

HR ANALYTIC DASHBOARD

MUHAMMAD RAFFY IBNU MUSTOFA

DATASET

Dataset berisi 2.845 baris dan 26 kolom diambil dari Kaggle, kemudian dimasukkan ke SQL Server untuk dianalisis. Data mencakup informasi karyawan, pelatihan, performa, serta skor engagement dan kepuasan kerja.

Alat Analisis:

- SQL Server digunakan untuk membuat SQL View yang merangkum insight penting tanpa menggunakan DAX.
- Power BI digunakan untuk memvisualisasikan hasil analisis dalam bentuk dashboard interaktif.

Transformasi & Analisis:

- Menghitung success rate pelatihan, biaya per hari, dan klasifikasi usia.
- Membuat segmentasi risiko resign berdasarkan engagement, satisfaction, dan performance.

METODE ANALISIS

VIEW TRAINING

```
create view training as  
select  
    Training_Program_Name,  
    Training_Type,  
    avg(Training_Duration_Days) AverageTrainingDuration,  
    count(*) as TotalParticipants,  
    sum(case when Training_Outcome = 'Passed' then 1 else 0 end) as PassedCount,  
    round(100 * sum(case when Training_Outcome = 'Passed' then 1 else 0 end) / count(*), 2) as SuccessRate,  
    avg(Training_Cost) AS AvgTrainingCost  
from [HR].[dbo].[HR]  
group by Training_Program_Name, Training_Type;
```

View ini berisi ringkasan statistik dari seluruh program pelatihan yang diselenggarakan oleh perusahaan, baik internal maupun eksternal. Fokus utamanya adalah mengukur efektivitas pelatihan melalui tingkat keberhasilan (success rate), durasi, dan biaya rata-rata.

TRAINING ANALYSIS

```
select *,(AvgTrainingCost / AverageTrainingDuration) as CostPerDay from training
select Training_Type, sum(AvgTrainingCost / AverageTrainingDuration) as CostPerDay from training group by Training_Type
```

	Training_Program_Name	Training_Type	AverageTrainingDuration	TotalParticipants	PassedCount	SuccessRate	AvgTrainingCost	CostPerDay
1	Communication Skills	External	2	302	74	24	531.032450644386	265.516225322193
2	Project Management	External	2	312	74	23	563.553684821496	281.776842410748
3	Customer Service	External	2	271	71	26	552.772213784531	276.386106892266
4	Leadership Development	Internal	3	278	77	27	552.686044295057	184.228681431686
5	Customer Service	Internal	2	269	60	22	587.11992608393	293.559963041965
6	Communication Skills	Internal	3	331	84	25	556.411482335578	185.470494111859
7	Technical Skills	External	2	273	62	22	571.875091636574	285.937545818287
8	Leadership Development	External	3	266	75	28	570.555449722405	190.185149907468
9	Project Management	Internal	3	273	68	24	562.201649145329	187.40054971511
10	Technical Skills	Internal	2	270	64	23	548.229370117188	274.114685058594
	Training_Type	CostPerDay						
1	External	1299.80187035096						
2	Internal	1124.77437335921						

Analisis menunjukkan bahwa success rate pelatihan internal dan eksternal relatif serupa, namun pelatihan internal memiliki biaya yang lebih rendah. Program seperti Leadership Development (Internal) dan Communication Skills (Internal) terbukti sebagai pilihan yang lebih efisien secara biaya. Oleh karena itu, pelatihan eksternal dengan biaya tinggi namun dampak terbatas disarankan untuk dievaluasi ulang efektivitasnya.

EMPLOYEE PERFORMANCE VIEW

```
create view EmployeePerformance as  
select  
    EmployeeType,  
    count(*) as TotalParticipants,  
    avg(Current_Employee_Rating) as EmployeeRating,  
    avg(Engagement_Score) as EngagementScore,  
    avg(Satisfaction_Score) as SatisfiscationScore,  
    avg(Work_Life_Balance_Score) as WorkLifeBalanceScore  
from [HR].[dbo].[HR] group by EmployeeType;
```

View ini menyajikan rata-rata skor kinerja dan kepuasan karyawan berdasarkan tipe kepegawaian. Data ini membantu memahami hubungan antara tipe pekerjaan dengan motivasi dan keseimbangan kerja karyawan.

EMPLOYEE PERFORMANCE ANALYSIS

	EmployeeType	TotalParticipants	EmployeeRating	EngagementScore	SatificationScore	WorkLifeBalanceScore
1	Full-Time	997	2	2	3	2
2	Contract	951	2	2	3	2
3	Part-Time	897	2	2	2	3

Rata-rata kinerja dan keterlibatan karyawan relatif serupa di semua tipe kepegawaian. Karyawan paruh waktu memiliki work-life balance terbaik, sementara karyawan kontrak menunjukkan tingkat kepuasan kerja tertinggi. Perlu evaluasi lebih lanjut untuk meningkatkan keseimbangan kerja dan kepuasan pada karyawan tetap.

SUMMARY

```
create view summary as
select
    Employee_ID,
    EmployeeType,
    GenderCode,
    Age,
    case
        when Age < 25 then 'Fresh Graduate'
        when Age BETWEEN 25 AND 34 then 'Young Adult'
        when Age BETWEEN 35 AND 44 then 'Mid-Age'
        when Age BETWEEN 45 AND 54 then 'Senior'
        else 'Pre-Retirement'
    end as AgeCategory,
    Division,
    Engagement_Score,
    Satisfaction_Score,
    Work_Life_Balance_Score,
    Performance_Score,
    case
        when Engagement_Score <= 2 AND Satisfaction_Score <= 2 then 'High Risk'
        when Engagement_Score <= 3 OR Satisfaction_Score <= 3 then 'Medium Risk'
        else 'Low Risk'
    end as ResignationRisk,
    Training_Date
from [HR].[dbo].[HR];
```

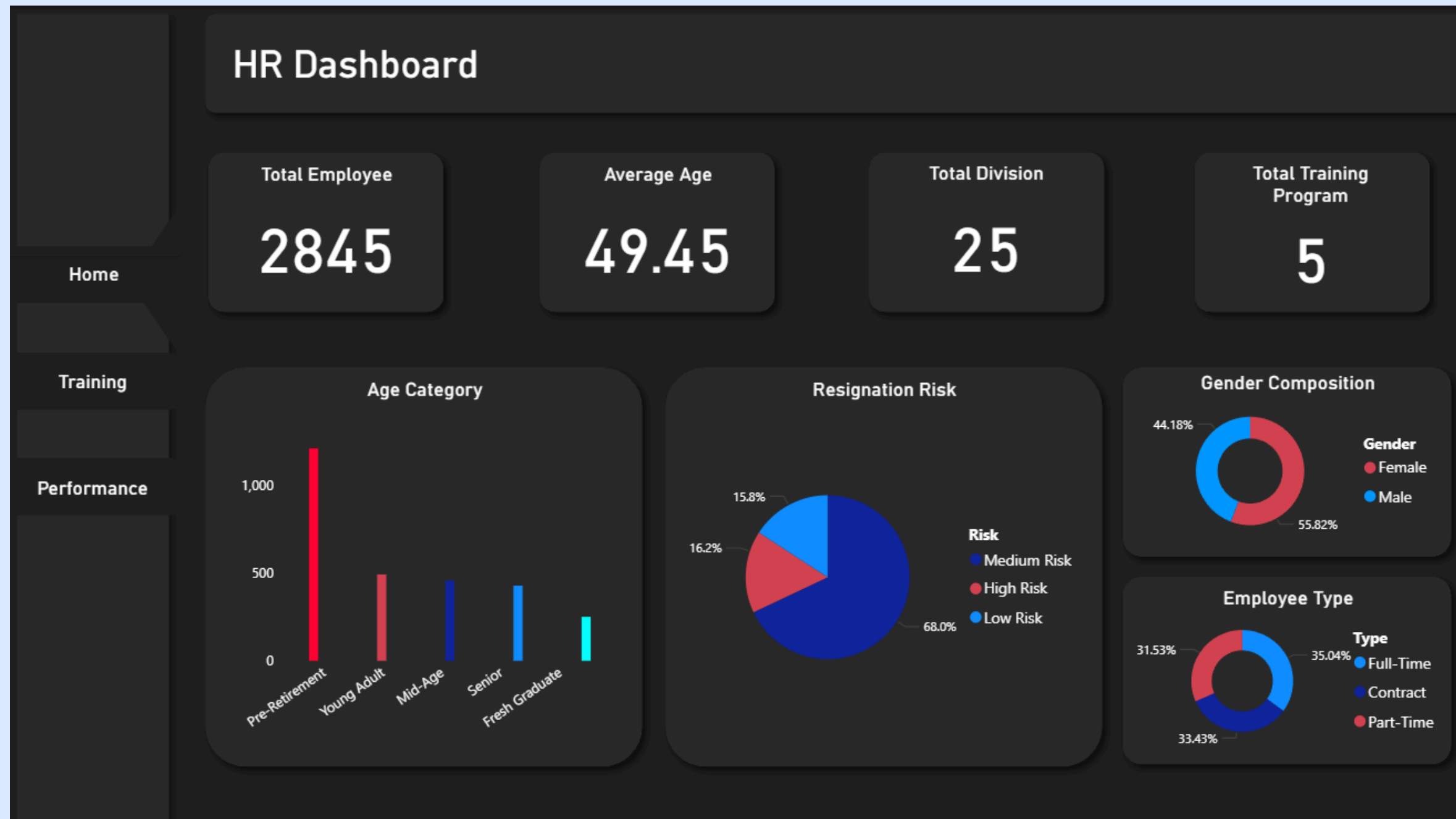
View ini merupakan ringkasan profil lengkap karyawan, menggabungkan informasi usia, performa, skor engagement, dan risiko resign. View ini digunakan untuk segmentasi dan prediksi risiko resign.

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HOME PAGE



TRAINING PAGE

Training Preview

Total Employee

2845

Passed Cour

709

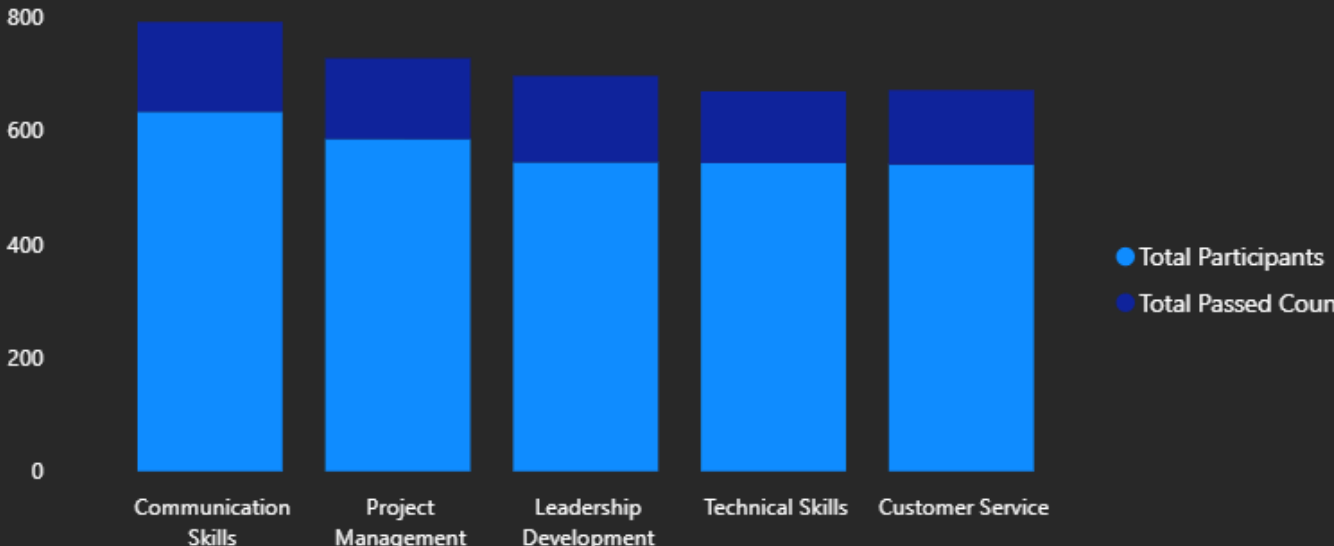
Average Training Cost

5.60K

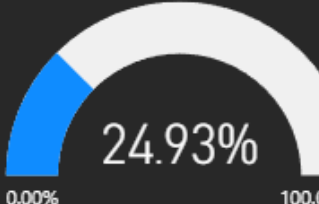
Average Training Score

2.40

Total Passed Count per Program



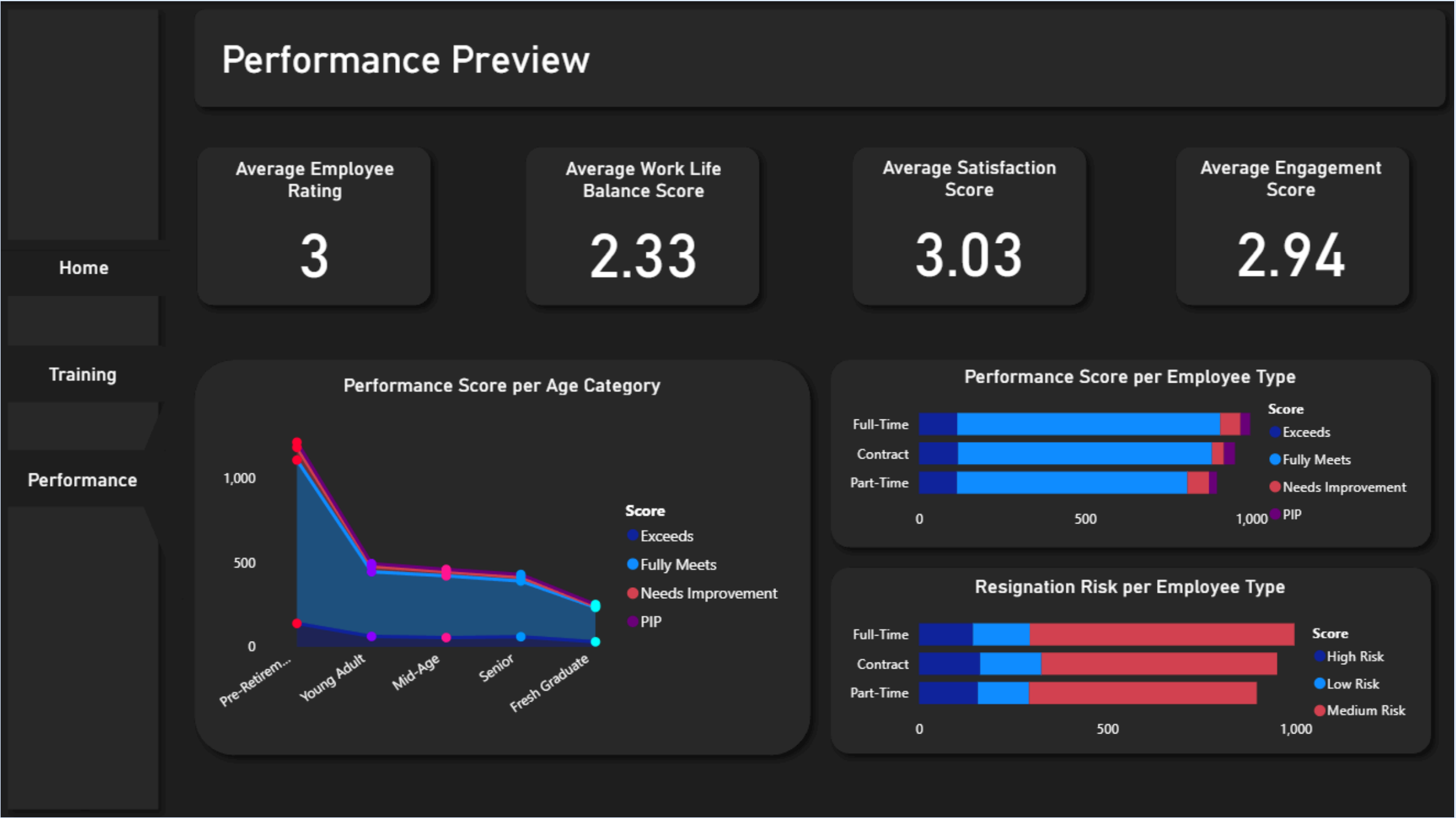
Average Success Ra



Training Type



PERFORMANCE PAGE



KESIMPULAN

Melalui integrasi SQL View dan visualisasi di Power BI, dashboard ini membantu perusahaan memahami komposisi SDM secara menyeluruh serta mengidentifikasi area risiko resign. Insight ini bisa menjadi dasar untuk pengambilan keputusan strategis, seperti penguatan engagement program, peremajaan tenaga kerja, atau evaluasi efektivitas pelatihan ke depannya.