



# Business process optimisation for the Institute Of Education

## Introduction

Idiro Analytics is an industry expert providing data-driven business solutions with the help of advanced analytics. For over 19 years, Idir Analytics has been helping businesses and other organisations to enable their data. Recently, Idir Analytics helped the Institute of Education with its data journey.

## The Business Challenge

The Institute of Education is Ireland's largest private secondary school teaching 4th, 5th, and 6th-year pupils.

The social distancing norms and nationwide lockdowns, which were implemented during the Covid-19 pandemic, have led to an inevitable surge in the use of digital technology. Classes

which used to be held in school classrooms had to be moved to the online space. During this period, the Institute of Education had been conducting more than 100 online classes. The school used MS Teams to deliver their online classes. In 2019, MS Teams introduced new functionality which enabled users/meeting organisers to download a meeting attendance report. However, even with this function, it was not feasible to manually download attendance reports for each of the several hundred online meetings per week. An automated solution was required.

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# Our work

The first step in the process was to understand the specific goals/problems of the client. Data is available in abundance, but we had to know more specifically what is required and in what format.

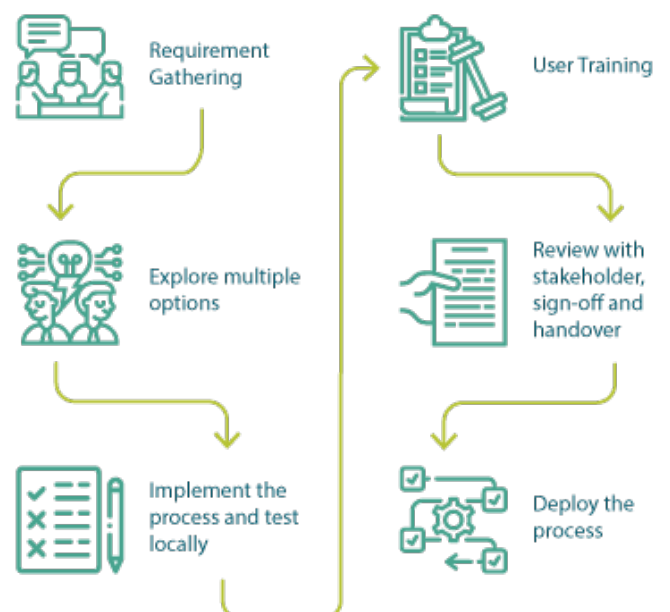
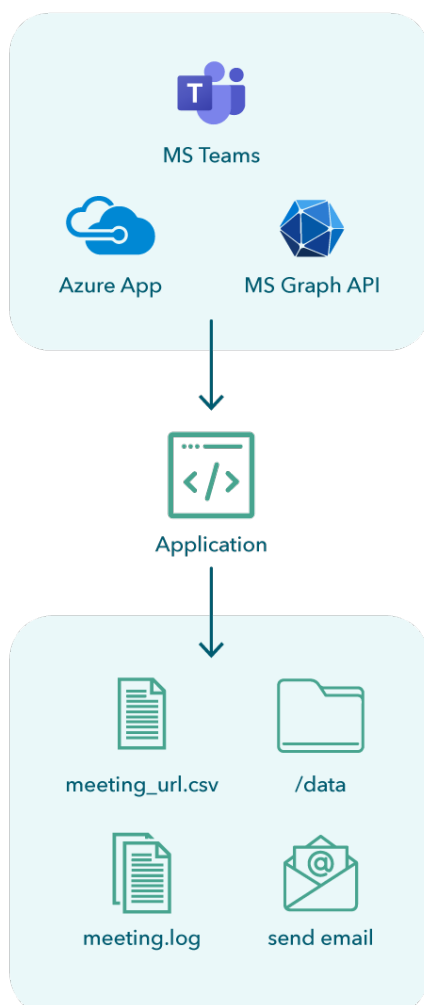
After understanding the requirements, we explored different ways to approach the task. Two of the most prominent solutions involved using Microsoft Power Automate and Microsoft Graph API. Even though Microsoft Power Automate offers a wide range of functionalities and a tight integration with other Microsoft services, running it for more than a hundred meeting IDs would have been a resource intensive and time-consuming process. On the other hand, Microsoft Graph provides API services, which contain endpoints to manage specifically this kind of task. We used Python to orchestrate the overall process, from connecting to MS Graph services to saving



attendee lists in the correct format and specific folders.

After the process was configured and tested for efficiency, the results showed that it took only 5-8 minutes to download, wrangle and save details of more than a hundred meetings with ten occurrences. This would have taken hours through other processes, and since it is happening in the background with significantly fewer resources, it won't interfere with any running operations.

Monitoring, a core part of any automation process, was also managed through the same program. Any error or failure occurring in the process was captured in a log, and an email with a warning was sent to the designated users.



# Results

There are many advantages to the automation of such operations, including reduced human error, fewer manual activities, improved resource utilisation, and scalable processes, to name just a few. In this case, downloading daily data from over 100 online classes was impractical. Since we automated this procedure, the Institute of Education can manage students and classes more efficiently by having the reports ready at their fingertips. The teachers at the Institute of Education are relieved from the monotonous task of doing daily attendance reports for each class, and due to the centralised attendance information of all the online classes, teachers and organisers have easy access to the data.



Idiro Analytics strategy is cross-toolset and encompasses the entire spectrum (SAS, R, Python, SQL, Qlik, Tableau, Big Data etc.) The Ildiro team has amassed a strong skill set due to their work on numerous distinct analytics challenges across various countries and sectors. The Institute of Education successfully automated one of the most tiresome tasks by utilising Ildiro's method in a customisable way.

The Institute of Education is just one of Ildiro's satisfied clients. To find out how Ildiro Analytics can add value to your business, contact us via [Idiro.com](http://Idiro.com)

## Conclusion

Idiro Analytics has worked with many clients worldwide. Our client list includes:



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# 100

online classes was impractical.

## Did you know?

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