



WeCloudData



Group 1

Student Background Challenge

Overview

Program Management Team



- Purpose: Understand Student Backgrounds
- Data Gathering: conducted a survey

Data Analytics Team (Our Team)



- Explore Data: Get an initial understanding of the data set
- Prepare Data: Clean and organize the data for analysis
- Analyze Data: Extract meaningful insights from the data
- Present Findings: Communicate insights clearly and effectively



Presented By: Manar Alsayed

Problem Definition



Objective:

Improve student learning by using survey data to understand backgrounds and skill levels.



Key Issues:

Curriculum Mismatch:

- Limited understanding of students' backgrounds can result in a curriculum that does not meet their needs effectively.

Inadequate Support:

- Lack of resources and support tailored to different skill levels may hinder student progress and satisfaction.



Data Cleaning

- Change columns names

optional)	2. What is your registered email?	4. Rate your skill level for each of the following skills	4. Rate your skill level for each of the following skills	4. Rate your skill level for each of the following skills
	idrismaric@weclouddata.com adam.xing@weclouddata.com	Comfortable Very Comfortable Intermediate Advanced	Uncomfortable Very Comfortable Intermediate Intermediate	Comfortable Very Comfortable Intermediate Beginner



hort	Excel Skill	SQL Skill	Python Skill	Tableau Skill	Power BI Skill	Excel Experience
hort 1	Advanced	Intermediate	Intermediate	Intermediate	Advanced	6 months - 1 year
hort 1	Intermediate	Intermediate	Intermediate	Beginner	Beginner	6 months - 1 year
hort 2	Beginner	Intermediate	Beginner	Beginner	Beginner	No experience



Data Cleaning

- Change columns names
- Remove name column
- Remove email column
- Remove timestamp column

	Timestamp	0. Which cohort are you from?	1. What is your name? (optional)	2. What is your registered email?
1				
2	8/20/2024 1:28	Cohort 1	Idris (WeCloudData)	idrismaric@weclouddata.com
3	8/20/2024 1:31	Cohort 1	Adam (WeCloudData)	adam.xing@weclouddata.com
4	8/20/2024 16:36	Cohort 1	Student 1	
5	8/20/2024 16:36	Cohort 1		
6	8/20/2024 16:36	Cohort 1	Student 2	
7	8/20/2024 16:37	Cohort 1		
8	8/20/2024 16:37	Cohort 1		



Data Cleaning

C	D	E	F	G	H
1. What is your name? (optional)	2. What is your registered email?	Excel Skill	SQL Skill	Python Skill	Tableau Skill
Idris (WeCloudData)	idrismaric@weclouddata.com	Comfortable	Uncomfortable	Comfortable	Comfortable
Adam (WeCloudData)	adam.xing@weclouddata.com	Very Comfortable	Very Comfortable	Very Comfortable	Very Comfortable
Student 1		Intermediate Advanced	Intermediate Intermediate	Intermediate Beginner	Beginner Beginner
3 - 6 months	Roll Rate Report (FinTech), Supply Chain Analytics (Supply Chain)				
0 experience	Community Solar (Energy), Roll Rate Report (FinTech), Marketing Analytics (CRM), Supply Chain Analytics (Supply Chain), A+ REIT (Real Estate), Google Analytics (Digital Marketing)				
No experience		Recent Graduate	Both	Business Analyst, Data / Ed	
Less than 6 months		Recent Graduate	Science, Technology, Engin	Business Analyst, Data / Cu	
No experience		Recent Graduate	Science, Technology, Engin	Business Analyst, Data / Go	
6 months - 1 year		Recent Graduate	Science, Technology, Engin	BI Analyst, BI Consultant Fir	
Less than 6 months		Recent Graduate	Science, Technology, Engin	Business Analyst, Data / Ch	

- Change columns names
- Remove name column
- Remove email column
- Remove timestamp column
- **Treat the first two rows as outliers**



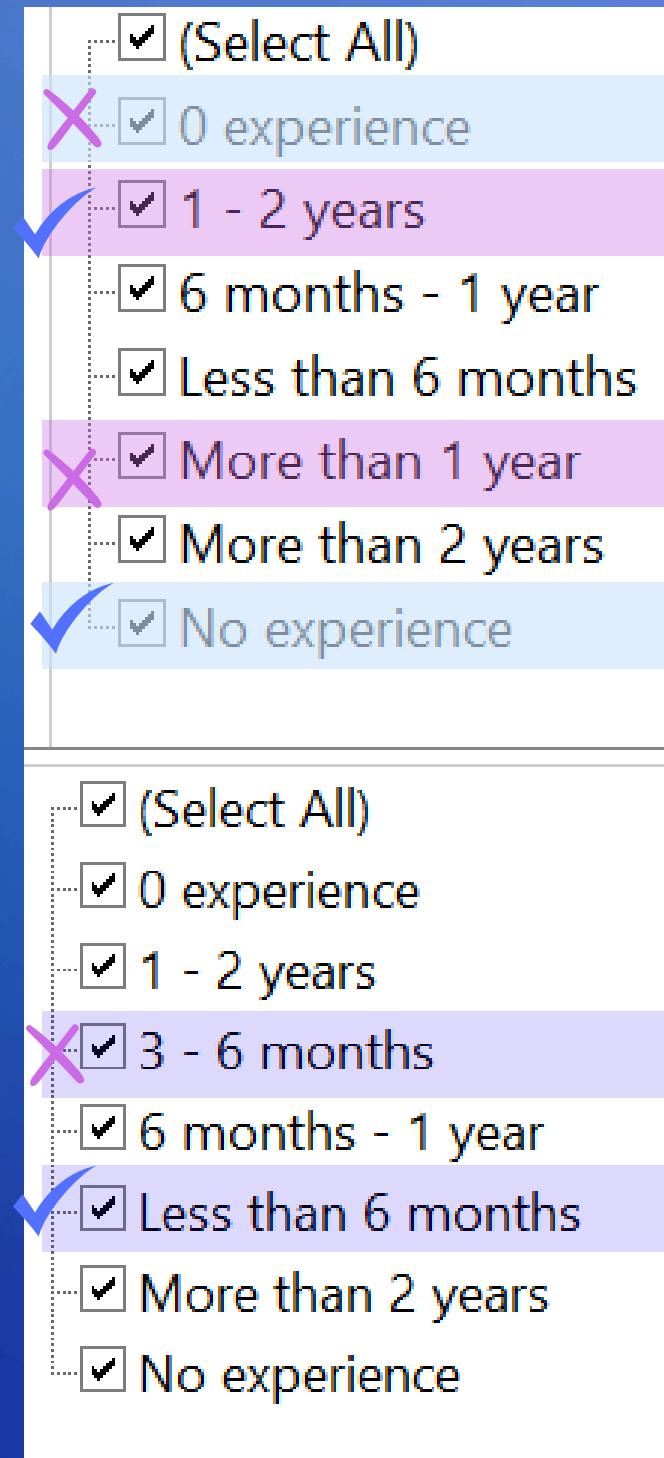
Data Cleaning

ID	Col
1	1 Col
2	2 Col
3	3 Col
4	4 Col
5	5 Col
6	6 Col
7	7 Col
8	8 Col
9	9 Col
10	10 Col
11	11 Col
12	12 Col
13	13 Col
14	14 Col
15	15 Col
16	16 Col
17	17 Col
18	18 Col
19	19 Col
20	20 Col
21	21 Col
22	22 Col

- Change columns names
- Remove name column
- Remove email column
- Remove timestamp column
- Treat the first two rows as outliers
- **Add ID column**



Data Cleaning



- Change columns names
- Remove name column
- Remove email column
- Remove timestamp column
- Treat the first two rows as outliers
- Add ID column
- **Change the experience from 3-6 months to less than 6 years, more than 1 year to 1-2 years, and 0 experience with No experience.**



Data Cleaning

R	S
Preferred roles	Preferred Industries

Business Analyst, Data Analyst, BI Analyst, BI Developer	Education, Financial Services, Government & Public Sector, Media & Entertainment, Technology
Business Analyst, Data Analyst, BI Manager	Customer Packaged Goods, Government & Public Sector, Media & Entertainment
Business Analyst, Data Analyst, BI Analyst, Project Manager	Government & Public Sector, Technology
BI Analyst, BI Consultant, BI Developer	Financial Services, Government & Public Sector, Supply Chain, Travel, Transportation
Business Analyst, Data Analyst, BI Analyst, BI Consultant	Chemicals, Construction, Energy, Financial Services, Government & Public Sector, Healthcare & Life Sciences, Technology
Business Analyst, Data Analyst, BI Analyst, BI Consultant	Energy, Financial Services, Government & Public Sector, Healthcare & Life Sciences, Technology
Business Analyst, Data Analyst, BI Analyst	Accounting & Legal, Aerospace & Defense, Government & Public Sector, Healthcare & Life Sciences, Technology
Business Analyst, Data Analyst, BI Analyst, BI Consultant	Construction, Education, Financial Services, Government & Public Sector, Healthcare & Life Sciences, Technology



T	U	V	W	X
Preferred roles.6	Preferred roles.7	Preferred roles.8	Preferred Industries.1	Preferred Industries.2
N/A	N/A	N/A	Financial Services	Government & Public Sector
Project Manager	N/A	N/A	Education	Supply Chain
BI Engineer	BI Manager	Project Manager	Education	Supply Chain
N/A	N/A	N/A	Customer Packaged Goods	Government & Public Sector
N/A	N/A	N/A	Government & Public Sector	Media & Entertainment
N/A	N/A	N/A	Chemicals	Government & Public Sector

- Change columns names
- Remove name column
- Remove email column
- Remove timestamp column
- Treat the first two rows as outliers
- Add ID column
- Change the experience from 3-6 months to less than 6 years, more than 1 year to 1-2 years and 0 experience with No experience
- **Used Power Query to split columns by delimiter(comma) and position(fix spacing) for data restructuring.**



Data Cleaning

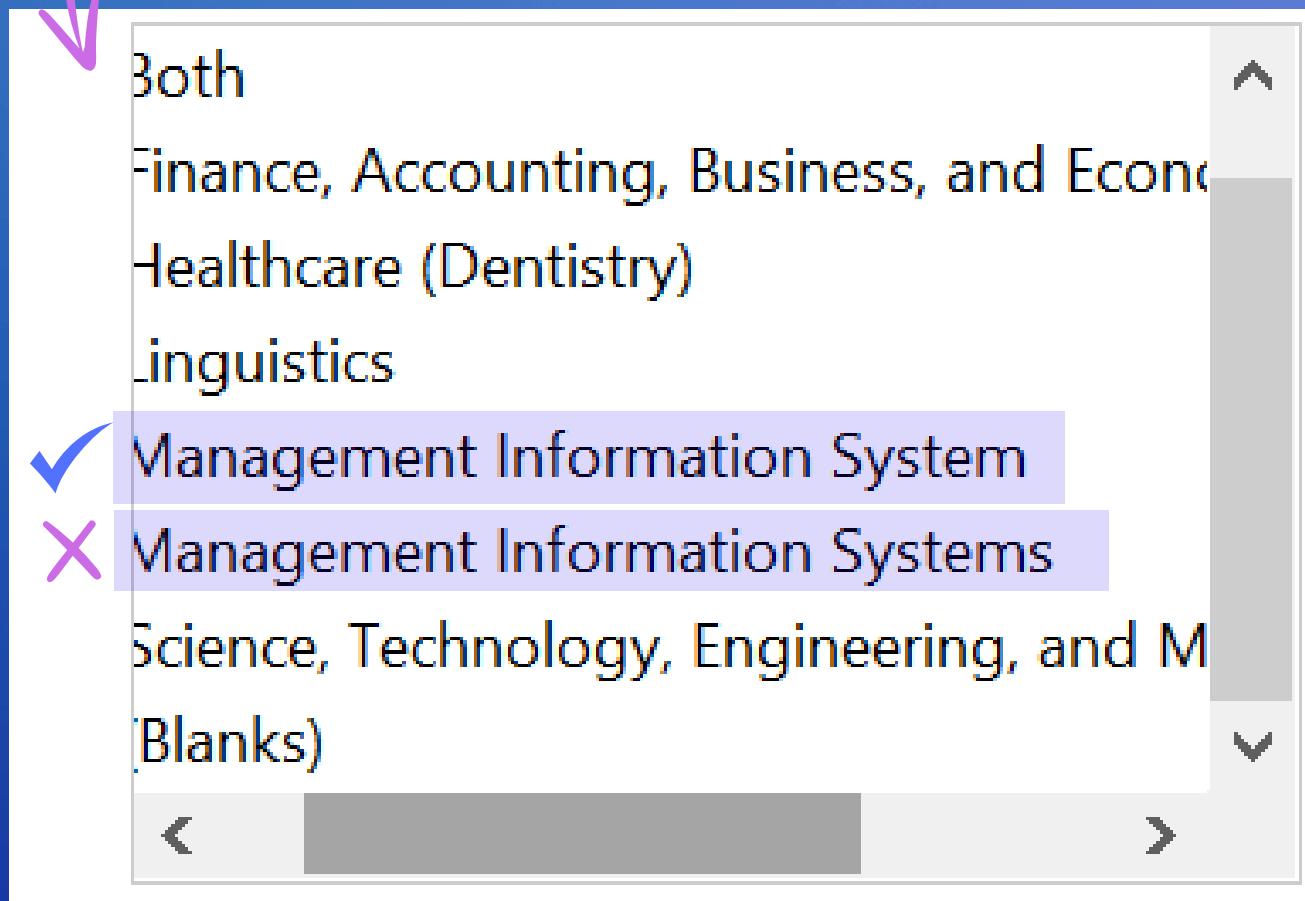
R Preferred roles.4	S Preferred roles.5	T Preferred roles.6	U Preferred roles.7	V Preferred roles.8
N/A	N/A	N/A	N/A	N/A
BI Engineer	BI Manager	Project Manager	N/A	N/A
BI Consultant	BI Developer	BI Engineer	BI Manager	Project Manager
N/A	N/A	N/A	N/A	N/A
BI Engineer	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
BI Engineer	BI Manager	N/A	N/A	N/A
BI Manager	Project Manager	N/A	N/A	N/A
Project Manager	N/A	N/A	N/A	N/A
BI Consultant	BI Developer	BI Engineer	BI Manager	Project Manager
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
BI Consultant	BI Developer	BI Engineer	BI Manager	N/A
BI Developer	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
BI Manager	N/A	N/A	N/A	N/A
BI Consultant	N/A	N/A	N/A	N/A
BI Engineer	BI Manager	N/A	N/A	N/A
BI Consultant	BI Engineer	Project Manager	N/A	N/A

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- Change the experience from 3-6 months to less than 6 years, more than 1 year to 1-2 years and 0 experience with No experience
- Used Power Query to split columns by delimiter(comma) and position(fix spacing) for data restructuring.
- **Fill null value with N/A**



Data Cleaning

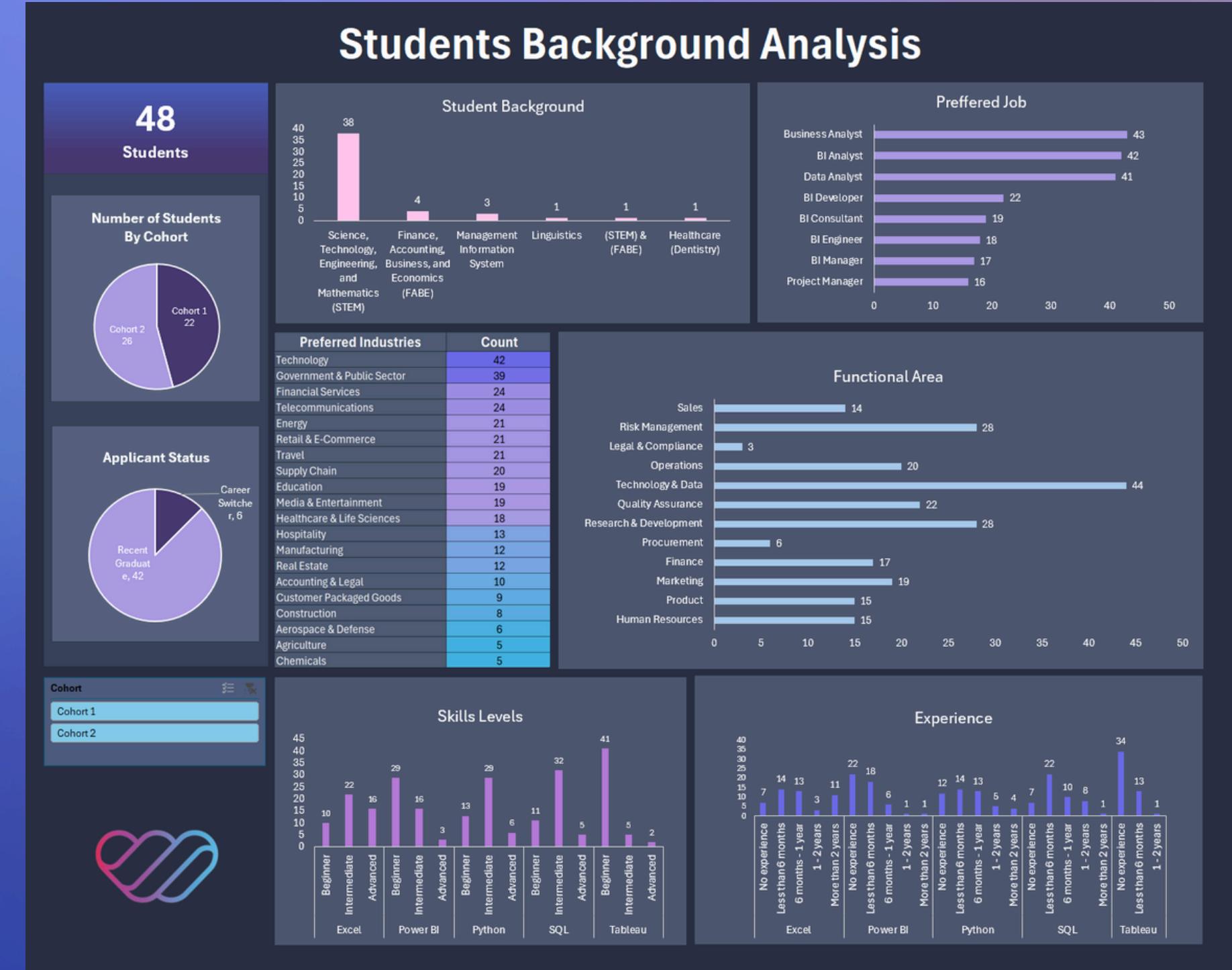
(STEM) and (FABE)



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- Remove name column
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- Remove timestamp column
- Treat the first two rows as outliers
- Add ID column
- Change the experience from 3-6 months to less than 6 years, more than 1 year to 1-2 years and 0 experience with No experience
- Used Power Query to split columns by delimiter(comma) and position(fix spacing) for data restructuring.
- Fill null value with N/A
- **Unify background spelling**

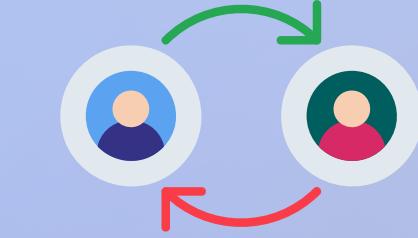


Students Background Dashboard



Presented By: Raghad Bahashwan

Recomndations:



Enhanced
Training in
Power BI
and Tableau

Targeted
Python and
SQL
Workshops

Experience-
based
Learning
Adjustments

Peer
Learning
Opportunities

Continuous
Skill
Assessments





Any question?

Thanks!

Group 1



Raghad
Bahashwan



Khalid
Alsufiani



Manar
Alsayed



Haifa
Alhuzali



Thanks!