**Data Visualization Portfolio**

**Jay Mtey**

[www.linkedin.com/in/jaymtey](file:///C:\Users\jmtey\Documents\Project_Kazi\My%20Cv\www.linkedin.com\in\jaymtey)

[jamte2006@yahoo.com](mailto:jamte2006@yahoo.com) [I jmtey@pedaids.org](mailto:I%20%20%20jmtey@pedaids.org)

My interest in Business Intelligence, Data Analytics, Data Visualization started back in 2015 when I was firstly introduced to a tool called QlikView while at Deloitte and as they say it the rest is history.

At my current workplace I spend about 70% of my time on data cleaning and data Visualisation. Nevertheless, when it comes to data Visualisation, I am particularly interested in utilizing both Excel and Power BI in a rather “partnership mode” rather than viewing the two tools as competing to each other as I believe they work better together.

There are a number of projects/tasks in data visualization that I am involved in and or managing i.e., for our country office I was involved/being involved in designing, developing and maintaining about 10 different Power BI reports however in this Portfolio I have highlighted some (3) of my recent works that might help in demonstrating my understanding in using Excel and Power BI. I selected the works based on their data source and reporting frequency i.e. (Project “1” is connecting into Azure SQL and it’s reporting frequency is monthly whereas Project “2” reporting frequency is Quarterly and its data source is DHIS 2 using a DHIS2 connector and lastly Project “3” is a weekly based report whose data source is an Excel file residing in SharePoint).

Both Project numbered 1-3 have detailed explanations and sample files that will also be attached/sent together with this portfolio. The Project sample files are named *ProjectP1, ProjectP2* and *ProjectP3*.

| **Project/System/Work Description** | **Role/Responsibilities** | **Tools Used** |
| --- | --- | --- |
| 1. **Monthly Report template**   Description/Challenge:  This was a report in excel that was done by the Monitoring and Evaluation team manually by combining different excel files (using index matching mainly) into a single one and send it to the donor for reporting every month  Solution:  To facilitate reporting on time and ensuring data integrity, Power BI was used by getting data required from the Azure SQL and exporting it into excel using the analyse in Excel feature. The excel was produced to reflect the standard template they were previous using which was achieved by using pivots and cube formulas to link the excel file and the power BI dataset so that whenever new data is available in excel, the excel user simply clicks the refresh button to get in the new data. The sample excel file in question is attached as part of the file *“Project P1”* | * Requirements gathering from the users * Working as part of a team of 2 (incl. my self), getting data into Power BI, data modelling, and exporting it into Excel format via the Analyse in Excel feature. * Adding cube formulas in the respective columns for the excel file as each column corresponds to a specific measure in Power BI * User orientation on the usage of the excel file | * Excel * Power BI * Azure - SQL |
| 1. **Gender Based Violence Report**   Description/Challenge:  Data for Gender Based Violence was being entered into an in house DHIS-2 based platform however getting a quick sense of it using the DHIS-2 Pivots and or exporting it into csv at most would require some data cleaning as well as ending up creating different data silos for individuals interested in understanding the data and making decisions based on the data.  Solution:  Creating a Power BI report and share it to everyone concerned. Detailed description on how this was achieved is attached as *“Project P2”* | * User Requirements gathering * Designing, developing and prototyping the report in desktop and publishing it. * Maintaining the report including updating it whenever there is new data. | * Power BI * DHIS-2 |
| 1. **H.I.V Viral Load Report**   Description/Challenge:  The viral load report was being produced in an excel file to track the viral load sample collected, received and tested from different health facilities to testing hub (major health facilities with testing equipment). The report was too long to follow along in excel and un friendly in terms of identifying what was happening quickly as the reporting frequency was on weekly basis.  Solution:  Creating a Power BI report and share it. Detailed description on how this was achieved is attached as *“Project 3”* | * User requirements gathering * Designing, developing and prototyping the report in desktop and publishing it. * Updating the report automatic by using Power automate to refresh the report with new data whenever new data is entered in an excel file that reside in a share point site. * Set up automatic email remainders to users in Power BI Service so that they may re-view the report. | * Power BI * Excel |