

## Title

Easy Analytics Corporation - Employee Engagement Dashboard 2023

## Tools used

1. Excel (data transformation & data manipulation)
2. Power BI (data modeling, DAX, visualization)

I created 2 pages

1. Overall Engagement
2. Survey Metric

## Purpose

1. Designed to analyze the Employee Engagement Survey results Year 2023
2. Identify strengths, areas for improvement & patterns across different divisions & departments
3. Turn employee feedback into actionable insights to drive engagement & organizational growth

HR & leadership team want to identify what's driving engagement & take action to improve retention, morale & performance (employee engagement is a measure of how emotionally committed employees are to their work and the company)

## Stakeholder

1. HRM
2. CHRO, leadership team

## Dataset

1. EmployeeData\_2023 (DataYear, EmployeeID, DivisionName, DepartmentName, Gender, Year, Month)
2. SurveyResponse\_2023 (DataYear, EmployeeID, QuestionID, LikertScore, AverageScore)
3. SurveyQuestion\_MarketScore\_2023 (DataYear, QuestionID, Metric, Category, QuestionText, Theme, MarketScore)
4. MetricMapping (Metric, MetricOrder)
5. CategoryMapping (Metric, Category, CategoryOrder)
6. QuestionMapping (QuestionID, QuestionText, QuestionOrder)
7. LikertScaleMapping (LikertScale, LikertScore, LikertScaleOrder)

## Database design

Star Schema, 1 Fact Table (SurveyResponse\_2023) with 2 Dimension Tables (EmployeeData\_2023, SurveyQuestion\_MarketScore\_2023)

## Data model

From Dimension Table @ Lookup Table to Fact Table, using Collie Layout

## One-to-many relationship (1:\*)

1. EmployeeData\_2023[EmployeeID] → SurveyResponse[EmployeeID]
2. SurveyQuestion\_MarketScore[QuestionID] → SurveyResponse[QuestionID]
3. MetricMapping[Metric] → SurveyQuestion\_MarketScore[Metric]
4. CategoryMapping[Category] → SurveyQuestion\_MarketScore[Category]
5. LikertScaleMapping[LikertScore] → SurveyResponse[LikertScore]

**One-to-one relationship (1:1)**

1. QuestionMapping[QuestionID] → SurveyQuestion\_MarketScore[QuestionID]

**Business questions to answer:**

1. What is the overall employee engagement score?
2. Which divisions or departments are most/least engaged?
3. Do male and female employees report different engagement levels?
4. What are the Top 3 and Bottom 3 questions company-wide?
5. How do we compare to the market?
6. Which themes are weakest?

**Metric**

1. Total Employees Surveyed
2. Overall Engagement Score
3. Participation Rate
4. Headcount by Gender
5. Male Headcount
6. Female Headcount
7. Engagement by Gender
8. Male Engagement
9. Female Engagement
10. Headcount by Division
11. Engagement by Division
12. Headcount by Department
13. Engagement by Department
14. Engagement Level for Division
15. Engagement Level for Department
16. Average Score per Metric
17. Market Score per Metric
18. Top 3 questions per Metric
19. Bottom 3 questions for Metric

## Business Insights:

1. What is the overall employee engagement score?  
77%

2. Which divisions or departments are most/least engaged?

All divisions scored above 65%, meaning every division is at least Engaged

1. People & Culture leads with 82% (Highly Engaged), showing exceptionally strong engagement
2. The rest range from 77%–79%, showing healthy overall engagement

Two departments are in the 60% range (below “Highly Engaged” threshold):

1. Client Onboarding & Activation (63%) is the only department not yet Engaged, neutral
2. Channel & Retail Sales (66%) is just on the border

Departments like Innovation & Emerging Tech (100%), Technical Support Engineering (87%), and Device Engineering (84%) demonstrate standout engagement levels. These teams may be key to understanding successful practices and team culture

3. Do male and female employees report different engagement levels?

There is no significant difference in engagement levels between male and female employees, with only a 1% variation

4. What are the Top 3 and Bottom 3 questions company-wide?

Top 3 for Core

Our organization invests in continuous learning  
Our organization supports flexible ways of working  
Our organization funds clubs that build engagement

Bottom 3 for Core

Our organization stays connected with former employees  
Our organization values people more than profit  
Our organization favors flexibility over rigid processes

Top 3 for Self

I look for ways to improve my contribution  
I believe my role contributes to the organization’s goals  
I see myself staying in this organization long-term

Bottom 3 for Self

I trust that my efforts are recognized  
I feel my workspace is comfortable  
I feel energized at work

Top 2 for Group

We are happy to help one another  
We share ownership of our work

Bottom 3 Group

We welcome diverse opinions

We trust each other to deliver

5. How do we compare to the market?

Tracked across Core, Self and Group metric

Core is +0.24 above market

Self is +0.35 above market

Group is +0.31 above market

These results indicate a strong internal culture and positive employee experience. The company may consider sharing best practices with lower-performing departments

6. What are the top and bottom performing themes?

Top 3 performing themes

1. Organizational Commitment
2. Continuous Improvement
3. Discretionary Effort

These themes suggest that employees are dedicated, resilient and consistently go above expectations

Top 3 weakest themes

1. Employer Branding
2. Agile Work Culture
3. People-First Culture

These weak areas may point to gaps in internal culture, adaptability and employee experience.

Consider reviewing internal communications, leadership practices and team flexibility frameworks

## DAX Measure

Headcount = DISTINCTCOUNT(EmployeeData[EmployeeID])

Female Headcount = CALCULATE([Headcount], EmployeeData[Gender]="F")

Headcount = DISTINCTCOUNT(EmployeeData[EmployeeID])

Participation Rate = DIVIDE(CALCULATE(DISTINCTCOUNT(EmployeeData[EmployeeID]), EmployeeData[ResponseFlag]="Y"), DISTINCTCOUNT(EmployeeData[EmployeeID]))

Engagement Score = CALCULATE(DIVIDE(AVERAGE(SurveyResponse[LikertScore]), 5))

Female Engagement = CALCULATE(DIVIDE(AVERAGE(SurveyResponse[LikertScore]), 5), EmployeeData[Gender]="F")

Male Engagement = CALCULATE(DIVIDE(AVERAGE(SurveyResponse[LikertScore]), 5), EmployeeData[Gender]="M")

Engagement Level =  
SWITCH(  
TRUE(),  
[Engagement Score] >= 0.80, "Highly Engaged",  
[Engagement Score] >= 0.65, "Engaged",  
[Engagement Score] >= 0.50, "Neutral",  
[Engagement Score] >= 0.25, "Disengaged",  
[Engagement Score] < 0.25, "Actively Disengaged"  
)

Core Average Score = CALCULATE(AVERAGE(SurveyResponse[LikertScore]), SurveyQuestion\_MarketScore[Metric]="Core")

Core Market Score = CALCULATE(AVERAGE(SurveyQuestion\_MarketScore[MarketScore]), SurveyQuestion\_MarketScore[Metric]="Core")

Self Average Score = CALCULATE(AVERAGE(SurveyResponse[LikertScore]), SurveyQuestion\_MarketScore[Metric]="Self")

Self Market Score = CALCULATE(AVERAGE(SurveyQuestion\_MarketScore[MarketScore]), SurveyQuestion\_MarketScore[Metric]="Self")

Group Average Score = CALCULATE(AVERAGE(SurveyResponse[LikertScore]), SurveyQuestion\_MarketScore[Metric]="Group")

Group Market Score = CALCULATE(AVERAGE(SurveyQuestion\_MarketScore[MarketScore]), SurveyQuestion\_MarketScore[Metric]="Group")

## Dynamic Measures

Average Score = CALCULATE(AVERAGE(SurveyResponse[LikertScore]),  
SurveyQuestion\_MarketScore[Metric]=SELECTEDVALUE(SurveyQuestion\_MarketScore[Metric]))

Market Score = CALCULATE(AVERAGE(SurveyQuestion\_MarketScore[MarketScore]),  
SurveyQuestion\_MarketScore[Metric]=SELECTEDVALUE(SurveyQuestion\_MarketScore[Metric]))

### DAX Calculated Column

In EmployeeData:

ResponseCount = COUNTROWS(RELATEDTABLE(SurveyResponse))

ResponseFlag = IF(EmployeeData[ResponseCount]>=35, "Y", "N")

In SurveyQuestion\_MarketScore:

MetricSortOrder = RELATED(MetricMapping[MetricOrder])

CategorySortOrder = RELATED(CategoryMapping[CategoryOrder])

QuestionSortOrder = RELATED(QuestionMapping[QuestionOrder])

In SurveyResponse

LikertScaleOrder = RELATED(LikertScaleMapping[LikertScaleOrder])

### Sort Column

In SurveyQuestion\_MarketScore:

Sort Metric column by MetricSortOrder column

Sort Category column by CategorySortOrder column

Sort QuestionText column by QuestionSortOrder column

In SurveyResponse Table:

Sort LikertScale column by LikertScaleOrder column