First time BencHEIT

Experiences from the first round of benchmarking

Oliver De Boni
Table of Contents

– Introduction of UZH and Zentrale Informatik
– From Zero to BencHEIT
– Results and Specific Findings
– Lessons Learned and Next Steps
Introduction of UZH and Zentrale Informatik
Introduction

- Founded in the year 1833
- Europe's first university to be established by a democratic political system
- The University of Zurich (UZH) is Switzerland's largest university with the widest range of study courses
- Member of the "League of European Research Universities" (LERU)
- Twelve Nobel Prizes
- Placed among the top 100 institutions of higher learning in the most important rankings
Facts and Figures

- 25'358 students
- 6'323 employees (FTE) and around 8000 headcounts
- Income 1'377 Mio CHF, Expenses 1'375 Mio CHF
Facts and Figures

- 25’358 students
- 6’323 employees (FTE) and around 8000 headcount
- Income 1’377 Mio CHF, Expenses 1’375 Mio CHF
From Zero to BencHEIT
Data Gathering Process

- Data gathering by SIM, specific data requested from the department heads and consolidated by SIM
- Data doubled checked by the CIO (his strong involvement was key for success)
- Sources of data, estimations and calculations documented
- Started by March, finished by end of May
Sources

- Annual Report 2015
- Report of Academic Services 2015
- Administration Tools for Network Components, Servers etc.
- IT-Inventories
- Directory Services like Active Directory, LDAP Directory, Identity Management
- IT Service Management Software
Challenges

– No experience with benchmarking before
– Numbers often not available (maturity of the organization)
  ➢ We had to figure out how to get the answers
  ➢ Or we had to estimate
– Not always a clear understanding what numbers have been requested (e.g. Students FTE)
– Priority for Department Heads
– Publication date of the annual report
– Usability of the Sharepoint Plattform (but we had great support from the BencHEIT team)
Results and Specific Findings
General Conditions

- High labour costs in Switzerland
- +180 locations
- Unknown number of IT staff within the faculties and institutes
- Often unknown what services other IT departments offer
Labour Costs

- Switzerland has more than the doubled labour costs than EU-28
- Labour costs are only comparable to Norway
- What about differences between sectors / industries?
Staff Costs

- Highest staff costs overall, even compared to Norway
- IT share of institution budget under average
- Very little outsourcing
Centralized vs Decentralized

- Centralized IT personnel under average
- No other central units
Service Costs

- Lower costs for Workstations, client and peripherals > not many managed clients at UZH
- Higher costs for networks, due to more than 180 locations?
- Business applications higher than norwegian institutions but in % in the average

<table>
<thead>
<tr>
<th>Costs by service (1000 EURO)</th>
<th>UZH</th>
<th>UE</th>
<th>NTNU</th>
<th>UBE</th>
<th>UEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>6482 k</td>
<td>9041 k</td>
<td>11184 k</td>
<td>3555 k</td>
<td>3373 k</td>
</tr>
<tr>
<td>Workstations, client and peripherals</td>
<td>1386 k</td>
<td>9376 k</td>
<td>12512 k</td>
<td>8509 k</td>
<td>3269 k</td>
</tr>
<tr>
<td>IT Service Desk/Helpdesk (incl. Service Point)</td>
<td>2156 k</td>
<td>4872 k</td>
<td>2579 k</td>
<td>1297 k</td>
<td>2395 k</td>
</tr>
<tr>
<td>Data networks: LAN &amp; WAN</td>
<td>2853 k</td>
<td>1578 k</td>
<td>2372 k</td>
<td>1357 k</td>
<td>1807 k</td>
</tr>
<tr>
<td>Voice services</td>
<td>2252 k</td>
<td>1186 k</td>
<td>1395 k</td>
<td>1495 k</td>
<td>679 k</td>
</tr>
<tr>
<td>Business applications</td>
<td>14523 k</td>
<td>9761 k</td>
<td>7093 k</td>
<td>7585 k</td>
<td>8367 k</td>
</tr>
<tr>
<td>IT management, administration and information</td>
<td>2772 k</td>
<td>3954 k</td>
<td>5954 k</td>
<td>7585 k</td>
<td>1191 k</td>
</tr>
<tr>
<td>Audiovisual services</td>
<td>3722 k</td>
<td>2729 k</td>
<td>2440 k</td>
<td>983 k</td>
<td>7964 k</td>
</tr>
<tr>
<td>Unspecified</td>
<td>26247 k</td>
<td>2830 k</td>
<td>958 k</td>
<td>29 k</td>
<td>199 k</td>
</tr>
<tr>
<td>Total IT costs</td>
<td>80992 k</td>
<td>46165 k</td>
<td>44740 k</td>
<td>22926 k</td>
<td>22167 k</td>
</tr>
</tbody>
</table>
Service Costs

- Lower costs for Workstations, client and peripherals > not many managed clients at UZH
- Higher costs for networks, due to more than 180 locations?
- Business applications higher than norwegian institutions but in % in the average

![Graph showing costs distribution]
Storage Numbers

- More storage space than other HEI
- Per user more that factor 3 compared to UNI and UNIMulti
- Per user more then factor 2 compared to 4001- and 300M€ group

<table>
<thead>
<tr>
<th>Servers and storage</th>
<th>UZH</th>
<th>UNI</th>
<th>UNIMulti</th>
<th>4001-</th>
<th>300M€ -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average storage space (TB)</td>
<td>12048 TB</td>
<td>2787 TB</td>
<td>3024 TB</td>
<td>5933 TB</td>
<td>4473 TB</td>
</tr>
<tr>
<td>Average storage space (GB) / User</td>
<td>377.0 GB</td>
<td>114.8 GB</td>
<td>112.3 GB</td>
<td>177.1 GB</td>
<td>147.5 GB</td>
</tr>
<tr>
<td>Number of physical servers</td>
<td>463</td>
<td>290</td>
<td>203</td>
<td>595</td>
<td>316</td>
</tr>
<tr>
<td>Number of virtualised servers</td>
<td>571</td>
<td>578</td>
<td>500</td>
<td>860</td>
<td>830</td>
</tr>
<tr>
<td>Average virtualisation index</td>
<td>67%</td>
<td>74%</td>
<td>73%</td>
<td>71%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Average storage space (GB) / User
Lessons Learned and Next Steps
Lessons Learned

We will definitely participate in the next round

– Wait until the recent Annual Report is available (for numbers related to the report)
– Inform the Department Heads early enough
– Next time it will be easier, but there are still white spots, so we have to:
  ➢ Look into unspecified areas
  ➢ Elaborate one some numbers, to check if we can get more accurate data
And now?

- View from outside helps for self-perception
- Increases maturity of the organization
- Good foundation for “setting the scene” and discussions on costs and human resources
  - CIO Presentation at Staff Meeting
  - CIO Presentation to the Executive Board of the University

- Still to do is to…
  - Look deeper into the Services and specific findings
  - Check some interesting findings with other Swiss Universities
  - Decide what numbers we could use as Key Performance Indicators (KPI)
Questions and Discussion

– Are the other data sources, than the ones I mentioned, in your organisation available?
– What do you do with the BenchHEIT results?
– What kind of benefits did you have in your organisation?