



ANALYSIS FOR DIVERSITY HIRES FORECASTING

FOR NOMURA KAKUSHIN 7.0

BY

**ANIKET GAMI & ANAMICA GUPTA
TEAM : TECHNICAL SOLVER**

AGENDA

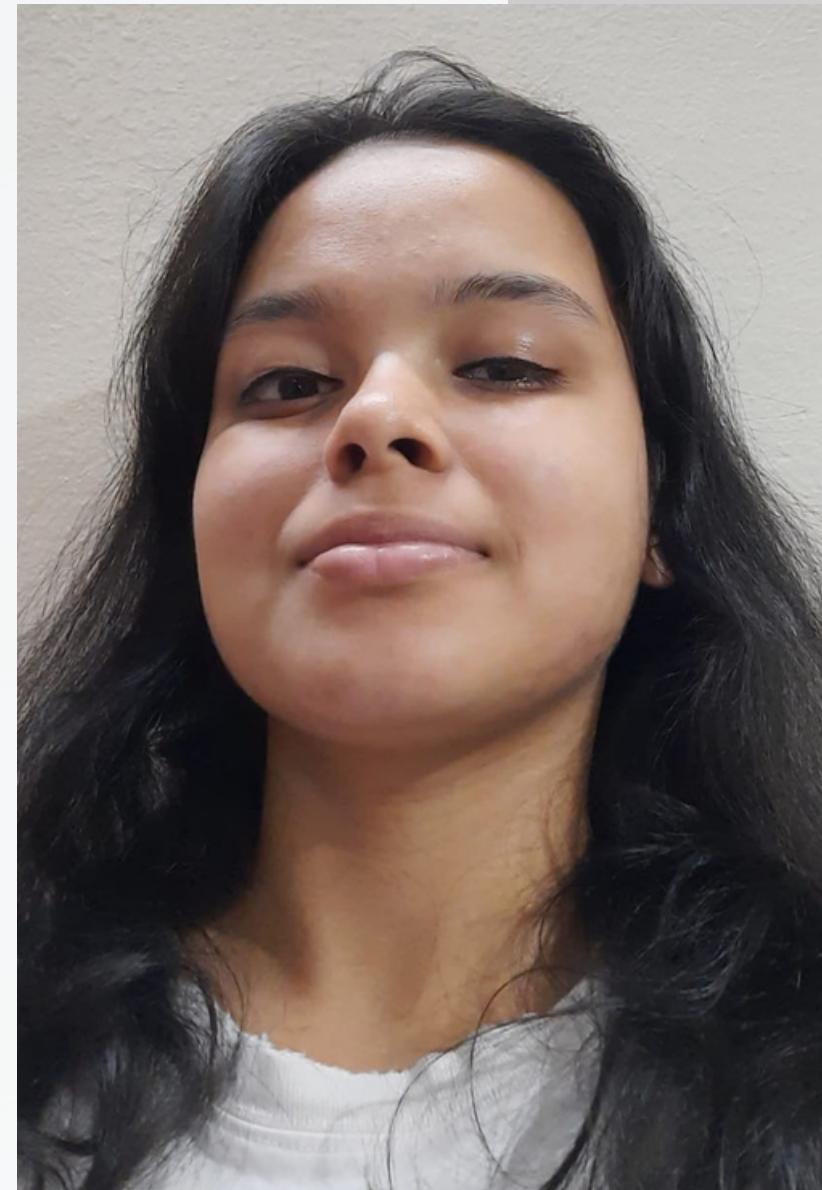
- 01** THE TEAM
- 02** PROBLEM STATEMENT
- 03** SOLUTIONS
- 04** TECHNOLOGIES USED
- 05** DATA FLOW
- 06** KEY FEATURES : DEMO
- 07** USERS OF THE SOLUTION
- 08** IMPLEMENTATION
- 09** RISKS
- 10** CONCLUSION

THE TEAM

NOMURA



ANIKET GAMI



ANAMICA GUPTA

PROBLEM STATEMENT

- AlwaysFirst IT Enabled services have been struggling with the diversity candidate ratio in their firm.
- Currently, AlwaysFirst stands at a men-to-women ratio of 73:27. While they are working on hiring more gender-diverse talent, it has not picked the right momentum due to a lack of supporting data.
- AlwaysFirst is now looking at an intelligent way to create and analyze the data to improve its diversity ratio.

WHY IS DIVERSITY AND INCLUSION NECESSARY FOR ANY ORGANIZATION?

- INNOVATION AND CREATIVITY
- IMPROVED DECISION-MAKING
- ENHANCED PROBLEM-SOLVING
- SOCIAL RESPONSIBILITY AND REPUTATION
- ENHANCED CUSTOMER UNDERSTANDING
- INCREASED EMPLOYEE ENGAGEMENT AND SATISFACTION
- BROADER TALENT POOL

METHODS OF ANALYSING THE PROBLEM

COMMON FACTORS FOR LACK OF DIVERSITY IN AN ORGANIZATION

- BIASED HIRING PRACTICES,
- LIMITED OUTREACH EFFORTS
- A LACK OF INCLUSIVE CULTURE
- A DEARTH OF DIVERSE LEADERSHIP AND ROLE MODELS,
- UNCONSCIOUS BIAS IN PERFORMANCE EVALUATION AND PROMOTION,
- INADEQUATE DIVERSITY AND INCLUSION INITIATIVES,
- LIMITED ACCESS TO OPPORTUNITIES, AND A LACK OF CLEAR DIVERSITY GOALS AND METRICS.

PROPOSED SOLUTION

OUR PROPOSED SOLUTION IS A COMPREHENSIVE D&I METRICS DASHBOARD THAT PROVIDES REAL-TIME TRACKING AND ANALYSIS OF KEY DIVERSITY AND INCLUSION METRICS. THE DASHBOARD OFFERS A USER-FRIENDLY INTERFACE, EMPOWERING MANAGERS AND LEADERS TO MONITOR PROGRESS, IDENTIFY TRENDS, AND TAKE PROACTIVE MEASURES TO IMPROVE DIVERSITY RATIOS.

TECHNOLOGIES USED

NOMURA

DATA ANALYTICS AND VISUALIZATION TOOLS



POWER BI



TABLEAU



MS EXCEL



GOOGLE SHEETS

TECHNOLOGIES USED

NOMURA

PREDICTIVE ANALYTICS TOOLS



PYTHON 3.0

LIBRARIES
scikit-learn, Matplotlib, Numpy, Pandas

CUSTOM DATABASE SOLUTIONS



TECHNOLOGIES USED

NOMURA

CODING PLATFORMS



JUPYTER
NOTEBOOK



VISUAL STUDIO
CODE

OTHER PLATFORMS



XAMPP SERVER



MICROSOFT TEAMS



ZOOM MEET

SAMPLE DATASET

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FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW New Tab

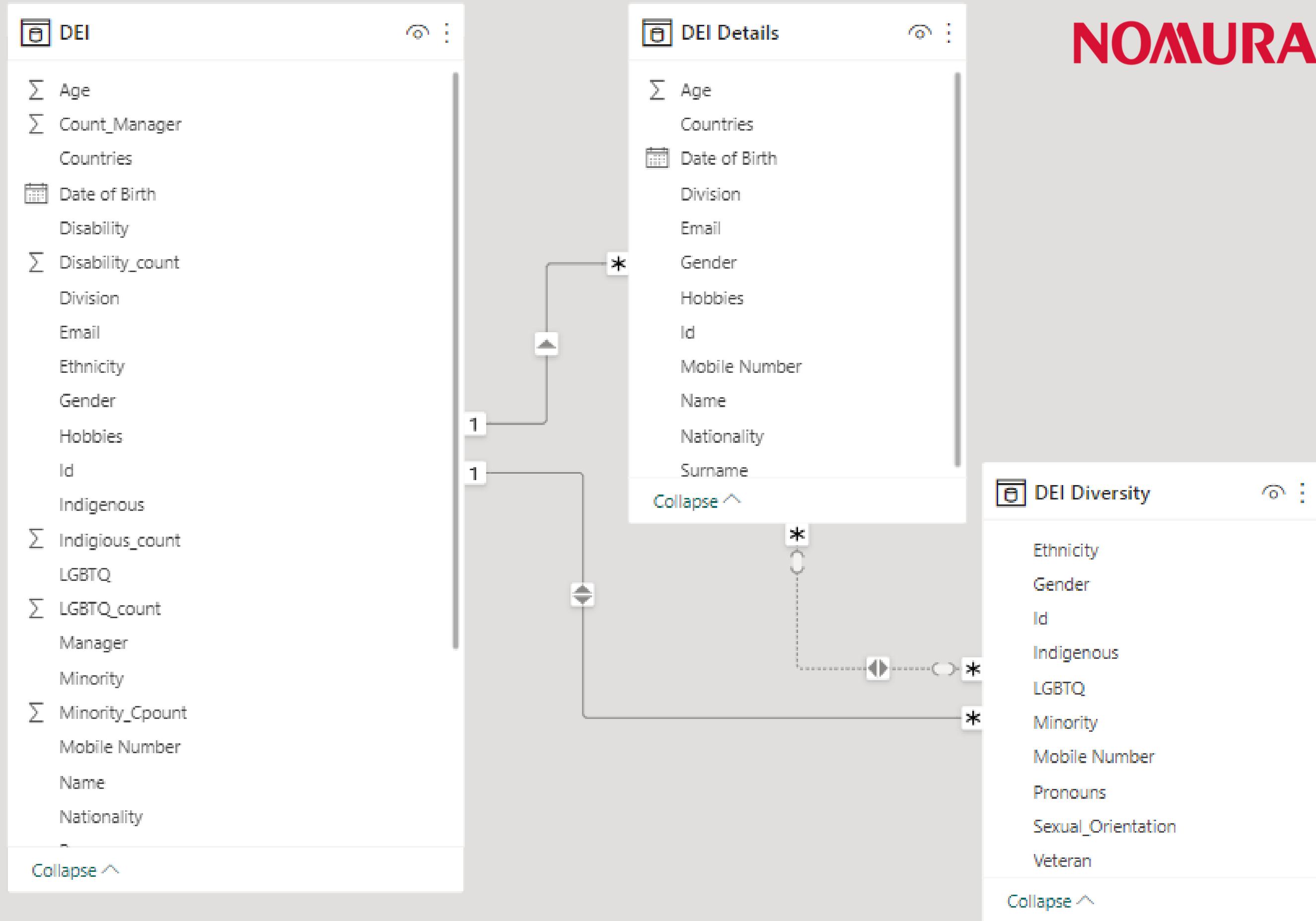
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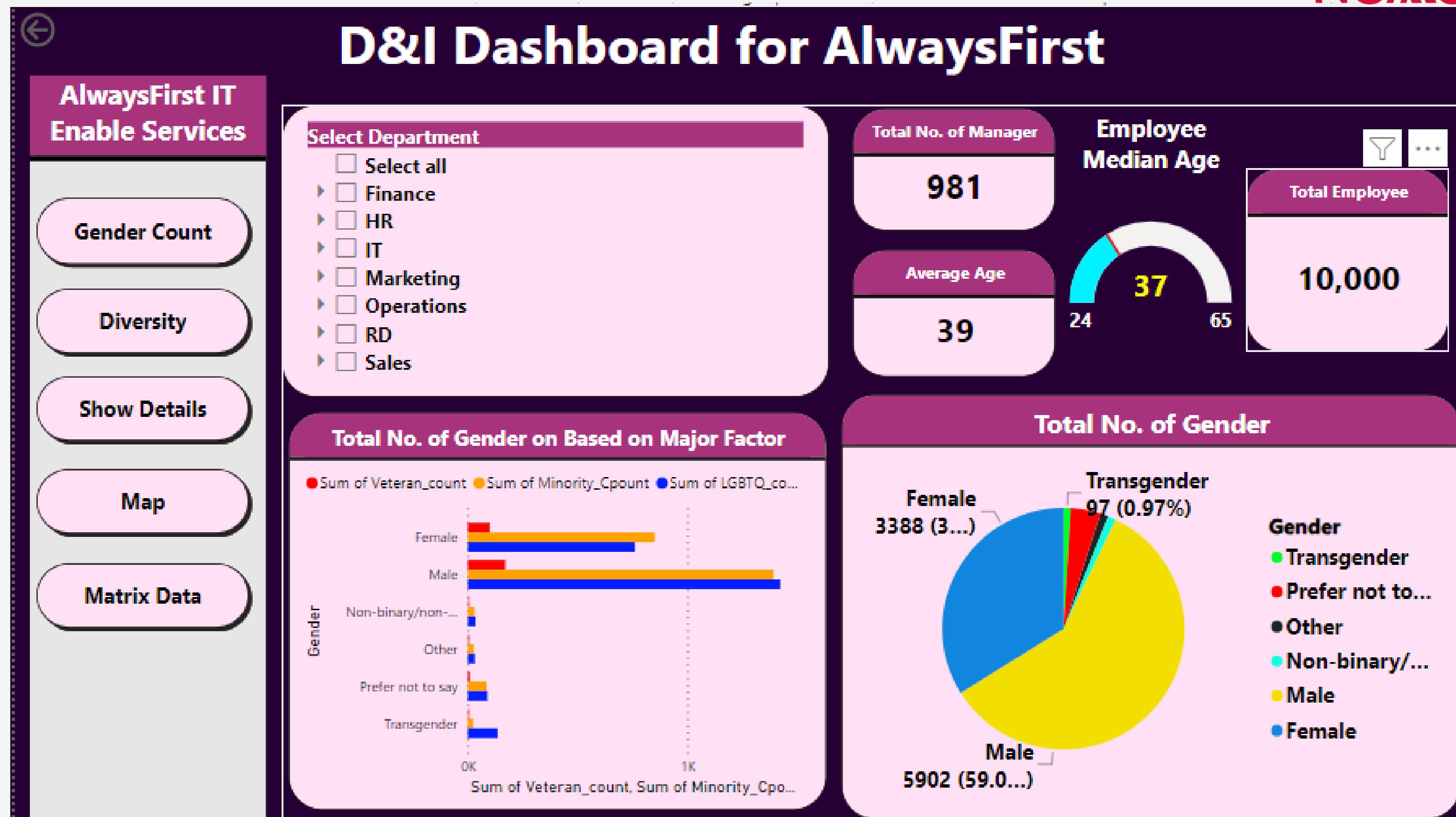
D6 RD Diversity, Equity and Inclusion Measures Dataset This data set contains fictitious data of 10,000 employees' DEI measures. kaggle.com

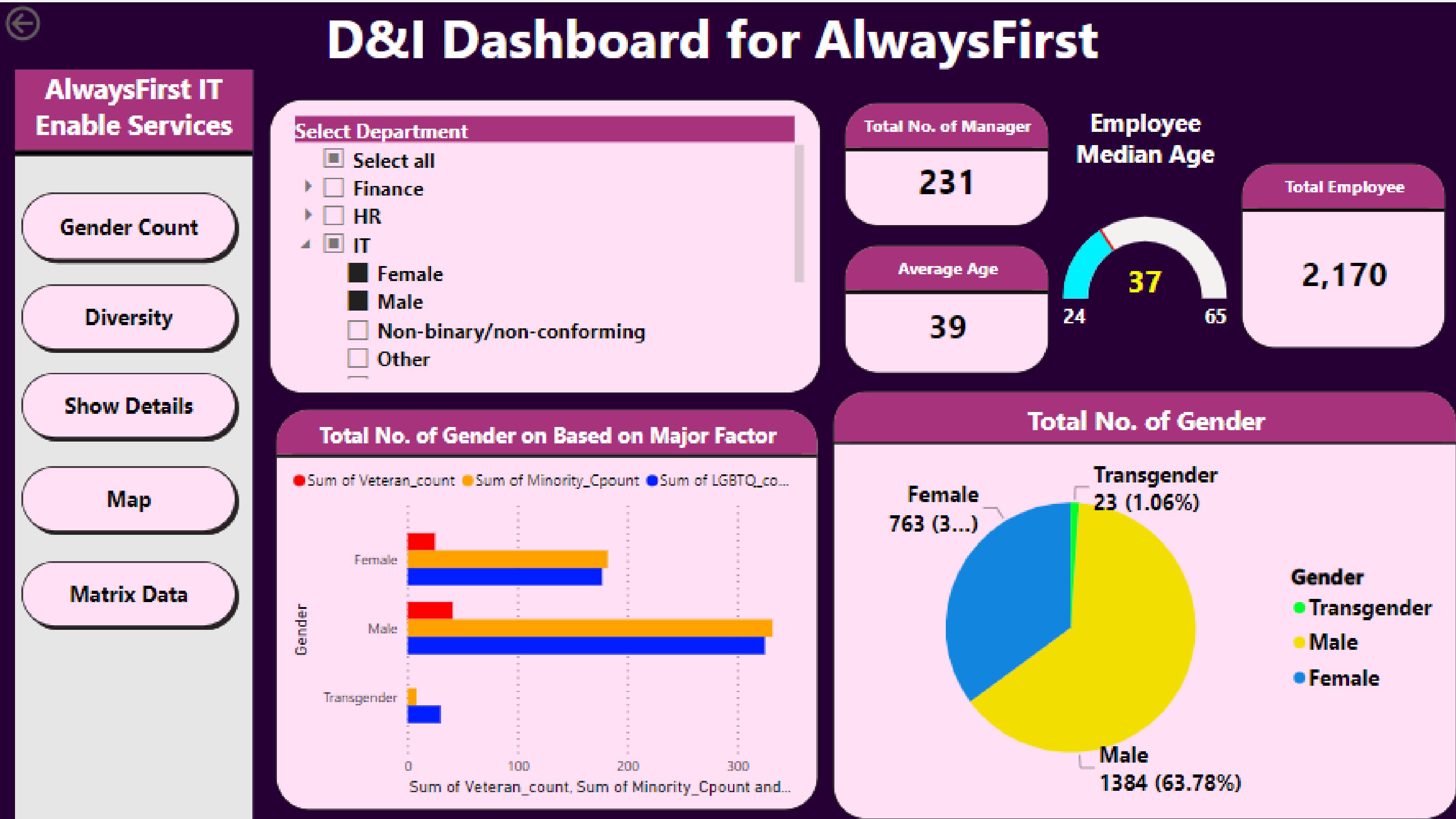
	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Id	Name	Surname	Division	Manager	Gender	Sexual_Orientation	LGBTQ	Indigenous	Ethnicity	Disability	Minority	Veteran
2	1	Deborah	Addison	IT	No	Transgender	Heterosexual	Prefer not to say	No	White	Yes	No	No
3	2	Mona	Hill	Marketing	No	Male	Heterosexual	No	Yes	White	No	Yes	No
4	3	Kimberly	Shelton	Finance	No	Female	Heterosexual	No	No	White	No	No	No
5	4	Denis	Robinson	HR	No	Male	Heterosexual	No	No	White	Yes	Yes	No
6	5	Carmen	Gunn	RD	No	Male	Heterosexual	No	No	Asian	No	No	No
7	6	Nathan	Furnell	Sales	No	Male	Heterosexual	No	No	Black	No	No	No
8	7	Luke	Sinclair	Marketing	No	Male	Prefer not to say	Yes	No	White	No	Yes	No
9	8	Fred	Callan	Sales	No	Male	Heterosexual	No	No	White	No	Yes	No
10	9	Carter	Owen	Finance	No	Male	Heterosexual	No	No	Black	No	Yes	No
11	10	Harry	Dobson	Sales	No	Male	Heterosexual	No	No	Black	No	No	No
12	11	Ramon	McCall	Sales	No	Male	Heterosexual	No	No	White	No	No	No
13	12	Fred	Wilton	RD	No	Female	Heterosexual	Prefer not to say	No	Middle Eastern	No	No	No
14	13	Nick	Sloan	Operations	No	Prefer not to say	Heterosexual	No	No	Black	No	No	No
15	14	Kassandra	Jarrett	Operations	No	Male	Heterosexual	No	No	Middle Eastern	No	No	No
16	15	Russel	Larsen	Sales	No	Male	Heterosexual	No	No	White	No	No	No
17	16	Rhea	Latham	IT	No	Male	Heterosexual	No	No	Middle Eastern	No	No	No
18	17	Liliana	Todd	HR	No	Male	Heterosexual	No	No	White	No	No	No
19	18	Brad	Windsor	Operations	No	Male	Heterosexual	No	No	White	No	No	No

DATA MODEL

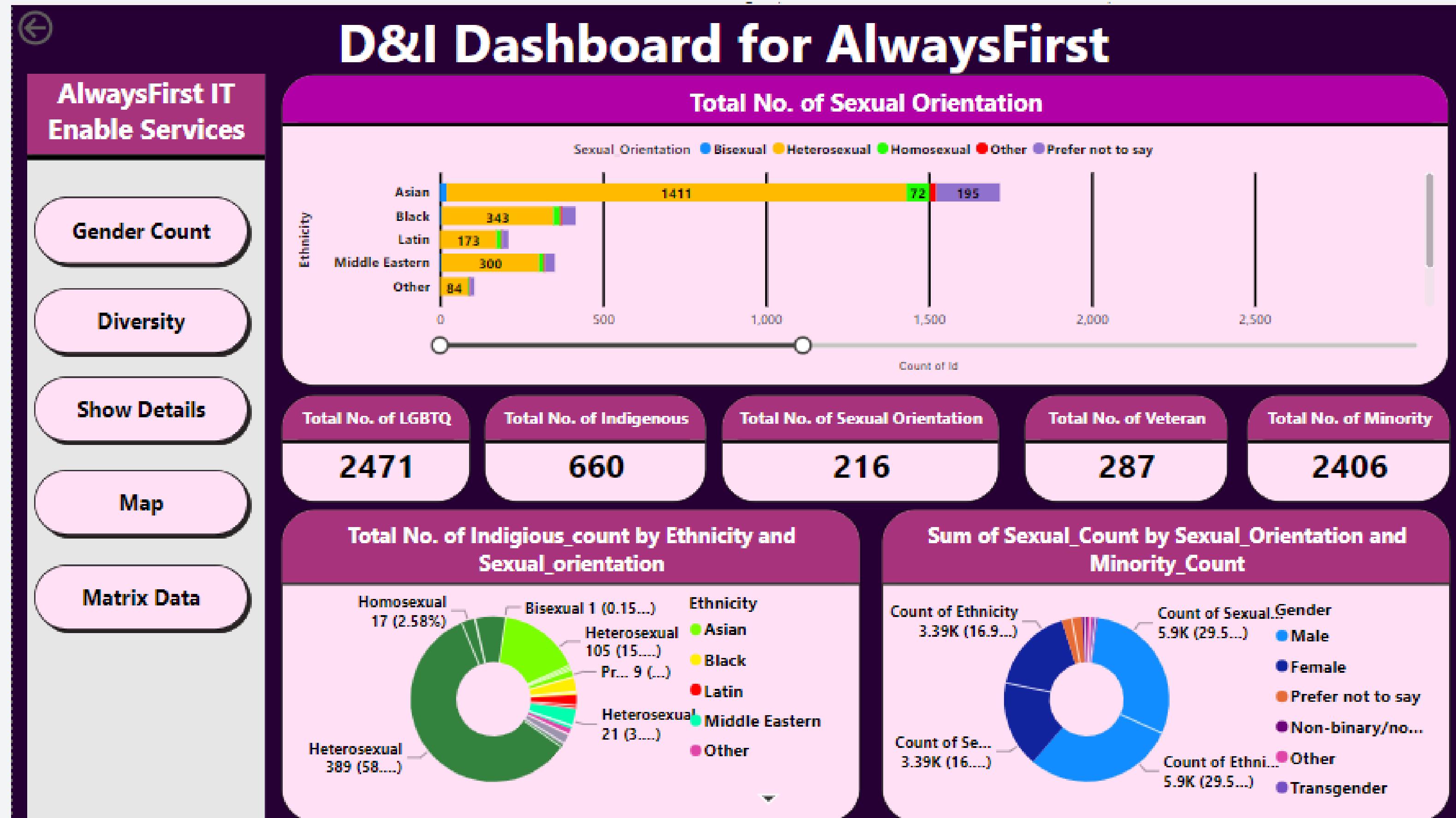


NOMURA





DEMAND PREDICTION BASED ON HISTORIC DATA



REAL TIME TRACKING OF DIVERSITY RATIOS

D&I Dashboard for AlwaysFirst

Select Departments

Id	Name	Surname	Gender	Date of Birth	Mobile Number	Email	Nationality	Hobbies	Disability
9999	Benny	Abbot	Prefer not to say	27 April 1960	821 130 2328	Benny.Abbott@mail.ca	Canadian	Travelling	No
9988	Jules	Whittle	Female	05 February 1962	679 431 2247	Jules.Whittle@mail.ca	Canadian	Travelling	No
9987	Trisha	Richardson	Male	24 May 1986	679 597 5841	Trisha.Richardson@mail.ca	Canadian	Music	No
9986	Stacy	Fisher	Female	24 November 1976	855 481 2525	Stacy.Fisher@mail.ca	American	Sports	No
9985	Vera	Baldwin	Prefer not to say	22 June 1986	442 158 2183	Vera.Baldwin@mail.ca	Canadian	Video Games	Yes
9982	Mavis	Blythe	Male	04 June 1993	183 497 4216	Mavis.Blythe@mail.ca	Canadian	Sports	No
9980	Tony	Long	Female	02 July 1993	318 478 4822	Tony.Long@mail.ca	Canadian	Reading	No
9979	Sylvia	Chapman	Female	30 August 1965	106 124 2078	Sylvia.Chapman@mail.ca	Vietnamese	Travelling	No
9972	Cecilia	Dixon	Male	25 March 1994	779 701 8351	Cecilia.Dixon@mail.ca	Canadian	Music	No
9968	Jackeline	Nicholls	Male	14 April 1991	692 870 2289	Jackeline.Nicholls@mail.ca	Cameroonian	Sports	No
9959	Emerald	Vangness	Female	01 May 1991	476 199 4212	Emerald.Vangness@mail.ca	American	Sports	No
9955	Alice	Carpenter	Male	23 April 1962	864 827 8531	Alice.Carpenter@mail.ca	American	Music	No
9952	Aiden	Armstrong	Female	28 August 1997	413 630 1563	Aiden.Armstrong@mail.ca	Korean	Sports	No
9945	Michael	Shaw	Male	08 May 1987	594 950 3276	Michael.Shaw@mail.ca	Philippine	Video Games	No
9943	Maia	Gordon	Male	07 August 1994	742 977 5667	Maia.Gordon@mail.ca	Polish	Video Games	No
9939	Barry	Newman	Male	01 November 1979	662 263 2241	Barry.Newman@mail.ca	Australian	Sports	No
9933	Percy	Victor	Male	09 July 1979	602 494 6750	Percy.Victor@mail.ca	Greek	Video Games	No
9930	Mandy	Nelson	Female	11 January 1979	391 117 1767	Mandy.Nelson@mail.ca	Canadian	Sports	No
9919	Leslie	Veale	Female	10 January 1980	473 320 4984	Leslie.Veale@mail.ca	Indian	Fishing	No

DATA ANALYSIS – SLICE AND DICE OF DATA

Sample - Power BI Desktop

Search

File Home Insert Modeling View Optimize Help Format Data / Drill

Cut Copy Format painter Paste Get data workbook OneLake data hub SQL Server Enter Data Recent sources Transform Refresh data New visual Text box More visuals Insert New measure Quick measure Calculations Sensitivity

D&I Dashboard for AlwaysFirst

No. of Employee in Particular Region

AlwaysFirst IT Enable Services

- Gender Count
- Diversity
- Show Details
- Map
- Matrix Data
- Band Wise Graph

Filters

Page 1 +

Page 1 of 1

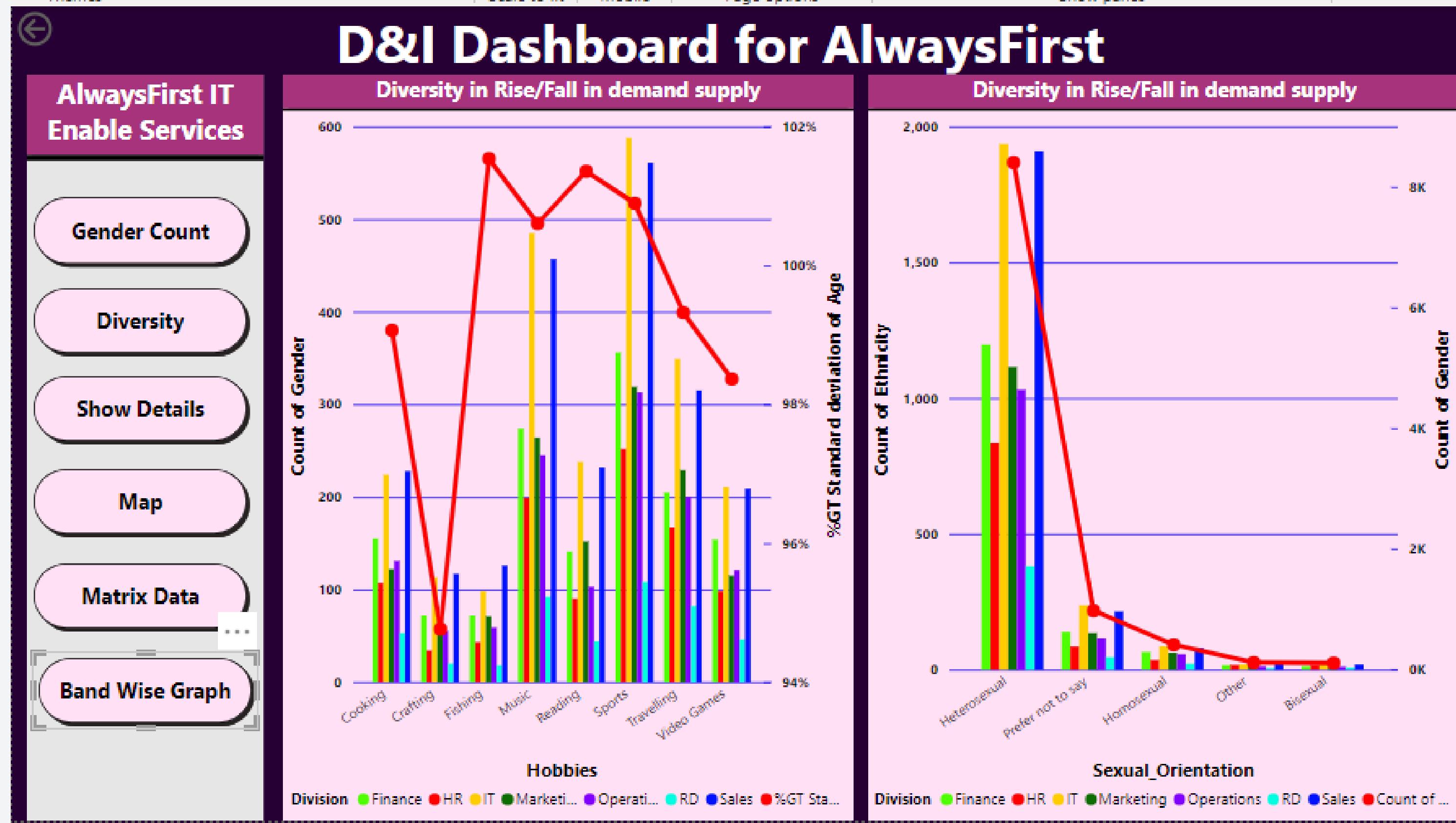
Tooltip Data (India):

Countries	India
Nationality	Indian
Count of Division	7
Sum of Count_Manager	94
Sum of Sexual_Count	1508
Sum of Indigous_count	60
Sum of LGBTQ_count	267

Nationality Legend:

- Afghan
- Albanian
- Algerian
- American
- Argentinian
- Australian
- Austrian
- Bangladeshi
- Batswana
- Belgian
- Bolivian
- Brazilian
- British
- Bulgarian
- Cambodian
- Cameroonian
- Canadian
- Chilean
- Chinese
- Colombian
- Costa Rican
- Croatian

HIGHLIGHTING DIVERSITY RATIO GAPS ON THE BU MAP.



GRAPHICAL REPRESENTATION OF BAND-WISE AND BU -WISE RISE/FALL IN DEMAND AND SUPPLY

D&I Dashboard for AlwaysFirst

AlwaysFirst IT Enable Services

Gender Count

Diversity

Show Details

Map

Matrix Data

LGBTQ

LGBTQ	0	1	2	Total
No	0			0
Prefer not to say		1296	1296	
Yes	1175		1175	
Total	0	1175	1296	2471

Indigenous

Indigenous	0	1	2	Total
No	0			0
Prefer not to say		166	166	
Yes	494		494	
Total	0	494	166	660

Veteran

Veteran	0	1	2	Total
No	0			0
Prefer not to say		194	194	
Yes	93		93	
Total	0	93	194	287

ID	Name	Surname	Gender	Ethnicity	Sexual_Orientation	Pronouns	LGBTQ	Indigenous	Veteran
9999	Benny	Abbot	Prefer not to say	White	Heterosexual	Xe/xem/xyrs	No	No	No
9998	Abbey	Randall	Male	White	Heterosexual	He/him/his	No	No	No
9997	Felicity	Gregory	Male	White	Heterosexual	He/him/his	No	No	No
9996	Louise	Robertson	Male	White	Heterosexual	He/him/his	No	Prefer not to say	No
9995	Destiny	Slater	Prefer not to say	White	Heterosexual	They/them/theirs	No	No	No
9994	Sylvia	Craig	Female	Asian	Bisexual	She/her/hers	Prefer not to say	No	Yes
9993	Carmella	Freeburn	Male	White	Heterosexual	He/him/his	No	No	No
9992	Havana	Mackenzie	Male	White	Heterosexual	He/him/his	No	No	No
9991	Ramon	Wilson	Female	White	Heterosexual	She/her/hers	No	No	No
9990	Molly	Selby	Female	Middle Eastern	Heterosexual	She/her/hers	No	No	No
999	Anabel	Paterson	Female	White	Heterosexual	She/her/hers	No	No	No
9989	Jack	Stone	Female	White	Prefer not to say	She/her/hers	Yes	No	No
9988	Jules	Whittle	Female	Middle Eastern	Heterosexual	She/her/hers	No	No	No
9987	Trisha	Richardson	Male	White	Heterosexual	He/him/his	No	No	No
9986	Stacy	Fisher	Female	Black	Heterosexual	She/her/hers	No	Yes	No
9985	Vera	Baldwin	Prefer not to say	Asian	Heterosexual	They/them/theirs	No	No	No

ADJUST HOW YOU SCREEN OR SEARCH FOR CANDIDATES

KEY FEATURES

HISTORIC DATA ANALYSIS

The dashboard enables reviewing historic data to identify clear trends and patterns, including diversity in applicants, hiring ratios at each stage, vendor diversity, and campus recruitment trends.

DEMAND PREDICTION

Based on historical data, the dashboard provides band-based and business unit-based demand predictions, ensuring minimum diversity ratio targets are met.

KEY FEATURES

DATA ANALYSIS

Allows slicing and dicing of data, enabling analysis of diversity ratios across all levels within the organization, from Analyst to MD.

REAL-TIME TRACKING

Managers and HR professionals can access real-time diversity ratios and utilize custom datasets provided by HR. They can also add candidate data to the existing dataset for accurate tracking.

KEY FEATURES

GRAPHICAL PRESENTATION

Presenting graphical representations of band-wise and BU-wise rise/fall in demand and supply, facilitating a visual understanding of diversity trends.

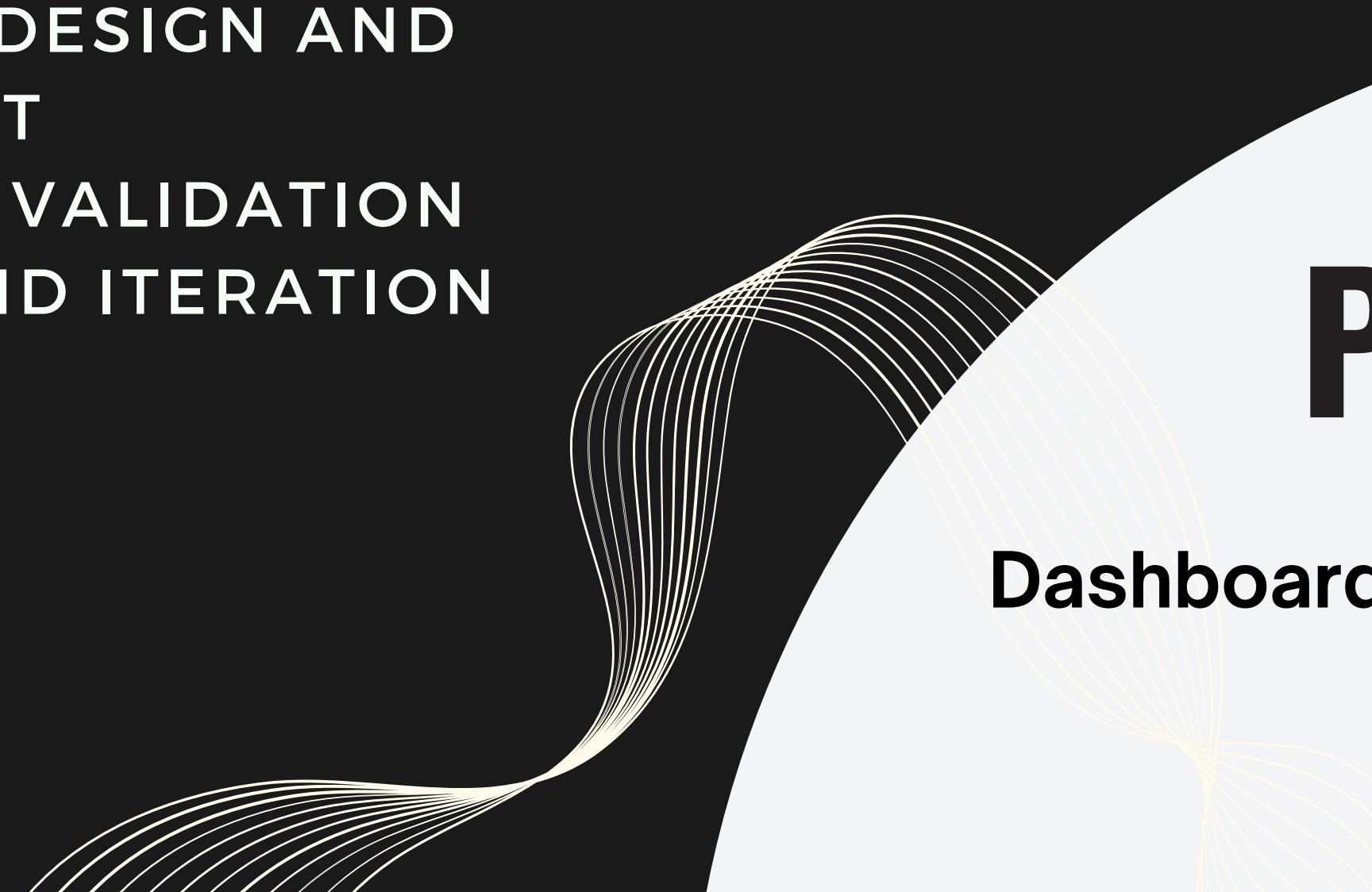
Highlights diversity ratio gaps on the BU map, helping identify areas that require targeted interventions.

CANDIDATE SCREENING AND SEARCH

The dashboard tracks metrics related to the candidate sourcing channels, application conversion rates, interview panel diversity, and candidate experience feedback, enabling organizations to ensure an inclusive recruitment process.

IMPLEMENTATION PLAN

1. IDENTIFY STAKEHOLDERS
2. DEFINE METRICS
3. DATA COLLECTION AND INTEGRATION
4. DASHBOARD DESIGN AND DEVELOPMENT
5. TESTING AND VALIDATION
6. FEEDBACK AND ITERATION



PHASE 1

Dashboard Development and
Testing

IMPLEMENTATION PLAN

1. DATA INTEGRATION
2. USER TRAINING
3. INITIAL ROLLOUT
4. FEEDBACK AND REFINEMENTS



PHASE 2

Data Integration and Initial Rollout

IMPLEMENTATION PLAN

1. COMMUNICATION AND CHANGE MANAGEMENT
2. TRAINING AND EDUCATION
3. ENCOURAGE DATA-DRIVEN DECISION MAKING

PHASE 3

Training and Adoption Across the Organization

IMPLEMENTATION PLAN

1. DATA GOVERNANCE AND QUALITY ASSURANCE
2. REGULAR UPDATES AND ENHANCEMENTS
3. PERFORMANCE EVALUATION
4. STAKEHOLDER ENGAGEMENT
5. CELEBRATE SUCCESS AND RECOGNITION

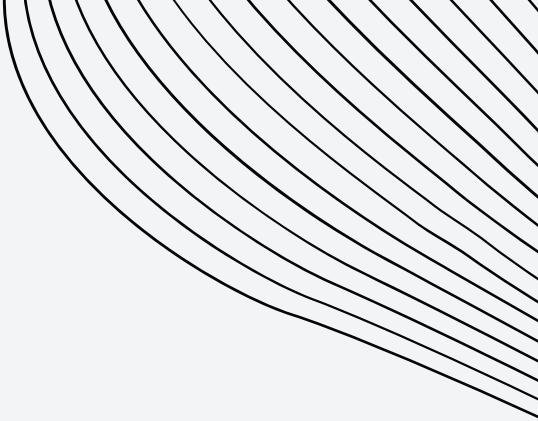
PHASE 4

Continuous Monitoring and
Improvement

USERS OF THE SOLUTION

Business Units Heads	Business Units HRA team / HR team	CIO	Recruitment team
Managers and Leaders	Internal Communications	Compliance and Legal Teams	External Reporting

RISKS INVOLVED

- 
- 
- 01** LACK OF DATA ACCURACY
 - 02** RESISTANCE TO CHANGE
 - 03** INSUFFICIENT USER TRAINING
 - 04** INCOMPLETE DATA INTEGRATION
 - 05** DATA PRIVACY AND SECURITY

HOW TO MITIGATE RISKS?

- 01** RISK ASSESSMENT MATRIX
- 02** DATA VALIDATION AND CLEANING TOOLS
- 03** CHANGE MANAGEMENT TOOLS
- 04** TRAINING AND LEARNING MANAGEMENT SYSTEMS
- 05** DATA INTEGRATION AND VISUALIZATION TOOLS
- 06** SECURITY AND PRIVACY TOOLS
- 07** PROJECT MANAGEMENT SOFTWARE
- 08** CONTINUOUS MONITORING AND ANALYTICS TOOL

CONCLUSION

- THE D&I METRICS DASHBOARD EMPOWERS ALWAYSFIRST TO MAKE DATA-DRIVEN DECISIONS.
- ADDRESSING GENDER DIVERSITY CHALLENGES AND ACHIEVING D&I GOALS.
- TOGETHER, LET'S FOSTER AN INCLUSIVE AND DIVERSE WORK ENVIRONMENT.

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