The Half-Life of Information at GIAC Enterprises

Charlie Scott and Stephen Strom
November 14, 2010

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

Category	Classification	Timeliness
Time-Bounded Fortune	Proprietary	Very Timely
General Fortune	Proprietary	Timely
Production Procedures	Proprietary	Timely
Accounting	Sensitive	Timely
Human Resources	Sensitive	Timely
Customer List	Restricted	Timely
Customer Leads	Restricted	Somewhat Timely
Business Contacts	Restricted	Not Timely

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 = 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

Category	**1**	**3**	**5**
Time Bounded Fortune	Category has not yet reached its half-life.	Category has reached its half-life.	Category is beyond its half-life.
…	…	…	…

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