

SUMANA BHLAIPUL – WORK EXPERIENCE

January 1, 2023 – Present

Freelance Consultant & Data Scientist – SumAnalytics

- Supported the task of incorporating project documents into a knowledge base system harnessing AI capabilities.
- Provided technical expertise in extracting and restructuring metadata from JSON-formatted data models, utilizing Python to seamlessly integrate extracted data into Excel format.
- Conducted financial data analysis to construct a financial forecasting model.
- Built a multilingual website for an equine tourism services company.
- Investigated and explored the potential of AI applications within the legal landscape.

October 1, 2018 to December 31, 2022

IT Lead & Data Science Coach - The Do Good Only Company BV

- Learn and stay up to date with cloud technologies e.g. AZURE, AWS, IBM Watson.
- Learn and stay up to date with development in data science e.g. Python, R, AI, Machine Learning, big data, IoT, DevOps, Power BI, Tableau, GitHub
- Develop, administer, supervise and conduct training program of Data Science with Python for non-technical people.
- Recommend and build IT Tools to support business analysis and decision making that fits for purpose for clients.
- Develop cases include solution to solve business problems with Python, SQL, Excel, Power BI, PHP, HTML/CSS/JS.

Key Projects

- Develop a bitesize web app learning interaction focused on data collection, extraction and the simplicity of user experience deployed on Azure via DevOps.
- Extract big data from MySQL and create dashboard using Excel which enable this online learning platform to look at relationship between sectors- license- student and their activity
- Develop Web Application that enables women to report abuse and harassment in workplace. The application is hosted on Azure. Data is stored in SQL. Data extraction from the database is done using Python. Data is then forwarded to Power BI for visualization and further analysis
- Develop A Drop shipping WooCommerce web application with interface to others WC and Shopify sites
- Develop Sale Dashboard, Employee skills matrix and Business Planning Tool
- Provide Insight into choice of technology and consequences of each one of them to an investing platform and recommendation of the way forwards.

April 1, 2018 to September 30, 2014

Data Science - Microsoft Professional Program

- Learn and practiced data science skills i.e. Azure, Machine Learning, Python, R, T-SQL, Power BI
- Evaluated Johan Cruijff Arena data and recommended a crowd congestion warning system.

March 1, 2014 to March 31, 2018

Independent Study and Adventure Travel

I took a break from work and enjoyed my time with regular health improvement activities e.g. walk, yoga, horse riding, gardening in my own allotment, solve puzzles, home improvements projects, reading, travelling, wildlife and landscape photograph. I made movies from the photos and video's I took.

March 1, 2011 to March 1, 2014

Business Process and IT Manager, Gate terminal B.V.

Gate terminal is the first, and only, LNG import terminal in the Netherlands. It has following main functions: receiving LNG tankers and unloading their cargo, storing LNG in cryogenic tanks, re-gasifying LNG and feeding gas into the national transmission network.

As the Business Process and IT manager, I reported directly to the CEO.

My responsibilities included

- Managing the IT innovation and maintenance (1.2 mln € OPEX, 600 k€ CAPEX)
- Custodian of the Gate LNG business process applications and initiate business process improvements, ensuring business continuity of the plant related to IT.
- Define, lead and deliver IT enhancement projects, for example the implementation of a new LNG ship loading facilities and reverse flow operation.
- Managed change and implement changes. Responsible for time, budget and quality management.
- Manage, guard and execute efficient and effective daily and long term continuity of the business process and industrial / office IT environment.
- Define and build reports using Business Object, Excel VBA, MS Access, SharePoint

Key Projects

May 1, 2013 to March 1, 2014

Business System Hosting Migration Project

I directed and managed the migration of the total suite of applications from IBM to Centric from conceptualization to implementation. I developed project definition, defined selection criteria, selected potential partners, evaluated bids and selected the new hosting partner. During the implementation, I hold multiple roles i.e. client representative, project manager and steering committee.

The suite included following applications for Production, Test and Acceptance Environment

- Hydrocarbon Accounting System (Energy Component)
- Bulletin Board , Online real time access for customers to the Hydrocarbon Accounting System
- BizTalk
- Oracle and Microsoft SQL Server databases
- Business Object

March 1, 2011 to October 1, 2011

Business System transition to operation

I managed the transition of business systems from the companies start-up phase, which included building and configuring the SOA suite, to the operational phase including

- Testing (production acceptance, end to end, integration)
- Contract management with all IT vendors, manage outsourced relationships both offshore (e.g. IBM China) and onshore (e.g. Tieto, IBM, Yokogawa, Oracle)

June 1, 2001 to June 12, 2010

Managing Consultant, Shell Global Solutions International B.V.

As a consultant, I helped internal and external customers improve their efficiency and effectiveness from 3 dimensions i.e. people, tool and process. My roles varied from project to project ranging from team lead, project co-ordinator, developer, programmer, tester to PMO support.

Key Projects

2009 Shell PEARL GTL project; Qatar

Review of design to support Hydrocarbon Accounting

PEARL is the project code name of a grass root Gas To Liquid (GTL) project jointly developed by Shell and Qatar Petroleum. The facility includes the largest GTL plant and one of the largest instrumentation and control systems. The facility process natural gas and convert it into light petroleum products.

- I conducted a review to ascertain that the GTL plant will have adequate measurement devices and acceptable accuracy to support hydrocarbon accounting. I used information from engineering drawings, equipment specifications and operating philosophy of the plant. From the findings, I recommended locations of additional measurement devices and accuracy required. I also recommended change to business processes to accommodate this short coming, had the project decided not to invest in additional devices.
- I also wrote a position paper "Hydrocarbon Volatile Organic Compound (VOC) control at marine terminals". The paper described rules/directives/legislation regarding VOC-emission controls during ship loading of light petroleum product in various part of the world and subsequently the conclusion was drawn what

action needed to be taken by the project.

2009 Tupras Refinery in IZMIR; Turkey Implementation of scheduling system

- As a Shell consultant, I supported the 3rd party refinery Tupras, with the implementation of the scheduling system ORION.
- I managed the upgrade and deployment of the ORION application database on SQL Server 2005 and the initial data migration from the Access 2003

2008 Alliance Refining Company (ARC); Thailand Implementation of scheduling system

ARC is the largest combined Refinery Complex owned by Chevron, Shell and the government of Thailand. ARC is a complex environment, because it is merger of two complex large scale refineries with different processing technology and capabilities. At the Shell side, the refinery required a new scheduling system, ORION.

- I analysed the refinery processes, built process flow models, and configured the new Scheduling System.
- I trained the users. I assisted them with production acceptance test and provided after care support.

2007 – 2008 Shell Gas & Power in Norway, Denmark, Germany, Spain and the Netherlands. Business Processes Modelling

Shell Gas & Power operating companies are involved in production, transport and marketing of gas and derived products. The first version of Business Process Model was available in 2003. Since Shell Gas & Power had been developing new business opportunities, executing projects to realise new ventures, the model was being improved and further detailed on a continuous basis.

- I reviewed their business processes in reference with a Business Process Improvement Framework.
- I then modelled the business processes and dataflow in System Architect.

In 2007, a new IT system was introduced. This tool would allow the business to plan and optimize the business on pan-European scale.

- I assisted the Business Improvement Team in mapping of existing optimization business process, redefined business processes and redefined the tool's functionalities required to enable the system to support new business processes.
- I developed a roles and responsibilities matrix and the matrix of keys positions i.e. general manager, commercial manager, logistics manager, commercial analyst, logistic advisor, mid office advisor versus the roles within the processes (e.g. deal owner, deal reviewer, deal authorizer, etc)
- I modelled 5 sub-processes steps using VISIO (basic flow and swim lane Diagram where applicable). I simplified each sub-process to fit into one A4 paper.
- I made a simplified end-to-end process flow diagram to fit to one A3 size paper using VISIO and then transferred to Power Point for the management.
- I wrote the On Board paper for new joiners describing the natural gas supply chain in general, Shell Energy Europe Pan European optimisation process

2004 – 2006 Sibneft Refinery in OMSK ; Russia Created IT Master Plan

The refinery is the world's second largest refinery and the leading Russian producer of petroleum and fuel oil products. Shell carried out a so called 'technical audit' which determined the level performance of the refinery in comparison with world class refineries.

- In the acquisition phase, I supported the Shell Account Executive in various form i.e. workshop, presentation, papers and subsequently in the drafting of the Services Contract.
- The project (35 million) was a full scale Refinery Performance Improvement program aimed to deliver the potential 130 million US\$ benefits for the refinery.
- The project comprised of 6 task forces. Work was carried out both on shore and offshore. Offshore - my role was Data and Information Management Task Force Leader.
- I led a team of 3 Sibneft data management staff in the setting up and deployment of the Project Information Management System and Tank Information and Oil Movement System
- I assisted the program manager in managing the interface between OMSK (refinery), Sibneft (Sponsor company) and Shell and worked on Program Deliverable Configuration Management.
- I also acted as the facilitator in various workshops organised by other task forces.

2004-2005 Reliance; India

Reliance refinery is the largest green field refinery and petrochemicals complex. The refinery uses an optimization tool to get the most profitable product grades by optimizing the ship discharge sequence, offload tanks, crude mixes and the operating conditions.

Managed data quality project

- I led the cross functional team of 12 people from various discipline and brought down Oil Accounting Losses figure to less than 0.25% mainly by improving data quality and data processing procedure.

Data Integration tool

- I designed developed, tested and delivered data integration tool between crude oil scheduling optimization tool (GECOS) and crude oil basic data generation tool (DATAGEN)
- I conducted a review and recommended the best way forward for reports and operator instructions generation. I defined adapted work flows and data flows within the existing business process

2002-2004 Yukos refineries Nuvokuibyshevsk and Achinsk ; Russia

Create IT Master Plan

Between 1996 and 2003 Yukos was one of the biggest and most successful Russian companies, producing 20% of Russia's oil output. Yukos wanted to modernise its assets and their operations.

- I reviewed the process automation, plant information system and IT infrastructure and delivered the Automation and IT Master Plan for both refineries.
- During the project I led 5 subject matter experts and supported the account executive in managing customer expectation. I was responsible for
 - The review of key business performance parameters
 - The review of the existing automation and IT systems
 - The identification of automation and IT system improvements and recommend target architecture of the information system; Integrated IT Systems and objectives for each refinery functional level e.g. DCS level, Advanced Process Control level etc.
 - The Identification what needs to be re-instrumented to bring the current situation to a level which will align with best practices and the IT master plan architecture
- I was also on site as a subject matter expert on planning and scheduling, data and information management and system integration.

Other small projects

Small Projects – Technical Audit

I carried out the review and provided business the recommendation as per the customers' request.

- SAP & Primavera (engineering planning tool) Interface Tool Review; Shell Exploration, The Netherlands
- Hydrocarbon Loss Review – Petrotel; Romania
- Redundancy Assessment – SASREF; Saudi Arabia
- Refinery Scheduling System Feasibility Study – Showa Shell ; Japan

Small Projects – Maintaining, Realisation and Enhancement of business application

In many small projects, I delivered in full or part of the functional requirements, the development, test and deployment of an application (or part of), upgraded or migration of the application and/or its database.

- Crude Oil Scheduling System (GECOS) - Wesseling and Godorf refinery; Germany
 - LNG Production and Ship Scheduling System – OLNG; Oman
 - LNG Production and Ship Scheduling System – MLNG; Malaysia
 - Be-spoken Business Modelling Tool (Linago, Optigas, Orbiter Access Database) – Shell Gas &
 - Power; the Netherlands
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Working Experience prior to 2001

November 2, 1992 - May 31, 2001; 8 years with the refinery since the conceptual design – EPC phase – start up - commissioning and operation

- 4 years refinery operation - Process Engineer; Oil movements (rail, road, ship loading, product blending), ETP, Utilities, Oil Accounting, Margin Improvement Projects (mainly by improving data quality and data

processing procedure).

- 2 years refinery start up – material procurement and set up contracts (successful start up and operation)
- 2 years with EPC team – procurement and cost control

May 15, 1983 - June 15, 1991; 8 years petroleum and petrochemical procurement and contract management

- 5 years - Crude Oil and Petroleum products procurement and contract management
- 1 years - Petrochemical Feedstock procurement and contract management
- 2 years – Managing consultant ; market entry strategy, petrochemical project feasibility study, pricing structure