The Half-Life of Information at GIAC Enterprises

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Group Discussion Written Project (GDWP)
What is Information Half-Life?

- Burton & Kebler (1960) defined it as the time it takes information to lose half its value.
- Data is worth less as it ages (fortunes linked to Chinese calendar are in 12 year cycles).
- Data value decays at different rates (customer list vs. procedures).
- Other decay factors: duplication, competition.
- Half-life varies for different data categories.
Factors that Influence Half-Life

• Data usefulness
  – Expert judgment by data users.
  – Rate of Change: Statistical analysis by corporate research.

• Timeliness
  – Calendar & expert judgment.

• Loss of Competitive Advantage
  – Expert judgment by corporate data consumers.
# Data Classification

<table>
<thead>
<tr>
<th>Category</th>
<th>Classification</th>
<th>Timeliness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time-Bounded Fortune</td>
<td>Proprietary</td>
<td>Very Timely</td>
</tr>
<tr>
<td>General Fortune</td>
<td>Proprietary</td>
<td>Timely</td>
</tr>
<tr>
<td>Production Procedures</td>
<td>Proprietary</td>
<td>Timely</td>
</tr>
<tr>
<td>Accounting</td>
<td>Sensitive</td>
<td>Timely</td>
</tr>
<tr>
<td>Human Resources</td>
<td>Sensitive</td>
<td>Timely</td>
</tr>
<tr>
<td>Customer List</td>
<td>Restricted</td>
<td>Timely</td>
</tr>
<tr>
<td>Customer Leads</td>
<td>Restricted</td>
<td>Somewhat Timely</td>
</tr>
<tr>
<td>Business Contacts</td>
<td>Restricted</td>
<td>Not Timely</td>
</tr>
</tbody>
</table>
Half-Life Metrics

- Qualitative Data Value = ((Data Usefulness) X (Loss to Competitive Advantage) X (Timeliness))
- We get half-life by periodic recalculation of the Qualitative Data Value.
- Half-Life is the number of days that it takes to reach $QDV = \frac{QDV_0}{2}$.
- Once this information has been gathered, we know the half-life of our data categories.
XML Schema (Container)

<CompanyData>
  <Data></Data>
  <DataCategory></DataCategory>
  <DataClassification></DataClassification>
  <ValueWindow></ValueWindow>
  <Timeliness></Timeliness>
</CompanyData>
## Strategic Planning Cycle Impact

<table>
<thead>
<tr>
<th>Category</th>
<th>1</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Bounded Fortune</td>
<td>Category has not yet reached its half-life.</td>
<td>Category has reached its half-life.</td>
<td>Category is beyond its half-life.</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

If the total number points adds up to 24 or more, then schedule a Strategic Planning Meeting.