# What's interesting about SAP is that its profitability is not as high as you would think

**Andrew Stotz,** PhD, CFA

My name is Andrew Stotz, let's get into this case study!

# COMPANY BACKGROUND



ACADEMY

**Andrew Stotz,** PhD, CFA

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# Have you seen "SAP" somewhere?

★ Job qualification as SAP experience

★ SAP skill is shown on LinkedIn

★ Training programs

★ SAP job roles in areas such as Accounting, HR, Business Analysis

**Andrew Stotz,** PhD, CFA

# What is SAP?

★ A German firm that produces and sells software to manage companies

- **The core offering is Enterprise Resource Planning (ERP) software**

★ SAP stands for Systems Applications and Products in data processing

Source: SAP.com

**Andrew Stotz,** PhD, CFA

# SAP facts

★ 24,000+ global partners

★ Worldwide locations across 130 countries

★ 99 of the 100 largest companies in the world are SAP customers

★ Only German software company in the Dow Jones Sustainability Index

★ >280m subscribers in its cloud userbase

**Andrew Stotz,** PhD, CFA

Sources: SAP.com
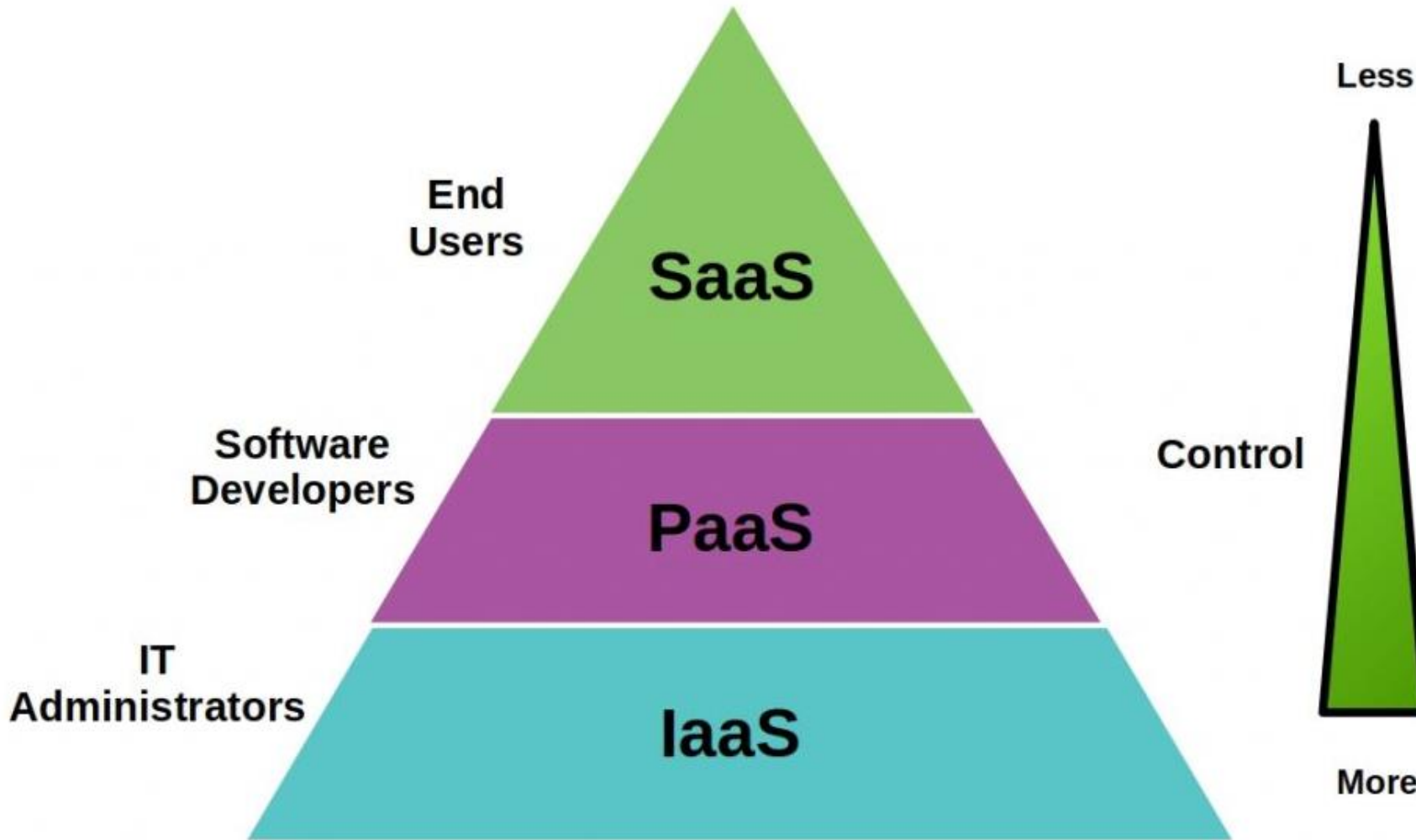
# What is ERP

★ Software helps companies run their business easier by a centralized platform for real-time data and information

★ Enhance efficiency, streamline operations, and improve communication across different departments within an organization
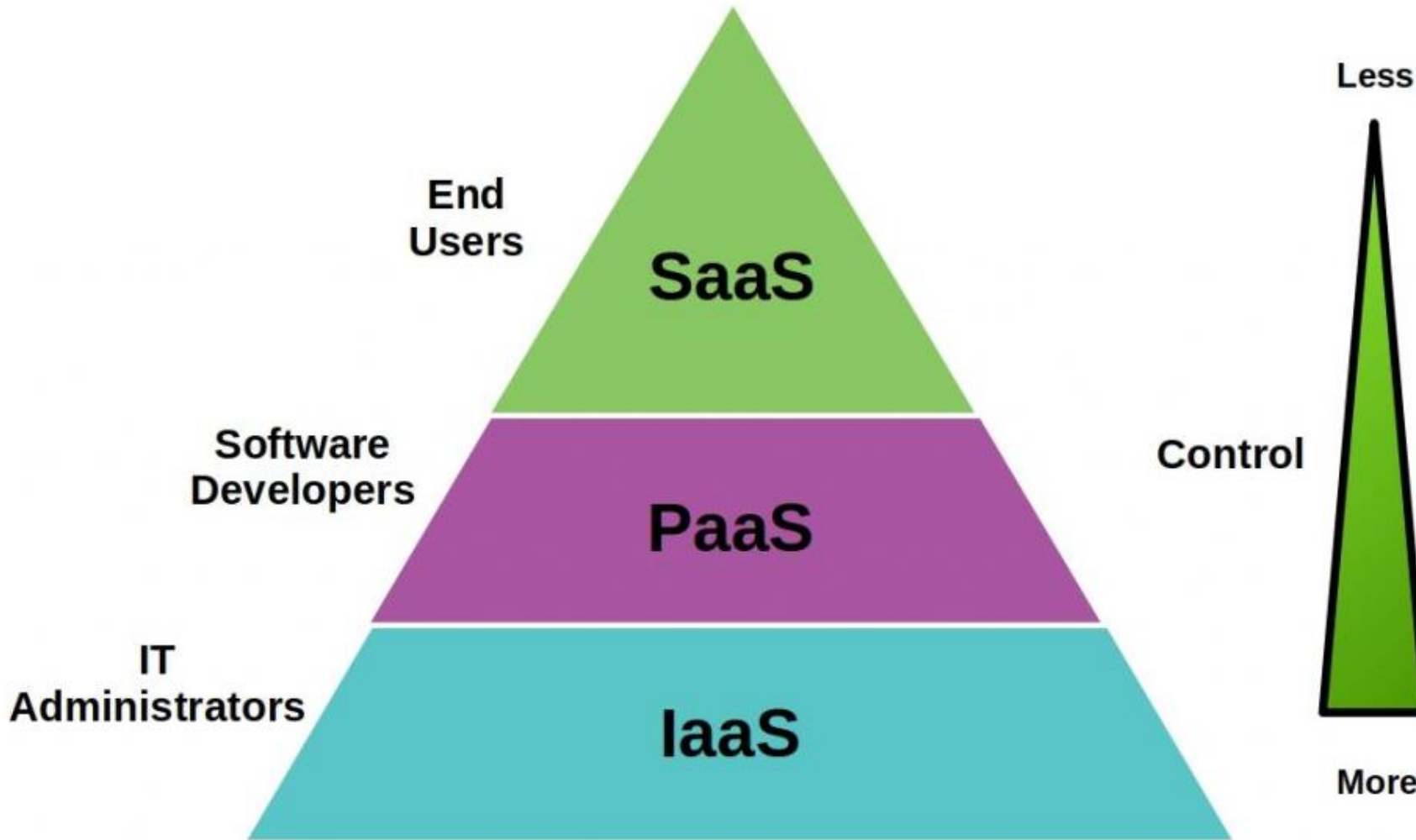
**Andrew Stotz,** PhD, CFA

# SAP Cloud Offerings Overview



End Users — SaaS

Software Developers — PaaS

IT Administrators — IaaS

Control: Less → More

**Andrew Stotz,** PhD, CFA

🌐 Infrastructure as a Service (IaaS): Firms can use IaaS from providers like AWS (Amazon) or Azure (Microsoft) to host SAP applications, databases, and related infrastructure

🌐 E.g. SAP HANA Enterprise Cloud

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# SAP Cloud Offerings Overview



End Users — SaaS

Software Developers — PaaS
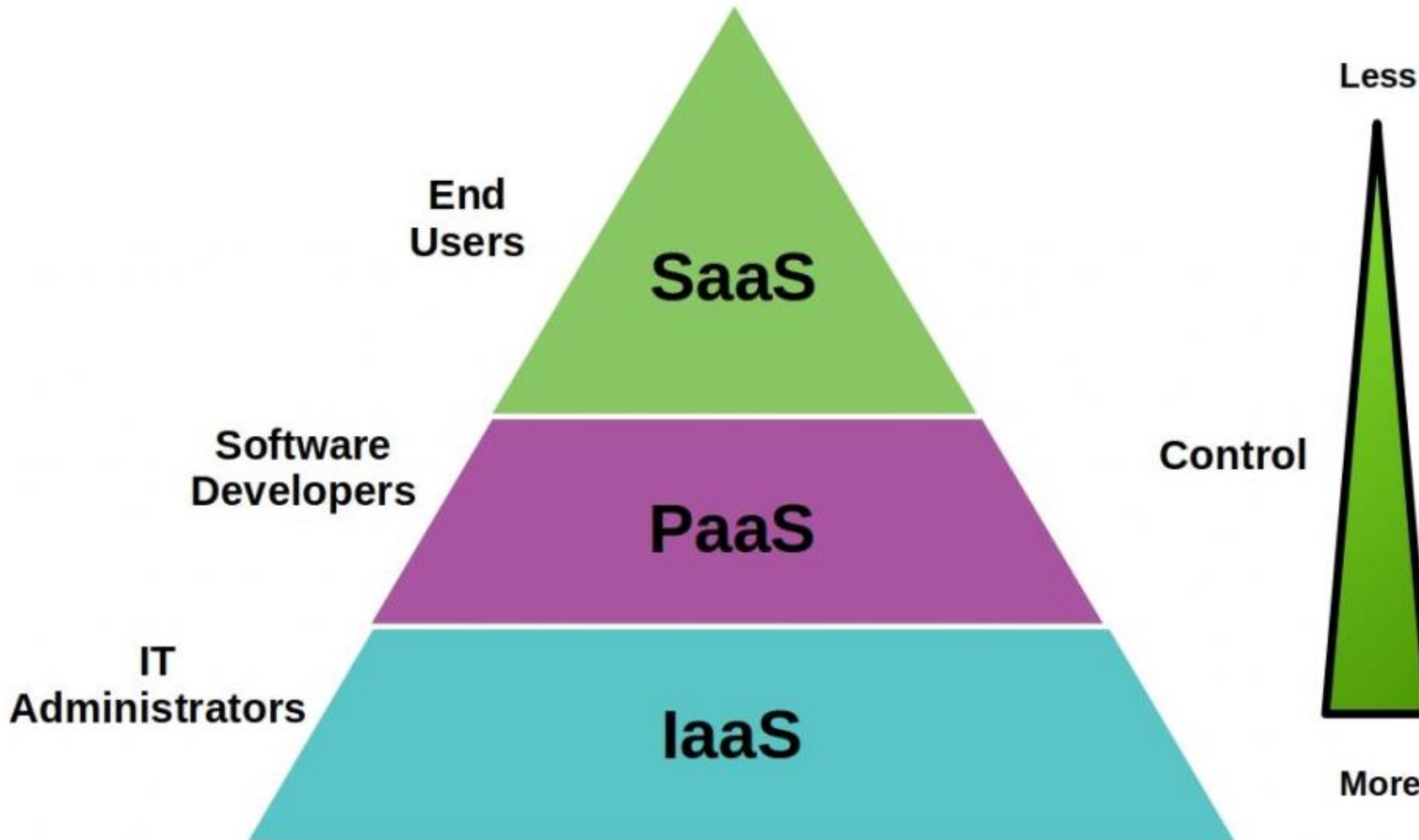
IT Administrators — IaaS

Control: Less / More

## Andrew Stotz, PhD, CFA

🌐 Platform as a Service (PaaS): Enables users to build, deploy, and manage applications in the cloud, such as database services, analytics services, machine learning

🌐 E.g. SAP Signavio

# SAP Cloud Offerings Overview



**Andrew Stotz,** PhD, CFA

- Software as a Service (SaaS): Fully managed in-memory cloud database
- Integrating enterprise data for faster decisions based on live data
- Ex. SAP HANA Cloud

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# Revenue breakdown by revenue type



**Cloud 41%**



**Software Support 39%**



**Software license 7%**



**Services 14%**



**Andrew Stotz,** PhD, CFA

Cloud revenue was the main growth driver in 2022, up by 33%

Sources: SAP Integrated Report 2022, accelerationeconomy, academyeurope, kms-solutions.asia, webmaster 10

# Cloud revenue breakdown



**SaaS**

Software as a service

**80%**



**PaaS**

Platform as a service

**13%**



**IaaS**

Infrastructure as a service

**7%**

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Sources: A. Stotz Academy, sap.com, datatronic.hu/paas-2/, outsystems.com
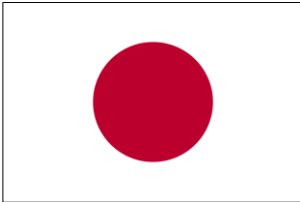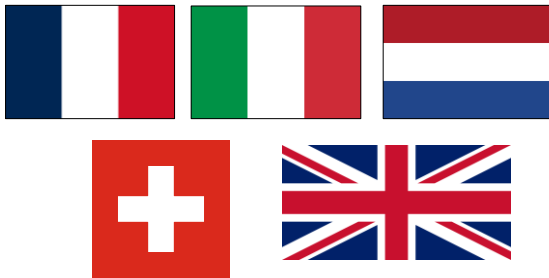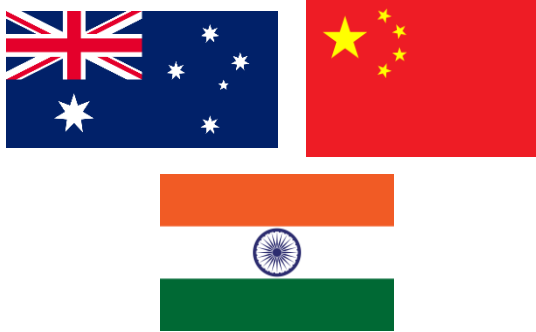
# Revenue breakdown by regions

| Americas 43% | EMEA 42% | APJ 7% |
|---|---|---|
| The top revenue-generating country | | |
|  |  |  |
| **United States 81%** of Americas | **Germany 34%** of EMEA | **Japan 28%** of APJ |
| Other important markets | | |
|  |  |  |
| **Brazil, Canada, Mexico** | **France, Italy, Netherlands, Switzerland, and UK** | **Australia, China, India** |

Sources: A. Stotz Academy, SAP Integrated Report 2022, en.wikipedia.org

Andrew Stotz, PhD, CFA

# Some large companies that use SAP

Andrew Stotz, PhD, CFA

# COMPETITIVE STRATEGY



**Andrew Stotz,** PhD, CFA

# SAP - Germany - Founded 1972

## Info. Tech. sector, 106,495 employees, €30bn revenue

## Main segments/products

- SAP S/4HANA
- SAP Business Technology Platform
- SAP Signavio

## Its competitive advantage

*Competitive advantage through integration and standardization of business processes, global presence, integrated solutions, diverse industry experience, and strong brand reputation.*

## How it achieved its competitive advantage

*By providing integrated enterprise resource planning solutions that standardize and streamline business operations, and a platform-as-a-service offering that supports custom development*

**Andrew Stotz,** PhD, CFA

Sources: SAP.com

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# Evolution from a small start-up to a global giant, with Key Milestones

★ Founded in 1972 by five ex-IBM employees, aimed to develop a standard software for real-time business processing

★ The first financial accounting system launched in 1973, named SAP R/1

- **Enabling real-time data access**

★ Release of R/3 in 1992

- **A significant shift contributed to SAP's widespread adoption by large enterprises**

**Andrew Stotz,** PhD, CFA

Sources: sap.com, sapfuturetrends.com

# Evolution from a small start-up to a global giant, with Key Milestones

★ Introduce mySAP.com in 2000

- **Enhanced integration with web-based access to SAP applications**

★ Acquisition of Business Objects in 2007

- **Expanded SAP's product portfolio to include business intelligence and analytics**

★ Transition to cloud computing

- **Offered cloud-based solutions, reducing costs and improving scalability**

**Andrew Stotz,** PhD, CFA

Sources: sap.com, sapfuturetrends.com

# SAP global success

★ No. 1 supply chain management software vendor in 2021 by Gartner

★ No. 2 in enterprise application software 2021

★ No. 2 global ERP market share in 2022

★ Key player in the global cloud ERP market

**Andrew Stotz,** PhD, CFA

Sources: A. Stotz Academy, sap.com, softwareconnect.com, Financesonline.com

# Global trends related to SAP's opportunity

★ Global ERP software market size expected to reach $123bn by 2030 from $51bn in 2021

★ Cloud ERP market size to be valued at $130bn by 2028 from current $72bn

- **Americas is the largest contributor in the market share and generator SAP's revenue**

★ Global SaaS market value projected to grow at 19% CAGR over 2023-2030

- **SaaS revenue was 80% of SAP's cloud revenue in 2022**

**Andrew Stotz,** PhD, CFA

Sources: A. Stotz Academy, softwareconnect.com, fortunebusinessinsights.com, marketsandmarkets.com

# What's interesting about SAP is that its profitability is not as high as you would think

Andrew Stotz, PhD, CFA

# What's interesting about SAP is that its profitability is not as high as you would think

Return on equity (%)



Legend: SAPG.DE (blue), Developed: Info Tech (orange)

X-axis: 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023E, 2024E, 2025E

Andrew Stotz, PhD, CFA

# LATEST NEWS

Andrew Stotz, PhD, CFA
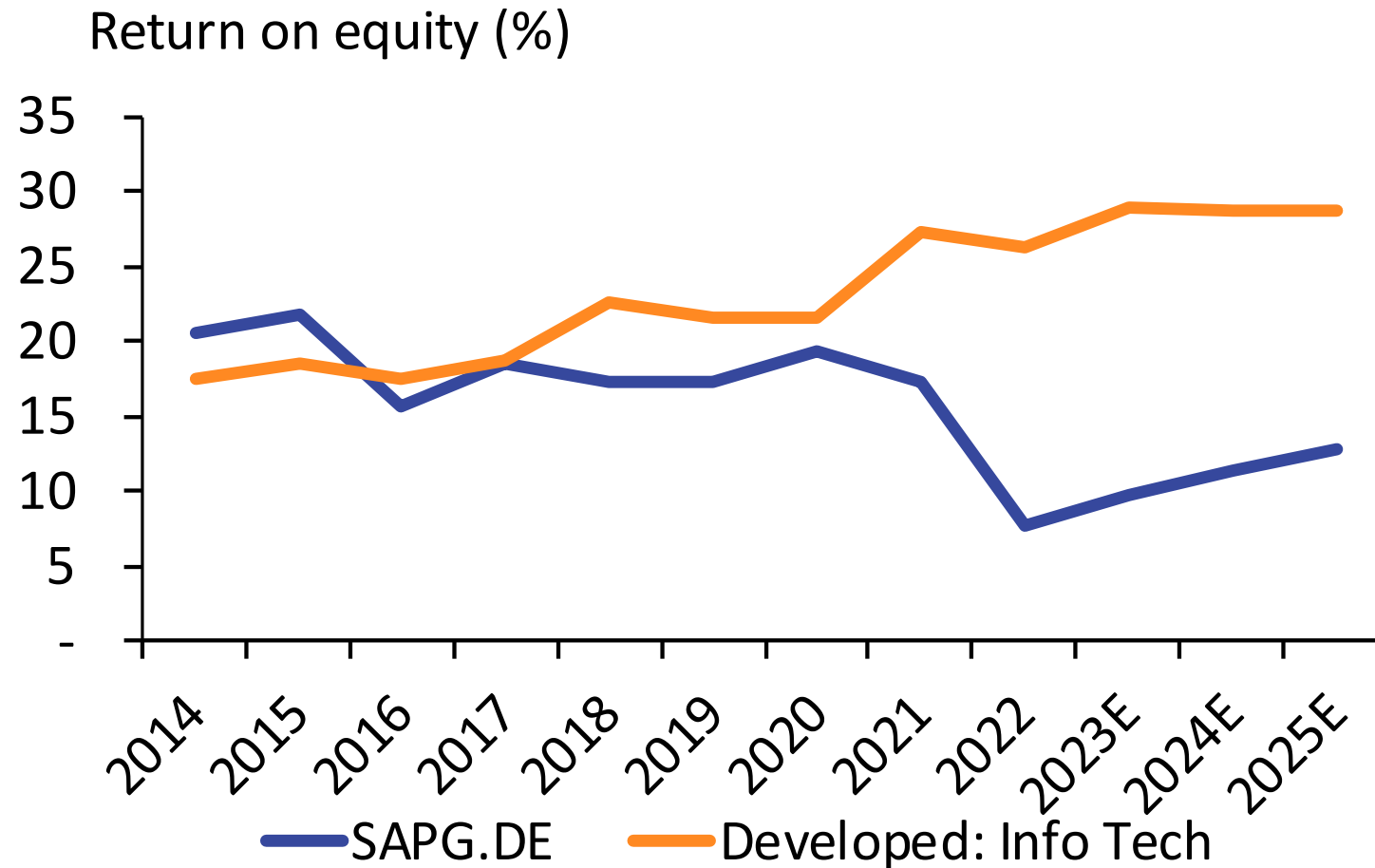
# Quarterly results

| (€ m) | 3Q22 | 4Q22 | 1Q23 | 2Q23 | 3Q23 | YoY (%) | 9M23 | 23E | % of 23E |
|---|---|---|---|---|---|---|---|---|---|
| Revenue | 7,476 | 8,436 | 7,441 | 7,554 | 7,744 | 3.6 | 22,739 | 33,958 | 67.0 |
| Cost of sales | (2,015) | (2,313) | (2,135) | (2,123) | (2,094) | 3.9 | (6,352) | (9,508) | 66.8 |
| **Gross profit** | **5,461** | **6,123** | **5,306** | **5,431** | **5,650** | **3.5** | **16,387** | **24,450** | **67.0** |
| SG&A | (3,821) | (4,378) | (3,975) | (3,986) | (3,881) | 1.6 | (11,842) | (18,337) | 64.6 |
| Other (exp)/inc | 11 | 163 | (10) | (1) | (1) | nm | (12) | (7) | 181.8 |
| **EBIT** | **1,651** | **1,908** | **1,321** | **1,444** | **1,768** | **7.1** | **4,533** | **6,106** | **74.2** |
| Finance cost | - | - | - | - | - | na | - | (189) | - |
| Other inc/(exp) | (387) | (948) | (126) | (264) | 37 | nm | (353) | 715 | (49.4) |
| **Earnings before taxes** | **1,264** | **960** | **1,195** | **1,180** | **1,805** | **42.8** | **4,180** | **6,632** | **63.0** |
| Income tax | (332) | (431) | (274) | (369) | (489) | 47.3 | (1,132) | (2,564) | 44.2 |
| **Earnings after taxes** | **932** | **529** | **921** | **811** | **1,316** | **41.2** | **3,048** | **4,068** | **74.9** |
| Equity income | - | - | - | - | - | nm | - | - | na |
| Minority interest | 123 | 214 | (31) | 180 | 6 | nm | 155 | (65) | (237.5) |
| **Earnings from cont. operations** | **1,055** | **743** | **890** | **991** | **1,322** | **25.3** | **3,203** | **4,003** | **80.0** |
| Forex gain/(loss) & unusual items | (386) | (203) | (412) | 2,079 | (44) | nm | 1,623 | (806) | (201.4) |
| **Net profit** | **669** | **540** | **478** | **3,070** | **1,278** | **91.0** | **4,826** | **3,197** | **150.9** |
| Recurring profit | 909 | 663 | 747 | 1,226 | 1,310 | 44.1 | 3,283 | 3,649 | 90.0 |
| EBITDA | 2,057 | 2,379 | 1,686 | 1,793 | 2,096 | 1.9 | 5,575 | 8,250 | 67.6 |
| Recurring EPS (€) | 0.775 | 0.569 | 0.635 | 1.044 | 1.110 | 43.2 | 2.788 | 3.134 | 89.0 |
| Reported EPS (€) | 0.573 | 0.465 | 0.410 | 2.626 | 1.094 | 91.0 | 4.130 | 2.747 | 150.3 |
| **Profits (%)** | **3Q22** | **4Q22** | **1Q23** | **2Q23** | **3Q23** | **Diff (%)** | **9M23** | **23E** | **Diff (%)** |
| Gross margin | 73.0 | 72.6 | 71.3 | 71.9 | 73.0 | (0.1) | 72.1 | 72.0 | (0.1) |
| Operating margin | 22.1 | 22.6 | 17.8 | 19.1 | 22.8 | 0.7 | 19.9 | 18.0 | (2.0) |
| Net margin | 8.9 | 6.4 | 6.4 | 40.6 | 16.5 | 7.6 | 21.2 | 9.4 | (11.8) |

**This is not a recommendation or investment advice.**

## Andrew Stotz, PhD, CFA

- SAPG reported 3Q23 recurring EPS of €1.11, which was +43.2% YoY and +6.3% QoQ
- The 9M23 result was 86.3% of our full-year forecast

# SAP is weaving the Gen AI thread into their solutions

Akhil George / TNN / Updated: Nov 24, 2023, 08:06 IST

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**New For You**


Qatar court accepts India's appeal against death penalty to ex-Navy men

SAP is incorporating Gen AI into their software portfolio, including their core ERP and extensions like SuccessFactors, Ariba solutions, supply chain solutions, and customer experience solutions. They aim to make every developer a Gen AI developer through initiatives like SAP Build Code, which integrates Gen AI and includes the Gen AI assistant Joule. SAP Labs India plays a crucial role in AI research and development, with the largest talent pool contributing to core R&D and sustainability efforts. The majority of SAP's India associates will be working on Gen AI, and they undergo detailed AI training programs.

Read Less

**A. Stotz ACADEMY**

**Andrew Stotz,** PhD, CFA

Sources: timesofindia.indiatimes.com

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# COMPETITIVE ADVANTAGE



**Andrew Stotz,** PhD, CFA

Here's the method I use as an **investor** and **business owner** to measure whether a company has a **competitive advantage**

Andrew Stotz, PhD, CFA

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# The **World Class** **Benchmarking** score card we developed 10 years ago

Andrew Stotz, PhD, CFA

# Here's how I construct the scorecard for any company

★ We gather the yearly and quarterly financial data of 26,000 companies worldwide

★ We then calculate each company's **Profitable Growth** score

  • **Which is a composite measure of both profitability and growth**

**Andrew Stotz,** PhD, CFA

# Here's how we construct the scorecard for any company

★ After that, we rank the subject company relative to sector peers of similar size

- **Decile ranking is from 1 (best) to 10 (worst)**
- **A score of 1 or 2 is financially world class**

★ We assess the company's performance over the prior four years and the past 12 months (PTM)

**Andrew Stotz,** PhD, CFA

**Is the company financially world class?**

# Is your company financially world class?

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# Just message me, and I'll score your company

**Andrew Stotz,** PhD, CFA

# VALUATION

**Andrew Stotz,** PhD, CFA

# Free cash flow

| (YE Dec, € m) | 2020A | 2021A | 2022A | 2023E | 2024E | 2025E | 2026E | 2027E |
|---|---|---|---|---|---|---|---|---|
| EBIT | 7,264 | 5,358 | 5,423 | 6,112 | 7,033 | 7,995 | 8,555 | 9,068 |
| *Est tax rate (%)* | *27* | *21* | *45* | *25* | *26* | *27* | *27* | *27* |
| **NOPAT** | **5,314** | **4,207** | **2,998** | **4,584** | **5,204** | **5,836** | **6,245** | **6,620** |
| Add: Depre & amort | 1,831 | 1,775 | 1,896 | 218 | 234 | 251 | 269 | 288 |
| **Cash NOPAT** | **7,145** | **5,982** | **4,894** | **4,802** | **5,438** | **6,087** | **6,514** | **6,908** |
| Chg in A/R | 1,315 | 241 | 116 | (367) | (594) | (576) | (544) | (499) |
| Chg in inventory | - | - | - | - | - | - | - | - |
| Chg in oth curr asst | 193 | (466) | (430) | (297) | (260) | (252) | (238) | (218) |
| Chg in A/P | (544) | 927 | 182 | 431 | 666 | 645 | 609 | 559 |
| Chg in oth curr liabs | (19) | 63 | 969 | 296 | 211 | 533 | 504 | 462 |
| **Less: Chg in work cap** | **945** | **765** | **837** | **63** | **22** | **350** | **331** | **304** |
| Less: CAPEX | (728) | (709) | (814) | (1,110) | (1,152) | (1,196) | (1,243) | (1,291) |
| Less: Chg in invest cap | | | | | | | | |
| **Free cash flow to firm** | **7,362** | **6,038** | **4,917** | **3,756** | **4,308** | **5,241** | **5,602** | **5,920** |
| *FCF per share (€)* | *6.2* | *5.1* | *4.2* | *3.2* | *3.7* | *4.5* | *4.9* | *5.1* |
| *NOPAT growth (%)* | *16.1* | *(20.8)* | *(28.7)* | *52.9* | *13.5* | *12.1* | *7.0* | *6.0* |
| *FCF growth (%)* | *36.4* | *(18.0)* | *(18.6)* | *(23.6)* | *14.7* | *21.7* | *6.9* | *5.7* |

**Andrew Stotz,** PhD, CFA

# Discounted cash flow analysis

| Calculation of cost of equity (COE, %) | Estimate |
|---|---|
| **Market: Germany** | |
| Market risk-free rate | 2.0 |
| Market equity risk premium | 7.0 |
| **Market return** | **9.0** |
| Company beta (x) | 1.0 |
| **COE** | **9.0** |

| Calculation of WACC | Average |
|---|---|
| Cost of debt | 2.2 |
| Average tax rate | 26.8 |
| **After tax cost of debt** | **1.6** |
| **Cost of preferred stock** | **-** |
| Debt as a % of total capital | 12.1 |
| Preferred stock as a % of total capital | - |
| Equity market value as a % of total capital | 87.9 |
| **Weighted average cost of capital** | **8.1** |

| SAPG: Valuation (€ m) | DDM | % | FCFF | % | FCFE | % |
|---|---|---|---|---|---|---|
| PV of cash flow in years 2023-27 | 10,102 | 18 | 19,208 | 20 | 16,677 | 17 |
| PV of fade period | 18,512 | 33 | 31,209 | 32 | 28,894 | 29 |
| PV of terminal value | 28,042 | 49 | 51,727 | 54 | 45,543 | 45 |
| **Present value of future cash flows** | **56,656** | **100** | **102,145** | **106** | **91,113** | **90** |
| Add: Cash & ST investments | na* | - | 9,697 | 10 | 9,697 | 10 |
| Add: Long-term investments | na | - | 151 | 0 | 151 | 0 |
| **Corporate value** | **56,656** | **100** | **111,993** | **116** | **100,961** | **100** |
| Less: Total debt, preferred stock & minorities | na | - | (15,747) | (16) | na | - |
| **Shareholder value** | **56,656** | **100** | **96,246** | **100** | **100,961** | **100** |
| Number of shares (m) | 1,164 | | 1,164 | | 1,164 | |
| **Equity value per share (€)** | **49** | | **83** | | **87** | |

Chart legend: Equity value per share (€); Current stock price (€)

Chart values: DDM 49, FCFF 83, FCFE 87, Current stock price 136

**This is not a recommendation or investment advice.**
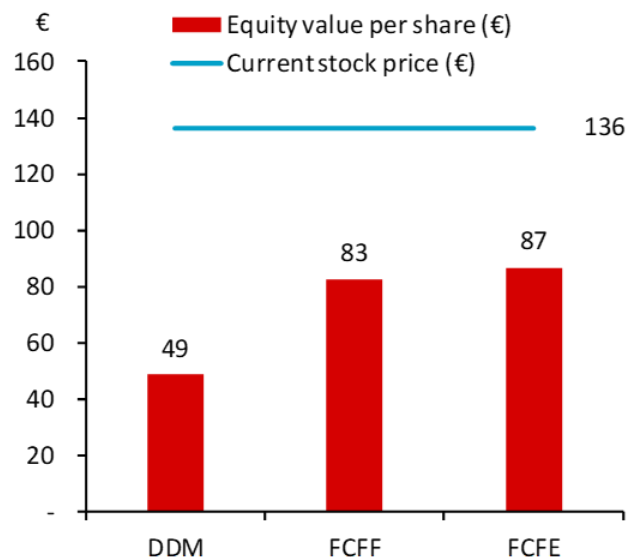
# Multiple valuation

| PE ratio (x) | 2021A | 2022A | 2023E | 2024E |
|---|---|---|---|---|
| SAPG | 20.0 | 45.6 | 42.2 | 35.7 |
| Germany | 16.3 | 26.0 | 20.3 | 18.4 |
| Asia ex Japan | 13.0 | 13.6 | 25.1 | 15.6 |
| World | 20.8 | 26.7 | 28.6 | 24.0 |

| EPS growth (%) | 2021A | 2022A | 2023E | 2024E |
|---|---|---|---|---|
| SAPG | 2.6 | (52.5) | 38.2 | 18.4 |
| Germany | 32.5 | (19.9) | 28.3 | 9.9 |
| Asia ex Japan | 39.0 | 7.9 | (45.9) | 61.0 |
| World | 38.7 | 6.0 | (6.7) | 19.1 |

| PB ratio (x) | 2021A | 2022A | 2023E | 2024E |
|---|---|---|---|---|
| SAPG | 3.0 | 3.1 | 3.9 | 3.8 |
| Germany | 3.1 | 3.5 | 3.2 | 3.0 |
| Asia ex Japan | 2.1 | 2.2 | 2.2 | 2.0 |
| World | 5.5 | 7.1 | 6.5 | 5.8 |

| ROE (%) | 2021A | 2022A | 2023E | 2024E |
|---|---|---|---|---|
| SAPG | 15.3 | 5.8 | 7.8 | 9.3 |
| Germany | 19.2 | 13.6 | 15.8 | 16.0 |
| Asia ex Japan | 16.1 | 16.2 | 8.8 | 13.1 |
| World | 26.5 | 26.8 | 23.0 | 24.3 |

**Andrew Stotz,** PhD, CFA

# What is your company worth?

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# Message me, and let's discuss the value of your company

**Andrew Stotz,** PhD, CFA