CHALLENGES AND SUCCESSES OF A SAS BUSINESS INTELLIGENCE IMPLEMENTATION

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Agenda

- Definition
- Context
- Examples
- Q and A

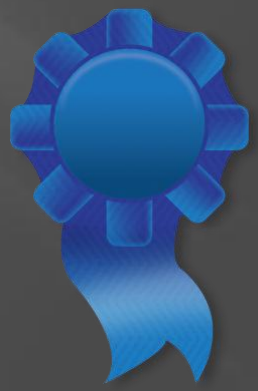
Business Intelligence - defined

"The ability to apprehend the interrelationships of presented facts in such a way as to guide action towards a desired goal."

- Hans Peter Luhn, **1958**

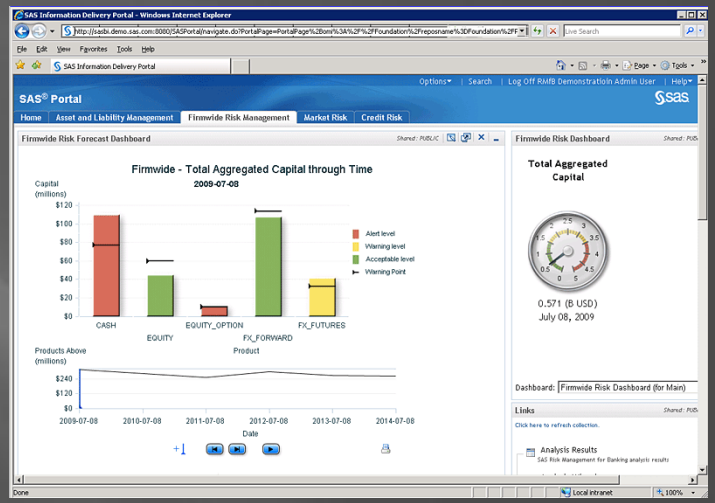
Definition

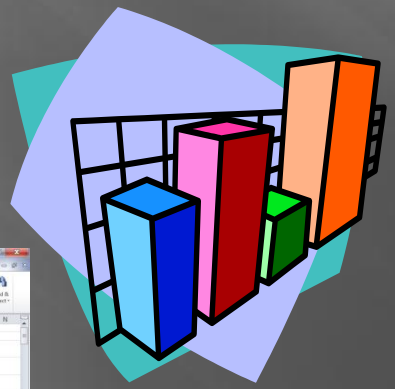
A **challenge** is a general term referring to things that are imbued with a sense of difficulty and **victory -** Wikipedia

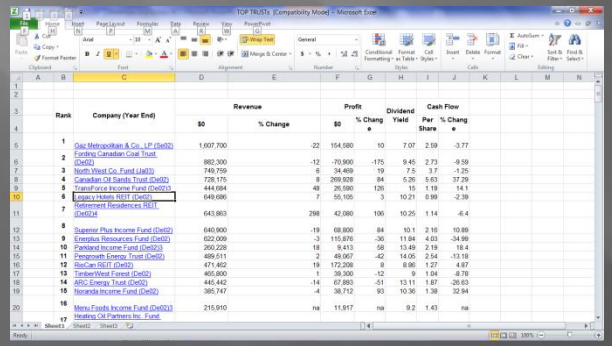


Definition

- What does the word “Report" mean?
  - Formatted, printed report?
  - Data Extract?
  - Spreadsheet
  - Dashboard?







More Definitions

- Standard Reports
  - Automated, repeatable, regular, PRODUCTION reports
- Ad-Hoc Reports
  - Supported by individuals, run as required
- OLAP – Drill down reports
  - Specialized reports based on cube structure


DM
Statistical ,
Forecasting,
OLAP , Drill Down Reports
Ad Hoc Reports
Standard Reports

Multiple BI "personas" with very different requirements

	Consumers of info	Producers of info	BI style	App embedded BI	Non traditional BI (no data model)	Advanced Analytics	Rely on IT
Executives	√√		Reports Dashboards			Consume	√√√
Power users	√√√	√√√	Queries OLAP		√√	Produce Consume	√
Average users	√√	√	Reports Queries OLAP	√√		Consume	√√
Casual users	√		Reports Dashboards	√√√		Consume	√√√
Developers	Support	Support Produce	Support	Support	Support	Support	NA

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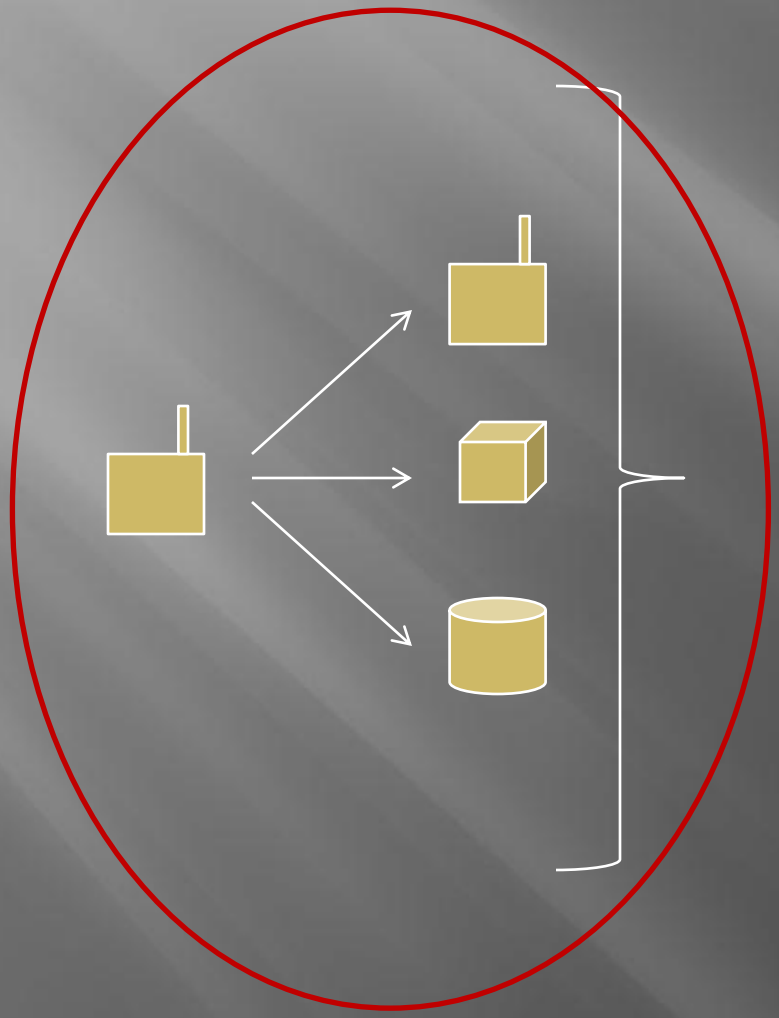
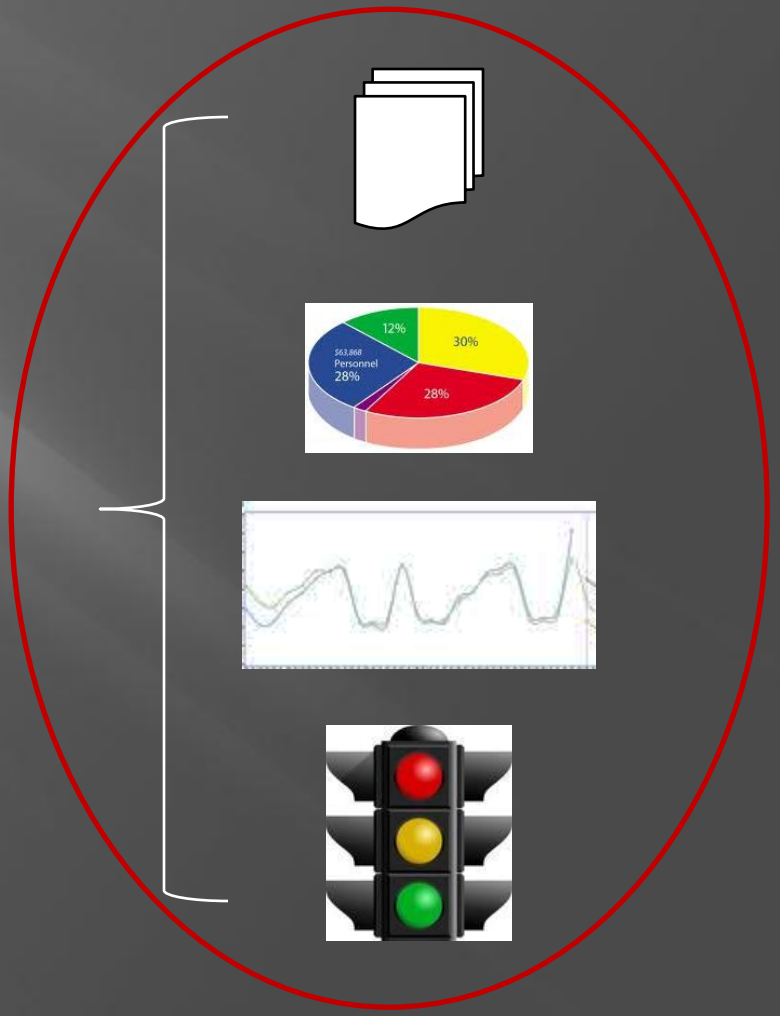
Methodology

- Different components of BI require different disciplines
  - Data provisioning different from Ad Hoc reporting etc.
- Agile vs. Waterfall
  - Both can be valid

Methodology



Business Layer



Focus on the business requirements

- Identify the key users(s)
  - May not always be apparent.
- 80 % of the work is the back end?
  - Data management
- Who is actually going to use the report/chart/analyses?

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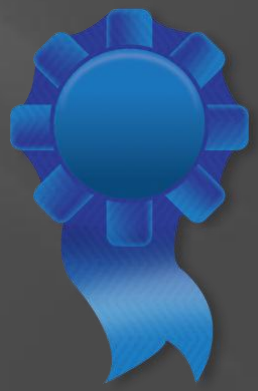
Technology

- The right tool for the job
  - Sometimes MS Excel might be what they need.
    - Add in for office
- Does the solution always require an OLAP cube?
- Beware the need to showcase the tools!
  - Select the appropriate project
- Stored Process, EG, Classic SAS, WRS, Information Maps, Predictive analytics, Forecasting etc?

"Solutioning"

- Business will often attempt to dictate "how" the report needs to be created as opposed to "what the content should be"
  - Business requirements need to be continuously validated with the ultimate user.
  - Quick deliverables help in validating requirements.

Challenges & Successes




DM
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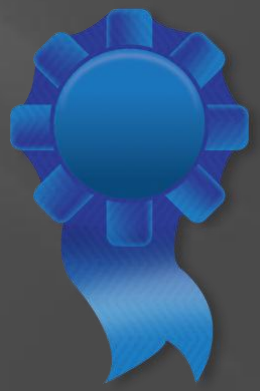
Challenge

- Querying the Data Warehouse does require some data management skills and an understanding of the data structure.
- Varying skillsets results in inconsistent analyses

Path to Success

- Create a "virtual data mart" so all analysts begin with the same set of data.
  - Parameterized
  - Common interface (EG)
- Standardized query eliminated complexity

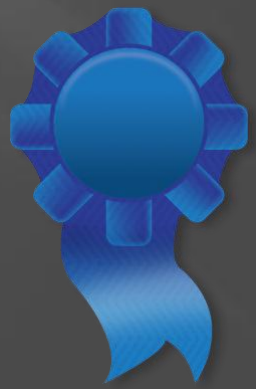


Challenge

- Requirement for sophisticated predictive analytics as.
- Expertise not available internally.
- Lack of clear understanding of data mining concept

Path to Success

- Created a project team with external Data Mining consultants and internal SME's
- DM experts created initial scoring model
- Internal SME's now use scores to conduct investigations…
- DM consultants will be brought in to "tweak" the models as required.

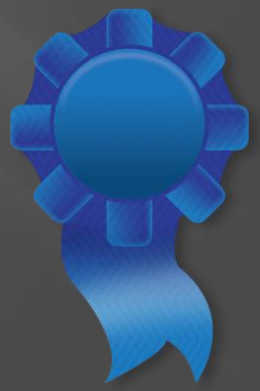


Challenge

- Lack of awareness of capabilities of SAS
- Require IT involvement
- Using inadequate tools
- Unaware of the power of an integrated suite

Path to success

- Appropriate training
- Internal user group
- Internal training
- Mentor a “champion” in each area
- Active business outreach program
- Establish relationships across the organization



Lessons Learned

- Commitment and clarity is required.
  - A Pilot / POC needs to be identified as such.
  - Move to production clarified.
- Use appropriate technology.
  - AMO?
- IT and Business need to be aware of project.
  - Need to part of the project team..

Lessons Learned

- Business processes/culture may need change management
- Data management will ALWAYS take longer than expected!
  - Analysts will usually need to do some further data management
- A “BICC “ will evolve from the BI program
- Success will ensure more demand!

Questions?

Go Canucks!