

Campaign Performance Analysis & Automation Dashboard | 1800Remodel.com

This is a real-world business analytics project designed for **1800Remodel.com**, a US-based home remodeling company. The goal was to analyze campaign performance data using **MySQL**, automate reporting, and visualize insights in Power BI.

Business Problem

1800Remodel.com runs multiple digital marketing campaigns but lacked a system to:

-  Track campaign profitability
-  Identify underperforming campaigns
-  Monitor monthly trends
-  Automate reports and insights

Project Goals

- ✓ Identify top-performing & underperforming campaigns
- ✓ Analyze conversion rate, error rate, ping success rate
- ✓ Monthly and campaign-based profitability tracking
- ✓ Automate SQL reporting through stored procedures
- ✓ Build an interactive Power BI dashboard connected to MySQL

SQL Analysis Report

Key Queries Used (With Output Samples):

```
## 1. Total gross profit by campaign
SELECT
    Campaign_Name,
    SUM(Gross_Profit) AS Total_Gross_Profit
FROM campaign_performance
GROUP BY Campaign_Name
ORDER BY Total_Gross_Profit DESC;
```

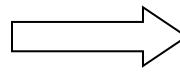
Campaign_Name	Total_Gross_Profit
Roofing	11694.00
Windows	7675.00
Plumbing	2540.00
Flooring	2053.00
Gutters	2007.00
SSDI	1846.00
Siding	1345.00
Solar	1233.00

-- Conversion Rate

```
## 2. Lead Conversion Rate
SELECT
    Campaign_Name,
    (SUM(Gross_Accepted) / SUM(Leads)) * 100 AS Conversion_Rate
FROM campaign_performance
GROUP BY Campaign_Name
ORDER BY Conversion_Rate DESC;
```

Campaign_Name	Conversion_Rate
Plumbing	50.7813
SSDI	43.5294
Pest Control	42.6829
Water Damage	40.7407
Roofing	26.4463
HVAC	24.0700

```
-- Monthly Gross Profit
## 5. Gross profit by month
SELECT
    MONTHNAME(Month) AS Month_Name,
    SUM(Gross_Profit) AS Total_Gross_Profit
FROM campaign_performance
GROUP BY MONTHNAME(Month), MONTH(Month)
ORDER BY MONTH(Month);
```



Month_Name	Total_Gross_Profit
June	4546.00
January	3355.00
April	3257.00
May	3241.00
November	3160.00
August	3027.00
July	2994.00
September	2283.00
October	2283.00

```
-- Monthly Acceptance Rate
## 13. Total leads and expected rate by month
SELECT
    MONTHNAME(Month) AS Month_Name,
    SUM(Leads) AS Total_Leads,
    SUM(Gross_Accepted) AS Total_Accepted,
    (SUM(Gross_Accepted) / SUM(Leads)) * 100 AS Acc
FROM campaign_performance
GROUP BY MONTHNAME(Month), MONTH(Month)
ORDER BY MONTH(Month);
```

Month_Name	Total_Leads	Total_Accepted	Acceptance_Rate
January	1032	387	37.5000
March	749	254	33.9119
May	1618	414	25.5871
April	1940	398	20.5155
June	3142	610	19.4144
December	1135	197	17.3568
August	2871	460	16.0223
July	2450	391	15.9592
November	2385	295	12.3690
September	3349	261	7.7934

-- Ping Success Rate by Campaign

```
## 3. Ping success rate
SELECT
    Campaign_Name,
    (SUM(Pings_Accepted) / SUM(Total_Pings)) * 100 AS Ping_Success_Rate
FROM campaign_performance
GROUP BY Campaign_Name
ORDER BY Ping_Success_Rate DESC;
```

Campaign_Name	Ping_Success_Rate
Windows	49.8136
Mvaid	45.8595
SSDI	23.1631
Roofing	20.1761
Solar	19.6021
Gutters	17.5320
Bathroom Remodel	16.4266
HVAC	12.1176

Key Insights

- ❖ Roofing had the highest profit (**\$11.69K**) despite lower conversion
- ❖ Plumbing had a higher conversion rate but lower profit
- ❖ Underperformers: **Mvaid, Medicare, Auto, Home**
- ❖ Highest profit month: **June (\$4,546)**
- ❖ Lowest profit month: **December (\$1,956)**
- ❖ Ping success rate & acceptance rate dropped sharply in **September & October**

SQL Automation

- Created two master summary tables:
 - `campaign_best_master` – campaign-level KPIs
 - `monthly_best_master` – month-level KPIs
- Built a **stored procedure**: `update_campaign_master()` to refresh both tables automatically when new data is added.

```
CALL update_campaign_master();
```

Dashboard Highlights (Power BI)

- ✓ Bar chart: Profit by Campaign
- ✓ Line chart: Monthly Profit Trend
- ✓ Bubble chart: Success vs Error Rate
- ✓ Cards: Total Leads, Highest Profit Month, Ping Success Rate

Power Bi Dashboard: [View Live Dashboard](#)



Recommendations

- **Boost Roofing Campaign:** Highest profit (\$11.7K) despite low conversion → Scale budget & improve targeting.
- **Pause or Optimize Low Performers:** Mvaid, Medicare, Auto showing low profit & high error → Reassess or pause.
- **Investigate Sept–Oct Drop:** Acceptance & ping success rates dropped → Check lead quality or tech issues.
- **Run Key Campaigns in June & Jan:** Peak months for profit → Align promotions accordingly.
- **Maintain SQL + Power BI Automation:** Efficient workflow → Just update the `campaign_performance` table monthly.
- **Future Improvements:** Add CPC, channel metrics, customer feedback, and real-time alerts in Power BI.

Project Structure

```
campaign-performance-1800remodel/
├── README.md
└── SQL/
```

```
└── campaign_analysis_full.sql
├── PowerBI/
│   └── CampaignPerformance.pbix
├── assets/
│   └── dashboard_screenshot.png
└── Report/
    └── CampaignPerformance.pdf
```

Data Source

-  Period: March 2024 – January 2025
 -  Format: CSV file (website backend scraped data)
 -  Loaded using MySQL: LOAD DATA INFILE
 -  Key fields: Leads, Revenue, Gross/Net Profit, Pings, Errors
-

Technologies Used

Technology	Purpose
MySQL	Data import, analysis, and automation
SQL	Queries for campaign/monthly KPIs
Stored Procedure	Automate KPI refresh
Power BI	Dashboard + DAX for visualization
Excel	Pre-clean raw CSV if needed
SQL Triggers & Procedures	To automate monthly master table updates

About the Company

1-800-Remodel is a home improvement company that connects homeowners with pre-screened contractors. Their mission is to simplify remodeling by providing trustworthy professionals and insights for smarter decision-making.

About Me

Hi, I'm **Abu Sufian**, a freelance Data Analyst working with a Top-Rated Analyst for 1800Remodel.com. I handled end-to-end analytics, including:

- Data scraping, SQL analysis
- KPI automation with Stored Procedure
- Dashboard creation in Power BI

 For full project access and code, check this GitHub repo.