

Professional Summary

A seasoned professional and accomplished leader with a distinctive combination of hands-on technical expertise and exceptional management skills. With over 14 years of experience, I have effectively directed, developed, architected, and implemented strategic solutions for Fortune 100 companies across diverse industries, including Healthcare & Life Sciences, Manufacturing, Retail, and Financial Services.

My ability to bridge the gap between technology and business objectives has consistently delivered impactful and efficient solutions, employing Agile and other traditional methodologies. My specialties encompass proficiency in cloud technologies, architectural design, data modernization, business intelligence, data warehouse and data lake solutions, Master Data Management (MDM) solutions, data governance, and program management

Work Experience Highlights

- Successfully orchestrated the strategic development and implementation of cutting-edge technology solutions for Fortune 100 clients, consistently surpassing key performance indicators.
- Led comprehensive cost-effective data modernization initiatives, facilitating seamless migrations from on-premises systems to **cloud-based platforms** such as **AWS, Azure, and Snowflake**.
- Architected & implemented a pragmatic **Data governance** framework for data protection & maintained compliance with regulatory requirements.
- Experienced with security, privacy, and regulation standards such as **HIPAA, GxP, SOX**.
- Led multiple engagements in the development of high-performance **Data Warehouses and Data Lakes**, harnessing **Azure Databricks, AWS Redshift, and Snowflake** platforms to deliver cost-effective & efficient data solutions.
- Served as an inspirational leader and mentor to cross-functional project teams comprising Business analysts, Data engineers, Data Scientists, and Data Visualization engineers, fostering a culture of innovation and operational excellence.
- Developed and executed **data science strategies**, aligning projects with **business objectives** and **KPIs**.
- Established best practices in **data collection, preprocessing, modeling, and validation**, ensuring high-quality predictive models.
- Oversee development of predictive models using machine learning algorithms and statistical methods and exploratory data analysis.
- Designed and executed **A/B tests** to measure the impact of data-driven interventions
- Engineered and executed data-centric programs, specializing in **business intelligence, data warehouses, data lakes, and Master Data Management (MDM)** solutions, **Data Catalog**, aligning closely with overarching business objectives to address intricate business challenges.
- Applied a wide range of **Software Development Life Cycle (SDLC)** methodologies, including **Agile (Scrum & Kanban), Waterfall, and Minimum Viable Product (MVP) Prototyping**, to optimize efficiency, productivity, and on-time project delivery.
- Demonstrated deep technical proficiency in **Data Modeling** (Dimensional & Entity-Relationship models) and **big data architectural design**.
- Expertise in developing data pipelines for **structured/unstructured, real-time data /batch processing** for various sources like **data files, relational database, API gateways, data streams**, etc.

Ankit Badal
+1-704-488-7886
badal.oist@gmail.com
<https://www.linkedin.com/in/ankitbadal/>

- Designed **ETL/ELT** pipelines for **structured/unstructured** data architecture using tools such as **AWS Glue, Informatica (PowerCenter & Intelligent Cloud Services), Microsoft SQL Server Integration Services (SSIS)**, etc.
- Developed robust business intelligence solutions which provide regular reports and actionable insights to senior management, enabling data-driven decision-making using a diverse set of tools, including **Tableau, Qlik, SQL Server Reporting Services (SSRS), Oracle Business Intelligence Enterprise Edition (OBIEE), Elasticsearch, Actuate**, and **SAP Lumira**.
- Collaborated with cross-functional teams to define quality standards and ensure their adherence throughout the software development lifecycle.
- Directed and managed QA engineers to create a test automation framework, increasing test coverage by 15% and reducing testing time by 30%.
- Worked with Quality Assurance teams to develop a roadmap for **SIT & UAT**, defining quality standards.
- Oversaw the implementation of a **CI/CD** framework using **Jenkins, git, flyway, docker**, etc.
- Possess familiarity with **Data science, ML** models, and **NLP** frameworks

Key Skills

Domain Expertise: Specialized knowledge in Life Sciences and Healthcare, Manufacturing, Retail, and Financial Services sectors.

Technical Expertise:

- **Programming Languages:** Python, SQL, PL/SQL, PySpark, R, R Shiny
- **Data Engineering & Modeling:** Mastered both Entity-Relationship (ER) and Dimensional Data Modeling techniques to construct robust data architectures.
- **Cloud data Platforms:** AWS, Azure, Snowflake.
- **Big Data Technologies:** Hadoop Ecosystem, MongoDB
- **Database:** Azure Databricks, AWS Aurora, PostgreSQL, Redshift, Snowflake, Oracle, SAP HANA, MSSQL Server
- **MDM Solutions:** Informatica MDM, IBM MDM.
- **Data pipeline & transformation tools:** AWS Glue, Apache Kafka, dbt, Dremio, Azure Data factory, Informatica (Power Center/IICS), SSIS, Data Stage
- **Orchestration tools:** Apache Airflow, Control-M
- **Business Intelligence Tools:** OBIEE, BI Publisher, Actuate, Qlik, Tableau, Elasticsearch, and Lumira.
- **SDLC Methodologies:** Agile (Scrum, Kanban) and Waterfall frameworks
- **DevOps Toolkit:** Docker, Flyway, Git, Jenkins, Artifactory, Splunk, Stash, Confluence, Jira, and SourceTree.
- **Data Governance:** Axon, Databricks Unity Catalog, AWS Data catalog, Informatica EDC
- **Certifications:** Azure AI-900 certified

Work Experience

May 2021 - Present **Engineering Manager (Data & Analytics)** **Deloitte Consulting LLP**

- Connecting with Business to understand their needs and pass on the requirements to development team along with design documents and manage deliverables.
- Designed and implemented robust ETL/ELT architectures, optimizing data processes and introducing

automation for increased efficiency.

- Developed and executed data science and MLOps strategies, aligning projects with business objectives and KPIs.
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- Established best practices in data collection, preprocessing, modeling, and validation, ensuring high-quality predictive models.
- Spearheaded the design and implementation of Master Data Management (MDM) solutions, guaranteeing data accuracy and uniformity across the entire organization.
- Architected a Data cataloging framework to enhance data discoverability, accessibility, and usability
- Led a high-performing Data Visualization team, fostering a culture of innovation and excellence, and providing guidance on BI projects.
- Developed and executed the BI strategy, aligning BI initiatives with business objectives and KPIs.
- Oversaw the design and implementation of data visualization dashboards, enabling stakeholders to access real-time insights.
- Demonstrated exceptional leadership in managing multiple engagements, overseeing new feature development alongside Operationalization and Maintenance (O&M) tasks, including L1/L2 support for existing platforms.
- Making recommendations for managing and enhancing on premises/Cloud Datawarehouse, ETL Architecture and Data Model for better performance and effective BI solution.
- Architected and automated the use cases such as identifying
 - The data quality issues and duplicates in datasets using user inputs.
 - The attributes, hierarchies, categories of unstructured data.
- Established best practices in data collection, preprocessing, modeling, and validation, ensuring high-quality predictive models and setting up guidelines for code quality, code management and reusable architecture.
- Architected and oversee Implementation of robust and efficient CI/CD pipeline using Jenkins, automating the entire build creation, testing, and deployment processes to higher environments.
- Oversaw manual and automated testing efforts, ensuring thorough coverage and timely test execution.
- Established a roadmap for System Integration Testing (SIT) and User Acceptance Testing (UAT), ensuring structured and effective testing phases
- Manage & Mentor team of Developers, estimating efforts to take optimum sprint-wise intake and manage their deliverable.
- Managing all sprint ceremonies and taking feedback to improve quality of output and improving work culture in team.
- Facilitating sprint planning, daily scrums, retrospectives, stakeholder meetings and software demonstrations

Aug 2018 – May 2021

Senior Data/Product Engineer

Deloitte Consulting LLP

- Collaborated closely with business stakeholders to gain a deep understanding of their needs and effectively translated these requirements into detailed design documents for the development team.
- Designed and executed a robust data integration architecture, introducing automation to orchestration processes, resulting in significantly enhanced operational efficiency.
- Leveraged data-driven insights to make recommendations for optimizing both on-premises and

cloud-based Data Warehouses, ETL Architecture, and Data Models, ultimately leading to improved performance and the facilitation of more effective BI solutions.

- Conducted exploratory data analysis (EDA) to uncover hidden patterns and trends in large datasets.
- Developed predictive models using machine learning algorithms and statistical methods
- Designed and executed A/B tests to measure the impact of data-driven interventions
- Established clear and comprehensive guidelines for code quality, code management, and reusable architecture, actively promoting best practices across the development team.
- Spearheaded the design and successful implementation of Master Data Management (MDM) solutions, playing a pivotal role in ensuring data accuracy and consistency across the entire organization.
- Managed a team of developers, expertly estimating project efforts, sprint-wise work allocation, and overseeing the timely delivery of project objectives.
- Improved database query performance through systematic identification and resolution of bottlenecks, optimized join operations, implemented indexing strategies, and applied query optimization hints.
- Championed automation initiatives throughout the organization, streamlining manual processes and significantly enhancing overall efficiency.
- Proficiently created and managed Relational Database Service (RDS) instances, facilitating code deployments with precision using Flyway.
- Designed and developed a cutting-edge data analytics application, harnessing the power of machine learning algorithms to identify and respond to pertinent regulations.
- Expertly extracted data from diverse structured and unstructured web sources, employing Python's BeautifulSoup framework and urllib packages, and subsequently employed Python regular expressions to cleanse, standardize, and parse the data.
- Streamlined data pipelines through the implementation of data mapping configurations, transforming unstructured source data into structured target models with automation.
- Implemented the K-means algorithm, enabling the identification of data clusters at various hierarchy levels to gain valuable insights.
- Applied PostgreSQL performance tuning techniques to optimize search index algorithms, resulting in significant improvements in search efficiency.
- Demonstrated a commitment to software quality by developing comprehensive unit test cases using the PyTest framework.
- Implemented a robust and efficient CI/CD pipeline using Jenkins, automating the entire build creation, testing, and deployment processes to higher environments.

May 2015 – Aug 2018

Data/Product Engineer

Deloitte Consulting LLP(I&P)

- Collaborated with the business team to gather requirements for Data Model Design.
- Designed a scalable ETL (Extract, Transform, Load) layer to accommodate future Data Model changes.
- Produced comprehensive Design Documents to guide the development team.
- Managed sprint-by-sprint effort estimation for the ETL Team, ensuring project timelines.
- Conducted code reviews to maintain code functionality and adherence to standards.
- Led system testing of component development and oversaw code promotion to higher

environments.

- Assumed responsibility for Data Integration-related deliverables, ensuring timely completion.
- Conducted code quality checks through system testing of ETL components and provided support during User Acceptance Testing (UAT).
- Identified and addressed performance issues within the ETL process, optimizing data flow.
- Established an automated scheduling process for ETL jobs to run at specified intervals and load incremental data into the central Data Warehouse.
- Provided expertise in designing and implementing effective Business Intelligence solutions.

Aug 2011 – April 2015

DW & BI Lead

Tata Consultancy Services

- Prepared and delivered monthly status dashboards to leadership, providing insights into project progress.
- Conducted a comprehensive analysis of the existing ETL system, aligning it with an Informatica-based solution for improved efficiency.
- Collaborated with the business team to gather requirements and conducted data profiling to ensure data accuracy.
- Designed Data Model changes and ETL architecture in accordance with project requirements.
- Created detailed Technical design documents to guide the Development team.
- Identified areas for performance improvement, made recommendations, and implemented enhancements.
- Managed effort estimations and project planning, ensuring alignment with project requirements.
- Conducted code reviews and oversaw the deliverables of the offshore development team.
- Developed blueprints for Business Intelligence (BI) solutions, facilitating their implementation by the Dev team.
- Established coding guidelines and best practices to optimize development processes.
- Prepared and reviewed deployment documents, providing support during production migration.
- Orchestrated Integration Testing and User Acceptance Testing (UAT) plans to ensure software quality.
- Offered support and addressed bug fixes during the US Time zone, ensuring uninterrupted operations

June 2009 – July 2011

DW & BI Developer

Cognizant

- Collaborated with Business Analysts to comprehend project requirements and objectives.
- Designed comprehensive unit test cases to ensure the functionality and reliability of ETL processes.
- Conducted peer code reviews to maintain code quality and consistency.
- Enhanced the performance of complex, long-running database queries, optimizing data retrieval.
- Created Visio documents for Data Model identification, streamlining data source recognition.
- Analyzed data formats and availability to inform data processing strategies.
- Designed data models and data mart constructs, aligning them with project goals.
- Developed and enhanced ETL mappings to extract data from diverse sources and load it into Oracle/MSSQL Server databases or flat files as needed.
- Performed data flow testing using Informatica Debugger, debugging mappings with available test

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data.

- Designed and implemented enhancements and new processes in Informatica, meeting client requirements.
- Applied performance tuning techniques to targets, sources, mappings, and sessions to boost system performance.
- Conducted error validation checks for data moving between various sources and targets.
- Tested mappings and ensured the quality of deliverables, adhering to project standards.
- Developed complex PL/SQL stored procedures for pre- and post-session commands.
- Accommodated new fields based on business requirements and resolved issues in the existing database table structure.

Education

Bachelor of Engineering in Computer Science –RGPV University Bhopal, M.P., India (2004-2008)