
Unlocking Cost Savings: Harnessing Microsoft Graph, Fabric, and Power BI Copilot for License Optimization

Laze Janev

Dynamics 365 Solution Architect



Laze Janev

16 years experience in Dynamics

MVP in AI ERP, MCT, Speaker

laze@janevconsulting.com

www.linkedin.com/in/lazejanev/



DYNUG.NO

HØSTKONFERANSE 26. OG 27. NOVEMBER
AV BRUKERE - FOR BRUKERE



AGENDA

- Introduction
- Purpose
- Architecture
- Demo
- What's next

Introduction

It is a report!!!

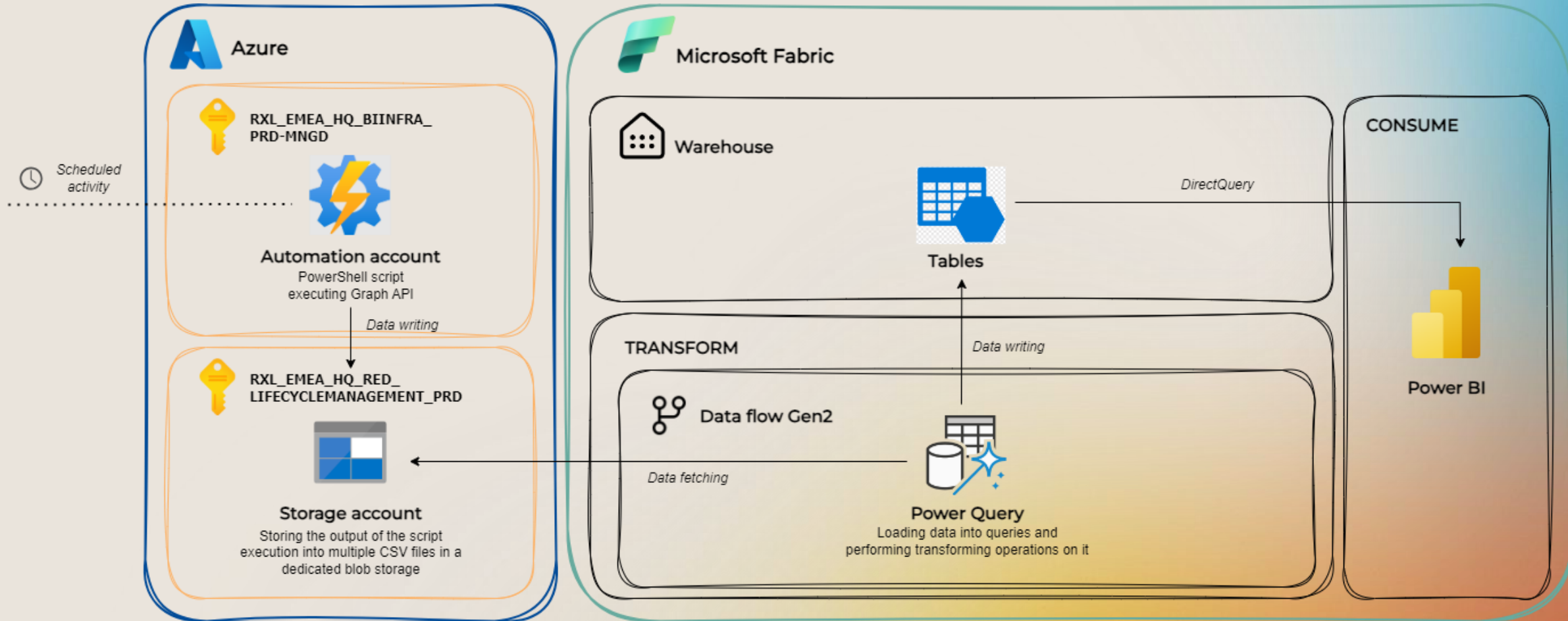
Microsoft Licensing Report - a Power BI report created to provide insights into active Microsoft licenses for users in a tenant. The report presents information by country and domain, tracks historical trends, and estimates monthly costs based on both Microsoft official pricing and Rexel-specific agreement pricing

Purpose

The purpose of the report is to:

- Display the active Microsoft licenses each user is assigned to in the tenant, categorised by country and domain.
- Present historical trends in license assignment over time, segmented by domain and country.
- Estimate and compare monthly costs using official Microsoft prices and Customer-specific pricing agreements.

Architecture diagram



Architecture components

Component	Description
API	Microsoft Graph API for fetching user licensing data
Azure Automation	PowerShell script execution and scheduling via Azure Automation Runbooks
Azure Storage Account	Storage for CSV files containing user license data
Data Flow Gen2	Data transformation pipeline in Azure Data Factory
Data Warehouse	Centralized storage for transformed data
Power BI	Visualization and reporting service

Architecture elements

- **Data source: Microsoft Graph API**
 - Data about user licenses is obtained via a Microsoft Graph API call executed within a PowerShell script. This script is responsible for fetching up-to-date licensing information for each user in the tenant.
- **PowerShell script**
 - The PowerShell script handles data extraction and its storage into a dedicated account.
- **Azure Storage Account**
 - Once the data is fetched by the PowerShell script, it is saved as CSV files in an Azure Storage Account for further processing
- **Data Flow Gen2**
 - The data is loaded from the CSV files into a data flow in Azure Data Factory Gen2, located inside the Fabric workspace HQ Users Licensing PRD. This data flow transforms the raw data to meet the report's requirements.

Architecture elements

Data Warehouse

- The transformed data is stored in a central data warehouse, which acts as the final storage destination before being consumed by Power BI.
- Storage format: Structured tables containing:
 - User licensing information
 - Historical data for trend analysis
 - License prices for each active license
 - Domain information

Architecture elements

Power BI Report

- The final Power BI report visualises the data stored in the data warehouse. The report provides an interactive interface for end-users to view licensing information, trends, and cost estimates.
- Data source: The Power BI service is connected to the data warehouse.
- Report pages:
 - Active: A breakdown of active licenses per user, domain, and country.
 - Licensing history: Line charts showing trends in license assignments over time, filtered by domain, country and date range.
 - Costs: Comparison of official Microsoft pricing and Customer-specific agreement pricing, presented in both tabular and visual formats.

DEMO

What's next?

License usage data

Microsoft 365 admin center

Home > Usage > Exchange

Usage

Overview

Reports

- Microsoft 365 Copilot
- Dynamics 365 Customer V...
- Exchange**
- Forms
- Microsoft 365 apps
- Microsoft Browser
- Microsoft Teams
- Microsoft Teams apps
- OneDrive
- Project
- SharePoint
- Visio
- Viva Engage
- Viva Learning

Email activity | Email app usage | Mailbox usage

Last updated: 20 October 2024 (UTC) ? Help 📅 Past 30 days ▾

Activity

Number of actions by type

↓ Export

Activity Type	Value
Send actions	~1.5
Receive actions	~1.0
Read actions	~0.5
Meeting created actions	~0.2
Meeting interacted actions	~0.1

Users

Number of users by activity type

↓ Export

Activity Type	Value
Send actions	~35.7K
Receive actions	~26.8K
Read actions	~17.9K
Meeting created actions	~8.9K
Meeting interacted actions	~0

↓ Export

Username	Last activity date (UTC) ⓘ	Send actions	Receive actions	Read actions	Meeting created actions	Meeting interacted actions
----------	----------------------------	--------------	-----------------	--------------	-------------------------	----------------------------

License usage report



Office 365 report usage | Data updated 20/10/24

Search



Pages

Summary

Globale view

Animated view

Outlook

OneDrive

SharePoint

Teams

Yammer

Scenario : Teams

Scenario : Storage

Analyse Active / Inactive

Scenario : communicati...

Scenario : applications



Filters

Department

Country

City

Microsoft Online Services Reporting



Total number of users online

Licensing breakdown by type

Licenses Office 365 E1

Licenses Office 365 E3

Licenses Office 365 E5

Active users on services last month



91.96%



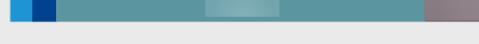
71.94%



81.93%



79.47%



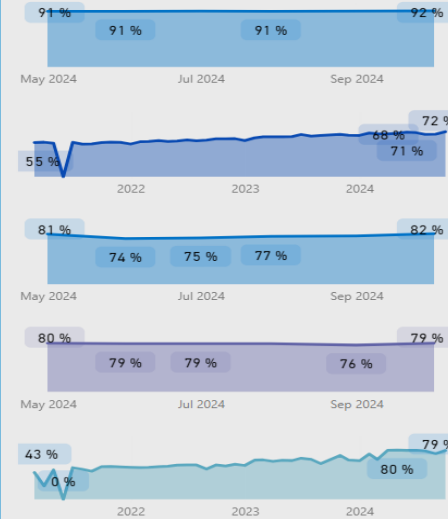
58.64%



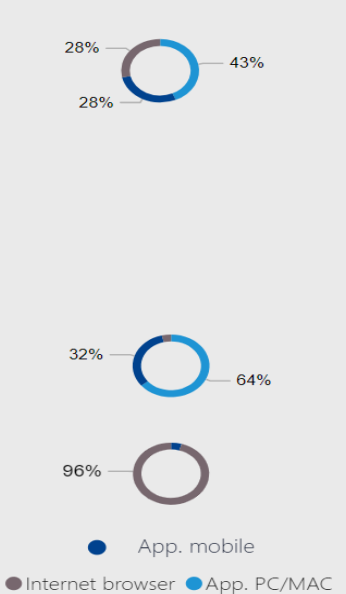
Active users < 30 days

Active < 3 months Active > 3 < 6 months Active > 6 months Inactive

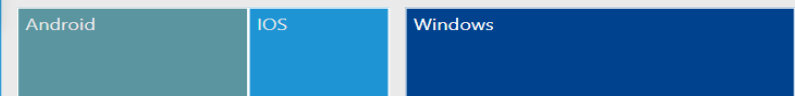
History of active user rate



Device type and volume to consume services



Active users on services



- Scenario : Teams
- Scenario : Applications
- Scenario : Communications
- Active / Inactive
- Scenario : Storage
- Scenario : active users history

Data between the 02-09-24 and the 02-10-24

- Country overview
- Definition
- MAU/Licenses
- MAU/Sales
- Appointment
- Phone Calls
- Opportunity
- Lead
- Incident

Country overview

Date

Last 6 Months

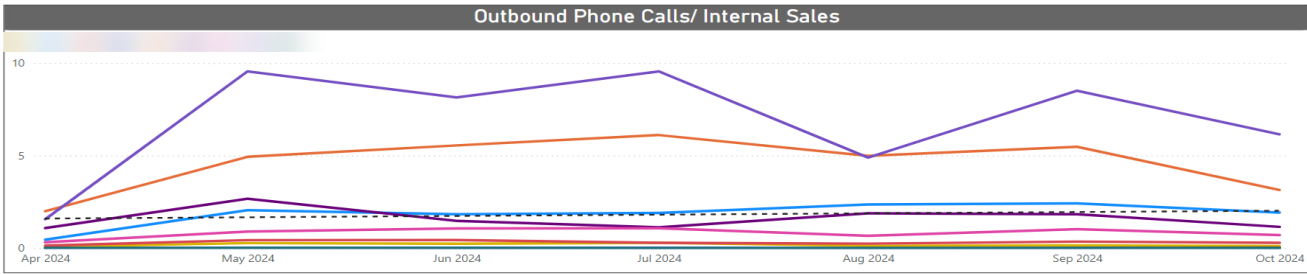
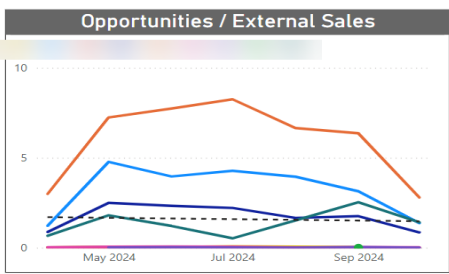
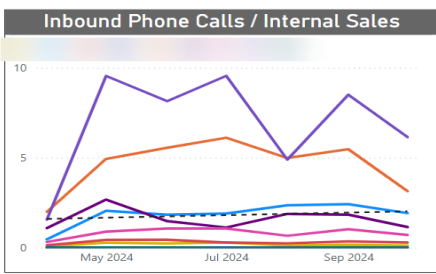
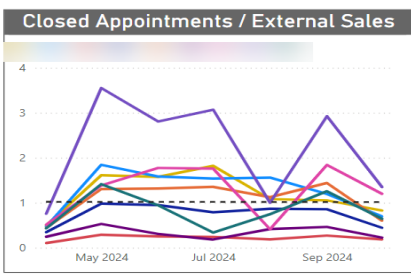
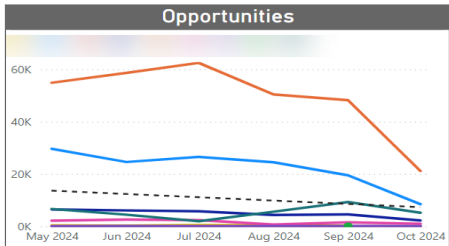
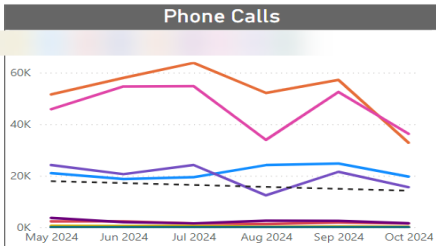
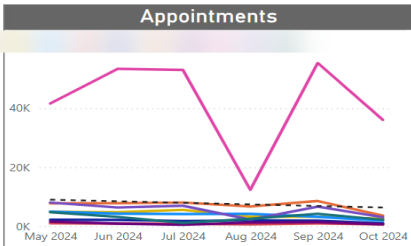
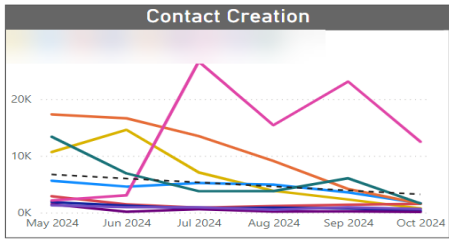
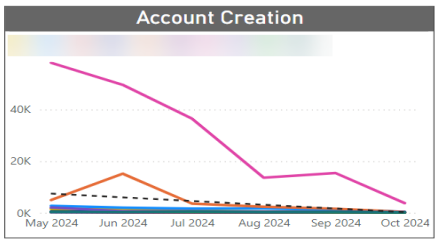
22/04/2024 - 21/10/2024

MAU / Licenses (last month)

(Blank)

MAU / Sales (last month)

(Blank)



Filters

Automate license governance

- Automatic license assignment and removal
- Workflow process with automation about the license assignment with tracking
- Cost savings with license reassignment
- License simulation when negotiating
- Create a Power BI app
- All integration points directly in Fabric

Q&A

Thank you