Improved IT Operations Management for IT Managers and Capacity Planners

Andrew Armstrong
Chief Customer Officer
Introduction

Andrew Armstrong
Chief Customer Officer
Agenda

- About your IT data
- What keeps you up at night?
- You have the answer – your own IT data
- Understanding cost & capacity usage
- Better tools
- Using your data
- IT data transparency
- With business data
- Change the perception of IT
What Keeps CIOs Up At Night
Cost Drivers

Understanding cost drivers

- Better decisions
- Behavioral correction
- More responsible usage
- Better control on cost & required capacity
“Data is not information, information is not knowledge, knowledge is not understanding, understanding is not wisdom”

- Clifford Stoll
Capacity management, operations cost and computing resource usage are all inter-related.
But it is also critically important that you understand what you're spending your OpEx $ on...
You need better tools…

Monitoring tools…
...haven’t evolved

“Infrastructure monitoring has become commodity”

“The future brings challenges that cannot be covered by these tools.”
It’s called **IT Business Intelligence**

- Delivered by a small # of ISVs
- Some are multi-platform
Understanding Capacity in Business Terms

Understanding Capacity Data in Business Terms

= ‘Who is using what and for how much?’
Understanding Capacity in Business Terms
Mapping: Business data
- Business Area (e.g. Capital Markets)
- Business System (e.g. Netbank)
- Owner (Who pays for the resource)

Mapping: IT assets
- LPAR
- Transaction
- Batch Job
OLAP data cubes: Measures and dimensions

- Combining different data types for use in BI reporting
  - Capacity or utilization: CPU, MSU, disk, etc.
  - Time: date, time, etc.
  - Technical: LPAR, Sysplex, etc.
  - Business dimensions: organization, application, SLA, etc.
  - Geography: Europe, Asia, Americas, etc.
• Provides a unique combination of IT and business information in reports
• Provides insight on mainframe & server resources consumed by specific business units
• Multi-platform capability
• Applicable to out-sourced server environments
IT Business Analytics lets you:
• Obtain value from your raw data
• Obtain more value by adding business data to it
Obtain value from your raw IT data
IT Data Analysis

- Making the data you have now more valuable
- Same data, more visual, faster/more informed decisions
Immediate problem identification: Peak workload not optimized
## Server Data Transparency

### Immediate problem identification: Excess server resources

<table>
<thead>
<tr>
<th>Server</th>
<th>Actual Disk</th>
<th>Actual Memory</th>
<th>Actual Processors</th>
<th>Required Disk</th>
<th>Required Memory</th>
<th>Required Processors</th>
<th>Excess Disk</th>
<th>Excess Memory</th>
<th>Excess Processors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>160798</td>
<td>6522</td>
<td>1443</td>
<td>81816</td>
<td>2595</td>
<td>801</td>
<td>78982</td>
<td>3927</td>
<td>642</td>
</tr>
<tr>
<td>SMT000484</td>
<td>800</td>
<td>63</td>
<td>24</td>
<td>111</td>
<td>36</td>
<td>2</td>
<td>689</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>SMT000511</td>
<td>3167</td>
<td>64</td>
<td>24</td>
<td>768</td>
<td>6</td>
<td>2</td>
<td>2399</td>
<td>58</td>
<td>22</td>
</tr>
<tr>
<td>SMT000638</td>
<td>3167</td>
<td>64</td>
<td>24</td>
<td>772</td>
<td>49</td>
<td>3</td>
<td>2395</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>SMT000485</td>
<td>135</td>
<td>32</td>
<td>16</td>
<td>72</td>
<td>28</td>
<td>2</td>
<td>64</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>SMT000618</td>
<td>250</td>
<td>96</td>
<td>16</td>
<td>197</td>
<td>6</td>
<td>2</td>
<td>53</td>
<td>90</td>
<td>14</td>
</tr>
<tr>
<td>SMT000286</td>
<td>157</td>
<td>32</td>
<td>16</td>
<td>117</td>
<td>7</td>
<td>3</td>
<td>40</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>SMT000448</td>
<td>137</td>
<td>24</td>
<td>16</td>
<td>108</td>
<td>6</td>
<td>3</td>
<td>29</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>SMT000625</td>
<td>3792</td>
<td>96</td>
<td>16</td>
<td>1970</td>
<td>75</td>
<td>3</td>
<td>1822</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>SMT000487</td>
<td>660</td>
<td>32</td>
<td>16</td>
<td>252</td>
<td>15</td>
<td>5</td>
<td>408</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>SMT000338</td>
<td>360</td>
<td>32</td>
<td>12</td>
<td>175</td>
<td>11</td>
<td>2</td>
<td>185</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>SMT000355</td>
<td>340</td>
<td>32</td>
<td>12</td>
<td>171</td>
<td>16</td>
<td>3</td>
<td>169</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>SMT000004</td>
<td>4710</td>
<td>64</td>
<td>16</td>
<td>3167</td>
<td>55</td>
<td>8</td>
<td>1543</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>SMT000092</td>
<td>100</td>
<td>32</td>
<td>8</td>
<td>61</td>
<td>4</td>
<td>1</td>
<td>39</td>
<td>28</td>
<td>7</td>
</tr>
<tr>
<td>SMT000093</td>
<td>100</td>
<td>32</td>
<td>8</td>
<td>61</td>
<td>4</td>
<td>1</td>
<td>39</td>
<td>28</td>
<td>7</td>
</tr>
</tbody>
</table>
Obtain more value by adding business data to your IT data
Business Measures (e.g. $)
Business Dimensions (e.g. Department)
Immediate problem identification:
Department usage of computing resources is imbalanced
Immediate problem identification: Server over-provisioning resulted in >100K of wasted monthly OPEX

Server rightsizing potential by business area - cost per month

- Capital Markets
- Finance
- Internal
- Marketing and Sales
- Retail Banking
- Savings

- Actual
- Required
Analytics brings transparency

IT analytics:
- Brings SMF data to life
- Controls over-provisioning
- Business data completes the picture
• Transparency changes behavior
• Behavior change can help control computing resource capacity usage
• Change the perception of IT from a large budget consumer into a window on business efficiency

Change the perception of IT…
Thank you for your time.

Andrew Armstrong
Chief Customer Officer
+1.613.523.5500
andrew.armstrong@dkl.com