Business Intelligence (BI) in SGNIC

Mon-Loi Perez
Associate Consultant
Singapore Network Information Centre Pte. Ltd. (SGNIC)
9 February 2015
Agenda

- Background
- Benefits
- Lessons Learned
- What’s Next
SGNIC wanted a way to gain some insights from registration data

- Domain registration trends
- Registrant profile (e.g. industry, location)
Gathered users’ BI report requirements
Conducted a PoC with several BI vendors
Chose vendor with the most intuitive solution
Extracted and analyzed data from registration system to create reports and published it for end-users.
Benefits

- Monitor Domain registration trend (Registrar’s health)

Monthly Domain Registration by Registrar

<table>
<thead>
<tr>
<th>REGISTRAR</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registrar A</td>
<td>708</td>
<td>557</td>
<td>595</td>
<td>618</td>
<td>575</td>
<td>611</td>
<td>537</td>
<td>542</td>
<td>628</td>
<td>716</td>
<td>676</td>
<td>764</td>
</tr>
<tr>
<td>Registrar D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registrar E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registrar F</td>
<td>1,323</td>
<td>1,101</td>
<td>1,202</td>
<td>1,112</td>
<td>1,065</td>
<td>1,055</td>
<td>1,376</td>
<td>1,670</td>
<td>1,092</td>
<td>1,029</td>
<td>1,047</td>
<td>1,178</td>
</tr>
<tr>
<td>Registrar M</td>
<td>36</td>
<td>44</td>
<td>70</td>
<td>62</td>
<td>30</td>
<td>33</td>
<td>58</td>
<td>47</td>
<td>37</td>
<td>37</td>
<td>29</td>
<td>55</td>
</tr>
<tr>
<td>Registrar N</td>
<td>270</td>
<td>274</td>
<td>355</td>
<td>357</td>
<td>228</td>
<td></td>
<td></td>
<td>269</td>
<td>362</td>
<td>391</td>
<td>431</td>
<td>352</td>
</tr>
<tr>
<td>Registrar O</td>
<td>1,432</td>
<td>1,508</td>
<td>1,602</td>
<td>1,513</td>
<td>1,427</td>
<td>1,499</td>
<td>1,544</td>
<td>1,392</td>
<td>1,354</td>
<td>1,399</td>
<td>1,381</td>
<td>1,850</td>
</tr>
<tr>
<td>Registrar P</td>
<td>389</td>
<td>305</td>
<td>483</td>
<td>470</td>
<td>291</td>
<td>197</td>
<td>175</td>
<td>214</td>
<td>209</td>
<td>181</td>
<td>82</td>
<td>288</td>
</tr>
<tr>
<td>Registrar Q</td>
<td>697</td>
<td>640</td>
<td>715</td>
<td>726</td>
<td>759</td>
<td>674</td>
<td>721</td>
<td>673</td>
<td>661</td>
<td>774</td>
<td>691</td>
<td>699</td>
</tr>
<tr>
<td>Registrar R</td>
<td>1,720</td>
<td>1,830</td>
<td>1,878</td>
<td>2,013</td>
<td>1,939</td>
<td>1,896</td>
<td>2,177</td>
<td>2,409</td>
<td>1,795</td>
<td>1,844</td>
<td>1,939</td>
<td>1,764</td>
</tr>
</tbody>
</table>

No. of Registration

23 ➔ 2,409
Benefits (cont.)

- Detect potential abuses of (marketing) promotions

Registration Trend for Promotion A
Benefits (cont.)

- Triggers probing questions (what happened here?)

Registrant by Country
Benefits (cont.)

- Industry distribution of Registrants (Aug 2014)
- How? Through sampling.
  - Population = 110,000 (domains with webservers)
  - Confidence Level = 99%
  - Error Rate = +/- 1%
  - 15,000 domains
Benefits (cont.)

- Clearer scope (division of work) for parties in the BI workflow (IT does data integration while business users create reports and analyses)
- End-users have more power on their reports (self-service reports)
Lessons learned...

- Get support from the end-users
- Understand your data (data flow, entity relationship)
- Recognise differences between BI (noun) and BA (verb)
- Research, research and research...
What’s Next?

- Integrate more data for correlation and to support organisation’s decisions (e.g. Website ranking, Registrant data from external sources, etc.)
- Merge Operational Intelligence with BI (e.g. Web server logs, WHOIS logs, etc.)
Quick demo...
Thank you!

Questions?