

Power BI – MIS Comparison

Introduction

Power BI has established itself as a key player when it comes to converting large datasets into meaningful reports. Many Support Teams are in the process of developing Power BI solutions for schools as it permits them to create high quality, dynamic reports. As Power BI references a copy of the live dataset, a major factor to consider when designing such solutions is the maintenance and flexibility of this dataset.

Power BI – SIMS MIS

SIMS presents a number of issues when it comes to both dataset generation and end user access.

- **Data must be exported from SIMS, then imported into Power BI**

This is a process that must be setup, automated and maintained. If any of the steps fail, it's not always clear that this has occurred. It also represents an additional security risk which needs to be accounted for (OneDrive, unencrypted data dumps, et cetera).

- **All data must be exported via the Report Engine**

Whilst this does allow for some flexibility, it also means that reports need to be setup and maintained at every school site. There is also a significant limitation in terms of the size of the dataset. For example, SIMS can't cope with exporting a large amount of data, such as attendance marks between a date range. Depending on the size of the school, this will often reach a memory limit for a single academic year, let alone historical results. If parameters need to be used, it's complex to automate these and is generally done using batch script.

- **No integration with the MIS**

To access the reports, users either have to install Power BI Desktop or logon to the Power BI site. The former solution involves the school having a local store of the Power BI template and essentially loading the report in the editor. They also need to manually refresh from the dataset each time. The Power BI site requires further automation to send data from the school to the online account. It offers a slightly better interface for the end user, but a security risk is introduced as users would either have to share credentials or invest in viewer accounts with Power BI pro licenses.

- **Difficult to standardise and no IP protection**

Due to each school having their own SIMS Server, drive locations and upload methods, it's difficult to create a standardised product which can be centrally maintained. End users have direct access to the Power BI templates and can access your intellectual property. This causes issues when trying to create products for income generation.

- **Complex Data Aggregation**

Aggregating data for MATs and LAs is relatively complicated as multiple data sources must be transferred to a single dataset, then collated using queries and scripts. With more complexity, there is more opportunity for a process failure.



Power BI – Bromcom MIS

Bromcom offers a fully integrated Power BI solution which provides quick access to both single site and groups of schools.

- **Data is pulled via API**

Bromcom offers a few options for obtaining data from the MIS, all of which are directly accessible from Power BI. Therefore, there's no automation or synchronisation service to manage, you simply enter the URL and credentials to gain access to the data.

- **Data is accessible**

The recommended approach is to use our OData Connection as this allows you to directly access a curated view of the live database. This includes a pre-defined Student table with all pastoral factors and location information, the entire attendance history of your school (mark by mark), along with Assessment results, Exams and so on. Should you require any custom fields or additional data, simply create a report in Bromcom and enable the option for a live link for Power BI.

- **Fully integrated with the MIS**

Bromcom has a seamless Power BI viewer built into the MIS so users can simply load the reports from within the Analysis menu. This can be configured with a single Power BI account, or set on a per user basis so there's no need for them to login to Power BI.

- **Easy to standardise and protect IP**

As the OData connection uses the same fields across all schools, reports can easily be designed on test data and then published to school accounts. Microsoft also support the use of Template Apps which allow Support Teams to easily publish multiple reports and roll out updates accordingly. Downloading of templates can be denied, protecting your intellectual property from being distributed or modified.

- **Built with Data Aggregation in mind**

Our Vision product aggregates MIS data from multiple schools (including SIMS based sites) into one central dataset. This can then be accessed by Power BI to create MAT or LA level reports.

