WHK Horwath is a listed Australian financial services firm. The EIS division of WHK Horwath specializes in the development of financial analysis and benchmarking tools. WHK Horwath is committed to supporting XBRL as a means to improve processes internally and to deliver value-added services to clients.

WHK Horwath is interested in participating in the forthcoming workshop to further explore and identify opportunities for the use of XBRL and other semantic-based technologies to enable better business analysis. WHK Horwath is willing to share the experiences gained and demonstrate the solutions developed from our recent work in this field. The details of which are enclosed in the following paper:

A pathway to improved Fundamental Financial Analysis
  : The Singapore Experience

Introduction
In November 2007 the Accounting Corporate Regulatory Authority (ACRA), Singapore's regulator of business entities, mandated the requirement for all Singapore incorporated companies to file their financial statements in XBRL.

This relatively early adoption of XBRL was accompanied by the promise of greater transparency, more efficient reporting and the enabling of better business analytics.

In the period between November 2007 and August 2009, the focus for the Singapore reporting regulator has been to ensure the successful adoption and implementation of XBRL. With this goal in view, the attention of ACRA focused on the provision of tools to support the creation, validation and filing of XBRL documents. In addition, ACRA has directed focus towards the ongoing refinement of its taxonomy. Comparatively less effort has been directed towards the development of tools which enable the business community to access, analyze and benchmark the collected filings.

By the end of July 2009, ACRA received in excess of 65,000 XBRL filings from both private and public companies. These filings represent a rich repository of standardized financial and business information.

The journey to better business analytics
Shortly after the commencement of mandatory filing, WHK Horwath identified the imminent need for robust and scalable systems which would enable the aggregation and analysis of XBRL filings. In collaboration with ACRA, WHK Horwath sought to design and develop a solution to service this need.

The result of this joint initiative, Open Analytics, will be launched on the 23rd of September at a Business Reporting Seminar hosted by the Institute of Certified Public Accountants of Singapore (ICPAS). This
event heralds the commencement of the information dissemination thrust of the XBRL implementation in Singapore.

The goal of Open Analytics is to distill large volumes of standardized financial data into simple, interpretive visualizations and deliver the derived business intelligence to the global market place.

**About Open Analytics**
Open Analytics makes available to the public an efficient way to retrieve salient financial analysis and benchmark performance data for fundamental financial analysis, investment analysis, credit analysis or other purposes.

Target users of the Open Analytics system include accountants, advisors, investors, analysts, lenders and business management. For example:

- Singaporean businesses seeking to compare performance against peers and identify performance improvement opportunities.
- Business Advisors looking for relevant financial intelligence to enable value add services.
- Lending institutions seeking credit risk assessment data and sound credit risk assessment tools.
- Finance professionals and investors requiring tools to review fundamental financial data for listed companies.

In addition to providing access to salient financial data, Open Analytics provides decision makers with tools to enable the analysis, interpretation and benchmarking of company data. WHK Horwath has leveraged its experience in developing Analysis-One ([www.analysis-one.com](http://www.analysis-one.com)) for the development of Open Analytics.

Open Analytics aims to provide a comprehensive view of a company’s performance by reference to the performance of its industry peers. This assessment is made available for every incorporated company in Singapore that submits filings to ACRA.

**Challenges**
The development of Open Analytics presented a number of challenges. For example:

1. Advanced analytics requires supplemental data (not provided in the filings) for analysis and benchmarking segmentation. Storing and mapping supplemental data (e.g., listed company share data) incurs additional processing cost. These costs would be reduced if supplemental data was available with semantic bindings.

2. The initial filing requirements in Singapore favored ease-of-adoption and hence limited the number of mandatory data fields in preference of more optional data fields. The resulting ‘data sparsity’ in filings limits analysis capabilities.

3. To leverage the value of an XBRL data repository requires a fast and efficient way to query filings. While XML is excellent for the transmission, readability and validation of data, it is not the ideal

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1 Banks, insurance companies and finance companies whose activities are regulated by the Monetary Authority of Singapore (MAS) are not required to file their financial statements in XBRL format.
platform for querying data. Data from the instance documents, the taxonomy and linkbases need to be transferred into a relational database format without losing valuable metadata.

The development and use of XBRL analysis systems can highlight data quality issues, sparse data, validation issues, inconsistency between filings and issues or errors in filing software. This feedback will improve the quality and richness of data via improvements to taxonomies and filing software.

**XBRL is evolving everywhere...**

The development of Open Analytics is representative of WHK Horwath’s commitment to supporting XBRL as the emerging standard for the exchange of financial statement data.

Open Analytics, currently supports only the aggregation and analysis of instance documents created using the ACRA taxonomy2. The design of the system architecture allows for the support of future taxonomy revisions and also the addition of support for other taxonomies. Accordingly, in preparation for the commencement of the Australian Government’s Standard Business Reporting (SBR) program in 2010, WHK Horwath plans to add support for the SBR AU Taxonomy.

**Conclusion**

In our view, Open Analytics represents a further positive reengineering of the information value chain in Singapore. Efficient markets run on information. Making it easier to find and use information (XBRL) will make markets run more efficiently.

We believe the experience of progressive regulators such as ACRA provides many key learnings for other regulators seeking to implement standard business reporting initiatives. Namely, to realize the XBRL value proposition, program administrators must not only lead the way in encouraging companies to report in XBRL, but must also hasten the process of providing tools which enable the use and dissemination of the business information collected.

Regulators must take the lead in promoting the benefits of XBRL and other semantic-based technologies, not only for standard business reporting but also as an enabler of standardized business analysis. Such an approach will ensure that the cost incurred by preparers of XBRL filings are coupled with the benefit derived from compliance to this standard.

We anticipate that the collaborative efforts undertaken to create Open Analytics will deliver a new era of unprecedented business analysis in Singapore. We envisage that as the benefits of new transparency become evident, filers will distribute a higher value stream of information (ie more non-mandatory data) about their companies.

Outside of Singapore, we hope that the approach undertaken by ACRA provides a prominent example to other regulators... that those responsible for assembling XBRL data must proactively collaborate with those seeking to aggregate and add value to this data and so extend the information value chain.

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2 ACRA Taxonomy v1.21
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END NOTES
ABOUT WHK HORWATH
WHK Horwath is a listed Australian financial services firm. The EIS division of WHK Horwath specializes in the development of financial analysis tools, such as (www.analysis-one.com). WHK Horwath is the member firm representing Crowe Horwath International throughout Australia and New Zealand. As one of the largest global professional service organizations, Crowe Horwath International has close to 140 independent accounting and management consulting member firms operating from over 465 offices around the world. For further information about WHK Horwath refer to www.horwath.com.

ABOUT XBRL
The eXtensible Business Reporting Language (XBRL) is a freely available, global, open standards driven data description language for the electronic communication of business and financial information. For further information about XBRL refer to www.xbrl.org.au/

ABOUT OPEN ANALYTICS
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