Measuring Financial Health of Non-Profit Organizations
A Data Analysis Initiative with Corelytics

Opportunity
- The Corelytics financial dashboard crunches data from accounting systems to help companies keep track of the vital signs of their business.
- Accounting ledger data so collected across multiple industries has potential for detailed analysis.
- Our focus area: Non-Profit Industry

Non-Profit Industry Overview
- Accounts for 9% ($1.5 trillion) of GDP.
- Only 4% of non-profits have a revenue >10M.
- Social problems are gigantic, NPOs addressing them are small.
- Systemic issues in grasping the importance of profit in NPOs.
- Very few social enterprises conduct themselves like for-profits: Example our very own - UW!

Objectives
- Analyze multi-dimensional accounting data of non-profits to arrive at financial health index.
- Identify key indicators of financial health.
- Provide recommendations to Corelytics on how they can better cater to non-profit clients.

Impact
- For NPOs: Isolation of distinct problem areas in financial health, Improved Predictive Analytics using new dimensions.
- For you and me: Better NPOs = Better tomorrow!

Findings & Recommendations
- Provision to classify sources of revenue does not exist.
- Categorical allocation of expenses between direct and indirect program costs is not enforced.
- Only 18% of NPO clients segregate accounting data by Line of Business.

Data Analysis
1. Collect and Analyze Data
Corelytics provided access to accounting data through SQL Server database. Multidimensional data was queried, transformed and analyzed using SQL Server, MS Excel and Tableau.

2. Compute Financial Health Metrics
- Quick Ratio
- Working Capital
- Cash/Sales Ratio
- Revenue
- Net Profit
- Net Profit %
- Growth Rate
- Debt Ratio
- Leverage Ratio
- AR Days

3. Build Ranking Model
Key metrics were identified and a Financial Health Index was formulated. Computation of the Financial Health Index involves detailed longitudinal, cross-sectional and trend analysis over the normalized metrics for all companies in the NPO industry.

4. Analyze Top and Bottom Performers

Growth percentages derived from trend line growth rates based on the latest 12 months growth divided by the prior 12 month total.

Bottom Performers
- Working Capital: $18 million
- Debt Ratio: 0.6
- Revenue: $100K
- Expenses: $200K
- AR Days: 30

Top Performers
- Working Capital: $3 million
- Debt Ratio: 0.3
- Revenue: $500K
- Expenses: $250K
- AR Days: 10

Information Flow

Acknowledgements:
- Donald Summers, Director, Altruist Partners

We need smarter non-profits that manage finances like for-profits. In fact non-profits have a moral imperative to grow, simply because they work for social good.

– Donald Summers, Director, Altruist Partners