

Consultant Resume

Howard Ong



Current Position Principal Consultant

Qualifications Bachelor of Business (Information Systems) (First Class Honours), Curtin Univ, 1990
Bachelor of Business (Information Processing) (Distinction), Curtin Univ, 1989

Employment History	<u>Company</u>	<u>Period</u>	<u>Position</u>
	Aurora Consulting	Sep 1997 - Present	Principal Consultant
	Oracle Corporation	Nov 1994 - Sep 1997	Senior Consultant
	CWT Distribution, Singapore	Feb 1993 - Oct 1994	Systems Analyst
	Ministry Of Health, Singapore	Feb 1991 - Jan 1993	Systems Analyst

Skills & Competencies In his many years of consulting experience, Howard has developed and maintained Business Intelligence and E-Business applications for many government and private-sector organisations. Howard has assumed a wide variety of project roles such as Project Manager, BI Architect, Business Analyst, System Designer and Technical Leader. The consulting services he rendered include Business Analysis, BI and Data Warehouse development, E-Business development, database design, OLAP design and database administration.

Howard possesses excellent presentation skills and has often presented papers in international and regional events such as Oracle Open World and the Oracle User Group Conferences. Howard's range of business and technical skills include -

- Project Management
- Business Analysis
- System Architecture
- Data Warehouse & Structured Development Methodology
- Business Intelligence
- Oracle Databases (with DBA skills)
- Microsoft SQLServer
- Oracle Designer
- Oracle Forms & Reports
- Oracle Content Management SDK
- Oracle Express
- Oracle JDeveloper, NetBeans (Java IDE)
- Oracle Application Server
- Oracle Portal
- Oracle BPEL Process Manager
- JSPs, Servlets, J2EE
- Apache HTTP Server
- Apache Tomcat Application Server
- CVS (Source Code Control software)
- Ant (J2EE Build Tool)
- Cognos PowerPlay
- Cognos Impromptu
- Cognos Report Studio
- Cognos Query Studio
- Cognos Framework Manager

Past & Present Projects

Department of Education & Training **Corporate Data Warehouse Support & Development**

First established in 1997, the Corporate Data Warehouse Infrastructure has evolved over the years into a state-of-the-art Data Warehouse environment, supporting a number of mission-critical applications. These include:

- Education Statistics (EdStat) Enquiry System
- School Online
- Finance Data Mart
- Accommodation Register
- School Projection System
- Data Warehouse Loading Engine

Extraction, Transformation & Loading (ETL) activities are performed through Dataware, Aurora's very own ETL tool. Hosting about 800 GB of data, the Data Warehouse supports some 500 intranet users and records an average of 300,000 hits per month - more than half of which originates from the Internet. In delivering its essential services, the Data Warehouse employs a number of cutting edge technologies.

Howard is the original architect of the Data Warehouse and has played an integral role in its development and evolution over the years. Currently, Howard assumes the role Project Manager and the ongoing support and enhancement of the Data Warehouse.

Role : Project Manager, Data Warehouse Consultant, BI Architect, Business Analyst, System Analyst, System Designer, Data Modeller, System Integrator.

Duration : Nov 1997 - Present

Environment : Windows 2003 Server, Oracle 10g Databases, Oracle9i Application Server, PLSQL, Oracle Financials, Peoplesoft HRMIS, Apache Tomcat, Java Servlets, Java Server Pages (JSPs), Oracle Forms, Oracle Reports, Oracle Express, Oracle Designer, Cognos Impromptu, Cognos Powerplay, Cognos Upfront.

Budget Reporting System

Part of the Corporate Data Warehouse, the Budget Reporting System provides an integrated reporting environment by drawing together data from the Oracle Financials Application and Peoplesoft Human Resource Application. A customised reporting front-end application is developed with Oracle PLSQL Web Toolkit. Cognos Powerplay is used to provide OLAP reports for analysis purposes.

The ETL processes entail complex data integration logic, which required a 3-way mapping among Oracle Financial GL account codes, Peoplesoft department codes and school codes from the School Directory application.

A mission-critical application, the application is used the Finance Directorate

for formulating and adjustment the budget allocation of about 2000 cost centres. Cost Centre managers use the application for budget tracking, reporting and adjustment purposes.

Howard performs business and system analysis duties when the application was first developed. Current, Howard presides over this project as the Project Manager, System Analyst and Technical Lead.

Role : Data Warehouse Consultant, Project Manager, BI Architect, Business Analyst, System Analyst and Designer.

Duration : Oct 1999 - Sep 2001

Environment : Windows 2003 Server, Oracle 10g Server, ETL, BI Reporting, PL/SQL, Oracle Designer, Oracle 9i Application Server, Cognos Powerplay, Cognos Impromptu, Oracle Financials, Peoplesoft HRMIS, Java Servlets, Java Server Pages (JSP), PLSQL Web Toolkit, Tomcat.

Department of the Attorney General

Corporate Data Warehouse

The Corporate Data Warehouse is a one-stop decision support tool for DotAG’s knowledge workers. Under the guidance of Howard, Aurora evolved the DotAG Corporate Data Warehouse from an out-dated, non-SOE compliant architecture into a state of the art information repository for supporting strategic decision making. Adopting a phased-implementation approach, the Aurora team has so far implemented several critical subject areas into the Warehouse repository. These includes :

- Prison Management
- Community Correction
- Fine Enforcement
- Finance
- Human Resource
- Courts (including Lower Courts, Higher Courts and Civil Courts)

The Data Warehouse has grown steadily through the years. To date, it holds more than 350GB of data, spread across over 500 tables; and is accessed by some 400 users using mostly Cognos BI products. Plans are constantly being made to further extend the information content of the Data Warehouse. The addition of each new subject area is managed through a Warehouse Development Methodology which emphasises on the key tasks of Requirement Analysis, Data Transformation, Data Publication and Verification. The methodology is aided by the implementation of Dataware, Aurora’s Extraction, Transformation and Loading (ETL) tool. Cognos suite of Business Intelligence tools are used to deliver the information to the users in a user-friendly web-enabled portal.

Howard was responsible for the initial set up of the Data Warehouse architecture; and on-going System Analysis work. In addition, he also fulfil the role of a Service Delivery Manager.

Role : Project Manager, Service Delivery Manager, BI Architect, BI Consultant, Data Warehouse Consultant, Business Analyst, System Analyst, System Designer, Data Modeller, System

Integrator.

Duration : Jun 2000 – Present

Environment: Windows 2003 Server, 64-bit Oracle 10g Databases, Oracle Designer, PL/SQL, Data Warehouse, Aurora Dataware ETL Tool, Microsoft ASP, SQLServer 2005, SSIS, BI Reporting, Cognos Analysis Studio/Powerplay, Cognos Report Studio, Cognos Query Studio, Impromptu, Cognos Access Manager

Department of Mines & Petroleum

Finance Data Mart

Phase 1 of this project brings together General Ledger, Purchase Order and Accounts Payable data from the Oracle Financial Application; and Staff salary data from the Clockwork Human Resource System. Once cleansed, validated and transformed, the data are loaded into an integrated Data Warehouse. Enabled with web-based reports, complete with drill-down capabilities, the Data Warehouse provides managers with an one-stop non-stop reporting environment.

In Phase 2 of the project, the Data Warehouse is extended to include productivity performance indicators. Through a web interface, Divisional Managers upload regular productivity data to the Data Warehouse, where they are combined with Financial data. The system produces numerous analysis reports on organisational productivity, which serves vital decision making processes such as the annual salary review.

Over the years, Aurora performed a number of upgrades on the application. Some of the more significant upgrade projects are :

- 2001 : Realign the Data Mart to Oracle Financials Rel 11i
- 2001 : Realign the Data Mart from Clockwork to Alesco HR Information System
- 2002 : Upgrade from Oracle Application Server (OAS) to the more-scalable Apache-based Oracle Application Server (OracleAS)
- 2004 : Upgrade of Oracle Financials Rel 11.5.9

Role : Data Warehouse Consultant, BI Architect, Project Manager, Business Analyst, System Analyst and Designer.

Duration : Jan 2000 – Oct 2002
Dec 2002 – May 2004 (intermittent)

Environment : Windows 2003 Server, Oracle 9i Server, ETL, BI Reporting, PL/SQL, Oracle Designer, Oracle9i Internet Application Server, Oracle Forms, Oracle Reports, Oracle Financials, Alesco HRMIS.

APA Financial Services Ltd

Portfolio And Asset Management System (PAMS)

The Portfolio Administration & Management System (PAMS) provides an innovation way of managing client investment portfolios. Serving financial advisers, accountants and investors, PAMS provides highly sophisticated accounting, management and taxation reports. In addition, the system also provides online query capabilities, charting, electronic download facilities and interface to popular third party applications. Delivering via the Internet, it is web-enabled via Java Servlets, Java Server Pages (JSPs), Oracle Reports and open-sourced products.

Originally developed with Oracle SQL*Forms 3.0 and Oracle Reportwriter, the system was re-engineered, enhanced and redeveloped over the years. The front-end Client Portal is a web-based E-Business and Query facility, developed in J2EE. The Back Office module currently runs on Oracle Forms and Oracle Reports. Plans are being made to convert it into a J2EE web-based module. Oracle Designer was utilised extensively for all data modelling work.

The application is being constantly enhanced as the company enhances its product offerings. At the same time, the application is also reengineered into an N-Tier Service Oriented Architecture (SOA), utilising cutting-edge J2EE technology such as Web Services, database connection pooling, LDAP authentication, Object-Relational Mapping tool, etc. A phased implementation is being adopted, which is expected to span 18 to 24 months.

A key component of the application is its business reporting platform. A Business Intelligence solution, the reporting database is populated on a daily basis with snapshots of the operational database. The reports show the point-in-time position of a client's portfolio, complete with trend information.

Howard assumes Quality Assurance and Service Delivery Management duties on this project. The duties undertaken by Howard and the team include :

- Analysis and functional specification
- Automation, rationalising and streamlining of business processes
- Database design in Oracle Designer
- Development of web screens
- Report development in Oracle Reports
- Development of interfaces with external organisations and third-party software.
- Installation and administration of an Oracle Application Server cluster
- Installation and administration of an Oracle Database Server cluster
- Database administration

Role : Project Manager, Service Delivery Manager, System Architect.

Duration : Mar 2005 – November 2008

Environment : Windows Server 2003, Business Intelligence, Oracle 8i/10g Database, PLSQL, JSP, Servlet, Struts, XML Parser, LDAP, SOA, Web Services, EAI technologies, Oracle Forms, Oracle Reports, Oracle Designer, Netbeans, Subversion, Jakarta Ant, Oracle JDeveloper, Microsoft IIS, C#.NET and Tomcat

Department of Agriculture & Food

AgriFood Infonet

AgriFood Infonet is a Data Warehouse solution, offering a one-stop Portal whereby a wide variety of Agricultural statistics and information is made available to internal and external users. It is the result of merging 8 legacy databases into a single coherent Oracle database, web-enabled through Oracle Portal.

The system consists of the following key components :

- A Market Intelligence repository where publications are electronically stored and indexed

- An Electronic Thesaurus by which documents in the document repository can be searched.
- Several statistical databases, holding information on Agriculture exports, imports and productions. The source of this information are : the Trade Database, Production Database and Livestock Price Database.
- A Java-base report and charting engine, by which information from the statistical database are published.
- A directory of Business Contacts in the Agriculture sector.
- A web-based mail system, integrated to other components such as the Business Contacts directory.
- A Meta Data Repository, storing information such as explanatory notes to data items, system messages, keyword list whereby information may be queried, etc.
- A security system whereby different user classes (administrator, Departmental staff and general public) are granted different level of accesses to various system components.
- A Portal front-end to act as a gateway to all the above-mentioned components.

A moderately large system, the system consist s of some 50 web-based reports and charts, 90 web-based data entry screens, and 90 database tables. Aurora's Portlet and Reporting framework was deployed to promote productivity and facilitate future extensions and enhancements.

Role : Project Manager, Business Analyst, System Analyst, System Designer, Data Modeller.

Duration : Aug 2002 - Nov 2003 (Phase 1)
Jul 2004 - Mar 2005 (Phase 2)
Apr 2005 - Nov 2005 (Phase 3)
May 2006 - Mar 2008 (Phase 4)

Environment : Windows 2000, Oracle 9i Server, Oracle Portal, Portlet Development Kit (PDK), ETL, BI Reporting, Oracle9i Application Server (9iAS), Oracle Container For J2EE (OC4J), Oracle Chart Builder, Netbeans, CVS, Jakarta Ant, Java Servlets, Java Server Pages (JSP), Enterprise Architect, Oracle Designer.

Wooldesk Portal

The Wool Service Desk, a Data Warehouse solution, is responsible for making available wool-related information through the deployment of web-based information solutions. To this end, Howard and his team has helped the Department develop and maintain the following Portals :

- A Price Benchmark Portlets (PBP) charts the historic selling price of wool lots. It provides the farmer with a mean to compare his/her prices against others.
- The Wool Quality Portlets (WQP) charts the quality and quantity of wool sold over time. It serves wool buyers, producers and researchers.
- The Mill Specifications Portlets (MSP) plots average price and supply charts for wool offered at auction. A Chinese version of this Portal was also

developed, targeted at users in China.

- The Market Indicators Portlets (MIP) plots a chart of Australian Wool Exchange market indicators and micron price guides.

The Wooldesk Portal is a Data Warehouse-like system. Sales data on wool are loaded onto an Oracle database on a weekly basis. Once loaded, post-load routines are invoked to cleanse the data and pre-calculate measure values. Calculations include percentiles and complex derivation formulae. Oracle Analytical functions were used for some of these calculations, for example, percentiles. The charts are rendered using Oracle Chart Builder and RChart, and deployed through Oracle Portal via Java Portlet Development Kit (JPDK).

Since its initial development, the Aurora team has completed a number of significant enhancements to the application – including a Chinese version of the Portal, a custom-built security module and a number of support portlets. Through the multi-level security module, users with higher access levels are provided with additional query options and information. In addition to the core information Portlets, a number of support Portlets were developed. These are :

- User Registration & Authentication Portlet
- Help File Portlet
- Wool Glossary Portlet
- Wool Region Portlet
- User Administration Portlet

Role : Project Manager, Business Analyst, System Analyst, System Designer, Data Modeller

Duration : Mar 2003 – Feb 2004 (Phase 3)
Feb 2004 – Nov 2004 (Phase 4)
Dec 2004 – Feb 2008 (General Maintenance)

Environment : Windows 2000, Oracle9i Server, ETL, BI Reporting, Oracle9i Application Server, Oracle Container For J2EE (OC4J), Java Servlets, Java Server Pages (JSPs), Oracle Portal, Java Portlet Development Kit (JPDK), Oracle Chart Builder, RChart, Netbeans, CVS, Ant, PL/SQL, Oracle Designer, Enterprise Architect.