Managing & Evolving A Large Software Workforce
A SAP Case Study

Dr. VISHAL SIKKA
MEMBER OF THE EXECUTIVE BOARD | SAP AG

October 26, 2012
SAP - A Global Leader in Providing Software Solutions to Businesses

World’s 4th Largest in Software
#2 in Germany (Mkt Cap ahead of Siemens, BMW, D-Telekom)

200,000 Customers in 120 Countries
21% Large Enterprises, 79% SMEs

SAP Share of Forbes 2000 Companies by Sector
85% Consumer Products & Life Science 88% Discrete Manufacturing
77% Energy & Nature Resources 73% Financial Services
78% Process Manufacturing 73% Public Services
73% Financial Services 78% Services

14.2B EUR Revenue, 11.3 B EUR SSRS Revenue in 2011
84.7B USD Mkt Cap
60,900 Employees, €262K Revenue/FTE
SAP is more than an application company today

Since 1972

2008

2010

2012

Applications

Analytics

Mobile

Database & Hana

Cloud
SAP’s growth in revenue and margin

SAP Revenue and Operating Margin
2002-06 US GAAP, 2007-12 non-IFRS in M€ and %

<table>
<thead>
<tr>
<th>Year</th>
<th>SAP Revenue (B€)</th>
<th>CAGR of Revenue</th>
<th>SAP Operating Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>7.4</td>
<td>23%</td>
<td>10.2</td>
</tr>
<tr>
<td>2003</td>
<td>7.0</td>
<td>27%</td>
<td>27%</td>
</tr>
<tr>
<td>2004</td>
<td>7.5</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>2005</td>
<td>8.5</td>
<td>28%</td>
<td>27%</td>
</tr>
<tr>
<td>2006</td>
<td>9.4</td>
<td>29%</td>
<td>28%</td>
</tr>
<tr>
<td>2007</td>
<td>10.2</td>
<td>+5%</td>
<td>11.7</td>
</tr>
<tr>
<td>2008</td>
<td>11.7</td>
<td>+12%</td>
<td>10.7</td>
</tr>
<tr>
<td>2009</td>
<td>10.7</td>
<td></td>
<td>12.5</td>
</tr>
<tr>
<td>2010</td>
<td>12.5</td>
<td></td>
<td>32%</td>
</tr>
<tr>
<td>2011</td>
<td>14.3</td>
<td></td>
<td>33%</td>
</tr>
<tr>
<td>2012</td>
<td>15.2</td>
<td></td>
<td>32%</td>
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</tbody>
</table>

1) Rolling four quarters from Q3 2011 – Q2 2012  Source: Company annual and quarterly reports
Evolution of Revenue Growth

Growth contributors by:
- HANA
- HANA-based applications
- Mobile

Growth driven by:
- HANA
- Mobile
- Cloud
- New Applications

1) Rolling four quarters from Q3 2011 – Q2 2012   Source: Company annual and quarterly reports  2) High-level guidance
Evolution of revenue, margin and share price

1) 2002-06 US GAAP, 2007-12 non-IFRS in M€ and %
2) Based on guidance for 2012
3) Price as of October 23rd, 2012

Disproportionate Growth
(End Q2 2012 in M€, %)

- Cloud: 110,934.4%
- HANA: 230,770.2%
- Mobile: 160,128.4%
- Apps: 2,200,18.0%
- Other DB: 330,5-10%
- Tech.: 500,5-10%
- Analytics: 670,5-10%

Notes:
1) Rolling four quarters (R4Q) from Q3 2011 – Q2 2012
2) Without Sybase365 messaging
3) R4Q vs. 12 months before
Source: SAP
People distribution by key categories

Headcount Allocation (in %)

Revenue and People Growth Rates (since 2009 – in %)

Cloud

Database

Tech. & Middleware

Mobile

Analytics

Applications

1) 2012 Forecast  2) including HANA  Source: SAP
TIP (Technology, Innovation, and Platforms) Overview

Applications
TIP responsible for technology for all applications across SAP and new applications

Analytics
TIP owns full product responsibility

Mobile
TIP owns full product responsibility

Database & Tech.
TIP owns full product responsibility

Cloud
TIP owns technology for all cloud apps across SAP
TIP owns Cloud Platform

SAP HANA – TIP’s full responsibility

TIP also has the responsibilities across SAP:
- Technology and Architecture for all SAP Products
- Innovation
- Design and User Experience
- Research & Incubation
- SAP Ventures

In 2012, TIP products are forecasted €2.2B software revenue that is ~50% of total SAP total software revenue
TIP Overview

Total 8,000 employees

- Database: 1588, 19%
- Mobile: 1349, 17%
- Analytics: 817, 10%
- Tech & Middleware: 1960, 24%

Distribution by Region:

- Americans: 2202, 27%
- EMEA: 3840, 48%
- APJ: 1964, 25%

Challenges

- Ensure the right level of investment across the portfolio/ put the money where the growth is and shift priorities without increasing the overall costs
- Ongoing renewal of skills,
- Shift of resources/ teams from old technology (ABAP) to new technology Hana - people have to accept the change and start from scratch again
- Location strategy, we need to grow engineering expertise in emerging countries in the new technology world. Be close to the customers
- Manage an acquired portfolio across 5 market segments: Mobile, Database/Hana, Technology/Middleware, Analytics and Applications, Cloud
- Educating the sales force and services to deliver the innovation to customers and at the same time determine new, low-cost, routes to market
To enable this growth, the TIP Board area also massively shifts resources from low- to high-growth areas each year.

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<tbody>
<tr>
<td>Acquisitions</td>
<td>2948</td>
</tr>
<tr>
<td>Cross-BA transfers</td>
<td>1028</td>
</tr>
<tr>
<td>Lift (freed up)</td>
<td>-1965</td>
</tr>
<tr>
<td>Shift within TIP</td>
<td>1692</td>
</tr>
<tr>
<td>Organic Growth</td>
<td>212</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3914</strong></td>
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</tbody>
</table>

**Technology & Innovation Platform Board Area**

**Staff in FTE**

- 17% of resources freed up for new topics
- 12% of resources freed up for new topics

**ACT 2009**

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<tr>
<th>Bobbi</th>
<th>EPM</th>
<th>BObj Bi</th>
<th>Organic</th>
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<tbody>
<tr>
<td>4,175</td>
<td>414</td>
<td>565</td>
<td>979</td>
</tr>
</tbody>
</table>

**ACT M&A 2009 Transfers**

-460  
-140

**ACT M&A 2010 Transfers**

5,474  
540  
-935

**ACT M&A 2011 Transfers**

5,686  
-98

**ACT M&A 2012**

7,640  
-685  
450

**Organic**

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HANA – BIG and SMALL

BIG - 100TB DRAM for 1 PB DATA

100 Nodes, 100 TB in DRAM  |  10 Years of SD Data
1.2T Rows (330 Million transactions / day)

Ad-hoc Simple Queries (e.g. Month Report) Return in 430ms – 647ms, Drill-down in 142ms
Complex Queries (e.g. YoY report) Return in 1.2s – 3.1s

SMALL - HANA ONE at AWS

60G Memory Amazon Instance
30G Memory for HANA
0.99 cents/hour
Less than 10 minutes to get it up running
Community Support
AppHaus – rethinking our workspace
Outlook

Our Three Imperatives

**Empowering end-users** with a singular focus on design and UX

**Renewing our products** and customer landscapes non-disruptively

**Building a next-generation real-time platform** for developers

Economics is at the heart of building products that are Desirable, Feasible, & Viable
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