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Ireland

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MSc. Data Analytics

Business Intelligence & Business Analysis

Project Report

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[Video Presentation Link](#)

Table of Contents

SPECIFICATION REPORT	3
1. Abstract.....	4
2. Background Information.....	4
2.1 Organisation.....	4
2.2 Marketplace	4
2.3 Scope of Process	4
3.Balanced Scorecard Framework	5
4.Gap Analysis.....	6
5. System Design	6
5.1 Process Design	6
5.2 Data Capture Points	7
5.3 Transactions Integration	7
5.4 Requirement Analysis And Dashboards.....	7
6.Database Design	8
6.1 Entity Relationship Diagrams	9
6.2 Data Dictionary	9
7.Business Rationale	11
7.1 Cost of Implementation	11
7.2 Business Benefits	12
IMPLEMENTATION REPORT	13
1.Introduction	14
2.Data Management.....	14
3.Supply Chain Management.....	14
4.Implementation Of CRM In Dynamics 365	15
4.1 Adding Customer Details into CRM.....	15
4.2 Sending Customer Promotional offer through Campaign via CRM	17
4.3 Adding Lead and converting opportunity in CRM.....	23
4.4 Sales Dashboard in CRM	27
5.Implementation Of Business Analysis in Tableau	28
5.1 Bakery Items Dashboard	28
5.2 Sales Transactions Dashboard	29
5.3 Sales Transactions as Per Country Dashboard.....	30
6.Teamwork	30
References	31

SPECIFICATION REPORT

1. Abstract

Our team has been hired by Price Waterhouse Coopers (PWC) for their client "Martin bakery" as data analysts to evaluate past and present goals of the company and provide decisions in improving process in the organization.

Firstly, we created Balanced Score Card (BSC) which provided feedback on Martin bakery's internal and external processes. Secondly, we performed gap analysis to reach the desired goals with certain action plans.

Our team used Tableau for technical implementation for dashboards and visualizations and for Customer Relationship Management, the system used is Microsoft Dynamics 365. The system designs are showed in this report.

Finally, an economic feasibility is provided to demonstrate that the suggested system implementation is commercially viable. The study details the advantages of our system deployment and compares them to the company's current condition data.

2. Background Information

2.1 Organisation

Martin bakery is a fictional entity created for the purpose of this project. The bakery has stores in different parts of the world and sell coffee, chocolates, vegan bars etc. They are currently running their business with the customer database they have collected since past few years. However, the bakery is now facing the issue of lesser sales than past 5 years and the bakery is also looking forward to curbing the costs at all possible events.

For the above stated reason, the organization is ready to invest in Business Intelligent systems and Customer Relationship Management systems to increase customer retention and boost sales.

2.2 Marketplace

Martin bakery is facing the problem with peak hours rush time where the staff is inadequate, hence customers face long waiting times for the order to be completed. Additionally, the inventory analysis is not perfect for days in a week specially weekends as sometimes the bakery run out of items such as coffee beans etc.

2.3 Scope of Process

The tools that are suitable for the bakery's scenario rectification for technical implementation is Tableau and that for CRM is Dynamics 365.

Bakery's current data of customers will be handled by CRM where the customers will be given loyalty points each time, they make a purchase from any of Martin bakery. The CRM will also be useful in sending promotional offers/discounts through a person's email id and phone number. Hence, customer retention will be easy for the organization.

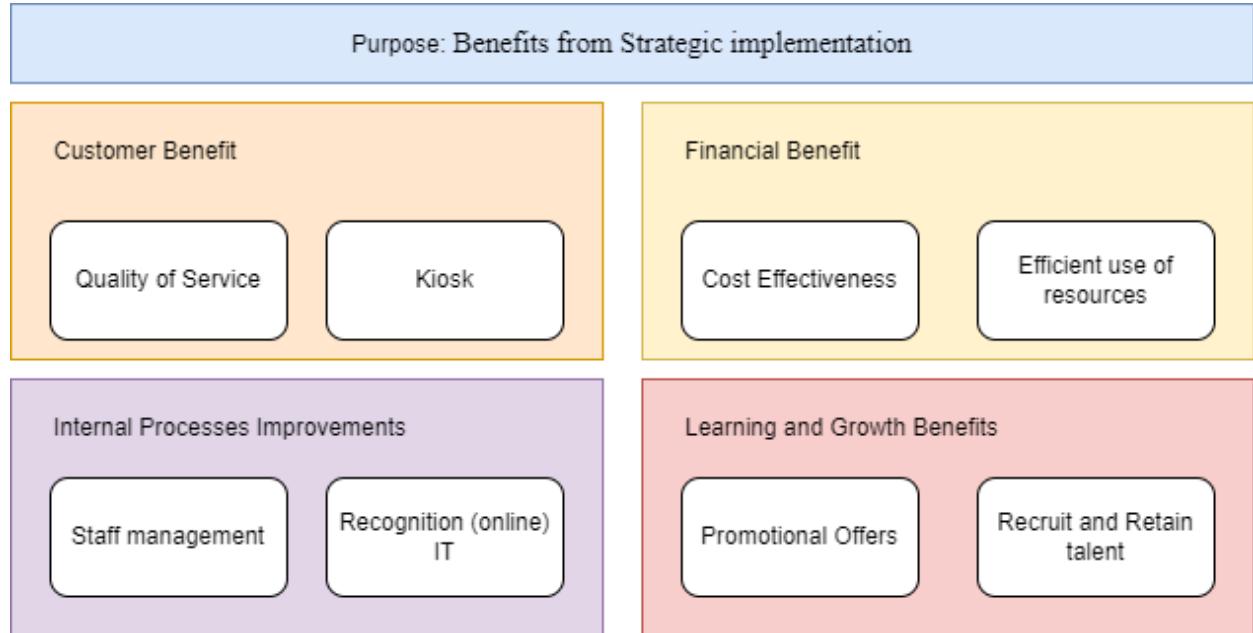
Tableau, with the help of visualizations, will help knowing the current statistics of the sales, staff, location benefits. These dashboards will help in making the future decisions on increasing the sales, reducing the unwanted staff hours.

Dashboards are later explained in section 5.2.

3. Balanced Scorecard Framework

The Balanced Scorecard explains vision and strategy of the organization where the insights into the bakery's internal processes, finances, employee resources, and customer relationship are given. Figure 1 explains the targets in each of the categories of the Balanced Scorecard of Martin bakery.

Figure 1: Balanced Scorecard of Martin Bakery



From a strategic standpoint, we'll show how the bakery might profit from the deployment of Tableau and CRM.

Let us examine the benefits of using Tableau and CRM to achieve Balanced Scorecard goals:

- **Customers**
 - Customers will be benefiting with on-time Quality deliverables
 - Optimal internal processes in the bakery reduces the wait time of customers
- **Financial**
 - Major Cost benefit due to efficient staff management and inventory management
 - Expected increase in sales because of promotions through CRM
- **Internal**
 - Employees share a professional space to work efficiently
 - Real time analysis of the bakery's complete current status
- **Learning and growth**
 - Lower turnover of the staff due to less work pressure
 - Development of new goals by the organization using Analysis and CRM
 - Long term goals can be broken into smaller goals with small timelines

4. Gap Analysis

We used Gap Analysis to compare the present solution to the bakery's intended solution in terms of time, labour, and money.

Table 1 shows the findings of the gap analysis:

Table 1: Results of the gap analysis

GAP Analysis		
Desired Solution	Current Solution	Action steps
1. CRM tool MS dynamics 365 licenced installed. 2. Real time analysing through dashboards and visualizations for efficient forecasting. 3. Cost analysis and expenditure comparison over last periods (months/years). 4. Efficient inventory management through forecasting the variation in bakery items consumption in the market. 5. Dashboard for sales growth because of promotions.	1. Customers are informed about promotions or loyalty benefits through phone calls which is very inefficient. 2. Manual calculations and estimations made about sales, profit, expenditures, raw material waste etc. 3. Inventory material is ordered based on previous in-house stock present which results in more wastage. 4. Balanced sheets and audits for forecasting growth and targets and not all employees are well familiar with it.	1. 1. Implement CRM tool Microsoft Dynamics 365 for precise customer feedback and customer retention through promotional campaigns. 2. Implement Tableau for dashboards and visualizations with dynamic input data capability 3. Dashboard showing seasonal/month-wise charts for all year forecasting 4. Country-wise sales dashboard which will help organization in making decision to open a new store in an area.

5. System Design

5.1 Process Design

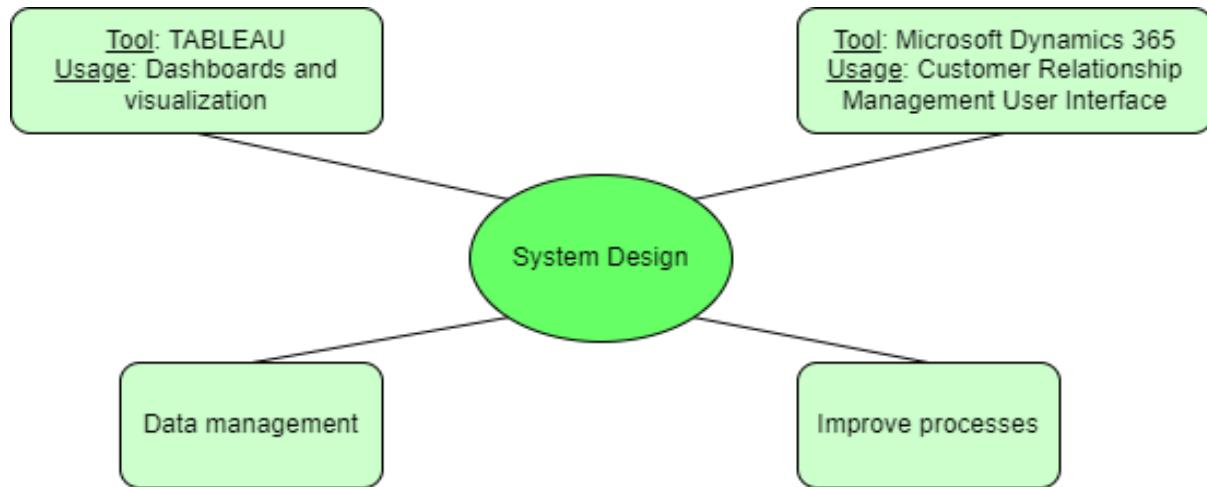
System design is problem solving technique to system analysis which aims at creating improved systems involving addition, deletion or changing pieces relative to original system.

- Dashboard

In this application, we have created 3 dashboards where the first dashboard signifies the comparison between various bakery products, correlation between them and sale of each item. Secondly, the second dashboard depicts the visualization for the sale of products on the yearly timeline where month-wise and hourly sales charts are shown. Lastly, in the third dashboard, products sold with respect to region id visualized.

Figure 2 depicts a high-level process diagram of process design:

Figure 2: System layout



5.2 Data Capture Points

- ❖ **Customer Services**
 - Interaction with the bakery customers for addressing their grievances and capturing their details for future use.
- ❖ **Invoicing**
 - Data gathered at the time of generating invoice of the products bought.
- ❖ **Social Media**
 - Promotional events on social media platform about the bakery and spread of processes followed by Martin bakery for product manufacturing.
- ❖ **Phone**
 - Sending promotional subject messages to clients based on their choice of products bought.
- ❖ **Emails**
 - Customers contacted through email for customer retention and promotional offers.
- ❖ **Chat**
 - Customers may communicate with you using Dynamics 365 chat. The technology will capture chats in addition to distributing via other channels.

5.3 Transactions Integration

The database model in our project is associated by the transactions table where the product id, customer id and country id serve as the foreign key which means that there is one to many relationships between all other tables and transaction table.

5.4 Requirement Analysis And Dashboards

The first dashboard depicts a comparison of various bakery items, as well as the association between them and the sale of each item. Second, the second dashboard shows a depiction of product sales

on an annual timeline, including month-by-month and hour-by-hour sales figures. Finally, the third dashboard displays items sold according to region id.

The dashboards graphs are as below:

Items dashboard

- Frequent Items
- Count of Items per Month
- Count of Orders received during weekdays-weekends
- Correlation of Items

Transactions dashboard

- Peak Selling Hours
- Day-wise Transactions
- Number of Items Sold based on Hours
- Most Productive Month
- Transactions per Hour

Worldwide distribution dashboard

- Transaction counts per country
- Transaction counts per month for each country
- Most Frequent Items

The dashboards show trend analysis over time, allowing the organization to intervene if service levels deteriorate.

The Dynamics 365 system also generates constructed dashboards and analytics, like as turnaround time, resolving problems, and customer feedback, in addition to the Tableau dashboards.

6. Database Design

The database was developed by Mockaroo and is dependent on anonymized bakery data. An RDMS (relational database management) architecture is used to interconnect the multiple datasets. All primary and foreign keys, as well as the varying type and a brief explanation, will be provided.

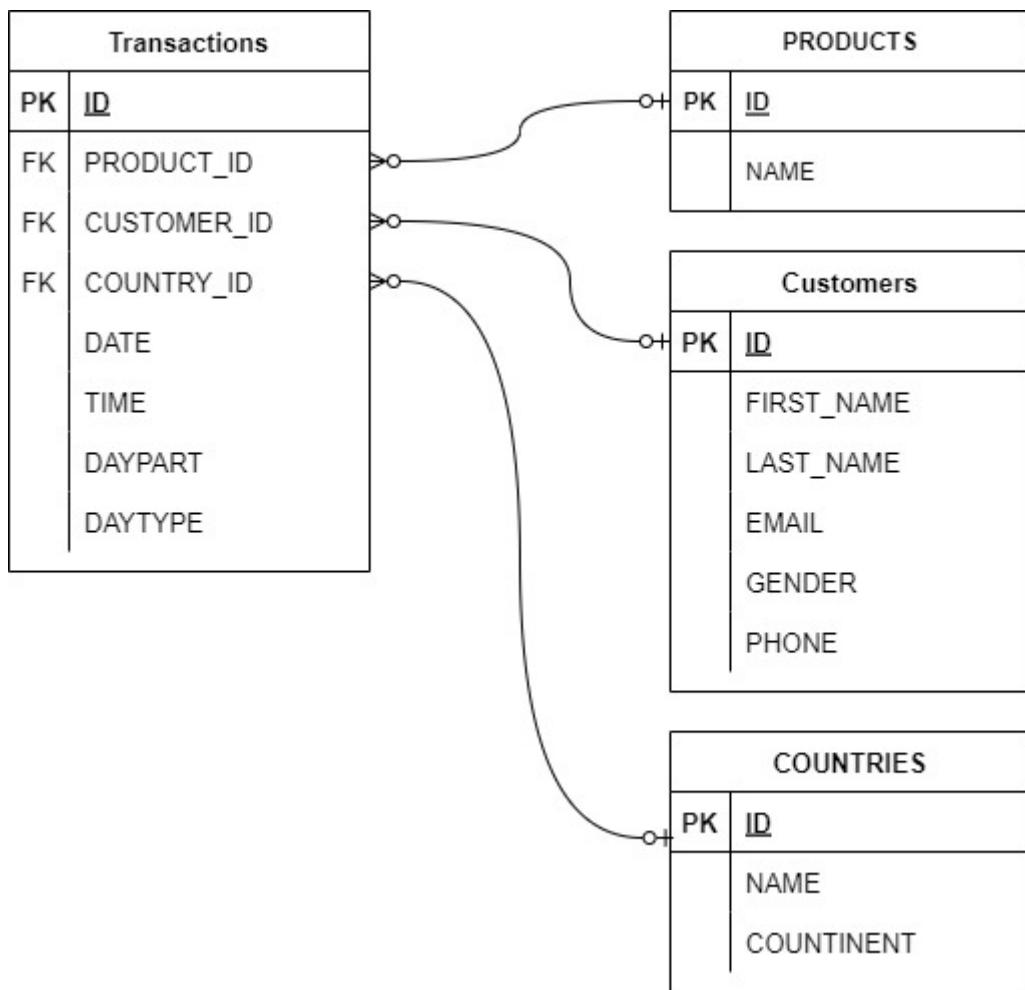
1. **Products** – This will be the list of all the unique products sold by bakery with column names as “ID” as Primary Key, “NAME”.
2. **Customers** – The Customers table has columns “ID”, “FIRST_NAME”, “LAST_NAME”, “EMAIL”, “PHONE” where ID is the Primary Key and this table gives details about all the customers who visit the bakery and give their details through the feedback form/email/phone.

3. **Countries** – This table gives information about the country data for Martin bakery locations. For now, this table has 3 columns “ID”, “NAME”, and “CONTINENT_NAME”. The Primary Key is “ID”.
4. **Transactions** – Transaction table has columns “ID” (this is primary key), “PRODUCT_ID” (foreign key), DATE, TIME, DAYPART, DAYTYPE, CUSTOMER_ID (foreign key), COUNTRY_ID (foreign key)

6.1 ER Diagram

Figure 4 depicts the entity connection diagram for our dataset:

Figure 4 – ER Diagram



An ERD is a snapshot of a relational model (Entity Relationship Diagram). It explains how we use tables and data structures in our Bakery. The letters PK and FK stand for primary and foreign key respectively. Figure 4 depicts the many-to-one link between table pairings. TRANSACTIONS BETWEEN PRODUCTS, COUNTRIES, AND CUSTOMERS.

6.2 Data Dictionary

A data dictionary is a collection of key terminology and measurements, as well as definitions, for each dataset. The data dictionaries in Table 3 below specifies the columns for each dataset. Below are the types of data for each columns, and also the primary key. The column accepts null values is indicated by a check box.

Table 3 – Data dictionary

Products Table

Columns								
	Name	Data type	Length/Precision	Scale	Not NULL?	Primary key?	Default	
	ID	numeric	10	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	NAME	Select an item...	25		<input type="checkbox"/>	<input type="checkbox"/>		

Customers Table

Columns								
	Name	Data type	Length/Precision	Scale	Not NULL?	Primary key?	Default	
	ID	numeric	10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	FIRST_NAME	character varying[]	25		<input type="checkbox"/>	<input type="checkbox"/>		
	LAST_NAME	character varying[]	50		<input type="checkbox"/>	<input type="checkbox"/>		
	EMAIL	character varying[]	100		<input type="checkbox"/>	<input type="checkbox"/>		
	PHONE	character varying[]	50		<input type="checkbox"/>	<input type="checkbox"/>		

Countries Table

Columns								
	Name	Data type	Length/Precision	Scale	Not NULL?	Primary key?	Default	
	ID	numeric	10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	NAME	character varying[]	100		<input type="checkbox"/>	<input type="checkbox"/>		
	CONTINENT	character varying[]	100		<input type="checkbox"/>	<input type="checkbox"/>		

Transactions Table

Columns								
	Name	Data type	Length/Precision	Scale	Not NULL?	Primary key?	Default	
	ID	numeric	10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
	PRODUCT_ID	numeric	10		<input type="checkbox"/>	<input type="checkbox"/>		
	DATE	date			<input type="checkbox"/>	<input type="checkbox"/>		
	TIME	timestamp without time zone	25		<input type="checkbox"/>	<input type="checkbox"/>		
	DAYPART	character varying[]	25		<input type="checkbox"/>	<input type="checkbox"/>		
	DAYTYPE	character varying[]	25		<input type="checkbox"/>	<input type="checkbox"/>		
	CUSTOMER_ID	numeric	10		<input type="checkbox"/>	<input type="checkbox"/>		
	COUNTRY_ID	numeric	10		<input type="checkbox"/>	<input type="checkbox"/>		

7. Business Rationale

7.1 Cost of Implementation

We estimate that the recommended Dynamics 365 and Tableau solutions may be produced by dedicating two IT personnel (business analysts) from BAU activities for six months to focus on the following goals:

- data extraction from current systems
- desired system estimation and adoption
- Restructure database
- Testing – Unit testing/ Integration testing/ User Acceptance Test UAT
- Final systems proposal
- User's Feedback analysis and system design
- Training must be provided to the testers

As a business analyst, we are a team of 3 individuals

In table 4 below, we can see that both tools are scalable, and the cost is estimated as per each user:

Table 4 – Licence fees of the proposed software solutions

License			
Software Required	Annual cost per user	Number of User	Total Cost
Tableau Online	€ 100	5	€ 499
Dynamics 365 - First user	€ 980	1	€ 999
Dynamics 365 – Other users	€ 200	14	€ 2,800
TOTAL			€ 4,298

From the license part, we can see the IT team and the system designing team users must be included for the annual or monthly subscription depending upon the length of the project. And accordingly, the charges or the buildings for each of the clients against each of the resources they are using is provided

7.2 Business Benefits

The following are some of the advantages of the suggested system:

- Individual database systems can be replaced by a single platform
- Less effort for system maintenance
- Real time analytics by Geographical areas etc.
- Employee engagement can be achieved through skill development and effective task management.

We recommend that the proposed solutions be implemented since the benefits substantially outweigh the costs, and implementation can be resourced internally.

IMPLEMENTATION REPORT

1. Introduction

For Martin Bakery, our team of business analysts will assess the company and work on putting the specifications into action. Our study will be implemented in a cost-effective and scalable manner. Our implementation will include two primary technological components: one that deals with data management and the other with reporting. For ticketing, team communication, and customer service, we've utilized Microsoft Dynamic 365 CRM. We've also used Tableau to extract insights from our data and produce graphics and interactive visualizations that will aid us in decision-making.

2. Data Management

Getting insights out of our data is most important aspect of our implementation. For any organisation data is the most valuable point. Our data of Martins bakery contains a lot of important information. It gives us an overview of various products sold during various time periods. We have taken our main dataset from Kaggle. We have added a few rows to this table using Mockaroo to get better understanding of our problem statement.

3. Supply Chain Management

For example, the supply chain for baked products begins with raw ingredients and concludes with the delivery of the finished product to the customer. To maximize efficiency while retaining quality, orchestrating the many operations at each level necessitates careful planning and optimization.

Baked goods ingredients

The practice of managing the multiple operations required to create and distribute goods and services to a company's clients is known as supply chain management. Design, farming, manufacturing, packing, and transportation are all part of the supply chain.

Process by which businesses turn raw materials into finished items, then transport and distribute them to clients, is known as supply chain management. Businesses and their vendors are linked by supply chains, allowing them to create and transport goods and services. Following are the major aspects of supply chain management for our bakery business.

Raw material: The major ingredients are flour, vegetable oil, sugar, maize, and other substances. Because most of the supplies are readily available locally, we will choose to buy in bulk from manufacturers that provide the cheapest pricing. International trade has been hampered by recent pandemics and political conflicts. Ukraine is Europe's largest wheat supplier. This has led to material shortages and price increases, such as wheat and sweets. Inventory management will be critical in addressing this issue.

Manufacturing: Raw ingredients are turned into baked products during the production step. The perishable nature of bread items is a concern. While adding preservatives to some items may assist, our goal is to provide fresh baked goods on time.

Distribution: The distribution step entails getting the items from the manufacturing plant to where the customers are. We sell directly to customers and to certain merchants from our cafés. According to your business's projections, taking online orders will be quite profitable at times.

Management: We use Dynamics 365 to handle our customers. Our visualizations can help with raw material management, inventory management, and workforce management.

4. Implementation of CRM in Dynamics 365

4.1 Adding Customer Details into CRM

The initial step is to add customer details which includes their contact details.

In dynamics 365 sales hub we can add a customer following the bellow steps as directed in screenshots.

Screenshot 1: My Active Contacts List View

Full Name	Email	Company Name	Business Phone
Alex Baker	alex@treyresearch.net	Trey Research	619-555-0127
Avery Howard	avery@treyresearch.net	Trey Research	567-555-0137
Cacilia Viera	cacilia@alpineskihouse.com	Alpine Ski House	281-555-0162
Carla Yates	carla@treyresearch.net	Trey Research	456-555-0156
Dwayne Elijah	dwayne@alpineskihouse.com	Alpine Ski House	281-555-0160
Haroun Stormonth	haroun@fabrikaminc.com	Fabrikam, Inc.	423-555-0122
Heriberto Nathan	heriberto@northwindtraders.com	Northwind Traders	614-555-0123
Kapil Lalwani			
Kevin Martin	kevin@adatum.com	A. Datum Corporation	425-555-0160
Kim Rocha	kim@treyresearch.net	Trey Research	567-555-0157
Miguel Garcia	miguel@northwindtraders.com	Northwind Traders	614-555-0127
Viplav Gadewar			

Screenshot 2: New Contact Form

New Contact
Contact - Contact

Summary Details Files

CONTACT INFORMATION

- First Name:
- Last Name:
- Job Title:
- Account Name:
- Email:
- Business Phone:
- Mobile Phone:
- Fax:
- Preferred Method of Contact: Any
- Address 1: Street 1:

Timeline

Almost there
Select Save to see your timeline.

Assistant

This record hasn't been created yet. To enable this content, create the record.

Company:

Dynamics 365 | Martin Bakery

New Contact - Unsaved
Contact · Contact

Viplav Vijay Gadewar
Owner

Summary Details Files

CONTACT INFORMATION

First Name	John
Last Name	Doe
Job Title	Student
Account Name	---
Email	john.doe@gmail.com
Business Phone	0892559365
Mobile Phone	---
Fax	---
Preferred Method of Contact	Any
Address 1: Street 1	---

Timeline

Almost there
Select Save to see your timeline.

Assistant

This record hasn't been created yet. To enable this content, create the record.

Company

Dynamics 365 | Martin Bakery

Show Chart New Delete Refresh Email a Link Flow AI Builder Excel Templates Export to Excel

My Active Contacts

Full Name	Email	Company Name	Business Phone
Alex Baker	alex@treyresearch.net	Trey Research	619-555-0127
Avery Howard	avery@treyresearch.net	Trey Research	567-555-0137
Cecilia Viera	cecilia@alpineskihouse.com	Alpine Ski House	281-555-0162
Carla Yates	carla@treyresearch.net	Trey Research	456-555-0156
Dwayne Elijah	dwayne@alpineskihouse.com	Alpine Ski House	281-555-0160
Haroun Stormonth	haroun@fabrikaminc.com	Fabrikam, Inc.	423-555-0122
Heriberto Nathan	heriberto@northwindtraders.com	Northwind Traders	614-555-0123
John Doe	john.doe@gmail.com		0892559365
Kapil Lalwani			
Kevin Martin	kevin@adatum.com	A. Datum Corporation	425-555-0160
Kim Rocha	kim@treyresearch.net	Trey Research	567-555-0157
Miguel Garcia	miguel@northwindtraders.com	Northwind Traders	614-555-0127

1 - 14 of 14

As shown above we have drafted a contact of John Doe in our directory. The final picture shows our active contacts updated.

4.2 Sending Customer Promotional offer through Campaign via CRM

Once our active contact list is sorted, we can send them promotional offers to attract them to buy our products. Offers can be either discounts or free products. We can also make offers that can be redeemed during non-peak hours to boost our sales during those periods.

The screenshot shows the Dynamics 365 interface for the 'Martin Bakery' account. The left sidebar navigation bar is visible, with 'Sales' selected. The main content area displays a list titled 'My Active Contacts' with 14 entries. The first entry, 'John Doe', is highlighted with a blue selection box around its row. The columns show 'Full Name', 'Email', 'Company Name', and 'Business Phone'. The list includes names like Alex Baker, Avery Howard, and Haroun Stormonth. At the bottom of the list, it says '1 - 14 of 14 (1 Selected)'.

Full Name	Email	Company Name	Business Phone
Alex Baker	alex@treyresearch.net	Trey Research	619-555-0127
Avery Howard	avery@treyresearch.net	Trey Research	567-555-0137
Cacilia Viera	cacilia@alpineskihouse.com	Alpine Ski House	281-555-0162
Carla Yates	carla@treyresearch.net	Trey Research	456-555-0156
Dwayne Elijah	dwayne@alpineskihouse.com	Alpine Ski House	281-555-0160
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Heriberto Nathan	heriberto@northwindtraders.com	Northwind Traders	614-555-0123
John Doe	john doe@gmail.com		0892559365
Kapil Lalwani			
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Kim Rocha	kim@treyresearch.net	Trey Research	567-555-0157
Miguel Garcia	miguel@northwindtraders.com	Northwind Traders	614-555-0127

This screenshot is identical to the one above, showing the 'My Active Contacts' list in Dynamics 365. The contact 'John Doe' is again highlighted with a blue selection box. The list contains 14 entries with columns for Full Name, Email, Company Name, and Business Phone. The bottom of the list shows '1 - 14 of 14 (1 Selected)'.

Full Name	Email	Company Name	Business Phone
Alex Baker	alex@treyresearch.net	Trey Research	619-555-0127
Avery Howard	avery@treyresearch.net	Trey Research	567-555-0137
Cacilia Viera	cacilia@alpineskihouse.com	Alpine Ski House	281-555-0162
Carla Yates	carla@treyresearch.net	Trey Research	456-555-0156
Dwayne Elijah	dwayne@alpineskihouse.com	Alpine Ski House	281-555-0160
Haroun Stormonth	haroun@fabrikaminc.com	Fabrikam, Inc.	423-555-0122
Heriberto Nathan	heriberto@northwindtraders.com	Northwind Traders	614-555-0123
John Doe	john doe@gmail.com		0892559365
Kapil Lalwani			
Kevin Martin	kevin@adatum.com	A. Datum Corporation	425-555-0160
Kim Rocha	kim@treyresearch.net	Trey Research	567-555-0157
Miguel Garcia	miguel@northwindtraders.com	Northwind Traders	614-555-0127

Dynamics 365 | Martin Bakery

My Active Contacts

Full Name	Email	Company Name
Alex Baker	alex@treyresearch.net	Trey Research
Avery Howard	avery@treyresearch.net	Trey Research
Cacilia Viera	cacilia@alpineskihouse.com	Alpine Ski House
Carla Yates	carla@treyresearch.net	Trey Research
Dwayne Elijah	dwayne@alpineskihouse.com	Alpine Ski House
Haroun Stormonth	haroun@fabrikaminc.com	Fabrikam, Inc.
Heriberto Nathan	heriberto@northwindtraders.com	Northwind Trad
John Doe	johndoe@gmail.com	
Kapil Lalwani		
Kevin Martin	kevin@adatum.com	A. Datum Corp
Kim Rocha	kim@treyresearch.net	Trey Research
Miguel Garcia	miguel@northwindtraders.com	Northwind Trad

1 - 14 of 14 (1 Selected)

Add **Cancel**

Dynamics 365 | Martin Bakery

New Marketing List

Marketing List - Marketing List

Summary **Members** **Notes**

Information

- Name*
- List Type* **Static**
- Purpose
- Targeted At*
- Source
- Currency
- Modified On

Campaigns

Quick Campaigns

No Locked Last Used on (Date) **Viplav Vijay Gadewar** Owner

Dynamics 365 | Martin Bakery

New Marketing List - Unsaved

Marketing List - Marketing List

Summary **Members** **Notes**

Information

- Name* **Birthday Cake Promotions**
- List Type* **Static**
- Purpose
- Targeted At* **Contact**
- Source
- Currency
- Modified On

Campaigns

Quick Campaigns

No Locked Last Used on (Date) **Viplav Vijay Gadewar** Owner

Dynamics 365 | Martin Bakery

Sales
↳ Leads
↳ Opportunities
↳ Competitors

Collateral
↳ Quotes
↳ Orders
↳ Invoices
↳ Products
↳ Sales Literature

Marketing
↳ Marketing Lists
↳ Campaigns
↳ Quick Campaigns

Performance
↳ Goals

Sales

My Active Marketing Lists

Name ↑	Type	Marketing List Member...	Last Used On	Purpose
Birthday Cake Promotions	Static	Contact		

1 - 1 of 1

Page 1

Dynamics 365 | Martin Bakery

Sales
↳ Leads
↳ Opportunities
↳ Competitors

Collateral
↳ Quotes
↳ Orders
↳ Invoices
↳ Products
↳ Sales Literature

Marketing
↳ Marketing Lists
↳ Campaigns
↳ Quick Campaigns

Performance
↳ Goals

Sales

Birthday Cake Promotions Saved

Marketing List - Marketing List

No Locked Last Used on (Date) Viplav Vijay Gadewar Owner

Summary Members Notes Related

Information

Name*
Birthday Cake Promotions

List Type*
Static

Purpose

Targeted At*
Contact

Source

Currency
Euro

Modified On
5/12/2022

Campaigns

Name ↑ Campaign Code Status Reason

No data available

0 - 0 of 0

Quick Campaigns

Subject Activity Type Total Members No. of Successes

New Quick Campaign

0 - 0 of 0

Page 1

Dynamics 365 | Martin Bakery

Sales
↳ Leads
↳ Opportunities
↳ Competitors

Collateral
↳ Quotes
↳ Orders
↳ Invoices
↳ Products
↳ Sales Literature

Marketing
↳ Marketing Lists
↳ Campaigns
↳ Quick Campaigns

Performance
↳ Goals

Sales

Birthday Cake Promotions Saved

Marketing List - Marketing List

Summary Members Notes Related

Information

Name*
Birthday Cake Promotions

List Type*
Static

Purpose

Targeted At*
Contact

Source

Currency
Euro

Modified On
5/12/2022

Campaigns

Name ↑

No data available

0 - 0 of 0

Quick Campaigns

Subject Activity Type

New Quick Campaign

0 - 0 of 0

Lookup Records

Select record

john

All Contacts

John Doe johndoe@gmail.com

New Contact Advanced lookup

Add Cancel

Dynamics 365 | Martin Bakery

Sales
↳ Leads
↳ Opportunities
↳ Competitors

Collateral
↳ Quotes
↳ Orders
↳ Invoices
↳ Products
↳ Sales Literature

Marketing
↳ Marketing Lists
↳ Campaigns
↳ Quick Campaigns

Performance
↳ Goals
↳ Sales

Birthday Cake Promotions - Saved
Marketing List - Marketing List

No
Locked
Last Used on (Date)
Viplav Vijay Gadewar
Owner

Summary Members Notes Related

Members

Full Name	Email	Company Name	Business Phone	Status
John Doe	johndoe@gmail.com	---	0892559365	Active

Dynamics 365 | Martin Bakery

Sales
↳ Leads
↳ Opportunities
↳ Competitors

Collateral
↳ Quotes
↳ Orders
↳ Invoices
↳ Products
↳ Sales Literature

Marketing
↳ Marketing Lists
↳ Campaigns
↳ Quick Campaigns

Performance
↳ Goals
↳ Sales

My Active Marketing Lists

Name	Type	Marketing List Member...	Last Used On	Purpose
Birthday Cake Promotions	Static	Contact		

Dynamics 365 | Martin Bakery

Sales
↳ Leads
↳ Opportunities
↳ Competitors

Collateral
↳ Quotes
↳ Orders
↳ Invoices
↳ Products
↳ Sales Literature

Marketing
↳ Marketing Lists
↳ Campaigns
↳ Quick Campaigns

Performance
↳ Goals
↳ Sales

My Active Marketing Lists

Create a Quick Campaign

Welcome to the Create Quick Campaign Wizard

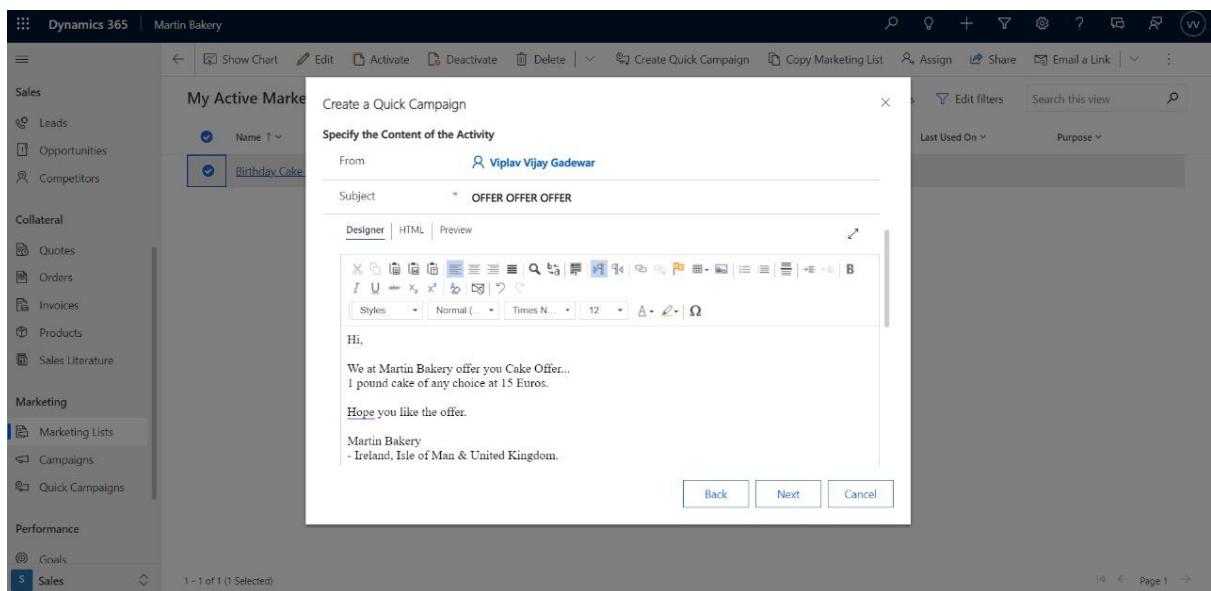
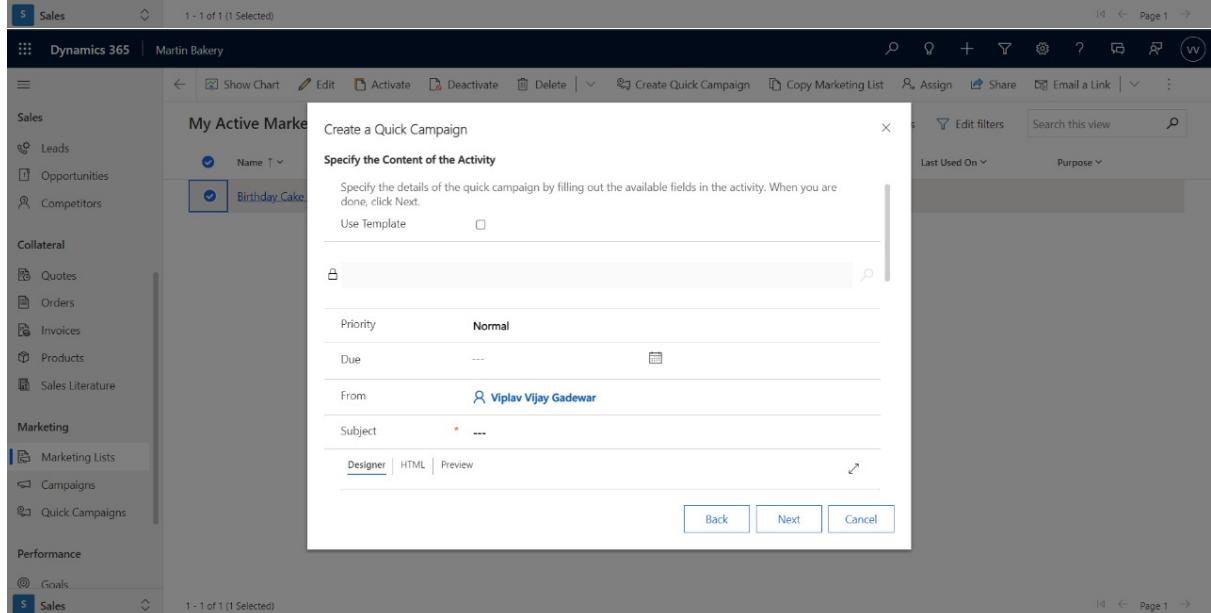
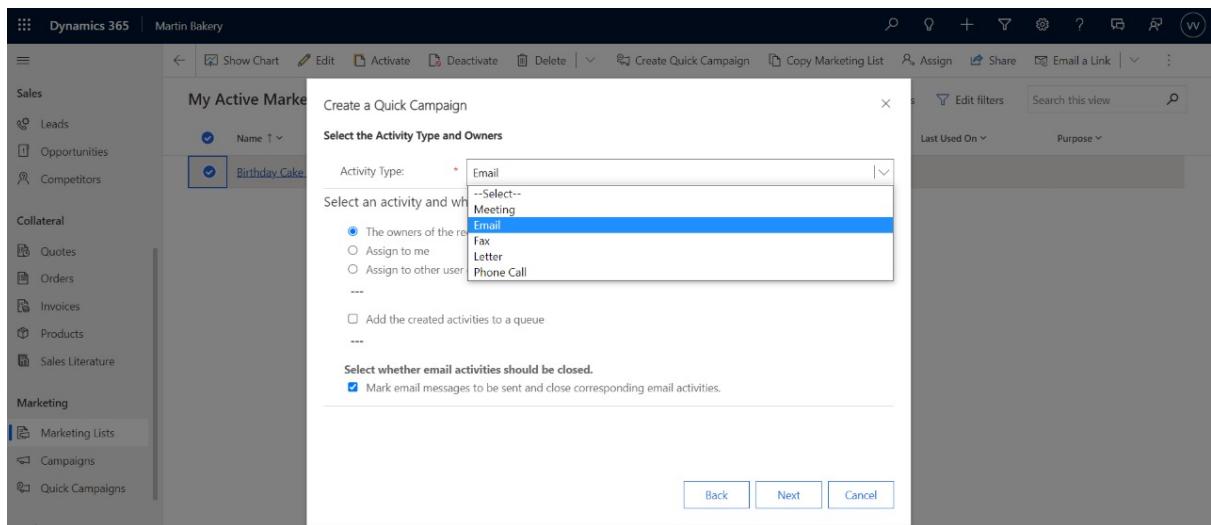
This wizard helps you create an activity and distribute it to multiple records at one time.

You can use this wizard to communicate directly with your customers, such as by sending email, or to assign activities to others to complete, such as making phone calls. Then, you can track the responses to these activities.

You will be asked to:

Specify the name of the quick campaign
Select an activity and who to assign the activity to
Specify the content for the activity
To continue, click Next.

Next Cancel



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My Active Marketing Lists

Create a Quick Campaign

Completing the Create Quick Campaign Wizard

You have successfully completed the wizard. Review the information for your campaign. If you want to make changes, click Back.

Name: Birthday Cake Campaign
Activity: Email
Scope: For Selected Records (1)
Owner: Me

After you create this quick campaign, it will be located in the Sales and Marketing pane, under Quick Campaigns.

To create the quick campaign and its activities, click Create.

Birthday Cake Promotions - Saved
Marketing List - Marketing List

Summary Members Notes Related

Targeted At*

- Contact
- Source
-
- Currency
- Euro

Modified On

5/12/2022 9:13 PM

Cost

Last Used On

Locked

No

Quick Campaigns

Subject	Activity Type	Total Members
Birthday.Cake.Campaign	Email	1

Birthday Cake Campaign - Saved
Quick Campaign - Quick Campaign (deprecated)

5/12/2022 9:30 PM | Contact | Email | Completed

INFORMATION

Subject*
Birthday Cake Campaign
Owner*
Viplav Vijay Gadewar
No. of Successes
1
No. of Failures
0
Error Details

Timeline

Search timeline
Enter a note...
Email from Viplav Vijay Gadewar
Offer Offer Offer CRM.0001001
Hi, We at Martin Bakery offer you Cake Offer... 1 pound cake of a...
Closed 9:31 PM

SELECTED MEMBERS

John Doe 0892559365

EXCLUDED MEMBERS

No data available

We have created a Birthday cake campaign offering a 15 euros discount to our eligible lead in our directory.

4.3 Adding Lead and converting opportunity in CRM

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New Lead
Lead - Lead

Lead to Opportunity Sales Flow
Active for less than one minute

Qualify (< 1 Min) → Develop → Propose → Close

Summary Details Files

Contact

Topic	*	---
First Name	*	---
Last Name	*	---
Job Title	---	---
Business Phone	---	---
Mobile Phone	---	---
Email	---	---

Timeline

Almost there
Select Save to see your timeline.

Assistant

This record hasn't been created yet. To enable this content, create the record.

Sales

Leads

Opportunities

Competitors

Collateral

Quotes

Sales

Company

Dynamics 365 | Martin Bakery

New Lead - Unsaved
Lead - Lead

Lead to Opportunity Sales Flow
Active for less than one minute

Qualify (< 1 Min) → Develop → Propose → Close

Summary Details Files

Contact

Topic	*	Order for Birthday Cake
First Name	*	John
Last Name	*	Doe
Job Title	Student	---
Business Phone	0892559365	---
Mobile Phone	---	---
Email	---	---

Timeline

Almost there
Select Save to see your timeline.

Assistant

This record hasn't been created yet. To enable this content, create the record.

Sales

Leads

Opportunities

Competitors

Collateral

Quotes

Sales

Company

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My Open Opportunities

Topic	Potential ...	Est. Close D...	Est. Revenue	Contact	Account	Probability	Rating	Email (Potential Cus...
Order for Birthday Cake	John Doe			John Doe		Warm	johndoe@gmail.c...	
5 Café BG-1 Pro Grinders for Northwind Tra...	Northwin...	5/12/2022	€24,995.00	Heriberto ...	Northwin...	93	Cold	
5 Café A-100 Automatic	Trey Rese...	5/18/2022	€77,500.00	Alex Baker	Trey Rese...	85	Hot	
3 Café Grande Espresso Machines for A. Da...	A. Datum ...	5/21/2022	€44,700.00	Kevin Mar...	A. Datum ...	90	Warm	
2 Semiautomatic Espresso Machines for A. ...	A. Datum ...	5/22/2022	€39,800.00	Kevin Mar...	A. Datum ...	78	Warm	
1 Café BG-1 Grinder for Alpine Ski House	Alpine Ski...	5/31/2022	€4,999.00	Dwayne El...	Alpine Ski...	80	Cold	
18 Airport Coffee Makers for Northwind Tra...	Northwin...	6/2/2022	€30,582.00	Miguel Ga...	Northwin...	93	Cold	
2 Café Duo Espresso Machines for Fabrikam	Fabrikam, ...	6/3/2022	€25,800.00	Zoltán Sza...	Fabrikam, ...	90	Warm	
1 Café Grande Espresso Machine for Alpine...	Alpine Ski...	6/4/2022	€14,900.00	Cecilia Vie...	Alpine Ski...	70	Cold	
50 Café A-100 Automatic	Trey Rese...	6/5/2022	€95,000.00	Avery Ho...	Trey Rese...	81	Warm	
10 Airport XL Coffee Makers for Alpine Ski H...	Alpine Ski...	6/11/2022	€4,990.00	Cecilia Vie...	Alpine Ski...	65	Cold	
9 Café PG-1 Grinders for A. Datum	A. Datum ...	6/11/2022	€35,991.00	Kevin Mar...	A. Datum ...	80	Hot	

1 - 13 of 13

Page 1

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Lead to Opportunity Sales

John Doe - Saved

Lead · Lead

Qualify (< 1 Min)

Develop

Propose

Close

Assign Lead

You have selected 1 Lead. To whom would you like to assign it?

Assign to: Me

User or team: ---

Assign Cancel

Summary Details Files Related

Contact

Topic: Order for Birthday Cake

First Name: John

Last Name: Doe

Job Title: Student

Business Phone: 0892559365

Mobile Phone: ---

Email: ---

Get started

Capture and manage all records in your timeline.

No notifications or suggestions

Check back later to see what's new and stay up to date.

Stakeholders

No data available.

Competitors

No data available

0 - 0 of 0

Page 1

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Lead to Opportunity Sales

John Doe - Lead

Lead to Opportunity Sales

Active for less than one minute

Summary Details

Contact

Topic: Order for Birthday Cake

First Name: John

Last Name: Doe

Job Title: Student

Business Phone: 0892559365

Mobile Phone: ---

Email: ---

Account or Contact may already exist

Associate the lead to existing records by choosing account and/or contact and clicking Continue. To proceed by without linking to matched record, click Ignore and save.

Matched accounts (0)

Matched contacts (1)

Full Name	Email	First Name	Last Name	Modified On	Business Pho...
John Doe	johndoe@g...	John	Doe	5/12/2022 ...	0892559365

Ignore and save Continue Cancel

Assistant

No notifications or suggestions

Check back later to see what's new and stay up to date.

Stakeholders

No data available.

Competitors

No data available

0 - 0 of 0

Page 1

Dynamics 365 | Martin Bakery

Order for Birthday Cake - Saved
Opportunity - Sales Trial

Lead to Opportunity Sales Trail Active for 1 minute Qualify Develop (< 1 Min) Propose Close

Summary Product Line Items Quotes Related

Timeline Search timeline + ⌂ Enter a note... Get started Capture and manage all records in your timeline.

Opportunity score Prioritize smarter with opportunity scores Get insights into which opportunities are most likely to be won. Ask your admin to set up predictive opportunity scoring for your org. Learn more

Want to know the health of this relationship? Ask your system administrator to enable Relationship Analytics.

Assistant

Topic Order for Birthday Cake

Dynamics 365 | Martin Bakery

Order for Birthday Cake - Saved
Opportunity - Sales Trial

Lead to Opportunity Sales Trail Active for 1 minute Qualify Develop (< 1 Min) Propose Close

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Order for Birthday Cake - Saved
Opportunity - Sales Trial

Lead to Opportunity Sales Trail Active for 1 minute Qualify Develop (< 1 Min) Propose Close

Summary Product Line Items Quotes Related

Timeline Search timeline + ⌂ Enter a note... Note modified by Viplav Vijay Gadewar Cake Specifications He Needs 1 pound Chocolate Brownie cake for his Friend's Birthday on 14th May 2022. 8:56 PM

Opportunity score Prioritize smarter with opportunity scores Get insights into which opportunities are most likely to be won. Ask your admin to set up predictive opportunity scoring for your org. Learn more

Want to know the health of this relationship? Ask your system administrator to enable Relationship Analytics.

Assistant

Topic Order for Birthday Cake

Contact John Doe

Account ---

Purchase Timeframe ---

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Order for Birthday Cake - Saved
Opportunity : Sales Trial

Lead to Opportunity Sales Trail
Active for 9 minutes

Qualify Develop (7 Min)

In Progress Viplav Vijay Gadewar

Propose **Close**

Timeline

Search timeline

Note modified by Viplav Vijay Gadewar
Cake Specifications
He Needs 1 pound Chocolate Brownie cake for his Friend's Birthday on 14th May 2022.

8:56 PM

Opportunity score

Prioritize smarter with opportunity scores

Get insights from admin to set up predictive opportunity scoring for your org. [Learn more](#)

Want to know the health of this relationship? Ask your system administrator to enable Relationship Analytics.

Assistant

Dynamics 365 | Martin Bakery

Order for Birthday Cake - Unsaved
Opportunity : Sales Trial

Lead to Opportunity Sales Trail
Active for 9 minutes

Qualify Develop (7 Min)

In Progress Viplav Vijay Gadewar

Propose **Close**

Timeline

Search timeline

Note modified by Viplav Vijay Gadewar
Cake Specifications
He Needs 1 pound Chocolate Brownie cake for his Friend's Birthday on 14th May 2022.

8:56 PM

Opportunity score

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Assistant

Dynamics 365 | Martin Bakery

Order for Birthday Cake - Saved
Opportunity : Sales Trial

Lead to Opportunity Sales Trail
Active for 10 minutes

Qualify Develop (7 Min)

In Progress Viplav Vijay Gadewar

Propose **Close**

Close Opportunity

Provide the following information about why this opportunity is being closed.

Status Reason * Won

Actual Revenue * €15.00

Close Date * 5/14/2022

Competitor ***

Description ***

OK Cancel

Opportunity score

Prioritize smarter with opportunity scores

Get insights into which opportunities are most likely to be won. Ask your admin to set up predictive opportunity scoring for your org. [Learn more](#)

Want to know the health of this relationship? Ask your system administrator to enable Relationship Analytics.

Assistant

The screenshot shows the Dynamics 365 interface for an opportunity record. The top navigation bar includes links for Refresh, Check Access, Reopen Opportunity, Assign, Email a Link, Delete, Process, Flow, Word Templates, and a search bar. The main header displays the opportunity name, status (Saved), and owner (Viplav Vijay Gadewar). A process flow diagram shows the current stage as 'Qualify' (blue circle) followed by 'Develop (9 Min)' (grey circle), 'Propose' (grey circle), and 'Close' (grey circle). The left sidebar lists various work items under 'My Work', including Sales accelerator, Activities, Dashboards, Customers, Accounts, Contacts, Leads, Opportunities (selected), Competitors, Collateral, and Sales. The main content area shows a timeline with notes from Viplav Vijay Gadewar, including a note about a birthday cake order and another note about modifying the order. It also displays summary information like Topic ('Order for Birthday Cake') and Contact ('John Doe'). On the right, there are sections for 'Opportunity score' (with a note to prioritize smarter with opportunity scores), 'Relationship Analytics' (with a note to enable it), and an 'Assistant' section.

To summarise our steps:

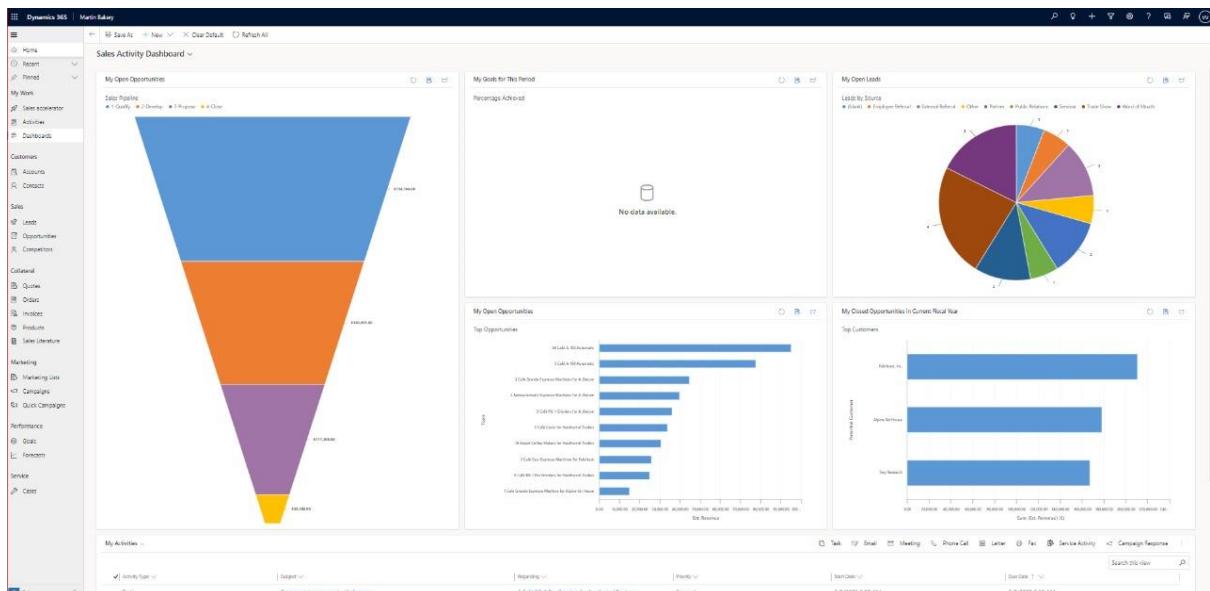
Identifying possible bakery leads: The first step is to discover potential bakery leads. Any prospective potential customer is referred to as a lead in CRM. Promotions in person or on social media might create leads.

Lead Generation: Leads may be produced right in the CRM program. On the upper left, there is a button to create a new lead.

Qualifying a Lead: We may use lead qualification to determine whether a lead is a prospective buyer. We can use this research to determine whether leads are fraudulent purchasers, so we don't waste any further efforts on them.

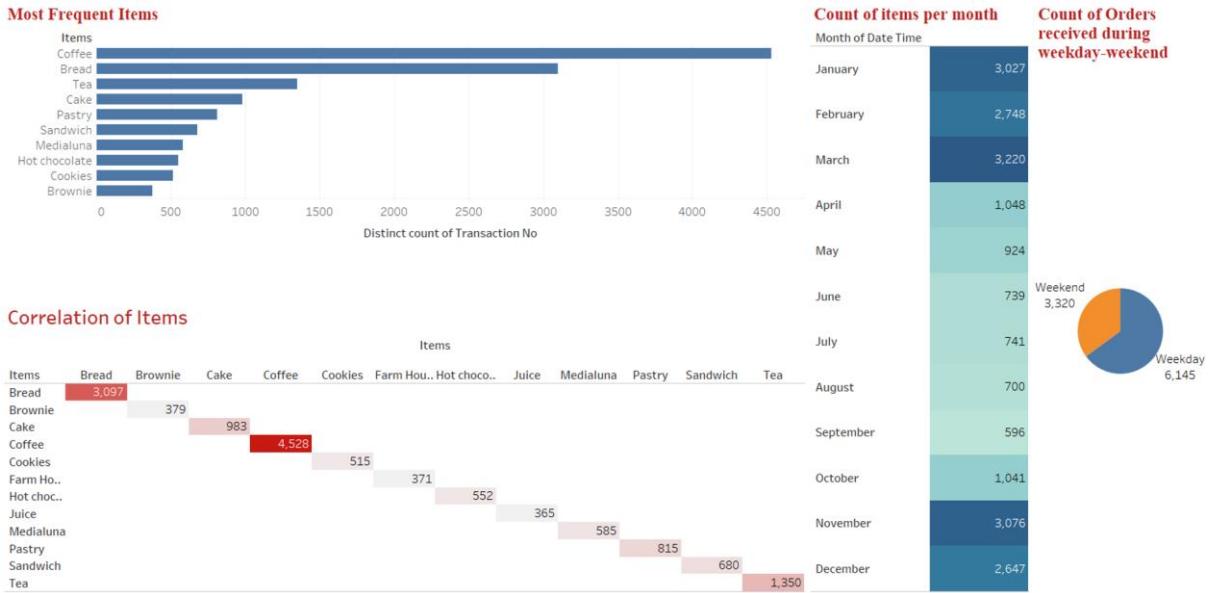
Qualifying: Qualified leads will be visible as prospective opportunities in this section. It will indicate whether the consumer is interested in purchasing our service.

4.4 Sales Dashboard in CRM



5. Implementation Of Business Analysis in Tableau

5.1 Bakery Items Dashboard



First Graph (Top Left)

This graph depicts sales of the bakery's most popular goods. We might compare this number to previous weeks/months/years. But for now, we're just giving a total count for all things. Coffee is the most popular item, followed by bread. The least popular products are cookies and brownies.

Second Diagram (Top Bottom)

This graph depicts the relationship between many elements. The most popular items are coffee, bread, and tea, which have a strong correlation with the other goods. We may examine the combos that customers want to buy together using this graphic.

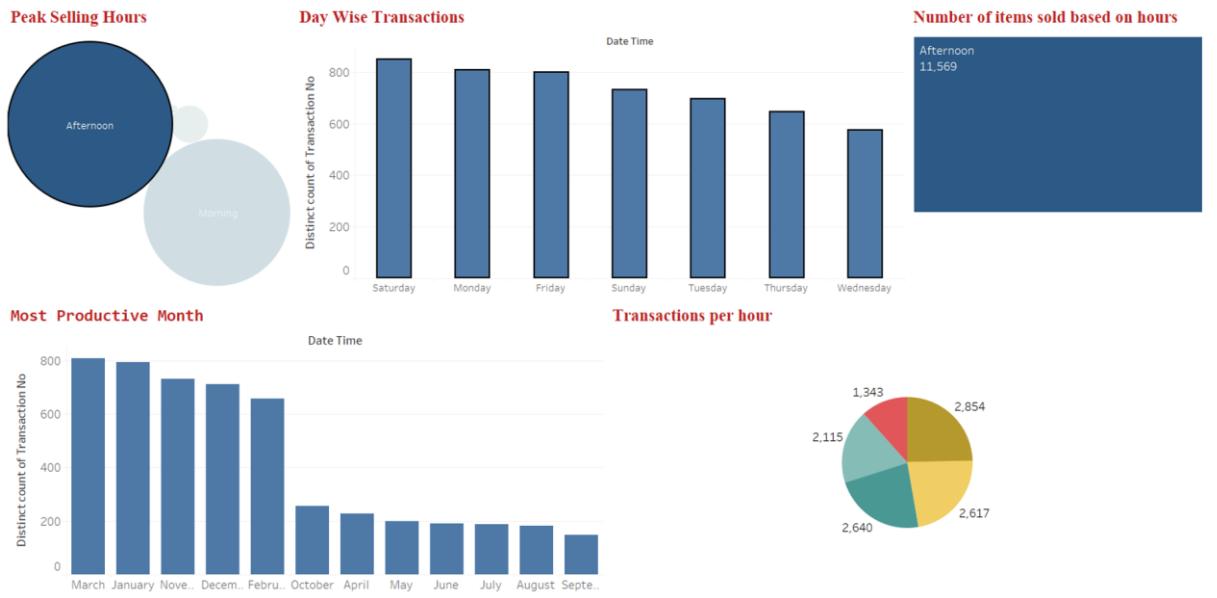
Third Diagram (Centre)

This table displays the monthly item count. There is a correlation between the month and the overall number of products sold. The most things are sold in March, with the lowest sales in September.

Fourth Diagram (Top Right)

This pie chart depicts item sales throughout the weekend and weekdays. In comparison to the rest of the week, sales are particularly excellent during the two-day weekend.

5.2 Sales Transactions Dashboard



First Graph (Top Left)

This pie chart shows that most of the customer traffic is during the afternoon time. Also, customers step in good numbers to have their morning coffee. Sales during closing hours in evening are comparatively low. So, we can distribute our resources according to this pattern throughout the day. We can deploy limited staff during the evening and production can be controlled looking at the demand during this time to avoid any possible wastage.

Second Graph (Top Centre)

The bar chart shows us sales per day. Sales on weekend are more than sales during the mid-week. Saturday is the busiest day. We can manage our resources accordingly.

Third Graph (Top Right)

This plot shows us sales of times based on hours. We can check the footfall in our stores based upon this projection.

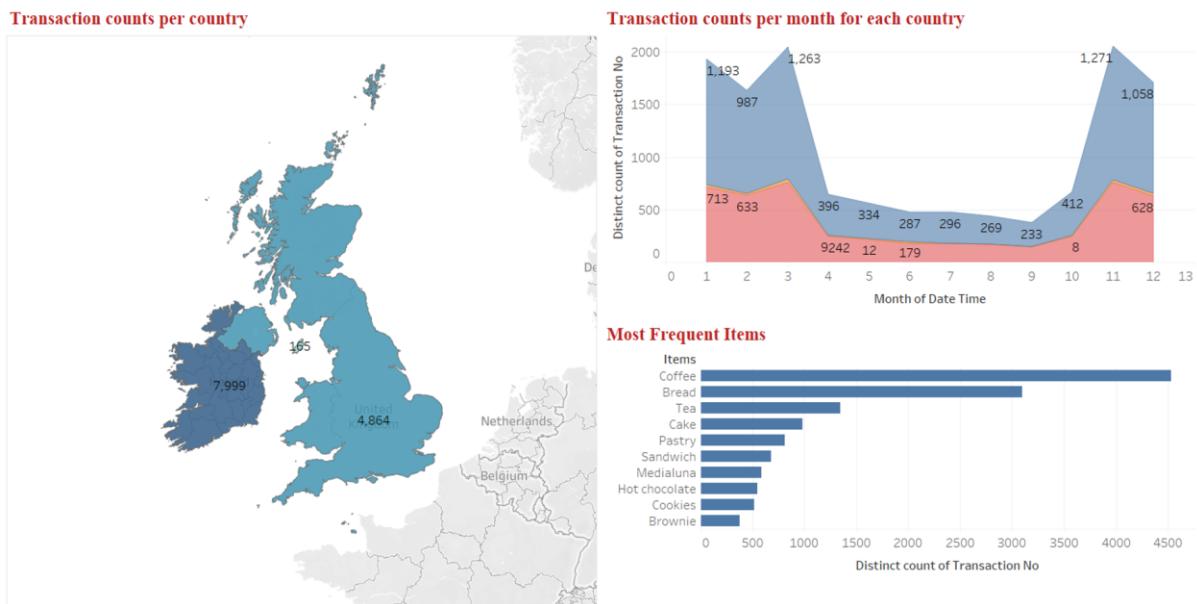
Fourth Graph (Bottom Left)

The bar chart shows sales for each month. We can see that sales from November to march are at peak. This is the winter season, so the sales are very good as people like to step in to have a hot cup of coffee. So, we must maximise our profits for this bonus season. Sales during the summer are comparatively less. A new product as a alternative to coffee like cold coffee will help to boost sales during the summer.

Fifth Graph (Bottom Right):

This pie chart shows us the sales of different items throughout the day.

5.3 Sales Transactions as Per Country Dashboard



First Graph (Left)

This map depicts sales in various nations. Ireland has the largest sales among the three nations, followed by the United Kingdom and the Isle of Man. We can grow our business by replicating the Ireland model in the other two nations and other future new ventures.

Second Diagram (Top Right)

The graph depicts the month-by-month count of transactions in each nation. All countries have the same trend of rising and falling sales for all months.

Third Diagram (Bottom Right)

The bar chart depicts the most popular items in each of the three nations. The most popular items in all three nations are coffee, bread, and tea.

6. Teamwork

From concept to implementation, team members Rohan, Viplav, and Kapil collaborated closely throughout the project. The Bakery dataset was chosen by the entire team.

Our project involved data gathering, Tableau dashboard creation, an ER diagram, analysis, CRM implementation, a Balance Scorecard, and the creation of a report and presentation.

Throughout the project, we used an Agile methodology. We scheduled meetings and conference calls to discuss our project ideas. Everyone equally offered their perspectives, and we had constructive arguments to test each other's methodologies, with the common goal of producing better and more exact results in the form of visualizations. During the project, we feel we displayed an excellent blend of subject knowledge, technological experience, and business analytical skills.

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