**Manabendra Bandopadhyay**

**105 Canter Ct., Roswell, GA 30076**

**M: 770.289.7222**

**Email: manabando@gmail.com / mbando1@bellsouth.net**

**Skype: mana.bando007**

**LinkedIn:** [**www.linkedin.com/in/mana-bando-51a36217/**](http://www.linkedin.com/in/mana-bando-51a36217/)

**Executive summary**

* **Leadership:** Worked with numerous C-level business leaders to identify new opportunity, new technology, better way to do thing. Lead teams to implement mission critical application.
* **Enterprise Data and Solution Architect / Application Integrator**: Eighteen plus years’ experience in leading team to provide enterprise solution and data strategy in data warehouse; Complex Data Modeling; System integration; Business intelligence; Marketing Data segmentation and Data mining; Data Analytics; Data Lake design, etc.
* **MDM and PIM Analyst / Architect / Data Governor**: 13+ years in implementing complex Financial, Reference, Asset, Customer, Product, Telecommunication, Insurance, Marketing, and Health care application using Informatica MDM. 3+ years as solution architect using STIBO System STEP Trailblazer tool in Manufacturing, Marketing, and Retail verticals. 1+ years with Customer and Asset data center using Semarchy.
* **Business Analytic / Data Visualization**: Seven plus years in developing Decision Support System (DSS); designing statistical modeling for Pattern matching, Forecasting, Predictive analytics, EOQ measurement, etc.

**Hands on skills / adaptability**

* Being a data architect, and leader always worked with smart people, innovative technologies, and forward-looking methodologies. Being a lifelong learner, always ready to learn and adapt a new way to think and accomplish.

**Education**

* TOGAF trained, and practitioner, 2018
* MS (Software Engineering): Attended Rochester Institute of Technology, Rochester, NY, 1991
* MBA (Management Information System): University of Houston, Houston, Texas, 1989
* BBA, MBA (Finance and Accounting): Memorial University of Newfoundland, St. John’s, Canada, 1986
* Certified Cost and Management Accountant: Institute of Cost and Management Accountant (ICMA), 1984

Career summary

**Industry vertical experience (in years)**

Healthcare (4+ yrs.), Managed care (2+ yrs.), Life science (2+ yrs.), Telecom (12+ yrs.), Telematics (5 yrs.), Finance (5 yrs.), Marketing (5+ yrs.), Manufacturing (3+ yrs.), Entertainment (1 yrs.), Security (2+ yrs.)

**Tech skills (in years)**

* TOGAF (6+ yrs.) | Zachman (1+ yrs.) | Data modeling (25+ yrs.) | CDM (4+ yrs.)
* Agile methodology (7+ yrs.) | SDLC methodology (17+ yrs.)
* EDW (25 yrs.| ETL / ELT (14+ yrs.) | Analytics (10 yrs.)
* Big data (2+ yrs.)
* Data Governance (8+ yrs.): Data Quality / Data lineage / Data harmonization / Automation
* PIM SME (5+ years): P360 / Multi domain
* MDM SME (13+ yrs.): Customer / Party (C360), Product, Reference (R360), Sales, Asset, Finance (F360)
* MDM / Data Steward (14+ yrs.): Customer / Party (C360), Product (P360), Reference (R360),
* PaaS (3+ yrs.) | SaaS (3+ yrs.)
* Azure data warehouse / data lake(1+ yr.) | AWS data warehouse (2+ yr.) | Snowflake (<1 yr)
* DevOps (CI/CD) (1+ yrs.) / ActiveVOS (1+ yrs.)

**Software skills**

|  |  |
| --- | --- |
| **Development** | **Software and tools** |
| **BI Data Analytic / Statistical Analysis** | SPSS, SAS, Minitab, MicroStrategy, SSAS, R, Adobe, Tableau, Power BI, Data Steward. |
| **Cloud data architect / Data Governance** | Oracle marketing cloud, Oracle golden gate, Azure DW and Data Lake, AWS, Verizon, Informatica, cloud data security, MS Purview. |
| **Database** | SYBASE, ORACLE, DB2, MSSQL (2008, 2012, 2016), Access, PostgreSQL, MySQL, Cassandra, TERADATA, Siebel CRM (Oracle), Azure SQL Datawarehouse, Azure Synapse. |
| **Data warehouse / Data Lake / ETL / ELT / Rest API** | INFORMATICA (PowerCenter, IDD, IDQ, MDM Hub), AZURE (Data Lake, EDW), MS BI stack (SSIS, SSAS, SSRS, MDS). |
| **Data / Enterprise architecture modeling** | ERwin, ER/Studio, Visio, SSMS (SQL Server Mngt Studio), ArchiMate |
| **Data model style** | Entity, Syndicate, Reference, Canonical, Common Data model (CDM), Star schema, OOD, EDW, OLAP, ODS, Data vault, WMS, Logistic distribution. |
| **Master Data Management** | Informatica, Ataccama, STIBO, Master Data Service, Semarchy, MS Purview. |
| **Work / Process flow design** | Informatica, STIBO, AVOS, ERWIN, VISIO. |
| **Enterprise architect / framework** | TOGAF, Zachman, DAMA. |
| **Product Information Management (PIM)** | Informatics, STIBO, Semarchy. |
| **ERP / CRM** | Oracle ERP, Oracle Siebel CRM/Analytics, Peoplesoft. |
| **Data Architect design / Methodologies** | UML; Enterprise Datawarehouse design (Kimball, Inmon); Waterfall, OLTP, OLAP, MDM, etc.; Gap analysis; Data Lake Design, Data Lakehouse design; SDLC, Operation Data Store (ODS), Hadoop, TOGAF, SAAS, PAAS, Agile, Docker. |
| **Operating System** | Windows, UNIX, LINUX. |
| **Program Languages** | C, C++, Java, JavaScript, ASP, Shell script (k-shell, c-shell), HTML5, PERL, SQL, NOSQL, PL/SQL, XML, T-SQL, Machine Learning, NOSQL, R, Python. |
| **Project life cycle management** | MS Project; Agile and Scrum, SDLC, Waterfall, DevOps. |
| **Data visualization / report** | Crystal Report, SSRS, Power BI (Microsoft), MicroStrategy, Tableau, Synapse. |
| **Data Security and standards** | PII, PHI, GDPR, GS1, Redgate. |
| **Healthcare/Clinical standard** | ICD 9/10, HL7, RxNORM. |

Work experience

**MDI – Hickory, NC** (through nirvanatechinc.com)  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Jan, 2023 – Current**

**Business domain:** Logistics, Supply chain, Shipping, Wholesale, Retail

**Role:** Logistic automation designer, Enterprise data architect, MDM/PIM architect, Data Steward

**Responsibilities:**

* Designing and developing an automated logistic data ingestion system to master customer, vendors, and product domain into WMS and MDM ecosystem.
* The developing design will completely rewrite current system to comply with currently developing data governance policies, procedures, data quality, business rules, and infrastructure.
* The delivered process will ensure data governance, data quality, and automated data intake rules for inventory management for a Warehouse Management System (WMS).

Software/Platform: Cubiscan-Qbit-DB, Matflo, Teach-in, STIBO (PIM, Customer, Vendor)

**USAA – St. Antonio, TX** (through HCL) **\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ January, 2022 – December, 2022**

**Business domain**: Insurance (Life, P&C), Risk, Banking, Finance

**Role:** Enterprise data governance and MDM / Data quality architect / Data Steward / CDM

**Responsibilities:**

* Developed an integrated and reconciled data governance quality architecture to implement LDTI (Long Duration Targeted Improvements) by transforming all legacy Excel based actuary analysis, activities, and process of USAA

life, risk products.

* By providing data quality and data governance, this redesigned data fabric architecture will enable USAA to retires

all physically managed UDA’s (User Defined Activities) in to a cloud based common master data fabric platform of compliant data and reporting system.

* Used the HL7 standard to identify critical data element (CDE) and developed core data security standard for CDM.
* Developed statistical forecasting model to predict pattern and anomalies of data quality needed to be maintained to keep pace with long term financial improvement model.

Software / technology platform: SAS, Essbase, Moody’s Analytics - AXIS model, ArchiMate, Snowflakes, Semarchy xDM, etc.

**Digital Realty – Dallas, TX** (through nirvanatechinc.com) **January 2021 – December, 2021**

**Business domain:** Data center, Real estate, Data exchange, Hosting

**Role:** Lead MDM and enterprise architect, SME

Redesigned and enhanced the Customer, Location, Asset, and product domain for this global data center company. Besides implementing data quality, and enterprise data governance standards the recalibrated data architecture also dealt with data security, GDPR, PHI, PII, etc.

Software / technology platform: OAC (Oracle Analytic Cloud), Power BI, Semarchy xDM, SFDC

**AFLAC Insurance – Columbus, GA** (through Quantiphi, Inc.) **\_ \_\_\_\_\_\_\_\_\_ Jan, 2020 – December, 2020**

**Business domain:** Insurance(Risk, Casualty, Party, Policy, Claim), Finance

**Role:** Enterprise MDM architect / data governor (Data quality, Data lineage, Data cataloging) / Data Steward

**Responsibilities:**

* To comply with Sarbanes-Oxley requirements, as a part of the data governance team, lead a data lineage and data quality initiative to assess and implemented an end to end enterprise data model, data lineage, data curation, data governance, and data visualization solution.
* The designed solution integrated legacy data to current master data repository to measure the lineage of all golden records from the sources, risk assessment, and data dispersion from the reporting to source. Designed and delivered infrastructure was a highly integrated data quality infrastructure made to support on-prem / cloud based applications for party (patient) domain enriched with clinical services, life science, online medical imaging, pharmacy, Laboratory, blood bank, order, payment, case management data.
* A data governance strategies, policies, and practices were implemented to ingest data via various reusable business rules and data quality filters.
* Clinical hierarchy associated with the payment system restructure by the ICD 9/10 standards and taxonomy.

Software platform: Informatica (MDM, IDD, IDQ, Metadata Manager), DB2, Oracle Fusion, SQL Server, Azure Data Warehouse, Azure synapse, Docker, ERWIN, ArchiMate, Power BI, Tableau, DevOps, Informatica P260.

**Hasbro Corporation – Pawtucket, RI** (through nirvanatechinc.com)  **\_\_\_\_\_\_\_\_\_\_ Jan, 2019 – Dec, 2019**

**Business domain:** Retail, Manufacturing, Entertainment, Marketing, Supply chain, Logistics

**Role:** Lead PIM / Data governance architecture / Data Steward

**Responsibilities:**

* Fabricated an innovative cloud based syndicated data model for Hasbro corporation, a truly multi-language, multi-currency, multi-cultural organization (they have presence in 120 countries in the world).
* Building this system achieved by laying down a meticulous data governance strategy for manufacturing and marketing system; product data management framework, and data governance to implement MDM/PIM (Master Data management / Product Information Management) solution globally.
* Delivered syndicated data model; business rules, data governance standards, and procedures, etc. Build architecture and methodologies were TOGAF process complaint for Common Data Model (CDM).
* The proposed hierarchy was built complying with the external and internal definition of the product taxonomy.
* Tool evaluations comprised of Informatica (MDM/PIM), STIBO (PIM), and Ataccama (Data profiler and Data catalog).

Software platform: Informatica (Power center, IDQ, Product 360), DB2, Oracle, SSIS, SQL Server, Azure Cloud, ERWIN, Power BI.

**Verizon Connect, Atlanta, GA**\_(permanent employee)\_\_ **\_\_\_\_ May, 2014 – Dec, 2018**

**Business domain:** Retail, Manufacturing, Inventory, Telematics, Advanced Marketing, Finance

**Role:** Enterprise data architect / Lead MDM / PIM Architect / Data Steward

**Responsibilities:**

* Lead, architect and integrate the initiative to run marketing campaign for Verizon Auto manufactured products.
* During development phase managed EDM Council (Enterprise Data Management).
* Daily task consisted running data profiling, evaluate data lineage, designing data survivorship golden rules, lead data governorship, support users via data stewardship, guide data integration, monitor MDM data HUB performance and guide troubleshooting efforts.
* Created sample Azure Data Lake architecture to run data quality prototype rules and visualization application. Also worked as Informatica MDM to SAP MDG application migration analyst.
* Lead contributor in designing syndicated data model to launch AWS cloud-based secured marketing campaign automation.
* Build SAAS platform to integrate and implemented special data quality measures to ingest and integrate Manufactured system, Siebel CRM (Oracle), Oracle Fusion, *Salesforce*, Oracle Eloqua, and ADOBE Campaign Manager data in marketing and forecasting model for B2B, and B2C data segmentation, predictive analysis, data governance, cloud based data security operations.
* Furthermore, for enterprise data governance MDM initiatives was integrated with secured cloud operation in compliance with GDPR and PII standards.
* Lead onshore and offshore team to implement MDM ecosystem for advanced marketing automation and campaign. Principal data governor. Principal Informatica MDM architect teamed up with vendor (Deloitte) to migrate some Informatica MDM domain to SAP-MDG platform.
* Developed a brand new MDM ecosystem using the TOGAF principles.
* This comprised, developing baseline business architecture, data vision, delivery architecture, implementation governance, architect change management, defining requirement management, shaping strategic data governance, and delivering data quality artifacts.
* All sourced, in-between, extracted data treated by MDM ecology followed the principles of TOGAF guidelines, and Zachman framework.
* Guided and designed MDM tool selection process by developing protype master Party (Customer) domain. The candidate tools were, STIBO, Informatica, Ataccama, Oracle CDM, Oracle Fusion, CDM

Software platform: Informatica MDM (Customer and Product), SAP-MDG, Teradata, Adobe campaign manager, Eloqua, Salesforce, Oracle marketing cloud, Oracle Fusion, Siebel, Cassandra, SSIS, SQL Server, Azure Data Lake, AWS, Erwin, Power BI, Tableau, SAS, R, Ataccama

**STIBO System****, Atlanta, GA**\_(permanent employee)\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Jan, 2012 – March, 2014**

**Business domain:** Retail, Finance, Manufacturing, Healthcare

**Role:** Delivery lead architect, PIM solution architect / Data Steward

**Responsibilities:**

Architect PIM (Product Information Management) solution for multiple US (e.g., Staples, Kimberly Clerk, Grainger) and Canadian (e.g., Spaenaur, Walmart Canada) retail businesses.

**Macy’s Technologies, Atlanta, GA** **(**through Matrix Resources**) \_\_\_\_\_ Feb, 2010 – Jan, 2012**

**Business domain:** Retail, Marketing, Franchise, Inventory

**Role:** Enterprise data warehouse, Solution architect, Data Steward

**Responsibilities:**

Designed and developed ‘order fulfillment and predictive analytic’ apps for retail, and sales forecasting. It included modeling, data analysis, data architecture, statistical data mining, sales forecasting, and data visualization.

**John Hancock Insurance, Boston, MA** (through Indotronix) **\_\_\_\_\_\_\_\_\_\_\_\_\_ Jan, 2008 – Jan, 2010**

**Business domain:** Healthcare, Medication management, Risk, Managed care, Patientcare, Payment system, Finance

**Role:** Principal data architect / Analyst / Data steward

**Responsibilities:**

Lead a team to develop a DSS (Decision Support System) architecture, integrated application supporting long term care health insurance rerating process, developing patientcare module, marketing / retail system based on Microsoft MDM.

**Alere Healthcare, Atlanta, GA** (through GE Consulting) **Jan, 2006 – Jan, 2008**

**Business domain:** Clinical, Managed care, Medication management

**Role:** Data warehouse solution architect

**Responsibilities:**

Designed a data migration and integration architecture in PEGA/ORACLE platform per ICD 9/10 structure to analyze, develop and enrich patients’ management system (PMS) with clinical services, life science, radiology imaging; RxNORM for pharmacy, Laboratory, blood bank, order, payment, case management, data security, insurance domains.

**Center for Disease Control****, Atlanta, GA** (through GE Consulting) **\_\_ April, 2004 – Dec, 2006**

**Business domain:** Clinical, Life science, Public healthcare, Research Management

**Role:** EDW architect, Data analytic, AI and knowledge base architect

**Responsibilities:**

Designed and developed an enterprise data warehouse (EDW), common data model (CDM), and knowledge base system by using Informatica and MicroStrategy in Siebel CRM platform.