

January 2017

646/1 M. 12 B. Ahngnam T. Wangchomphu A. Muoung C. Phetchabun 67210 Thailand +66 (0)87 888-0876

e-mail: BSC@BillSmart.com www.BillSmart.com/BSC

Professional Biography

Bill Smart is an Independent Consultant and a Principal at Bill Smart Consulting (BSC). He currently focuses his efforts in the areas of education and business consulting for database Customer Relationship Management and Business Intelligence. His expertise spans the areas of Strategic Planning, Business and Information Discovery, Data Architecture and Modeling, Systems Definition and Design, Project Management and Implementation in the related areas of Data Warehouse, Executive Information Systems and Knowledge Discovery/Data Mining.

Experience Snapshot

Since February 2015 I have participated in an in-depth analysis of the ongoing implementation of a Teradata data warehouse. The dual goals of this effort are to optimize the implementation for the customer, Globe Telecommunications in Manila, Philippines; and to help develop a thorough, dependable and repeatable data warehouse practice for Amdocs.

Beginning February 2012 Mr. Smart was engaged by Teradata Canada to build a Logical Data Model (LDM) for their customer JEVCO - an insurance company offering coverage for Personal and Commercial Vehicles, Commercial Property and Commercial Surety. He finished the LDM at the end of May on schedule.

From December 2010 through January 2011 Mr. Smart is helping analyze and develop a Business Requirements, Functional Requirements and Functional Specifications process for an interface to a Basel II Calculation and Reporting Solution (BCRS) from an expanded Teradata Data Warehouse for **Standard Chartered First Bank** in Seoul, Korea.

In July of 2010 he joined a consortium of IT companies to respond to a Request for Proposal (RFP) from Telekom Malaysia in Kuala Lumpur, Malaysia for a Marketing Analytical CRM System and to conduct and present a Proof-of-Concept (POC) exercise on-site in Kuala Lumpur. The RFP included a Marketing Data Mart, Analytical CRM Tool (data mining tool), Online Reporting Tool and Campaign Consulting. The members of this consortium are: Teliti Computers, Sdn Berhad (Kuala Lumpur) – IT Services company and principal partner; Cornerstone-Asia (Singapore) – an IT services company specializing in Business Intelligence (BI) and Business Analytics (BA); KXEN (San Francisco) – a data mining automation company; and SAP Business Objects (Waldorf, Germany) – a data transformation and online analytic and reporting tool. Mr. Smart acted the Subject Matter Expert (SME) of the consortium for the RFP and POC. After a lengthy analysis process this consortium was awarded the contract in June 2011.

From October 2007 through February 2008 Mr. Smart participated in the development of a Teradata enterprise-wide data warehouse being built for **Siam Commercial Bank**, a large full service bank in



January 2017

Professional Biography

Bangkok, Thailand. His primary responsibilities on this project were to oversee deployment of the data warehouse, and the design, development and implementation of the historical data for the new data warehouse. He was also involved in lending support to the overall data warehouse architecture, and the customization of the Teradata Financial Services Logical Data Model for use by SCB.

From March through August 2007 he assumed the dual role of project manage and solutions architect on a new NCR/Teradata data warehouse for **Total Access Communication Public Company Limited** (**DTAC**), a large mobile phone company in Bangkok, Thailand. The new data warehouse was to replace an existing reporting data mart, and add new business functionality. The first phase of this implementation focused on information supporting analysis of Network Management, Interconnect Traffic, Product Management, Financial Analysis, Fraud Analysis, Sales Analysis and Customer Relationship Management.

From July 2006 through January 2007 he acted as project management of the enhancement of a large NCR/Teradata data warehouse for **Bharti Tele-Ventures / Airtel**, a large mobile phone company in New Delhi, India. The enhancement involved the integration of new lines-of-business coming from several new source systems. The project also included using the data warehouse to develop multiple predicative models to assist Bharti manage its swiftly growing telecommunications business.

Mid-May through June 2006 he participated the development of an enterprise-wide logical data model and data dictionary for **DBS Bank of Singapore**. The resultant model was a common model mapping the data elements between DBS's legacy systems, their Enterprise Management Systems (EMS - an integration layer) and Finacle, their new core banking system which was then still under development.

Beginning April of 2005 Mr. Smart divided his time between two large phone companies in India: **Bharti Tele-Ventures / Airtel** in Delhi and **Hutchinson Telecommunications / Orange** in Mumbai. My activities included gathering requirements and developing designs for a package of descriptive and predictive models including churn, segmentation and cross-sell/up-sell, data warehouse optimization and project management.

From late-August to early-December 2004 he assisted in developing a logical data model for **Commonwealth Bank of Australia** for a project encompassing aspects of Wealth Management, Margin Lending, Investments and both Life and General Insurance areas. During that period he also performed a strategic analysis of their Data Warehouse and development process, and delivered recommendations for both immediate and long-range process improvements.

During July and early August 2004 Mr. Smart assisted in a Data Warehouse Assessment for **Hong Leong Credit** in Kuala Lumpur, Malaysia; a holding company which is comprised of **Hong Leong Bank**, **Hong Leong Securities** and **Hong Leong Assurance Berhad**. During the Data Warehouse Assessment he focused on the technical aspects of enhancing the existing data warehouse to provide a more comprehensive, enterprise-wide view of the customer. He also performed analysis and delivered



January 2017

Professional Biography

recommendations for optimizing the daily data warehouse maintenance processes of Extract, Transformation and Load (ETP) processes to provide the business with a Day+1 data currency.

In late January 2003 Bill began working for **T.N. Information Systems** in Bangkok, Thailand on a project for **Krung Thai Bank**. This large Bangkok bank is migrating its entire core banking system from a legacy platform to a client/server system called **Profile CBS**. Profile CBS was developed by **Sanchez**, a U.S. company whose headquarters are in Malvern, PA. Mr. Smart is designing and leading the efforts on two database-related tasks in association with the migration: **data cleansing** of the existing data, and **data conversion** to meet the new system's requirements.

November and December 2000 Mr. Smart helped develop a **Logical Data Model** for Fubon Group in Taipei, Taiwan. Fubon Group is a large holding company which owns subsidiary companies spanning the financial services industry: retail banking, commercial banking, insurance and investments. The logical data model was to be the basis to build a Marketing Customer Information File (Marketing-focused Customer-Oriented Data Warehouse) which would include data across all businesses.

January to March 2000 Mr. Smart performed an **Information Discovery** and developed a **Logical Data Model** in support of a marketing-oriented Data Warehouse for **MultiChoice** - a satellite pay-TV company based in Johannesburg, South Africa. This assignment had the unique challenge of synchronizing the LDM with a sister company **M-Web** - an Internet Service Provider based in Cape Town, South Africa. Bill has returned to MultiChoice in May and July to build a heuristic **Customer Valuation Model**, and remains involved with the MultiChoice Data Warehouse implementation and associated application development on an ad-hoc consulting basis.

From June through December 1999 Bill performed a **Business and Information Discovery** for **Telefónica de Argentina** to extend the capabilities of their existing Residential Customer-focused Data Warehouse to include their other businesses: Public Telephone, Small and Large Business, Wireless, Internet, Data Network, Yellow Pages and Equipment Sales. He also modified the **Logical Data Model** to incorporate the information needed to support these additional businesses.

From September of 1998 through April of 1999 he was **Technical Lead** on a successful Customer-Oriented Data Warehouse implementation for a **BCP Telecomunicações**, a brand new cellular phone company in Brazil. His responsibilities included **Business and Information Discovery, Data Architecture and Modeling, Systems Architecture and Design, Technical Project Lead and Project Management of the actual implementation.**

Through August of 1998 Bill Smart was **Director of Knowledge Discovery** for NCR's **Human Interface Technology Center (HITC)** in Atlanta, Georgia. His department was responsible for all HITC Knowledge Discovery research, focusing on research centered around NCR's Scalable Data Warehouse. The major 1998 Applied R&D projects and activities included *Active Templates* - a comprehensive analytic model **development environment**; *Customer Interaction Mining* - focusing on **data architecture**, **data**



January 2017

Professional Biography

modeling, and knowledge discovery in merchant/consumer interaction especially in World Wide Webbased electronic commerce; and *KnowledgeSTART* - a program offering an inexpensive, fixed-fee, short duration analytic modeling service for all industry areas.

Through September of 1997 Mr. Smart was **Head of Research - Machine Learning and Artificial Intelligence** for **NCR Corporation**'s Financial Systems Group. He directed research in NCR's **Financial Services Knowledge Lab** in London, England in the areas of Computer Knowledge Discovery, which includes the disciplines of **Data Architecture, Data Modeling, Data Analysis, Data Mining, Machine Learning** and **Artificial Intelligence**. During that period Mr. Smart was responsible for three research projects: *Data to Knowledge* (**data mining research with a focus on use of parallel genetic algorithms),** *Intelligent Agents* **and** *Electronic Cash***.**

Through March of 1997 Mr. Smart was **Chief Information Officer** for **Integrated HealthCare, Inc (IHC)**. IHC was a **start-up c**ompany providing **systems integration services** to automate medical clinics, and was developing **automated fraud detection services** for medical entitlement programs such as Social Security Disability and Workers' Compensation. The clinic automation integration featured a true client/server environment based on third party applications and Microsoft Back Office. In conjunction with the clinic automation efforts Mr. Smart actively participated in the development of emerging **ANSI Standards for Electronic Data Interchange in Healthcare Environments (HL7)** with particular focus on **Object Brokering**. IHC's automated fraud detection was based on proprietary rules implemented through an **expert system**, and **automated rule discovery** using data mining techniques including **rule induction**, **neuro-fuzzy rule induction and neural networks**.

Through June of 1996 Mr. Smart was Chief Technology Officer in NCR's (formally AT&T/Global Information Solutions) Parallel Systems Division. He was responsible for monitoring, identifying and driving the integration of new technologies into NCR's products and services related to data warehousing. His responsibilities spanned the entire scope of Data Warehousing technologies including business discovery, information discovery, data architecture, logical and physical database design, data transformation, relational database management systems and supporting utilities, access tools including SQL generators, and various Online Analytical Processing (OLAP) applications. During this time, however, Mr. Smart focused his efforts especially on analytic model development environments for NCR's Data Warehouse program; and initiated and was chief strategist for NCR's Knowledge Discovery/Data Mining Program.

Through January of 1995 Mr. Smart was **Vice President** in **Bank of America**'s Advanced Technology Systems Department and Systems Manager of the Artificial Intelligence Engineering unit which he started for Bank of America in November, 1992. This group acted as a focal point and advocate for the research, development and implementation of **data models**, **expert systems**, **neural networks and other artificial intelligence technologies and supporting infrastructures** throughout Bank of America.



January 2017

Professional Biography

From July, 1993 through October, 1994 Mr. Smart was the representative from Bank of America to the **Financial Services Technology Consortium (FSTC)**. FSTC is made up of leading U. S. banks, National Laboratories of the U. S. Department of Energy, the U. S. Department of Treasury and a number of U. S. universities. FSTC sponsors non-competitive collaborative research and development on inter-bank technical projects affecting the entire financial services industry in the U. S. - with particular emphasis on projects involving the development of the **National Information Infrastructure (NII)** and **High Speed Computing and Communications Initiative (HPCCI)**. FSTC's research projects were:

- Inter-bank Check Imaging
- Electronic Commerce Payments
- Electronic Check (SmartCard technology)
- Detection and Management.
- Fraud Detection and Management Project (Project Director)

Synopsis

In addition to his experience in advanced technology integration, Mr. Smart has over thirty-four years of data processing experience spanning seven years in the airline industry, nine years in retail banking, five in telecommunications, one in healthcare insurance, and three with NCR devoted to data warehouse data architecture, data modeling and data analysis. This includes five years of mainframe application development, five years of mainframe systems programming, four years of local and wide area network telecommunications design, eight years of Al and Data Mining application development combined with over twenty-five years of technical management experience.

Education and Personal Achievements

Mr. Smart holds an Associate of Arts (AA), a Bachelor of Science - Computer Science and Engineering (BS-CSE), and a Master's in Business Administration (MBA) Degrees.

He is a former Advisory Editor for Bank Technology News, has been an active consultant on fraud detection to both domestic and international banks, featured speaker at domestic and international conferences, and a guest lecturer at U.S. colleges, universities, business seminars and conferences on the topic of business usage of data warehousing, artificial intelligence, knowledge discovery and data mining. He is a former Member of the Board of Directors of Integrated HealthCare, Inc. and currently sits on the Board of Directors of Access TradeOne, Inc., an Internet-based securities trading company.

Novelist

Mr. Smart has authored three books:

- Cap'n Billy: An Alabama Odyssey, a fictionalized memoir published in August, 2014
- Kepler-438b, a science fiction novel published in March, 2015
- Jihadi: Path to Heaven, an historical novel published in December, 2015

* * * * *