as our company-wide focus areas in 2017.

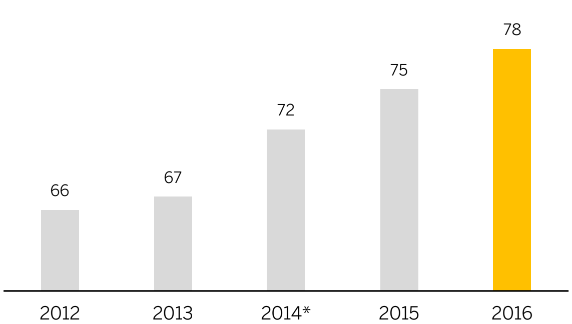
In the second half of 2016, we also conducted a strategy dialog survey to assess the degree to which employees understand and believe in our strategy, our culture, and our leadership, as well as the capability to drive innovation. This survey revealed that while we already have the right innovation mindset, many of the internal innovation tools available are not yet widely known within the company.

In addition, we also measure our Business Health Culture Index (BHCI) based on our People Survey. The BHCI assesses the degree to which our workplace culture supports people’s well-being, work-life balance, and organizational health.

In 2016, the positive trend of the BHCI continued with a score of 78% compared to 75% in 2015. This encouraging result shows that a health-focused culture has impacted employees in a positive way.

Business Health Culture Index

Percent



**The BHCI score for 2014 was recalculated based on two updated questions. This calculation method has been applied moving forward.*

Getting the Right Talent in the Right Place at the Right Time

While we increased our overall hiring volume successfully in 2016, increasing the number of “early talent” hires (people with professional experience of up to two years) has also been a key priority for us. In 2016, approximately one third of all external hires fell into this category.

At the same time, continued recognition of SAP as an employer of choice contributed to our success in meeting our hiring targets in 2016. SAP won many awards across the globe in the areas of diversity, inclusion, employer attractiveness, and people satisfaction. For a comprehensive list of awards given to SAP in 2016, see the *Recognition* section of the SAP Integrated Report online.

Selection of employer branding awards SAP received in 2016

Collaborating with Educational Institutions

Our collaboration with educational institutions is key to recruiting early talent. SAP works closely with over 3,100 universities on international events such as student meet-ups and info days. In addition, we run a number of coding events such as SAP InnoJam, as well as a broad variety of activities and events through our SAP University Alliances program.

SAP also runs a vocational training program that allows students to work towards their university degree while gaining valuable business experience at the same time. As of the end of 2016, more than 1,000 vocational training students were enrolled in the program. Overall, we measured a conversion rate (number of these types of students who stayed with SAP after completing their dual studies) for vocational training students of 82% in 2016.

Connecting with Refugee Communities

As a company with employees of approximately 80 different nationalities working in Germany alone, we are open to talented people from all communities. As part of our “Engaging with Refugees” program, we are working on a number of initiatives that promote cultural integration through training and recruitment. For example, SAP joined Germany’s “*Wir zusammen*” (“We together”) initiative, which provides an Internet platform to support the efforts of participating companies to integrate refugees into the German labor market. In 2016, SAP offered 100 internships and 14 vocational training positions to refugees in Germany. In 2017, SAP will again offer up to 100 additional internships and 10 vocational training positions to candidates who are refugees.

In addition, 2016 saw the launch of Refugee Code Week, empowering young people and inspiring refugee communities with job-relevant coding skills. In collaboration with the United Nations Refugee Agency (UNHCR), the event introduced more than 10,000 refugees and nationals in Egypt, Jordan, Lebanon, and Turkey to coding basics, Web development, and software skills in the SAP Business One application. The most promising students are referred to SAP partner ReBootKAMP (RBK.org) for an intensive 16-week training program and assistance in securing job placements.

Investing in Talent Development

At SAP, we believe that everyone is a talent and we invest in the professional development of all our employees. We continue to build development offerings for specific groups such as early talents, experts, and fast-track employees. To provide career development support, we also introduced career counselling sessions that are delivered either in person or virtually.

In addition, we launched SAP Talk to 8,100 early-adopter employees in 2016. This approach provides a new, state-of-the-art way of managing performance at SAP, helping foster a continuous dialog on professional development between managers and employees. We plan to roll out SAP Talk to all SAP employees in 2017.

Our overall retention rate in 2016 was 93.7% compared with 91.8% in 2015. We define retention as the ratio of the average number of employees minus voluntary attrition to the average number of employees (in full-time equivalents, or FTEs). High retention is something we are aiming for as reflected in all our activities to drive high employee engagement.

Engaging Our People Through Impactful and Inspirational Leadership

Our investment in developing our leaders is delivering results according to our People Survey. Living up to our SAP leadership principles and building trust with employees has become a key ingredient of successful leadership performance. By the end of 2016, 57.6% of leaders at SAP completed our flagship leadership development program. Leaders who completed this had higher employee engagement and leadership trust scores. In 2016, leadership trust reached 57% (2015: 52%) and we are committed to keep this high score moving forward.

Our Leadership Principles:

– Drive Simplicity
– Develop Amazing Talent
– Ensure Customer Success

Making Learning a Compelling Experience for Everyone

We support employees at all levels and roles as they strive to achieve their long-term career aspirations. Our learning strategy is based on the principle that much of employee learning and development happens outside formal training such as coaching, mentoring, rotational programs, and on-the-job-guided development experiences. This is why we are transitioning to a continuous learning model with a strong focus on more informal learning activities.

To achieve this, we make high-quality learning opportunities easily accessible to all employees through our cloud-based learning management system (SAP SuccessFactors solution). In 2016, we provisioned 1.3 million courses to 90.7% of our employees. We also initiated a new tuition assistance program to help employees as they pursue additional educational and professional certification opportunities.

Self-paced online programs that include language learning as well as technical and soft-skills training courses are open to all employees. In addition, the online programs enable employees to build impactful development plans that meet their career goals. Our innovative peer-to-peer learning portfolio includes coaching, mentoring, job shadowing, and facilitation opportunities. In 2016, we hosted many live and virtual "learning culture" workshops throughout the world, as an opportunity to foster the exchange of ideas between peers and managers.

Creating an Environment That Drives Innovation, Performance, and Engagement

SAP aims to create a working environment that helps drive innovation, high performance, and employee satisfaction. We do so by providing, among others, the following benefits and activities:

– **SAP Shares program**: Introduced in 2016, this equity program consists of two different plans, ensuring closer market alignment. The "Own SAP" plan enables employees to purchase shares with preferred conditions and build value by becoming an SAP shareholder. The "Move SAP" plan is a restricted stock unit plan that rewards selected employees and executives for their contribution to the success of the company. For more information, see the *Notes to the Consolidated Financial Statements* section, *Note (27)*.
– **Hasso Plattner Founders' Award**: In its third year, this prestigious award provides the highest internal employee recognition at SAP for delivering on our vision and strategy. In 2016, the award went to the "Skills for Africa" initiative, which helps fill the skills gap in the IT sector in Africa.
– **Intrapreneurship program**: Open to all global employees, this program attracted more than 830 entries from over 1,500 employees in 2016. It enables employees to act as entrepreneurs and transform innovative ideas into profitable businesses in new markets.
– **SAP SuccessFactors solutions**: To make our employees' lives easier when dealing with HR matters, we continue to transform and simplify our entire HR IT landscape by implementing SAP SuccessFactors solutions. In this context, approximately 160 HR experts supported sales teams in

deals related to our own human capital management solutions. Also in 2016, we announced the Klaus Tschira Human Resources Innovation Award, an annual program for SAP partners and customers that have contributed a unique and innovative solution in the field of human resources.
- **People Weeks**: In 2016, SAP again sponsored a two-week event designed for employees to exchange ideas and cultivate a greater connection across cultures, genders, and generations. Under the motto "You in the Digital Workplace," the event reached over 27,000 employees in 124 locations and 58 countries.
- **"How We Run"**: Launched in 2015 to showcase the behavioral values that provide the foundation to SAP's corporate culture, our "How We Run" behaviors initiative has received widespread support and adoption among SAP employees worldwide.

Our "How We Run" Behaviors

Promoting Inclusion, Well-Being, and Social Innovation

An inclusive, bias-free culture inspires greater innovation and helps us to better connect with and serve our customers. It also fosters employee engagement, and makes SAP a more attractive workplace.

Closing the Gender Gap

As the first multinational technology company, SAP was awarded the Economic Dividends for Gender Equality (EDGE) certificate in 2016. It recognizes our global commitment to gender diversity and equality in the workplace and reinforces SAP's publicly stated goal to fill 25% of its management positions with women by the end of 2017. We have made great strides toward our goal, increasing the proportion of female managers from 23.6% in 2015 to 24.5% in 2016.

Throughout 2016, SAP sponsored and hosted numerous events focused on attracting, developing, and supporting women. These included major events in China, Colombia, Germany, Saudi Arabia, the United States and other countries. Additional ongoing initiatives supporting women at SAP include the Women's Professional Growth Webinar series, the Business Women's Network, and the Women@SAP online community. In addition, we offer executive sponsorships for women at SAP and the Leadership Excellence Acceleration Program (LEAP), a highly respected and award-winning development program that helps prepare high-potential women for leadership roles at SAP.

Creating an Inclusive Environment

Working closely with ethnicity-based employee network groups such as the Black Employee Network (BEN), and Latinos@SAP, SAP launched several important initiatives in 2016 in the United States. An example is Project Propel, a program designed to enable U.S. educational institutions that have historically served minorities to build the next generation of technology talent. The program focuses on providing students with critical digital enterprise skills that are in demand in the SAP ecosystem.

In addition, we participate in a wide range of activities to create a more inclusive environment throughout the organization, including:

- **Focus on Insight – Diversity and Inclusion curriculum**: A global learning curriculum launched for all employees in September 2016 to ensure that everyone at SAP understands the importance and benefits of a diverse workplace.
- **Business Beyond Bias**: Launched in August 2016, this initiative includes significant investment in programs and technology that support greater diversity. This helps eliminate bias not only at SAP but also in customer and partner organizations.
- **White House Tech Inclusion Pledge**: SAP is one of the largest global technology companies to participate in this pledge, announced during former President Obama's Global Entrepreneurship Innovation Summit 2016 in Silicon Valley.
- **Autism at Work program**: 107 employees with Autism Spectrum Disorder currently work at SAP. Launched in Argentina this year, we have implemented the Autism at Work program in nine countries.
- **Global Pride@SAP employee network**: This network has grown to more than 8,000 members, sponsoring numerous activities and initiatives that support lesbian, gay, bisexual, and transgender (LGBT) people and their allies.

Caring for the Health and Well-Being of Our Employees

We believe that the way we care for our people is closely linked to our business success. When people feel healthy, respected, and cared for, it results in higher productivity, engagement, innovation, and customer satisfaction.

A caring culture enables our employees to live to their full potential and accelerates our ability to achieve our goals. Consequently, we invest in extensive employee benefits, programs, and services that truly make people's lives better. These include:

– **Employee Assistance Program (EAP)**: This program helps employees to deal better with life's challenges by providing free, confidential, and impartial expert advice and support, 24 hours a day, seven days a week.
– **Corporate Oncology Program (COPE)**: Available in Canada, Germany, United Kingdom, and the United States, the program provides SAP employees facing cancer with access to an individual molecular genetic tumor analysis and interpretation.
– **Health checkup**: A one-day, one-on-one health checkup program for executives.
– **Take Charge of Your Health and Well-Being program**: This program empowers employees to take better care of their health and well-being.
– **Health Ambassador Network**: This global network strengthens our focus on health in SAP office locations and helps identify best practices.
– **Local health and well-being offerings**: Services such as skin screening, on-site fitness centers and activity classes, mindfulness practice, eyesight testing, and health awareness sessions are also available to employees in various office locations.

Engaging in Social Investments

As our vision to help the world run better and improve people's lives shows, we are passionate about making a positive impact on people's lives, both in our communities and in the wider world. As SAP guides our customers through digital transformation, our social investments focus on ensuring that today's young people – regardless of background – get the skills they need to thrive and lead in this digital economy.

Our strategy is based on two main focus areas. We aim to increase the capacity of innovative social enterprises that put young people on the path to successful careers. In addition, we aim to build a skilled workforce for the IT sector through training and workforce development programs. In 2016, we donated €22.3 million to charitable organizations.

Improving Lives, Sharing Experience

As part of our social investment commitment, SAP encourages its employees to contribute their time and talent to support social causes. Whether by offering individual hands-on support, or business coaching and mentoring, we run a number of initiatives that help make a real difference to people's lives in the communities in which they live and work.

An annual highlight is our "Month of Service" program. This year, more than 22,000 employees in 42 countries volunteered almost 142,000 hours to this program alone. While passing on valuable skills and helping the world to run better, employees taking part in these programs benefit from what can be an incredibly rewarding experience. In addition to making a positive social impact, they develop leadership skills, learn about new markets, and grow their professional network.

Extending Code Week Initiatives

In 2016, SAP extended our successful Code Week initiatives to bring digital literacy to thousands of young people who may not otherwise have the opportunities to learn software coding skills.

Now in its second year, Africa Code Week saw thousands of coding activities organized across 30 African countries and through openSAP coursework. Africa Code Week demonstrates the power of public-private partnerships: Hundreds of schools, teachers, ministers, community centers, businesses, and non-profit organizations work together towards the common goal of ensuring Africa's children are not left out of the digital economy. In 2016, the program reached 426,000 children in Africa.

Supporting Our Social Sabbatical Portfolio

With four unique programs across the award-winning social sabbatical portfolio, we offer employees at all levels the opportunity to extend their skills, expertise, and know-how. Participation in the program challenges employees to solve concrete business challenges for non-profit organizations and social enterprises in either their home or emerging markets.

By volunteering their time and talent for assignments that last between two and six weeks, our employees strengthen their leadership competencies, cross-industry know-how, and intercultural sensitivity. They achieve all this while ensuring their "client" is better able to deliver on their social mission.

Recent projects include building strategic plans for social entrepreneurship incubators and strengthening the internal capabilities of non-profit organizations focused on STEM education and digital literacy. As such, we worked with the Dreamoval Foundation in Accra, Ghana, to support the development of a growth strategy to strengthen the IT skills of 170,000 teachers to help improve educational outcomes across the country.

In 2016, we also extended our social sabbatical portfolio to joint projects with SAP customers. In July, a joint team of volunteers from SAP and GlaxoSmithKline plc designed and implemented an integrated database for Partners in Health, a non-profit organization based in Kigali, Rwanda. Additional social sabbatical collaboration with customers is planned for 2017.

Through our social sabbatical portfolio, 213 SAP employees provided 58,808 hours of pro bono service to 71 organizations in 15 countries in 2016.

Changing the Game for Underprivileged Youths with the KickApp Cup

To ignite passion for IT, we need to be creative about how to reach young people. We developed a creative approach, harnessing the power of soccer to bring people together while spreading a passion for IT.

The first annual KickApp Cup brought together 200 young community leaders from disadvantaged backgrounds to work closely with 180 SAP developers and coaches. Their aim: to develop a prototype app that would help non-profit organizations tackle issues such as monitoring attendance or tracking social impact.

Regional competitions took place at SAP Labs locations worldwide including Brazil, Germany, Hungary, India, Israel, and the United States. The teams coded together, played soccer and had fun, while competing to attend the finals in Lyon, France, and Heidelberg, Germany, to present their app prototypes.

The event was organized in collaboration with streetfootballworld, a non-governmental organization (NGO) whose mission is to use soccer as a tool to drive social change. The best ideas from each team were then combined to create a final app that was presented during the 16th streetfootballworld Festival at the European soccer championships (UEFA EURO 2016).

Gaining International Recognition for Award-Winning Programs

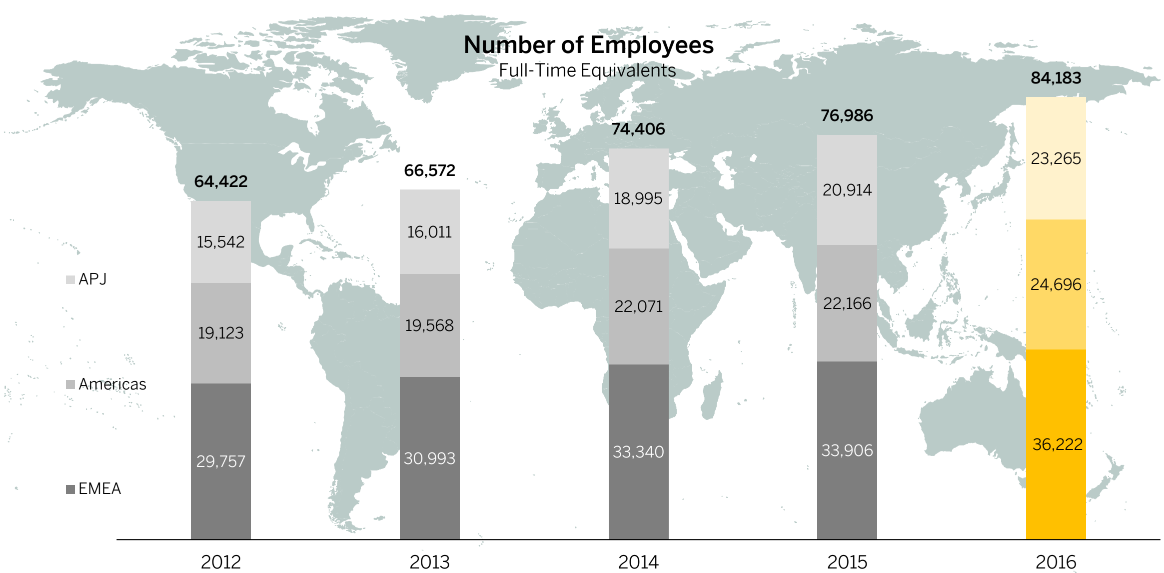
SAP received significant recognition in 2016 for the innovative nature of its social investment programs. For more information, see the *Recognition* section of the SAP Integrated Report online.

Headcount and Personnel Expense

On December 31, 2016, we had 84,183 full-time equivalent (FTE) employees worldwide (December 31, 2015: 76,986). This represents an increase in headcount of 7,197 FTEs in comparison to 2015. The average number of employees in 2016 was 80,609 (2015: 75,180).

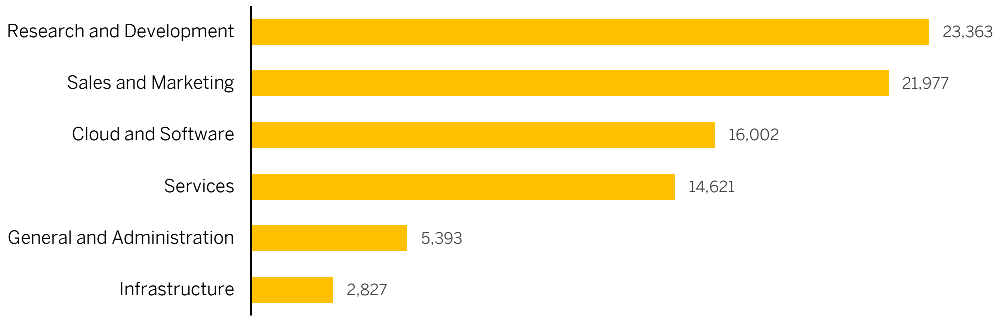
We define headcount in FTE as the number of people on permanent employment contract considering their staffing percentage. Students, individuals employed by SAP who are currently not working due to various reasons (such as maternity leave), and temporary employees with limited contracts of less than six months are excluded from our figures. The number of temporary employees is not material.

Our personnel expense per employee decreased to approximately €127,000 in 2016 (2015: approximately €135,000). This decrease in expense is primarily attributable to a significant decrease of employee-related restructuring expenses in 2016 compared to the previous year. The personnel expense per employee is defined as the overall personnel expense divided by the average number of employees. For more information about employee compensation and a detailed overview of the number of people we employ, see the *Notes to the Consolidated Financial Statements* section, *Note (7).*



Employees by Functional Area

Full-Time Equivalents



Energy and Emissions

380 kt
carbon emissions

950 GWh
energy consumption

100%
renewable electricity

Being a Front-Runner of a Greener Way of Working

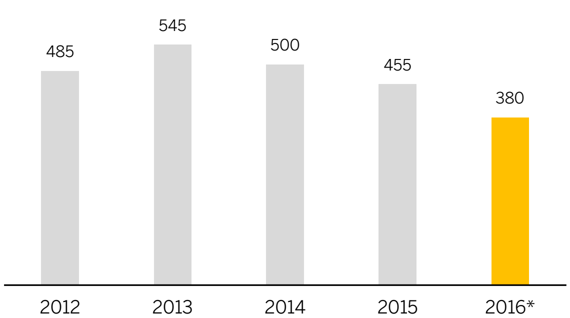
As a role model for sustainable business operations, SAP takes its environmental responsibilities seriously. We believe that by running cleaner, greener operations, we can make a difference to our planet. In addition, we aim to enable our customers to reduce their overall carbon footprint through our software.

One of our goals is to reduce net greenhouse gas (GHG) emissions from our operations to levels of the year 2000 by 2020. This target includes all direct emissions from running our business as well as a selected subset of indirect emissions from supply chains and services.

A number of initiatives harness innovative technologies to help us run our operations in a way that minimizes our impact on the environment. In addition, our investment in renewable electricity certificates and carbon credits enables us to support sustainability projects across the globe.

Total Net Emissions

kilotons CO_2



*For more information on the calculation method of the 2016 CO_2 emissions, see our *Notes to Environmental Performance Reporting* section on the GHG footprint in the SAP Integrated Report online.

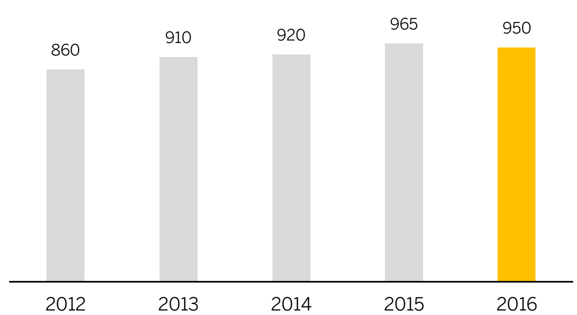
In addition to our long-term commitment for 2020, we have derived annual targets for our internal operational steering. In 2016, we outperformed our annual target to reduce our emissions to less than 400 kilotons (kt) of CO_2. This result stems primarily from updating our emission factors as well as compensation with carbon emission offsets. Our focus on carbon emissions has contributed to a cumulative cost avoidance of €155 million in the past three years, compared to a business-as-usual scenario based on 2007. We avoided €73.6 million of this cost in 2016.

Committing to 100% Renewable Electricity

Our commitment to 100% renewable electricity is crucial to making our operations more sustainable. While SAP produces a small amount of renewable electricity through solar panels in some locations, we rely primarily on the purchase of renewable energy certificates (RECs) to achieve our target of 100% renewable electricity. We follow robust procurement guidelines for RECs to ensure that we only invest in environmentally friendly schemes.

Total Energy Consumption

GWh

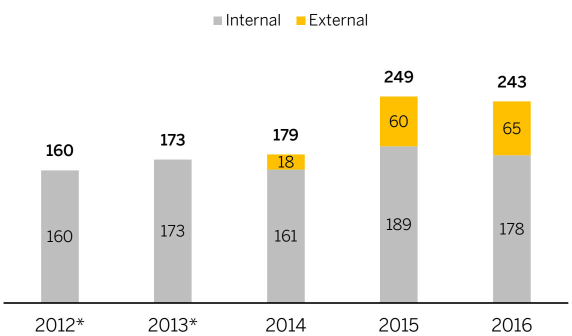


Strengthening Our “Green Cloud”

As more business moves to the cloud, data centers are a key part of how SAP provides solutions to our customers. By using our green cloud services, customers can significantly reduce their carbon footprint. However, data centers represent a significant part of our total GHG with energy consumption increasing as a growing number of customers sign up to our cloud services. For this reason, our data centers have become a primary focus of our carbon reduction efforts. We have introduced initiatives to drive efficiency and innovation around buildings, data center operations, and infrastructure. For example, in 2016, one of our main data centers in Rot, Germany, had a very efficient power usage effectiveness (PUE) of 1.35. In addition, we have tied our business strategy to our environmental strategy by creating a completely “green cloud” powered by 100% renewable electricity at SAP. Carbon neutrality is achieved by purchasing renewable electricity certificates and carbon emission offsets.

Total Data Center Electricity

GWh



* We started reporting our external data center energy consumption in 2014.

Helping Our Customers Run Greener Operations

The vast majority of our overall emissions result from the use of our software. When our customers run SAP software on their hardware and on their premises, the resulting carbon footprint is about 20 times the size of our own net carbon footprint. To address this, we have developed a downstream emissions strategy to help our customers, hardware providers, and others run greener operations. One of the most important ways we help our customers reduce their energy usage and emissions is by managing their SAP systems through cloud services provided by our carbon-neutral green cloud offerings. In addition, the solutions in our portfolio help enable our customers manage their resources, such as electricity, in an efficient manner.

The SAP HANA platform also plays a vital role in helping our customers to cut their carbon emissions. By combining the worlds of analytic and transactional data into one real-time, in-memory platform, it can help create much leaner operations, further simplifying the system landscape and reducing energy consumption.

SAP also works with customers to optimize their on-premise landscapes so that they consume less energy. We achieve this by helping them to decommission legacy systems, archive unused data, and consolidate business applications, as well as virtualizing their system landscape.

Driving Environmental Initiatives Throughout SAP

We continuously pursue strategies to help us achieve our goal of reducing emissions at a time of ongoing growth in our business. Key initiatives for 2016 included the following:

- **Sustainable programming sessions**
  In a new online training module, software developers and architects learn how to make a positive contribution to SAP’s sustainability goals in their daily programming work. Performance and sustainability go hand in hand as performance-optimized programming usually equates to energy-efficient programming. It also helps improve end-to-end response time and creates a great user experience for our customers.
- **Electric vehicles**
  As a result of our business expansion, the number of SAP employees eligible for a company car has increased annually. We want to ensure that the resulting growth in our car fleet does not undo our successes in cutting emissions. To help address this, SAP aims to increase the number of electric vehicles in our company car fleet to 20% by 2020.
  All electric company cars charged at SAP are powered with 100% renewable electricity. In addition, in Germany, we provide employees with an incentive to switch to electric alternatives by offering a battery subsidy that offsets the costs of purchasing an electric vehicle.
- **Internal carbon pricing for business flights**
  As first introduced in 2015, we continue with our program to reduce the impact of air travel by SAP employees. In addition to avoiding business flights, we invest in carbon emission offsets for air travel in nine countries by charging an internal carbon price. This offset effort resulted in a compensation of 90 kt in 2016.
- **Investment in carbon credits**
  In 2016, we continued to realize the benefits of our investment in the Livelihoods Fund, a unique investment fund whose returns consist of high-quality carbon credits. Several years ago, we made a commitment to invest €3 million covering a 20-year participation in the fund that supports the sustainability of agricultural and rural communities worldwide. Livelihoods Funds have been designated the “Best

Corporate Offsetting Program 2016" in voluntary carbon markets by the *Environmental Finance* magazine. In 2016, we received carbon credits from the fund, which helped us to offset our carbon footprint by 21 kt.

Financial Performance: Review and Analysis

Up 7%
cloud and software revenue (IFRS)

Up 20%
operating profit (IFRS)

Up 31%
new cloud bookings

Economy and the Market

Global Economic Trends

In its latest economic bulletin, the European Central Bank (ECB) concludes that the global economy grew steadily in 2016 at a similar pace as the year before, with relatively stable expansion in advanced economies and a slight improvement in emerging market economies. According to the ECB, acute uncertainty about the political and economic impact of the presidential election in the United States shaped global sentiment at the end of the year.

For the Europe, Middle East, and Africa (EMEA) region, the ECB reports that economic recovery in the euro area continued throughout 2016, supported by the ECB's own monetary policy measures which it finds helped revitalize domestic demand in the euro area and reduce debt. According to its calculations, the real gross domestic product of the euro area countries grew 1.7% in 2016. The economies of many of the Central and Eastern Europe countries also performed well in 2016, the ECB writes. There were even signs of an economic rebound in Russia, but expansion there stayed slightly negative for the year as a whole.

In the North America and Latin America (Americas) region, continued low interest rate policies and improving labor markets stimulated the U.S. economy in 2016, the ECB reports, with economic activity in the United States improving markedly in the second half of 2016, following modest growth in the first half. In Brazil, the recession is believed to have slowly bottomed out in the second half of the year.

In the Asia Pacific Japan (APJ) region, soft foreign demand and weak private consumption caused Japan's economy to advance at only a very modest pace, the ECB notes. In China, meanwhile, economic growth continued to slow in 2016 but, according to the ECB, eventually stabilized in the second half-year, supported by strong consumption and infrastructure spending.

The IT Market

According to Gartner Market Databook December 2016 by Gartner, a market research firm, "worldwide IT spending is forecast to grow 0.5% in 2016 on a constant-currency basis. However, currency rate changes will limit market growth to negative 0.6%. Software is the best-performing segment, with 6.9% growth in 2016 constant currency, while Emerging Asia/Pacific is the fastest-growing region/country, at 2.9%."

In the Europe, Middle East, and Africa (EMEA) region, growth declined year-over-year in the Western European IT market from 3.6% to –0.1% and the Eastern European IT market declined from 15.8% to 1.8% (see table in paragraph "Expected Developments and Opportunities": "Trends in the IT Market – IT spending Year-on-Year", created by SAP on the basis of Gartner Market Databook, 4Q16 Update, 21 December 2016). According to the same table, software spending grew significantly faster than all other submarkets throughout the region.

The Americas region likewise recorded lower growth rates in IT spending than the previous year as can be seen in the table mentioned above. According to the same table, software spending nevertheless significantly outperformed IT spending as a whole.

In the Asia Pacific Japan (APJ) region, software spending grew faster than all other submarkets in the IT industry as well, documented in the table mentioned above.

Source: Gartner Market Databook, 4Q16 Update, 21 December 2016.

The Gartner Report described herein, (the "Gartner Report") represents research opinion or viewpoints published, as part of a syndicated subscription service, by Gartner, Inc. ("Gartner"), and are not representations of fact. Each Gartner Report speaks as of its original publication date (and not as of the date of this Annual Report) and the opinions expressed in the Gartner Report are subject to change without notice.

Impact on SAP

In 2016, we once again succeeded in significantly expanding our business and outperformed the overall global economy and IT industry in 2016 with regards to revenue growth. Our good 2016 results are further evidence that our strategy of innovating across the core, the cloud, and business networks to help our customers become true digital enterprises is the right way forward.

In 2016, we again demonstrated that we are consistently pursuing our strategy for innovation and growth – and that globally, we are able to generate growth that few other IT companies can match – in three respects: in revenue from core business and cloud business, and in operating profit.

Overall Financial Position

Executive Board's Assessment

In 2016, we delivered strong software sales, fast cloud growth, and operating profit expansion. We saw exceptional growth in our cloud and software business and reached above the midpoint of the full year outlook which we raised in October. SAP's rapidly expanding cloud business combined with solid growth in support revenue continued to drive the share of more predictable revenue.

The strong cloud growth was driven throughout our broad cloud portfolio. Mainly due to our strong top line result, we generated an operating profit which was at the midpoint of our raised guidance range.

We made substantial progress in transforming our Company by shifting investments from non-core activities to strategic growth areas, enabling us to capture the tremendous growth opportunities in the market. We expanded our addressable market, acquired best in class assets, and innovated a new generation of ERP with SAP S/4HANA. Our strong cloud backlog and the high software support renewal rates combined with our robust pipeline positions us for yet another year of growth in 2017 and allowed us to confidently raise our high-level 2020 ambition.

Influence of Accounting Policies on Our Financial Position

For more information about our accounting policies, see the Notes to the Consolidated Financial Statements section, *Note (3)*.

There are no off-balance sheet financial instruments, such as sale-and-lease-back transactions, asset-backed securities, and liabilities related to structured entities, which are not disclosed in our Consolidated Financial Statements.

Performance Against Our Outlook for 2016 (Non-IFRS)

Our 2016 operating profit-related internal management goals and published outlook were based on our non-IFRS financial measures. For this reason, in the following section we discuss performance against our outlook only in terms of non-IFRS numbers derived from IFRS measures. The subsequent section about IFRS operating results discusses numbers only in terms of the International Financial Reporting Standards (IFRSs), so the numbers in that section are not expressly identified as IFRS numbers.

Outlook for 2016 (Non-IFRS)

At the beginning of 2016, we projected that our 2016 non-IFRS cloud subscriptions and support revenue would be between €2.95 billion and €3.05 billion at constant currencies (2015: €2.30 billion). We expected full-year 2016 non-IFRS cloud and software revenue to increase by 6% to 8% at constant currencies (2015: €17.23 billion). We also expected our full-year operating profit (non-IFRS) for 2016 to end between €6.4 billion and €6.7 billion (2015: €6.35 billion) at constant currencies. We anticipated an effective tax rate (IFRS) of between 22.5% and 23.5% (2015: 23.4%) and an effective tax rate (non-IFRS) of between 24.5% and 25.5% (2015: 26.1%).

In July 2016, we adjusted our outlook for the effective tax rate (IFRS) to between 27.0% and 28.0% and for the effective tax rate (non-IFRS) to between 28.0% and 29.0%. The increase in comparison to the previous outlook mainly resulted from tax effects relating to changes in foreign currency exchange rates in Venezuela and the fact that the execution of the originally planned consolidation of intellectual property rights held by SAP Group company hybris AG at the level of SAP SE in Germany could no longer be achieved at this point of time.

In October, based on the strong momentum in our cloud business, we raised our outlook for 2016 non-IFRS cloud subscriptions and support revenue to a range of €3.00 billion to €3.05 billion at constant currencies. The upper end of this range represents a growth rate of 33% at constant currencies. Thanks to continued growth in our software license business, we were also able to increase our growth outlook for full-year 2016 non-

IFRS cloud and software revenue to 6.5% to 8.5% at constant currencies. In view of the greater revenues expected, we also adjusted our outlook for full-year operating profit (non-IFRS) for 2016 upward to range between €6.5 billion and €6.7 billion at constant currencies.

2016 Actual Performance Compared to Outlook (Non-IFRS)

We achieved or exceeded the raised outlook for revenue and operating profit we published in October.

Comparison of Outlook and Results for 2016

	Outlook for 2016 (as reported in Integrated Report 2015)	Revised Outlook for 2016	**Results for 2016**
Cloud subscriptions and support revenue (non-IFRS, at constant currencies)	€ 2.95 billion to € 3.05 billion	€ 3.00 billion to € 3.05 billion	€ 3.01 billion
Cloud and software revenue (non-IFRS, at constant currencies)	+6.0% to +8.0%	+6.5% to +8.5%	+8%
Operating profit (non-IFRS, at constant currencies)	€6.40 billion to €6.70 billion	€6.50 billion to €6.70 billion	€6.61 billion
Effective tax rate (IFRS)	22.5% to 23.5%	27.0% to 28.0%	25.3%
Effective tax rate (non-IFRS)	24.5% to 25.5%	28.0% to 29.0%	26.8%

Despite ongoing economic uncertainty throughout 2016, especially in Latin America, coupled with fears about the possible effects of the Brexit vote and the presidential election in the United States, our new and existing customers continued to show a strong willingness to invest in our solutions.

On a constant currency basis, non-IFRS cloud subscriptions and support revenue grew from €2.30 billion in 2015 to €3.01 billion in 2016. That represents an increase of 31% on a constant currency basis. We thus achieved our refined outlook range of €3.00 billion to €3.05 billion that we predicted in October.

Our new cloud bookings, which is the main measure for our cloud-related sales success and for future cloud subscriptions revenue, increased 31% in 2016 to €1.15 billion (2015: €874 million). In addition to this strong growth, our cloud backlog (unbilled future revenue based on existing customer contracts) climbed by 47% to €5.4 billion (2015: €3.7 billion). This reflects the unbilled committed future cloud subscriptions and support revenue that will drive strong cloud growth in 2017 and beyond.

Besides the cloud business, our traditional on-premise business also showed a remarkable growth in 2016. Cloud and software revenue (non-IFRS) was €18.43 billion (2015: €17.23 billion). On a constant currency basis, the increase was 8% and therefore well above the midpoint of the increased outlook.

Our total revenue (non-IFRS) rose 6% in 2016 to €22.07 billion (2015: €20.81 billion). On a constant currency basis, the increase was 7%.

Operating expenses (non-IFRS) in 2016 were €15.43 billion (2015: €14.46 billion), an increase of 7%. On a constant currency basis, the increase was 8%.

Our expense base in 2016 continued to be impacted by the transformation to a fast-growing cloud business. In our outlook we expected the cloud subscriptions and support gross margin to be at least stable or to slightly increase compared to 2015. The cloud subscriptions gross margin for 2016 was 64.4%, a decrease of 1.2pp on a constant currency basis and with that below our expectations. The decrease is primarily due to the change in the cloud subscription revenue mix; the share of our infrastructure-as-a-service cloud offering (IaaS) that has a lower margin than the other cloud offerings, grew at above-average rates and thus impacted the overall gross margin. The cloud subscriptions gross margins of our cloud offerings developed heterogeneously in 2016:

Our cloud subscriptions gross margin (non-IFRS) in our business network business increased by 1% and resulted in approximately 76% for 2016, already close to our long-term ambition of approximately 80%. This excellent result is attributable to the continued positive gross margin development within the Concur and SAP Ariba portfolios.

The cloud subscriptions gross margin (non-IFRS) of our infrastructure-as-a-service cloud offering (IaaS) performed much better in 2016 than in 2015. In 2016 our cloud subscription gross margin is -5% which reflects an improvement of more than 104pp on a constant currency basis. In the last two quarters break-even was already reached, we are therefore in line with our expectations. Profitability in our software-as-a-service/platform-as-a-service cloud offering (Saas/PaaS) was approximately 62% for 2016 compared to our long-term ambition of approximately 80%. Affected by the incremental investments in our cloud infrastructure, cloud profitability fell by 8pp on a constant currency basis, mainly due to significant investments in the expansion of our data center and IT infrastructure as well as in the harmonization of our various public cloud offerings into one platform.

Efficiency improvements in both our cloud and traditional on-premise business drove continued operating profit expansion. Non-IFRS operating profit in 2016 was €6.61 billion on a constant currency basis, reflecting an increase of 4%. As a result, we were able to surpass our excellent results from 2015, despite our continued investment in our business transformation during the reporting year. The positive development of our operating profit was influenced by the effects of our global transformation program carried out in 2015 as well as by the cost-conscious hiring of highly educated young talents in our fast growth areas and locations that enabled us to increase our overall headcount by 7,197 full-time equivalents in 2016. With these additional resources, we continued to invest in our innovation and growth markets. Thus, constant currency non-IFRS operating profit amounting to €6.61 billion was at the midpoint of our raised outlook range (€6.5 billion to €6.7 billion).

We achieved an effective tax rate (IFRS) of 25.3% and an effective tax rate (non-IFRS) of 26.8%, which is below the adjusted outlook of 27.0% to 28.0% (IFRS) and 28.0% to 29.0% (non-IFRS). This mainly results from taxes for prior years and from the regional allocation of income.

Operating Results (IFRS)

This section on operating results (IFRS) discusses results only in terms of IFRS measures, so the IFRS numbers are not expressly identified as such.

We break our operations down into three regions: the Europe, Middle East, and Africa (EMEA) region, the Americas region, and the Asia Pacific Japan (APJ) region. We allocate revenue amounts to each region based on where the customer is located. For more information about revenue by geographic region, see the Notes to the Consolidated Financial Statements section, *Note (28)*.

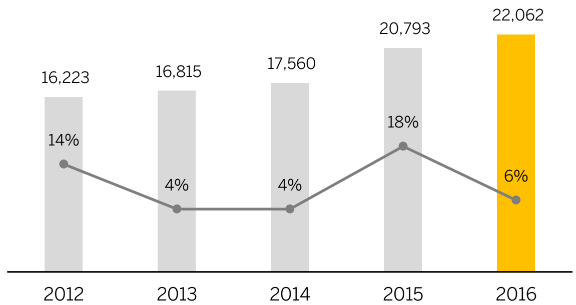
Revenue

Total Revenue

Total revenue increased from €20,793 million in 2015 to €22,062 million in 2016, representing an increase of €1,269 million, or 6%.

Total Revenue

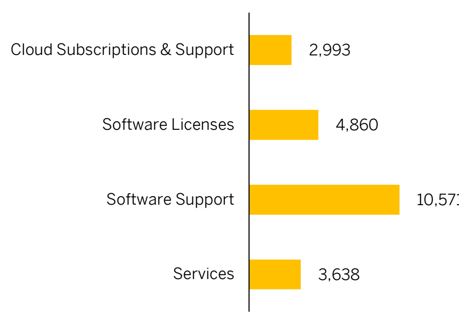
€ millions | change since previous year



This increase reflects a 7% increase from changes in volumes and prices and a 1% decrease from currency effects. The growth in revenue resulted primarily from a €707 million increase in cloud subscriptions and support revenue. Furthermore, software support revenue rose €478 million. This growth is a result of continuously high software license revenue, which increased €25 million in 2016. Cloud and software revenue climbed to €18,424 million in 2016, an increase of 7%. Cloud and software revenue represented 84% of total revenue in 2016 (2015: 83%). Service revenue increased 2% from €3,579 million in 2015 to €3,638 million, which was 16% of total revenue, in 2016.

Revenue by Line Item

€ millions

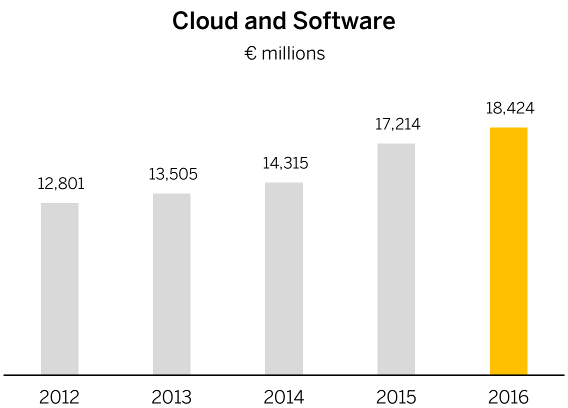


For more information about the breakdown of total revenue by region and industry, see Revenue by Region and Revenue by Industry below.

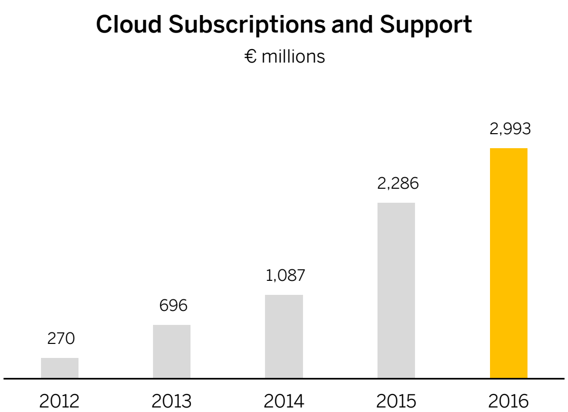
Cloud and Software Revenue

Software licenses revenue results from the fees earned from selling or licensing software to customers. Revenue from cloud subscriptions and support refers to the income earned from contracts that permit the customer to access specific software solutions hosted by SAP during the term of its contract with

SAP. Support revenue represents fees earned from providing technical support services and unspecified software upgrades, updates, and enhancements to customers.



Cloud subscriptions and support revenue increased from €2,286 million in 2015 to €2,993 million in 2016.



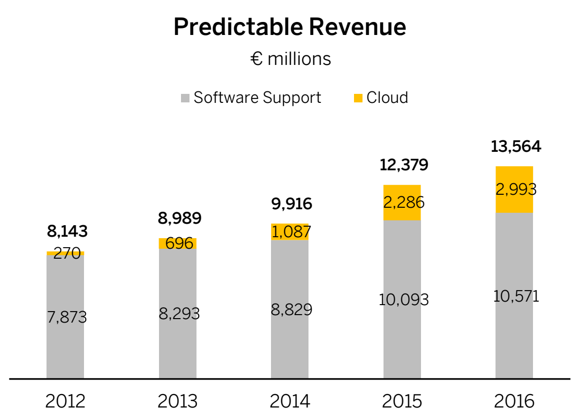
Despite a combination of a challenging macroeconomic and political environment and the accelerating industry shift to the cloud, we achieved a €25 million increase in software license revenue. This increase, from €4,835 million in 2015 to €4,860 million in 2016, reflects a 1% increase from changes in volumes and prices and a 1% decrease from currency effects.

Our customer base continued to expand in 2016. Based on the number of contracts concluded, 16% of the orders we received for software in 2016 were from new customers (2015: 13%). The total value of software orders received was stable year-over-year. The total number of software license contracts remained at the same level with 57,291 (2015: 57,439), while the average order value remained unchanged year-over-year. 29% of our software order entry in 2016 resulted from deals worth more than €5 million (2015: 27%), while 38% resulted from deals worth less than €1 million (2015: 40%).

Our stable customer base, continued investment in new software licenses by customers throughout 2016 and the previous year, and the continued interest in our support offerings resulted in an increase in software support revenue from €10,093 million in 2015 to €10,571 million in 2016. The SAP Enterprise Support offering was the largest contributor to our software support revenue. The €478 million, or 5%, growth in software support revenue reflects a 6% increase from new support business and a 1% decrease from currency effects. This growth is primarily attributable to SAP Product Support for Large Enterprises and SAP Enterprise Support. The acceptance rate for SAP Enterprise Support among new customers reached 100% in 2016 (2015: 99%).

Software licenses and software support revenue rose €503 million, or 3%, from €14,928 million in 2015 to €15,431 million in 2016. This increase reflects a 4% increase from changes in volumes and prices and a 1% decrease from currency effects.

We define predictable revenue as the sum of our software support revenue and our cloud subscriptions and support revenue. Compared to the previous year, our predictable revenue increased 10%, from €12,379 million to €13,564 million in 2016. Predictable revenue accounted for 61% of our total revenue in 2016 (2015: 60%).



Cloud and software revenue grew from €17,214 million in 2015 to €18,424 million in 2016, an increase of 7%. This reflects an 8% increase from changes in volumes and prices and a 1% decrease from currency effects.

Services Revenue

Services revenue combines revenue from professional services, premium support services, training services, messaging services and payment services. Professional services primarily relate to the installation and configuration of our cloud subscriptions and on-premise software products. Our premium support offering consists of high-end support services tailored to customer requirements. Messaging services are primarily transmission of electronic text messages from one mobile phone provider to another. Payment services are primarily delivered in connection with our travel and expense management offerings.

Services revenue increased €59 million, or 2%, from €3,579 million in 2015 to €3,638 million in 2016. This increase reflects a 3% increase from changes in volumes and prices and a 1% decrease from currency effects.

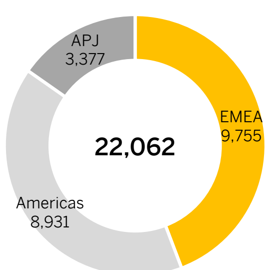
A solid market demand led to a 1% increase of €26 million in consulting revenue and premium support revenue from €2,856 million in 2015 to €2,883 million in 2016. This increase reflects a 2% increase from changes in volumes and prices and a 1% decrease from currency effects. Consulting and premium support revenue contributed 79% of the total service revenue (2015: 80%). Consulting and premium support revenue contributed 13% of total revenue in 2016 (2015: 14%).

Revenue from other services increased €33 million, or 5%, to €756 million in 2016 (2015: €723 million). This reflects a 6% increase from changes in volumes and prices and a 1% decrease from currency changes.

Revenue by Region and Industry

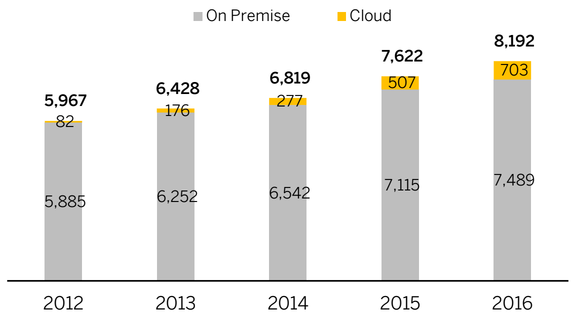
Revenue by Region

Revenue by Region
(based on customer location)
€ millions



EMEA Region
In 2016, the EMEA region generated €9,755 million in revenue (2015: €9,181 million), which was 44% of total revenue (2015: 44%). This represents a year-over-year increase of 6%. Revenue in Germany increased 9% to €3,034 million in 2016 (2015: €2,771 million). Germany contributed 31% (2015: 30%) of all EMEA region revenue. The remaining revenue in the EMEA region was primarily generated in the United Kingdom, France, Switzerland, the Netherlands and Italy. Cloud and software revenue generated in the EMEA region in 2016 totaled €8,193 million (2015: €7,622 million). Cloud and software revenue represented 84% of all revenue in the region in 2016 (2015: 83%).

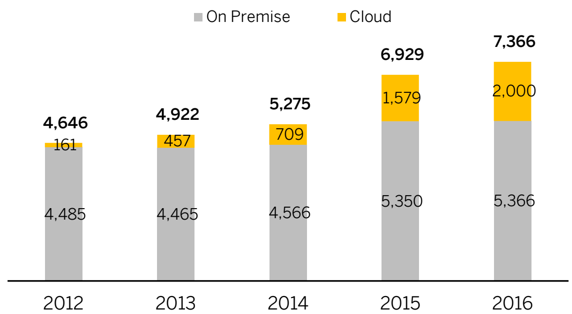
EMEA: Cloud and Software Revenue
€ millions



Cloud subscriptions revenue rose 39% to €703 million in 2016 (2015: €507 million). This growth reflects a 41% increase from changes in volumes and prices and a 3% decrease from currency effects. Software licenses and software support revenue rose 5% to €7,489 million in 2016 (2015: €7,115 million). This increase reflects a 7% increase from changes in volumes and prices and a 2% decrease from currency effects.

Americas Region
In 2016, 40% of our total revenue was generated in the Americas region (2015: 41%). Total revenue in the Americas region increased 6% to €8,931 million; revenue generated in the United States increased 6% to €7,167 million. This growth reflects a 6% increase from changes in volumes and prices and currency effect of 0%. The United States contributed 80% (2015: 80%) of all revenue generated in the Americas region. In the remaining countries of the Americas region, revenue increased 5% to €1,763 million. This increase reflects a 7% increase from changes in volumes and prices and a 2% decrease from currency effects. Revenue in the remaining countries of the Americas region was generated primarily in Mexico, Brazil and Canada. Cloud and software revenue generated in the Americas region in 2016 totaled €7,366 million (2015: €6,929 million). Cloud and software revenue represented 82% of all revenue in the Americas region in 2016 (2015: 82%).

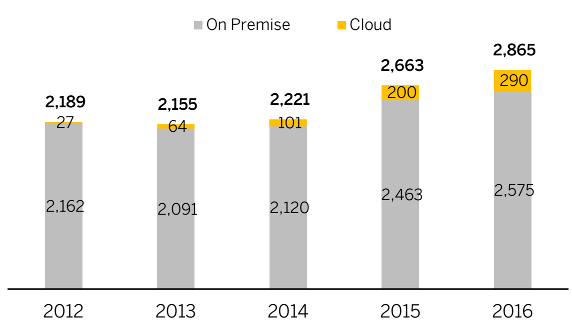
Americas: Cloud and Software Revenue
€ millions



Cloud subscriptions revenue rose by 27% to €2,000 million in 2016 (2015: €1,579 million); currency effects were 0%. Software licenses and software support revenue in 2016 of €5,366 million was virtually unchanged compared to the prior year (2015: €5,350 million).

APJ Region
In 2016, 15% (2015: 15%) of our total revenue was generated in the APJ region. Total revenue in the APJ region increased 6% to €3,377 million. In Japan, revenue increased 24% to €825 million. Revenue from Japan was 24% (2015: 21%) of all revenue generated in the APJ region. The revenue growth in Japan was attributable to a 10% increase from changes in volumes and prices and a 13% increase from currency effects. In the remaining countries of the APJ region, revenue increased 1%. Revenue in the remaining countries of the APJ region was generated primarily in Australia, India and China. Cloud and software revenue in the APJ region totaled €2,865 million in 2016 (2015: €2,663 million). That was 85% of all revenue from the region (2015: 84%).

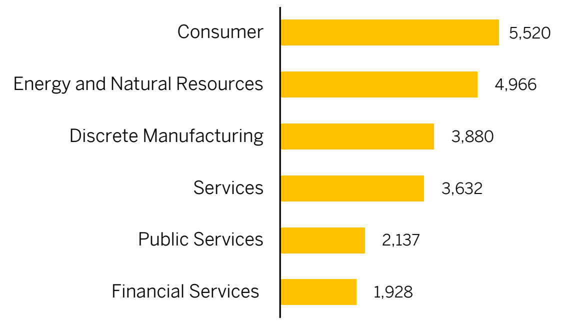
APJ: Cloud and Software Revenue
€ millions



Cloud subscriptions revenue grew 45% to €290 million in 2016 (2015: €200 million). This growth reflects a 43% increase from changes in volumes and prices and a 1% increase from currency effects. Software licenses and software support revenue increased 5% to €2,575 million in 2016 (2015: €2,463 million). This growth reflects a 3% increase from changes in volumes and prices and a 1% increase from currency effects.

Revenue by Industry
We allocate our customers to one of our industries at the outset of an initial arrangement. All subsequent revenue from a particular customer is recorded under that industry sector.

Revenue by Industry
€ millions



In 2016, we achieved above-average growth in the following industry sectors, measured by changes in total revenue: Consumer (€5,520 million, growing 12%); Services (€3,632 million, growing 10%); and Discrete Manufacturing (€3,880 million, growing 6%). Revenue from the other industry sectors was Financial Services (€1,928 million, growing 3%); Energy and Natural Resources (€4,966 million, growing 3%); and Public Services (€2,137 million, decreasing 2%).

Operating Profit and Operating Margin

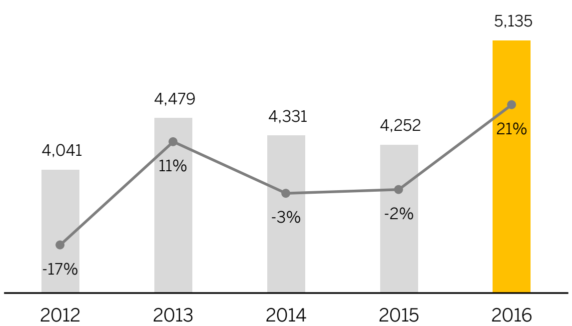
SAP continued to invest in innovation and its cloud business and achieved a record revenue in 2016. Thanks to strong revenue growth and lower restructuring costs, our operating profit improved 21% to €5,135 million (2015: €4,252 million).

In 2016, our operating expenses increased €387 million or 2% to €16,928 million (2015: €16,541 million). The main contributors to that increase were our continued investment in sales activities and our greater revenue-related and investment-related cloud subscriptions and support costs.

The record revenue generated and significantly lower restructuring costs had a positive impact on our operating profit. Continuing investment in cloud infrastructure, in sales activities around the world, and in research and development also affected the results in 2016. The increased operating profit and the higher share price in 2016 pushed the cost of bonus payments to employees and share-based compensation higher. Our employee headcount (measured in full-time equivalents, or FTEs) increased by 7,197 year-over-year.

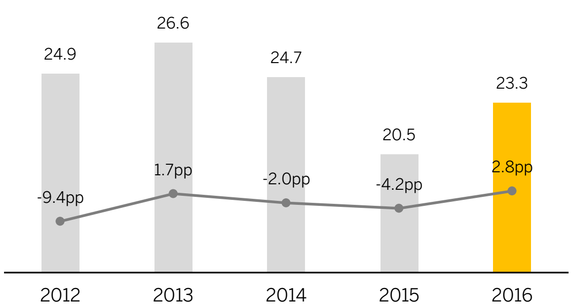
Operating Profit

€ millions | change since previous year



Operating Margin

Percent | change since previous year



The increased operating expenses largely represent investments in the future and were offset by the increase in revenue.

As an overall result of these effects on operating profit, our operating margin widened 2.8pp to 23.3% in 2016 (2015: 20.5%).

Changes to the individual elements in our cost of revenue were as follows:

Cost of Cloud and Software

Cost of cloud and software consists primarily of customer support costs, cost of developing custom solutions that address customers' specific business requirements, costs for deploying and operating cloud solutions, amortization expenses relating to intangibles, and license fees and commissions paid to third parties for databases and the other complementary third-party products sublicensed by us to our customers.

In 2016, the cost of cloud and software increased 5% to €3,495 million (2015: €3,313 million).

Main impact on costs was an additional €291 million year-over-year to extend our cloud business in response to the sustained strength of customer demand, with an associated increase in the expense of delivering and operating cloud applications. These investments contributed to revenue growth. Our margin on cloud subscriptions and support increased 0.8pp to 56.1% (2015: 55.3%). This improvement in margin was achieved primarily through strong growth in revenue. The investments in our cloud business were offset by the significant increase in cloud subscriptions and support revenue.

While software licenses and support revenue increased, savings in customer support, in the cost of developing custom solutions, and in license fees, enabled us to reduce our software and support costs by a total of €109 million year over year.

The gross margin on cloud and software, defined as cloud and software profit as a percentage of cloud and software revenue, widened to 81.0% in 2016 (2015: 80.8%). This change was mainly driven by the improved software license and support margin, which increased 1.2pp to 85.9% (2015; 84.7%).

Cost of Services

Cost of services consists primarily of the cost of consulting, premium services and training personnel and the cost of bought-in consulting and training resources.

As of the second quarter of 2016, we changed the way sales and marketing expenses related to our service activities are classified in our income statement. For more information see the Notes to the Consolidated Financial Statements section, *Note (3b)*.

Although we were able to increase our service revenue by 2% year over year to €3,638 million in 2016 (2015: €3,579 million), our service business continues to be greatly affected as we trend away from classic software licensing and consulting revenue toward more subscription revenue from cloud solutions. In addition, we continue to invest in our ONE Service organization and in our customer co-innovation projects. As a result, cost of services rose 5% to €3,089 million (2015: €2,932 million). Our gross margin on services, defined as services profit as a percentage of services revenue, narrowed to 15.1% (2015: 18.1%).

Research and Development Expense

Our research and development (R&D) expense consists primarily of the personnel cost of our R&D employees, costs incurred for independent contractors we retain to assist in our

R&D activities, and amortization of the computer hardware and software we use for our R&D activities.

Due to growing personnel costs driven by a 12% increase in our R&D headcount by the end of the year, our R&D expense increased by 7% to €3,044 million in 2016 from €2,845 million in 2015. R&D expense as a percentage of total revenue thus increased to 13.8% in 2016 (2015: 13.7%). For more information, see the *Products, Research & Development, and Services section.*

Sales and Marketing Expense

Sales and marketing expense consists mainly of personnel costs, direct sales costs, and the cost of marketing our products and services.

Our sales and marketing expense rose 8% from €5,782 million in 2015 to €6,265 million in 2016. The increase was mainly the result of greater personnel costs as we expanded our global sales force, and of increased expenditure for bonus payments prompted by the strong revenue growth. The ratio of sales and marketing expense to total revenue, expressed as a percentage, increased to 28.4% year-over-year (2015: 27.8%), an increase of 0.6pp.

General and Administration Expense

Our general and administration expense consists mainly of personnel costs to support our finance and administration functions.

General and administration expense decreased 4% from €1,048 million in 2015 to €1,005 million in 2016. This decline in costs is primarily the result of careful cost management. Consequently, the ratio of general and administration expense to total revenue decreased in 2016 to 4.6% (2015: 5.0%).

Segment Information

In 2016, SAP had two reportable segments: the Applications, Technology & Services segment; and the SAP Business Network segment.

For more information about our segment reporting, see the Notes to the Consolidated Financial Statements, *Note (28)*, and the *Performance Management System* section.

Applications, Technology & Services Segment

€ millions, unless otherwise stated (Non-IFRS)	**2016**	2015	Δ in %	Δ in % (Constant Currency)
Cloud subscriptions and support revenue	1,353	932	45	47
Cloud subscriptions and support margin (in %)	51	52	–2pp	–1pp
Segment revenue	19,920	18,963	5	6
Gross margin (in %)	74	74	–0pp	–0pp
Segment profit	8,031	7,723	4	4
Segment margin (in %)	40	41	–0pp	–1pp

In 2016, the revenue increase in the Applications, Technology & Services segment was driven mainly by strong growth in software support revenue, which increased 5% (6% at constant currencies) to €10,464 million. As a consequence of continuous strong demand for our human capital management, customer engagement and commerce, and SAP HANA Enterprise Cloud offerings, cloud subscriptions and support revenue in the Applications, Technology & Services segment grew 45% (47% at constant currencies) to €1,353 million.

The increase of cloud subscriptions and support revenue and software support revenue resulted in an increase in the revenue share of more predictable revenue streams in this segment of 2pp at constant currencies from 58% in 2015 to 59% in 2016. Software license revenue attributable to this segment increased 1% at constant currencies to €4,814 million (2015: €4,770 million).

The segment's cost of revenue during the same time period increased 7% (8% at constant currencies) to €5,279 million (2015: €4,954 million). This increase in expenses was primarily the result of greater investment in expanding our cloud infrastructure and in providing and operating our cloud applications, as well as additional personnel expenses to support the growth of the cloud business.

SAP Business Network Segment

€ millions, unless otherwise stated (Non-IFRS)	**2016**	2015	Δ in %	Δ in % (Constant Currency)
Cloud subscriptions and support revenue	1,595	1,337	19	19
Cloud subscriptions and support margin (in %)	76	75	1pp	1pp
Segment revenue	1,925	1,616	19	19
Gross margin (in %)	67	68	−1pp	−1pp
Segment profit	338	317	7	0
Segment margin (in %)	18	20	−2pp	−3pp

The segment's cost of revenue increased 21% in 2016 (22% at constant currencies) to €631 million (2015: €520 million). The SAP Business Network segment achieved a segment gross profit of €1,295 million in 2016 (2015: €1,095 million), an increase of 18% (17% at constant currencies).

Financial Income, Net

Financial income, net, changed to −€38 million (2015: −€5 million). Our finance income was €230 million (2015: €241 million) and our finance costs were €268 million (2015: €246 million).

Finance income mainly consists of gains from disposal of equity securities totaling €164 million (2015: €176 million), interest income from loans and receivables, and other financial assets (cash, cash equivalents, and current investments) totaling €40 million (2015: €41 million), and income from derivatives totaling €29 million (2015: €30 million).

Finance costs mainly consist of interest expense on financial liabilities amounting to €108 million (2015: €135 million) and negative effects from derivatives amounting to €114 million (2015: €72 million). The decrease in finance costs is mainly due to lower average indebtedness. For more information about financing instruments, see the Notes to the Consolidated Financial Statements section, *Note (17b)*.

Income Tax

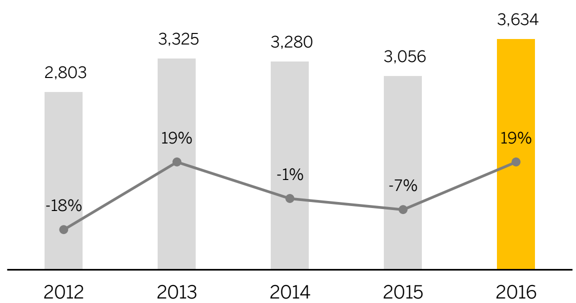
Our effective tax rate increased to 25.3% in 2016 (2015: 23.4%). The increase in the effective tax rate mainly resulted from changes in taxes for prior years and the increase in the profit before taxes. For more information on income taxes, see the Notes to the Consolidated Financial Statements section, *Note (10)*.

Profit After Tax and Earnings per Share

Profit after tax increased to €3,634 million in 2016 (2015: €3,056 million).

Profit after Tax

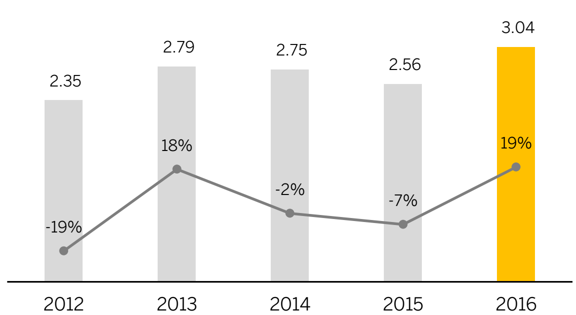
€ millions | change since previous year



Basic earnings per share increased to €3.04 (2015: €2.56). The number of shares outstanding increased to 1,198 million in 2016 (2015: 1,197 million).

Earnings per Share

€ | change since previous year



Dividend

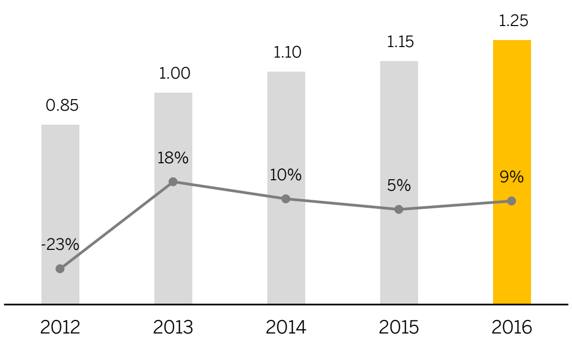
We believe our shareholders should benefit appropriately from the profit the Company made in 2016. In recent years, the payout has always been greater than 35% of profit after tax. We aim to continue our policy to pay a dividend totaling more than 35% of profit after tax in the future.

The Executive Board and the Supervisory Board will recommend to the Annual General Meeting of Shareholders that the total dividend will be increased by 9% to €1.25 per share (2015: €1.15). Based on this recommendation, the overall dividend payout ratio (which here means total distributed dividend as a percentage of profit) would be 41% (2015: 45%).

If the shareholders approve this recommendation and if treasury shares remain at the 2016 closing level, the total amount distributed in dividends would be €1,498 million. The actual amount distributed may be different from this total because the number of shares held in treasury may change before the Annual General Meeting of Shareholders. In 2016, we distributed €1,378 million in dividends from our 2015 profit after tax. In 2016 and 2015, we did not repurchase any SAP treasury shares.

Dividend per Share

€ | change since previous year



Finances (IFRS)

Overview

Global Financial Management

We use global centralized financial management to control liquid assets and monitor exposure to interest rates and currencies. The primary aim of our financial management is to maintain liquidity in the Group at a level that is adequate to meet our obligations. Most SAP companies have their liquidity managed centrally by the Group, so that liquid assets across the Group can be consolidated, monitored, and invested in accordance with Group policy. High levels of liquid assets help keep SAP flexible, sound, and independent. In addition, various credit facilities are currently available for additional liquidity, if required. For more information about these facilities, see the *Credit Facilities* section.

We manage credit, liquidity, interest rate, equity price, and foreign exchange rate risks on a Group-wide basis. We use selected derivatives exclusively for this purpose and not for speculation, which is defined as entering into a derivative instrument for which we do not have corresponding underlying transactions. The rules for the use of derivatives and other rules and processes concerning the management of financial risks are documented in our treasury guideline, which applies globally to all companies in the Group. For more information about the management of each financial risk and about our risk exposure, see the Notes to the Consolidated Financial Statements section, *Notes (24)* to *(26)*.

Liquidity Management

Our primary source of cash, cash equivalents, and current investments is funds generated from our business operations. Over the past several years, our principal use of cash has been to support operations and our capital expenditure requirements resulting from our growth, to quickly repay financial debt, to acquire businesses, to pay dividends on our shares, and to buy back SAP shares on the open market. On December 31, 2016, our cash, cash equivalents, and current investments were primarily held in euros and U.S. dollars. We generally invest only in the financial assets of issuers or funds with a minimum credit rating of BBB, and pursue a policy of cautious investment characterized by wide portfolio diversification with a variety of counterparties, predominantly short-term investments, and standard investment instruments. Investments in financial assets of issuers with a credit rating lower than BBB were not material in 2016.

We believe that our liquid assets combined with our undrawn credit facilities are sufficient to meet our present operating needs and, together with expected cash flows from operations, will support debt repayments and our currently planned capital expenditure requirements over the near term and medium term. It may also be necessary to enter into financing transactions when additional funds are required that cannot be wholly sourced from free cash flow (for example, to finance large acquisitions).

To expand our business, we have made acquisitions of businesses, products, and technologies. Depending on our future cash position and future market conditions, we might issue additional debt instruments to fund acquisitions, maintain financial flexibility, and limit repayment risk. Therefore, we continuously monitor funding options available in the capital markets and trends in the availability of funds, as well as the cost of such funding. In recent years, we were able to repay additional debt within a short period of time due to our persistently strong free cash flow. For more information about the financial debt, see the *Cash Flows and Liquidity* section.

Capital Structure Management

The primary objective of our capital structure management is to maintain a strong financial profile for investor, creditor, and customer confidence, and to support the growth of our business. We seek to maintain a capital structure that will allow us to cover our funding requirements through the capital markets at reasonable conditions, and in so doing, ensure a high level of independence, confidence, and financial flexibility.

For more information about the capital structure and its analysis, see the *Analysis of Consolidated Statement of Financial Position* section and Notes to the Consolidated Financial Statements section, *Note (21)*.

The long-term credit rating for SAP SE is "A2" by Moody's with stable outlook and "A" by Standard & Poor's with positive outlook. Standard & Poor's raised the outlook from stable to positive on August 12, 2016.

Our general intention is to remain in a position to return liquidity to our shareholders by distributing annual dividends totaling more than 35% of our profit after tax as well as repurchasing treasury shares in future. In absence of large acquisitions, our strong operating cash flow will generate excess cash in the next 6–12 months. Based on the actual acquisition volume and liquidity development we would consider a potential share buyback in the second half of 2017.

Credit Facilities

Other sources of capital are available to us through various credit facilities, if required.

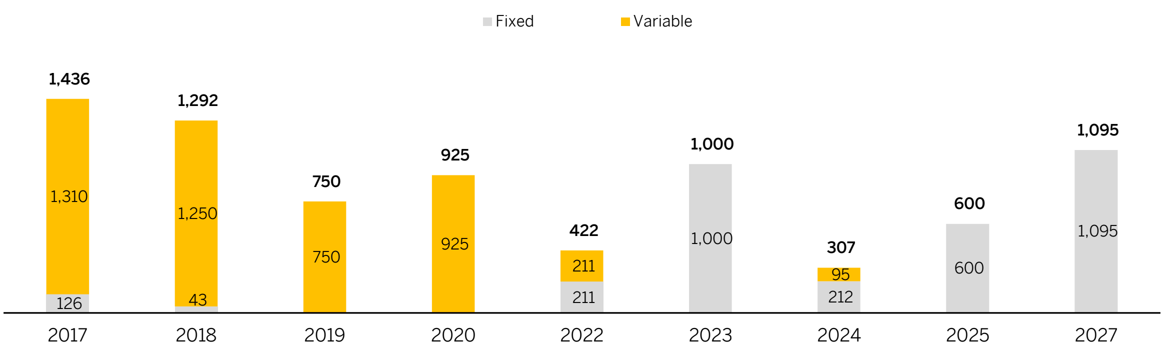
We are party to a committed €2.0 billion revolving credit facility contract which matures in November 2020. The credit facility may be used for general corporate purposes. A possible future utilization is not subject to any financial covenants. So far, we have not used and do not currently foresee any need to use, this credit facility.

As at December 31, 2016, SAP SE had additional available credit facilities totaling €474 million. Several of our foreign subsidiaries have credit facilities available that allow them to borrow funds at prevailing interest rates. As at December 31, 2016, approximately €25 million was available through such arrangements. There were immaterial borrowings outstanding under these credit facilities from our foreign subsidiaries as at December 31, 2016.

Financial Debts

Maturity Profile of Financial Debts

€ millions



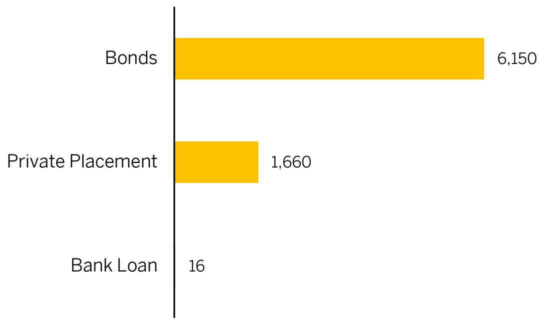
Financial debt on December 31, 2016 included amounts in euros (€6,150 million) and U.S. dollars (€1,660 million). Approximately 58% of financial debt was held at variable interest rates, partially swapped from fixed into variable using interest rate swaps.

In August 2016 we issued a €400 million Eurobond with a maturity of two years and variable interest rates (3-month EURIBOR plus 0.30%).

In 2017, the Company intends to repay two Eurobond tranches of €1,000 million in total as well as two U.S. private placement tranches of US$442.5 million in total when they mature.

Financial Debt

€ millions



For more information about our financial debt, see the Notes to the Consolidated Financial Statements section, *Note (17)*.

Cash Flows and Liquidity

Group Liquidity

€ millions	**2016**	2015	Δ
Cash and cash equivalents	3,702	3,411	291
Current investments	971	148	823
Group liquidity	**4,673**	**3,559**	**1,114**
Current financial debt	–1,435	–567	–868
Net liquidity 1	**3,238**	**2,992**	**246**
Non-current financial debt	–6,390	–8,607	2,217
Net liquidity 2	**–3,153**	**–5,615**	**2,462**

Group liquidity consists of cash and cash equivalents (for example, cash at banks, money market funds, and time deposits with original maturity of three months or less) and current investments (for example, investments with original maturities of greater than three months and remaining maturities of less than one year included in other financial assets) as reported in our Consolidated Financial Statements. Net liquidity is Group liquidity less total financial debt as defined above.

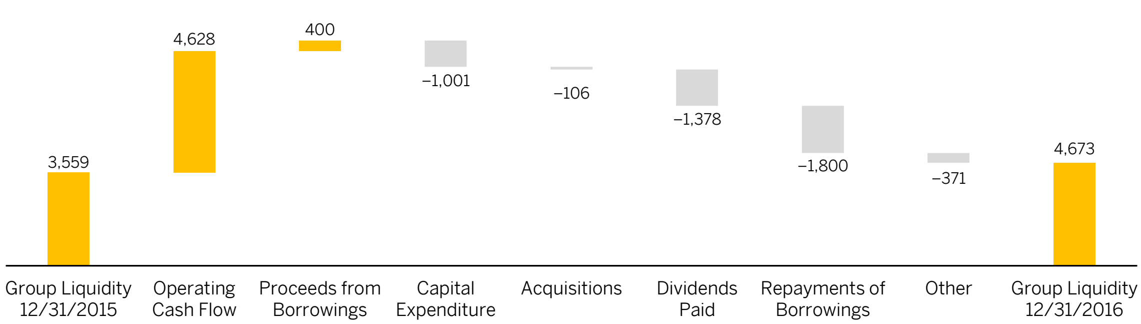
Group liquidity on December 31, 2016, primarily comprised amounts in euros and U.S. dollars.

The increase in Group liquidity compared to 2015 was mainly due to cash inflows from our operations. They were offset by cash outflows for dividend payments and repayments of borrowings.

For information about the impact of cash, cash equivalents, current investments, and our financial liabilities on our income statements, see the analysis of our financial income, net, in the *Operating Results (IFRS)* section.

Group Liquidity Development

€ millions



Analysis of Consolidated Statements of Cash Flow

Analysis of Consolidated Statements of Cash Flow

€ millions	2016	2015	Δ in %
Net cash flows from operating activities	4,628	3,638	27
Net cash flows from investing activities	–1,799	–334	>100
Net cash flows from financing activities	–2,705	–3,356	–19

In 2016 cash inflows from operating activities increased by €990 million to €4,628 million (2015: €3,638 million). This result is primarily due to our revenue increase and higher profitability as well as €161 million lower payments to employees related to restructuring (2015: €476 million).

In 2016, days' sales outstanding (DSO) for receivables, defined as the average number of days from the raised invoice to cash receipt from the customer, increased three days to 74 days (2015: 71 days).

Cash outflows from investment activities increased to €1,799 million in 2016 (2015: €334 million). The increase resulted from lower proceeds from sale of equity or debt instruments of other entities of €793 million in 2016 (2015: €1,880 million). Cash outflows from purchase of intangible assets and property, plant, and equipment increased by €365 million to €1,001 million in 2016. For more information about current and planned capital expenditures, see the *Assets section* and *the Investment Goals* section.

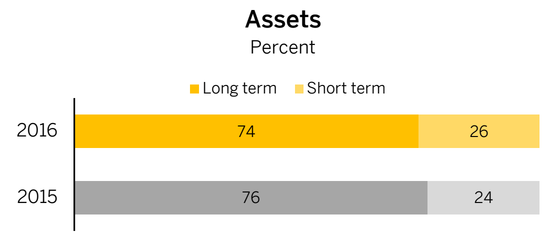
Net cash outflows from financing activities were €2,705 million in 2016, compared to net cash outflows of €3,356 million in 2015. The 2016 cash outflows resulted from repayments of €1,250 million bank loan that we had taken to finance the Concur acquisition. The repayment was partly refinanced through the issuance of a €400 million Eurobond. We also repaid a US$600 million U.S. private placements. Cash outflows in 2015 arose mainly from repayments of €1,270 million bank loan that we assumed in connection with our acquisition of Concur, €550 million Eurobonds and US$300 million U.S. private placements. We refinanced another portion of the bank loan through the issuance of a three-tranche Eurobond of €1,750 million in total.

The dividend payment of €1,378 million made in 2016 exceeded the amount of €1,316 million from the prior year resulting from the increased dividend paid per share from €1.10 to €1.15.

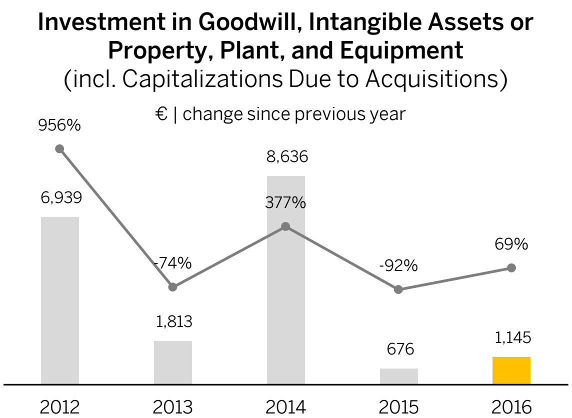
Assets (IFRS)

Analysis of Consolidated Statements of Financial Position

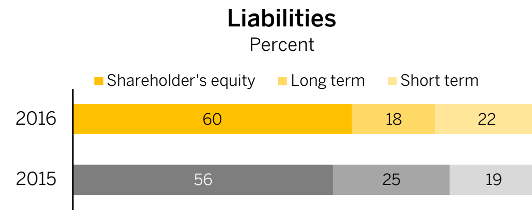
Total assets increased by 7% year-over-year to €44,277 million.



Total current assets increased by 19% in 2016 from €9,739 million to €11,564 million. This was mainly due to an increase in trade and other receivables to €5,924 million (2015: €5,274 million) on the one hand, which stemmed from our strong business in the last quarter of 2016. On the other hand it was due to investments in financial assets (2016: €1,124 million; 2015: €351 million).



Total non-current assets increased by 3% in 2016 to €32,713 million compared to the previous year's figure of €31,651 million. This change was mainly due to foreign exchange related revaluations.

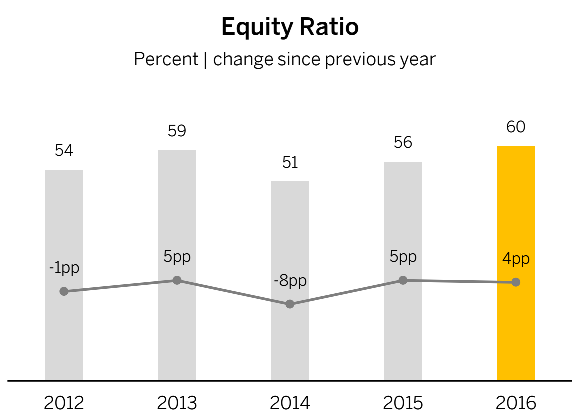


Current liabilities increased by 23% to €9,674 million in 2016 as compared to the prior year (€7,867 million) which was mainly due to reclassifications from non-current to current financial liabilities to reflect the respective maturity profile.

Total non-current liabilities decreased by €2,023 million in 2016 to €8,205 million compared to the previous year figure of €10,228 million, which was (beside of the aforementioned reclassification on financial liabilities) mainly due to a repayment of our outstanding bank loan.

For more information about financing activities in 2016, see the *Finances (IFRS)* section.

Thus, the equity ratio (that is, the ratio of shareholders' equity to total assets) improved to 60% (prior year: 56%).



Principal Capital Expenditures and Divestitures Currently in Progress

In 2016, we continued with various construction projects and started new construction activities in several locations. The expansion of our data centers is an important aspect of our investments planned for 2017. We aim to extend our office space to cover future growth. We plan to cover all of these projects in full from operating cash flow. Our most important projects are listed below:

Construction Projects

€ millions					
Country	**Location of Facility**	**Short Description**	**Estimated Total Cost**	**Cost incurred by December 31, 2016**	**Estimated Completion Date**
Germany	Walldorf	New office building for approx. 700 employees	71	8	October 2018
Germany	Walldorf	New data center	65	9	March 2018
India	Bangalore	New office building for approx. 2,500 employees	60	23	July 2017
Israel	Ra'anana	New office building for approx. 800 employees	63	48	April 2017
United States	New York City	Execution of leasehold improvements and consolidation of offices for approx. 450 employees	52	33	March 2017
United States	Colorado Springs, CO	New data center	122	21	January 2018

For more information about planned capital expenditures, see the *Investment Goals* section. There were no material divestitures within the reporting period.

Competitive Intangibles

The resources that are the basis for our current as well as future success do not appear on the Consolidated Financial Statements. This is apparent from a comparison of the market capitalization of SAP SE (based on all outstanding shares), which was €101.7 billion at the end of 2016 (2015: €90.1 billion), with the book value of our equity on the Consolidated Financial Statements, which was €26.4 billion (2015: €23.3 billion). This means that the market capitalization of our equity is nearly four times higher than the book value. The difference is mainly due to certain internally generated intangible resources that the applicable accounting standards do not allow to be recorded (at all or at fair value) in the Consolidated Financial Statements. They include customer capital (our customer base and customer relations); employees and their knowledge and skills; our ecosystem of partners; software we developed ourselves; our ability to innovate; the brands we have built up, in particular, the SAP brand itself; and our organization.

As of December 31, 2016, SAP was the most valuable company in Germany in terms of market capitalization based on all outstanding shares.

According to the Interbrand "Best Global Brands" annual survey, SAP ranked as the 22nd most valued brand in the world (2015: 26th). We went from number 26 to 22 on the list in just one year. Against other German brands, the SAP brand ranks third behind Mercedes-Benz and BMW, and ninth globally against other IT brands. The SAP brand grew faster than major competitors. Interbrand determined our brand value to be US$ 21.3 billion, an increase of 13% compared to the previous year (2015: US$18.8 billion).

The results of our current and past investment in research and development are also a significant element in our competitive intangibles.

Our customer capital continued to grow in 2016. At the end of 2016, we had more than 345,000 customers (2015: 300,000) in various market segments. The U.S. magazine *Forbes* revealed in its World's Most Valuable Brands report that 98% of the 100 most valued brands, 87% of the Forbes Global 2000 companies, and 100% of the Dow Jones top-scoring sustainability companies are SAP customers. To help us improve insight into our customers' view of SAP, in 2012, we began measuring our Customer Net Promoter Score (NPS), a metric that gives a more complete picture of customer loyalty as it answers the question of how likely our customers would be to recommend SAP. For more information about our new customers and the Customer NPS, see the *Customers* section.

Employee-related activities increased the value of our employee base and our own software. For more information, see the *Employees and Social Investment* section, and the *Products, Research & Development, and Services* section.

Report on the Economic Position of SAP SE

SAP SE is headquartered in Walldorf, Germany, and is the parent company of the SAP Group, which comprises 246 companies. SAP SE is the Group holding company and employs most of the Group's Germany-based development and service and support personnel.

As the owner of the intellectual property in most SAP software, SAP SE derives its revenue mainly from software license fees paid by its subsidiaries for the right to market SAP solutions and bears the group-wide research and development expenses for the most part.

The SAP SE annual financial statements are prepared in accordance with the reporting standards in the German Commercial Code in the amended version of the Accounting Directive Implementation Act BilRUG and the German Stock Corporation Act. The full SAP SE annual financial report and unqualified audit report are submitted to the operator of the *Elektronischer Bundesanzeiger* (Online German Federal Gazette) for publication and inclusion in the *Unternehmensregister* (German Business Register). It is available from SAP SE on request.

The first time adoption of changed reporting standards according to BilRUG led to disclosure changes in our income statement. The definition of revenues has been expanded such that the recognition of income under revenues no longer requires that the income results from sales of the products and goods or from the provision of services that are typical of the company's line of business. So income formerly shown as other operating income is now shown as revenue.

Intercompany royalty reimbursement claims from subsidiaries from the years 2012 to 2015 in the amount of €153 million reduced in the current year both, receivables from affiliated companies and revenue, but relate to other fiscal periods. Resulting taxes of €37 million reduced tax provisions and tax expenses.

In order to improve the presentation of the income situation, expenses for licenses and commissions are no longer shown as other operating expenses. Due to the predominantly revenue-generating nature of these expenses a separate disclosure under cost of services and materials is applied.

Income

The income statement uses the nature of expense method and presents amounts in millions of euros.

The following income statement shows the reconciliation of prior-year figures shown in the financial statements 2015 to the adjusted previous-year figures, taking into account the disclosure changes described above. The comments to income refers to the changes in relation to the adjusted previous-year figures.

SAP SE Income Statement – German Commercial Code (Short Version)

€ millions	**2016**	2015 adjusted	Reconciliation	2015
Total revenue	**12,578**	**10,876**	**10**	**10,866**
Other operating income	1,218	1,709	–10	1,719
Cost of services and materials	–7,337	–5,263	–1,232	–4,031
Personnel expenses	–1,838	–1,763	0	–1,763
Depreciation and amortization	–263	–263	0	–263
Other operating expenses	–2,143	–2,723	1,232	–3,955
Operating profit	**2,215**	**2,573**	**0**	**2,573**
Finance income	**1,155**	**929**	**0**	**929**
Income before taxes	**3,370**	**3,502**	**0**	**3,502**
Income taxes	–760	–824	0	–824
Income after taxes	**2,610**	**2,678**	**0**	**2,678**
Other taxes	–15	–14	0	–14
Net income	**2,595**	**2,664**	**0**	**2,664**

The total revenue of SAP SE in 2016 was €12,578 million (2015: €10,876 million), an increase of 16%. Product revenue increased 26% to €10,157 million (2015: €8,051 million). As in previous years, product revenue was primarily generated from license fees paid by subsidiaries of SAP SE.

The disproportionate rise of SAP SE product revenue compared to SAP Group's increase of cloud and software revenues, is mainly due to license fees paid for distribution and utilization rights of IP held by affiliated companies. In December 2015, SAP SE concluded license agreements granting SAP SE as of January 2016 world-wide distribution and utilization rights of those IP. This mainly concerns the IP rights of our acquisitions from the past years: Ariba, Concur, Fieldglass, SuccessFactors, and Sybase.

Within the scope of these license agreements, SAP SE was granted the right to further develop the existing technology, too. As a result, the volume of IP-related SAP SE services, which had previously been charged to the former IP distributers, decreased, leading to a decrease of other revenues by 15% to €1,927 million (2015: €2.280 million).

SAP SE operating profit decreased 14% to €2,215 million (2015: €2,573 million). Other operating income decreased €491 million to €1,218 million (2015: €1,709 million). The year-over-year decrease is primarily due to a decrease in gains from currency effects. SAP SE cost of services and materials increased 39% to €7,337 million (2015: €5,263 million). The granted IP rights led to an increase in expenses for licenses and commissions by €947 million to €2.179 million (2015: €1,232 million) and mainly IP-related research and development costs resulted in a rise of services received by €1,130 million to €5,137 million (2015: €4,007 million).

SAP SE personnel expenses, mainly the labor cost of software developers, service and support employees, and administration staff employed by SAP SE, increased 4% to €1,838 million (2015: €1,763 million). Other operating expenses decreased 21% to €2,143 million (2015: €2,723 million). This decrease is mainly attributable to €402 million lower losses from currency effects and a €247 million decrease in restructuring costs. The effect was partly offset by a €39 million increase in costs for maintenance and service.

Finance income was €1,155 million (2015: €929 million), an increase of €226 million compared with the previous year. The increase is primarily due to a €230 million higher income from profit transfer agreements and an increase of €5 million in net interest income. These were partly offset by an increase of €7 million in write-downs of financial assets.

SAP SE income before taxes decreased €132 million to €3,370 million (2015: €3,502 million). Income taxes decreased 8% to €760 million (2015: €824 million). After deducting taxes, the resultant net income is €2,595 million (2015: €2,664 million), a decrease of €69 million year-over-year.

Assets and Financial Position

In 2016, SAP SE total assets closed at €32,706 million (2015: €30,953 million).

SAP SE Balance Sheet – German Commercial Code (Short Version)

€ millions	**12/31/2016**	12/31/2015
Assets		
Intangible assets	147	184
Property, plant, and equipment	1,111	998
Financial assets	25,338	25,257
Fixed assets	**26,596**	**26,439**
Inventories	2	2
Accounts receivable and other assets	4,637	3,872
Marketable securities	150	0
Liquid assets	970	360
Short-term assets	**5,759**	**4,234**
Prepaid expenses and deferred charges	**205**	**173**
Deferred taxes	**144**	**106**
Surplus arising from offsetting	**2**	**1**
Total assets	**32,706**	**30,953**
Equity and liabilities		
Shareholders' equity	**15,291**	**14,024**
Provisions	**1,339**	**1,247**
Liabilities	**16,069**	**15,679**
Deferred income	**7**	**3**
Total shareholders' equity and liabilities	**32,706**	**30,953**

Owing to investments in IT infrastructure property, plant and equipment rose by €113 million to €1,111 million (2015: €998 million). Financial assets increased €81 million compared with the previous year to €25,338 million (2015: €25,257 million), due mainly to capital contributions and loans to subsidiaries.

The increase of €765 million in accounts receivable and other assets was principally the result of higher receivables from affiliated companies mainly due to higher product revenue and higher tax receivables. Liquid assets and marketable securities increased by €760 million to €1.120 million (2015: €360 million).

SAP SE shareholders' equity rose 9% to €15,291 million (2015: €14,024 million). Against outflows of €1,378 million associated with the payment of the 2015 dividend, there was a €2,595 million increase in net income and an inflow of

€50 million from the issuance of shares to service the share-based payments of employees. The equity ratio (that is, the ratio of shareholders' equity to total assets) increased from 45% in 2015 to 47% in 2016.

Provisions increased €92 million to €1,339 million (2015: €1,247 million). Other provisions increased €110 million to €953 million (2015: €843 million) primarily as a result of additions to the other employee-related liabilities and provision for losses from derivative forward contracts. Reserves for tax decreased €17 million to €381 million (2015: €398 million).

Liabilities increased €390 million to €16,069 million (2015: €15,679 million). This increase is mainly attributable to contrasting effects: On the one hand, SAP SE issued new debt in the amount of €400 million and liabilities to affiliated companies increased €1.130 million, primarily due to increased cash contributions by subsidiaries through SAP SE centralized management of finance and liquidity; on the other hand, SAP SE repaid €1,250 million in liabilities to banks.

Opportunities and Risks

SAP SE is subject to materially the same opportunities and risks as the SAP Group. For more information, see the *Risk Management and Risks* section as well as the *Expected Developments and Opportunities* section.