

National College of Ireland

Project Submission Sheet – 2020/2021

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Programme: Msc Data Analytics **Year:** 2020

Module: Business Intelligence & Business Analytics (MSCDAD_A)

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**Submission Due
Date:** December 20th 2020

Project Title: Ryanair Business Implementation Report

I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.

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Ryanair Business Implementation Report

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Abstract– This report will discuss the implementation of a full suite of BI and Business Analytics systems. The report will highlight the different developmental processes and discuss the final architecture of the Customer Relationship Management system implemented.

Keywords: *Business Intelligence, CRM, BI Dashboard*

I. INTRODUCTION

Ryanair is viewed as, as one of Europe's largest Airline companies over the last decade they have seen massive growth in the number of passengers who have flown with them increasing their numbers from 72 million in 2009-10 to 139 million in 2018-19. Ryanair's largest source of revenue is charging for extras on people's tickets, extras include small bags, reserved seating, large check in bags and priority boarding [1].

A. Porters Five Forces business analysis

In order to understand how the profitability of Ryanair can continue to increase a Porters Five Forces business analysis has been conducted.

1) Industry Competition – High

Ryanair's greatest competitors include Finnair, easyJet, Flybe and more. The main source of competition is to cover the most amount of destinations at the cheapest cost. Ryanair's massive fleet has allowed it to drive out much of the other competition while bringing business to airports that may have not survived without the airline. There is still a massive number of routes that Ryanair fly which continue to have a fierce amount of competition [2].

2) Potential New Entrants – Low

The airline industry is an extremely expensive industry to work in. The cost of fleets can equate to billions for some airlines, because of this and the massive amount of industry competition already present in Europe it is very unlikely for a new competitor to enter the field.

3) Supplier Power – High

The two most important supplies for Ryanair are jet fuel and aeroplanes. Airbus and Boeing have created a massive duopoly in aeroplane manufacturing. Ryanair, however, have created a very strong relationship with Boeing as they are their largest customer in Europe. Due to this relationship Ryanair continues to get below standard market Rates. Jet fuel prices are governed by world trade so because of this Ryanair's suppliers have a lot of bargaining power [3].

4) Customer Power – High

Customer power is so high in the budget airlines industry because of the competitive nature of the prices. Very few customers have brand loyalty when looking for the cheapest price. Ryanair has very little power when trying to increase the price of its flights because customers will immediately go to the next airline with the cheapest flight for that route. Budget airlines like Ryanair are constantly looking to cut operational costs while improving facilities for customers which also plays into the customers bargaining power.

5) Substitutes Threat – Low

Customers today are constantly looking for the most efficient and cost-effective means of travel. Even though there is incredible railway travel throughout Europe and a number of Bus routes that can take you anywhere they cannot compete with Ryanair in either the cost or efficiency category. The amount of time both forms of transport take compared to the aeroplanes ensure that this won't change in the foreseeable future.

II. BI IMPLEMENTATION

The goal of the project is to address the four specified processes into a business intelligence and business analytics report.

All the business visualization has been created on Tableau software. The dashboards implement all the processes mentioned in the specification report that's associated with the Ryanair Revenue, Expenses, Customer booking, and Flights related data. Analysis of different dashboards plays a vital role to take strategic business-related decisions. Using the database, the Ryanair's processes were visualized. There was a requirement of two separate dashboards where revenue and expense were shown in a separate dashboard. The complete Business Report can be seen in the following interactive dashboard as shown in Figure 1.

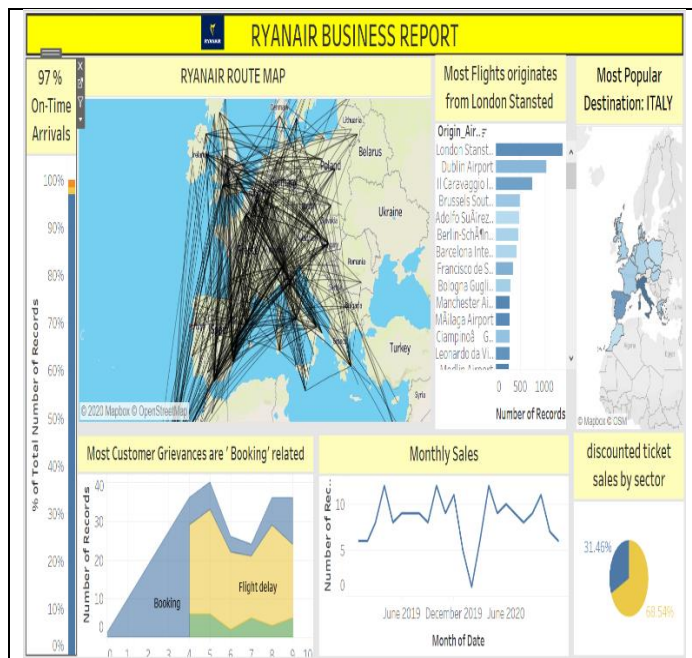


Figure 1. Complete Business Overview in this Interactive Dashboard

This interactive dashboard gives a very detailed insight into the various aspects of running an airline company.

Flight Routes and Schedules:

Ryanair route map gives a detailed look into the different routes Ryanair travels across Europe. Being able to visualize this gives a much clearer image of Ryanair flights while also enabling the user to gain insight into where new routes can possibly go or if a certain destination is not very popular. Most of the Ryanair flights originates from London Stansted Airport which is the busiest airport. The most popular Ryanair destination is in fact Italy. (See Fig.2)

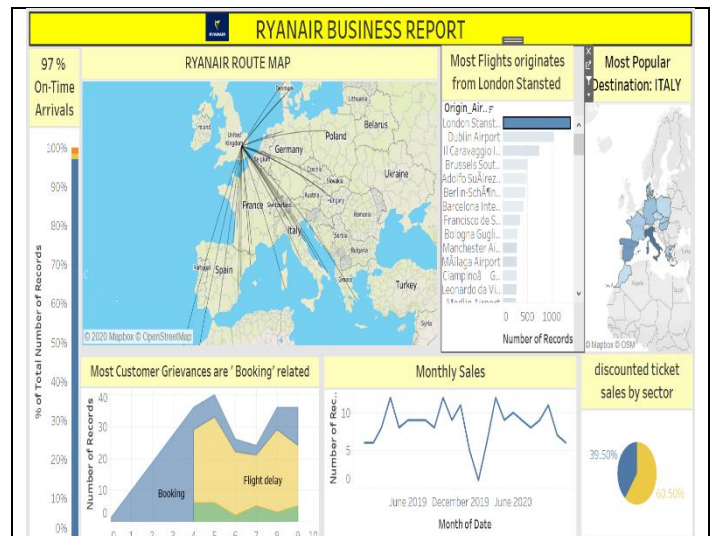


Figure 2. Route Map showing flights originating from London

Figure 2.1 shows how the route map was created using the longitude and latitude of the origin_airports from the dataset. The map also shows the total number of flights from the airport of origin as we hover around different airports.

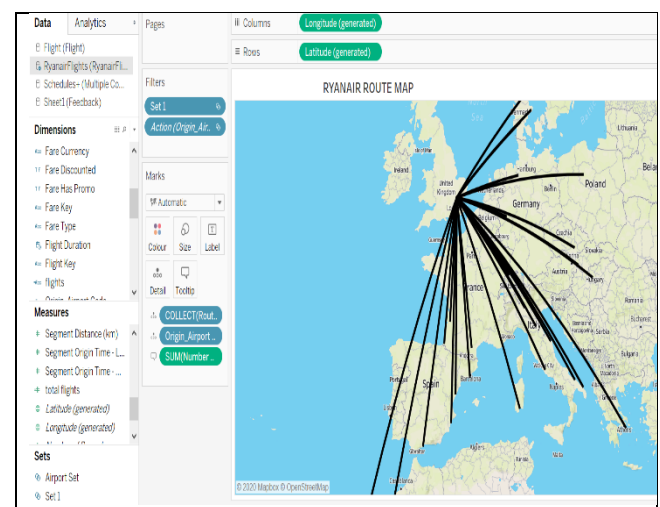


Figure 2.1 Creating Ryanair Route Map on Tableau

Customer Care and grievance redressal:

Customer satisfaction was one of the four key processes highlighted for this project. A graph visualising the grievances filed by the customers is also visible within this dashboard. From this customer feedback table in Figure 3, we can see that the majority of complaints that account for 'below 4' on the feedback scale i.e. grievances are related to bookings. Whereas fair number of customers are

satisfied with the on-time arrivals. Another table shows 97% of Ryanair flights are on time which is a very impressive number.

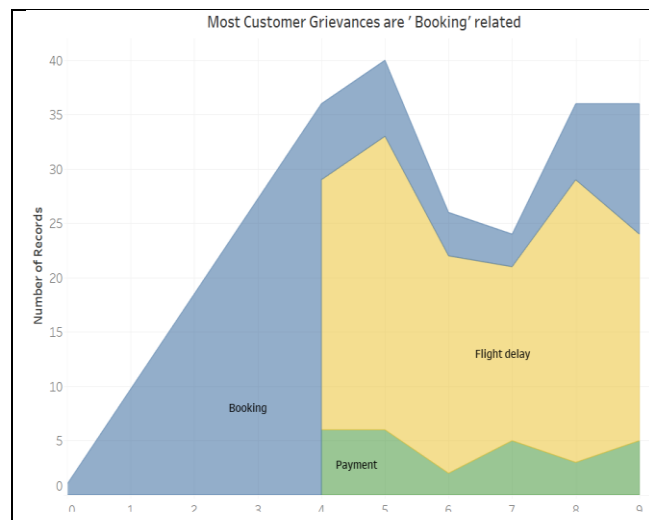


Figure 3 Customer Feedback Area Chart with rating experience on a scale of 1-10.

Booking and Sales:

A monthly sales graph was also generated, and we can see why Ryanair is reliant on seasonal income as there is a massive drop of in sales during the winter months. Also, the bookings have seen a decline since Feb 2020 due to the onset of pandemic 'COVID 19' as seen in Figure 4.

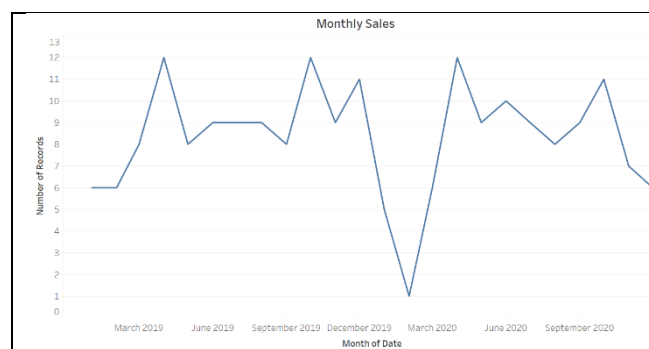


Figure 4. Monthly Sales chart shows a decline during winter months

Another aspect of the organisation is if it relies too much on discounted sales. As seen in Figure 5, about 55% of total sales accounts for the ones with discount for the flights originating from Prague airport. Whereas flights from Palma De Mallorca had only 9% discounted sales. The sales pi-chart can show the results for all the countries Ryanair travels as we hover around the route map or select an airport from the

drop-down list. 'Blue' accounts for the number of passengers who travelled on discounted tickets.

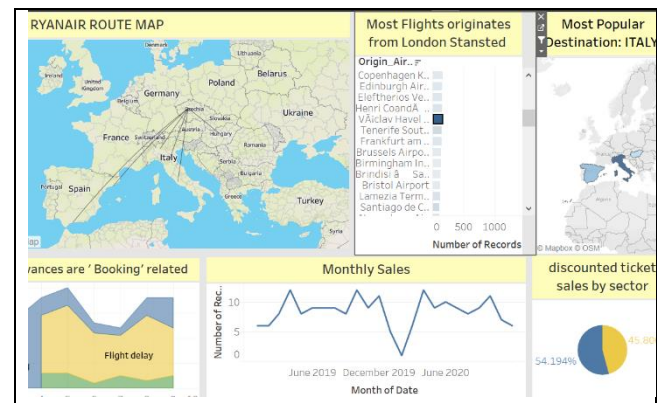


Figure 5. Pi-Chart shows discounted ticket sales. Blue- Discounted, Yellow- Original Fare

Finally, the multiple data sources were taken into account for this Business Insight Report (Figure 6).

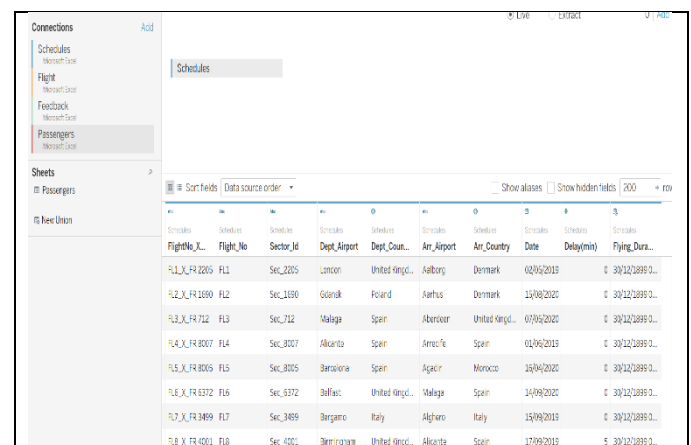


Figure 6 Business Report Data Source

Marketing and Advertising:

Pricing and promotion of goods and services to satisfy organizational objectives.

Figure 7 represents revenue and expenses associated with the Ryanair business division for the year 2019, 2020. This financial information plays an important role in upper management while undertaking business-related decisions for the company's future. As highlighted in the Marketing and Ads Expense graph for the year 2019 & 2020 combined, Print and commercial media i.e. Newspaper and Television contributed higher overall to the expenses compared to other marketing sources such as the Internet, Radio, Travel Agent. Perhaps management can focus more to spend on digital media sources such as the Internet

and Radio to drive more customer traffic. For the Expenses related to the Airport base, Fuel cost is adding more towards the total expense and thus it makes business sense for management to source fuel from countries exporting cheaper fuel as supposed to existing fuel sources. The data sources for creating report can be seen in Figure 8.

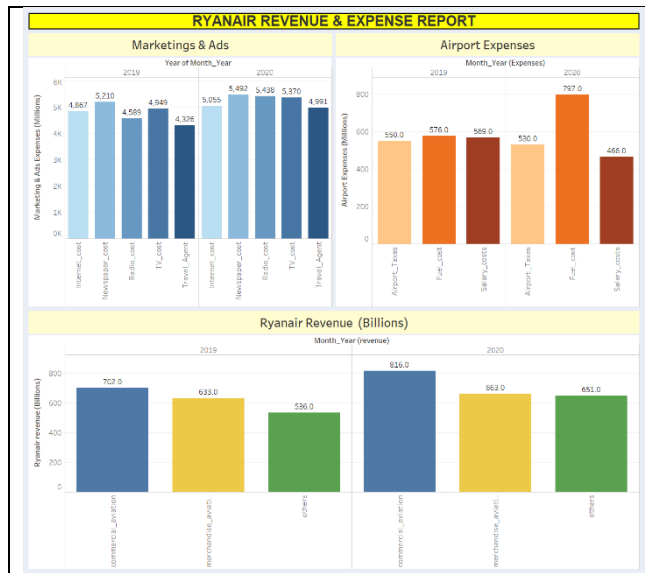


Figure 7 Revenue & Expense Report Dashboard

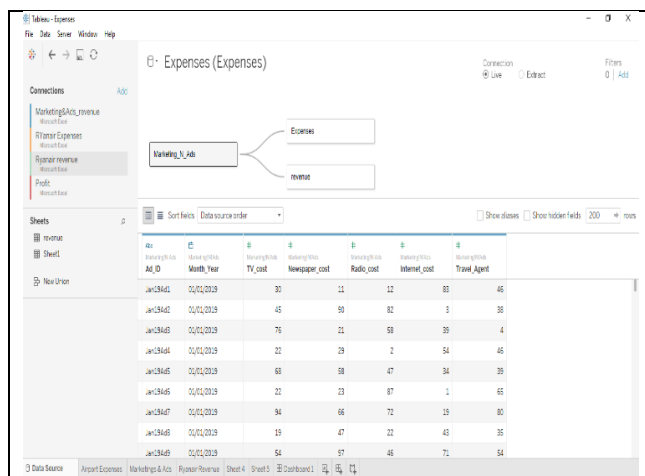


Figure 8 Revenue & Expense Report Data Source

Figure 9 represents a financial overview associated with the capital involved in the Ryanair business entity. From 2019,2020 Revenue graphs, we can clearly state that income from the commercial aviation sector contributes more towards which is closely followed by the merchandise aviation sector. To maximize profit board members and upper management should focus more on flourishing the commercial aviation business entity by strategically sourcing fuel from countries having lesser fuel cost

and emphasizing more on spending marketing budget in digital media to reduce customer acquisition cost which eventually leads to an increase in user base.

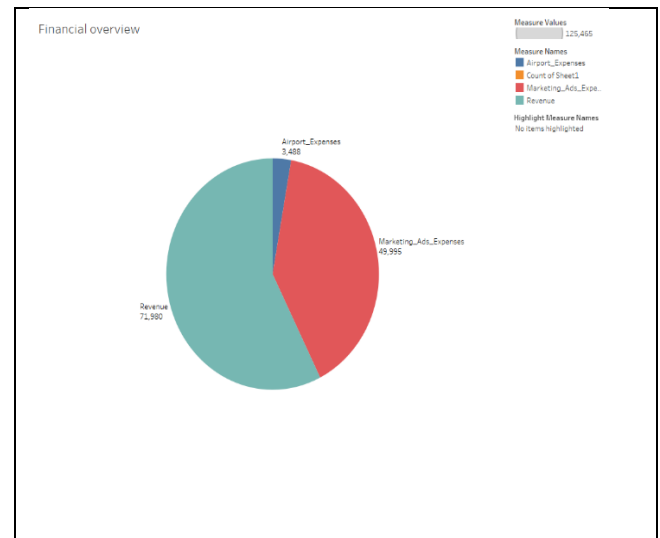


Figure 9 Financial Overview pie chart

III. CRM IMPLEMENTATION

A. Ryanair Customer Support Division Overview

Ryanair Customer Support Division consists of a Division Manager and Customer service executives. The Customer data such as email id, contact number, age, sex, booking id is maintained and timely updated in SQL database. Customer Support executives are responsible for resolving all the customer-related issues.

Issues related to Ryanair Customer are raised mainly in three ways:

- 1) Emails sent directly from customer registered mail id.
- 2) Ticket Issues generated from Ryanair Customer support web portal.
- 3) Over a voice calls from a customer on designated customer desk contact no.

SQL database is being used at present; Microsoft database is used to log customer issues. Customers are required to provide their ticket id while raising the complaint or issues.

At the time of raising the issue, customers are prompted to provide their Booking Id. Customer

Support Executives are provided with these issues in the form of emails over Microsoft outlook.

Given the currently existing system, we can conclude that standardization is required for all the process flow involving right from raising the issue tickets from the customer side to assigning it to various customer executives. Thus, implementing Customer Service Hub (CRM system) provided by the Microsoft Dynamic would prove as an ideal solution [4].

Major Factors that involve the solutions are:

- 1) Automating the assignment of the issue with preexisting rules for certain issue categories.
- 2) Categorizing and grouping the Issues into specific queues for tracking purposes.
- 3) Representation of Issues and queues status under a unified Dashboard.

B. Customer Service Hub Setup:

Creation of Admin and other Security Roles

- 1) Customer Support Manager Role – This will act as an admin role who has access to Create, Assign, Read, Write, Update Delete Cases, Queues on an organization level. Fig.10.1 shows an equivalent image for the role as defined in Dynamic CRM Hub.
- 2) Customer Support Executives Role – This will act as a role that has access to Read, Write, Update Cases, Queues on an organization level. Fig.10.2 shows an equivalent image for the role as defined in Dynamic CRM Hub.

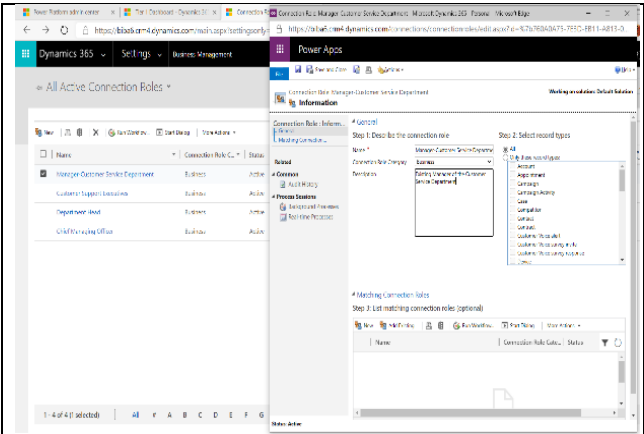


Figure 10.1 Admin Role Creation

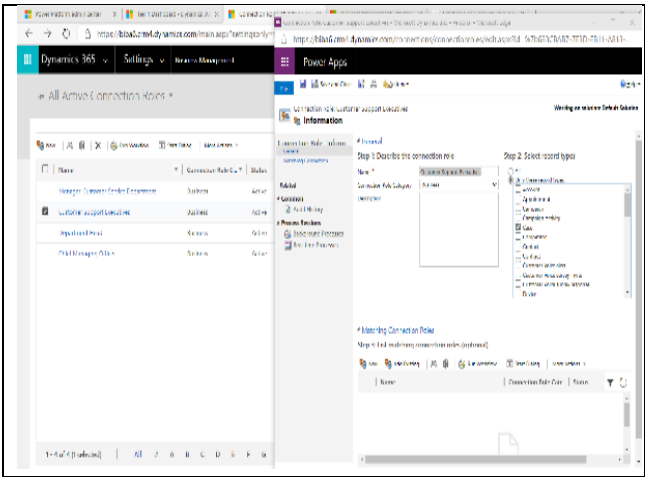


Figure 10.2 Customer exec Role Creation

C. CRM Service Hub Process:

The flow diagram as shown in Figure 10.3 describes the process flow for CRM and how customer issues are targeted, assigned, and resolved in an organized manner with the help of interactive Microsoft dynamic CRM features. As issues are resolved and tracked from time to time this provides accurate timely updates for all the customer queries.

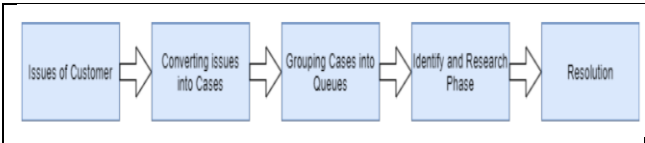


Figure 10.3 CRM Flow

Creation of Cases involved the following steps.

Step 1: Converting Issues into Cases

A manager with admin access is the only entity that can create Cases. As highlighted below in Figure 10.4, we can view all the Active Cases are Viewed under My Active View Cases. Customer support executives are assigned cases by the Manager.

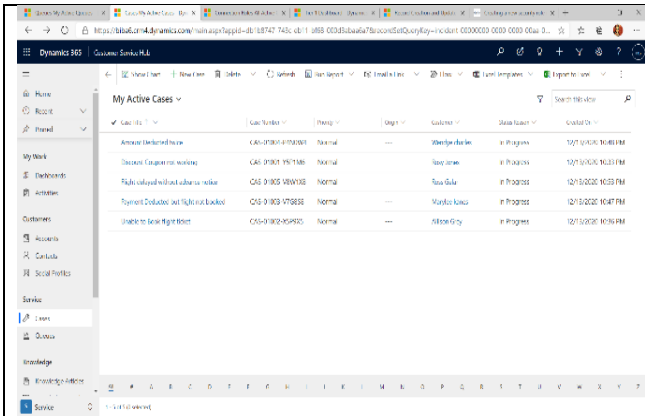


Figure 10.4 Issues to Cases

Step 2: Grouping of Cases into queues

The main application of Queue is to a group and organized various related cases into similar created single queues i.e., the queues are being groped based on the similar category of issues. Forex as highlighted below all the Payment related issues/cases get a group into a single Payment Cases Queue. The manager of the customer support division has the access to Create Queues. Access of the Customer support executives is made limited to only assigning cases to Queues but is prohibited from queue creation.

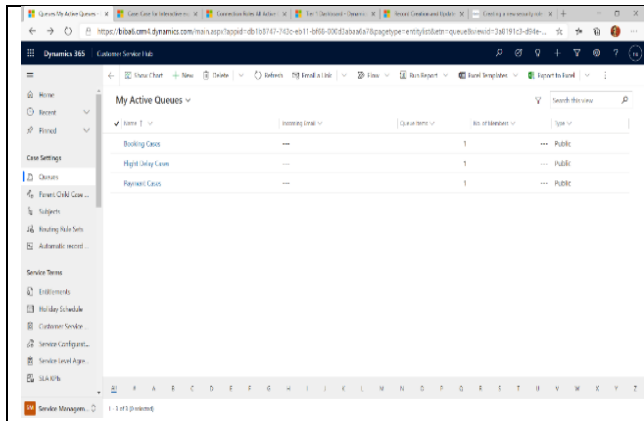


Figure 10.5 Current Queues

Step 3: Routing Rule

The main application of Routing Rules is to automatically direct cases/issues of customers and thus skipping the involvement of customer support executives in the process flow. Figure 10.6 shows a Routing rule implemented for Ryanair Payment Related Cases. Thus, all the payment related queries/cases are automatically directed to the concerned team when it matches the rule criteria which leads to directly grouping it into payment queue.

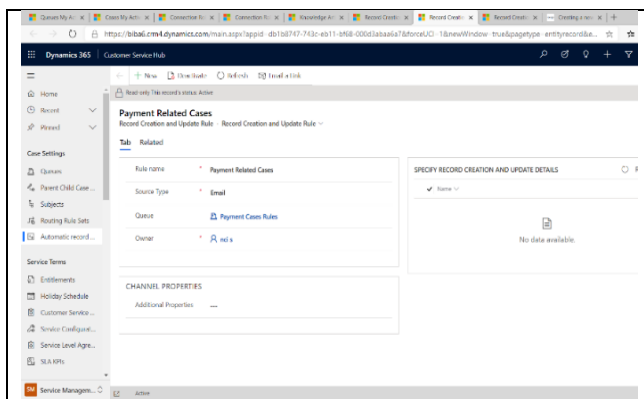


Figure 10.6 Routing Rule

Step 4: Identify & Research Phase

This phase involves going through the cases in detail before the issue is forwarded to the resolve stage. All the assigned customer support executive goes to the cases thoroughly and then contact the desired customer via email or phone. Further researching more into the root and helps in resolving the same.

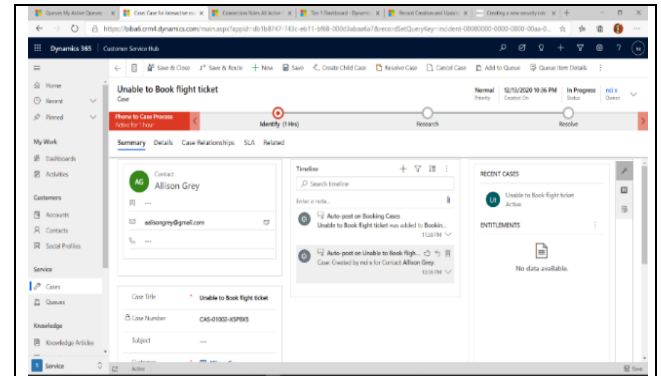


Figure 10.7 Identify & Research Phase

Step 5: Resolved Case section

As shown in figure the Resolved cases reflect the cases whose status is marked as resolved.

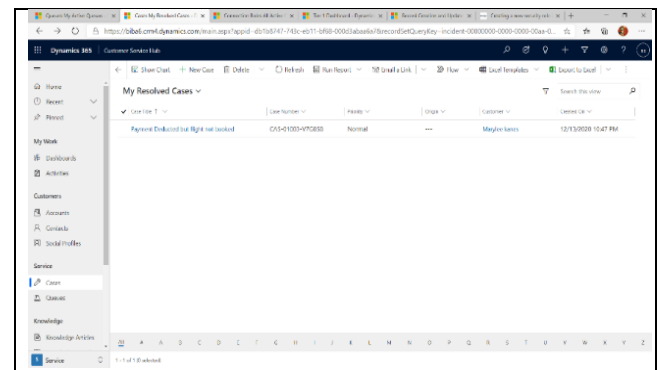


Figure 10.8a Resolved Cases

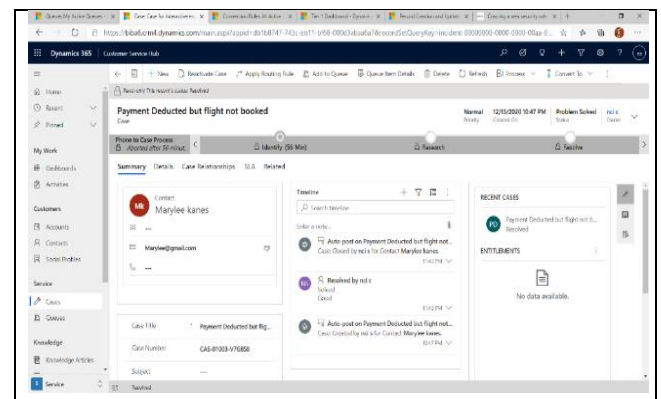


Figure 10.8b Resolved Cases

Step 6: Dashboards

A Dashboard gives an overall summary view of all the subprocess involves in the CRM flow. It acts as a one roof destination for going through the status of active cases, resolved cases. Fig. 10.9 represents a Manager view dashboard which involves specific fields for their desired role as per the role access.

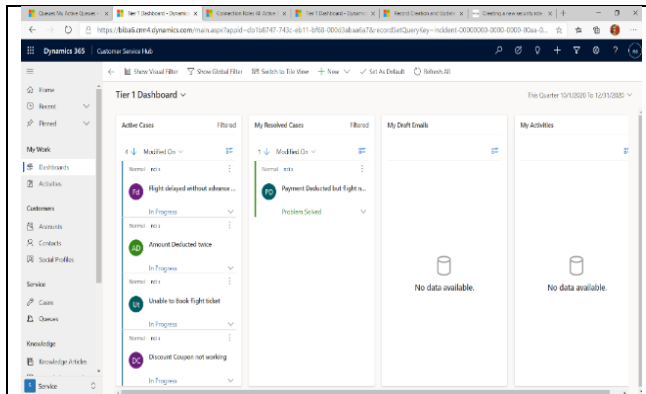


Figure 10.9 Dashboard under Manager role

IV. CONCLUSION

This report implements the complete business suite for Ryanair which is one of the largest budget airline industry across Europe. The report captures all essential processes required by the business to have a detailed overview of the business targeting the key problem areas for future growth of business. Furthermore, the report suggests the implementation of customer relationship management to improve on this very important aspect of any business.

Teamwork

The team worked very effectively and efficiently together. To gain a better understanding of the project each member took part in all aspects of the project and regular meetings were held to discuss the approach needed to take in order to complete the work on time. The objectives of the project were met by constant communication with one another while also dividing the work evenly amongst each other. The most difficult aspect of the project was the beginning as we struggled to identify an approach, once the approach was established however, we were able to

focus in on the project requirements and work well together.

V. REFERENCES

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