Analytics
GSS - Credentials
10 March 2014
At EY, we define analytics as the extensive management and use of data, statistical and quantitative analysis, explanatory and predictive models and fact-based management to improve business performance, drive better business decisions and proactively manage risk.

Analytics can sharpen the insights we apply to solving problems and differentiate our client service. For many forms of analytics, Ph.D. level training underpins the science — but practical project experience provides the real art.

We are adept across a continuum of analytical techniques, including:

01. Descriptive analytics
   Involves mining past data to report, visualize, and understand what has already happened — after the fact or in real-time

02. Predictive analytics
   Leverages past data to understand the underlying relationship between data inputs and outputs to understand why something happened or to predict what will happen in the future

03. Prescriptive analytics
   Determines which decision and/or action will produce the most effective result against a specific set of objectives and constraints

04. Forensic analytics
   Investigative data linking, social networking analysis, artificial intelligence and predictive modelling to proactively seek opportunities to prevent and detect fraud, waste and abuse
Descriptive Analytics
Advisory: Pharmaceutical industry
Wholesale Supply analytics
Domain expertise, Data Integration, Business Analytics, Visual Analytics

Business objectives

Provide strategic insight into wholesale quota information across regions further enabling decisions to better dictate the distribution of products across markets.

Solution

Automated data extraction process from SAP & other sources (IMS Data, Pricing Information, Product Data) using ETL tool – Informatica.

The product features include product name and size harmonization, and product supply/demand inferences.

Benefit

- Minimize time to arrive at any of the actionable inferences.
- Provide insights into the wholesalers’ supply and demand, so that the company can define quotas.
Advisory: Pharmaceutical Industry  
A/P Duplicate Analysis  
Domain expertise, Data Integration, Business Analytics, Information Mapping, Visual Analytics

Business objectives

Provide insights to analyze duplicate invoices; this one involves a three-way match to arrive at duplicates and also avoids duplicate payments.

Solution

Toolkit processes accounts payable invoice data from systems like SAP or JDE, compiles into a common data model and runs various tests to identify duplicate invoices.

Reports are created using Spotfire.

Benefit

- Quick and easy access to information on duplication, which in turn means lesser time to take action.
- Provides root-cause analysis on duplicate transactions (payment to wrong vendor, advance paid, etc).
Advisory: Pharmaceutical Industry
Travel analytics
Data Integration, Domain Expertise, Data Architecture, Visual Analytics

Business objectives

Provide insight on travel expenses and also to reduce the per-person travel cost and expenses

Solution

Tool provides insight into various trends in travel spend and also help them optimize travel costs

Toolkit helps end users to do various analysis on Compliance, Spend Analysis, and Travel Frequency Analysis

Benefit

► Quick and easy access to information on spend, compliance and travel frequency
► Enables users to bring down the travel cost
Business objectives

Design an integrated data management and reporting system which consolidates the data and the programming logic into 3 schemas; EEM (Europe and China), EEM Asia (for Asian countries) and EEM AH (Animal Health), within a single Oracle database.

Solution

Convert T-SQL procedural code from SQL Server databases to PL/SQL in a centralized Oracle database

Build a similar system to EEM and an integrated reporting solution in Spotfire to display data from all markets with an inbuilt user-based security.

Benefit

► Reduction in time in getting the Spotfire reports from days to hours
► Faster analysis as there is no information overload
► The Oracle solution is intuitive, easy to use and easy to modify to accommodate a new test which the client can easily integrate into the system
Advisory: Disney
Archive / Purge
Information Architecture, Data Architecture, Data Integration

Business objectives

Archive and purge archaic data in the online production database with reconciliation processes to validate the records.

Build an archival system that allows extending the catalog to include more tables for archival based on business rules.

Solution

Designed and developed database archive and purge process for 13 schemas in the database for data older than 3 years in the online production database.

Benefit

Efficient retrieval of data – once the archival is implemented;
MENA – Telecom Team
Spend intelligence
Domain expertise, Data Integration, Data Architecture, Business Analytics, Visual Analytics

Business objectives

Provide visibility on usage and expense, Identify cost saving opportunities, and enable tariff plan optimization

Highlight billing/rating inaccuracies and Identify duplicate payments

Solution

Diagnostics on cost per connection and number of connections by office, by country, cost duration, count by country, office, service provider, call type, caller profile based on cost band, VOIP service provider usage vs. payment

Benefit

► Tool enables potential cost saving opportunities identified based on analytics
► Tool provides features to do analysis on vendor-terms and payments (“What if” scenarios); this one is done using Advanced Visualization Tool – Tableau.
Security Operations Centre
Advanced Security Intelligence
Information Architecture, Big Data, Data Integration, Data Architecture, Visual Analytics

Business objectives
Move to an intelligence-driven security model that relies on security-related information from internal & external source.
Deliver a comprehensive view of risks & vulnerabilities on a single platform.

Solution
Integration of data from disparate data sources on a big data platform using Hadoop
Automated detection of relevant, emergent threats from internet chatter
Advanced visualization for analysis and pattern detection

Benefit
► Enhanced situation awareness for security analysts
► ‘Over the horizon’ visibility to emerging threats, while reducing overall analyst workload via contextual filtering
People
Workforce Analytics
Business Analysis, Data Integration, Predictive Modelling, Visual Analytics

Business objectives

Reduce the current effort and cycle time in report preparation

Provide projections regarding headcount of the firm in 2020 (done as part of Vision 2020 Head count projections)

Solution

Role-based dashboards — for monitoring key metrics & analysis

Predictive model for headcount growth

Benefit

► Demonstrated that self-service BI approach can reduce the current effort and cycle time to business insight

► Prediction of the headcount requirements for Advisory to meet Vision 2020 target of $15B, based on present trends
VoicE & Video Team (IT Operations)
Performance/Service/Vendor Management
Information Mapping, Data Governance, Data Integration, Predictive Modelling, Visual Analytics

Business objectives
To provide a unified dashboard and scorecard that allows descriptive analytics on Service Availability, Operational Performance, Vendor Management, Security Management and Volumetrics

Solution
Self-service BI application with cues on security incidents, service disruptions, and status on change management
Predictive solution on outages/security incidents based on the past pattern of issues/incidents

Benefit
► Better understanding and measurement of key business performance indicators
► Enhanced visibility & analysis of around 35+ critical KPIs across multiple sub-service lines under Voice & Video Operations Management
Global Real Estate Team
Utilization analytics
Business Analysis, Data Integration, Visual Analytics

Business objectives

Create a Dashboard to provide actionable insights from global real estate data

Create a central data repository for ad-hoc reporting facilities

Solution

Integrated data from various source like Lease details, Head count by location, Cost/FTE, Revenue by location by Headcount, Flexible working arrangements

Visualization using Spotfire presents various insights into the utilization and cost for the global real estate

Benefit

► Factbook action board will provide actionable insights from global real estate data

► Currently the excel based reports is generated half-yearly. Post implementation of the Spotfire based interactive BI solution, the reports can be generated every month (the cycle time to load and generate interactive reports will come down quite considerably)
Business objectives

This project is aimed at providing data analytics and reporting support to the EY Global Real Estate Operations team. The major activities covered are data analysis, visualization, reporting, information sourcing and data warehousing.

Solution

Spotfire based action boards and dash boards for better and more powerful visualization
Automation of the existing manual process in SQL Server
Design and implementation of new reports to enable effective decision making

Benefit

- Timely and accurate information on real estate costs and utilization across the various EY offices
- Enhanced user-friendly visualizations in place of the previous ‘wall of numbers’
- Visual drilldown facility to get to the root of the problem
Business objectives

To identify cost saving opportunities through optimizing real estate utilization across various locations

To enable and support people working through various channels in a cost effective way

Solution

ESS portal by integrating various Data sources

Checks and balances to make sure that the incoming data is cleansed and standardized

Utilization reporting based on entries

Benefit

► Application with various modules on Regional dash boarding, Records and Information Management, and Admin reporting
Global Revenue Analysis
G-360 Analysis (Implemented for Tax Team)
Business Analysis, Data Integration, Predictive Modelling, Visual Analytics

Business objectives

To create an Analytic platform for “Global 360 degree Revenue Analysis” based on Service Lines, Industry and companies
To enable Opportunity and Review comparison for a selected region and sector

Solution

Web-based interactive dashboard that provides country-wide revenue analysis that can be drilled down into industry-wise, sector-wise and company-wise revenue analysis
An easy-to-use map based user interface through which users can do the slicing and dicing on the underlying data

Benefit

► Users will be able to get insights into which sector/sub-sector/industry is doing the best in terms of revenue generation
► System would be able to provide insights on the geographies that the team could pursue on – for more opportunities
Business objectives

To productize the G360 Account Performance analysis by moving the existing excel model into a managed environment using Tableau and SQL.

Solution

The data for all Periods were loaded into SQL and Tableau dashboards were created. As the data in the SQL database is aged, the Tableau dashboards

Benefit

► Tableau dashboards allow the user to analyze the G360 Account Performance for any Period in any Fiscal Year which was not possible earlier
► Some of the inferences through advanced visualization (using Tableau) was not possible through Excel reports
Business objectives

Build a comprehensive report as part of revamping the compensation structure in accordance with the competitors, we were able to match around 50 positions and prepared the revised compensation incorporating basic salary and other benefits.

Solution

Developed a benchmarking report by matching the positions of the company with the competitors and benchmarking various components of compensation across 50 different positions.

Benefit

- Easy to comprehend information enables user to make decisions faster
- Cycle time for generating these reports has come down quite considerably
Market segmentation
Global Markets Planning and Analysis (GMPA)
Data Governance, Data Architecture, Information Architecture, Data Integration, MDM

Business objectives

To arrive at an integrated data exchange (with client data) from various internal and external data feeds that can be used for variety of analytics projects

Solution

Provision of a user layer for presenting data from multiple sources linked through common id
Scalable solution to addressing new feeds and Financial data
All data elements can be traced back to the original data feeds

Benefit

- The data exchange covers wide variety of internal and external systems like Capital IQ, DnB, Audit Analytics, Russell 3000, GFIS, GIS, ARD and Forbes 2000
- Unified scalable data repository that can help the Markets team to build data marts for various teams—this data repository has features to trace data back to the original source (Data Traceability)
**Human Capital Technology Team**  
Global Mobility Policy Advisory  
Data Integration, Data Architecture, Visual Analytics

**Business objectives**

To bring consistency and increase the efficiency of Consultants with an automated solution to compare and benchmark policies across several industries and geography; earlier, this was done manually by Human Capital technology team.

**Solution**

The proposed solution leverages MS Excel capabilities of data collection and management and gives consultants more insights into the data captured from organizations – to benchmark the policies and compare policies and their benefits across industries with statistical validations.

**Benefit**

- The automated tool will improve consultant’s efficiency and increase consistency.
- The tool can be used globally to leverage policy benchmarking opportunities.
L&D Budget Tool
Excel based Analytics for GSS
Business Analysis, Data Integration

Business objectives
To support L&D budgeting process and to capture the course and learner information from several regions required to develop the budget and consolidate information at a region or area level with minimal manual intervention.

Solution
An excel budgeting tool developed by GSS to capture information from multiple regions to develop the budget, consolidate the information and generate a set of reports and dashboards once information has been consolidated.

Benefit
► The automated tool will speed up the learning budgeting process after gathering information from multiple regions, populate dashboards and will generate several reports instantly without any manual intervention.
Travel Analytics
Mining Opportunities for Cost Saving and Cost Avoidance
Business Analysis, Data Integration, Visual Analytics

Business objectives

Travel cost is a major expense in EY. As a Global Enterprise with different TMCs, it has become extremely difficult to track and reduce Non Client Related Travel (NCRT). So an analytics team was formed to track all travel related data and suggest areas where travel expense can be controlled and hence improve the Total Net Revenue per FTE.

Solution

- Capture Vendor response against RFP. Interpret the response and present relative savings against current contract.
- Track and report Non Client Related Travel Expense.
- Streamline the consolidation of data reported by Travel Management Companies (TMC) across different geographies.
- Designed and Developed Preferred Hotel Database.
- Automate the manual effort to increase efficiency.

Benefit

- Automated consolidation of TMC and Finance reports (Effort reduced from 3 days to 1hr).
- NCRT Report automated and generated on monthly basis- Helped management to track NCRT.
- Preferred Hotel Database to ensure travelers stay only in Preferred Hotels leading to Savings.
- RFP Summarization is automated to improve comparison among vendor responses.
Employee Compensation Analysis
Excel based analytics tool development - GSS
Data Collection, Data Integration, Visual Analytics

Business objectives

Compare the existing compensation with the proposed numbers and the market standard numbers, and arrive at an optimal compensation for the employees.

Solution

An excel macro based tool that lets the user create and analyze different scenarios by varying the proposed hike percentage across the whole organization and across individual grades.

Benefit

► The tool takes the count of employees in each grade into account and calculates the additional cost the company has to incur due to the proposed hike in compensation.

► Dynamic visualization give user a better understanding of the variance between the current, proposed and the market.
Credits Enabler Tool
Excel based analytics tool
Business Analysis, Data Integration

Business objectives
Create a deck with client credentials for the MENA Assurance Team, with the credentials in the form of tombstones.

Solution
An excel macro based tool that lets the user create tombstones for the credentials with size and shape of the tombstones compatible to the PowerPoint slide.

Benefit
- Enables the user to filter the credentials based on offering, sub-offering, client and target sector, sub-sector, industry and country with an option to switch between short and detailed description.
- Automates the tombstone creation, thus saving hours of manual effort.
Employee engagement survey analysis
HR Advisory Data Analytics
Data Governance, Data Integration, Business Analysis, Visual Analytics

Business objectives

Analysis of survey data and computation of Engagement quotient and build a report

Solution

Analysis of primary survey data to derive the employees Engagement quotient for the company as a whole, as well as for each unit. Detailed report was also prepared for both the company and for individual units.

Benefit

Provides an easy-to-use analysis tool to collect and analyze employee engagement survey data and also enable inferences on the collated data.
Business objectives

To enable “comparable companies analysis” (fundamental technique to compare companies)

Existing Excel tools are limited in scope, flexibility and interactivity

Solution

A visual analysis toolkit for exploratory analysis of company info.

Dynamic range of criteria and measures (e.g. geography, sector, margin analysis, solvency ratios & sector KPIs).

Benefit

► Analyze an expanded company universe, based on a wider range of criteria and benchmarks

► Visual design enables enhanced pattern and outlier detection
Capital Confidence Barometer (CCB)
Data Governance, Data Architecture, Data Integration, Business Analytics, Visual Analytics

Business objectives

To provide insights into corporate leadership thought process in various aspects like Investments, Mergers, Acquisitions and Economic Outlook

To enable EIU to predict corporate planning and action in “growth”, “M&A”, “capital spending” and economic outlook

Solution

Online survey tool to capture the thought of process/corporate sentiments in variety of investment related aspects

Analysis possible on various dimensions including Region, Country, Revenue, Sector, Sub-sector and company-type

Benefit

► Anywhere, anytime, and anyplace – “24 x 7” access from both inside and outside EY network
► Variety of charts included, to provide inferences on change of corporate opinions or plans over time
► Analysis inferences can be captured in various output formats like Excel and PowerPoint for easy sharing
TAS
Financial Model Reporting
Data Integration, Data Architecture, Visual Analytics

Business objectives
Create an analytics solution for TAS Finance Team (primarily responsible for feasibility study of companies under various sectors based on historical values and assumptions) – to present a potential financial model based on assumptions on key metrics

Solution
A better approach in decision making by correlating various performance values
Comparison of various companies over performance values

Benefit
► Reveals unnoticed information, gives answers faster, and helps to investigate cause-effect relationships
Market Vision
TAS
Data Integration, Data Architecture, Information Mapping, Visual Analytics

Business objectives
Create a diagnostic platform that identifies potential opportunities for TAS engagements with corporates by analyzing financial metrics, corporate behaviors and signaling by companies to the wider market

Solution
Created MarketVision - a web-enabled tool which allows real-time data analysis, convergence with other TAS Innovation platforms and wider distribution and usage at all levels; this was done using Spotfire as a platform for building analytic charts and dashboards

Benefit
► Identifies and quantifies potential opportunities analytically as opposed to intuitively
► Access to a wide array of information keeps the user aware of multiple aspects while pursuing a potential opportunity
Ernst & Young has introduced a new approach to global VAT management known as GITDM. It offers clients detailed graphic overviews of VAT risk and opportunity areas impacting compliance. This is a methodology that can be implemented regardless of legacy systems used by the client.

**Solution**

EY Decomposition/VAT audit specialist supports in decomposition process

EY IT teams use the decomposed data for running the scripts in ACL/SQL to get the processed data for analysis purposes

**Benefit**

- Analyze large volume of data of clients to assess the current state of transactions of clients
- Analyze transactions to assess VAT relevance of transactions and to analyze the correctness of VAT paid or reclaimed
**Business objectives**

Combine data analytic skills, knowledge of client systems or client service requirements to provide tax technology engagement support to QS and other data intensive BTS engagements.

**Solution**

Excel files of clients - cleansed, consolidated and uploaded to MS access database. VBA program in Excel and Access were created to modify the client Excel files to templates for direct upload onto Access Database. Automated data cleansing and data loading function.

**Benefit**

- Support the tax technology team on section 199 projects, fixed assets capitalization and depreciation, - support migration from MS Access to SQL - database consolidation work
- Faster data cleansing, validation and loading process
- BTS Technology engagement support
Assurance Market Intelligence Database
Data Integration, Data Architecture, Information Mapping, Business Analytics, Data Governance, MDM, Visual Analytics

Business objectives
Support client facing professionals with insight into non-listed businesses in MENA
Self-service capability to perform ratio analysis, trends, peer analysis, benchmarking and sector analysis

Solution
Integrated repository of company info & financial statements
User interface & processes for data quality assurance
Easy-to-use analytics interface

Benefit
► Financial ratio analysis & benchmarking across non-listed businesses in MENA
► Analysis on various dimensions like ‘growth’, ‘profitability’, ‘net income’, etc.
► The tool provides an integrated data repository from 1500+ non-listed EY clients’ data – which can be used to do variety of analysis like peer analysis and sector/sub-sector analysis
Assurance
GTAC Master Data Model
Data Integration, Data Architecture, Information Mapping

Business objectives
To build GTAC Master data set combining the data from different data sources, to develop various predictive models like staffing model
To create GTE Detailed File for Assurance team by combining the In Scope GTE File and the various Ratings files

Solution
Implemented data models and created a central DB repository
Provided different loading patterns to clean up the data from different sources.

Benefit
► Descriptive and Statistical Analysis are done with the Masters, since the data across various heterogeneous systems is brought to one place
► The Masters are used to develop various predictive models
Business objectives

To provide an environment for Auditors to perform analysis on financial journal entries made by customers.
To provide a “Completeness” report on all journal entry transactions rather than working on samples

Solution

Data cleansing activities implemented through a “PowerShell” script and re-usable scripts for basic validations
Custom data extraction jobs to extract data from non-standard sources and defined a process life-cycle with check-points in each step

Benefit

► Handle huge volumes of journal entry and trial-balance data
► Provide cleansed data and exception report in Access/Excel
Assurance: ATF – Audit tool of the future
Intelligent Data Project
Data Governance, Data Integration, Data Architecture, Information Mapping

Business objectives
Develop the Data Transformation packages for both SAP and Oracle data

Solution
Created Transformation packages for Conversion and Mapping, created separate SSIS packages for both Oracle and SAP Conversion Process. Performed the conversion of the data fields to the correct field type according to the target table structure and CDM Versioning

Benefit
The current work includes integrating data from heterogeneous systems, and setting business rules to validate the extracted data; Advanced visualizations were built to provide insights into financial transactions, any exceptions, clues on erroneous transactions and so on.
**Business objectives**

Support performance improvement teams on working capital optimization engagements

Reduce the effort and complexity of performing a ‘quick scan’ of business processes

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**Solution**

Tools optimized for visual exploration of large datasets


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**Benefit**

- Ready-to-deploy diagnostics that reduce the cycle time to business insight
- This tool could be used as a “pre-sales sales collateral” or as a “delivery accelerator”
Advisory - MENA
Customer Analytics and Market Insights (CAMI)
Data Integration, Data Architecture, Information Mapping, Visual Analytics

Business objectives

To gather responses from wide variety of business and retail consumers to provide insights into market trends

To provide a platform for analyzing survey responses for both EY internal and client users

Solution

Web based application to do analysis on survey response rates, analysis on individual questions and multiple questions

An interactive application that provides comparison between selected questions based on the weighted average assigned for each question

Benefit

► Anywhere, anytime, and anyplace – “24 x 7” access from both inside and outside EY network
► Application is scalable in terms of adding questions to the existing list
► Various features to support analysis on individual questions and multiple questions at the same time
Predictive Analytics
Trade flow Analysis
G-360 Trade Flow
Data Integration, Predictive Modeling, Business Analytics, Visual Analytics

Business objectives

Estimate the market potential across the globe using the historical M&A data of the G-360 accounts

Solution

Transactions of the G-360 accounts (as early as 1993) is taken from Capital IQ. The average TEV/Revenue ratio of the acquiring company is used to impute the TEV for the missing years. The transactions at different time periods are then rolled up to the present year at country level.

Benefit

- The results can be compared with our revenue from GFIS and the potential markets can be easily identified
- Reporting performed using Tableau allowing easy analysis of the Inbound/Outbound market potential at the target country level
Health Care Provider in UAE
Customer Segmentation
Data Governance, Data Integration, Predictive Modelling, Performance Frameworks, Visual Analytics

Business objectives

Assist a major healthcare provider in the UAE to grow business.

Solution

Develop a robust customer segmentation based on patient needs and attitudes.
Measured patient experience, satisfaction and loyalty using primary survey data in each segment.

Benefit

► Identified target market to win new patients & expand the healthcare provider’s market share
Market segmentation
Predictive part in GMPA
Information Mapping, Data Integration, Predictive Modelling, Performance Frameworks, Visual Analytics

Business objectives

Analyse and predict the market share of EY and the market leader across different market segments in the Americas based upon the estimates for propensity to spend on services EY currently provides.

Solution

Look at the macro economic and sector specific indicators and map them to business triggers and the direction of impact.

Develop a robust regression model based on Macro economic indicators and sector specific indicators.

Benefit

► Build a predictive capability into the current tool which only handles the descriptive analysis
(Predictive capabilities were provided through “R” and reporting enabled through Tableau)
MENA: Workforce projection
Strategy: Data Analytics
Predictive Modeling, Performance Frameworks

Business objectives

Percentage of women workforce in the organization by 2020.

Solution

Forecast the % of Women workforce for a country/region by 2020.
Analysis of the Impact of different Parameters (Promotion rate, New Hire rate etc. of Women employees at different grades of Employee levels).

Benefit

► Ensure that there is gender equality
► Enable “what-if” analysis on the number of women needed for a particular year – considering various assumptions like grade-wise-promotions for women, grade-wise-new hires, attrition, etc.
Assist the Ministry of Health in assessing the healthcare personnel requirement in Saudi Arabia by 2020, to determine appropriate policies.

Forecast the demand for all categories of healthcare professionals in Saudi Arabia for multiple scenarios. Benchmark against current level of healthcare personnel in high income (OECD) countries.

Forecasts provided were used as inputs for framing various policies by the Ministry of Health.
Social Media Insights Tool
Social Data Analytics
Data Integration, Data Architecture, Information Analysis, Big Data, Predictive Modelling, Open-Source BI, Visual Analytics

Business objectives
Support our client facing people with actionable insights extracted from Social Media (SM) that are relevant to business cases they are analysing.

Solution
Backed by a Machine learning scheme, this tool is able to collect Social web data, analyse it algorithmically, and present EY related materials, trends, patterns, etc. for different industry sectors.

Benefit
► Makes it possible to gather data related to EY’s business interests from SM and other resources and an automated self-learning tool to analyze social data for underlying patterns and correlations
Financial Data Integration - Big Data Research
Unstructured data analysis
Data Integration, Data Architecture, Information Analysis, Big Data, Predictive Modelling, Open-Source BI, Visual Analytics

Business objectives
Automate the extraction of Financial Data from unstructured and structured data sources

Solution
Data extraction from unstructured financial reports in the form of PDF, HTML, MS Word documents
Data extraction from structured formats like XBRL (eXtensible Business Reporting Language)

Benefit
- Improved speed of Financial data extraction by automation
- Accuracy of Financial data extraction by automation
Public Data Integration
Integrates public, proprietary and purchased data – semi-structured and structured
Data Integration, Data Architecture, Information Analysis, Big Data, Open-Source BI, Visual Analytics

Business objectives
Examine the potential for new, technology-enabled business operating models & business opportunities based on integration of an array of data sources – public, proprietary & purchased

Solution
Implement a use case that acquires, transforms, integrates and visualizes selected, publically available financial information with internal data sets and commercial data
Build a corporate monitoring prototype that demonstrates the enhanced visibility from this data in a self-service mode

Benefit
► Demonstrates the feasibility to blend public data sources with internal data sets and commercial proprietary data
► Viable alternative to commercial data sources in certain scenarios, which can potentially optimize overall spend on third party data providers
Threat Data Management
Analysis of semi-structured and structured data
Data Integration, Data Architecture, Information Analysis, Big Data, Predictive Modelling, Visual Analytics

Business objectives

Explore the feasibility, approach & opportunities in semi-structured data management with a specific use case in cyber security.

Demonstrate how cyber threat information can be adapted for storage in semi-structured formats such as XML.

Solution

Implemented an XML repository for cyber security information that comply with emerging cyber security standards.

Adaptive user interface to manage threat information, that supports schema changes of evolving standards.

Benefit

► Demonstrates the storage & management of semi-structured cyber threat information compliant to emerging security standards.

► Provides a general framework to store and manage semi structured documents, compliant to evolving domain/industry standards – an increasing need across domains/sectors.
Data Management
Extension to Threat Management Solution
Data Architecture, Data Integration, Information Mapping, Big Data, Service Oriented Architecture

Business objectives

Demonstrate how the cyber threat information which is shared in XML format between tools and applications, can be stored and managed securely at scale

Solution

Implement a standards-compliant repository for threat information.

Build an adaptive user interface to manage semi-structured information.

Benefit

► Demonstrate the feasibility in storing and managing semi-structured threat information in the cyber security domain — an emerging field
About EY

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