The Library Cube

library resources + student use = value

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There are many approaches to evaluating the value of libraries.

This is our story
Problem statement I:

Does a student’s academic performance improve through the use of library information resources?
Problem statement II:

How do we know which students make little or no use of library information resources?
Libraries and other units produce lots of discrete data
but....
our systems typically don’t talk to other university systems
The challenge was to build a relational database (or cube)

• books
• ereadings
• databases
• ebooks
• student grades
How?

Book loans:
> Weekly export of flat files from LMS
> Monitor weekly ‘snap shots’
Eresources:

> Authentication logs (ezyproxy)
> Monitor use in 10 minute blocks (144 ten minute periods p/day)
> When used – database name captured

Other benefits

– logs are updated weekly
### Filters/dimensions
- All Student Types
- All Course Types
- All Subjects
- All Campuses
- All Course Grades
- All Course Status
- All Course Years
- All Courses
- All Frequency Resources Used
- All Course Commencing
- All Borrower Types
- All Resources Used
- All Number of Courses
- All Grades
- All Ages
- All Citinships
- All Days of the Week
- All Months
- STUDENT_NUMBER
- STUDENT_COURSE_ID
- Measures

### Grades

<table>
<thead>
<tr>
<th>WAM</th>
<th>Domestic</th>
<th>1</th>
<th>2-4</th>
<th>5-10</th>
<th>11-20</th>
<th>20-40</th>
<th>41-80</th>
<th>81-160</th>
<th>&gt;161</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>69.88</td>
<td>68.29</td>
<td>67.09</td>
<td>68.29</td>
<td>71.18</td>
<td>73.67</td>
<td>74.51</td>
<td>73.22</td>
<td></td>
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<tr>
<td>International</td>
<td>65.28</td>
<td>61.14</td>
<td>62.98</td>
<td>65.28</td>
<td>66.43</td>
<td>67.79</td>
<td>67.50</td>
<td>68.92</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63.94</td>
<td>64.52</td>
<td>65.32</td>
<td>66.66</td>
<td>68.63</td>
<td>69.90</td>
<td>72.11</td>
<td>72.34</td>
<td>71.71</td>
</tr>
</tbody>
</table>
Is it perfect?

- Some limitations in correlations
- Arbitrary measures; business rules
- Many external factors affect grades, e.g. academic influence
<table>
<thead>
<tr>
<th>WHAT BUSINESS ACTIVITIES WILL THE CUBE SUPPORT?</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Accountability</td>
</tr>
<tr>
<td>&gt; Marketing</td>
</tr>
<tr>
<td>&gt; Continuous improvement</td>
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</tbody>
</table>
But....... 

A first at UOW Library:
> for true integration of data silos
> getting answers to our problem statements
> evaluating our communication and intervention strategies
> for a new way of demonstrating the value of the Library
QUESTIONS?