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SAP AKTIENGESELLSCHAFT SYSTEMS APPLICATIONS PRODUCTS IN DATA

Form 20-F

March 26, 2009

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**UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 20-F**

(Mark One)

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g)  
OF THE SECURITIES EXCHANGE ACT OF 1934**
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2008**
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from        to**
- SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
Date of event requiring this shell company report  
Commission file number: 1-14251**

**SAP AG**

*(Exact name of Registrant as specified in its charter)*

**SAP CORPORATION**

*(Translation of Registrant's name into English)*

**Federal Republic of Germany**

*(Jurisdiction of incorporation or organization)*

**Dietmar-Hopp-Allee 16**

**69190 Walldorf**

**Federal Republic of Germany**

*(Address of principal executive offices)*

**Wendy Boufford**

**c/o SAP Labs**

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**650-849-4000 (Tel)**

**604-974-4789 (Fax)**

*(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)*

**Securities registered or to be registered pursuant to Section 12(b) of the Act:**

Title of each class	Name of each exchange on which registered
American Depositary Receipts, each representing one Ordinary Share, without nominal value	New York Stock Exchange
Ordinary Shares, without nominal value	New York Stock Exchange*

**Securities registered or to be registered pursuant to Section 12(g) of the Act:** None

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:** None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

Ordinary Shares, without nominal value (as of December 31, 2008)**	1,225,762,900
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Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes  No

Note: Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

\* Not for trading, but only in connection with the registration of American Depositary Shares representing such ordinary shares.

\*\* Including 38,456,734 treasury shares.

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**INTRODUCTION**

SAP AG is a German stock corporation (*Aktiengesellschaft*) and is referred to in this Annual Report on Form 20-F, together with its subsidiaries, as SAP, or as the Company, we, our, or us. Our consolidated financial statements included in Item 18. Financial Statements in this Annual Report on Form 20-F have been prepared in accordance with generally accepted accounting principles in the United States of America, referred to as U.S. GAAP.

In this Annual Report on Form 20-F: (i) references to US\$, \$, or dollars are to U.S. dollars; (ii) references to or are to the euro. Our financial statements are denominated in euros, which is the currency of our home country, Germany. Certain amounts that appear in this Annual Report on Form 20-F may not add up because of rounding adjustments.

Unless otherwise specified herein, euro financial data have been converted into dollars at the noon buying rate in New York City for cable transfers in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York (the Noon Buying Rate ) on December 31, 2008, which was US\$1.3919 per 1.00. No representation is made that such euro amounts actually represent such dollar amounts or that such euro amounts could have been or could be converted into dollars at that or any other exchange rate on such date or on any other dates. The rate used for the convenience translations also differs from the currency exchange rates used for the preparation of the Consolidated Financial Statements. For information regarding recent rates of exchange between euro and dollars, see Item 3. Key Information Exchange Rates. On March 9, 2009, the Noon Buying Rate for converting euro to dollars was US\$1.2565 per 1.00.

Unless the context otherwise requires, references in this Annual Report on Form 20-F to ordinary shares are to SAP AG s ordinary shares, without nominal value. References in this Annual Report on Form 20-F to ADRs are to SAP AG s American Depositary Receipts, each representing one SAP ordinary share.

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Throughout this Annual Report on Form 20-F, whenever a reference is made to our website, such reference does not incorporate by reference into this Annual Report the information contained on our website.

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**FORWARD-LOOKING INFORMATION**

This Annual Report on Form 20-F 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 Annual Report on Form 20-F 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 events. As a result, our forward-looking statements and information are subject to uncertainties and risks. A broad range of uncertainties and risks, many of which are beyond our control, could cause our actual results and performance to differ materially from any projections expressed in or implied by our forward looking statements. These uncertainties and risks include, but are not limited to:

economic conditions in general and trends in our business, particularly the current global economic crisis and general global economic uncertainty and any further deterioration of current conditions;

claims and lawsuits against us that could result in adverse outcomes, including third party infringement claims;

our ability to use intellectual property, including intellectual property licensed to us by third parties;

the success of our new SAP Enterprise Support offering;

our ability to obtain, license and enforce intellectual property rights;

our ability to successfully implement our business strategy, including our SAP Business ByDesign offering as well as our SAP NetWeaver platform strategy;

our ability to procure new licenses, renew existing maintenance agreements and to sell additional professional services, particularly with respect to our installed customer base;

consolidation, competition and rapid technological change in the software industry;

liquidity and the valuation of our financial assets, particularly in the current economic climate;

quarterly fluctuations in our sales and the related difficulty of accurately forecasting future revenue, particularly in the current economic climate;

currency fluctuations;

our ability to establish new relationships and enhance existing relationships with third party distributors, software suppliers, systems integrators and value-added resellers;

the effectiveness of our IT security measures and general IT system availability and Internet-related privacy concerns;

our ability to obtain and expand market acceptance of our services and products, and customer satisfaction with the implementation and installation of our products;

unauthorized or premature disclosure of our future strategies, technologies and products;

social and political instabilities, terrorist attacks or other acts of violence or war;

our ability to retain key personnel with specialized knowledge and technology skills;

our ability to effectively manage our headcount and our geographically dispersed employee base;

our ability to successfully integrate newly acquired businesses;

international regulatory and global political conditions;

our ability to obtain sufficient insurance coverage to avoid negative impacts on our financial position or results of operations resulting from the settlement of claims; and

other risks and uncertainties.

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We describe these and other risks and uncertainties in more detail under **Item 3 Key Information Risk Factors**.

If one or more of these uncertainties or risks materializes, or if management's underlying assumptions prove incorrect, our actual results may differ materially from those described in or inferred from our forward-looking statements and information.

The words **aim, anticipate, believe, continue, could, counting on, is confident, estimate, expect, for, plan, project, predict, seek, should, strategy, want, will, would, guidance, outlook** and similar words used in this Annual Report on Form 20-F relate to us are intended to identify such forward-looking statements. Such information includes, for example, the statements made in **Item 5. Operating and Financial Review and Prospects** and **Item 11. Quantitative and Qualitative Disclosures About Market Risk**, but also appears in other parts of this Annual Report on Form 20-F. The factors that could affect our future financial results are discussed more fully under **Item 3. Key Information Risk Factors** as well as elsewhere in this Annual Report on Form 20-F and in our other filings with the U.S. 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 of this Annual Report on Form 20-F. We undertake no obligation to publicly update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

This Annual Report includes statistical data about the IT industry derived from information published by sources including: Gartner, Inc., or Gartner, a provider of market information and strategic information for the IT industry; International Data Group, or IDC, a provider of market information and advisory services for the information technology, telecommunications, and consumer technology markets; investment bank Goldman Sachs; financial services company UBS; and Forrester Research, a major market research company. This type of data represents only the estimates of Gartner, IDC, Goldman Sachs, UBS, Forrester Research and other sources of industry data. SAP does not adopt nor endorse any of the statistical information provided by sources such as Gartner, IDC, Goldman Sachs, UBS, Forrester Research or other similar sources that is contained in this Annual Report on Form 20-F. In addition, although we believe that data from these companies are generally reliable, this type of data is inherently imprecise. We caution you not to place undue reliance on this data.

## **EXPLANATION OF NON-GAAP FINANCIAL MEASURES**

This document discloses certain financial measures, such as non-GAAP revenues, non-GAAP expenses, non-GAAP operating income, non-GAAP operating margin and constant currency revenue and operating income measures that are not prepared in accordance with U.S. GAAP and are therefore considered non-GAAP financial measures. Our non-GAAP financial measures may not correspond to non-GAAP financial measures that other companies report. The non-GAAP financial measures that we report should be considered as additional to, and not as substitutes for or superior to, revenue, operating income, cash flows, or other measures of financial performance prepared in accordance with U.S. GAAP. Our non-GAAP financial measures included in this document are reconciled to the nearest U.S. GAAP measures, except for projected 2009 figures for which we provide only a projected non-GAAP financial measure without reconciling to a corresponding projected U.S. GAAP measure because a reconciliation is not practicable due to the prospective nature of the information.

We believe that it is of interest to investors to receive certain supplemental historical and prospective non-GAAP financial information used by our management in running our business and making financial, strategic and operational decisions in addition to financial data prepared in accordance with U.S. GAAP to attain a more transparent understanding of our past performance and our future results. Beginning in 2008, we use these non-GAAP measures consistently as defined below in our planning, forecasting, reporting, compensation and external communication. Specifically,

Our management uses these non-GAAP numbers rather than U.S. GAAP numbers as the basis for financial, strategic and operating decisions.

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The variable remuneration components of our board members and employees that are tied to our company's growth and operating performance are based on SAP's achievement of its targets for non-GAAP operating income, non-GAAP software and software-related revenue growth at constant currencies, and non-GAAP operating margin at constant currencies.

The annual budgeting process involving all management units is based on non-GAAP revenues and non-GAAP operating income numbers rather than U.S. GAAP numbers.

All monthly forecast and performance reviews with all senior managers globally are based on these non-GAAP measures rather than U.S. GAAP numbers.

Both company-internal target setting and guidance provided to the capital markets are based on non-GAAP revenues and non-GAAP income measures rather than U.S. GAAP numbers.

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

The non-GAAP measures provide investors with insight into management's decision-making since management uses these non-GAAP measures to run our business and make financial, strategic and operating decisions.

The non-GAAP measures provide investors with additional information that enables a comparison of year-over-year operating performance by eliminating certain direct effects resulting from the acquisition of Business Objects.

Our non-GAAP financial measures reflect adjustments based on the following items, as well as the related income tax effects:

### **Non-GAAP Revenue**

Revenues in this document identified as non-GAAP revenue have been adjusted from the respective U.S. GAAP numbers by including the full amount of Business Objects support revenues that would have been reflected by Business Objects had it remained a stand-alone entity but which are not permitted to be reflected as revenues under U.S. GAAP as a result of fair value accounting for Business Objects support contracts in effect at the time of the Business Objects acquisition.

Under U.S. GAAP we record at fair value the Business Objects support contracts in effect at the time of the acquisition of Business Objects. Consequently, our U.S. GAAP support revenues, our U.S. GAAP software and software-related service revenues and our U.S. GAAP total revenues for periods subsequent to the Business Objects acquisition do not reflect the full amount of support revenue that Business Objects would have recorded for these support contracts absent the acquisition by SAP. Adjusting revenue numbers for this nonrecurring revenue impact provides additional insight into our ongoing performance: The support contracts are typically one-year contracts, and we expect customers will renew them, which would result in revenues from the support fees. However, we cannot provide absolute assurance that these contracts will be renewed.

### **Non-GAAP Operating Expense**

We exclude acquisition-related charges, which are defined as follows:

Amortization expense of intangibles acquired in business combinations and certain standalone acquisitions of intellectual property;

Expense from purchased in-process research and development; and

Restructuring expenses as far as incurred in connection with a business combinations.

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**Non-GAAP Operating Income and Non-GAAP Operating Margin**

Operating income and operating margin in this document identified as non-GAAP operating income and non-GAAP operating margin have been adjusted from the respective operating income and operating margin numbers as recorded under U.S. GAAP by adjusting for the above mentioned non-GAAP revenues and expenses.

We include these non-GAAP revenues and exclude these non-GAAP expenses for the purpose of calculating non-GAAP operating income and non-GAAP operating margin when evaluating the continuing operational performance of the Company because these expenses generally cannot be changed or influenced by management after the acquisition other than by disposing of the acquired assets. As management at levels below the Executive Board has no influence on these expenses we generally do not consider these expenses for purposes of evaluating the performance of management units. As we believe that our Company-wide performance measures need to be aligned with the measures generally applied by management at varying levels throughout the Company we exclude these expenses when making decisions to allocate resources, both on a Company level and at lower levels of the organization. In addition, we use these non-GAAP measures to gain a better understanding of the Company's comparative operating performance from period-to-period and as a basis for planning and forecasting future periods. Considering that management at all levels of the organization is heavily focused on our non-GAAP measures in our internal reporting and controlling, we believe that it is in the interest of our investors that they are provided with the same information.

We believe that our non-GAAP financial measures described above have limitations, which include but are not limited to the following:

The eliminated amounts may be material to us.

Without being analyzed in conjunction with the corresponding U.S. GAAP measures the non-GAAP measures are not indicative of our present and future performance, foremost for the following reasons:

The additional insight into our potential future financial performance that our non-GAAP revenue numbers are intended to provide assumes that Business Objects customers renew their maintenance contracts. Projections of our future revenues made based on these numbers would be overstated if such maintenance renewals do not occur.

While our non-GAAP income numbers reflect the elimination of certain acquisition-related expenses, no eliminations are made for the additional revenues that result from the acquisitions.

The acquisition-related one-time charges that we eliminate in deriving our non-GAAP income numbers are likely to recur should SAP enter into material business combinations in the future.

The acquisition-related amortization expenses that we eliminate in deriving our non-GAAP income numbers are recurring expenses that will impact our financial performance in future years.

While our non-GAAP revenue numbers are adjusted for a one-time impact only, our non-GAAP expenses are adjusted for both one-time and recurring items. Additionally, the revenue adjustment for the fair value accounting for Business Objects support contracts and the expense adjustment for one-time and recurring acquisition-related charges do not arise from a common conceptual basis as the revenue adjustment aims at improving the comparability of the initial post-acquisition period with future post-acquisition periods while the expense adjustment aims at improving the comparability between post-acquisition periods and pre-acquisition periods. This should particularly be considered



when evaluating our non-GAAP operating income and non-GAAP operating margin numbers as these combine our non-GAAP revenues and non-GAAP expenses despite the absence of a common conceptual basis.

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We believe, however, that the presentation of the non-GAAP measures in conjunction with the corresponding U.S. GAAP measures provides useful information to management and investors regarding present and future business trends relating to our financial condition and results of operations. We therefore do not evaluate our growth and performance without considering both non-GAAP measures and U.S. GAAP measures. We caution the readers of this document to follow a similar approach by considering our non-GAAP measures only in addition to, and not as a substitute for or superior to, revenues or other measures of our financial performance prepared in accordance with U.S. GAAP.

**Constant Currency Period-Over-Period Changes**

We believe it is important for investors to have information that provides insight into our sales. Revenue measures determined under U.S. GAAP provide information that is useful in this regard. However, both growth in 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 data expressed in such units to present changes in the volume of products and services sold. To provide information that may be useful to investors in breaking down and evaluating sales volume changes, we do present information adjusted for foreign currency effects about revenue changes and various values and components relating to operating income. We calculate constant currency year-over-year changes in revenue and operating income by translating foreign currencies using the average exchange rates from the previous (comparator) year instead of the report year.

We believe that data on constant currency period-over-period changes has limitations, particularly because the currency effects that are eliminated constitute a significant element of our revenues and expenses and may materially affect our performance. We therefore limit our use of constant currency period-over-period changes to the analysis of changes in volume as one element of the full change in a financial measure. We do not evaluate our growth and performance without considering both constant currency period-over-period changes on the one hand and changes in revenues, expenses, profit, or other measures of financial performance prepared in accordance with U.S. GAAP on the other. We caution the readers of this report to follow a similar approach by considering constant currency period-over-period changes in measures of financial performance only in addition to, and not as a substitute for or superior to, changes in revenues, expenses, income or other measures prepared in accordance with U.S. GAAP.

**Table of Contents****PART I****ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

**ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**ITEM 3. KEY INFORMATION****SELECTED FINANCIAL DATA**

The following table presents selected consolidated financial information of SAP for the five most recent fiscal years. The selected consolidated financial information of SAP is a summary of, is derived from and is qualified by reference to, our consolidated financial statements, with the exception of the 2008 US\$ amounts which are unaudited and are provided for the convenience of readers. The selected consolidated balance sheet data as of December 31, 2006, 2005 and 2004 and the selected consolidated income statement data for the years ended December 31, 2005 and 2004 are derived from our audited consolidated financial statements prepared under U.S. GAAP. However, we have not included our audited consolidated financial statements for those periods in this document. The based selected consolidated balance sheet data as of December 31, 2008 and 2007 and the selected consolidated income statement data for the years ended December 31, 2008, 2007 and 2006 are derived from our audited consolidated financial statements, which are included in Item 18. Financial Statements and have been audited by KPMG AG Wirtschaftsprüfungsgesellschaft ( KPMG ), independent registered public accountants, whose report appears on page F-1 of this Annual Report on Form 20-F.

	<b>2008</b>	<b>Year Ended December 31,</b>			<b>2005</b>	<b>2004</b>
	<b>US\$(<sup>1</sup>)</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>		
		<b>In millions, except earnings per share data</b>				
<b>Income Statement Data<sup>(2)</sup>:</b>						
Total revenue	16,097	11,565	10,242	9,393	8,509	7,514
Operating income	3,953	2,840	2,732	2,578	2,337	2,018
Income from continuing operations	2,682	1,927	1,934	1,881	1,502	1,311
Net income	2,600	1,868	1,919	1,871	1,496	1,311
Earnings per share based on income from continuing operations						
Basic	2.25	1.62	1.60	1.53	1.21	1.05
Diluted	2.25	1.62	1.60	1.53	1.21	1.05
Earnings per share based on net income						
Basic	2.18	1.57	1.59	1.53	1.21	1.05
Diluted	2.18	1.57	1.59	1.52	1.20	1.05
<b>Other Data:</b>						

Weighted-average number of shares  
outstanding

Basic	1,190	1,190	1,207	1,226	1,239	1,243
Diluted	1,191	1,191	1,210	1,231	1,243	1,249

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	2008 US\$( <sup>1</sup> )	Year Ended December 31,				
		2008	2007	2006	2005	2004
In millions, except earnings per share data						
<b>Balance Sheet Data:</b>						
Cash and cash equivalents	1,777	1,277	1,608	2,399	2,064	1,506
Total assets	19,761	14,197	10,366	9,503	9,040	7,585
Shareholders' equity	10,068	7,233	6,503	6,136	5,782	4,594
Subscribed capital( <sup>3</sup> )	1,706	1,226	1,246	1,268	316	316
Short-term financial debt( <sup>4</sup> )	3,236	2,325	32	31	22	26
Long-term financial debt( <sup>4</sup> )	3	2	2	2	9	9

- (1) Amounts presented in US\$ have been translated for the convenience of the reader at 1.00 to US\$1.3919, the Noon Buying Rate for converting 1.00 into dollars on December 31, 2008. See Exchange Rates for recent exchange rates between the Euro and the dollar. This convenience translation is not included in our financial statements and, accordingly, our independent registered public accounting firm has not audited these US\$ amounts.
- (2) All figures are based on continuing operations except for Net income. See Note 11 to our consolidated financial statements in Item 18. Financial Statements for further discussion on our discontinued operations. As these discontinued operations were acquired by us in 2005 the 2004 income statement data does not reflect any discontinued operations.
- (3) On December 15, 2006 there was a fourfold increase in the number of shares under a capital increase pursuant to German law that resulted in an increase to subscribed capital of approximately 950 million common shares. Furthermore, the 2007 and 2008 figures reflect cancellations of 23 million and 21 million treasury shares effective September 7, 2007 and September 3, 2008, respectively. See Item 9. The Offer and Listing General for more detail of the share increase and the cancellation of shares.
- (4) The balances include financial debt representing bank loans, overdrafts and convertible bonds issued to facilitate settlement of share-based compensation plans (See Item 6. Directors, Senior Management and Employees Share-Based Compensation Plans. ). Short-term is defined as having a remaining life of one year or less; long-term is defined as having a remaining term exceeding one year. The significant increase in short-term debt during 2008 is due to debt incurred to finance the acquisition of Business Objects and the related incremental obligations under the Business Objects equity programs.

**EXCHANGE RATES**

The prices for ordinary shares traded on German stock exchanges are denominated in euro. Fluctuations in the exchange rate between the euro and the dollar affects the dollar equivalent of the euro price of the ordinary shares traded on the German stock exchanges and, as a result, may affect the price of the ADRs in the United States. See Item 9. The Offer and Listing for a description of the ADRs. In addition, SAP AG pays cash dividends, if any, in euro. As a result, any exchange rate fluctuations will also affect the dollar amounts received by the holders of ADRs on the conversion into dollars of cash dividends paid in euro on the ordinary shares represented by the ADRs. The deposit agreement with respect to the ADRs requires the depositary to convert any dividend payments from euro into dollars as promptly as practicable upon receipt.

A significant portion of our revenue and expenses is denominated in currencies other than the euro. Therefore, fluctuations in the exchange rate between the euro and the respective currencies to which we are exposed may materially affect our consolidated financial position, results of operations and cash flows. See Item 5. Operating and Financial Review and Prospects Foreign Currency Exchange Rate Exposure. For our foreign currency risk and hedging strategy see Item 11. Quantitative and Qualitative Disclosure About Market Risk Foreign Currency Exchange Rate Risk.

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The following table sets forth the average, high and low Noon Buying Rates for the euro expressed as U.S. dollars per 1.00.

<b>Year</b>	<b>Average<sup>(1)</sup></b>	<b>High</b>	<b>Low</b>
2004	1.2478	1.3625	1.1801
2005	1.2400	1.3476	1.1667
2006	1.2661	1.3327	1.1860
2007	1.3797	1.4862	1.2904
2008	1.4695	1.6010	1.2446

<b>Month</b>	<b>High</b>	<b>Low</b>
2008		
July	1.5923	1.5559
August	1.5569	1.4660
September	1.4737	1.3939
October	1.4058	1.2446
November	1.3039	1.2525
December	1.4358	1.2634
2009		
January	1.3946	1.2804
February	1.3064	1.2547
March (through March 9, 2009)	1.2674	1.2549

(1) The average of the applicable Noon Buying Rates on the last day of each month during the relevant period.

The Noon Buying Rate on March 9, 2009 was US\$1.2565 per 1.00.

**DIVIDENDS**

Dividends are jointly proposed by SAP AG's Supervisory Board (*Aufsichtsrat*) and Executive Board (*Vorstand*) based on SAP AG's year-end stand-alone statutory financial statements, subject to approval by the shareholders and are officially declared for the prior year at SAP AG's Annual General Meeting of Shareholders. Dividends paid to holders of the ADRs may be subject to German withholding tax. See Item 8. Financial Information Other Financial Information Dividend Policy and Item 10. Additional Information Taxation.

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The following table sets forth in euro the annual dividends paid or proposed to be paid per ordinary share in respect of each of the years indicated. The amounts shown in the table for 2005 and prior years are retrospectively adjusted for the effect of the fourfold increase in the number of shares resulting from the capital increase effective December 15, 2006 pursuant to German law. One SAP ADR currently represents one SAP AG ordinary share. Accordingly, the final dividend per ADR is equal to the dividend for one SAP AG common share and is dependent on the euro/U.S. dollar exchange rate. The table does not reflect tax credits that may be available to German taxpayers who receive dividend payments. If you own our ordinary shares or ADRs and if you are a U.S. resident, refer to Item 10. Additional Information Taxation, for further information.

Year Ended December 31,	Dividend Paid per Ordinary Share	
		US\$
2004	0.28	0.35 <sup>(1)</sup>
2005	0.36	0.43 <sup>(1)</sup>
2006	0.46	0.62 <sup>(1)</sup>
2007	0.50	0.77 <sup>(1)</sup>
2008 (proposed)	0.50 <sup>(2)</sup>	0.63 <sup>(2)(3)</sup>

- (1) Translated for the convenience of the reader from euro into U.S. dollars at the Noon Buying Rate for converting euro into U.S. dollars on the dividend payment date. The depositary is required to convert any dividend payments received from SAP as promptly as practicable upon receipt.
- (2) Subject to approval of the Annual General Meeting of Shareholders of SAP AG to be held on May 19, 2009.
- (3) Translated for the convenience of the reader from euro into U.S. dollars at the Noon Buying Rate for converting euro into U.S. dollars on March 9, 2009 of US\$1.2565 per 1.00. The depositary is required to convert any dividend payments received from SAP as promptly as practicable upon receipt. The dividend paid may differ due to changes in the exchange rate.

The amount of dividends paid on the ordinary shares depends on the amount of profits to be distributed by SAP AG, which depends in part upon our performance. The timing and amount of future dividend payments will depend upon our future earnings, capital needs and other relevant factors in each case as proposed by the Executive Board and the Supervisory Board of SAP AG and approved at the Annual General Meeting of Shareholders.

**RISK FACTORS****Economic, Political and Regulatory Risks**

**The current global economic crisis and general uncertainty in global economic conditions has caused, and may in the future cause, a reduction and deferral in demand for our products, negatively impacting our business, results of operations, financial condition and cash flows. Global economic conditions may worsen in the future, exacerbating this negative impact.**



The purchase and implementation of SAP software products typically constitutes a significant portion of our customers' overall corporate budgets. As a result, customer willingness to invest in acquiring and implementing SAP products generally varies with economic and other business conditions. Recently, economic conditions have deteriorated significantly in the regions in which we do business and in the industries in which our customers operate. Specifically, there has been a significant reduction in the availability of credit, increased rates of default and bankruptcy, decreased consumer spending and a substantial decline in most major equity markets. In addition, there has been nearly unprecedented volatility in global capital and banking markets as well as in currency markets in certain countries. As a result of deterioration in global economic conditions and

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financial markets, we have experienced and expect to continue to experience for the foreseeable future a broad range of adverse effects, including but not limited to:

Decreased IT investments generally;

Decreased customer demand for our software and services, including order delays and cancellations;

Customers' inability to obtain credit on acceptable terms, or at all, to finance purchases of our software and services;

Insolvency of customers, partners and key suppliers, leading to a negative impact on our business;

Increased risk in collectability of accounts receivable. For example, the global economic crisis has led to greater write-offs of accounts receivables for SAP in 2008 and may lead to greater write-offs in the future;

Increased reserves for doubtful accounts;

Increased price competition for our products and services;

Decreased customer confidence; and

Pressure on our operating margin.

Continued deterioration of global economic conditions, including the severe recession in the United States and other countries and further disruptions in the credit and financial markets worldwide, will likely have a negative impact on our business, results of operations, financial condition and cash flows which could be significant. In particular, our profitability and cash flows might be significantly adversely affected by the current and any continuing deterioration of the economic conditions in Europe or the United States because we derive a substantial portion of our revenue from software licenses and services in those geographic regions. Additionally, an important feature of our long-term strategy for growth is to increase our offerings for the small and midsize enterprise segment. Consumer hesitancy or limited availability of finance may constrict the business operations of our customers and our channel, development, and implementation partners, and consequently impede our own operations. The consequences may include restrained or delayed investments, late payments, bad debts, and even insolvency among our customers and business partners. These have already had an effect on our revenue growth and incoming payments, and the impact may continue. In addition, our prices could come under more pressure due to more intense competition or deflation. If current economic conditions persist or worsen, we expect that our revenue growth and results of operations will continue to be negatively impacted. Finally, an extended period of further economic deterioration could exacerbate the other risks we describe in this Annual Report on Form 20-F.

See Item 4. Information About SAP Business by Region for information on the regions in which we operate and Item 4. Information About SAP Revenue by Industry Sector for information on the industries in which our customers operate.

**Continued deterioration of global economic conditions could make it increasingly difficult for us to accurately forecast demand for our products and services, and could cause our revenue and operating results to fall short of expectations.**

Our revenue and operating results can vary and have varied in the past, from quarter to quarter. Our revenue in general, and in particular our software revenue, is difficult to forecast for a number of reasons. See the risk factor

below entitled Our sales are subject to quarterly fluctuations and our sales forecast may not be accurate for additional details. Current economic conditions make it even more difficult for us to accurately forecast demand for our products and services. As a result, future quarterly revenue and operating results could fall below our expectations, likely resulting in a decline in our stock price.

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**Our global business activities subject us to economic, regulatory and other risks which could harm our business, operating results and financial condition.**

Our products and services are currently marketed in over 120 countries in the Europe, Middle East and Africa ( EMEA ), North America and Latin America ( Americas ) and Asia Pacific Japan ( APJ ) regions. Sales in these regions are subject to risks inherent in transacting business globally, including, in particular:

general economic or political conditions in each country or region;

conflict and overlap among different tax structures;

potentially adverse tax consequences of doing business in a particular region;

the management of an organization spread over various jurisdictions;

exchange rate fluctuations;

longer payment cycles;

regulatory constraints such as import and export restrictions, competition law regimes, legislation governing the use of the Internet, additional requirements for the development and distribution of software and services, trade restrictions, changes in tariff and freight rates and travel and communication costs;

In Brazil, India, and China, and elsewhere, certain regulatory constraints in the form of, for example, special levies on cross-border royalty payments and bureaucratic import-control processes impede international goods traffic and business operations;

expenses associated with localizing our products and transacting business in the local currency;

different requirements of workers' councils and labor unions across countries; and

higher costs of doing business internationally.

As we expand further into new regions and markets, these risks could intensify. One or more of these factors could adversely impact our operations globally or in one or more particular countries or regions. As a result, our business, operating results and financial condition could be harmed.

**Social and political instabilities including those caused by terrorist attacks, the risk of war or international hostilities, pandemic disease outbreaks and natural disasters could adversely impact our business.**

Terrorist attacks and other acts of violence or war as well as the risk of pandemic disease outbreaks and natural disasters could have a negative impact on the world economy, contribute further to the current climate of economic decline and economic and political uncertainty in many regions in which we do business and affect our and our customers' revenue and investment decisions over an extended period of time. Furthermore, such occurrences could make business continuity and business travel more difficult. This social and political instability could interfere with customers' decision making processes and our ability to sell products and provide services to them.

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Market Risks

**Our future revenue is dependent in part upon our installed customer base continuing to license additional products, renew maintenance agreements and purchase additional professional services; a decision not to renew contracts or not to purchase more of our products or services could adversely impact our business.**

Our large installed customer base traditionally has generated a large portion of our revenue. We have increased our customer base by acquiring other companies and by extending our channel partner ecosystem. Our support strategies are under constant review and development to assist us in addressing our customers' broad range of requirements. In 2008 we rolled out SAP Enterprise Support services, which we believe is more extensive than the support offerings of many of our competitors. Customers with current contracts pay support fees that increase stepwise. Success in achieving our business goals depends significantly on the success of our maintenance (support) models and on our ability to deliver high-quality services. It is possible that existing customers decide not to renew their maintenance contracts with us or not to purchase more of our products or services in the future. Such decisions by customers could have a material adverse effect on our business and results of operations.

**Consolidation in the software industry may result in unstable and/or decreased demand for our software and stronger peer companies in the long term.**

The entire IT sector, including the software industry, has in recent years experienced a period of consolidation through mergers and acquisitions. We expect this trend to continue for the foreseeable future. Although consolidations in the software industry may create market opportunities for remaining entities, any consolidation could create uncertainty among existing and potential customers regarding future IT investment plans. In turn, this could diminish customer demand for our products and services and could result in longer sales cycles as customers determine which company best addresses their needs. Also, consolidated companies may emerge as stronger competitors with more resources, a larger customer base and a wider variety of product offerings than our own.

**Due to intense competition, our market share and financial performance could decline.**

The software industry has been and continues to be intensely competitive. The market for our products continues to be intensely competitive, with technology continuing to evolve rapidly. As part of our business strategy, over the last few years we have focused our efforts in areas where demand is expected to grow more rapidly. In particular, we have focused on the completion of our service-oriented architecture (SOA) road map, customer relationship management solutions, solutions for small and midsize enterprises, as well as industry-tailored solutions for specific industries such as retail and financial services. Our expansion from traditional large enterprise resource planning (ERP) product offerings to our new product and services offerings exposes us to competitors varying in size, geographic location and specialty. Current and potential competitors have established and may continue to establish cooperative relationships among themselves or with third parties to increase the ability of their products to address customer needs better than we do. Competition, with respect to pricing, product quality and functionalities/features, and consulting and support services, could increase substantially and result in price reductions, cost increases or loss of market share.

The continuing trend towards outsourcing business processes to external providers (business process outsourcing, or BPO ) and other software-based services could result in increased competition for us with systems integrators, consulting firms, telecommunications firms, computer hardware and software vendors and other IT service providers.

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The software application delivery model often referred to as SaaS, or software as a service, is popular particularly in the mid-market due to its low initial cost requirements and Web-based operability. Our on-demand solutions are targeted at midsize enterprises and we face strong competition in this SaaS arena.

In response to competition, we have been required in the past, and may be required in the future, to furnish additional discounts or other concessions to customers or otherwise modify our pricing practices. These developments have impacted and may increasingly negatively impact our revenue, earnings and market share.

### Business Strategy Risks

#### **Demand for our newly introduced products such as SAP Business ByDesign may not develop as planned and our mid-market strategy may not be successful.**

We are investing significant resources in developing and marketing new and enhanced products and services. Demand for and customer acceptance of recently introduced products and services are subject to a high level of uncertainty, especially due to the current global economic crisis and the resulting global economic uncertainty.

Targeting midsize companies with the aim of building a leading position in the mid market is a key part of our strategy. To that end, expanding our network of business partners and creating the infrastructure for volume business are of great importance. To tap potential business in the lower mid-market, we have spent approximately 242 million beginning in 2007 through 2008 in sales channels, processes, infrastructure, and human resources, all oriented toward new customer relationships and a larger, more diversified partner ecosystem.

Our newly architected mid-market solutions are in contrast to our traditional software solution offerings due to their different approach to market and different product appeal to a large mass of midsize companies that traditionally have not considered purchasing an integrated business application to support their core business functions.

Despite our efforts, demand for these products and services may not develop, which could have a material adverse effect on our business, financial position and results of operations or cash flows.

#### **Any failure to develop new relationships and enhance existing relationships with third-party distributors, software suppliers, system integrators and value-added resellers that help sell our products and services may adversely affect our revenues.**

We have entered into agreements with a number of leading suppliers of computer software and hardware and other technology providers to enable compatibility of certain of the products produced by such suppliers with our software products. Also, we have supplemented our consulting and support services (in the areas of product implementation, training and maintenance) through alliance partnerships with third-party hardware and software suppliers, systems integrators, and consulting firms. Most of these agreements and alliances are of relatively short duration and are non-exclusive. In addition, we have established relationships relating to the resale of certain of our software products by third parties. These third parties include value-added resellers and, in the area of application hosting services, certain computer hardware vendors, systems integrators and telecommunications providers. Our growth strategy includes commencing and maintaining relationships with independent software vendors and value added resellers for our products targeted at small and midsize enterprises. Most of these third parties and business partners have similar arrangements with our competitors. In addition, some of these third parties also produce their own standard application or technology integration software in competition with SAP.

There can be no assurance that these third parties or business partners will continue to cooperate with us when our agreements or partnerships expire or are up for renewal. In addition, there can be no assurance that these third parties

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and partners will devote sufficient resources to promote, sell, support and integrate our

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products to enable us to compete successfully with other software vendors. Finally, there can be no assurance that these third parties and partners will provide high-quality products or services, or that actions taken or omitted to be taken by these parties will not adversely affect us. The failure to obtain high-quality products or services that enable us to compete successfully or to renew such agreements or partnerships could adversely affect our ability to continue to develop product enhancements and new solutions that keep pace with anticipated changes in hardware and software technology and telecommunications. In addition, any of these failures could adversely affect our ability to penetrate target markets; consequently, demand for our software products and services could decline.

### Human Capital Risks

**If we were to lose the services of members of management and employees who possess specialized knowledge and technology skills, we may not be able to manage our operations effectively or develop new products and services.**

If our highly skilled and specialized personnel leave the Company and qualified replacements or new resources are not available or if we decide to invest in additional resources in certain areas we may not be able to manage our operations effectively to achieve our targets. Especially as we embark on the introduction of new and innovative technology offerings, we are relying on being able to build up and maintain a specialized workforce with deep technological know-how to ensure an optimal implementation of such new technologies in accordance with our customers' demands. Most of our current employees, with the exception of selected managers, are subject to employment agreements or conditions that do not contain post-employment noncompete provisions and, in the case of most of our existing employees outside of Germany, permit the employees to terminate their employment on relatively short or no notice. There can be no assurance that we will continue to be able to attract or retain the personnel we require to develop and market new and enhanced products and to market and service our existing products and conduct our operations successfully. Further, recruiting of personnel may expose us to claims from other companies seeking to prevent their employees from working for a competitor.

**If we do not effectively manage headcount as well as our geographically dispersed employee base, our business may not operate efficiently, and this could have an adverse impact on our results of operations.**

Changes in employees and infrastructure might lead to a mismatch between our costs and revenues in the future. In January 2009 we announced our intention to reduce the number of positions globally to 48,500 by the end of the year, and to take advantage of any attrition during this time to assist in meeting our year end goal. If we do not manage our intended reduction in number of positions as planned, or if we are unable to manage effectively our geographically dispersed workforce, our business may not operate efficiently and this could have an adverse impact on our results of operations.

### Organizational and Governance-Related Risks

**We are subject to significantly increased governance-related regulatory requirements both in Germany and the United States.**

As a stock corporation domiciled in Germany and listed in Germany and the United States, SAP is subject to governance-related regulatory requirements under both jurisdictions. These standards are among the highest standards worldwide and have grown considerably in the past few years. In the United States, the Sarbanes-Oxley Act of 2002 requires the establishment, ongoing assessment and certification of an effective system of internal control over financial reporting accompanied by stringent documentation efforts for companies and their external auditors. Also in the United States, the Foreign Corrupt Practices Act requires not





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only accurate books and records, but also sufficient controls, policies and processes to ensure business is conducted without the influence of bribery and corruption on an international scale. Since the German federal government issued the 10-point program to strengthen corporate integrity and investor protection in the past years, various new legislation was passed to improve investor protection, transparency and shareholder democracy. Additionally, most of our subsidiaries face increasing local regulatory requirements many of which have been expanded in recent years. Given the high level of complexity of these laws there can be no assurance that we will not be held in breach of certain regulatory requirements, for example, through fraudulent or negligent behavior of individual employees, our failure to comply with certain formal documentation requirements or otherwise. Any corresponding accusation against us, whether merited or not, may have a material adverse impact on our reputation as well as the trading price of our ordinary shares and ADRs.

### **Principal shareholders may be able to exert control over our future direction and operations.**

As of March 9, 2009, the beneficial holdings of SAP AG's principal shareholders and the holdings of entities controlled by them constituted in the aggregate approximately 28% of the outstanding ordinary shares of SAP AG. If SAP AG's principal shareholders and the holdings of entities controlled by them vote in the same manner, this could delay, prevent or facilitate a change in control of SAP or other significant changes to SAP AG or its capital structure. See Item 7. Major Shareholders and Related-Party Transactions Major Shareholders, for further information.

### **Sales of ordinary shares by principal shareholders could adversely affect the price of our capital stock.**

The sale of a large number of ordinary shares by any of the principal shareholders and related entities could have a negative effect on the trading price of our ADRs or our ordinary shares. We are not aware of any restrictions on the transferability of the shares owned by any of the principal shareholders or related entities.

### **U.S. judgments may be difficult or impossible to enforce against us or our Board members.**

Currently, except for John Schwarz and Bill McDermott, all members of SAP AG's Executive Board and all members of the Supervisory Board are non-residents of the United States. A substantial portion of the assets of SAP and our Board members are located outside the United States. As a result, it may not be possible to effect service of process within the United States upon non-U.S. resident persons or SAP or to enforce against non-U.S. resident persons judgments obtained in U.S. courts predicated upon the civil liability provisions of the securities laws of the United States. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in Germany.

### **SAP's Sustainability Strategy may be difficult to maintain, and a failure by us to meet customer or partner expectations or generally accepted sustainability standards could have an adverse impact on our results of operations, our business and our reputation.**

For SAP, sustainability is a standard that guides our engagement in new business opportunities holistically encompassing profitable growth, environmental value, and societal benefit. Therefore, we address sustainability risks, especially relating to climate change, corporate integrity, human resources management, the ethical behavior of suppliers, the accessibility, user-friendliness, and safety of our products, privacy and data protection in connection with the use of SAP products, and the digital divide the belief that people's access to digital and information technology is dependent on social factors. If our sustainability practices are not sufficient to meet the expectations of our customers and partners or generally accepted sustainability standards, this could have an adverse impact on our results of operations, our business and our reputation.



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### Communication and Information Risks

#### **Our IT security measures may be breached or compromised and we may sustain unplanned IT system unavailability.**

The Internet is a public network, and data is sent over this network from many sources. We rely on encryption, authentication technology and firewalls to provide security for confidential information transmitted to and from us over the Internet. Anyone who circumvents our security measures could misappropriate proprietary information or cause interruptions in our services or operations. In the past, computer viruses and software programs that disable or impair computers have been distributed and have rapidly spread over the Internet. Computer viruses could be introduced into our systems or those of our customers or suppliers, which could disrupt our network or make it inaccessible to customers or suppliers. Our security measures may be inadequate to prevent security breaches, and our business would be harmed if we do not prevent them. In addition, we may be required to expend significant capital and other resources to protect against the threat of security breaches and to alleviate problems caused by breaches as well as by any unplanned unavailability of our internal IT systems.

#### **Wide acceptance of the use of Internet-based transactions may be hindered due to privacy concerns and privacy breaches.**

Consumers have significant concerns about secure transmissions of confidential information, especially financial information, over public networks like the Internet. This remains a significant obstacle to general acceptance of e-commerce and certain aspects of our business, such as our on-demand business. Advances in computer capabilities, new discoveries in the field of cryptography or other events or developments could result in compromises or breaches of security such as those that have generated widespread media attention. Continued high-profile cases of inadvertent and unauthorized disclosure of personal information could have the effect of substantially reducing the use of the Web for commerce and communications and therefore could adversely impact our long-term strategy for growth.

#### **We may not be able to prevent unauthorized or premature disclosure of our future strategies, technologies and products, resulting in competitive disadvantage.**

We have established a range of IT security standards and organizational communication protocols to help ensure that internal, confidential communications and information about sensitive subjects such as our future strategies, technologies and products are not improperly or prematurely disclosed to the public. There is no guarantee that the established protective mechanisms will work in every case. SAP's competitive position could be compromised considerably if confidential information about the future direction of our strategies, technologies or products becomes public knowledge.

### Financial Risks

#### **Our liquidity and the valuation of our financial assets may continue to be adversely impacted by the global economic downturn.**

We use global centralized financial management to control liquid assets, interest, and currencies with the goal of maintaining Group liquidity at a level that is adequate to meet our obligations. Most SAP companies are included in our central cash management system. High levels of liquid assets and marketable securities provide a strategic reserve, helping keep SAP flexible, sound, and independent. We have a syndicated credit line, and other bilateral credit lines on which we can draw if necessary. Due to the current global economic conditions and the credit markets in particular, refinancing conditions have become markedly more difficult for the banks, which result in less advantageous borrowing terms for businesses. We cannot therefore exclude the possibility that the



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risk of increased financing expense could materially affect our financial position, results of operations and cash flows.

SAP's investment policy is set out in our internal treasury guideline document, which is a collection of rules that apply globally to all companies in the Group. Among its stipulations is a requirement that we invest only in assets from investment grade rated issuers. The weighted average rating of our financial assets is between A and A+. We pursue a policy of cautious investment characterized by wide portfolio diversification with a variety of counterparties, predominantly short-term investments, and standard investment instruments. We cannot, however, exclude the possibility that the current financial crisis could negatively affect our assets.

**Because we conduct our operations throughout the world, our results of operations may be affected by currency fluctuations.**

Although the euro has been our financial and reporting currency since January 1, 1999, a significant portion of our business is conducted in currencies other than the euro. Approximately 64% of our consolidated revenue in 2008 was attributable to operations in non-euro member states and translated into euro. As a consequence, period-to-period changes in the average exchange rate in a particular currency versus the euro can significantly affect reported revenue and operating results. In general, appreciation of the euro relative to another currency has a negative effect on reported results of operations, while depreciation of the euro has a positive effect, although such effects may be short term in nature. We continually monitor our exposure to currency risk and pursue a company-wide foreign exchange risk management policy. We have in the past and expect to continue in the future to at least partly hedge such risks with certain financial instruments. There can be no assurance that our hedging activities, if any, will be effective. See Item 11. Quantitative and Qualitative Disclosures about Market Risk Foreign Currency Exchange Rate Risk.

**Our sales are subject to quarterly fluctuations and our sales forecast may not be accurate.**

Our revenue and operating results can vary and have varied in the past, sometimes substantially, from quarter to quarter. Our revenue in general, and in particular our software revenue, is difficult to forecast for a number of reasons, including:

- the relatively long sales cycles for our products;
- the large size and extended timing of individual license transactions;
- the timing of the introduction of new products or product enhancements by us or our competitors;
- changes in customer budgets;
- seasonality of a customer's technology purchases; and
- other general economic and market conditions, such as the global economic crisis that emerged in late 2008.

As many of our customers make and plan their IT purchasing decisions at or near the end of calendar quarters, and with a significant percentage of those decisions being made during the fourth quarter, even a small delay in purchasing decisions could have a material adverse effect on our results of operations. While our dependence on single, large scale sales transactions has decreased in recent years due to a relative increase in the number of license transactions concluded by SAP, mainly attributable to SAP's strengthened focus on the small and midsize enterprises (SME) segment, there can be no assurance that our results will not be adversely affected by the loss or delay of one or a few large sales, which continue to occur especially in the large enterprise segment.

We use a pipeline system to forecast sales and trends in our business. Our sales personnel monitor the status of proposals, including the date when they estimate that a customer will make a purchase decision and the potential revenue from the sale. While this pipeline analysis may provide us with some guidance in business

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planning, budgeting and forecasting, these pipeline estimates may not consistently correlate to revenue in a particular quarter and could cause us to improperly plan, budget or forecast. Because our operating expenses are based upon anticipated revenue levels and because a high percentage of our expenses are relatively fixed in the near term, any shortfall in anticipated revenue or delay in recognition of revenue could result in significant variations in our results of operations from quarter to quarter or year to year. A continued deterioration in global economic conditions would make it increasingly difficult for us to accurately forecast demand for our products and services, and could cause our revenue, results of operations and cash flows to fall short of expectations. We have increased over recent years, and plan to continue to increase in the future, the following expenditures:

expansion of our operations;

research and development directed towards new products and product enhancements; and

development of new distribution and resale channels, particularly for small and midsize enterprises.

Such future increases in expenditures will depend, among other things, upon economic conditions, ongoing results and evolving business needs. To the extent such expenses precede or are not subsequently followed by increased revenue, our quarterly or annual operating results would be materially adversely affected and may vary significantly from preceding or subsequent periods.

### **The market price for our ADRs and ordinary shares may be volatile.**

The trading prices of our ADRs and ordinary shares have experienced and may continue to experience significant volatility. The current trading prices of the ADRs and the ordinary shares reflect certain expectations about the future performance and growth of SAP, particularly on a quarterly basis. However, our revenue can vary and has varied, sometimes substantially, from quarter to quarter, causing significant variations in operating results and in growth rates compared to prior periods. Any shortfall in revenue or earnings from levels projected by us quarterly or from projections made by securities analysts has had and could have an immediate and significant adverse effect on the trading prices of the ADRs or the ordinary shares in any given period. Additionally, we may not be able to confirm our projections of any such shortfalls until late in the quarter or following the end of the quarter because license agreements are often executed late in a quarter. Finally, the stock prices for many companies in the software sector have experienced wide fluctuations, which have often not been directly related to an individual company's operating performance. The trading prices of our ADRs and ordinary shares have in the past and could in the future fluctuate in response to various factors including, but not limited to:

the announcement of new products or product enhancements by us or our competitors;

technological innovation by us or our competitors;

quarterly variations in our results of operations;

changes in revenue and revenue growth rates on a consolidated basis or for specific geographic areas, business units, products or product categories;

speculation in the press or financial community;

general market conditions specific to particular industries;

litigation to which we are a party;



general and country specific economic or political conditions (particularly wars, terrorist attacks, etc.); and proposed and completed acquisitions or other significant transactions by us or our competitors.

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Many of these factors are beyond our control. In the past, companies that have experienced volatility in the market price of their stock have been subject to shareholder lawsuits including securities class action litigation. Any such lawsuits against us, with or without merit, could result in substantial costs and the diversion of management's attention and resources, resulting in a decline in our results of operations and our stock price.

### **Our revenue mix may vary and may negatively affect our profit margins.**

We generally license our software products for an upfront license fee based on the number and types of users or other applicable metrics. Maintenance fees are typically established based on a specified percentage of the license fee. Variances or slowdowns in our licensing activity may negatively impact our current and future revenue from maintenance and services since such maintenance and services revenues typically follow and are dependent upon software sales. Historically, the profit margin from our services arrangements is lower than that of our software sales. Any decrease in the percentage of our total revenue derived from software licensing could have a material adverse effect on our business, financial position, results of operations or cash flows.

We have introduced new licensing models such as on-demand and subscription models which typically result in revenue being recognized over time. Although revenue from such new models is still relatively insignificant, we expect it to grow in the future. A significant portion of the related cost of developing, marketing and providing our solutions to customers under such new models could be incurred prior to the recognition of revenue, thus impacting our profit margin in the short term.

### **Management's use of estimates may affect our results of operations and financial position.**

Our financial statements are based upon the accounting policies as described in Note 3 to our consolidated financial statements in Item 18. Financial Statements. Such policies require management to make significant estimates, assumptions and judgments that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported amounts of revenues and expenses. Facts and circumstances used by management in making estimates and judgments may change from time to time and may result in significant variations, including adverse effects on our results of operations or financial position.

### **Revenue recognition accounting pronouncements and other financial reporting standards may adversely affect our reported financial information.**

We regularly monitor our compliance with all of the financial reporting standards and any new pronouncements that are relevant to us. Findings of our monitoring activity or the pronouncement of new financial reporting standards may require us to change our revenue recognition or other financial reporting policies, to alter our operational policy to reflect new or amended financial reporting standards, or to restate our published financial reporting information. We cannot exclude the possibility that this may have a material impact on our financial position and results of operations. Our significant accounting policies are described in Note 3 to our consolidated financial statements in Item 18. Financial Statements.

### **The cost of derivative instruments for hedging of share-based compensation plans may exceed the benefits of those arrangements.**

To reduce the volatility of the income statement impact of our share-based payment programs, we use derivative instruments to hedge risks resulting from future cash flows associated with STAR (stock appreciation rights) and SAP SOP (SAP stock option plan) plans. We cannot exclude the possibility that the expense of hedging the STAR and SOP plans will exceed the related benefits or that a decision not to hedge a particular cash flow stream will prove to be disadvantageous.



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### Project Risks

**Customer implementation and installation of our products involves significant resources and is subject to significant risks.**

Implementation of SAP software is a process that often involves a significant commitment of resources by our customers and is subject to a number of significant risks over which we may have little or no control. These risks include in particular:

- shortage of our trained consultants available to assist customers in the implementation of our products;
- requirements that do not meet customer expectations or the software does not fit to the business model of the customer;
- third-party consultants do not have the know-how or resources to successfully implement the software;
- the implementation of the software is destabilized by custom specific software development; and
- the safeguarding measures offered by SAP are not implemented by customers and partners.

Some of our customers have incurred significant third-party consulting costs and experienced protracted implementation times in connection with the purchase and installation of SAP software products. In addition, the success of new SAP software products introduced by us may be adversely impacted by the perceived or actual time and cost to implement the SAP software products. We cannot guarantee that we can reduce or eliminate protracted installation or significant third-party consulting costs, that shortages of our trained consultants will not occur, or that our costs to perform installation projects will not exceed the fees we receive when fixed fees are charged by us. Therefore, unsuccessful customer implementation projects could result in claims from customers, harm SAP's reputation, and cause a loss of future revenues.

### Product Risks

**We depend on technology licensed to us by third parties, and the loss of this technology could delay implementation of our products or force us to pay higher license fees.**

We license numerous third-party technologies that we incorporate into our existing products, on which, in the aggregate, we may be substantially dependent. There can be no assurance that the licenses for such third-party technologies will not be terminated, that the licenses will be available in the future on terms acceptable to us or that we will be able to license third-party software for future products. In addition, we may be unable to renegotiate acceptable third-party license terms to reflect changes in our pricing models. While we do not believe that one individual technology we license is material to our business, changes in or the loss of third-party licenses could lead to a material increase in the costs of licensing or to SAP software products becoming inoperable or their performance being materially reduced, with the result that we may need to incur additional development or licensing costs to ensure continued performance of our products. The risk increases if we acquire a company or a company's intellectual property assets that have been subject to third-party technology licensing and product standards less rigorous than our own. We cannot exclude the possibility that adverse effects may result from a product of a business we acquire.

**Undetected errors, shortcomings in our security features or delays in new products and product enhancements may result in increased costs to us and delayed demand for our products.**

To achieve customer acceptance, our new products and product enhancements often require long development and testing periods. These development efforts are subject to multiple risks. For example,

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scheduled market launches can be delayed and products may not completely satisfy our stringent quality standards or meet customer expectations, market needs, or comply with local standards and requirements. Generally, first releases are licensed to a controlled group of customers after a validation process. New products and product enhancements may contain a number of undetected errors, or bugs, or prove incapable of high volume data processing when they are released. There can be no assurance that all errors and requirements can be corrected to the customer's satisfaction. As a result, we may be faced with customer claims for cash refunds, damages, replacement software or other concessions. The risk of errors and their adverse consequences may increase as we seek to introduce a variety of new software products simultaneously. Significant undetected errors or delays in introducing new products or product enhancements could affect market acceptance of SAP software products, and any such events could have a material adverse effect on SAP's financial condition, cash flow, results of operations and reputation.

The use of SAP software products by customers in business-critical applications and processes and the relative complexity of some of our software products create the risk that customers or other third parties may pursue warranty, performance or other claims against us for actual or alleged failures of SAP software products, the provision of services or application hosting. We have in the past been, and may in the future continue to be, subject to such warranty, performance or other similar claims.

In addition, certain of our Internet browser-enabled products include security features that are intended to protect the privacy and integrity of customer data. Despite these security features, our products may be vulnerable to break-ins and similar problems caused by Internet users, such as hackers bypassing firewalls and misappropriating confidential information. Such break-ins or other disruptions could jeopardize the security of information stored in and transmitted through the computer systems of our customers. Addressing problems and claims associated with such actual or alleged failures could be costly and could have a material impact on our operations.

Although our agreements generally contain provisions designed to limit our exposure as a result of actual or alleged failures of SAP software products or the provision of services, such provisions may not cover every eventuality or be effective under applicable law. Any claim, regardless of its merits could entail substantial expense and require the devotion of significant time and attention by key management personnel. The accompanying publicity of any claim, regardless of its merits, could adversely affect the demand for our software and our reputation.

### **If we are unable to keep up with rapid technological changes, we may not be able to compete effectively.**

Our future success depends in part upon our ability to:

- continue to enhance and expand our existing products and services;

- provide best-in-class business solutions and services; and

- develop and introduce new products and provide new services that satisfy increasingly sophisticated customer requirements, keep pace with technological developments and are accepted in the market.

There can be no assurance that we will be successful in anticipating and developing product enhancements or new solutions and services to adequately address changing technologies and customer requirements, that we will bring new solutions, solution enhancements or services to market in advance of our competitors or that we will be able to generate enough revenues to offset the significant research and development costs we incur in bringing these products and services to the market. We may fail to anticipate and develop technological improvements, to adapt our products to technological change, changing country-specific regulatory requirements, emerging industry standards and changing customer requirements or to produce high-quality products, enhancements and releases in a timely and cost-effective manner in order to compete with applications and other technologies offered by our competitors.



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### **Our SAP NetWeaver platform strategy may not succeed or may make certain of our products less desirable.**

Since the introduction of the SAP NetWeaver platform, we have been executing on our application platform vision. While we remain an enterprise application provider, the objectives of our platform strategy are to decrease the cost of integration, enable process flexibility and innovation, and help extend our partner ecosystem.

With solutions built on the SAP NetWeaver platform, we are targeting to enhance our position in the enterprise software industry by extending core applications.

To promote a broad adoption of the SAP NetWeaver platform, we are working with certified third-party independent software vendors (ISVs) that use SAP NetWeaver as a basis to develop and offer their own certified solutions. The continued success of the SAP NetWeaver technology platform depends critically on our maintaining a dynamic network of ISVs developing their own business applications for SAP NetWeaver. Any ISV-developed solutions with significant errors may reflect negatively on our reputation and thus indirectly impede our own business operations. In addition, as with any open platform design, the greater flexibility provided to customers to use data generated by non-SAP software may reduce customer demand for certain of our software products. The failure to receive acceptance from customers of the SAP NetWeaver platform, development by competitors of superior technology or significant errors in the solution could have a material adverse impact on our revenues, earnings and results of operations.

See Item 4. Information about SAP Description of the Business Evolution of SAP Solutions, for a more detailed description of SAP NetWeaver.

### Other Operational Risks

#### **We are subject to claims and lawsuits against us that may result in adverse outcomes.**

We are subject to a variety of claims and lawsuits. Adverse outcomes in some or all of the claims pending against us might result in significant monetary damages or injunctive relief against us that could adversely affect our ability to conduct our business. While management currently believes that resolving all of these matters, individually or in the aggregate, will not have a material adverse impact on our business, financial position, income or cash flows, litigation and other claims are by their nature subject to uncertainties, and management's view of these matters may change in the future. Actual outcomes of litigation and other claims may differ from the judgments made by management in prior periods, which could result in a material adverse impact on our financial position and results of operations, as well as SAP's reputation. See Note 24 to our consolidated financial statements in Item 18. Financial Statements for more information.

#### **Third parties may claim we infringe their intellectual property rights, which could result in damages being assessed against us and our ability to use certain technologies being limited in the future.**

Third parties have claimed and may claim in the future that we have infringed their intellectual property rights. Our software products have been, and we believe will increasingly be, subject to such claims as the number of products in our industry segment grows, as we expand our products into new industry segments and as the functionality of products overlap. Any claims, with or without merit, could preclude us from utilizing certain technologies in our products, be time-consuming, result in costly litigation, require us to pay damages to third parties, require us to enter into royalty and licensing arrangements on terms that are not favorable to us, cause product shipment delays, subject our products to an injunction, require a complete or partial re-design of the relevant product, result in delays by customers in making spending decisions, or damage our reputation.





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Additionally, the use of open-source software has become more prevalent in the development of software solutions in the software industry. Accordingly, we are selectively embedding in our software certain third-party open-source software components, which include software code subject to their respective open-source licenses that may require that the code be freely transferable. There can be no assurance that, in the future, a third party will not assert that our products or the third-party software we deploy must be made publicly available under the terms of an open-source license, resulting in the loss of our proprietary advantage in the affected product.

### **If we acquire other companies, we may not be able to integrate their operations effectively and, if we enter into strategic alliances, we may not work successfully with our alliance partners.**

To complement or expand our business, we have made and expect to continue to make acquisitions of additional businesses, products and technologies. In addition, we have entered into, and expect to continue to enter into, a variety of alliance arrangements. Our current strategy for growth includes, but is not limited to, the acquisition of companies and businesses with the aim of strengthening our geographic reach, broadening our offerings in particular industries, or complementing our technology portfolio. Management's negotiation of potential acquisitions or alliances, and management's integration of acquired businesses, products or technologies could divert its time, focus and resources. In addition, some transactions in which we may encounter risks include:

- inability to successfully integrate the acquired business, including integrating different business and licensing models;

- inability to integrate the acquired technologies or products with current products and technologies;

- potential disruption of ongoing business;

- inability to retain key technical and managerial personnel of the acquired business;

- dilution of existing equity holders caused by capital stock issuances to the stockholders of acquired companies;

- assumption of unknown material liabilities of acquired companies;

- incurrence of debt or significant cash expenditures;

- difficulty in implementing, remediating or maintaining controls, procedures and policies;

- potential adverse impact on relationships with partners or third-party providers of technology or products;

- impairment of relationships with employees and customers;

- integration of the acquired company's accounting, human resource and other administrative systems;

- regulatory constraints; and

- problems with product quality, product architecture, legal contingencies, product development issues or other significant risks that may not be detected through the due diligence process.

In addition, acquisitions of additional businesses may require an immediate charge to income for any in-process research and development costs of companies being acquired and amortization costs related to certain tangible and

intangible assets that are acquired. Ultimately, certain acquired businesses may not perform as anticipated, resulting in charges for the impairment of goodwill and other intangible assets. Such write-offs and amortization charges may have a significant negative impact on operating margins and net income in the quarter in which the business combination is completed and subsequent periods. In addition, we have entered and expect to continue to enter into alliance arrangements for a variety of purposes including the development of new products and services. There can be no assurance that any such products or services will be successfully developed or that we will not incur significant unanticipated liabilities in connection with such arrangements.

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We may not be successful in overcoming these risks or any other problems encountered in connection with any such transactions and may therefore not be able to receive the intended benefits of those acquisitions or alliances.

### **We may not be able to adequately obtain, license or enforce intellectual property rights.**

We seek to protect our proprietary rights through a combination of applicable trade secret, copyright, patent and trademark laws, license and non-disclosure agreements and technical measures. All of these measures afford only limited protection and our proprietary rights could be challenged, invalidated, held unenforceable, or otherwise circumvented. Some proprietary rights may be vulnerable to disclosure or misappropriation by employees, partners, or other third parties. Despite our efforts, there can be no assurance that these protections will be adequate to prevent third parties from obtaining, using, or selling what we regard as our proprietary technology and information without authorization. There can also be no assurance that third parties will not independently develop technologies that are substantially equivalent or superior to our technology. Also, it may be possible for third parties to reverse engineer or otherwise obtain and use technology and information that we regard as proprietary. Accordingly, we might not be able to protect our proprietary rights against unauthorized third-party copying or utilization, which could adversely affect our competitive position and result in reduced sales. Any legal action we bring to enforce our proprietary rights could be costly, distract management from day-to-day operations, and lead to claims against us, which could adversely affect our operating results. In addition, such enforcement actions could involve a partner or vendor and adversely affect our ability, and our customers' ability, to access that partner or vendor's products. In addition, the laws and courts of certain countries may not offer effective means to enforce our intellectual property rights.

### **We may not be able to secure our business operations against disruption and to safeguard our assets.**

We attach great importance, as a software company, to securing our business operations against disruption and to safeguarding our assets. We have a number of measures in place to ensure that our data and information technology, our physical assets, and our organization are secure against attack from without and within. There is nevertheless a risk that someone might misuse or steal property, plant, or equipment or gain unauthorized access to our facilities and to sensitive material, and might use such material to SAP's detriment. Any such misuse, stealing or other security breach could negatively impact our assets, finances, or income.

### **Our insurance coverage may not be sufficient to avoid negative impacts on our financial position, results of operations and cash flows resulting from the settlement of claims.**

We maintain adequate insurance coverage for protection against a diverse portfolio of risks. Our objective is to ensure that financial effects of risk occurrences are excluded or limited to the extent practicable at reasonable cost. Despite these measures, certain categories of risks are not currently insurable at reasonable cost. Even if we obtain insurance, our coverage may be subject to exclusions that limit or prevent our indemnification under those insurance policies. Further, we cannot guarantee the ability of the insurance companies to meet their claims liabilities. If this risk occurs, it may result in significant adverse impact on our financial position, results of operations and cash flows.

### **We may incur losses in connection with venture capital investments.**

In the past we acquired and expect in the future to continue to acquire equity interests in technology-related companies. Many of these enterprises currently generate net losses and require additional capital outlay from their investors. Changes to planned business operations may possibly affect the performance of companies in which SAP holds investments, and that could negatively affect the value of our investments. Moreover, under German tax law, capital losses and impairments of equity securities are not tax-deductible, which may negatively affect our effective tax rate.



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**ITEM 4. INFORMATION ABOUT SAP**

Our legal corporate name is SAP AG. SAP AG is translated in English to SAP Corporation. SAP AG, formerly known as SAP Aktiengesellschaft Systeme, Anwendungen, Produkte in der Datenverarbeitung, was incorporated under the laws of the Federal Republic of Germany in 1972. Where the context requires in the discussion below, SAP AG refers to our predecessors, Systemanalyse und Programmentwicklung GbR (1972-1976) and SAP Systeme, Anwendungen, Produkte in der Datenverarbeitung GmbH (1976-1988). SAP AG became a stock corporation (*Aktiengesellschaft*) in 1988. Our principal executive offices, headquarters and registered office are located at Dietmar-Hopp-Allee 16, 69190 Walldorf, Germany. Our telephone number is +49-6227-7-47474.

In 2008, we acquired Business Objects. With that acquisition, we expanded our core solutions to address the needs of the business user. In addition, as part of our legal entity rationalization activities, we have integrated certain Business Objects subsidiaries into the following significant SAP subsidiaries: SAP Deutschland AG &Co. KG, SAP (Schweiz) AG, SAP Nederland B.V., SAP Brasil Ltda and SAP Japan Co., Ltd.

For a discussion of our principal capital expenditures and divestitures, see Item 4. Description of Property Capital Expenditures.

We intend to make this Annual Report on Form 20-F and other periodic reports publicly available on our Web site ([www.sap.com](http://www.sap.com)) without charge immediately following our filing with the SEC. We assume no obligation to update or revise any part of this Annual Report on Form 20-F, whether as a result of new information, future events or otherwise, unless we are required to do so by law.

**DESCRIPTION OF THE BUSINESS**

**Overview**

SAP was founded in 1972. Our core business is selling licenses for software solutions and related support services. In addition, we offer consulting, training and other services for our software solutions. We develop and market our products and services in close cooperation with independent business partners.

As of December 31, 2008, we had more than 82,000 customers in over 120 countries and employed more than 51,500 individuals at locations in more than 50 countries in the EMEA, Americas, and Asia Pacific Japan regions. We are headquartered in Walldorf, Germany. As of December 31, 2008, SAP consisted of SAP AG and its network of 187 subsidiaries. We have three lines of business that constitute our reportable segments: product, consulting and training. We tailor our solutions to serve the needs of customers in 25 specific industries, for example banking, insurance, chemicals, healthcare, retail, consumer products, and the public sector. For a discussion of our geographic regions and industry sectors, see Item 4. Information about SAP Description of the Business Revenue by Industry Sector, and Note 28 to our consolidated financial statements in Item 18. Financial Statements.

The Company is listed on several exchanges, including the Frankfurt Stock Exchange and the New York Stock Exchange (NYSE) under the symbol SAP.

**Evolution of SAP Solutions**

With the vision to create standard application software for real-time business processing, we introduced the first generation of our software in 1973, initially consisting of a financial accounting application.

The SAP R/2 system, our second generation of application software, was then developed for mainframe, designed to handle different languages and currencies and to integrate many aspects of business, including distribution centers, field operations centers, corporate headquarters, and sales offices.

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We recognized the demand for more decentralized business software solutions and designed the initial version of the SAP R/3 system, moving from mainframe computing to the three-tier architecture of database, application and user interface. Introduced in 1992, SAP R/3 quickly became the category leader in ERP systems. During the 1990s, we introduced several solutions built on SAP R/3 to provide capabilities tailored to specific industries.

In the early 2000s, we continued to expand our product offerings to include the SAP Business Suite family of business applications that help enterprises improve business operations ranging from supplier relationships, production and warehouse management to sales, administrative functions and customer relationships. We introduced the successor to SAP R/3 called the SAP ERP application, which is a component of SAP Business Suite.

We began in 2003 to adapt our portfolio of products to the new environment, mapping a route to a flexible new enterprise service-oriented architecture for software. A service-oriented architecture (SOA) is an industry term referring to a software architecture that supports the design, development, identification, and consumption of standardized services across the enterprise, thereby improving reusability of software components and creating agility in responding to change. The term service as used in service-oriented architecture means a Web service that is a self-contained functionality that can be accessed by applications across a network using mechanisms based on Web standards. An enterprise service, defined by us and our partners and customers, is a series of Web services combined with business logic that can be accessed and used repeatedly to support a particular business process. Aggregating Web services into business-level enterprise services provides more meaningful building blocks for composing applications to automate enterprise-scale business scenarios.

One key benefit of enterprise service-oriented architecture, or enterprise SOA, is the ability to rapidly map complex business processes with reusable enterprise services. Companies can use enterprise services to flexibly compose or alter applications as rapidly as their markets and business process needs change. Our platform for realizing enterprise SOA is the SAP NetWeaver technology platform. Together with the SAP NetWeaver technology platform and a repository of enterprise services, SAP ERP can serve as a business process platform, which is the unified environment that companies implement to perform their core business processes efficiently and to reorganize, extend, and create new business processes flexibly. In other words, SAP helps organizations establish their unique business process platform by delivering ready-to-execute software for business processes, reusable enterprise services that enable business process steps, and the technology to compose and deploy software that enables flexible business processes.

In 2007, SAP launched a new product, SAP Business ByDesign, a comprehensive, adaptable, on-demand business software solution for midsized companies. SAP Business ByDesign's availability is restricted in a limited number of countries; we intend to introduce other deployment modes.

In recent years, SAP has built a portfolio of solutions addressing the needs of the business user. Business users comprise a segment of the global workforce that has historically remained outside of the enterprise software mainstream. In their roles as decision makers, business users are generally not directly involved in more structured business processes such as customer relationship management or supply chain management although their roles often involve the supervision and analysis of these processes. In most cases, they operate in a less structured environment, drawing on information resources as diverse as spreadsheets and Internet sites. However, their efforts can be enhanced by tools and applications designed to help organize and manage information to optimize everyday business activities and improve the way employees work. To meet the needs of this group of users, SAP has delivered several enhancements to its core applications, such as embedded analytics in the SAP Business Suite. We have also developed new products to address the needs of such business users who wish to take advantage of enterprise information. Examples of such products include Duet. Introduced in 2006, Duet is the first product jointly developed and supported by SAP and Microsoft. Duet enables employees to interact quickly and easily with selected SAP business processes and data without leaving the familiar Microsoft Office environment. SAP also acquired Business Objects in early 2008. SAP and Business Objects quickly





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embarked on a road map to transform their software for business users into the emerging market for business performance optimization which helps organizations see and respond to business events in real time.

Mission and Strategy

### **Trends and Orientation**

In the face of continuous, accelerated change in the business environment, executives must find ways to contend with shifting pressures to ensure sustained competitiveness and profitable growth. These rapid changes are driven by key transformational forces, such as global economic uncertainty, hypercompetition, a rising consumer power, and the quest for sustainability. Recently, the pervasive effect of these pressures on the global business environment has demonstrated that businesses have become more interconnected than ever before. Business models are evolving from linear value chains to collaborative networks with the customer at the center. Within the context of these business networks, each business focuses on what it does best while working closely with other companies to improve the overall customer experience. The business network is a new source of competitive advantage for companies because it increases and speeds innovation not only between companies, but also with the end customer and allows risks to be managed and shared with partners and suppliers.

The sharing of risks, knowledge, and processes is typical of collaborative relationships in a business network, and it benefits all of the collaborators. However, many companies are reluctant to adopt this approach because their strategic planning is isolated from their business operations. Technology solutions can help them close the gap between strategy and execution by linking decision-making systems to integrated, end-to-end processes that can be easily extended to business partners.

### **Mission**

It is part of our mission to help customers resolve such difficulties and thereby enable them to achieve profitable, sustainable growth. To succeed, we wish to build from our established leading position in the business software market and accelerate business and IT innovation for firms and industries. In striving for this goal, we are also contributing to global economic development on a grand scale.

We offer solutions that help companies of all sizes close the gap between strategy and execution. They include the SAP Business Suite family of business applications, SAP NetWeaver, the SAP BusinessObjects portfolio, SAP's offerings for small businesses and midsize companies, and solutions to help customers realize their sustainability goals. Our portfolio of SAP software and services can help customers attain the visibility, efficiency, and flexibility that enables them to respond to changes in the business environment with more agility and effect and capture the full benefits of business networks.

At the heart of our strategy stands customer value. We intend to widen the market we address with more attractive offerings for our customers including, for example, new data analysis and decision support solutions for business users, and software solutions scaled to small businesses and midsize companies.

### **Strategy for Growth**

Our traditional core customer base includes many large global enterprises as well as midsize companies. Such global companies use the SAP Business Suite applications, SAP Business All-in-One solutions, or SAP Business One to automate their business transactions, enabling better management and governance. In our traditional core business, we seek to win a greater share of our customers' wallet. We also aim to win new customers, for instance companies that have been using custom software.



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Our portfolios of solutions for 25 industries are a crucial factor in our success. In 2008, we focused on strategic industries with exceptional growth potential, including, for example, banking, retail, communications, and the public sector.

Delivering solutions for business users – process owners and decision makers – is a central element of our strategy for growth. In 2008, we concluded the acquisition of Business Objects and expanded our core solutions to address what we identify as the three key needs of decision makers in business. First, they need to make decisions more effectively based on a broader array of structured and unstructured data from sources both inside and outside the enterprise. Second, business users need better tools and applications to support collaborative decision making. Third, business users seek to build competitive advantage by creating and managing business networks with partners, suppliers, and customers. Our products focus on these needs to help individuals, teams, and companies better collaborate through business networks.

The SAP Business ByDesign solution is designed to open up a new segment of the global market for us, smaller businesses with between 100 and 500 employees. They have distinctly different software needs: Getting their new IT solution running quickly, at minimum risk and predictable cost, is often more important for these customers than specific functional depth. Many such companies do not believe that their needs can be met by traditional software offerings or by the available on-demand solutions.

The following measures will help us realize our full growth potential:

**Organic growth:** Our primary growth strategy is to continue to develop our own product portfolio and our own base of direct customers – by winning more customers and by selling more to our existing customers.

**Co-innovation:** Collaborating with customers and partners remains one of our central policies. We are investing more in our partner ecosystem. This supports the development of solutions built on the SAP NetWeaver technology platform and leverages sales forces to address the various market and customer segments.

**Smart acquisitions:** With targeted strategic and fill-in acquisitions that add to our broad solution offering for individual industries or across industries, we gain specific technologies and capabilities to meet the needs of our customers.

## **THE SAP PORTFOLIO**

We offer a portfolio of business software, technology, and related services and support to meet the long-term requirements and mission-critical needs of our customers. The main challenges facing our customers are the current global economic recession, hypercompetition, rapidly shifting consumer demand, the impact of international economic integration, the accelerating pace of innovation, and the quest for sustainability. To be equal to these challenges, companies and public administrations must link their strategic planning to their business operations, closing the gap between strategy and execution. This is where information technology solutions can help. They can link decision-making systems to integrated, end-to-end processes that can be easily extended to business partners.

Our portfolio of SAP software and services can help customers respond to changes in the business environment with more agility and effect, better capture the benefits of business networks, and thus grow profitably. The goal at the heart of our portfolio of software and services is therefore the best possible combination of efficiency, insight, and flexibility:

**Efficiency** Innovative business processes to optimize operations: SAP connects and streamlines processes across our customers' businesses to drive efficiency and help enable business operations to achieve strategic goals.

**Insight** Improved decisions for greater success: SAP enables business people to make more insightful and timely strategic decisions based on better information in the context of specific business issues.

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Flexibility Strategic and operational agility: With SAP software, customers can more easily pursue new strategies and capture the full benefits of business networks, because business processes are flexible and the business platform is extensible.

In addition, at the end of October we started our Best-Run Now initiative, with special solution offerings to help businesses of all sizes in difficult times of economic uncertainty. It draws together software and service products to offer solutions that can help companies rapidly make a difference in areas such as liquidity, business intelligence (BI), procurement, and people management. Flexible financing options and support for implementation make it easier for customers to invest speedily.

We offer the following products and services:

\* depending on form of contract

Solutions for Large Enterprises

**SAP Business Suite**

The flagship of our large-enterprise offerings is SAP Business Suite software. SAP Business Suite applications provide end-to-end business process support, reporting, and analytics. Its core applications, industry applications and supplementary applications are powered by the SAP NetWeaver technology platform. Companies use this platform to design, compose, or adapt processes to address the unique needs in their industry.

**Core SAP Business Suite Applications**

The cornerstone of SAP Business Suite is the SAP ERP application, an integrated enterprise resource planning application. SAP ERP addresses the core business software requirements of midsize businesses and large organizations around the world in all industries and sectors. SAP ERP includes four individual solutions that support key functional areas: SAP ERP Financials, SAP ERP Human Capital Management, SAP ERP Operations, and SAP ERP Corporate Services.

The other components of SAP Business Suite are:

The SAP Customer Relationship Management (SAP CRM) application, which helps companies acquire and retain customers, build lasting relationships, and improve customer loyalty. Companies can

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choose between ways to deploy the application: as an on-premise implementation, on-demand as Web-based CRM, or in a hybrid solution that combines both. As our customers' business needs evolve, they can smoothly transition from one deployment option to another at any time.

The SAP Product Lifecycle Management (SAP PLM) application, which helps companies manage, track, and control all product-related and project-related information over the complete product and asset life cycle and across the extended supply chain. SAP PLM integrates all product-related information needed to collaborate with business partners and supporting processes, including product innovation, design and engineering, quality and maintenance management, and control of environmental issues.

The SAP Supplier Relationship Management application (SAP SRM), which helps organizations in all industries accelerate and optimize the supply cycle by improving their vendor relationships. It provides strategic value through sustainable cost savings, contract compliance, and quick time-to-value.

The SAP Supply Chain Management (SAP SCM) application, which gives our customers a base for building transparent, flexible communities of companies. By integrating all partners in the supply chain, supply and demand can be synchronized along the chain, and materials and knowledge can flow freely among all of the partners concerned. That helps companies intelligently adapt to changing market conditions and proactively respond to shorter, less predictable product life cycles.

We first delivered enhancement packages providing regular updates for SAP ERP in 2007. This unique delivery model, which we introduced for the entire SAP Business Suite in 2008, makes it simpler and faster for customers running SAP Business Suite applications to adopt new product functions, industry-specific features, and enterprise services. It also shields customers from the complexity of multiple upgrades and offers them an opportunity to reduce information technology (IT) costs by consolidating their systems on a single platform and reducing the number of separate software instances that need to be maintained.

Our enhancement package model also gives customers planning security. The SAP Business Suite applications are, and will for the next several years remain, a stable platform on which customers can, if they wish, regularly update their system. The packages provide a reliable software enhancement process that alleviates disruption and minimizes costs.

**Table of Contents****Industry Solutions for Large Enterprises**

SAP Business Suite delivers distinct solution portfolios for 25 different industries, including for example banking and insurance, chemicals, healthcare, retail, consumer products, and the public sector. Each industry solution portfolio delivers powerful, industry-specific functions along with best practices we have developed with our customers. Our industry solutions are designed to meet the needs of the major industry sectors listed below. We also offer solutions for numerous subsectors.

**Process Industries**

- Chemicals
- Mill Products
- Oil & Gas
- Mining

**Discrete Industries**

- Aerospace & Defense
- Automotive
- Engineering, Construction & Operations
- High Tech
- Industrial Machinery & Components

**Consumer Industries**

- Consumer Products
- Retail
- Wholesale Distribution
- Life Sciences

**Service Industries**

- Media
- Logistics Service Providers
- Airlines
- Telecommunications
- Utilities
- Professional Services

**Financial Services**

- Banking
- Insurance

**Public Services**

- Healthcare
- Higher Education & Research
- Public Sector
- Defense & Security

**Solutions for Small Businesses and Midsize Companies**

SAP offers three solutions for small businesses and midsize companies that are easy to implement and use. They are designed to best fit the needs of small businesses and midsize companies that need solutions to help them manage customer relationships, supplier relationships, financial operations, and supply chains.

**SAP Business All-in-One**

Midsize companies with industry-specific requirements can buy SAP Business All-in-One solutions from our channel partners. Customers can deploy SAP Business All-in-One on-premise or hosted by an SAP partner. If they choose hosting by an SAP partner, the software is operated, maintained, and monitored by experts in an external data center. The customer does not have any maintenance and update work or any upfront capital investment. SAP Business All-in-One is a complete package built on SAP ERP and SAP CRM, including SAP Best Practices and preconfigured business scenarios specially packaged for industry-specific implementation and use by midsize companies. Approximately 1,100 partners also offer 660 qualified SAP Business All-in-One solutions with extra functions for specific microvertical markets and specific geographic regions. The SAP Business All-in-One fast-start program provides the complete package together with an online solution configurator and special tools for rapid live implementation. It is currently the choice of approximately 13,450 customers in 50 countries.

**SAP Business ByDesign**

SAP Business ByDesign is specially designed for businesses with 100 to 500 employees that wish to benefit from a powerful enterprise solution but do not wish to run an extensive IT infrastructure. It enables companies to manage



different business processes in harmony on one system. They can choose which business processes to include, and add more as and when they are required. SAP Business ByDesign offers preconfigured best-practice process support for financials, CRM, people management, procurement, project management, and the supply

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chain through a single, consistent user interface. This solution is hosted on the Internet by SAP and provided to customers in on-demand mode for a monthly fee. It is a completely new business model for SAP. Currently it is available in China, France, Germany, India, the United States, and the United Kingdom. We are controlling the ramp-up, carefully selecting new customers and working in close collaboration with them and with partners, and feeding their experience back into product development.

### **SAP Business One**

The SAP Business One application is for small businesses, typically with fewer than 100 employees and 30 users, that are looking for an affordable, single system to cover core operations such as financials, sales, and customer support. Customers can deploy SAP Business One on-premise or hosted by a partner, typically in less than one month. The solution is sold and supported through a global network of approximately 1,200 certified partners. There are over 550 extensions available from independent software vendors (ISVs) and more than 40 country versions. By the end of 2008, SAP Business One had a base of approximately 22,600 customers.

### **SAP BusinessObjects Portfolio**

Our solutions for business users help our customers toward broader insight, aligned strategy, and risk- and performance-optimized decisions. They close the gap between strategy and execution.

### **SAP BusinessObjects Solutions**

SAP BusinessObjects BI solutions help simplify the ways that decision makers use information, enabling business users to access, format, analyze, navigate in, and share information across their organization.

SAP BusinessObjects information management (IM) solutions help organizations improve their data quality, understand and use information better, track data lineage for compliance purposes, and ensure consistent semantics across the business.

The SAP BusinessObjects intelligence platform is a BI platform with a wide scope that makes relevant BI available to users in accordance with their roles. The platform has functions to drive productivity and improves organization-wide decision-making processes.

SAP BusinessObjects enterprise performance management (EPM) solutions empower organizations to manage all financial and operational aspects of strategy, planning, budgeting, forecasting, reporting, and analytic requirements.

SAP BusinessObjects governance, risk, and compliance (GRC) solutions help ensure that customers have the proper processes and controls in place to realize transparent GRC.

### **Additional Solutions for Business Users**

Originally announced in April 2005, Duet software provides seamless access to SAP business process software and data using Microsoft Office on the business user's desktop. Duet is the result of collaboration between Microsoft and us, and is our first joint product. In 2008, SAP and Microsoft deepened the relationship and jointly enhanced Duet with additional business scenarios, platform capabilities, and development tools.

Alloy software, which we developed with IBM, enables business users to access SAP software and information from within the familiar IBM Lotus Notes environment.



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### **Business Intelligence Solutions for Midsize Companies**

The SAP BusinessObjects portfolio comprises BI solutions for small businesses and midsize companies. The solutions are specifically designed to address the needs of businesses in that segment.

The Crystal Reports family of offerings is specially designed for small business that need a stable, easy reporting solution for all areas in their organization – a solution that can draw on virtually any source of data. Customers can use proven functions for designing, managing, visualizing, delivering, and scheduling reports. We can deliver it in on-premise mode – either on a server or as a single desktop application – or in on-demand mode.

SAP BusinessObjects Edge BI software is powerful, integrated BI software for midsize companies. It delivers solutions for operational reports, *ad-hoc* reporting and analysis, and dashboards, with powerful data integration and quality. Customers can start with options to address their immediate BI requirements and build their solution as their needs grow – at a low investment cost.

### **The SAP NetWeaver Technology Platform**

IT organizations can use SAP NetWeaver to run business software, such as SAP Business Suite applications and SAP-certified partner solutions, from a single, unified technology platform. As the technical foundation for a service-oriented architecture (SOA), SAP NetWeaver helps IT organizations evolve their existing IT infrastructure into a business process platform and enhance the performance of their business processes.

It unifies numerous middleware functions into a single software environment to reduce IT complexity and increase business agility. The platform supports open standards, so companies can use it to integrate heterogeneous systems and data from diverse SAP and non-SAP sources. It can help organizations make their business processes reliable, secure, and scalable. SAP NetWeaver is a technology platform for modular composition of applications and for the delivery of solutions.

### **Solutions for Sustainability**

We aim to enable companies to execute their sustainability strategies using SAP software solutions, thereby making a contribution to growing their corporate value, protecting their brands, and mitigating compliance risks. We see sustainability as anchored in a holistic approach to risk and opportunity from social, environmental, and economic perspectives. With our SAP BusinessObjects GRC solutions, we help customers better manage risk and compliance, especially with regard to financial processes, environmental concerns, and securing the global supply chain. Additionally, SAP Business Suite software provides business process efficiency, flexibility and insight, representing a sound foundation for an organization's sustainability endeavors.

These are solutions that are specifically oriented to sustainability:

The SAP Supply Chain Management application is designed to help our customers achieve their sustainability objectives. Companies can use it to consolidate orders and optimize shipments, reducing CO<sub>2</sub> emissions and overall energy consumption.

The SAP Environment, Health, and Safety Management (SAP EHS Management) application supports the management of environment, health, and safety, industrial hygiene, and occupational health processes as well as compliance for product safety, hazardous substances, dangerous goods, and waste management. In addition, SAP EHS Management helps ensure compliance with environmental laws and policies as well as reduce associated costs, efforts, and risks on plant and corporate levels. Companies can also use this software

to manage compliance with European law concerning the registration, evaluation, authorization, and restriction of chemicals (REACH), which helps them secure the right to market their products.

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The SAP Recycling Administration application helps ensure compliance with worldwide recycling legislation for packaging, batteries, and waste electrical and electronic equipment.

The SAP BusinessObjects Risk Management application helps companies balance business opportunities and the associated financial, legal, and operational risks. By specifically monitoring high-impact risks to avoid incurring damaging market sanctions, companies can maximize corporate performance.

Because SAP applications are integrated, they can efficiently support compliance. Integration with SAP and non-SAP software gives businesses increased visibility, supporting compliance functions across the enterprise and its network of business partners.

### **SAP Services Portfolio**

The SAP Services organization provides a broad array of methodologies, tools, and certified partner offerings to meet our customers' business needs. The SAP Services portfolio includes consulting, education, support, custom development, and managed services. The offerings are categorized into software-related services, and professional services and other services. Software-related services are support services provided by the SAP support units (SAP Active Global Support, SAP BusinessObjects Customer Assurance, and SME Services) and custom development provided by the SAP Custom Development organization. Our professional services and other services are consulting, education, and managed services.

SAP Services has a local presence in more than 50 countries and runs 77 training centers, seven global support centers, and 10 custom development centers in Europe, Asia, and the Americas. The 20,000 SAP service experts provide 24x7 support for customer and partner SAP solution portfolios at a global level.

### **Software-Related Services**

The SAP Custom Development organization develops custom solutions on the SAP platform that are tailored to meet customers' unique business requirements. The service portfolio includes extending and enhancing existing SAP solutions and building new business solutions.

The SAP support units offer a range of services to support our customers before, during, and after implementation of our software solutions. We provide around-the-clock technical support. Moreover, the organization offers proactive, preventive support services to protect and enhance our customers' current investments in SAP technology and applications. SAP Enterprise Support services are a key element in our offering, providing customers with holistic IT landscape support over the full life cycle of their application with the aim of optimizing the solution's operation. This covers a wide range of software components: SAP products, custom developments (including developments released by SAP), and partner solutions. SAP Enterprise Support aims to reduce the total cost of operation for our customers by delivering accelerated innovation, protection of investment, and mission-critical support as a solution provider based on defined service level agreements. SAP Product Support, for our largest enterprise customers, provides the tools and methodologies to take charge of day-to-day support needs and to manage IT landscape holistically over the life cycle of SAP applications. From implementation to operation to change management, it helps to ensure that SAP solutions contribute to the business goals of our customers. The SAP Safeguarding support option helps our customers mitigate the technical risks of an implementation or upgrade and ensure smooth go-live and ongoing operations. The SAP MaxAttention support option delivers to our largest enterprise customers technical account management for their entire solution life cycle and implementation of end-to-end solution operations.

### **On-Demand Software Services**

The market defines on-demand as a software delivery format in a one-to-many framework (one solution served to many customers) that can include different pricing options such as license fees with, optionally, service fees, or recurring subscription fees. It complements the traditional model by giving software vendors an

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additional format in which to market software and create sustainable value for customers. Customers now have a choice of deployment modes (on premise and off premise) and of payment models (perpetual license with, optionally, recurring service fees or recurring subscription fees).

SAP on-demand software services focus on delivering the right solutions to meet customers' needs. It is therefore crucial that our customers are able to choose between different deployment options to suit their different business needs. In the large enterprise space, we are currently seeing customers adopting on-demand models for business processes, such as for sales automation processes connected with on-premise ERP software functions, that are less mission-critical than, for example, core financial processes. As a result, we expect gradual adoption of on-demand solutions to be the norm, leading to hybrid landscapes with integration of on-demand and on-premise solutions. These adoption patterns are a key driver in our on-demand strategy—evidenced, for example, by our SAP CRM and SAP E-Sourcing on-demand solutions, and the SAP BusinessObjects Information OnDemand portal.

### **Professional Services and Other Services**

The SAP Consulting organization offers planning, implementation, and optimization services for business solutions. We advise and support customers on designing business processes and IT infrastructure and help customers with project management and solution implementation and integration. We also help customers optimize solutions and IT landscapes for changing business needs.

The SAP Education organization provides the training, services, and tools required to assist SAP customers and partners in maximizing the value they can create with their SAP solutions. SAP Education offerings include training needs analysis, certification assessments, learning software and tools, and education in several delivery models, including classroom and e-learning.

The SAP Managed Services organization provides application management services and hosting services, running and managing SAP solutions on behalf of customers.

### **Newly Introduced Products and Product Versions**

In 2008, we extended our solution portfolio, focusing primarily on increasing integration between the product lines to help our customers close the gap between strategy and execution. Working with our customers and partners, we created new solutions in all four core areas of our product portfolio: enterprise applications and industry solutions for large enterprises, the technology platform, solutions for small businesses and midsize companies, and applications for business users. We also made a number of strategic acquisitions to augment our portfolio of products.

### **Expanded Offerings for Enterprise Applications and Industry Solutions**

SAP Business Suite applications and all SAP industry solutions were improved to adapt to the accelerating rate of change of the market and customer expectations:

**SAP ERP:** In May, we announced the general availability of the third enhancement package for the SAP ERP application. Functional improvements provide stronger support for financial close processes, treasury risk, cash management, and expense management. In addition, human capital management capabilities were improved to support end-to-end talent management processes. For organizations that operate global shared-service organizations, new facilities were delivered to support intracompany processes and collaboration. Enhancement packages enable our customers to add functions to their SAP software packages stepwise without upgrades, which reduces the total cost of managing their enterprise software implementation.



SAP Customer Relationship Management: Since the introduction of SAP CRM 2007 in December 2007, we have experienced significant market momentum on a global basis. In 2008, we further enhanced the

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capabilities of SAP CRM by delivering new processes to meet industry-specific needs such as investigative case management for the public sector, loyalty management for consumer-focused industries, and service management for discrete industries. In addition, we partnered with Research In Motion (RIM) to extend SAP applications for business users by creating an SAP CRM application accessed from BlackBerry mobile devices.

**SAP Supplier Relationship Management:** In June 2008, we introduced new versions of our SAP E-Sourcing, SAP Contract Lifecycle Management, and SAP Spend Analytics (now SAP BusinessObjects Spend Performance Management) applications. These new versions were designed to improve the amount of identified and negotiated savings, increasing sustained savings to our customers. In November 2008, the first customers started to use SAP SRM 7.0. SAP SRM now extends compliance capabilities with enhancements to centralized sourcing and contract management, services procurement, catalog management, supplier enablement, usability, and accessibility to information. SAP SRM also helps fully deliver on the complete source-to-pay process for our customers.

**SAP Supply Chain Management:** In 2008, we released a new version of SAP SCM with capabilities that leverage point-of-sales data to improve planning accuracy and visibility, provide new forecasting methods and enhanced collaboration with contract manufacturers, and enable attribute- or characteristics-based planning. There were also major enhancements to warehouse and transportation management, such as graphical warehouse layout modeling, improved visualization, tighter integration of export controls, and increased utilization through enhanced integrated processes. We have also expanded the radio-frequency identification (RFID) and auto-ID solution footprint of SAP SCM with support for serialization technology and the EPCIS standard, a global communications standard by EPCglobal that improves transparency in the tracking of goods.

**SAP Product Lifecycle Management:** SAP PLM now offers simplified access to information within the context of a specific role to help our customers improve productivity, reduce training, eliminate manual activities, and make decisions more rapidly. SAP PLM now includes an intuitive new user interface that delivers information in the context of the role requesting it. For example, the application now supports product-centric viewing.

**SAP solutions for automatic identification (auto-ID) and serialization:** With the release of the latest SAP Auto-ID Enterprise offering, we delivered several new functions in the fields of auto-ID and serialization technology. For example, SAP object event repository now conforms to the EPCIS standard. Delivery processing scenarios now fully support the U.S. Department of Defense item unique identification (IUID) schema, which enables the identification of all inventory items based on bar codes containing unique, fixed number sequences, as well as the electronic product code of EPCglobal and other serialization procedures. This release also includes significant performance enhancements to support high-volume processes. Enhancements to SAP ERP included support for unique item identification (UII) from supply chain to asset management. In addition, the SAP Event Management 7.0 application enhanced usability and flexibility in the Web Dynpro user interface.

**SAP Manufacturing:** By acquiring Visiprise, we improved manufacturing operations management capabilities by optimizing execution of manufacturing processes on the plant floor. This acquisition is a continuation of our investment in applications for the shop floor and leverages existing capabilities offered by the SAP Manufacturing Integration and Intelligence (SAP MII) application. Further enhancements included support for outsourced manufacturing, dynamic production planning across multiple plants, and advances in lean planning and operations management. We also made it easier to create composite applications for manufacturing operations that can significantly improve employee productivity.

Enterprise energy management: In July 2008, we delivered an enterprise energy management solution. It comprises functions from SAP MII, the plant information solution from OSIsoft, and the SAP Environment, Health, and Safety Management application. The solution enables companies to

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gather information on the use of energy throughout the enterprise, identify areas for energy reduction, monitor the implementation of energy excellence projects, and make the results available throughout the enterprise. Companies can therefore use the enterprise energy management solution to cut their energy costs and emissions.

### **SAP NetWeaver Technology Platform Enhanced**

SAP NetWeaver helps companies standardize, consolidate, and optimize their IT landscape and develop innovative integrated business process solutions. With SAP NetWeaver, we enable IT departments to create a powerful business process platform based on the principles of SOA. Enhancements made to SAP NetWeaver in 2008 focus on helping our customers to simplify the way workers use IT, to accelerate the design and integration of applications for business processes, and to intelligently manage and access relevant data across the entire enterprise.

**SAP NetWeaver Composition Environment:** We released the first enhancement package for the SAP NetWeaver Composition Environment offering, providing a lean, integrated, standards-based development, modeling, and runtime environment. Software developers and technical consultants can use it to extend application logic and, depending on users' needs, compose new views and applications based on SAP software. The enhancement package delivers the next generation of tools for increasing process flexibility with new business process management and business rules management capabilities.

**SAP NetWeaver Identity Management:** The SAP NetWeaver technology platform now contains embedded identity management capabilities to help companies save time and money by optimizing the administration of user accounts and passwords inside their business network.

**SAP NetWeaver Master Data Management (SAP NetWeaver MDM):** Adoption of the SAP NetWeaver MDM component continues to grow among companies in all industries and of all sizes. A new version was delivered in the fourth quarter of 2008. It offers extended flexibility for data modeling and support for complex objects, enabling the deployment of a single master data management repository for multiple data domains. SAP NetWeaver MDM now links with SAP BusinessObjects Data Services software through the MDM enrichment controller. It is thus a solution with innovative data-integration and data-quality capabilities.

**SAP NetWeaver Information Lifecycle Management:** SAP has developed a three-pronged approach to information life-cycle management that meets the complex IM needs of today's organizations: data archiving, which focuses on keeping the growth of data volume in check; retention management, which deals with the life cycle of data from the time it is created until it is destroyed; and a retention warehouse, which addresses the decommissioning of legacy applications and systems.

**SAP NetWeaver Enterprise Search:** Launched in 2007, the SAP NetWeaver Enterprise Search application gives business users easy access to data in SAP systems, and intuitive links to find related information and act on the data they find. In 2008, we again significantly extended the range of information sources available and delivered a new user interface for SAP NetWeaver Enterprise Search.

**SAP NetWeaver Mobile:** In 2008, we introduced a new version of the mobile application platform, designed to enhance scalability of the platform as well as mobile device management and mobile security features.

### **New Developments for Small Businesses and Midsize Companies**

We delivered innovative developments for our customers in the small business and midsize company segment in 2008:

SAP Business One: In 2008, SAP Business One version 2007 was released into general availability. The new release offers many new financial and reporting capabilities that are designed to enable small

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businesses to leverage local best practices and address local business customs. Further, we introduced an industry solutions program that allows our software solution partners to create tightly integrated solutions that extend the power of SAP Business One. Additionally, we enabled integration between SAP Business One and SAP NetWeaver, to make it easy for SAP Business One customers to connect with SAP Business Suite implementations used by their headquarter offices.

**SAP Business All-in-One:** In the second half of 2008, we released an enhanced version of SAP Business All-in-One with new customer relationship management functions. By combining comprehensive, preconfigured SAP CRM and SAP ERP best practices, midsize companies can now manage their customers, their brands, and sales effectiveness together with core business operations in one solution. This new CRM offering can be added at any time to a customer's SAP Business All-in-One solution or deployed standalone, and is available from SAP and SAP channel partners.

**SAP Business ByDesign:** In October 2008, we released Feature Pack 1.2 for SAP Business ByDesign. This new release optimized quality, performance, and system stability.

## **Broader Portfolio for Business Users**

In 2008, we combined SAP applications for business users with Business Objects solutions to form a new SAP BusinessObjects portfolio of solutions. We expanded our applications and capabilities with innovative offerings to optimize enterprise performance management, promote good governance, risk management, and compliance, and improve enterprise-wide information flows.

**SAP BusinessObjects IM solutions:** Shipped in March 2008 as part of SAP BusinessObjects XI 3.0, our SAP BusinessObjects Data Services XI 3.0 information management solution was one of the first of its kind to combine data integration and data quality in a single product. It offers companies new ways to optimize performance, giving users access to the right information at the right time in an easy user interface.

**SAP BusinessObjects intelligence platform:** In 2008, we delivered two releases of the intelligence platform: SAP BusinessObjects XI 3.0 in March and SAP BusinessObjects XI 3.1 in September. SAP BusinessObjects XI 3.0 makes relevant BI available to users in accordance with their roles. The platform now also has new functions to drive productivity and improves organization-wide decision-making processes. Enhanced migration tools ease upgrades for customers. Moreover, SAP BusinessObjects solutions now work within practically any application environment: SAP BusinessObjects XI 3.1 added broader language support, integration with data sources from a variety of vendors including HP, Microsoft, and Netezza and native support for the 64-bit architecture many customers now use for their business applications.

**SAP BusinessObjects BI solutions:** In 2008, we provided the first platform to combine access to all information (whether it is structured in databases or unstructured text) and access for all people (whether they require reporting, query and analysis, dashboards and visualization, or predictive analysis) in a single environment. We also delivered the SAP BusinessObjects Edge BI 3.0 solutions, addressing the BI needs of midsize companies, and Crystal Reports Server 2008 software for small businesses.

**SAP BusinessObjects GRC solutions:** In 2008, we released new versions of the SAP BusinessObjects Access Control and SAP BusinessObjects Process Control (formerly SAP GRC Process Control) applications. SAP BusinessObjects Process Control automates control monitoring in both SAP and non-SAP systems to assist compliance, detects exceptions, and remedies issues with workflow-based processes. The new version of SAP BusinessObjects Access Control includes automated review and approval processes on employee access throughout the enterprise, automatic monitoring and detection of access violations, and

reaffirmation of mitigation controls. In addition, we have added extended identity management integration and cross-platform capabilities for non-SAP applications.

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SAP BusinessObjects EPM solutions: In 2008, we delivered several new EPM solutions. The new version of the SAP BusinessObjects Planning and Consolidation application helps customers easily configure their planning and budgeting applications to run on SAP NetWeaver and is also optimized for the Microsoft SQL platform, supporting customers with diverse IT environments. A new version of our SAP BusinessObjects Strategy Management application is now integrated with SAP NetWeaver as well, adding more business context to the strategy management process and lowering the total cost of ownership for SAP customers. We released other new EPM solutions in a new version of the SAP BusinessObjects Spend Performance Management application, delivering actionable visibility into purchasing detail, a new version of the SAP BusinessObjects Financial Consolidation application, which helps organizations leverage their BI investment and enables users to quickly create and distribute *ad-hoc* financial reports to key decision makers, and a new version of the SAP BusinessObjects Profitability and Cost Management application, which helps customers gain more precise insight into cost drivers and their effect on profitability.

Jointly developed with Microsoft, Duet software enables business users to use SAP-based data and business process software in the familiar Microsoft Office environment. In December 2008, we delivered a new Duet version for ramp-up, with extensions to all existing user processes and new capabilities for purchasing management, recruitment management, and workflow approvals. It comes with additional configuration tools for the system administrator and with more languages.

We developed the Alloy software in conjunction with IBM. It enables business users to access SAP software and information from within the familiar IBM Lotus Notes environment. Alloy is available from both companies from the first quarter of 2009.

## SEASONALITY

As is common in the software industry, our business has historically experienced the highest revenue in the fourth quarter of each year, due primarily to year-end capital purchases by customers. Such factors have resulted in 2008, 2007, and 2006 first quarter revenue being lower than revenue in the prior year's fourth quarter. We believe that this trend will continue in the future and that our revenue will continue to peak in the fourth quarter of each year and decline from that level in the first quarter of the following year.

## BUSINESS BY REGION

We operate our business in three principal geographic regions, namely EMEA, which represents Europe, the Middle East and Africa, the Americas, which represents both North and South America, and Asia Pacific Japan (APJ), which represents Japan, Australia and other parts of Asia. We allocate revenue amounts to each region based on where the customer is located. See Note 28 to our consolidated financial statements in Item 18. Financial Statements for additional information with respect to operations by geographic region.



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The following table sets forth, for the years indicated, the total revenue attributable to each of our three principal geographic regions:

	<b>2008</b>	<b>2007</b> <b>millions</b>	<b>2006</b>
Germany	2,193	2,004	1,907
Rest of EMEA	4,011	3,386	2,994
<b>Total EMEA</b>	<b>6,204</b>	<b>5,390</b>	<b>4,901</b>
United States	2,882	2,706	2,609
Rest of Americas	990	871	776
<b>Total Americas</b>	<b>3,872</b>	<b>3,577</b>	<b>3,385</b>
Japan	515	447	431
Rest of APJ	974	828	676
<b>Total APJ</b>	<b>1,489</b>	<b>1,275</b>	<b>1,107</b>
<b>Total revenue</b>	<b>11,565</b>	<b>10,242</b>	<b>9,393</b>

**EMEA.** In 2008, 54% (2007: 53%) of our total revenues were derived from the EMEA region. Our total revenues in the EMEA region grew to 6,204 million or by 15% in 2008 (2007: 10%). The EMEA region revenue growth reflects a 17% (2007: 11%) increase from changes in volumes and prices and a 2% decrease from currency effects. Revenues in Germany, SAP's home market, increased by 9% (2007: 5%) to 2,193 million in 2008 (2007: 2,004 million). Germany contributed 35% (2007: 37%) of EMEA's total revenues, which is a slight decrease of 2 percentage points compared to 2007. The remainder of revenues for the EMEA region in 2008 originated mainly from the following countries: the United Kingdom, France, Switzerland, the Netherlands, Italy and Russia.

The number of our employees (full-time equivalents, or FTEs) in the EMEA region increased by 3,171 FTEs or 13%, from 23,654 as of December 31, 2007 to 26,825 as of December 31, 2008. This increase was mainly driven by the acquisition of Business Objects. In Germany, the number of FTEs increased by 6% to 15,582 as of December 31, 2008 compared to 14,749 as of December 31, 2007. See Item 6. Directors, Senior Management and Employees Employees.

**Americas.** 33% (2007: 35%) of our 2008 total revenues were recognized in the Americas region. Revenues increased by 8% (2007: 6%) to 3,872 million in 2008. Revenues from the United States grew by 7% in 2008 (2007: 4%), which represents a growth of 14% (2007: 13%) from changes in volumes and prices and a 7% decrease from currency effects. The United States contributed 74% (2007: 76%) of our total revenues in the Americas region. The rest of the Americas region increased revenues by 14% (2007: 12%) to 990 million, which represents a growth of 20% (2007: 15%) from changes in volumes and prices and a 6% decrease from currency effects. These revenues were principally generated in Canada, Brazil and Mexico.

In the Americas region the FTEs increased by 27% from 10,629 as of December 31, 2007 to 13,457 at December 31, 2008. This increase was mainly driven by the acquisition of Business Objects.

**APJ.** In 2008, the Asia Pacific Japan region contributed 13% (2007: 12%) of our total revenues, with most of this revenue being derived mainly from the following major contributing countries: Japan, Australia, India, China and South Korea. In the Asia Pacific Japan region, revenues rose by 17% (2007: 15%) to 1,489 million in 2008. Japan increased by 15% (2007: 4%) to 515 million, which represents 35% (2007: 35%) of total revenues in the Asia Pacific Japan region. The Japan region revenue growth reflects a 6% (2007: 14%) increase from changes in volumes and prices and a 9% increase from currency effects. The rest of the Asia Pacific Japan region (Japan excluded) increased revenues by 18% (2007: 22%), which represents a growth of 26% (2007: 24%) from changes in volumes and prices and an 8% decrease from currency effects.

In the Asia Pacific Japan region, FTEs increased by 17% from 9,578 as of December 31, 2007 to 11,254 as of December 31, 2008. This increase was due principally to the acquisition of Business Objects.

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## REVENUE BY INDUSTRY SECTOR

We have identified six industry sectors to focus our product development efforts on the key industries of our existing and potential customers and to provide best business practices and specific integrated business solutions to those industries. We allocate our customers to an industry at the outset of an initial arrangement. All subsequent revenues from a particular customer are recorded under that industry sector. The following table sets forth the total revenues attributable to each of the six industry sectors for the years ended December 31, 2008, 2007, and 2006.

	<b>2008</b>	<b>2007</b>	<b>2006</b>
		<b>millions</b>	
Process Industries	2,365	2,135	1,995
Discrete Industries	2,432	2,222	2,179
Consumer Industries	2,234	1,949	1,665
Service Industries	2,703	2,371	2,132
Financial Services	773	678	590
Public Services	1,058	887	832
<b>Total revenue</b>	<b>11,565</b>	<b>10,242</b>	<b>9,393</b>

## SALES, MARKETING AND DISTRIBUTION

SAP AG primarily uses its worldwide network of subsidiaries to market and distribute SAP's products and services locally. Those subsidiaries have entered into license agreements with SAP AG pursuant to which the subsidiary acquires the right to sublicense SAP AG's products to customers within a specific territory. Under these agreements, the subsidiaries retain a certain percentage of the revenue generated by the sublicensing activity. We began operating in the United States in 1988 through SAP America, Inc., a wholly owned subsidiary of SAP AG. Since then, the United States has become one of our most important markets. In certain countries, we have established distribution agreements with independent resellers rather than with subsidiaries.

In addition to our subsidiaries' sales forces, we have developed an independent sales and support force through value-added resellers unrelated to SAP who assume responsibility for the licensing, implementation and support of SAP solutions, particularly with regard to the SAP Business One application and qualified SAP Business All-in-One partner solutions. We have also entered into alliances with major system integration firms, telecommunication firms and computer hardware providers to offer certain SAP Business Suite applications.

We supplement certain of our consulting and support services through alliances with hardware and software suppliers, systems integrators and third-party consultants with the goal of providing customers with a wide selection of third-party competencies. The role of the alliance partner ranges from pre-sales consulting for business solutions to the implementation of our software products to project management and end-user training for customers and, in the case of certain hardware and software suppliers, to technology support.

Traditionally, our sales model has been to charge a one-time, up front license fee for a perpetual license to our software (without any rights to future products) which is typically installed at the customer site. We now offer our solutions in a variety of ways which include on-demand, hosted solutions, and subscription-based models. Although

revenues from these new types of models currently are not material, we expect these revenues to increase in the future.

Our marketing efforts cover large, multinational groups of companies as well as small and midsize enterprises. We believe our broad portfolio of solutions and services enables us to meet the needs of customers of all sizes and across industries.

Capitalizing on the possibilities of the Internet, we actively make use of online marketing. Some of our solutions can be tested online via the Internet demonstration and evaluation system, which also offers special services to introduce customers and prospects to new solutions and services.

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**PARTNERSHIPS, ALLIANCES AND ACQUISITIONS**

Partnerships and strategic alliances are a key element of our efforts to broaden the solutions and services offered to SAP customers and to extend the markets for our products and services. Our close collaboration with partners across the life cycle of a customer solution is a key element in enhancing customer satisfaction. We characterize our partnerships and strategic alliances into categories such as services, technology, software, hosting, content, education and support that together constitute what we refer to as the partner services network. Within most categories, our partners may achieve the status of a local or global partner. We expect our alliance partners to provide customers with joint strategic solutions. Our partners generally have a strong position in a particular line of business or cross-industry and complement the range of SAP solutions in these areas. Our partner network includes thousands of companies including independent software vendors (ISVs), systems integrators, and business process outsourcing (BPO) providers across all partner categories.

We have entered into agreements with a number of leading software, technology and services companies to cooperate and enable the software, technology and services offered by such suppliers to complement our software products and vice versa.

In May 2006, we announced the launch of a US\$125 million global fund called the SAP NetWeaver Fund, which focuses on strategic investments in select companies that are committed to the SAP ecosystem and are building innovative solutions based on the SAP NetWeaver technology platform. To date, the fund has invested approximately one-fourth of the US\$125 million in minority interests of six technology companies providing innovative solutions for various industries from manufacturing to life sciences. We account for these investments using the cost method unless we are able to significantly influence the operating and/or financial decisions of the investee, in which case we use the equity method of accounting.

SAP's acquisition strategy is to acquire complementary application offerings and solutions through strategic and fill-in acquisitions. These acquisitions give SAP access to innovative technologies while enabling SAP to continue to focus on organic growth.

In 2008, we acquired the outstanding shares of two unrelated companies and the net assets of two other unrelated businesses that developed and/or distributed software that is complementary to our business. We have integrated the acquired businesses into the SAP operations and solution offerings. We have retained the majority of the employees from the businesses we acquired. The financial results of these acquired businesses have been included in our financial statements since the respective acquisition dates. The amount of in-process research and development we expensed in 2008 as a result of these acquisitions was immaterial.

In early 2008 we acquired Business Objects, a leading provider of business intelligence solutions. We have successfully integrated Business Objects with SAP. The acquisition cost, net of cash held by Business Objects, amounted to approximately 4.2 billion. The combination of Business Objects solutions with SAP technologies enables SAP to offer a unique portfolio of products that can give business users process owners and decision makers in business the transparency they need for effective decision making.

The acquisition of Visiprise, Inc. (Visiprise) in July 2008 exemplifies our fundamental acquisition strategy as mentioned above. Visiprise was a privately-owned software vendor that developed and distributed manufacturing execution systems. The acquisition of Visiprise was another step in our strategy of helping manufacturing organizations close the gap between operational planning and production execution.

Other than the Business Objects acquisition, the acquisitions made in 2008 were immaterial to us individually and in the aggregate. For further information, see Note 4 to our consolidated financial statements in Item 18. Financial Statements.

There were no public takeover offers by third parties with respect to our shares in 2008 or 2007.

**Table of Contents****INTELLECTUAL PROPERTY, PROPRIETARY RIGHTS AND LICENSES**

We rely on a combination of the protections provided by applicable trade secret, copyright, patent, and trademark laws, license and non-disclosure agreements, and technical measures to establish and protect our proprietary rights in our products. For further details on risks related to SAP's intellectual property rights, see Item 3 Key Information Risk Factors Other Operational Risks.

We may be dependent in the aggregate on technology that we license from third parties that is embedded into our products or that we resell to our customers. We have licensed and will continue to license numerous third-party software products that we incorporate into and/or distribute with our existing products. We endeavor to protect ourselves in the respective agreements by obtaining certain rights in case such agreements are terminated.

We are a party to certain patent cross-license agreements with certain third parties.

We are named as a defendant in various legal proceedings for alleged intellectual property infringements. See Note 24 to our consolidated financial statements in Item 18. Financial Statements for a more detailed discussion of these legal proceedings.

**ORGANIZATIONAL STRUCTURE**

As of December 31, 2008, SAP AG was the holding company of 187 subsidiaries. Our subsidiaries perform various tasks such as the distribution of SAP's products and providing SAP services on a local basis. Our primary research and development facilities, the overall group strategy and the corporate administration functions are concentrated at our headquarters in Walldorf, Germany.

The following table illustrates our most significant subsidiaries based on revenues as of December 31, 2008:

<b>Name of Subsidiary</b>	<b>Ownership %</b>	<b>Country of Incorporation</b>	<b>Function</b>
<b>Germany</b>			
SAP Deutschland AG & Co. KG, Walldorf	100	Germany	Sales, consulting and training
<b>Rest of Europe/Middle East/Africa</b>			
SAP (UK) Limited, Feltham	100	Great Britain	Sales, consulting and training
SAP (Schweiz) AG, Biel	100	Switzerland	Sales, consulting and training
SAP France S.A., Paris	100	France	Sales, consulting and training
SAP ITALIA SISTEMI, APPLICAZIONI, PRODOTTI IN DATA PROCESSING S.P.A., Milan	100	Italy	Sales, consulting and training
SAP Nederland B.V., s-Hertogenbosch	100	The Netherlands	Sales, consulting and training
SAP CIS, Moscow	100	Russia	Sales, consulting and training
<b>Americas</b>			
SAP America, Inc., Newtown Square	100	USA	Sales, consulting and training
Business Objects Americas	100	USA	Sales, consulting and training
SAP Canada Inc., Toronto	100	Canada	Sales, consulting, training, and research and

SAP Public Services, Inc., Washington, D.C.	100	USA	development
SAP Brasil Ltda.	100	Brasil	Sales, consulting and training
<b>Asia/Pacific</b>			
SAP JAPAN Co., Ltd., Tokyo			Sales, consulting training, and research and development
	100	Japan	
SAP Australia Pty Limited, Sydney	100	Australia	Sales, consulting and training



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DESCRIPTION OF PROPERTY

Our principal office is located in Walldorf, Germany, where we own and occupy approximately 420,000 square meters of office space including our facilities in neighboring St. Leon-Rot. We also own and lease office space in various other locations in Germany, totaling approximately 115,000 square meters, and in 59 other countries worldwide, totaling approximately 705,000 square meters. The space in most locations other than our principal office in Germany is leased. We own certain real properties in Newtown Square and Palo Alto, United States; Bangalore, India; and a few other locations in and outside of Germany.

The office space we occupy includes approximately 275,000 square meters in the EMEA region, excluding Germany, approximately 240,000 square meters in the USA, and approximately 190,000 square meters in the APJ Region.

The space is being utilized for various corporate functions including research and development, customer support, sales and marketing, consulting, training, and administration. Note 28 to our consolidated financial statements in Item 18. Financial Statements discusses property, plant, and equipment by geographic region. Item 6. Directors, Senior Management and Employees discusses the numbers of our employees by business area and by geographic region, which may be used to approximate the productive capacity of our workspace in each region.

We believe that our facilities are in good operating condition and adequate for our present usage. We do not have any significant encumbrances on our properties. We are currently undertaking construction activities in various locations to increase our capacity for future expansion of our business. Some of our significant construction activities are described below, under the heading Capital Expenditures.

Capital Expenditures

We commenced the construction of a new office building at our Newtown Square location in the second quarter of 2007, which will add 850 workspaces and will increase our workspace by approximately 20,000 square meters. We estimate the total cost to be about 79 million, of which we had incurred approximately 55 million as of December 31, 2008. The construction is expected to be completed in May of 2009. We are funding the construction with internally generated cash flows.

In Germany we closed down our branch in Saarbrücken and started the consolidation of facilities with the branch in St. Ingbert. We estimate the total cost of this project to be approximately 14 million, of which we had paid approximately 6 million as of December 31, 2008. We are funding the construction in St. Ingbert with internally generated cash flows. We expect to complete this project within the second half of 2010.

In 2008 we began construction of a guesthouse in our Walldorf location to save future travel costs on visiting SAP employees. We estimate the total cost of the construction to be approximately 17 million, of which we had paid approximately 8 million as of December 31, 2008. We are funding the construction with internally generated cash flows. The construction is expected to be completed by the end of 2009.

In Brazil, we commenced construction for the expansion of the São Leopoldo office in the fourth quarter of 2007, which will add 400 workspaces. We estimate the total costs to be about 13 million, of which we had incurred approximately 5 million as of December 31, 2008. We are funding this project with internally generated cash flows. The construction at this location is expected to be completed in mid 2009.

Our capital expenditures for property, plant, and equipment amounted to 344 million for 2008 (2007: 342 million; 2006: 316 million). Capital expenditures in 2008 for property, plant, and equipment remained constant compared to 2007. The increase from 2006 to 2007 was in large part due to the construction of new buildings in Walldorf that were completed in 2007. For a related discussion on property, plant, and equipment, see Note 17 to our consolidated financial statements in Item 18. Financial Statements.

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Our capital expenditures for intangible assets such as software licenses, acquired technologies and customer contracts increased significantly to 1,044 million in 2008 from 238 million in 2007 (2006: 189 million). Goodwill also increased significantly to 3,547 million in 2008 from 520 million in 2007 (2006: 407 million). The increase from 2007 to 2008 was primarily attributable to the acquisition of Business Objects. The increase from 2006 to 2007 was primarily attributable to the acquisition of the shares or net assets of various unrelated companies in 2007. For further details on acquisitions and related capital expenditures, see Note 4 and Note 16 to our consolidated financial statements in Item 18. Financial Statements.

For further details regarding capital expenditures by geographic region, see Note 28 to our consolidated financial statements in Item 18. Financial Statements.

## **ITEM 4A. UNRESOLVED STAFF COMMENTS**

Not applicable.

## **ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

### **OVERVIEW**

Our principal sources of revenue are sales of software products and related services. Software revenue is primarily derived from software license fees that customers pay to use SAP products. We provide standard support for a fee based on a fixed percentage of the license fee paid by the customer and we also offer optional support services for additional coverage and scope. In 2008 SAP began offering Enterprise Support, which allows companies to take full advantage of the integration of SAP and non-SAP solutions, minimize risk, enable the acceleration of innovation and address solution lifecycle management. Our professional service revenue consists of consulting, training and other service revenue; consulting revenue is primarily derived from the services rendered with respect to implementation of our software products and training revenue from customer project teams and end-users, as well as training third-party consultants with respect to SAP software products. See Item 4. Information about SAP The SAP Portfolio for a more detailed description of the products and services we offer.

Subscription revenues flow from contracts that have both a software element and a support element. Subscription contracts typically give our customers the use of current software and the right to unspecified future products. We charge a fixed monthly fee for a definite term, which is generally five years. Software rental revenue flows from software rental contracts, also with software and support elements but here the customer receives the use of current products only. Our revenue from other software-related services includes revenue from our on-demand offerings, for example the SAP CRM on-demand solution, any future on-demand revenue from our new midmarket product SAP Business ByDesign, revenue from hosting contracts that do not entitle the customer to readily exit the arrangement, and revenue from software-related revenue-sharing arrangements, for example our share of revenue from collaboratively developed products.

We also report revenue from other services within professional services and other service revenue. This item includes revenue from non-mandatory hosting services, application management services (AMS), and sales commission received from third-parties. Non-mandatory hosting services revenue consists of revenue from hosting contracts from which the customer can readily exit if it wishes to run the software on its own systems.

In addition, we present in our Consolidated Statements of Income the results of discontinued operations. This presentation results from the wind-down of our TomorrowNow Group ( TN ), which consists of TomorrowNow, Inc. and its subsidiaries, and to cease providing third-party product-support services. TN is a subsidiary of SAP America, Inc., which is a wholly owned subsidiary of SAP AG. In our discussion in the following Operating Results section and

the Segment Discussions section under this Item 5, revenue and expense figures are for our continuing operations, unless noted otherwise. The disposal of TN did not have a significant

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impact on our results of operations. See Note 11 to our consolidated financial statements in Item 18. Financial Statements for more detail about discontinued operations.

The following discussion is provided to enable a better understanding of our operating results for the periods covered, including:

the key factors and trends that we believe impacted our performance in 2008;

our outlook for 2008 compared to our actual performance;

a discussion of our operating results for 2008 compared to 2007 and for 2007 compared to 2006 (including Segment Discussions);

the key factors and trends we believe will impact our performance in 2009; and

our outlook for 2009 (including Medium-Term Perspectives).

The preceding overview should be read in connection with the more detailed discussion and analysis of our financial condition and results of operations in this Item 5, Item 3. Key Information Risk Factors and Item 18. Financial Statements.

## **KEY FACTORS**

### **2008 Global Economic Trends**

The international financial crisis pervaded developments in the global economy during 2008. Its impact on the entire financial sector and on the real economy was apparent in pressure on the prices of commodities and of many capital goods, a marked decline in the price of many securities, corrections in some places very substantial in real estate prices, a loss of confidence among market participants, and a noticeable decline in demand, which the automotive industry felt especially keenly. In consequence, the economic outlook has deteriorated significantly, and businesses and consumers have accordingly adjusted their expectations. Falling commodity prices at the end of 2008 did nothing to improve overall market sentiment.

In January 2008, the International Monetary Fund (IMF) projected that global output, which is the global total value of all goods and services, would grow 4.2% in 2008; In January 2009, it revised that projection downward to 3.4%. In an early forecast, the IMF expected world trade in goods and services to increase 5.6% in 2008; it now believes world trade grew only 4.1% in 2008.

The European Central Bank (ECB) reported worsening economic trends in the second half of 2008. It observed that global inflationary pressures relaxed toward the end of the year, but that the impact of the turmoil on the financial markets was spreading across the world. The emerging and developing economies, which in past years had made a strong contribution to global economic growth, appear also to have been affected by deteriorating economic conditions. In January 2009, the IMF estimated that their combined 2008 output growth had declined to 6.3%.

According to the ECB, the economies of the United States and western Europe became increasingly subdued over the year. In North America, the sharp downturn in growth was primarily the result of the steep decline in consumer spending, the continuing correction of the housing market, and faltering investment in business plant, equipment, and software. In the economies in the euro area, 2008 saw ever tighter lending standards for business and slower growth in lending to consumers, the ECB reported. The Deutsche Bundesbank reports that in the second half of 2008, Germany

was also significantly affected by the ailing global economy. Consumer spending and investment behavior were disrupted, which was reflected in a marked rise in the savings ratio toward the end of 2008.

Similarly, the economic situation in Japan was made worse in the second half of 2008 by sluggish domestic demand and a continuing decline in export activity, according to the ECB. Credit conditions did not tighten as much as in other industrialized countries. Nonetheless, the ECB assumes the Japanese economy slowed further

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in the final quarter of 2008, because the deteriorating employment situation kept consumer spending in check and because exports again decreased as a result of the falling demand overseas for Japanese products.

According to the ECB's analysis, the pace of growth again slackened appreciably in the emerging and developing economies in Asia during the third quarter of 2008. Although the global economic downturn spread and deepened in the second half of 2008, exports from the emerging countries in Asia were generally not severely affected. Rather, it was declining domestic demand, held back by evaporating consumer and business confidence that slowed economic growth.

## Year-Over-Year Output Growth

%	2007	2008e	2009p
World	5.2	3.4	0.5
Advanced economies	2.7	1.0	(2.0)
United States	2.0	1.1	(1.6)
Euro area	2.6	1.0	(2.0)
Germany	2.5	1.3	(2.5)
Developing Asia	10.6	7.8	5.5
Japan	2.4	(0.3)	(2.6)

e = Estimate; p = Projection

Source: IMF, January 2009

## IT Market in 2008

In the assessment of International Data Corporation (IDC), a market research firm based in the United States, the effects of the international financial crisis on the real economy had a pronounced influence on global demand for IT especially in the final quarter of 2008. Until as late as the summer, the global IT market had withstood relatively well the turmoil of the financial crisis and already receding economic growth even though that market was beginning to show signs of reduced vigor. In the first half of the year, IDC also observed a flattening of the increase in demand for IT in the emerging economies, trending toward the lower levels of demand growth in the industrialized countries. While, in IDC's analysis, demand in some industries, such as financial services, retail, and construction, remained weak, international IT spending growth was relatively constant into the third quarter of 2008. IDC attributes such robust growth in IT spending to the increasing complexity of the tasks that IT accomplishes for companies, and on the resultant efficiency gains.

However, as the credit crunch worsened, from mid-September companies showed much less willingness to invest in IT. Investment bank Goldman Sachs's IT spending indicator suggested that IT capital expenditure growth was decelerating significantly, measured over the full year. By the end of 2008, the perception that economic growth was waning was already reflected in acutely reduced demand from companies for hardware and software, IDC observed.

Overall, in IDC's analysis, 2008 was a relatively good year because the financial crisis did not affect the real economy until quite late. Year-over-year, worldwide spending on IT, excluding telecommunications, grew 6.9%. Breaking down 2008 spending growth by segment, IDC estimated that the biggest increase was achieved in packaged software (9.1%), while the weakest segment was hardware (4.9% growth). In its geographical breakdown, IDC estimated that spending grew most strongly in the AJP region (10.3%) and least strongly in the Americas region (3.9%).





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## IT Spending

Percentage Change Since Previous Year

%	2007	2008e	2009p
World			
Total IT market	12.5	6.9	0.5
Hardware	13.0	4.9	(3.6)
Packaged software	13.8	9.1	3.4
Application software	14.4	7.9	2.7
Services	11.2	8.0	3.4
Americas region			
Total IT market	8.7	3.9	0.6
Packaged software	11.2	5.7	3.9
Application software	10.0	4.8	3.6
Services	6.5	4.8	3.5
EMEA region			
Total IT market	16.9	8.4	0.0
Packaged software	19.0	11.5	1.9
Application software	23.0	10.9	1.0
Services	17.2	9.1	2.5
APJ region			
Total IT market	12.3	10.3	1.3
Packaged Software	11.3	16.2	5.2
Application software	11.0	15.0	4.3
Services	9.4	13.7	5.4

e = Estimate; p = Projection

Source: IDC Black Book Q4, February 2009

## OUTLOOK 2008

## SAP Performance Against our Outlook for 2008

We expressed our 2008 operating income-related internal management goals and published outlook in non-GAAP terms. For this reason, in the following section we discuss performance against our outlook exclusively and expressly in terms of non-GAAP numbers. The subsequent discussion in this Item 5. Operating and Financial Review and Prospects Operating Results is in terms of U.S. GAAP measures, except where otherwise noted.

## Outlook for 2008

At the beginning of 2008, we provided an outlook of increasing non-GAAP software and software-related service revenue (2007: 7,427 million) in a range between 24% and 27% on a constant currency basis. We defined the measure as excluding a nonrecurring deferred support revenue write-down of approximately 180 million from the acquisition of Business Objects. We expected SAP's business, excluding the contribution from Business Objects, to contribute 12 to 14 percentage points to this growth. In July 2008, we also announced that in view of our successful first-half year operations, we expected non-GAAP software and software-related service revenue growth to reach the upper end of the range that we had announced earlier. In October 2008 as a result of the



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deteriorating global economic conditions, we decided we could no longer specifically forecast our non-GAAP at constant currency software and software-related service revenue growth for 2008. See below for our outlook given in October 2008.

At the beginning of 2008, we also projected that our constant-currency non-GAAP operating margin, which excludes a nonrecurring deferred support revenue write-down from the acquisition of Business Objects and acquisition-related charges, would be in a range between 27.5% and 28.0%. Non-GAAP operating margin is the ratio, expressed as a percentage, of non-GAAP operating income at constant currency to non-GAAP total revenue at constant currency. The non-GAAP operating margin outlook that we announced at the beginning of 2008 included accelerated investments of 175 to 225 million (2007: 125 million) in building a business around the new SAP Business ByDesign solution to address new, untapped segments in the mid-market. In April of 2008, we modified the rollout strategy for the SAP Business ByDesign solution to enable a more focused and controlled ramp-up process. We announced that the accelerated investment in SAP Business ByDesign in 2008 would be reduced by approximately 100 million in view of the modified rollout strategy. We expected this would reinforce the non-GAAP operating margin improvement and lead to an operating margin in the range between 28.5% and 29.0%. In July 2008, we announced that we expected the full-year non-GAAP operating margin to be at the upper end of the range reinforced in April 2008. In October 2008 we modified our constant currency non-GAAP operating margin outlook further as the impact of the global economic crisis became more apparent. See below for our outlook given in October 2008.

In October, we adjusted our outlook for full-year 2008 non-GAAP software and software-related service revenues and non-GAAP operating margin. In light of the uncertain economic and business environment, in October 2008 we ceased providing an outlook for full-year 2008 non-GAAP software and software-related service revenues and modified our outlook for non-GAAP operating margin. At that time we gave the following outlook for full-year 2008:

With recent cost-savings initiatives in place, the Company expects full-year 2008 non-GAAP operating margin, which excludes a nonrecurring deferred support revenue write-down of 180 million from the acquisition of Business Objects and acquisition-related charges, to be around 28% at constant currencies if we can increase non-GAAP software and software-related service revenues, excluding a nonrecurring deferred support revenue write-down from the acquisition of Business Objects, in a range between 20% and 22% at constant currencies for the full year 2008. We believe that in the fourth quarter of 2008 we can save some 200 million compared to our originally forecasted costs. To this end we will stop all recruitment, considerably reduce spending on externally provided services, and make cuts in travel and other variable expenditure for the rest of 2008.

We continue to project an effective tax rate of 31.0% to 31.5% (based on U.S. GAAP income from continuing operations) for 2008.

In our previous outlook (given in July 2008) we expected to hire 3,500 employees in 2008 (excluding additions from acquisitions). To date we have hired 1,500 new employees (given in October 2008; excluding new hires from acquisitions). Based on our revised outlook this amount should not significantly change through the end of the year.

We will continue in 2008 with our strategy of buying back shares in order to give back liquidity to our shareholders. We already bought back shares totaling 486.8 million as of September 30, 2008.

The investments in fixed assets (excluding acquisitions) planned for 2008 mainly comprise the completion of office buildings at several locations which can be fully financed with operating cash flow. Based on our cost saving programs we reduced the investments which were planned for the fourth quarter. Our financial position shall be further strengthened as a result.

This outlook is based among others on the presented assumptions regarding the global financial crisis which emerged in the second half of September. The global financial crisis resulted in a

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clear and until this time unexpected change in the buying behavior of our customers. However, the outlook is also based on the assumption that the buying behavior will follow our normal seasonality of revenues; we expect the fourth quarter contributing the highest revenues of the year 2008.

A reconciliation from our Non-GAAP financial measures to our U.S. GAAP financial measures is provided below. These non-GAAP measures reconcile to the nearest U.S. GAAP equivalents as follows:

2008	U.S.	Business Objects Support Revenue Not	Acquisition- Related Charges	Non-GAAP Financial Measure	Currency Effect on the Non-GAAP Financial Measure	Non-GAAP Financial Measure at Constant Currency
	GAAP Financial Measure	Recorded Under U.S. GAAP	millions, except operating margin			
Software and software-related service revenue	8,457	166		8,623	296	8,919
Total revenue <sup>(1)</sup>	11,565	166		11,731	413	12,144
Operating income <sup>(1)</sup>	2,840	166	297	3,303	147	3,450
Operating margin	24.6%	1.3%	2.3%	28.2%	0.2%	28.4%

(1) These financial measures are the numerator or the denominator in the calculation of our non-GAAP operating margin and the comparable U.S. GAAP operating margin, and are included in this table for the convenience of the reader.

### 2008 Non-GAAP Software and Software-Related Service Revenue Early 2008 Outlook Compared to Actual Performance

On a constant currency basis over the full year, our non-GAAP software and software-related service revenue grew 20% (16% without adjustment for currency effects) to 8,919 million (2007: 7,427 million), which was below the revenue outlook we set at the beginning of the year. We did not meet our early 2008 revenue outlook due to the global economic crisis that emerged in the second half of 2008, which caused the demand for our software products to decrease steeply, particularly in the fourth quarter of 2008, as many customers declined to make investment decisions. Although demand for original SAP products fell more severely than the products of Business Objects, SAP's business without the Business Objects results contributed 6 percentage points to non-GAAP software and software-related service revenue growth on a constant currency basis due primarily to the successes in the first half of the year. For the fifth year in succession, including the results of Business Objects, we achieved double-digit percentage growth in full-year non-GAAP software and software-related service revenue on a constant currency basis.

### 2008 Non-GAAP Operating Margin Outlook Compared to Actual Performance

We achieved a non-GAAP operating margin of 28.4% on a constant currency basis, meeting the outlook we provided at the beginning of the year (27.5% to 28%) and the outlook provided in October 2008 (28.0%), but failing to meet the outlook provided in April 2008 and as revised in July 2008. This represented a 1.1 percentage-point improvement over

the previous year's corresponding 27.3% non-GAAP operating margin, despite the difficult economic conditions. In addition, we met the non-GAAP at constant currency operating margin outlook of 28% we defined in October 2008, even though the 20% year-over-year growth in our non-GAAP software and software-related service revenue that we achieved on a constant currency basis was at the lower end of the assumed range. We realized this success by implementing comprehensive cost savings, which included a stop on all recruitment and a significant reduction of spending on external service providers, business travel and other variable costs. Compared to the original forecast, we saved more than 200 million in the final quarter of 2008 with these measures, which were an immediate response to the deteriorating economic conditions.

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## OPERATING RESULTS

## Total Revenue

	<b>2008</b>	<b>2007</b> <b>millions</b>	<b>2006</b>	<b>Change</b> <b>2008 vs.</b> <b>2007</b>	<b>Change</b> <b>2007 vs.</b> <b>2006</b>
Total revenue	11,565	10,242	9,393	13%	9%

As a result of our acquisition of Business Objects in January 2008, our numbers for 2008 and 2007 are not fully comparable.

**2008 compared with 2007.** Total revenue increased from 10,242 million in 2007 to 11,565 million in 2008, representing an increase of 1,323 million or 13%. The revenue growth reflects a 17% increase from changes in volumes and prices and a 4% decrease from currency effects. This increase is mainly related to the strong performance in software and software-related service revenue, which grew by 1,030 million or 14% compared to 2007. A significant portion of this growth was due the acquisition of Business Objects. In 2008, software and software-related service revenue represented 73% of our total revenue, which was flat compared to 2007. Professional services and other service revenue contributed 295 million to the overall growth in 2008. This represents an increase of 11% compared to 2007. Professional services and other service revenue accounted for 26% of our total revenue compared to 27% in 2007.

The average exchange rate for the U.S. dollar in 2008 was \$1.47 per 1.00, compared to \$1.38 per 1.00 in 2007. The rate evolved as follows for the period-end Noon Buying Rate expressed as dollars per 1.00.

<b>Date</b>	<b>Period-End</b>
December 2007	1.4603
March 2008	1.5805
June 2008	1.5748
September 2008	1.4081
December 2008	1.3919

Ultimately the strength of the euro over the year reduced the euro value of revenue generated in other currencies. Foreign currency translation effects from the strengthening value of the euro during the year negatively impacted our total revenue by 4% in 2008.

**2007 compared with 2006.** Total revenue increased from 9,393 million in 2006 to 10,242 million in 2007, representing an increase of 849 million or 9%. The revenue growth reflects a 13% increase from changes in volumes and prices and a 4% decrease from currency effects. This increase is mainly related to the strong increase in software and software-related service revenue, which grew by 831 million or 13% compared to 2006. The revenue growth reflects a 17% increase from changes in volumes and prices and a 4% decrease from currency effects. In 2007, software and software-related service revenue represented 73% of our total revenue, which is an increase of

3 percentage points compared to 2006, in line with our goals. Professional services and other service revenue contributed 16 million to the overall growth in 2007. This represents an increase of 4% compared to 2006 from changes in volumes and prices and 3% decrease from currency effects.

The average exchange rate for the U.S. dollar in 2007 was \$1.38 per 1.00, compared to \$1.27 per 1.00 in 2006. The rate evolved as follows for the period-end Noon Buying Rate expressed as dollars per 1.00.

<b>Date</b>	<b>Period-End</b>
December 2006	1.3197
March 2007	1.3374
June 2007	1.3520
September 2007	1.4219
December 2007	1.4603



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Ultimately the strength of the euro over the year reduced the euro value of revenue generated in other currencies. Foreign currency translation effects from the strengthening value of the euro during the year negatively impacted our total consolidated revenue by 4% in 2007.

Software and software-related service revenue

	2008	2007	2006	Change 2008 vs. 2007	Change 2007 vs. 2006
		millions			
Software revenue	3,606	3,407	3,003	6%	13%
Support revenue	4,593	3,838	3,464	20%	11%
Subscription and other software-related service revenue	258	182	129	42%	41%
<b>Software and software-related service revenue</b>	<b>8,457</b>	<b>7,427</b>	<b>6,596</b>	<b>14%</b>	<b>13%</b>

Software revenue represents fees earned from the sale or license of software to customers. Support revenue represents fees earned from providing customers with technical support services and unspecified software upgrades, updates and enhancements. Subscription and other software-related service revenue represents fees earned from subscriptions, software rentals, and other types of software-related service contracts.

**2008 compared with 2007.** Software and software-related service revenue increased from 7,427 million in 2007 to 8,457 million in 2008, representing an increase of 1,030 million or 14%. A significant portion of this growth was due the acquisition of Business Objects. The revenue growth reflects an 18% increase from changes in volumes and prices and a 4% decrease from currency effects.

Software revenue rose from 3,407 million in 2007 to 3,606 million in 2008, accounting for an increase of 199 million, or 6%. The software revenue growth consists of a 10% increase from changes in volumes and prices and a 4% decrease from currency effects.

The strong performance in software and software-related service revenue for the full year 2008 is the result of well balanced growth in all regions. Compared to 2007 the EMEA region grew by 15%. This growth represents an 18% increase from changes in volumes and prices and a 3% decrease from currency effects. The Americas region grew by 9%, which represents a 16% increase from changes in volumes and prices and a 7% decrease from currency effects and the region Asia Pacific Japan region by grew 21%, which represents a 23% increase from changes in volumes and prices and a 2% decrease from currency effects.

The extension of our established product portfolio, SAP Business Suite and our platform-related products based on SAP NetWeaver, especially towards the business user solutions, led to an overall software revenue growth rate of 6%. The software revenue growth reflects a 10% increase from increased volumes and prices and a 4% decrease from currency effects. In 2008, we continued to derive software revenue from our strong customer base. Nevertheless, the number of software contracts coming from new customers remained stable at 31%. Based on the order entry value, the new customer share decreased from 21% in 2007 to 13% in 2008 influenced fundamentally by lower deal sizes in the extended business user area.

The SAP NetWeaver-related revenue decreased from 997 million in 2007 to 942 million in 2008, representing a decrease of 55 million or 6%. The portion relating specifically to the underlying SAP NetWeaver stand-alone revenue increased by 55 million or 17% to 384 million in 2008 compared to 329 million in 2007. The decrease was mainly due to the global economic crisis that emerged during the second half of 2008 since we recorded a 31% increase during the first half of 2008.

Our stable customer base and the continued sale of software to existing and new customers throughout 2008 resulted in an increase in support revenue from 3,838 million in 2007 to 4,593 million in 2008, representing an increase of 755 million or 20%. The support revenue growth reflects a 23% increase from changes in volumes and prices and a 3% decrease from currency effects. The largest contributor to the 2008

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increase in support revenue based on volume was the Americas region where our support revenue increased by 27%.

Subscription and other software-related service revenue increased by 76 million or 42% to 258 million compared to 182 million in 2007. The growth in revenue reflects a 43% increase from volumes and prices and 1% decrease from currency effects. The increase was primarily due to the settlement of new major subscription contracts.

**2007 compared with 2006.** Software and software-related service revenue increased from 6,596 million in 2006 to 7,427 million in 2007, representing an increase of 831 million or 13%. A significant portion of this growth was due the acquisition of Business Objects. This growth represents a 17% increase from changes in volumes and prices and a 4% decrease from currency effects.

Software revenue increased from 3,003 million in 2006 to 3,407 million in 2007, representing an increase of 404 million, or 13%. This growth represents a 18% increase from changes in volumes and prices and a 5% decrease from currency effects. The currency effects were impacted by the stronger value of the euro compared to other currencies. This strong performance is the result of well balanced growth in all regions. Compared to 2006 the EMEA region grew by 14%. This growth represents a 15% increase from changes in volumes and prices and a 1% decrease from currency effects. The Americas region grew by 8%, which represents a 16% increase from changes in volumes and prices and a 8% decrease from currency effects and the Asia Pacific Japan region grew by 28%, which represents a 32% increase from changes in volumes and prices and a 4% decrease from currency effects.

In addition to the further increased licensing of our software solution SAP Business Suite and the platform related products utilizing our SAP NetWeaver platform technology, the growth in software revenue was also driven by increased sales of our business user solutions. In 2007 we continued to derive software revenue from our existing customer base. In both 2007 and 2006, approximately 31% of the number of new contracts came from new customers, with the remaining 69% coming from our installed customer base. Based on the value of orders received, the new customer share increased from 19% in 2006 to 21% in 2007.

The SAP NetWeaver-related revenue increased from 754 million in 2006 to 997 million in 2007, representing an increase of 243 million or 32%. The underlying SAP NetWeaver stand-alone revenue increased by 160 million or 95% to 329 million in 2007 compared to 169 million in 2006.

Thanks to our stable installed customer base and the continued sale of software to existing and new customers throughout 2007, support revenue increased from 3,464 million in 2006 to 3,838 million in 2007, representing an increase of 374 million or 11%. The support revenue growth reflects a 15% increase from changes in volumes and prices and a 4% decrease from currency effects. The largest contributor to the 2007 increase in support revenue based on volume was again the EMEA region where the support revenue increased by 219 million or 11%.

Subscription and other software-related service revenue increased by 53 million or 41% to 182 million compared to 129 million in 2006.

Professional services and other service revenue

	2008	2007	2006	Change 2008 vs. 2007	Change 2007 vs. 2006
	millions				
Consulting revenue	2,498	2,221	2,249	12%	(1)%

Training revenue	434	410	383	6%	7%
Other service revenue	107	113	96	(5)%	18%
<b>Professional services and other service revenue</b>	3,039	2,744	2,728	11%	1%

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**2008 compared with 2007.** Professional services and other service revenue increased from 2,744 million in 2007 to 3,039 million in 2008, representing an increase of 295 million or 11%. This revenue growth reflects a 15% increase from changes in volumes and prices and a 4% decrease from currency effects.

Consulting revenue increased from 2,221 million in 2007 to 2,498 million in 2008, representing an increase of 12%. The consulting revenue growth reflects a 17% increase from changes in volumes and prices and a 5% decrease from currency effects. In 2008, consulting contributed strongly to the revenue growth in professional services and other service revenue representing a pay off for past headcount investments in the consulting area. Consulting revenue as a percentage of total revenue remained quite stable at 22% in 2008, contributing to SAP's total revenue double-digit growth rate.

Training revenue increased from 410 million in 2007 to 434 million in 2008, representing an increase of 6%. The training revenue growth reflects a 10% increase from changes in volumes and prices and a 4% decrease from currency effects. Strong contribution to the growth in training revenue was achieved by higher demand for E-Learning and on-site customer training. The training business also benefited from growth in the certification area.

Other service revenue decreased from 113 million in 2007 to 107 million in 2008, representing a decrease of 5%. The other service revenue decline reflects a 2% decrease from changes in volumes and prices and a 3% decrease from currency effects. Other service revenue mainly consists of revenue generated by the SAP Managed Services organization, which operates, manages and maintains SAP solutions.

**2007 compared with 2006.** Professional services and other service revenue increased slightly from 2,728 million in 2006 to 2,744 million in 2007, representing an increase of 16 million or 1%. This revenue growth reflects a 4% increase from changes in volumes and prices and a 3% decrease from currency effects.

Consulting revenue decreased from 2,249 million in 2006 to 2,221 million in 2007, representing a decrease of 1%. The consulting revenue growth reflects a 2% increase from changes in volumes and prices and a 3% decrease from currency effects. In 2007, consulting headcount grew by 12%; however, it required time to ramp up these new resources to a fully productive status. This effect, coupled with negative currency effects, contributed to the slight decline in consulting revenue.

Consulting revenue as a percentage of total revenue decreased from 24% in 2006 to 22% in 2007, caused by the continued growth of software and software-related services revenue, and the slight decline of consulting revenue year over year.

Training revenue increased from 383 million in 2006 to 410 million in 2007 or 7%. The growth reflects an 11% increase from changes in volumes and prices and a 4% decrease from currency effects. While traditional classroom training only grew marginally, most of the growth in training revenue was achieved in the E-Learning area. The training business also benefited from growth in the certification area.

Other service revenue increased from 96 million in 2006 to 113 million in 2007 or 18%. The other service revenue growth reflects a 23% increase from changes in volumes and prices and a 5% decrease from currency effects. Other service revenue mainly consists of revenue generated by the SAP Managed Services organization, which operates, manages and maintains SAP solutions. Most of the growth of SAP Managed Services revenue came from the EMEA region.

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## Total Operating Expenses and Operating Income

	2008	2007 millions	2006	Change 2008 vs. 2007	Change 2007 vs. 2006
Total operating expenses	8,725	7,510	6,815	16%	10%
Operating income	2,840	2,732	2,578	4%	6%
Operating margin (Operating income as a percentage of total revenue)	24.6%	26.7%	27.4%		

As a result of our acquisition of Business Objects in January 2008, our numbers for 2008 and 2007 are not fully comparable.

**2008 compared with 2007.** Despite our response to the effects of the financial and economic crisis by introducing cost-saving measures, which resulted in a saving of more than 200 million in the final quarter of 2008, our total operating expenses for 2008 increased to 8,725 million compared to 7,510 million in 2007 representing an increase of 1,215 million or 16%. As described below the main driver for this increase was the acquisition of Business Objects.

For a more detailed analysis of the individual operating expense line items see the Operating Expenses section following this section. The increase in total operating expenses was mainly driven by the following:

In 2008 we increased our personnel expenses by 705 million or 17% to 4,879 million, which is the result of the overall headcount increase in 2008 of 7,675 FTE, including acquisitions, or 17% to 51,536 FTE as of December 31, 2008. Of this 17% Business Objects contributed 14 percentage points or 6,224 FTE.

In addition to the Business Objects acquisition the 2008 cost of software and software-related services increased due to payments for additional third-party licenses, the effects of license disputes, and further reinforcement of our support resources in the first half of the year.

The increase in our expenses for sales and marketing was steeper than the rise in our total revenue. This was principally due to our investment in expanding the field organization for our SAP BusinessObjects solutions.

The modest increase in cost of professional services and other services, research and development and general and administration expense could for the most part be attributed to expenses we incurred in several areas in connection with the acquisition of Business Objects.

Increased operating expenses in 2008 coupled with the lower than expected revenue result due to the deteriorating economic conditions in the second half 2008, resulted in a decrease in operating income from 6% in 2007 to 4% in 2008.

**2007 compared with 2006.** At the beginning of the 2007, we explained in our outlook that we intended to invest about 300 million to 400 million over a period of eight quarters starting in early 2007 to build up a business around SAP Business ByDesign. Depending on when we actually made these investments, in 2007 we expected to reinvest the equivalent of about one to two operating margin percentage points in preparing for additional future growth opportunities. Therefore, we assumed our 2007 operating margin to be in the range 26.0% to 27.0%. In line with our outlook, the additional investment we had announced, which amounted to 125 million, reduced our operating margin

by 1.2 percentage points. We spent the money on accelerated investments in enhancing IT infrastructure, building our sales and channel capability, and extending our marketing activity.

Total operating expenses for 2007 were 7,510 million compared to 6,815 million representing an increase of 695 million or 10%.

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The increase in total operating expenses was mainly driven by the following:

In 2007 we increased our personnel expenses by 356 million or 9% to 4,174 million, which is the result of the overall headcount increase in 2007 of 4,663 FTE or 12% to 43,861 FTE as of December 31, 2007. We continued to keep a tight control on personnel expenses due to minimal fixed salary increases as well as by adding additional headcount primarily in the major emerging markets with modest salary levels. In total, 35% of the headcount increase in 2007 was realized in India, China and Bulgaria. The share of employees in these three countries increased from 14% in 2006 to 16% as of December 31, 2007. Personnel expenses as percentage of total operating expenses remained stable at 56%.

As a result of the strong increase in software and software-related service revenue, cost of purchased licenses (e.g. databases) increased in 2007 by 27%.

The incremental headcount and the increase in business activity in 2007 resulted in 54 million or 13% higher travel expenses compared to 2006.

Our accelerated investments in connection with SAP Business ByDesign.

**OPERATING EXPENSES**

Cost of software and software-related services

	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>Change 2008 vs. 2007</b>	<b>Change 2007 vs. 2006</b>
		<b>millions</b>			
Cost of software and software-related services	1,646	1,310	1,091	26%	20%
As a percentage of software and software-related service revenue	19%	18%	17%		

Cost of software and software-related services consists primarily of:

Customer support costs which include:

SAP Enterprise Support (e.g. End-to-end Solution Operations, Global support backbone, 7x 24 Root Cause Analysis (RCA), Custom Code Support, Support for Enhancement Packs, Pro-active Remote Service)

Support for Large Enterprises (LE)

Standard support (e.g. 24x7 customer problem resolution, remote service delivery)

SAP Premium Support (Increased value on standard services)

Optimized implementation and ongoing management of End-to-end Solution Operations (costs and risks control by managing customers applications end-to-end)



SAP MaxAttention Support (comprehensive support tailored to customer needs)

SAP Safeguarding (Reduced implementation or upgrade risk)

Costs of developing custom solutions that address customers' unique business requirements.

License fees and commissions paid to third parties for databases and the other complementary third-party products sublicensed by us to customers.

**2008 compared with 2007.** The cost of software and software-related services increased from 1,310 million in 2007 to 1,646 million in 2008, or by 26%, which was mainly due the acquisition of Business Objects, but also due to the expansion of support resources, the 32 million effects of license disputes and increased expenses for third-party license fees. As a percentage of software and software-related service revenue, cost of software and software-related services increased from 18% in 2007 to 19% in 2008.

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Overall, the workforce in this area increased from 5,831 FTEs in 2007 to 6,458 FTEs in 2008, representing an increase of 11%. The support organization has continued its efforts to improve the efficiency of our processes by moving into low-cost locations (Bulgaria, China and India). Approximately 24% of our global support resources were based in the low-cost locations at the end of 2008, which is an increase of 2 percentage points compared to 2007.

**2007 compared with 2006.** The cost of software and software-related services increased from 1,091 million in 2006 to 1,310 million in 2007, or by 20%, mainly due to the expansion of support resources and increased expenses for third-party license fees. As a percentage of software and software-related service revenue, cost of software and software-related services increased from 17% in 2006 to 18% in 2007. The decline of the software and software-related services margin was influenced in 2007 by 0.5 percentage points from our accelerated investments in SAP Business ByDesign.

Overall, the workforce in this area increased from 5,243 FTEs in 2006 to 5,831 FTEs in 2007, representing an increase of 11%. The support organization has continued its efforts to improve the efficiency of our processes by moving into low-cost locations (Bulgaria, China and India). Twenty-two percent of the support resources were based in the low-cost locations at the end of 2007, which is an increase of 2 percentage points compared to 2006.

## Cost of professional services and other services

	2008	2007 millions	2006	Change 2008 vs. 2007	Change 2007 vs. 2006
Cost of professional services and other services	2,296	2,091	2,073	10%	1%
As a percentage of professional services and other service revenue	76%	76%	76%		

Cost of professional services and other services consists primarily of consulting and training personnel expenses as well as expenses for third-party consulting and training resources.

**2008 compared with 2007.** Cost of professional services and other services rose from 2,091 million in 2007 to 2,296 million in 2008, or 10%. As a percentage of professional services and other services revenue, cost of professional services and other service revenue remained steady at 76%. The lower cost increase compared to a slightly higher revenue growth led to a positive professional services and other services margin development in 2008, although that improvement was mainly offset by increased costs resulting from our focused efforts to rapidly integrate the Business Objects professional services activities into our service portfolio. These increased costs negatively influenced our professional services and other services margin by 1.4 percentage points.

The increase in cost of professional services and other services was also due to increased personnel expenses resulting from the integration of Business Objects employees.

**2007 compared with 2006.** Cost of services increased from 2,073 million in 2006 to 2,091 million in 2007, or 1%. As a percentage of service revenue, cost of services remained the same at 76% in both 2007 and 2006. The professional services and other services margin was influenced in 2007 by 0.5 percentage points from our accelerated investments in SAP Business ByDesign.

The slight increase in cost of professional services and other services was mainly driven by increased personnel expenses due to the hiring of new employees in consulting.

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## Research and Development

	<b>2008</b>	<b>2007</b> <b>millions</b>	<b>2006</b>	<b>Change</b> <b>2008 vs.</b> <b>2007</b>	<b>Change</b> <b>2007 vs.</b> <b>2006</b>
Research and development	1,631	1,458	1,335	12%	9%
As a percentage of total revenue	14%	14%	14%		

Our research and development (R&D) expenses consist primarily of:

Personnel expenses related to our R&D employees;

Costs incurred for independent contractors retained by us to assist in our R&D activities; and

Amortization of computer hardware and software used in our R&D activities.

**2008 compared with 2007.** R&D expenses in 2008 increased by 12% to 1,631 million compared to 1,458 million in 2007. As a percentage of total revenue, research and development expenses were 14% in 2008, which is consistent with 2007.

Our R&D expenses in 2008 increased mainly due to incremental headcount. The number of development employees increased by 2,596 FTE or 20% to 15,547 FTE as of December 31, 2008, primarily due to the Business Objects acquisition.

**2007 compared with 2006.** R&D expenses in 2007 increased by 9% to 1,458 million compared to 1,335 million in 2006. As a percentage of total revenue, R&D expenses were 14% in 2007, which is flat compared to 2006. Around 0.3 percentage points of the 14% increase were related to our accelerated investments in SAP Business ByDesign.

R&D expenses were mainly impacted by incremental headcount. The number of development employees increased by 1,150 FTE or 10% to 12,951 FTE as of December 31, 2007. The R&D organization has continued to build up development resources primarily in locations with modest salary levels, and 66% of the research and development headcount increase in 2007 was realized in India, China and Bulgaria. The share of development headcount based in these three locations increased in 2007 by 3 percentage points to 28%.

## Sales and Marketing

	<b>2008</b>	<b>2007</b> <b>millions</b>	<b>2006</b>	<b>Change</b> <b>2008 vs.</b> <b>2007</b>	<b>Change</b> <b>2007 vs.</b> <b>2006</b>
Sales and marketing	2,540	2,162	1,908	17%	13%
As a percentage of total revenue	22%	21%	20%		

**2008 compared with 2007.** Sales and marketing expenses increased from 2,162 million in 2007 to 2,540 million in 2008 or 17%. As a percentage of total revenue, sales and marketing expenses rose slightly from 21% in 2007 to 22% in 2008. The cost increase resulted primarily from the 2,419 FTE or 29% additional headcount adding up to 10,701 FTE. Of these, 2,184 FTE were integrated into our organization as a result of the acquisition of Business Objects.

**2007 compared with 2006.** Sales and marketing expenses increased from 1,908 million in 2006 to 2,162 million in 2007 or 13%. As a percentage of total revenue, sales and marketing expenses increased slightly from 20% in 2006 to 21% in 2007. The increase resulted primarily from the 1,232 FTE incremental headcount. In addition, around 0.4 percentage points of the 13% increase were related to our accelerated investments in the new business model for SAP Business ByDesign.

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Overall employees in sales and marketing increased by 1,232 FTE or 17% to 8,282 FTE in 2007. This growth in 2007 was mainly driven by the sales area while marketing headcount remained almost flat. Around 43% of the sales headcount was hired in the Americas region.

## General and Administration

	2008	2007	2006	Change 2008 vs. 2007	Change 2007 vs. 2006
		millions			
General and administration	623	506	464	23%	9%
As a percentage of total revenue	5%	5%	5%		

**2008 compared with 2007.** General and administration (G&A) expenses increased from 506 million in 2007 to 623 million in 2008. This represents an increase of 23%. This increase was driven by increased personnel expenses and other headcount related costs mainly due to the acquisition of Business Objects. As a percentage of total revenue, G&A expenses remained flat from 2007 at 5%.

The number of G&A employees increased by 447 FTE or 16% to 3,244 FTE in 2008. As in the prior year, we continued to expand our shared service centers in all regions to support efficient growth in this area.

**2007 compared with 2006.** G&A expenses increased from 464 million in 2006 to 506 million in 2007. This represents an increase of 9%. This increase was driven by increased personnel expenses and other headcount related costs due to the incremental headcount. As a percentage of total revenue, G&A expenses remained at 5% as they were in 2006.

The number of G&A employees increased by 325 FTE or 13% to 2,797 FTE in 2007. We continued to expand our shared service centers in all regions to support efficient growth in this area.

## Financial Income/Expense, Net

	2008	2007	2006	Change 2008 vs. 2007	Change 2007 vs. 2006
		millions			
Financial income/expense, net	(62)	124	122	(150)%	2%
As a percentage of total revenue	(1)%	1%	1%		

Financial income/expense, net is comprised primarily of interest income/expense, net, income/(losses) from equity method investments, and gains/(losses) on sales of equity securities.

**2008 compared with 2007.** In 2008, we incurred significantly higher interest costs than in 2007 due to an additional acquisition-related bank loan that was taken out in connection with the Business Objects acquisition. Our interest income/expense, net declined by approximately 138% in 2008, resulting in a net interest expense of 51 million. (2007: 135 million net interest income). Consequently, our financial income/expense, net decreased from a net financial income of 124 million in 2007 to a net financial expense of 62 million in 2008.

**2007 compared with 2006.** In 2007, our net interest income rose 13% to 135 million (2006: 120 million), reflecting higher rates of interest. Impairment charges on minority investments had a minimal negative effect on financial income/expense, net. The hedging of stock appreciation rights (STARs) had no effect on financial income in 2007 (2006: 7 million unrealized gain). In the previous year, the fair value of instruments acquired to hedge anticipated STAR exposures increased before the instruments were designated as hedging the exposure of STARs granted, and the associated revaluation led to the unrealized gain. In 2007, we did not acquire instruments to hedge the anticipated exposure from STARs granted in 2007.

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## Income Taxes

	2008	2007 millions	2006	Change 2008 vs. 2007	Change 2007 vs. 2006
Income taxes	825	921	805	(10)%	14%
As a percentage of Income from continuing operations before income taxes	30%	32%	30%		

**2008 compared with 2007.** Our income taxes decreased by 10% in 2008 in comparison to 2007 and our effective tax rate decreased in 2008 to 30.0% from the previous year's 32.2%. The decrease in our effective tax rate and the corresponding income tax expense in 2008 was the result of a reduction in the rate of corporation tax in Germany from 25% to 15%, effective January 1, 2008, and also a reduction in the rate of trade tax under the German business taxation reform. The decrease can also be attributed to the decline in income before income taxes, which decreased by 4%. The decrease in income before income taxes was mainly due to the reduction in financial income/expense, net and the decrease in other non-operating income/expense, net, which were subject to material negative currency effects. See Note 10 to our consolidated financial statements in Item 18. Financial Statements, for further details on income taxes.

**2007 compared with 2006.** Despite the positive effect of tax-free or low-tax investment in equities and financial assets, income tax rose 14% in 2007 while income from continuing operations before income taxes rose 6%, resulting in an effective tax rate of 32.2% as compared to 29.9% in 2006. Our 2006 effective tax rate was unusually low due to effects of the conclusion of tax audits.

## SEGMENT DISCUSSIONS

Currently we have three reportable operating segments: product, consulting and training. Total revenue figures for each of our operating segments differ from the revenue figures classified in our consolidated statements of income because for segment reporting purposes, revenue is generally allocated to the segment that is responsible for the related transactions, regardless of the nature of the sales transaction. The segment contributions reflect only expenses directly attributable to the segments and do not represent the actual margins for the operating segments on a U.S. GAAP basis. Costs such as general and administrative, research and development, share-based compensation, and certain corporate expenses are not allocated to the segments and therefore are not reflected in the segment contribution results. See Note 28 to our consolidated financial statements in Item 18. Financial Statements for further details on our segments.

In 2008, operating expenses from share-based compensation plans were 63 million compared to 95 million in 2007 and 99 million in 2006. As noted above, costs related to share-based compensation programs do not impact segment results. These expenses are not recorded within operating segments.

Values in the following table are stated in millions of euros, except for percentage and percentage point figures:

Product Segment	2008	2007	2006	Change 2008 vs. 2007	Change 2007 vs. 2006
External revenue	8,366	7,369	6,643	14%	11%



Segment expenses	(3,655)	(3,062)	(2,609)	19%	17%
Segment contribution	4,711	4,307	4,034	9%	7%
<b>Segment profitability</b>	56%	58%	61%	(2) percentage points	(3) percentage points

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<b>Consulting Segment</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>Change 2008 vs. 2007</b>	<b>Change 2007 vs. 2006</b>
External revenue	2,824	2,369	2,300	19%	3%
Segment expenses	(2,040)	(1,738)	(1,704)	17%	2%
Segment contribution	784	631	596	24%	6%
<b>Segment profitability</b>	<b>28%</b>	<b>27%</b>	<b>26%</b>	<b>1 percentage point</b>	<b>1 percentage point</b>

<b>Training Segment</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>Change 2008 vs. 2007</b>	<b>Change 2007 vs. 2006</b>
External revenue	525	493	440	6%	12%
Segment expenses	(300)	(284)	(273)	5%	4%
Segment contribution	225	209	167	8%	25%
<b>Segment profitability</b>	<b>43%</b>	<b>42%</b>	<b>38%</b>	<b>1 percentage point</b>	<b>4 percentage points</b>

## Product Segment

The product segment is primarily engaged in marketing and licensing our software products and providing support for our software products. Support includes technical support for our products, assistance in resolving problems, providing user documentation, unspecified software upgrades, updates and enhancements. The product segment also performs certain custom development projects. The product segment includes the sales, marketing and service and support lines of business.

**2008 compared with 2007.** Product segment revenue increased by 14% from 7,369 million in 2007 to 8,366 million in 2008, of which approximately 850 million was due to acquisitions. The increase was driven by an increased in customer licensing of our software solutions which in turn contributed to an increase in support revenue. This growth reflects a 17% increase from changes in volumes and prices and a 3% decrease from currency effects. Approximately 98% of revenue within the product segment is derived from software and software-related service revenue.

Approximately 2% of revenue within the product segment is derived from non-software related transactions (e.g., professional services, other services, and other revenues) initiated by employees of the product segment. Software revenue as part of the total product segment revenue increased by 3% from 3,269 million in 2007 to 3,356 million in 2008. This growth reflects a 7% increase from changes in volumes and prices and a 4% decrease from currency effects. Support revenue increased by 23% from 3,737 million in 2007 to 4,596 million in 2008. This growth reflects a 27% increase from changes in volumes and prices and a 4% decrease from currency effects. Subscription and other software-related service revenue increased by 42% from 181 million in 2007 to 257 million in 2008.

Product segment expenses increased by 19% from 3,062 million in 2007 to 3,655 million in 2008. Expenses from the sales line of business account for about half of the entire product segment expenses, while expenses from the marketing line of business account for roughly 20% and expenses from the service and support line of business account for roughly 30% of overall product segment expenses. The increase in product segment expenses results mainly from headcount growth of roughly 20%, predominantly due to the acquisition of Business Objects.

Product segment contribution increased by 9% from 4,307 million in 2007 to 4,711 million in 2008, or 56% of total segment revenue compared to 58% of total segment revenue in 2007.

**2007 compared with 2006.** Product segment revenue increased by 11% from 6,643 million in 2006 to 7,369 million in 2007, driven by increased licensing of our software solutions which then contributed to an increase in support revenue. This growth reflects a 15% increase from changes in volumes and prices and a 4% decrease from currency effects. Approximately 98% of revenue within the product segment was derived from software and software-related service revenue, with the remaining 2% derived from professional services and

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other service revenue as well as other revenue. Software revenue as part of the total product segment revenue increased by 12% from 2,926 million in 2006 to 3,269 million in 2007. This growth reflects a 16% increase from changes in volumes and prices and a 4% decrease from currency effects. Support revenue increased by 9% from 3,413 million in 2006 to 3,737 million in 2007. This growth reflects a 14% increase from changes in volumes and prices and a 5% decrease from currency effects. Subscription and other software-related service revenue increased by 41% from 129 million in 2006 to 182 million in 2007. This growth reflects a 45% increase from changes in volumes and prices and a 4% decrease from currency effects.

Product segment expenses increased by 17% from 2,609 million in 2006 to 3,062 million in 2007. Expenses from the sales line of business accounted for about half of the entire product segment expenses, while expenses from the marketing line of business accounted for roughly one-fourth and expenses from the service and support of the line of business accounted also for roughly one-fourth of overall product segment expenses. The increase in product segment expenses resulted mainly from headcount growth continued investment in aligning our operations to more volume business and associated personnel travel and infrastructure expenses as well as additional third-party expenses.

Product segment contribution increased by 7% from 4,034 million in 2006 to 4,307 million in 2007, or 58% of total segment revenue compared to 61% of total segment revenue in 2006.

### Consulting Segment

The consulting segment is primarily engaged in the implementation of our software products.

**2008 compared with 2007.** Consulting segment revenue increased by 19% from 2,369 million in 2007 to 2,824 million in 2008. Of this increase 131 million was due to acquisitions. This growth reflects a 24% increase from changes in volumes and prices and a 5% decrease from currency effects. Consulting segment expenses increased by 17% from 1,738 million in 2007 to 2,040 million in 2008. Consulting segment contribution increased by 24% from 631 million in 2007 to 784 million in 2008. The consulting segment profitability increased by 1 percentage point to 28%.

Geographically EMEA, Americas and APJ have all contributed to the strong top line growth in the consulting segments revenue while increased demand has been managed through a 10% increase in resources, predominantly in the global delivery organization which accounts for 30% of this headcount increase, and the newly introduced global hubs which have a focus on strategic solutions and industries. In addition to this increase in workforce, customer related third party delivery costs have increased 3% to support the revenue growth. This growth reflects a 6% growth from changes in volumes and prices and 3% decrease from currency effects.

**2007 compared with 2006.** Consulting segment revenue increased by 3% from 2,300 million in 2006 to 2,369 million in 2007. This growth reflects a 7% increase from changes in volumes and prices and a 4% decrease from currency effects. Consulting segment expenses increased by 2% from 1,704 million in 2006 to 1,738 million in 2007. Consulting segment contribution increased by 6% from 596 million in 2006 to 631 million in 2007. The consulting segment profitability increased by 1 percentage point to 27%.

Geographically, the strongest growth in 2007 came from the Americas region driven by increased activity in the United States. The increase in demand has been managed through increasing the local workforce by 15% and increased use of SAP's global delivery resources enabling a reduction in third party delivery costs. The Asia Pacific Japan region also had strong growth in 2007, with activities in China and India increasing substantially. This demand has been met through increased use of global delivery resources, an increase in headcount together with the use of external resources. Consulting revenue in the EMEA region grew at a slower rate but showed significant increase in some areas such as Commonwealth of Independent States (CIS), the Nordic region, Benelux, Iberia, southeast

European countries, and the Middle East, which all achieved double digit growth rates.

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### Training Segment

The training segment is primarily engaged in providing educational services on the use of our software products and related topics for customers and partners. Training services include traditional classroom training at SAP training facilities, customer and partner-specific training and end-user training, as well as e-learning.

**2008 compared with 2007.** Training segment revenue was 525 million in 2008, which represents an increase of 6% from 493 million in 2007. This growth reflects an 11% increase from changes in volumes and prices and a 5% decrease from currency effects. The primary driver of this growth was traditional classroom training, where revenue growth of 16% was achieved. Revenue in the other sectors such as academy and certification, customer specific training and e-learning experienced marginal growth.

Of the 525 million training segment revenue recognized in 2008, 39 million resulted from businesses acquired in 2008. Of the core SAP business, before acquisitions, EMEA and APJ grew 6% and 18% respectively while the Americas decreased by 18% from 192 million to 158 million. North America shrank by 22% counteracting the 4% growth shown in Latin America.

Training segment expenses increased from 284 million in 2007 to 300 million in 2008, or 5% mainly due to acquisition-related headcount growth.

Training segment contribution increased by 8% from 209 million in 2007 to 225 million in 2008. Training segment margin increased by 1 percentage point to 43%.

**2007 compared with 2006.** Training segment revenue was 493 million in 2007, which represents another strong increase of 12% from 440 million in 2006. This growth reflects a 16% increase from changes in volumes and prices and a 4% decrease from currency effects. While traditional classroom training grew rather marginally, strong revenue growth was achieved primarily in e-learning, academy training, and customer-specific training. Although it still represents a rather small proportion of 9% of total training revenue, e-learning continues to rise in popularity and grew significantly in 2007 by 181%.

Training segment expenses increased from 273 million in 2006 to 284 million in 2007, or 4%. The cost of internal and external resources increased to support the growing business.

Training segment contribution increased by 25% from 167 million in 2006 to 209 million in 2007. Training segment margin increased by 4 percentage points to 42%.

### OUTLOOK 2009

#### Future Trends in the Global Economy for 2009

At the end of 2008, the IMF believed that after massive revaluations in the second half of the year, the prospects for global economic development would remain poor as the financial sector continued to contract. The Organisation for Economic Co-operation and Development (OECD) noted in November that it was extraordinarily difficult to make reliable predictions about the economy at the turn of 2008/2009.

As the IMF reported, it was widely held that conditions and developments on the international financial markets continued to pose a considerable risk for the global economy. Overvalued assets on the books of the banks and financial institutions and falling property prices had materially worsened global economic conditions, the IMF reported. It noted that companies were responding by reducing capacity and holding back investment in capital goods,

and that the effects would be felt well into 2009.

According to the IMF's January 2009 projections, in 2009 annual world output growth will decelerate to 0.5% from 3.4% in 2008. Compared to the previous year, the IMF expects significant decreases in output in the advanced economies (2%) and world trade (2.8%) in 2009. A sustained recovery will not be possible until the functionality of the financial sector is restored and the credit markets are unclogged, the IMF says. At the end of

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November 2008, the OECD was already forecasting a 0.4% contraction in the economies of its member states in 2009.

The IMF's January 2009 projections envisage a 1.6% reduction in U.S. gross domestic product (GDP) in 2009. In January 2009, the U.S. Congressional Budget Office also expected a contraction in the U.S. economy in 2009, with inflation-adjusted GDP falling 2.2% and the longest and deepest recession in the United States since the Second World War. According to the ECB, restrictive credit terms, the shortage of work, weaker corporate balance sheets, and uncertain economic prospects are all discouraging U.S. households and businesses from spending. The continuing contraction of the housing market and decreased demand for exports also represent risks for the prospects of the U.S. economy, it reported.

The IMF, in its January 2009 report, projected a decline in euro area output of 2.0% in 2009. The ECB also projected at the end of 2008 that 2009 would see continuing weakness in the global economy and very subdued demand on the domestic market. Provided some of the gloom lifts from surrounding economies and some of the tension is resolved on the financial markets, the ECB envisages that the second half of 2009 could see the beginnings of a recovery in the euro area, encouraged by an easing of commodity prices. However, it believes the downside risks predominate. Chief among these are that the turbulence on the financial markets may have a greater impact on the real economy than previously foreseen and that global macroeconomic imbalances may stoke protectionism and other uncontrollable phenomena.

In its January 2009 report the IMF forecast that, like the euro area as a whole, Germany would experience significant economic decline in 2009, with GDP contracting 2.5%. The German central bank, the Deutsche Bundesbank, anticipated at the end of 2008 that early 2009 would see a considerable decrease in activity in the real economy in Germany. It noted that bailout measures instigated by governments in many countries represented a broad base on which control over the global crisis of confidence might be asserted, but that for the rest of 2009 the burdens on the economy would be heavy. The Deutsche Bundesbank did not believe the German economy would regain momentum until a revival in the global economy, expected in 2010.

Japan will also experience significant decline in 2009, with GDP contracting 2.6%, according to the January 2009 forecast published by the IMF. According to the ECB, the beginning of the year would be marked by slow consumer spending and weak export demand. In the countries in Asia with developing and emerging economies, according to the ECB growth would decline further in 2009 owing to the spreading global economic downturn, tight finance, the weak real estate market, and the delayed effects of earlier restrictive measures.

**IT Market: Outlook for 2009**

The gloomy prospects for the development of the global economy will continue to hamper demand for IT worldwide, according to research published at the beginning of 2009 by U.S. market research firm IDC. It believes businesses demand for IT will grow much more slowly. The influence of the wider economy will be stronger than usual and will only partly be offset by IT industry factors. UBS, a financial services company, also points to the close connection between economic growth and IT industry growth, calculating a historical correlation of 0.71 between global output growth and global IT spending growth.

IDC's expectations for the growth of the IT market reflect deepening pessimism: In the summer of 2008, IDC was still expecting 5.9% growth in global IT spending in 2009, by February 2009 it had revised this prediction to 0.5%. It foresees the most significant decline in demand in the hardware segment. In February 2009, it projected hardware spending would decrease 3.6%. In the summer of 2008, IDC was expecting 6.2% growth in application software spending in 2009; by February 2009 it had revised this projection to 2.7%. In both the packaged software and the IT services segments, in February 2009 IDC projected 3.4% spending growth in 2009. In January 2009, Forrester Research, another major market research firm in the United States, predicted global IT spending would decline 3% in



U.S. dollar terms in 2009, after seven years of continuous growth. The reasons it gives for this forecast are the impending recession in the United States, and currency effects. Like IDC, Forrester

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also believes software will be the segment to perform best in the global IT market, with spending virtually unchanged.

IDC expects the turbulence on the financial markets to have a greater impact on the emerging markets, which have hitherto seen relatively strong growth in this sector. Notably, this would affect the economies of eastern Europe, including Russia, where the global shortage of credit and tighter lending standards would particularly impact companies' IT spending. In the EMEA region, it projects that 2009 overall IT spending will be unchanged (0.0%) since the previous year, with growth in the services segment being the highlight at 2.5%. It expects a modest increase in demand for IT in 2009 in the Americas region: Here it predicts overall IT sales will rise 0.6%, led by packaged software spending and services spending increases of 3.9% and 3.5% respectively. In February 2009, IDC said it expected IT demand to hold up best in the APJ region. It believes spending will grow 1.3% there overall in 2009, helped by increases of 5.4% in services sales and 5.2% in packaged software sales.

In its discussion of future trends, IDC identifies several factors that could have a positive effect in the IT industry. For example, it suggests that convergence could buoy IT demand: convergence of the telephone network and the Internet, of IT and communications technologies, and of storage, routing, and processing in data centers. Convergence may drive new competitive dynamics and offer new applications and functions to customers. IDC reports that the resulting stricter legal and regulatory compliance demands should help sales of sophisticated GRC software, both for initial deployment and to replace older applications.

IDC sees a further positive factor in the transformation process that the software industry is just entering. That transformation includes basic architectures (such as SOA) and the way software is written and delivered. The associated new avenues for using software and new functions are expected to generate new demand. IDC says applications will become more complex as they grow more powerful. This would create space and edge for vendors offering applications and systems that help reduce complexity. IDC assumes that the transformation will take considerable time but will also spur short and medium term demand as companies transition from legacy systems to SOA-based solutions. It expects new software creation and delivery models to play a key role.

IDC also identifies the growing dynamism of IT as a short term factor: The rate at which the power and productivity of IT grows from version to version is accelerating. At the same time, applications markets are converging and the functional scope of individual applications is widening, reducing the attraction of highly specialized applications. This means the new solutions address functionally broader markets, which increases their chance of success. Finally, IDC notes that companies will continue to demand more data security, increasing the demand for IT solutions that satisfy their requirements in that respect. The more complex software grows, the more vulnerable it becomes to attack. This will draw companies toward powerful security solutions, IDC says. It expects this segment to grow significantly. IDC says the current economic problems will impede these trends but cannot stop them.

### 2009 Financial Outlook for SAP

Due to the continuing uncertainty surrounding our economic and business environment, we will not publish specific outlook guidance for our 2009 software and software-related service revenue.

We expect our 2009 non-GAAP operating margin, which excludes a nonrecurring deferred support revenue writedown from the acquisition of Business Objects of approximately \$9 million and acquisition-related charges, to be in the range of 24.5% to 25.5% at constant currencies. That includes nonrecurring restructuring costs of between \$200 million and \$300 million that we expect to incur as we reduce our workforce and that we expect will negatively impact our non-GAAP operating margin by approximately 2 to 3 percentage points. Our 2009 non-GAAP operating margin outlook is based on the assumption that our 2009 non-GAAP software and software-related service revenue, which excludes a nonrecurring deferred support revenue writedown from the acquisition of Business Objects, will be unchanged or decline not more

than 1% at constant currencies (2008: 8,623 million).

We expect a corresponding decrease in our operating income.

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We project an effective tax rate for 2009 of 29.5% to 30.5% (2008: 30.1%) based on U.S. GAAP income from continuing operations.

If the Annual General Meeting of Shareholders so resolves, in 2009 we will again pay a dividend that provides a payout ratio of about 32%.

Excepting acquisitions, our planned capital expenditures for 2009 will be covered in full by operating cash flow and will chiefly be spent on completing new office buildings at various locations.

Among the premises on which this outlook is based are those presented concerning economic development and our expectation that we will not benefit from any positive effects in 2009 from a major acquisition. We also assume that our results in the first half of 2009, and especially in the first quarter, will hardly be comparable with our very good performance in the first half of 2008 before the beginning of the economic crisis.

### **Medium-Term Perspectives**

We expect our business and revenue to continue to grow, assuming the current economic crisis does not have long-term consequences. Our strategy is to increase software and software-related service revenue, which comprises software and maintenance revenue and subscriptions and other software-related services.

The completion of our SOA development road map (which means all SAP solutions now run on a business process platform), the introduction of our SAP Business ByDesign solution, and our acquisition of Business Objects will open up potential for us to address more markets. We estimate that the total volume of the software and software-related services segment of the markets in which we now operate and will operate in the future will grow from currently about US\$70 billion to about US\$75 billion by 2010.

By 2010, we hope to increase our customer numbers to about 100,000. We expect 50% of our orders received to be for new products by 2010.

### **FOREIGN CURRENCY EXCHANGE RATE EXPOSURE**

Although our reporting currency is the euro, a significant portion of our business is conducted in currencies other than the euro. International sales are primarily made through our subsidiaries in the respective regions and are generally denominated in the local currency, although in certain countries where foreign currency exchange rate exposure is considered high, some sales may be denominated in euro or U.S. dollars. Expenses incurred by our subsidiaries are generally denominated in the local currency. Accordingly, the functional currency of our subsidiaries is the local currency. Therefore, movements in the foreign currency exchange rates between the euro and the respective local currencies to which our subsidiaries in countries that do not participate in the euro are exposed, may materially affect our consolidated financial position, results of operations and cash flows. In general, appreciation of the euro relative to another currency has a negative effect on our results of operations, while depreciation of the euro has a positive effect. As a consequence, period-to-period changes in the average exchange rate in a particular currency can significantly affect our revenue, operating results and net income. The principal currencies in which our subsidiaries conduct business that are subject to the risks described in this paragraph include the U.S. dollar, the Japanese yen, the British pound, the Swiss franc, the Canadian dollar, and the Australian dollar. We enter into derivative instruments, primarily foreign exchange forward contracts, to protect our anticipated cash flows from foreign subsidiaries from the effects of foreign currency exchange fluctuations. See also Item 11. Quantitative and Qualitative Disclosures About Market Risk Foreign Currency Exchange Rate Risk and Note 26 to our consolidated financial statements in Item 18. Financial Statements.

Approximately 64% of our consolidated revenue in 2008 and approximately 66% in 2007 was attributable to operations in non-euro participating countries and such revenues had to be translated into euros for financial reporting purposes. Fluctuations in the value of the euro had negative effects on our consolidated revenue of

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402 million, income before income taxes of 146 million and net income of 129 million for 2008, and had negative effects on our consolidated revenue of 365 million, income before income taxes of 118 million and net income of 99 million for 2007. See Item 11. Quantitative and Qualitative Disclosures About Market Risk Foreign Currency Exchange Rate Risk.

The impact of foreign currency exchange rate fluctuations discussed in the preceding paragraph is calculated by translating current period figures in local currency to euros at the monthly average exchange rate for the corresponding month in the prior year. Throughout this Annual Report on Form 20-F, we discuss our financial performance without the effect of foreign currency fluctuations on a constant currency basis, which is calculated in the same manner.

## **CRITICAL ACCOUNTING POLICIES**

Our consolidated financial statements are prepared based on the accounting policies described in Note 3 to our consolidated financial statements in Item 18. Financial Statements in this Annual Report on Form 20-F. The application of such policies may require management to make significant estimates, judgments and assumptions that can have a significant impact on amounts reported in our consolidated financial statements. We base our assumptions, judgments and estimates on historical experience and various other factors that we believe to be reasonable under the circumstances. Actual results could differ materially from these estimates under different assumptions or conditions. The accounting policies that most frequently require us to make significant estimates, judgments and assumptions, and therefore are critical to understanding our results of operations, are:

Revenue recognition;

Valuation of accounts receivable;

Accounting for share-based compensation;

Accounting for income taxes and uncertain income tax positions;

Valuation of acquired assets; and

Legal contingencies.

Our management periodically discusses these critical accounting policies with the Audit Committee of the Supervisory Board. Historically, our significant estimates, judgments and assumptions relative to our critical accounting policies have not differed materially from actual results. Please refer to Note 3 to our consolidated financial statements in Item 18. Financial Statements for further discussion of our accounting policies.

### **Revenue Recognition**

We derive our revenues from the sale or the license of our software products and of support services, subscriptions, consulting, development, training, and other professional services. The vast majority of our software is sold or licensed in multiple-element arrangements that include support services and often professional services, development, or other elements. We therefore license our software generally in multiple-element arrangements. We recognize revenue pursuant to the requirements of the American Institute of Certified Public Accountants (AICPA) Statement of Position 97-2, Software Revenue Recognition (SOP 97-2), as amended, when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectability is probable. If at the outset of an arrangement we determine that the arrangement fee is not fixed or determinable, revenue is deferred until the

arrangement fee becomes due and payable by the customer. If at the outset of an arrangement we determine that collectability is not probable, revenue is deferred until payment is received or collectability has become probable. The determination of whether fees are fixed or determinable or whether the fees are collectible is inherently judgmental. As a result, the timing or amount of revenue recognition can vary depending on what assessments have been made.

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Revenue on multiple-element arrangements is recognized using the residual method when company-specific objective evidence of fair value exists for all of the undelivered elements (for example, support services, consulting, or other services) in the arrangement, but does not exist for one or more delivered elements (for example, software). We allocate revenue to each undelivered element based on its respective company- or vendor-specific objective evidence of fair value ( VSOE ), which is the price charged when that element is sold separately or, for elements not yet sold separately, the price established by our management if it is probable that the price will not change before the element is sold separately. We allocate revenue to undelivered support services based on company-wide rates charged to renew the support services annually after an initial period. Such renewal rates generally represent a fixed currency amount or a fixed percentage of the discounted software license fee charged to the customer. The vast majority of our customers renew their annual support service contracts. We defer revenue for all undelivered elements based on their respective VSOEs and recognize the residual amount of the arrangement fee attributable to the delivered elements, if any, when the basic criteria in SOP 97-2 have been met. We review our VSOEs at least annually. If we are unable to establish or maintain a VSOE for one or more undelivered elements within a multiple-element arrangement, it could adversely impact our revenues, results of operations and financial position because we may have to defer all or a portion of the revenue from multiple-element arrangements.

We have ongoing relationships with many of our customers and often enter into several transactions with the same customer within close proximity in time. Therefore, it is critical to determine what constitutes a multiple-element arrangement with a particular customer. Also determining what constitutes a separate element in the arrangement may involve judgment; for example, a right to an incremental discount on a customer's future purchases of software or services could become a separate element in a multiple-element arrangement which we need to separately account for if that incremental discount is considered to be significant.

If a multiple-element arrangement involves significant production, modification, or customization of the software, or is otherwise determined to contain elements (such as consulting services) that are deemed to be essential to the functionality of the software elements, software revenue, which might otherwise be recognized immediately, needs to be deferred and recognized as the essential services are provided. The determination of whether the arrangement involves significant production, modification, or customization of the software or whether an element is essential to the other elements could be complex and requires the use of judgment.

Also, the determination of the amount of revenue from custom joint development agreements, development services and consulting services to recognize in a given period typically is based on the amount of work completed up to that point. This requires us to make estimates about total cost to complete the project and the stage of completion. The assumptions, estimates, and uncertainties inherent in determining the stage of completion affect the timing and amounts of revenues and expenses reported. If we do not have a sufficient basis to measure the progress of completion or to estimate the total contract revenues and costs, revenue is recognized when the project is complete and, if applicable, final acceptance is received from the customer. Changes in estimates of progress towards completion and of contract revenues and contract costs are accounted for as cumulative catch-up adjustments to the reported revenues for the applicable contract.

**Valuation of Accounts Receivable**

Accounts receivable are recorded at invoiced amounts less an allowance for doubtful accounts. The allowance for doubtful accounts represents our best estimate of the amount of probable credit losses in our existing accounts receivable portfolio. We determine the allowance for doubtful accounts using a two-step-approach. After giving consideration to the financial solvency of specific customers, we evaluate homogenous portfolios of receivables according to their default risk primarily based on the age of the receivable and historical loss experience, but also taking into consideration general market factors such as the current economic crisis and how that might impact our receivable portfolio. A continuation or worsening of the economic crisis may lead to additional write-offs.





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We believe that the accounting estimate related to the establishment of the allowance for doubtful accounts is a critical accounting policy because the assessment of whether a receivable is collectible is inherently judgmental and requires the use of assumptions about customer defaults that could change significantly. Under U.S. GAAP, a valuation allowance must be recognized when it is probable that a credit loss will occur and the amount of such loss is reasonably estimable. Judgment is required when we evaluate available information about a particular customer's financial situation to determine whether an allowance for that specific account is necessary. Basing the general allowance for the remaining receivables on our historical loss experience, too, is highly judgmental as history may not be indicative of future development, particularly in unusual and extreme global economic circumstances resulting from the global financial crisis. Changes in our estimates about the allowance for doubtful accounts could materially impact the reported assets and expenses in our financial statements and net income could be adversely affected if actual credit losses exceed our estimates.

Total accounts receivable at December 31, 2008 and 2007 were 3,130 million and 2,898 million, respectively, which were net of an allowance for bad debts of 51 million in 2008 and 21 million in 2007. Net amounts charged to expense/(income) to provide for allowances for doubtful accounts were 29 million, 6 million and (40) million, during 2008, 2007, and 2006, respectively.

Specific customer credit loss risks are charged to the respective cost of software and maintenance or cost of service. Customer credit loss risks based on aging of the receivables are classified as general bad debt expense, which is included in Other operating income/expense, net as disclosed in Note 7 to our consolidated financial statements in Item 18. Financial Statements.

Charges for credit loss risks were as follows:

	2008	2007	2006
	millions		
Specific customer credit loss risks	20	9	3
Customer credit loss risks based on aging of the receivables charged to expense/(income)	9	(3)	(43)
Total amounts charged to expense/(income) for allowances for doubtful accounts	29	6	(40)

Accounts receivable written off against the allowance for doubtful accounts approximated 3 million, 8 million and 5 million during 2008, 2007, and 2006, respectively.

#### Accounting for Share-Based Compensation

As further explained in Note 27 to our consolidated financial statements in Item 18 Financial Statements, as of December 31, 2008 we had two share-based compensation plans classified as equity awards (SAP Stock Option Plan 2002 and Long Term Incentive 2000 Plan) and four share-based compensation plans that are classified as liability: STAR Plan; Incentive Plan 2010; Virtual Stock Option Plan 2007; and Business Objects Plan. Furthermore, we have various employee share purchase plans. Effective January 1, 2006, we adopted the fair value recognition provisions of SFAS 123 (revised 2004), *Share-Based Payment* (SFAS 123R), using the modified-prospective transition method. Accordingly, equity-classified awards are measured at grant date fair value and are not subsequently remeasured. Liability-classified awards are remeasured to fair value at each balance sheet date until the award is settled.

For the years presented in our consolidated financial statements in Item 18 Financial Statements, we did not change any plan terms of our existing share-based compensation plans. The historical Business Objects plans were modified by Business Objects in anticipation of the closing of our acquisition of Business Objects in accordance with local regulations to preserve the liquidity of the shares underlying the options and restricted stock units granted under these plans. Options and restricted stock units granted under the Business Objects plans included several plans, some of which related to employees of companies previously acquired by Business Objects. For further information, see Note 27 to our consolidated financial statements in Item 18. Financial Statements.

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To estimate the fair values of our stock options and convertible bonds granted under the share-based compensation plans classified as equity awards (Stock Option Plan 2002 and Long Term Incentive 2000 Plan) we used the Black-Scholes-Merton option-pricing model. As described in Note 27 to our consolidated financial statements in Item 18. Financial Statements, this option-pricing model requires that we use a number of assumptions, including expected future stock price volatility and expected option life (which represents our estimate of the average amount of time remaining until the options are exercised or expire unexercised).

The last stock options granted under SAP SOP 2002 Plan and Long Term Incentive 2000 Plan were granted in 2006 and 2002, respectively. For options granted in 2006 and 2005, the expected life of the options was determined using the simplified method to be 3.5 years, which represented the average of the vesting period and the contractual term of the awards. This approach was used because we did not have sufficient information about the historical exercise behavior of equity-based options granted to our employees. For awards granted from 2002 to 2004, the expected term of the awards was determined to be 2.5 years. Expected volatilities are based on implied volatilities of traded options to purchase our common share granted in 2006 and 2005 and based on historical data for options granted between 2002 and 2004.

Additionally, our share price on the date of grant influences the option value. Even though the exercise price of most options equals or is connected to the quoted market price of our stock on the grant date, the higher the share price, the higher the option value.

We intend to continue using share-based compensation awards to attract and retain senior managers and select employees. However, we do not intend to grant any more options under equity-classified awards and instead intend to make use of share-based compensation awards classified as a liability.

For purposes of determining the estimated fair value of our stock options, we believe expected volatility is the most sensitive assumption. Changes in the volatility assumption could significantly impact the estimated fair values calculated by the Black-Scholes-Merton or other binomial option-pricing model.

### Accounting for Income Taxes and Uncertain Income Tax Positions

We conduct operations and earn income in numerous foreign countries and are subject to changing tax laws in multiple jurisdictions within the countries in which we operate. In addition, there are numerous transactions where the ultimate tax outcome is uncertain such as those involving revenue sharing and cost reimbursement arrangements between SAP Group companies. Significant judgments are necessary in determining our worldwide income tax accruals and provisions in accordance with FIN 48, Accounting for Uncertainty in Income Taxes an interpretation of FASB Statement No. 109. Although we believe we have made reasonable estimates about the ultimate resolution of our tax uncertainties based on current tax laws and our interpretation of current tax laws, no assurance can be given that the final tax outcome of these matters will be consistent with what is reflected in our historical income tax provisions and accruals. Such differences could have a material effect on our income tax provision and net income in the period in which such determinations are made.

We recognize deferred tax assets and liabilities for temporary differences between the book and tax bases of assets and liabilities using enacted tax rates in effect for the year in which we expect the differences to reverse. We record a valuation allowance to reduce the deferred tax assets to the amount that is more likely than not to be realized. In evaluating our ability to utilize our deferred tax assets, we consider all available positive and negative evidence, including our past operating results, our forecast of future taxable income. Our judgments regarding future taxable income are based upon expectations of market conditions and other facts and circumstances. Any adverse change to the underlying facts or our assumptions could require that we reduce the carrying value of our net deferred tax assets. Furthermore, our use of different estimates, assumptions and judgments in connection with tax planning strategies and

tax uncertainties could result in materially different carrying values of our income tax asset and liability amounts and therefore could adversely impact our recorded income tax amounts.

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As of December 31, 2008, we have cumulative undistributed earnings from certain foreign subsidiaries of approximately 2.764 million that are currently deemed to be permanently reinvested. Changes in economic or other circumstances may impact our decision to repatriate some or all of these undistributed earnings which would result in the recognition of additional income tax liabilities.

### Valuation of acquired assets

We account for all business combinations using the purchase method of accounting which requires that the assets acquired and liabilities assumed be recorded at the date of acquisition at their estimated fair values. Any excess of the acquisition cost of the business combination over the estimated fair values of the identifiable net assets acquired (e.g. any tangible assets acquired, those intangible assets that are required to be recognized and reported separately from goodwill, and any liabilities assumed) is recorded as goodwill in the balance sheet and is generally denominated in the local currency of the related acquisition. Goodwill is allocated to our segments based on fair values.

In addition to assets acquired in business combinations, as part of our ongoing operations we purchase other intangible assets such as intellectual property. These acquired assets are reviewed for impairment when significant events occur or there are changes in circumstances that indicate that the carrying amount of these assets or asset groups may not be recoverable.

Estimating the fair value to be assigned to each class of assets acquired and liabilities assumed and the determination of the appropriate reporting units to which any goodwill should be allocated involves considerable management judgment. The necessary valuations are based on information available at the acquisition date and are based on expectations and assumptions that have been deemed reasonable by management. These judgments, estimates and assumptions can materially affect our results of operations.

In connection with the acquisition of Business Objects, we recognized goodwill of approximately 3.5 billion and identifiable intangible assets of approximately 1.0 billion. Factors that contributed to our recognition of goodwill in connection with the acquisition of Business Objects are expected synergies from combining the activities of the two companies as well as assets which cannot be recognized separately apart from goodwill because they are not identifiable (such as the quality and level of education of the workforce). The results of Business Objects have been included in the consolidated financial statements from the date of acquisition. In connection with the acquisition we incurred restructuring costs as a result of severance and relocation of workforce, the elimination of duplicate facilities, and contract terminations. Such costs have been recognized as liabilities of the acquired entities.

In accordance with Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets* ( SFAS 142 ), we review the carrying amount of goodwill for impairment on an annual basis. Additionally, we perform an impairment assessment of goodwill and other intangible assets whenever events or changes in circumstances indicate that the carrying value of goodwill and other intangible assets may not be recoverable. In making that assessment, we use certain assumptions and estimates about future cash flows, which are complex and often subjective. They can be affected by a variety of factors, including changes in our business strategy, our internal forecasts and estimation of our weighted-average cost of capital.

Due to the above factors, actual cash flows and values could vary significantly from the forecasted future cash flows and related values derived using the discounted cash flow method. Although we believe the assumptions and estimates we have made in the past have been reasonable and appropriate, different assumptions and estimates could materially affect our reported financial results. We did not record any impairment charges on our goodwill or intangible assets during fiscal year 2008. However, the amount of goodwill and other intangible assets on our consolidated balance sheet has increased significantly in 2008, primarily as a result of the Business Objects acquisition. As of December 31, 2008, the carrying amounts of our goodwill and intangible assets, net were 5,009 million and 1,127 million,

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respectively (2007: 1,423 million and 403 million, respectively). Although we do not currently have an indication of  
any significant impairment,

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there can be no assurance that impairment charges will not occur in the future. For more information, see Note 16 to our consolidated financial statements in Item 18. Financial Statements.

### Legal Contingencies

Currently we are involved in various claims and legal proceedings. We review the status of each significant matter on at least a quarterly basis and assess our potential financial and business exposures related to such matters. We make a provision for a liability for such matters when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated pursuant to SFAS No. 5, *Accounting for Contingencies*. Significant judgment is required in (a) the determination whether a liability has been incurred, (b) the determination of the probability of loss, (c) the determination whether the amount of a probable loss is reasonably estimable and (d) the estimate of the probable loss. Due to uncertainties relating to these matters, accruals are based only on the best information available at the time. As additional information becomes available, we reassess the potential liability related to our pending claims and litigation and may revise our estimates and any related accruals. Such revisions to our estimates of the potential liabilities could have a material impact on our results of operations and financial position. The effects of changes in estimates of potential liabilities related to our legal contingencies had no material impact on 2008, 2007 or 2006 results. See Note 24 to our consolidated financial statements in Item 18 Financial Statements.

### NEW ACCOUNTING STANDARDS NOT YET ADOPTED

See Note 3 to our consolidated financial statements in Item 18 Financial Statements.

### LIQUIDITY AND CAPITAL RESOURCES

Our primary source of cash, cash equivalents and short-term investments is funds generated from our business operations. Over the past several years, our principal use of cash has been to support continuing operations and our capital expenditure requirements resulting from our growth, to pay dividends on our shares, to buy back SAP shares in the open market and to acquire businesses. Cash and cash equivalents are primarily held in euro and U.S. dollars as of December 31, 2008.

We use global centralized financial management to control liquid assets as well as monitor exposure to interest rates and currencies with the goal of achieving adequate liquidity for the SAP Group. High levels of liquid assets and marketable securities provide a strategic reserve, helping keep SAP flexible, sound, and independent. The 1 billion syndicated credit facility and other, bilateral lines of credit are currently available for additional liquidity if required.

We believe that our working capital is sufficient to meet our present operational needs and, together with expected cash flows from operations, will support our currently planned capital expenditure requirements for the next twelve months. However, given the current uncertain economic environment, there can be no assurance that a further downturn in the economy worldwide, in a particular region, or in demand for our products and services in general, will not have a material adverse impact on our liquidity.

To complement or expand our business in the future, we have made and expect to make acquisitions of businesses, products and technologies, and to enter into joint venture arrangements. These acquisitions or joint venture arrangements may require additional financing. Due to the financial market crisis additional financing will generally be more difficult to obtain. Refinancing costs (credit spreads) have significantly increased during the last 12-18 months.

In connection with our acquisition of Business Objects we entered into a 5 billion credit facility in October 2007 (subsequently reduced to 4.45 billion as of December 31, 2007 and further reduced to 2.95 billion in February 2008).



The credit facility has to be repaid by December 31, 2009. As of March 9, 2009, we had outstanding borrowings of 2.3 billion on this credit facility.

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Due to the current global economic conditions and the credit markets in particular, refinancing conditions have become markedly more difficult. Therefore, we monitor funding options available in the capital markets and trends in the availability of funds as well as the cost of such funding. Depending on our future cash needs and future market conditions, we might issue debt instruments available to us with a view to maintaining financial flexibility and limiting repayment risk.

The table below presents our cash and cash equivalents as well as short-term investments as of December 31:

	<b>2008</b>	<b>2007</b>	<b>% change</b>
	<b>millions</b>		
Cash and cash equivalents	1,277	1,608	(21)%
Restricted cash <sup>(1)</sup>	3	550	(99)%
Short-term investments	382	598	(36)%
<b>Total</b>	<b>1,662</b>	<b>2,756</b>	<b>(40)%</b>

(1) The restricted cash balance as of December 31, 2007 represents a security deposit that served as collateral for the credit facility entered into in connection with the acquisition of Business Objects.

Cash and cash equivalents consist of cash at banks and highly liquid investments with original maturity of three months or less, including mainly money market funds and time deposits. Short-term investments consist of investments with original maturities of greater than three months and remaining maturities of less than one year, including time deposits, money market funds and other available-for-sale debt and marketable equity securities. Investments with maturities beyond one year or certain cost- and equity-method equity investments may be classified as short-term based on their highly liquid nature and because such marketable securities represent the investment of cash that is available for current operations. The decrease in cash and cash equivalents and short-term investments from 2007 was mainly due to the use of liquidity for acquisitions, continued repurchase of our own shares, dividend payments, and repayments of short-term debt. See Note 3 to our consolidated financial statements in Item 18 Financial Statements for a related discussion on how we define short-term investments.

Total net interest expenses amounted to 51 million in 2008 compared to net interest income of 135 million in 2007 and 120 million in 2006. The change is primarily due to strong increase in interest expenses following the credit facility we entered into in connection with the acquisition of Business Objects ( 123 million in 2008 compared to 7 million in 2007 and 4 million in 2006). Interest income was also considerably lower due to a generally lower interest rate environment ( 72 million in 2008 compared to 142 million in 2007 and 124 million in 2006). In addition to foreign currency exposure, we are generally exposed to fluctuations in the interest rates of many of the world's leading industrialized countries. Our interest income and expense are most sensitive to fluctuations in the level of U.S. dollar and euro interest rates.

We operate globally and have subsidiaries in over 50 countries. Our foreign subsidiaries license SAP AG's software products to local customers and remit a certain percentage of the revenue to SAP AG in Germany as license fees. We have experienced and expect to experience situations where the amount of funds transferred from our subsidiaries in certain countries to Germany are restricted due to economic or legal reasons. The impact of such restrictions on our intercompany transfers has been and is expected to be insignificant.

Cash, cash equivalents and short-term investments mainly consisted of amounts held in U.S. dollars (approximately 361 million) and in euro (approximately 764 million) as of December 31, 2008.

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## Analysis of Consolidated Statements of Cash Flow

	Years ended December 31,			Change 2008 vs. 2007	Change 2007 vs. 2006
	2008	2007	2006		
		millions			
Net cash provided by operating activities	2,183	1,950	1,855	12%	5%
Net cash used in investing activities	(3,769)	(1,392)	(132)	171%	955%
Net cash provided by/(used in) financing activities	1,281	(1,287)	(1,375)	200%	(6)%

Cash provided by operating activities increased by 233 million or 12% in 2008 over 2007 mainly attributable to effective management of our working capital, for example, the cost-savings measures implemented in 2008.

Consistent with the revenue growth (13% in 2008), our accounts receivable balance increased by 232 million or 8% in 2008 while our rolling 12-month average collection period, which is measured in days sales outstanding, or DSO (defined as average number of days from revenue recognition to cash receipt from the customer) increased from 66 days in 2007 to 71 days in 2008, mainly as a result of the deteriorating economic conditions. Cash used in investing activities increased significantly from 1,392 million in 2007 to 3,769 million in 2008 mainly due to our acquisition of Business Objects which led to an increase of cash outflows for acquisitions by 3,101 million from 672 million in 2007 to 3,773 million in 2008. Also, in 2008 we invested 339 million in our technology and business infrastructure by purchasing intangible assets and property, plant and equipment, a significant portion of which represented the cost of constructing office buildings. Cash provided by financing activities increased by 2,568 million mainly due to proceeds from the credit facility we entered into in connection with our acquisition of Business Objects, but also due to decreased spending on purchases of treasury stock (2008: 487 million; 2007: 1,005 million).

Cash provided by operating activities increased by 95 million or 5% in 2007 over 2006, mainly due to the increase in net income. As total revenue grew, our accounts receivable balance increased by 455 million or 19% in 2007 while our rolling 12-month average collection period, which is measured in DSO, was reduced from 68 days in 2006 to 66 days in 2007. Cash used in investing activities increased significantly from 132 million in 2006 to 1,392 million in 2007. This increase is partly due to a transfer of cash to restricted cash. The restricted cash was set up in 2007 as a security deposit that served as collateral for a credit facility entered into in connection with the acquisition of Business Objects. Also, the net inflow from short-term, equity, and other investments was significantly less than in 2006, because in 2006 we had liquidated and reallocated substantial amounts of such investments. In addition, cash outflow for acquisitions of unrelated companies increased to 672 million (2006: 504 million). Also, we continued to spend on intangible assets and property, plant and equipment, amounting to 401 million in 2007, a significant portion of which represented the cost of construction of office buildings. Cash used in financing activities decreased by 88 million or 6% in 2007, mainly because of a slightly lower amount used for purchases of treasury stock (2007: 1,005 million; 2006: 1,149 million).

**Credit Lines**

As of December 31, 2008, we had outstanding long-term financial debt of 2 million and outstanding short-term financial debt of approximately 2,325 million, consisting primarily of amounts borrowed under the 5 billion credit facility and other lines of credit as described below.

In October 2007 we entered into a 5 billion credit facility (subsequently reduced to 4.45 billion as of December 31, 2007 and further reduced to 2.95 billion in February 2008) in connection with the acquisition of Business Objects. The

use of the facility is not restricted by any financial covenants. Borrowings under the facility bear interest of EURIBOR plus a margin of 0.25%. As of March 9, 2009, we had an outstanding borrowing of 2.3 billion on this credit facility.

Also, currently we are party to a revolving 1 billion syndicated credit facility agreement with an initial term of 5 years ending November 2009. The use of the facility is not restricted by any financial covenants.

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Proceeds are for general corporate purposes. Borrowings under the facility bear interest of EURIBOR or LIBOR for the respective currency plus a margin ranging from 0.20% to 0.25% depending on the amount drawn. We are also required to pay a commitment fee of 0.07% per annum on unused amounts of the available credit. We entered into this credit facility to increase our financial flexibility. We did not, however, draw down the facility in 2008, nor do we currently intend to draw down on the facility. Consequently, there were no borrowings outstanding under the facility as of December 31, 2008.

As of December 31, 2008, SAP AG had additional available lines of credit totaling approximately 597 million. As of December 31, 2008, there were no borrowings outstanding under these lines of credit. Furthermore, certain of our foreign subsidiaries have lines of credit available that allow them to borrow funds in their respective local currencies at prevailing interest rates, generally to the extent SAP AG has guaranteed such amounts. As of December 31, 2008, approximately 52 million was available through such arrangements. Total aggregate borrowings under these lines of credit amounted to 21 million as of December 31, 2008.

**Authorized Capital**

We also have available sources of cash through authorized capital as outlined in Note 20 to our consolidated financial statements in Item 18 Financial Statements.

**OFF-BALANCE SHEET ARRANGEMENTS**

Several entities of the SAP Group have entered into operating leases for office facilities, computer hardware and certain other equipment. These arrangements are sometimes referred to as a form of off-balance sheet financing. Rental expenses under these operating leases are set forth below under Contractual Obligations.

We have not entered into any transactions, arrangements or other relationships with unconsolidated, variable interest entities, as such term is defined in FASB Interpretation No. 46 (Revised December 2003), *Consolidation of Variable Interest Entities – an interpretation of ARB No. 51*. We believe we do not have other forms of material off-balance-sheet arrangements that would require disclosure other than those already disclosed.

**CONTRACTUAL OBLIGATIONS**

The table below presents our on- and off-balance sheet contractual obligations as of December 31, 2008:

<b>Contractual obligations</b>	<b>Total</b>	<b>Payments due by period</b>			<b>More than 5 years</b>
		<b>Less than 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	
			<b>millions</b>		
Short-term debt obligations <sup>(1)</sup>	2,404	2,404			
Long-term debt obligations <sup>(1)</sup>	2		2		
Operating lease obligations <sup>(2)</sup>	863	229	334	153	147
Purchase obligations <sup>(3)</sup>	249	189	54	4	2
Other long-term liabilities reflected on the balance sheet <sup>(4)</sup>	133		67		66
<b>Total</b>	<b>3,651</b>	<b>2,822</b>	<b>457</b>	<b>157</b>	<b>215</b>

- (1) This represents bank loans and interest thereon.
- (2) See Note 23 to our consolidated financial statements in Item 18. Financial Statements for additional information about operating lease obligations and the related rental expense.
- (3) Purchase obligations represent agreements to purchase goods or services that are enforceable and legally binding on us that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. The outstanding obligations include the

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construction of facilities, office equipment and car purchase commitments, food and security services and other facility commitments.

Our expected contributions to our pension and other post employment benefit plans are not included in the table above. We expect to contribute in 2009 statutory minimum and discretionary amounts of 2 million to our German defined benefit plans and 29 million to our foreign defined benefit plans, all of which are expected to be paid as cash contributions. Our contributions to our German and foreign defined contribution plans have ranged from 86 million to 93 million in 2006 through 2008; we expect similar contributions to be made in 2009. See Note 19a to our consolidated financial statements in Item 18. Financial Statements for additional information on estimated future pension benefits to be paid.

(4) Amounts mainly consist of employee-related liabilities ( 57 million) and derivatives ( 31 million) and deferred rent ( 36 million). Not included in the table are noncurrent income taxes payable of 278 million, which includes provisions for uncertainties in income taxes. Other noncurrent liabilities on the balance sheet such as pension and other post employment benefit liabilities, deferred compensation, deferred income and deferred tax liabilities are not included in this table. For additional information on liabilities see Notes 18 and 19b to our consolidated financial statements in Item 18 Financial Statements.

We expect to meet these contractual obligations with existing cash and our cash flows from operations. The timing of payments for the above contractual obligations is based on payment schedules for those obligations where set payments exist. For other obligations with no set payment schedules, estimates as to the most likely timing of cash payments have been made. The ultimate timing of these future cash flows may differ from these estimates.

### Obligations under Indemnifications and Guarantees

Our software license agreements generally include certain provisions for indemnifying customers against liabilities if our software products infringe a third party's intellectual property rights. To date, we have not incurred any material loss as a result of such indemnification obligations and have not recorded any liabilities related to such obligations.

In addition, we occasionally provide function or performance guarantees in routine consulting contracts and development arrangements. Based on historical experience and evaluation, we do not believe that any material loss resulting from these guarantees is probable. In addition, because the guarantees relate to our own performance, no related liability has been recorded. We also generally provide a six to twelve month warranty on our software. Due to the nature of these warranties, which relate to the performance of our software, we cannot reasonably estimate the maximum exposure to loss resulting from the warranties. Our warranty liability is included in Other obligations. See Note 19b to our consolidated financial statements in Item 18 Financial Statements.

As of December 31, 2008 and 2007, no guarantees were provided for performance or financial obligations of third parties.

### RESEARCH AND DEVELOPMENT

The SAP product development units define the business functions and technical architecture of future software products and realize them in software code and software-related content such as models and methodologies.

SAP's development labs, known as SAP Labs, are our global research and development organization with operations in various countries throughout the world. Next to our headquarters in Walldorf, Germany, our three largest development locations are in India, the United States and China. This regional diversification enhances the efficient use of local resources and allows for closer ties to the companies in our partner ecosystem as we jointly develop



innovative products and services. The network of SAP Labs is designed to act quickly on new requirements from customers and the market and to accelerate product innovation and raise productivity.

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Complementing the SAP Labs network, SAP Research is a group responsible for identifying emerging information technology trends, as well as researching and building prototypes for potential inclusion in SAP products. The fundamental business model of SAP Research is based on co-innovation through collaborative research with both academia and industry. SAP Research consists of 14 interconnected research centers on five continents. Each center is located in close proximity to an SAP development center or on a university campus. We believe that in the medium term we must continuously improve our portfolio of products if we are to maintain and build on our current leading position as a vendor of business software.

Research and development (R&D) expenses for the years ended December 31, 2008, 2007 and 2006 were 1,631 million, 1,458 million and 1,335 million, respectively. R&D expenses as a percentage of total revenue were 14%, 14% and 14% for the years ended December 31, 2008, 2007, and 2006, respectively.

The importance of R&D was also reflected in the breakdown of employee profiles. In 2008, our total FTE count in development work was 15,547 (2007: 12,951). This constitutes 30% of all SAP employees and represents a 20% rise in the number of R&D employees since the previous year. Our acquisition of Business Objects in 2008 contributed 1,697 new R&D employees or 13% of this increase.

The expenses for R&D include mainly employee salaries and the cost of externally procured development services.

**Table of Contents****ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES****SUPERVISORY BOARD**

The current members of the Supervisory Board of SAP AG, each member's principal occupation, the year in which each was first elected and the year in which the term of each expires, respectively, are as follows:

<b>Name</b>	<b>Age</b>	<b>Principal Occupation</b>	<b>Year First Elected</b>	<b>Year Term Expires</b>
Prof. Dr. h.c. mult. Hasso Plattner, Chairman <sup>(1)(2)(4)(6)(7)(8)(12)</sup>	65	Chairman of the Supervisory Board	2003	2012
Pekka Ala-Pietilä <sup>(1)(7)(8)(12)</sup>	52	Co-founder and CEO Blyk Ltd.	2002	2012
Prof. Dr. Wilhelm Haarmann <sup>(1)(2)(4)(5)(9)</sup>	58	Attorney at Law, Certified Public Auditor and Certified Tax Advisor; HAARMANN Partnerschaftsgesellschaft, Rechtsanwälte, Steuerberater, Wirtschaftsprüfer	1988	2012
Bernard Liautaud <sup>(7)(13)</sup>	46	General Partner, Balderton Capital	2008	2012
Dr. h.c. Hartmut Mehdorn <sup>(1)(5)(6)</sup>	66	Chairperson of Executive Board, Deutsche Bahn AG	1998	2012
Prof. Dr.-Ing. Dr. h.c. mult. Dr.-Ing. E.h. mult. Joachim Milberg <sup>(1)(2)(3)(4)(7)(8)</sup>	65	Chairman of the Supervisory Board of BMW AG	2007	2012
Dr. Erhard Schipporeit <sup>(1)(3)(11)(12)</sup>	60	Management Consultant	2005	2012
Prof. Dr.-Ing. Dr.-Ing. E.h. Klaus Wucherer <sup>(1)(7)</sup>	64	Managing Director of Dr. Klaus Wucherer Innovations- und Technologieberatung GmbH	2007	2012
Lars Lamadé, Vice Chairman <sup>(4)(6)(10)</sup>	37	Employee, Project Manager Service & Support	2002	2012
Thomas Bamberger <sup>(3)(10)</sup>	41	Employee, Chief Controlling Officer Research & Breakthrough Innovation, Head of Operations Global Service & Support	2007	2012
Panagiotis Bissiritsas <sup>(2)(5)(10)</sup>	40	Employee, Support Expert	2007	2012
Willi Burbach <sup>(4)(7)(10)</sup>	46	Employee, Developer	1993	2012
Peter Koop <sup>(4)(7)(10)</sup>	42	Employee, Industry Business Development Expert	2007	2012
Christiane Kuntz-Mayr <sup>(7)(14)</sup>	46	Employee, Deputy Chairperson of the Works Council of SAP AG	2009	2012
Dr. Gerhard Maier <sup>(2)(3)(10)</sup>	55	Employee, Development Project Manager	1989	2012
Stefan Schulz <sup>(5)(6)(7)(10)</sup>	39	Employee, Development Project Manager	2002	2012

- (1) Elected by SAP AG's shareholders on May 10, 2007.
- (2) Member of the Compensation Committee.
- (3) Member of the Audit Committee.
- (4) Member of the General Committee.
- (5) Member of the Finance and Investment Committee.
- (6) Member of the Mediation Committee.

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- (7) Member of the Technology and Strategy Committee.
- (8) Member of the Nomination Committee
- (9) Until January 1, 2006, Wilhelm Haarmann practiced as a partner of Haarmann Hemmelrath which served as special German tax counsel to SAP AG and counseled SAP with regard to other legal matters. On January 1, 2006, he founded HAARMANN Partnerschaftsgesellschaft in Frankfurt.
- (10) Elected by SAP AG's employees on April 23, 2007.
- (11) Member of the Audit Committee and determined to be the Audit Committee financial expert.
- (12) Member of the Special Committee
- (13) Elected by SAP AG's shareholders on June 3, 2008, replacing August-Wilhelm Scheer who resigned from the Supervisory Board on the same day.
- (14) Replacing Helga Classen who left the Supervisory Board on December 31, 2008 due to partial retirement.

For detailed information on the Supervisory Board committees and their tasks, including the Audit Committee and Compensation Committee, please refer to Item 10 Additional Information Corporate Governance.

Certain current members of the Supervisory Board of SAP AG were members of supervisory boards and comparable governing bodies of enterprises other than SAP AG in Germany and other countries as of December 31, 2008. See Note 29 to our consolidated financial statements included in Item 18 Financial Statements for more detail. Apart from pension obligations towards employees, SAP AG has not entered into contracts with any member of the Supervisory Board that provide for benefits upon a termination of the employment or service of the member.

Pursuant to the German Co-determination Act of 1976 (*Mitbestimmungsgesetz*), members of the Supervisory Board of SAP AG consist of eight representatives of the shareholders and eight representatives of the employees. Of the eight employee representatives, two must be nominated by the trade unions. The elected employees must be at least 18 years of age and must have been in the employment of SAP AG or one of its German subsidiaries for at least one year. They must also fulfill the other qualifications for election codified in Section 8 of the German Works Council Constitution Act. These qualifications include, among other things, not having been declared ineligible or debarred from holding public office by a court.

**EXECUTIVE BOARD**

The current members of the Executive Board, the year in which each member was first appointed and the year in which the term of each expires, respectively, are as follows:

<b>Name</b>	<b>Year First Appointed</b>	<b>Year Current Term Expires</b>
Prof. Dr. Henning Kagermann, Co-CEO	1991	2009
Léo Apotheker, Co-CEO	2002	2010

Dr. Werner Brandt	2001	2013
Erwin Gunst	2008	2012
Prof. Dr. Claus Heinrich	1996	2009
Bill McDermott	2008	2012
Gerhard Oswald	1996	2010
John Schwarz	2008	2010
Jim Hageman Snabe	2008	2012

The Executive Board members' responsibilities are aligned along SAP's value chain, spanning innovation, research and development, production, services, marketing, training, consulting and sales.

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The following changes occurred in the Executive Board in 2008:

On February 19, 2008, we announced that Business Objects CEO John Schwarz was named member of the SAP Executive Board, effective March 1, 2008.

On April 2, 2008, we announced that the SAP Supervisory Board named then Deputy CEO Léo Apotheker as SAP's Co-CEO alongside Henning Kagermann, with immediate effect. Henning Kagermann will step down as planned on May 31, 2009 at which time Léo Apotheker will be sole CEO.

Further on April 2, 2008, we announced that the SAP Supervisory Board appointed Erwin Gunst, Bill McDermott and Jim Hageman Snabe to the SAP Executive Board effective July 1, 2008.

On October 31, 2008, Claus Heinrich announced that he has decided to leave SAP on May 31, 2009.

On November 26, 2008, the SAP Supervisory Board named Erwin Gunst the next labor relations director of SAP AG, effective January 1, 2009, succeeding Claus Heinrich.

On December 31, 2008, Peter Zencke gave up this seat on the SAP Executive Board upon expiration of his contract.

A description of the management responsibilities and backgrounds of the current members of the Executive Board are as follows:

**Henning Kagermann, Co-CEO** (*Vorstandssprecher*), 61 years old, physics graduate. Henning Kagermann joined SAP AG in 1982. He became a member of the Executive Board in 1991 and Co-CEO in 1998. In May 2003 he became sole CEO of the Executive Board. In April 2008 he again became Co-CEO when the SAP Supervisory Board named Léo Apotheker Co-CEO alongside Henning Kagermann. He has overall responsibility for SAP's strategy and business development, and is further responsible for internal audit and top talent management.

**Léo Apotheker, Co-CEO** (*Vorstandssprecher*), 55 years old, business economist. Léo Apotheker first joined SAP in 1988 and became a member of the Executive Board in 2002. In April 2008 he became Co-CEO alongside Henning Kagermann. He is responsible for consulting, education, marketing, partner management, industry solutions, and global communications.

**Werner Brandt**, 55 years old, business administration graduate. Werner Brandt joined SAP in early 2001 as the Chief Financial Officer and member of the Executive Board. Prior to joining SAP, Werner Brandt was CFO and member of the Executive Board of Fresenius Medical Care AG since 1999. In this role, he was also responsible for labor relations. Before joining Fresenius Medical Care AG, Werner Brandt headed the finance function of the European operations of Baxter International Inc. His responsibilities at SAP include finance and administration, shared services, global intellectual property, mergers & acquisitions, and SAP Ventures.

**Erwin Gunst**, 49 years old, holds a degree in commercial engineering. He joined SAP in 1988 and became Chief Operating Officer and member of its Executive Board on July 1, 2008. He is responsible for company operations and processes, global human resources (including labor relations), internal SAP IT, and the management of all SAP Labs worldwide.

**Claus Heinrich**, 53 years old, business management and operations research graduate. Claus Heinrich joined SAP in 1987 and became a member of the Executive Board in 1996. On October 31, 2008, he announced that he will leave SAP on May 31, 2009.

**Bill McDermott**, 47 years old, holds a master's degree in business administration. He joined SAP in 2002 and became a member of its Executive Board on July 1, 2008. He is responsible for global field operations.

**Gerhard Oswald**, 55 years old, economics graduate. Gerhard Oswald joined SAP in 1981 and became a member of the Executive Board in 1996. He is responsible for global service and support.

**John Schwarz**, 58 years old, has diploma in business administration and a degree in computer science. John Schwarz joined SAP in 2008 and became a member of its Executive Board on March 1, 2008. He is chief executive officer (CEO) of Business Objects, a business unit within the SAP Group. He joined Business Objects in



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September 2005 as its CEO. Prior to Business Objects, he was president and chief operating officer of Symantec Corporation. He is responsible for the SAP BusinessObjects business unit, the Global Ecosystem & Partner Group and for Corporate Business Development.

**Jim Hagemann Snabe**, 43 years old, holds a master degree in operational research. He joined SAP in 1990 and became a member of its Executive Board on July 1, 2008. He is responsible for product development. This includes solutions for large enterprises, small and medium size enterprises, and the technology platform.

The members of the Executive Board of SAP AG as of December 31, 2008 that are members on other supervisory boards and comparable governing bodies of enterprises, other than SAP, in Germany and other countries, are set forth in Note 29 to our consolidated financial statements in Item 18 Financial Statements. Apart from pension obligations, SAP AG has not entered into contracts with any member of the Executive Board that provide for benefits upon a termination of the employment of service of the member.

To our knowledge, there are no family relationships among the Supervisory Board and Executive Board members.

## **COMPENSATION**

This compensation report outlines the criteria that we apply to determine compensation for Executive Board and Supervisory Board members, discloses the amount of compensation paid, and describes the compensation systems. It also contains information about Executive Board members' share-based compensation plans, shares held by Executive Board and Supervisory Board members, and the directors' dealings required to be disclosed in accordance with the German Securities Trading Act.

### Compensation for Executive Board Members

#### **Compensation System**

Until and including 2008, the Executive Board members' compensation system has been set by the Compensation Committee, a committee of the Supervisory Board chaired by Hasso Plattner (chairperson of the Supervisory Board). Its other members are Panagiotis Bissiritsas, Wilhelm Haarmann, Gerhard Maier, and Joachim Milberg. In the future, the full Supervisory Board will assume this responsibility, in accordance with the amended German Corporate Governance Code.

Executive Board members' compensation is intended to reflect the Group's size and global presence as well as our economic and financial standing. The level is internationally competitive to reward committed, successful work in a dynamic environment.

The compensation of the Executive Board as a body is performance-based. It has three elements: a fixed element (salary), a performance-related element (directors' profit-sharing), and a long-term incentive element (share-based compensation).

A compensation target is set for the total of fixed and performance-related elements. We review the compensation target every year in the light of our business and directors' compensation at comparable companies on the international stage. Every year, the Compensation Committee sets the target performance-related compensation, reflecting the relevant values in SAP's budget for that year. The number of virtual stock options issued in 2008 to each individual member of the Executive Board by way of share-based compensation was decided by the Compensation Committee at its meeting on March 3, 2008, and reflected the fair value of the options.

The following criteria apply to the elements of Executive Board compensation for 2008:

The fixed element is paid as a monthly salary.

The amount of performance-related compensation to be paid out in respect of 2008 depends on the SAP Group's achievement of its targets for (non-GAAP) operating income, (non-GAAP) software and

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software-related service revenue growth at constant currencies, and the (non-GAAP) operating margin at constant currencies.

On February 11, 2009, the Supervisory Board's Compensation Committee assessed SAP's performance against the agreed targets and determined how much performance-related compensation was payable. The payment will be made after the Annual General Meeting of Shareholders in May 2009.

The regular form of share-based compensation is the issue of virtual stock options under the terms of the 2007 stock option plan (SAP SOP 2007). For the terms and details of SAP SOP 2007, see Note 27 to our consolidated financial statements in ITEM 18. Financial Statements.

**Amount of Compensation**

Executive Board members' compensation was as follows in 2008:

	Fixed Elements		Performance Related Element Directors Profit- Sharing (000)	Long-Term Incentive Elements Share-Based Compensation (SAP SOP 2007) <sup>(2)</sup>	Total
	Salary	Other <sup>(1)</sup>			
Prof. Dr. Henning Kagermann (Co-CEO)	750.0	15.7	2,606.1	948.4	4,320.2
Léo Apotheker (Co-CEO)	687.5	334.5	2,388.9	632.3	4,043.2
Dr. Werner Brandt	455.0	23.5	1,581.0	577.3	2,636.8
Erwin Gunst <sup>(3)</sup>	227.5	18.1	790.5		1,036.1
Prof. Dr. Claus E. Heinrich	455.0	19.8	1,581.0	577.3	2,633.1
Bill McDermott <sup>(3)</sup>	395.2	142.4	631.3		1,168.9
Gerhard Oswald	455.0	627.9	1,581.0	577.3	3,241.2
John Schwarz <sup>(4)</sup>	424.9	14.3	1,295.2	577.3	2,311.7
Jim Hagemann Snabe <sup>(3)</sup>	227.5	22.3	790.5		1,040.3
Dr. Peter Zencke	455.0	143.5	1,581.0	577.3	2,756.8
<b>Total</b>	<b>4,532.6</b>	<b>1,362.0</b>	<b>14,826.5</b>	<b>4,467.2</b>	<b>25,188.3</b>

1) Insurance contributions, benefits in kind, expenses for maintenance of two households due to work abroad, compensation from seats on other governing bodies in the SAP Group, leave compensation, reimbursement of legal fees.

2) Fair value at the time of allocation.

3) Member of the Executive Board since July 1, 2008. (The table shows compensation since that date.)

4) Member of the Executive Board since March 1, 2008. (The table shows compensation since that date.)

The total compensation of all Executive Board members in fiscal year 2008 for work for SAP excluding compensation relating to the office of Executive Board member was 8,741,300. This was primarily compensation earned as SAP employees before they took their Executive Board seats after the beginning of the year. It includes, among other elements, share-based compensation under SAP SOP 2007.

The values for regular share-based compensation in the table above result from the following allocations of SAP SOP 2007 virtual stock options granted in 2008.

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The following table shows total Executive Board compensation in 2007, including SAP SOP 2007 stock options granted.

	Fixed Elements		Performance Related Element	Long-Term Incentive Elements	Total
	Salary	Other1)	Directors Profit- Sharing	Share-Based Compensation (SAP SOP 2007) <sup>(2)</sup> (000)	
Prof. Dr. Henning Kagermann (Co-CEO)	728.5	16.0	4,219.7	949.1	5,913.3
Shai Agassi (member until March 31, 2007) <sup>(4)</sup>	161.3	3.1	446.8 <sup>(3)</sup>		611.2
Léo Apotheker (Co-CEO)	485.6	59.0	2,813.1	632.7	3,990.4
Dr. Werner Brandt	443.4	41.3	2,568.5	577.7	3,630.9
Prof. Dr. Claus E. Heinrich	443.4	20.2	2,568.5	577.7	3,609.8
Gerhard Oswald	443.4	14.8	2,568.5	577.7	3,604.4
Dr. Peter Zencke	443.4	28.0	2,568.5	577.7	3,617.6
<b>Total</b>	<b>3,149.0</b>	<b>182.4</b>	<b>17,753.6</b>	<b>3,892.6</b>	<b>24,977.6</b>

- 1) Insurance contributions, benefits in kind, expenses for maintenance of two households due to work abroad, compensation from seats on other governing bodies in the SAP Group.
- 2) Fair value at the time of allocation.
- 3) The portion of the directors' profit-sharing for January through March 2007 was calculated on the basis of the actual directors' profit-sharing paid in 2006.
- 4) Shai Agassi left the Executive Board on March 31, 2007. His employment contract with SAP ended on April 30, 2007.

## Share-Based Compensation Under SAP SOP 2007

Fair Value	2008 Allocations	
	Incentive Elements	Fair Value
	Total Fair Value of Long-Term	

	Quantity	per Right at Time of Grant	at Time of Grant (000)	per Right on December 31, 2008	Total Value on December 31, 2008 (000)
Prof. Dr. Henning Kagermann (Co-CEO)	133,396	7.11	948.4	4.67	623.0
Léo Apotheker (Co-CEO)	88,933	7.11	632.3	4.67	415.3
Dr. Werner Brandt	81,200	7.11	577.3	4.67	379.2
Erwin Gunst <sup>(1)</sup>					
Prof. Dr. Claus E. Heinrich	81,200	7.11	577.3	4.67	379.2
Bill McDermott <sup>(1)</sup>					
Gerhard Oswald	81,200	7.11	577.3	4.67	379.2
John Schwarz <sup>(2)</sup>	81,200	7.11	577.3	4.67	379.2
Jim Hagemann Snabe <sup>(1)</sup>					
Dr. Peter Zencke	81,200	7.11	577.3	4.67	379.2
<b>Total</b>	628,329		4,467.2		2,934.3

1) Member of the Executive Board since July 1, 2008. (No allocations were made after that date.)

2) Member of the Executive Board since March 1, 2008. (The table shows allocations since that date.)

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			2007 Allocations		
			Total Fair Value of Long-Term		
	Quantity	Fair Value per Right at Time of Grant	Incentive Elements at Time of Grant (000)	Fair Value per Right on December 31, 2007	Total Value on December 31, 2007 (000)
Prof. Dr. Henning Kagermann (Co-CEO)	118,637	8.00	949.1	8.53	1,012.0
Léo Apotheker (Co-CEO)	79,093	8.00	632.7	8.53	674.7
Dr. Werner Brandt	72,216	8.00	577.7	8.53	616.0
Prof. Dr. Claus E. Heinrich	72,216	8.00	577.7	8.53	616.0
Gerhard Oswald	72,216	8.00	577.7	8.53	616.0
Dr. Peter Zencke	72,216	8.00	577.7	8.53	616.0
<b>Total</b>	<b>486,594</b>		<b>3,892.6</b>		<b>4,150.7</b>

**End-of-Service Undertakings*****Retirement Pension Plan***

Members of the Executive Board receive a retirement pension when they reach the retirement age of 60 and vacate their Executive Board seat or a disability pension if, before reaching the regular retirement age, they become subject to occupational disability or permanent incapacity. A surviving dependent's pension is paid on the death of a former member of the Executive Board. The disability pension is 100% of the vested retirement pension entitlement and is payable until but not after the beneficiary's 60th birthday. The surviving dependent's pension is 60% of the retirement pension or vested disability pension entitlement at death. Entitlements are enforceable against SAP AG.

The benefit payable has been agreed with the active Executive Board members. If service is ended prematurely, pension entitlement is reduced in proportion as the actual length of service stands in relation to the maximum possible length of service.

On January 1, 2000, SAP AG introduced a contributory retirement pension plan. At that time, the performance-based retirement plan was discontinued for Executive Board members. Entitlements accrued up to December 31, 1999, were unaffected. The benefits are derived from any accrued entitlements on December 31, 1999, under performance-based pension agreements and a salary-linked contribution for the period commencing January 1, 2000. The contribution is 4% of applicable compensation up to the applicable income threshold plus 14% of applicable compensation above the applicable income threshold. For this purpose, applicable compensation is 90% of target annual salary. The applicable income threshold is the statutory annual income threshold for the state pension plan in Germany (West), as amended from time to time.

An exceptional agreement applies to Executive Board member Léo Apotheker. Léo Apotheker's agreement provides only for a retirement pension, and the pension contribution reflects his participation in the French social security system. Henning Kagermann's rights to retirement pension benefits will be increased by further annual contributions because he has remained a member of the Executive Board after his 60th birthday.

Executive Board member Bill McDermott has rights to future benefits under the pension plan of SAP America, Inc. The pension plan of SAP America, Inc. is a cash balance plan that provides on retirement either monthly pension payments or a lump sum. The pension becomes available from the beneficiary's 65th birthday. Subject to certain conditions, the plan also provides earlier payment or invalidity benefits.



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In addition, for the following members of the Executive Board SAP paid pension contributions to third parties in 2008.

	<b>In Fiscal Year 2008 (000)</b>
Bill McDermott	474.5
Jim Hagemann Snabe	92.1

SAP made no retirement pension plan contributions in respect of Executive Board member John Schwarz in 2008.

The following table shows the change in total projected benefit obligation (PBO) and in the total accruals for pension obligations to Executive Board members:

	<b>Prof. Dr. Henning Kagermann</b> (Co-CEO)	<b>Léo Apotheker</b> (Co-CEO)	<b>Shai Agassi</b>	<b>Dr. Werner Brandt</b>	<b>Erwin Gunst<sup>(1)</sup></b>	<b>Prof. Dr. Claus E. Heinrich</b> (000)	<b>Bill McDermott</b>	<b>Gerhard Oswald</b>	<b>Dr. Peter Zencke</b>	<b>Total</b>
PBO										
January 1, 2007	5,334.7	445.4	356.8	593.3		3,015.3		3,284.3	3,875.9	16,905.7
Less plan assets market value										
January 1, 2007	4,582.5	603.4	246.4	408.2		1,763.4		2,015.1	2,947.0	12,566.0
<b>Accrued</b>										
January 1, 2007	752.2	(158.0)	110.4	185.1		1,251.9		1,269.2	928.9	4,339.7
PBO change in 2007	530.5	(22.9)	(320.9)	20.4		(284.4)		(269.5)	(228.4)	(575.2)
Less plan assets										
Change in 2007	645.5	27.0	(199.0)	102.5		265.3		301.3	407.9	1,550.5
PBO										
December 31, 2007	5,865.2	422.5	35.9	613.7	280.3	2,730.9	588.4	3,014.8	3,647.5	17,199.2
Less plan assets market value										
December 31, 2007	5,228.0	630.4	47.4	510.7	272.9	2,028.7	45.0	2,316.4	3,354.9	14,434.4
	637.2	(207.9)	(11.5)	103.0	7.4	702.2	543.4	698.4	292.6	2,764.8

<b>Accrued</b>										
<b>December 31,</b>										
<b>2007</b>										
BO change in										
2008	(277.2)	17.3	88.1	108.9	81.0	366.6	84.3	(36.8)	432.2	
an assets										
change in 2008	277.2	28.4	113.3	(224.8)	282.6	(11.7)	320.2	431.8	1,217.0	
<b>BO</b>										
December 31,										
2008	5,588.0	439.8	701.8	389.2	2,811.9	955.0	3,099.1	3,610.7	17,595.5	
ess plan										
assets market										
value										
December 31,										
2008	5,505.2	658.8	624.0	48.1	2,311.3	33.3	2,636.6	3,786.7	15,604.0	
<b>Accrued</b>										
<b>December 31,</b>										
<b>2008</b>	82.8	(219.0)	77.8	341.1	500.6	921.7	462.5	(176.0)	1,991.5	