

ESTA 2020 Vision

Bristol - Marriott City Centre

19th May 2010

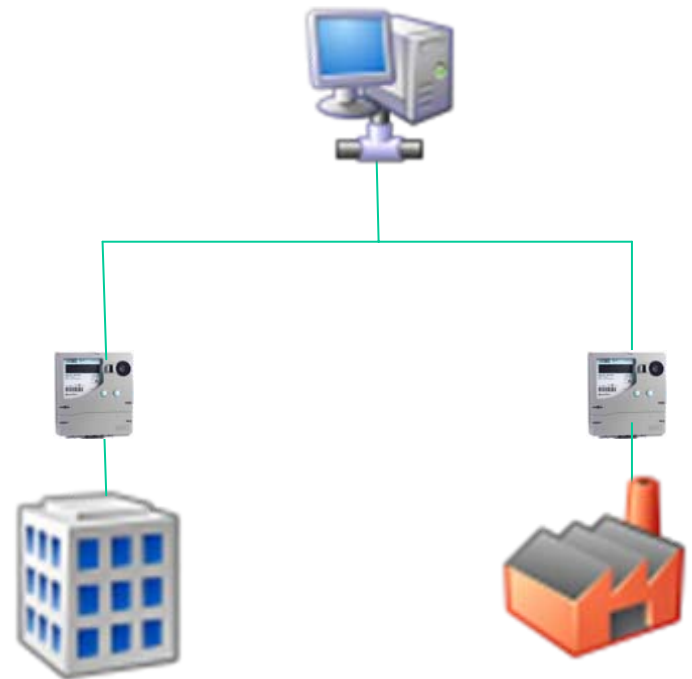
Spreadsheet Soup and Beyond

David Enever and Paul Homer

Business Development

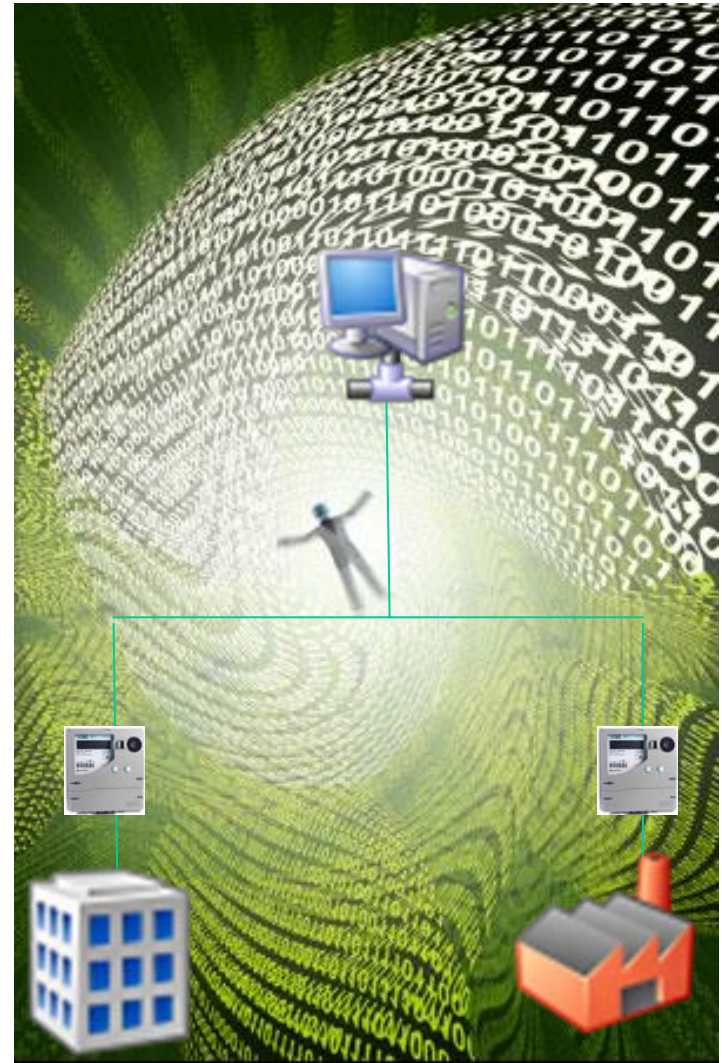
Sub-Metering

- Sub-meters are installed
- Half-Hourly (HH) data collected for all key areas of a building or site
- Automatically collected at a central location
- What happens next?



Data Volumes

- Consider a system of 25 sub-meters
- Manually read once per week
- 25 meters x 52 weeks
- 1,300 data points
- aM&T system, 30 min intervals
- 25 meters x 48 HH x 365 days
- 438,000 data points



Data Management

- Key issue:
 how to use the data effectively
- Spreadsheets?
- Often a starting point
- Good for viewing 'raw' data
- Not scalable
- Difficult to maintain
- Spreadsheet Soup!

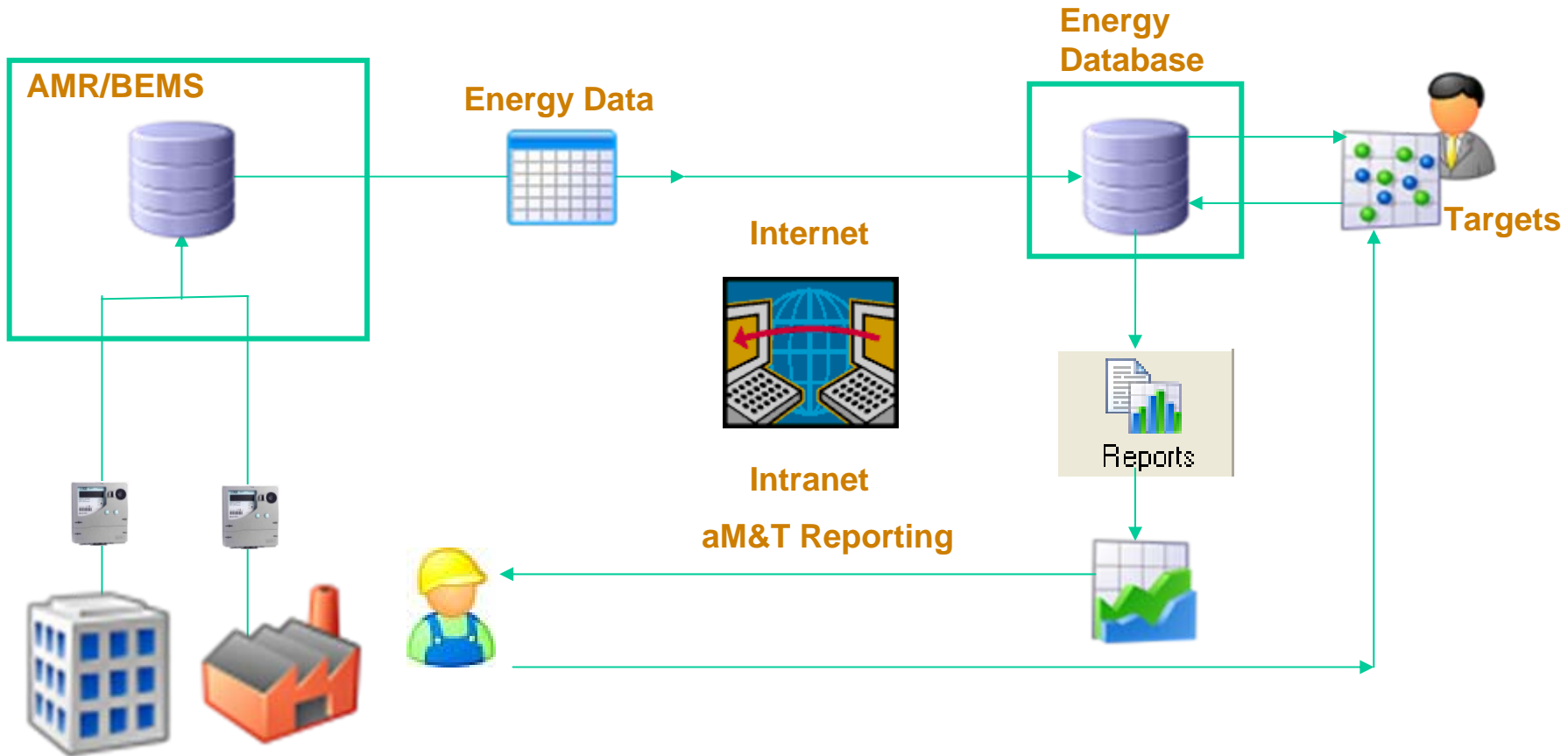


Data Management

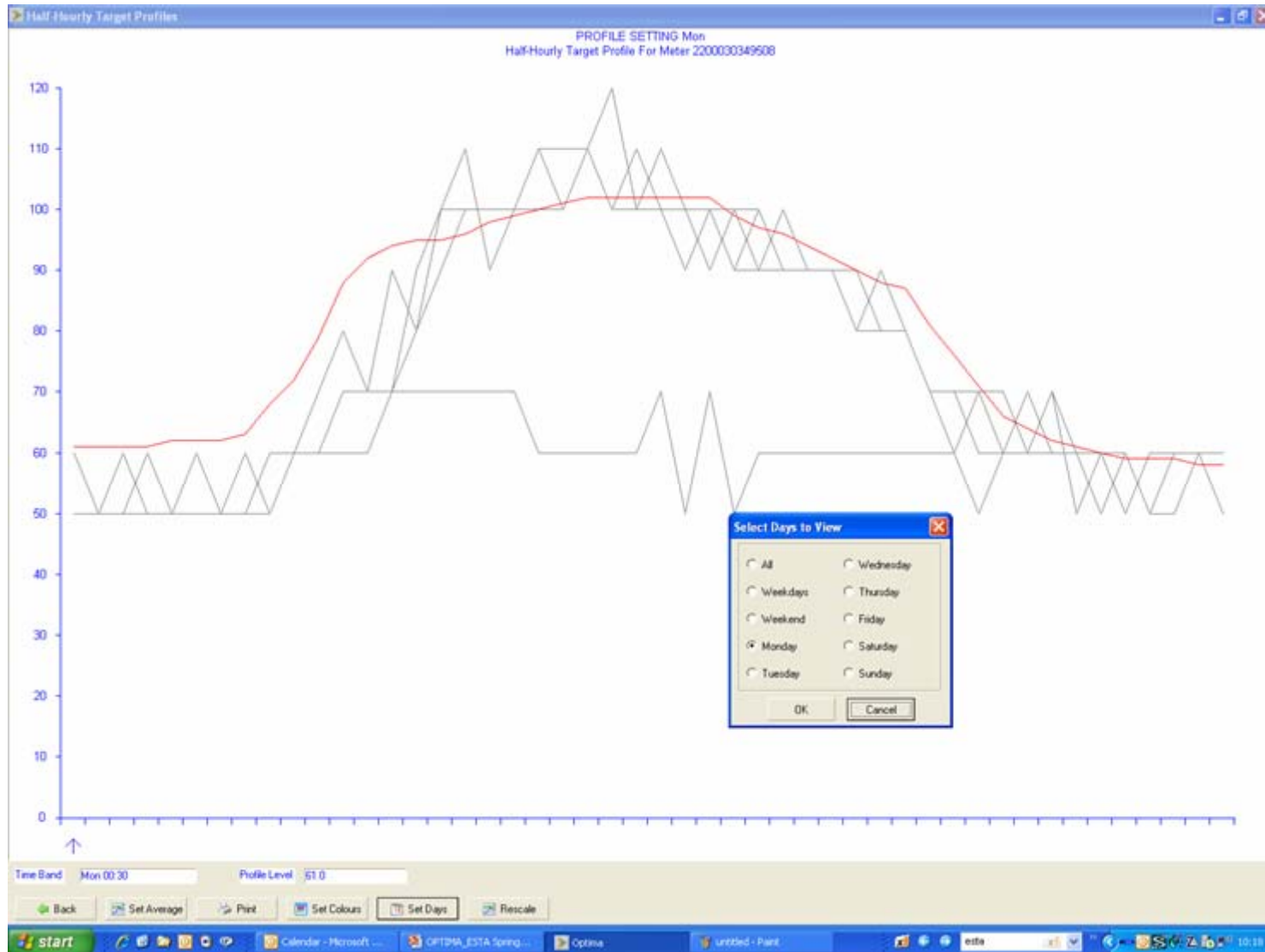
- Managing data requires structure
- Proprietary software package + database
- Many years of development - ongoing
- Handles large volumes of data
- SQL databases provide inherent security
- Data can be shared by many users
- Reporting is entirely 'Data Driven'
- No need for manual tweaking of countless spreadsheets



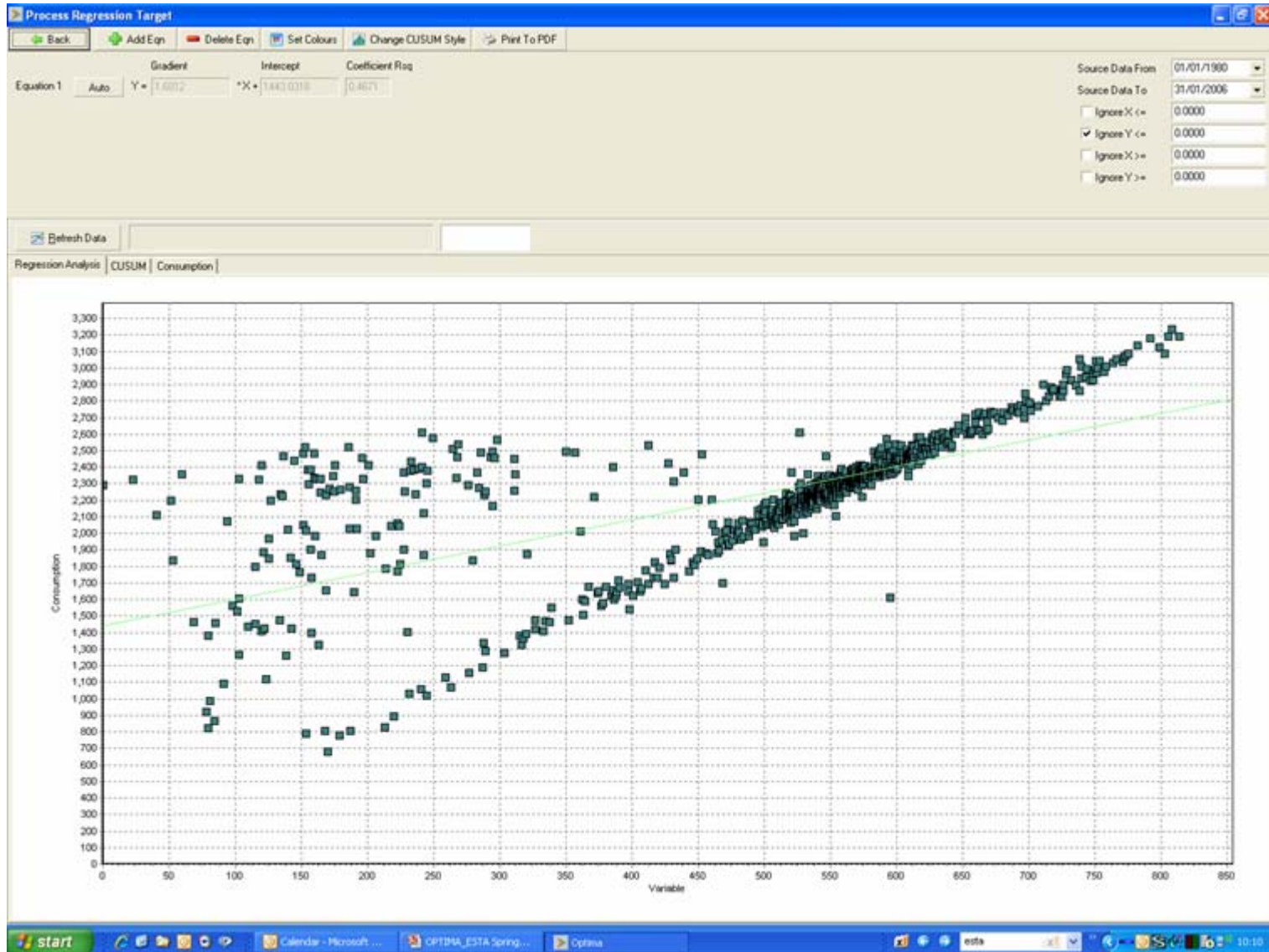
aM&T Data Flows



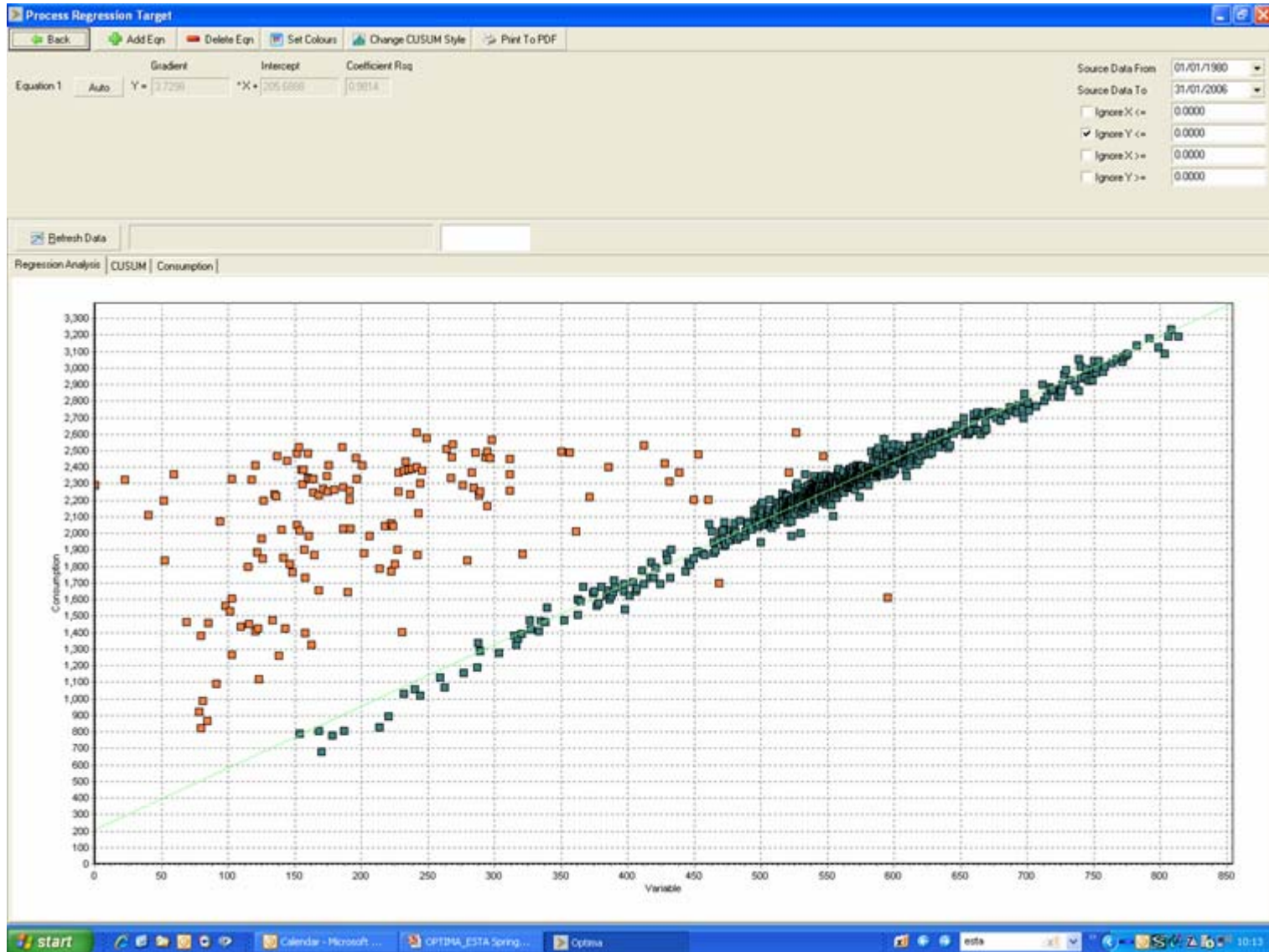
Data Analysis & Targets



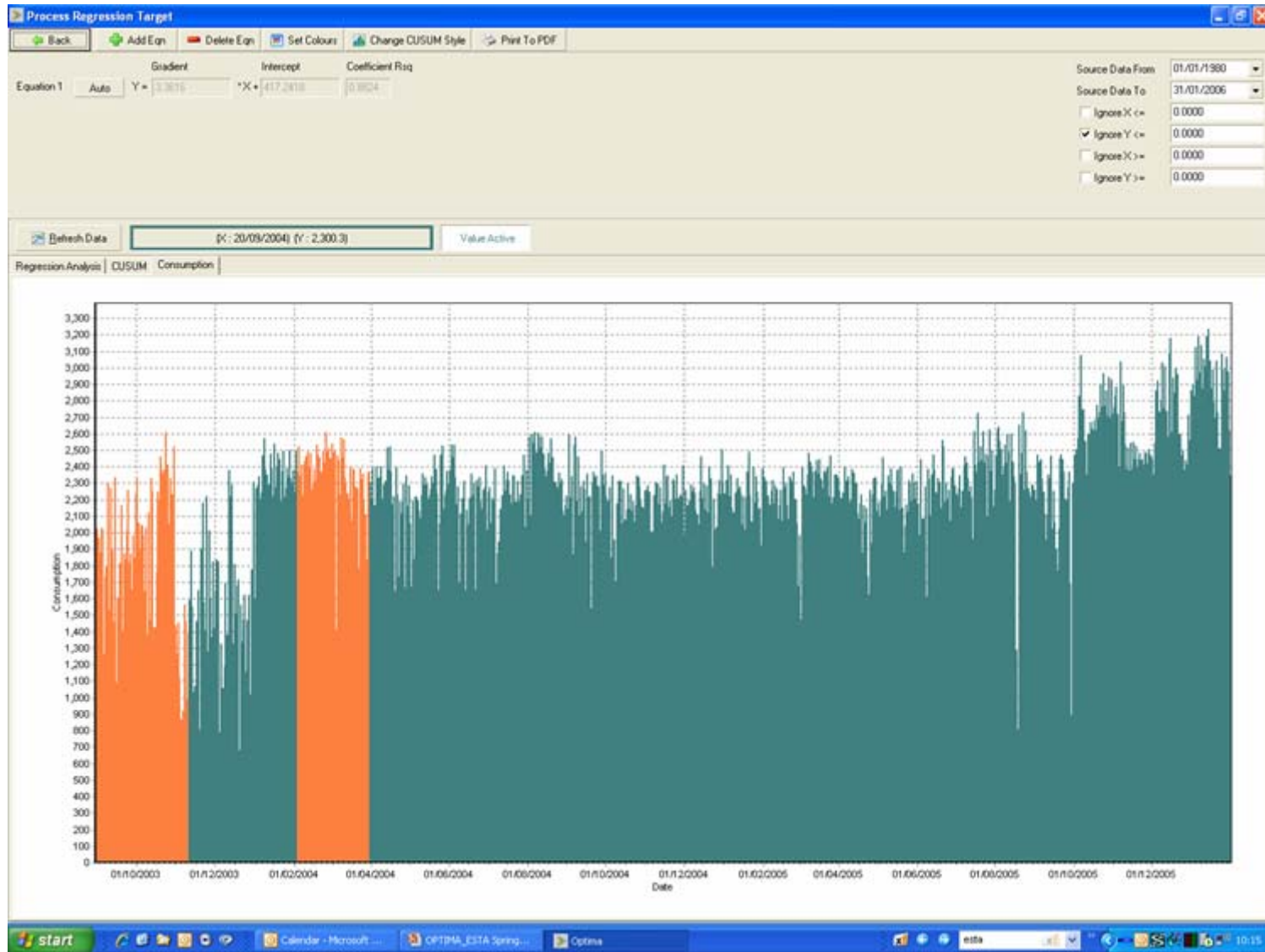
Data Analysis & Targets



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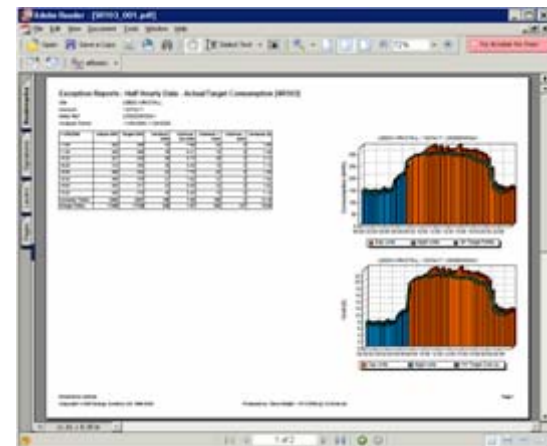
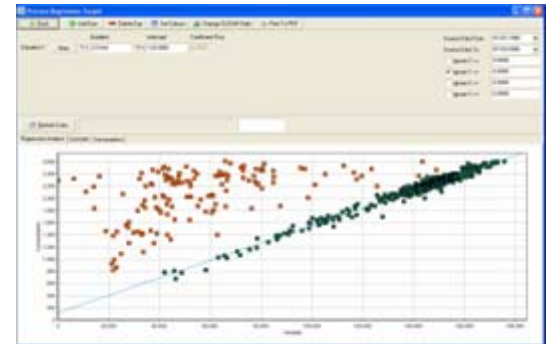


Data Analysis & Targets



(Automatic) Monitoring & Targeting

- “To manage you must first measure”
Lord Kelvin
- Simple technique
- Measure, Quantify, Predict
- Calculate & Set Targets
- Calculate & Set Benchmarks
- Alarms & Exception Reports
- Analysis tools should suit data volumes



Thank you



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