PowER BI – KPI PROCESS IMprovement

Project Proposal

## Project Type

This is a work-based project, where I will be learning new skills in the Microsoft Power BI platform utilising the knowledge acquired from the course modules. The goal of the project to implement/improve one or several business process which will lead to time saving efficiencies and better overview of the current situation in the business. The internal company mentor will be the Chief Financial Officer. This also means that I will be allowed to spend time on this as part of my day-to-day work

Technologies: Office365, SharePoint, Microsoft Power Platform

Tools: Power BI Desktop, Power BI Data Gateway, Power BI Report Server, M language and DAX (Data Analysis Expression)

## What is the problem.

Mainline Group is looking to display KPI information from various data sources on a Power BI dashboard to departmental stakeholders and leadership team.

## Background

Mainline Group has several systems that holds business information. Finance, Health and Safety and Operations staff query this data on a regular basis to produce business performance reports and to generate KPI (Key Performance Indicators) metrics for the different departments. The reports are generated on a weekly or monthly basis but there are also ad hoc reports.

The current systems in use are:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **System** | **Function** | **Location** | **Has API** | **Users** |
| **Fieldview** | Record QA/QC/Admin forms and Timesheet for site staff | Cloud | Yes - JSON | On-Site Staff / Operations |
| **Smartsheet** | Record timesheets for Salaried Staff | Cloud | Yes | All management & admin staff |
| **Coins** | ERP System / Purchase orders, Contract Value Codes / Salaries etc | Cloud | Yes | Finance / Commercial / Operations |
| **Pipedrive** | Business Development Lead System | Cloud | Yes | Business Dev |
| **Trimble Estimating** | Tender Cost Estimating system | Hosted SQL DB | No | Estimating / Commerical |
| **HR Locker** | HR Administration, Leave, CPD | Cloud | Yes | HR |
| **Office365** | SharePoint, Excel, word etc | MS Cloud | Yes | All |
| **Viewpoint** | Contract Management System and design review | Cloud | Yes | Operations / Design |

## Current Situation.

The company have over the summer of 2022 been revising the KPI process and have in September rolled out a new KPI process where departmental stakeholders fill in excel spreadsheet reports with various KPI data. For example, hours spent by employee per contract and other data like work site accidents etc.

The company is aware that this is a time-consuming process and when this process is well established the company is looking to improve the efficiencies in this process. The company has already identified that the Microsoft Power BI platform can be a potential tool to use to display almost real-time dashboard views of the business data. During 2022 there has been internal talks about identifying and bringing in external Power BI consultants/developers to do this work during 2023.

The company has fully migrated to SharePoint during 2022 and is using the SharePoint platform as Intranet and repository for company data

## Project Scope



Figure : Overview of existing potential databases available to the project

Mainline has several systems available to be incorporated in the project, initial planned scope is the Fieldview, Smartsheet and Viewpoint systems.

## Potential Issues

As the project will have access to commercial sensitive and potential personal data; measures will be put in place to minimise any exposure of this data. This will also limit the scope of which systems and data that will be incorporated in the project. If it’s not feasible to limit the exposure, test data will be utilised.