icealex

2024

TRAINER PROFILE PROJECT

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1. Introduction:

The **ICEALEX** team asked to do a project to manage their data and optimize trainers' allocation across **ICEALEX** programs. This project aims to enhance the effectiveness of **ICEALEX'**s training programs by focusing on two key objectives:

- **Analyzing Trainer Satisfaction Rates:** By measuring and improving trainer satisfaction, we aim to boost the quality of education provided, ensuring that satisfied trainers create more engaging and impactful learning experiences for trainees.
- **Creating Comprehensive Trainer Portfolios:** Developing detailed portfolios for each trainer will capture their expertise, qualifications, performance metrics, and program history. This will enable data-driven decisions for optimal trainer deployment, fostering continuous improvement and excellence in training delivery.

Some issues were encountered throughout the project:
Inconsistent Data Entries: Several trainer records had missing or inconsistent data, making it difficult to assess performance and qualifications accurately.

The tools and methodologies used in the project:

- SQL Server is utilized to create and manage the database, ensuring efficient storage and handling of trainer data and relationships between different data tables.
- Python: Utilized to do Exploratory Data Analysis (EDA) to explore the data, identify patterns, and address inconsistencies.
- Excel: Used to construct pivot tables and connect with the SQL database, facilitating a detailed and dynamic examination of the data.
- Power BI: Applied to analyze the data and create interactive visualizations. Power BI allowed us to present the data clearly and engagingly, helping stakeholders to easily understand the insights and trends.

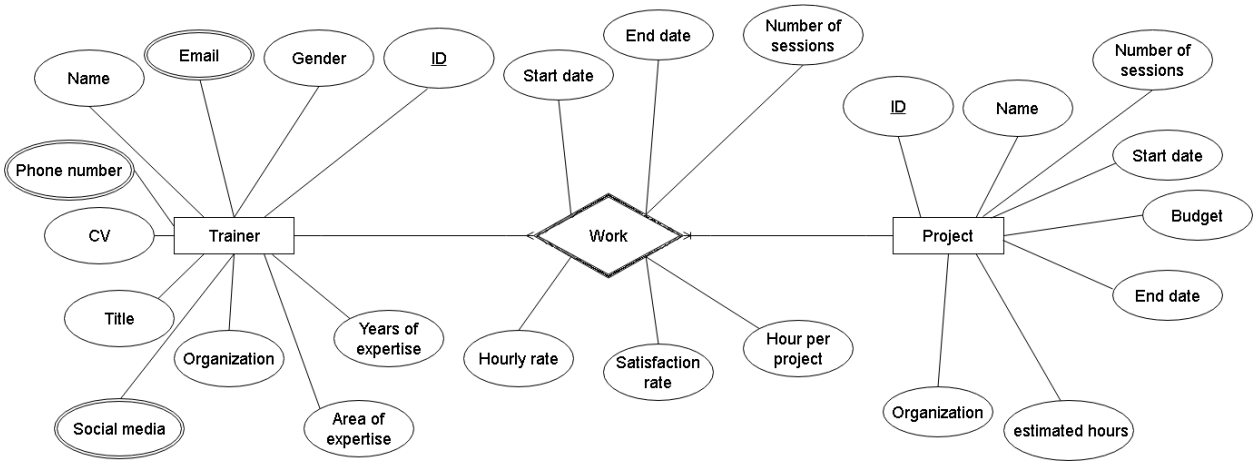
Through addressing these issues and implementing our objectives, we strive to elevate both trainer and trainee success, driving the overall mission of ICEALEX forward.

2. Business Questions:

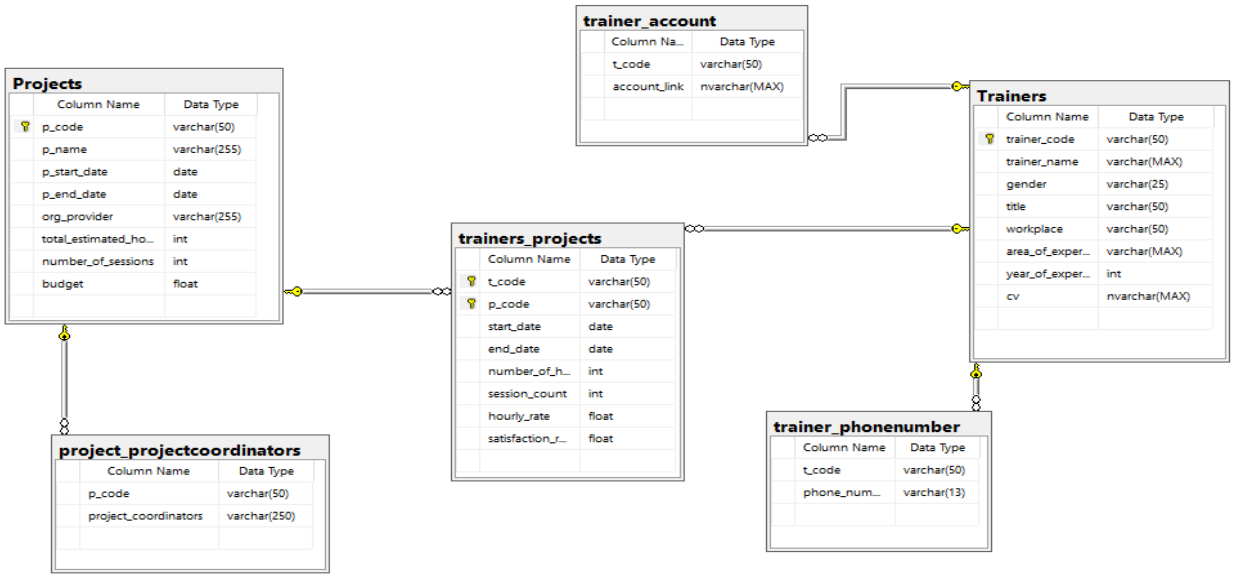
1. The ICEALEX community has several trainers. Each trainer has a name, gender, ID, CV, title, organization, years of experience, area of expertise, satisfaction rate, hourly rate, hour per project, multiple emails, phone numbers, and social media accounts.
2. The community has many projects. Each project has a name, ID, number of sessions, start date, end date, budget, organization, and estimated hours.
3. Each trainer may work on many projects
4. Each project must done by one or more trainer

3. Database Design:

3.1. Entity Relationship Diagram(ERD):



3.2. The Schema:



4. Database Creation:

In this step, we used SQL Server to create, insert, and select the trainer's data.

The tables created are:

1. Trainers table: A dimension table that contains the trainers' data.
2. trainer_phonenumber table: A dimension table containing multiple trainers' phone number values.
3. trainer_account: A dimension table that contains multiple values of trainers' email addresses and social media accounts.
4. Projects: A dimension table that contains IceAlex's projects.
5. Project_projectcoordinators: A dimension table containing the coordinators' names, assigned for the projects.
6. trainers_projects table: A fact table containing both trainers' data and the projects they worked on.

Table name	Key	Type
Trainers	trainer_code	Primary key
trainer_phonenumber	t_code,phone_number	Composite key
trainer_account	t_code,account_link	Composite key
Projects	p_code	Primary key
project_projectcoordinators	p_code,project_coordinator	Composite key
trainers_projects	t_code,p_code	Composite key

4.1 Database Tables Creation:

Create trainer portfolio database:

```
CREATE DATABASE trainer_portfolio;
USE trainer_portfolio;
```

Create Trainers table:

```
CREATE TABLE Trainers(
 trainer_code varchar(50) PRIMARY KEY,
 trainer_name varchar(max) NOT NULL,
 gender varchar(25) NOT NULL,
 title varchar(50),
 workplace varchar(50),
 area_of_expertise varchar(max),
 year_of_expertise int,
 cv nvarchar(max) )
```

Create trainer-accounts table:

```
CREATE TABLE trainer_account(
t_code varchar(50) FOREIGN KEY REFERENCES Trainers(trainer_code),
account_link nvarchar(max)
)
```

Create trainer-phone number table:

```
CREATE TABLE trainer_phonenumber(
t_code varchar(50) FOREIGN KEY REFERENCES Trainers(trainer_code),
phone_number varchar(13),
)
```

Create projects table:

```
CREATE TABLE Projects(
p_code varchar(50) PRIMARY KEY,
p_name varchar(255) NOT NULL,
p_start_date Date,
p_end_date Date,
org_provider varchar(255),
total_estimated_hours int,
number_of_sessions int,
budget Float
)
```

Create a project coordinator table:

```
CREATE TABLE project_projectcoordinators(
p_code varchar(50) FOREIGN KEY REFERENCES Projects(p_code),
project_coordinators varchar(250)
)
```

Create trainers_projects table:

```
CREATE TABLE trainers_projects(
t_code varchar(50) FOREIGN KEY REFERENCES Trainers(trainer_code),
p_code varchar(50) FOREIGN KEY REFERENCES Projects(p_code),
start_date Date,
end_date Date,
number_of_hours_per_project int NOT NULL,
session_count int,
hourly_rate Float,
satisfaction_rate Float,
PRIMARY KEY(t_code,p_code)
)
```

4.2 Creation of Table View

Create a view to get the email address only:

```
CREATE VIEW v_email AS
SELECT t.trainer_code, t.trainer_name, tc.account_link
FROM Trainers AS t
LEFT JOIN trainer_account AS tc
ON t.trainer_code = tc.t_code
WHERE tc.account_link LIKE '%@%';
```

Create a view to get the social media only:

```
CREATE VIEW v_socialmedia AS
SELECT t.trainer_code, t.trainer_name, tc.account_link
FROM Trainers AS t
LEFT JOIN trainer_account AS tc
ON t.trainer_code = tc.t_code
WHERE tc.account_link LIKE '%www.%';
```

Create a view for the current year:

```
CREATE VIEW current_year AS
SELECT *
FROM trainers_projects
WHERE year(start_date) = (SELECT MAX(year(start_date)) FROM trainers_projects);
```

Create a view to have both trainers and project names together in the trainer view:

```
CREATE VIEW detailed_trainers_projects AS
SELECT tp.t_code,t.trainer_name,tp.p_code,
p.p_name,t.area_of_expertise,tp.start_date,tp.end_date,
        tp.number_of_hours_per_project,tp.session_count,tp.hourly_rate,tp.satisfaction_rate
FROM trainers_projects AS tp
LEFT JOIN Trainers AS t
ON t.trainer_code = tp.t_code
LEFT JOIN Projects AS p
ON p.p_code = tp.p_code;
```

4.3 Data Insertion

Inserting data to Trainers table:

```
INSERT INTO
Trainers(trainer_code,trainer_name,gender,title,workplace,area_of_expertise,year_of_expertise,
cv)
VALUES
 ('Trainer01','AAAAAA','Female','Business Developer','Na','Business
Development',4,'https://www.google.com/drive/'),
 ('Trainer02','BBBBBB','Male','Business Consultant','Na','(Business Model) Innovation
Consultancy',4,'https://www.google.com/drive/'),
|
|
|
```

Insert data into trainer_account:

```
INSERT INTO trainer_account(t_code,account_link)
VALUES
 ('Trainer01','trainer@gmail.com'),
 ('Trainer02','trainer@gmail.com'),
 ('Trainer03','trainer@gmail.com'),
 ('Trainer04','trainer@gmail.com'),
 ('Trainer05','trainer@gmail.com'),
 ('Trainer06','trainer@gmail.com'),
 ('Trainer07','trainer@gmail.com'),
|
|
|
```

Insert data into the phone number table:

```
INSERT INTO trainer_phonenumber(t_code, phone_number)
VALUES
('Trainer01','00000000000'),
 ('Trainer02','00000000000'),
 ('Trainer03','00000000000'),
 ('Trainer04','00000000000'),
 ('Trainer05','00000000000'),
 ('Trainer06','00000000000'),
 ('Trainer07','00000000000'),
 ('Trainer08','00000000000'),
|
|
|
```

Insert data into the project table:

```
INSERT INTO
Projects(p_code,p_name,p_start_date,p_end_date,org_provider,total_estimated_hours,number
_of_sessions,budget)
VALUES
('SOA23','Startups of Alex','2023-01-01','2023-06-01','Na',40, 10, 5000),
('SOA22','Startups of Alex','2022-01-01','2022-06-01','Na',30, 10, 3000),
('SOA24','Startups of Alex','2024-01-01','2024-06-01','Na',40, 10, 6000),
('TIEC24','TIEC Pre-incubation','2024-01-01','2024-06-01','Na',40, 10, 5000),
('TIEC23','TIEC Pre-incubation','2023-01-01','2023-06-01','Na',40, 10, 5000),
('TIEC21','TIEC Pre-incubation','2021-01-01','2021-06-01','Na',40, 10, 1000),
('HR23','Heya Raeda','2023-01-01','2023-04-01','Na',90, 45, 10000),
|
|
|
```

Insert data to project_project_projectcoordinators

```
INSERT INTO project_projectcoordinators(p_code,project_coordinators)
VALUES
('SOA23','AAA'),
('SOA22','AAA'),
('SOA24','BBB'),
('TIEC24','BBB'),
('TIEC23','CCC'),
('TIEC21','HHHH'),
('HR23','SSSS'),
('HR22','ZZZ'),
('HR21','ZZZ'),
|
|
|
```

Insert data into trainers_project table:

```
INSERT INTO trainers_projects(t_code,
p_code,start_date,end_date,number_of_hours_per_project,session_count,hourly_rate,
satisfaction_rate)
VALUES
('Trainer01','SOA23','2023-01-01','2023-02-01',32,8,400,0.81),
('Trainer01','TIEC23','2023-02-01','2023-03-01',9,3,100,0.81),
('Trainer01','HR23','2023-03-01','2023-04-01',48,12,400,0.81),
('Trainer02','SOA22','2022-01-01','2022-02-01',32,8,300,0.52),
('Trainer02','TIEC24','2024-02-01','2024-03-01',9,3,600,0.2152),
('Trainer02','HR22','2022-03-01','2022-04-01',48,12,500,0.30),
|
|
|
```

4.4 Data Selection

Show the Trainers data

```
 SELECT*
FROM Trainers;
```

Show the trainer_account data:

```
 SELECT*
FROM trainer_account;
```

Select the trainer data and trainer_account:

```
SELECT t.trainer_code, t.trainer_name, tc.account_link
FROM Trainers AS t
LEFT JOIN trainer_account AS tc
ON t.trainer_code = tc.t_code;
```

Selection of the v_email:

```
SELECT *
FROM v_email
ORDER BY trainer_code;
```

Selection of the v_social media:

```
SELECT *
FROM v_socialmedia
ORDER BY trainer_code;
```

Show data from the phone number table:

```
SELECT *
FROM trainer_phonenumber;
```

Join trainers and phone number tables:

```
SELECT t.trainer_code, t.trainer_name, tpn.phone_number
FROM Trainers AS t
LEFT JOIN trainer_phonenumber AS tpn
ON t.trainer_code = tpn.t_code
ORDER BY t.trainer_code;
```

Show the projects table:

```
SELECT *
FROM Projects;
```

Show the project_projectcoordinators:

```
SELECT *
FROM project_projectcoordinators;
```

Join the data in the project_projectcoordinators with the Projects:

```
SELECT p.p_code, p.p_name, pc.project_coordinators
FROM Projects AS p
LEFT JOIN project_projectcoordinators AS pc
ON p.p_code = pc.p_code
ORDER BY p.p_code;
```

Show trainers_project table:

```
SELECT *
FROM trainers_projects;
```

Show data for the current year:

```
SELECT *
FROM current_year;
```

Show data for the detailed_trainers_projects:

```
SELECT *
FROM detailed_trainers_projects;
```

Truncate database tables

Trainers Table

```
TRUNCATE TABLE Trainers;
```

trainer_account

```
TRUNCATE TABLE trainer_account;
```

trainer_phonenumber

```
TRUNCATE TABLE trainer_phonenumber;
```

Projects table

```
TRUNCATE TABLE Projects;
```

project_projectcoordinators table

```
TRUNCATE TABLE project_projectcoordinators;
```

trainers_projects table

```
TRUNCATE TABLE trainers_projects;
```

To update a value

```
UPDATE Trainers
SET year_of_expertise = 4
WHERE trainer_name = "AAAAA" ;
```

To add new records

```
INSERT INTO
Trainers(trainer_code,trainer_name,gender,title,workplace,area_of_expertise,year_of_expertise,
cv)
VALUES('Trainer31','fgdgsd','Female','Business Developer','Na','Business
Development',4,'https://www.google.com/drive/')
```

To delete a value

```
DELETE FROM Trainers
WHERE t_code = 'Trainer01';
```

5. Exploratory Data Analysis(EDA):

Area of expertise	Years of Experience	Social Media	CV	...	Projcet 1	Projcet 1 Year	Project 1 hourly rate (EGP)	Project 2	Projcet 2 Year	Project 2 hourly rate (EGP)	Project 3	Projcet 3 Year	Project 3 hourly rate (EGP)	Satifaction rate %
Business Development	4	NaN	Na	...	Startups of Alex	2023	400	NaN	NaN	NaN	NaN	NaN	NaN	81.00%
(Business Model) Innovation Consultancy	4	NaN	Na	...	TIEC Pre-incubation	2024	600	NaN	NaN	NaN	NaN	NaN	NaN	21.52%
Digital Marketing	5	NaN	Na	...	Talent4Startups	2024	400	NaN	NaN	NaN	NaN	NaN	NaN	55.81%
Business consultancy	6	NaN	Na	...	Startups of Alex	2023	500	NaN	NaN	NaN	NaN	NaN	NaN	57.45%
Impact Management	4	NaN	Na	...	Ladies Startups League Superstar	2023	200	NaN	NaN	NaN	NaN	NaN	NaN	32.19%

The data provided is not clean it contains columns with only null values like CV, and social media columns, and the format of the data is wide.

Email	Phone Number	Gender	Title	Area of expertise	Years of Experience	No. Projects Joined	Project	Project_year	Satifaction rate %	Project_yearly_rate
@gmail.com	1253334345	Female	Business Developer	Business Development	4	1	Startups of Alex	2023	81.00	400.0
@gmail.com	1253334345	Male	Business Consultant	(Business Model) Innovation Consultancy	4	1	TIEC Pre-incubation	2024	21.52	600.0
@gmail.com	1253334345	Female	Marketier	Digital Marketing	5	1	Talent4Startups	2024	55.81	400.0
@gmail.com	1253334345	Male	Business Consultant	Business consultancy	6	1	Startups of Alex	2023	57.45	500.0
@gmail.com	1253334345	Female	Project manager	Impact Management	4	1	Ladies Startups League Superstar	2023	32.19	200.0

Dropping the CV, and social media columns that are not important in analysis, and handling missing values by imputing using mean, and median for numeric columns and mode for categorical values the data became clean,
Using the melt() method to unpivot the columns we convert the data from wide format to long format to be ready for analysis.

6. Pivot Tables:

This section is divided into three parts.

- ➔ First, an analysis of all years of participation with ICEALEX is conducted.
- ➔ Second, an analysis of the data of the current year.
- ➔ Lastly, a report that shows the full data of the trainer.

6.1 Analysis and Reports overall:

Here we provide an analysis of the whole data through the years.

6.1.1. Count of overall projects for each trainer

area_of_expertise	All	
Row Labels	**Count of projects**	**Distinct Count of org_provider**
AAAAAA	3	1
AABBB	2	1
BBBBBB	3	1
CCCCCC	3	1
DDDDDD	3	1
DWSD	2	1
EEEEEE	3	1
FFFFFF	3	1
GGGGGG	3	1
HHHHHH	2	1
IIIIII	1	1
JJJJJJ	1	1
KKKKKK	1	1
LLLLLL	1	1
MMMMMM	2	1
NNNNNN	1	1

- ☐ This pivot table gives a summary of the **count of projects and the number of organizations**, each trainer worked in, throughout all years.
- ☐ You can use the filter to pick a specific category.

6.1.2. Records of hourly rate and satisfaction rate per trainers and projects throughout the whole years

area_of_expertise	All	
Row Labels	**Average of hourly_rate**	**Average of satisfaction_rate**
AAAAAA		
2023		
Heya Raeda	$400	81.00%
Startups of Alex	$400	81.00%
TIEC Pre-incubation	$100	81.00%
AABBB	**$350**	**82.50%**
BBBBBB	**$467**	**34.51%**
CCCCCC	**$367**	**73.60%**
DDDDDD	**$367**	**73.60%**
DWSD	**$350**	**72.91%**
EEEEEE	**$367**	**73.60%**
FFFFFF	**$367**	**73.60%**

- ☐ This pivot table gives a summary record per each trainer through all years. It includes **the projects for each year, the average hourly rate, and the average satisfaction.**
- ☐ You can use the filter to pick a specific category.

6.1.3. Reports per subject

start_date (Year)	All		
Row Labels	**Count of projects**	**Average of hourly_rate**	**Average of satisfaction_rate**
(Business Model) Innovation Consultancy	3	$467	34.51%
Backend Web Development	2	$650	82.50%
Business consultancy	3	$367	73.60%
Business Consultant & Team Development	1	$400	55.81%
Business Development	3	$300	81.00%
Business Development & Marketing Consultant	1	$400	55.81%
Business Modeling Consultant	3	$367	62.47%
Businesss/Marketing/Finance	1	$400	55.81%
Coach, Facilitator, Board Member, Finance Director	1	$400	45.00%
Curriculum Development Consultant	1	$400	75.00%
Digital Marketing	12	$425	75.20%
Entrepreneurship and Ecosystem Building	1	$300	90.00%

- ☐ This pivot table gives a summary record per category through all years. It includes **the projects for each year, the average hourly rate, and the average satisfaction.**
- ☐ You can use the filter to pick a specific year.

6.1.4. Data per Gender

area_of_expertise	All
Gender	
Female	
Count of p_code	21
Average of hourly_rate	$386
Average of satisfaction_rate	73.23%
Male	
Count of p_code	30
Average of hourly_rate	$417
Average of satisfaction_rate	65.82%
Total Count of p_code	**51**
Total Average of hourly_rate	**$404**
Total Average of satisfaction_rate	**68.87%**

- ☐ This pivot table gives a summary record per gender through all years. It includes **the projects for each year, the average hourly rate, and the average satisfaction.**
- ☐ You can use the filter to pick a specific category.

6.1.5. Number of hours vs the average hourly rate

Number of hours vs the average hourly rate	
area_of_expertise	All
Row Labels	**Average of hourly_rate**
8	$480
9	$350
20	$313
32	$350
40	$427
48	$450
Grand Total	**$404**

- ☐ This pivot table is to give a view of **the common number of hours vs the average hourly rate**.
- ☐ This is to give a quick expectation on the average hourly rate when making a contract with a trainer.
- ☐ You can use the filter to pick a specific category.(Can be used for new contracts).

6.1.6. Project data over years

Sum of budget	Column Labels				
Row Labels	2021	2022	2023	2024	Grand Total
Heya Raeda	7000	10000	10000	20000	47000
InvestMED			3000		3000
Ladies Startups League	9000				9000
Ladies Startups League Superstar		10000	10000		20000
Mentoring Lounge	2000			3000	5000
Safir		500			500
Startups of Alex		3000	5000	6000	14000
SwitchMED			3000		3000
Talent4Startups			15000	15000	30000
TIEC Pre-incubation	1000		5000	5000	11000
Grand Total	**19000**	**23500**	**51000**	**49000**	**142500**

- [ ] This pivot table shows **the budget of the projects across the years.**

6.1.7. Organizations and projects

area_of_expertise	All				
trainer_name	All				
Count of projects	**Column Labels**				
Row Labels	**2021**	**2022**	**2023**	**2024**	**Grand Total**
Na					
TIEC Pre-incubation	15		1	1	17
Talent4Startups				15	15
Mentoring Lounge	15				15
Heya Raeda		1	1		2
Startups of Alex		1	1		2
Grand Total	**30**	**2**	**3**	**16**	**51**

- [ ] This pivot table shows **the records of organizations, projects, and their count.**
- [ ] This can be filtered by category and trainer name.

6.1.8. View over experience level

area_of_expertise	All			
Row Labels	**Average of hourly_rate**	**Count of p_name**	**Average of satisfaction_rate**	**Recent_active_year**
2-5	$389	27	68.97%	2024
5-10	$421	24	68.76%	2024
Grand Total	**$404**	**51**	**68.87%**	**2024**

- ☐ This pivot table shows **number of count, average hourly rate, and average satisfaction rate according to the level of experince through all active years**.
- ☐ Can be filtered based on category.(Can be used for new contracts)

6.1.9. Last active year and the hourly rate corresponding to this year for each trainer

area_of_expertise	All	
Row Labels	**Recent_active_year**	**Average of hourly_rate**
AAAAAA	2023	$300.00
AABBB	2021	$350.00
BBBBBB	2024	$466.67
CCCCCC	2024	$366.67
DDDDDD	2024	$366.67
DWSD	2024	$350.00
EEEEEE	2024	$366.67
FFFFFF	2024	$366.67
GGGGGG	2024	$366.67
HHHHHH	2024	$400.00
IIIIII	2021	$300.00
JJJJJJ	2024	$400.00
KKKKKK	2021	$400.00

- ☐ This pivot table **shows the last year, a trainer was active with ICEALEX and the corresponding hourly rate in this year.**
- ☐ Can be filtered using category.

6.2 Analysis and Reports for the current year:

Here we provide an analysis of the data generated for the current year.

6.2.1.Trainer and project_rate per project for the current year

area_of_expertise	(All)
Trainer	**Sum of project_rate**
BBBBBB	**5400**
TIEC Pre-incubation	5400
CCCCCC	**16000**
Talent4Startups	16000
DDDDDD	**16000**
Talent4Startups	16000
DWSD	**16000**
Talent4Startups	16000
EEEEEE	**16000**
Talent4Startups	16000

- ☐ This pivot table shows the **active trainers, current projects, project rate for each project and the total project rate for the *current year***.
- ☐ Can be filtered based on the category.

6.2.2.Average hourly rate for the current year per trainer

area_of_expertise	(All)	
Row Labels	**Average of hourly_rate**	**Average of satisfaction_rate**
MMMMMM	$800	55.81%
BBBBBB	$600	21.52%
CCCCCC	$400	55.81%
TTTTTT	$400	50.00%
RRRRRR	$400	55.81%
DWSD	$400	55.81%
DDDDDD	$400	55.81%
EEEEEE	$400	55.81%
OOOOOO	$400	55.81%
FFFFFF	$400	55.81%
SSHH	$400	55.81%
GGGGGG	$400	55.40%

- ☐ This pivot table shows the **active trainers, their average current hourly rate, and the average satisfaction rate for the *current year***.
- ☐ Can be filtered based on the category.

6.2.3.Average hourly rate for the current year per trainer

area_of_expertise	(All)	
Row Labels	**Average of hourly_rate**	**Average of satisfaction_rate**
MMMMMM	$800	55.81%
BBBBBB	$600	21.52%
CCCCCC	$400	55.81%
TTTTTT	$400	50.00%
RRRRRR	$400	55.81%
DWSD	$400	55.81%
DDDDDD	$400	55.81%
EEEEEE	$400	55.81%
OOOOOO	$400	55.81%
FFFFFF	$400	55.81%
SSHH	$400	55.81%
GGGGGG	$400	55.40%

- ☐ This pivot table shows the **active trainers, their average current hourly rate, and the average satisfaction rate for the *current year***.
- ☐ Can be filtered based on the category.

6.2.4.Average hourly rate vs years of experience for the current year

area_of_expertise	(All)
Row Labels	**Average of hourly_rate**
3	$400
4	$467
5	$400
6	$500
7	$400
8	$400
Grand Total	**$438**

- ☐ This pivot table is to give a view over **the common number of hours vs the average hourly rate for the current year**.
- ☐ This to give a quick expectation on the average hourly rate when making a contract with a trainer.
- ☐ You can use the filter to pick a specific category.(Can be used for new contracts)

6.2.5.Project data for the current year

area_of_expertise	(All)		
Row Labels	**Average of budget**	**Average of total_estimated_hours**	**Average of satisfaction_rate**
Talent4Startups	15000	120	55.40%
TIEC Pre-incubation	5000	40	21.52%
Grand Total	**14375**	**115**	**53.28%**

- ☐ This pivot table shows **the current active projects' data for the *current year*.**
- ☐ Can be filtered based on category.

6.2.6.Details of projects and trainers for the current year

area_of_expertise	(All)				
Row Labels	**Count of p_code**	**Sum of number_of_hours_per_project**	**Average of hourly_rate**	**Sum of project_rate**	**Average of satisfaction_rate**
BBBBBB	**1**	**9**	**$600**	**$5,400.00**	**21.52%**
TIEC Pre-incubation	1	9	$600	$5,400.00	21.52%
CCCCCC	**1**	**40**	**$400**	**$16,000.00**	**55.81%**
Talent4Startups	1	40	$400	$16,000.00	55.81%
DDDDDD	**1**	**40**	**$400**	**$16,000.00**	**55.81%**
Talent4Startups	1	40	$400	$16,000.00	55.81%
DWSD	**1**	**40**	**$400**	**$16,000.00**	**55.81%**
Talent4Startups	1	40	$400	$16,000.00	55.81%
EEEEEE	**1**	**40**	**$400**	**$16,000.00**	**55.81%**
Talent4Startups	1	40	$400	$16,000.00	55.81%
FFFFFF	**1**	**40**	**$400**	**$16,000.00**	**55.81%**

- ☐ This pivot table is to give **a summary for *current year's* projects fot each trainer**.
- ☐ You can use the filter to pick a specific category.

6.2.7.Trainer and organization

area_of_expertise	(All)
Row Labels	**Count of p_code**
YYYY	**1**
Na	**1**
Talent4Startups	1
RRRRRR	**1**
Na	**1**
Talent4Startups	1

- ☐ This pivot table shows a **summary of the organizations and the projects the trainer participated in for the *current year*.**
- ☐ Can be filtered based on category.

6.2.8.View over experience level for the current year

area_of_expertise	(All)		
Row Labels	**Count of p_code**	**Average of hourly_rate**	**Average of satisfaction_rate**
2-5	8	$425	51.52%
5-10	8	$450	55.03%
Grand Total	**16**	**$438**	**53.28%**

- ☐ This pivot table shows **number of count, average hourly rate, and average satisfaction rate according to the level of experience for *current year***.
- ☐ Can be filtered based on category.

6.3. A report of the trainer's raw data

This report will be generated on picking a trainer from the list.

Please choose a trainer for the list below

Trainer Name IIIIII

t_code	trainer_name	gender	p_code	p_name	area_of_expertise	start_da
Trainer09	IIIIII	Male	TIEC21	TIEC Pre-incubation	Senior Consultant	01-01-

This view provides all the details for the trainer through the years.
You need to pick the trainer's name from the dropdown list and all the trainer's details will appear.

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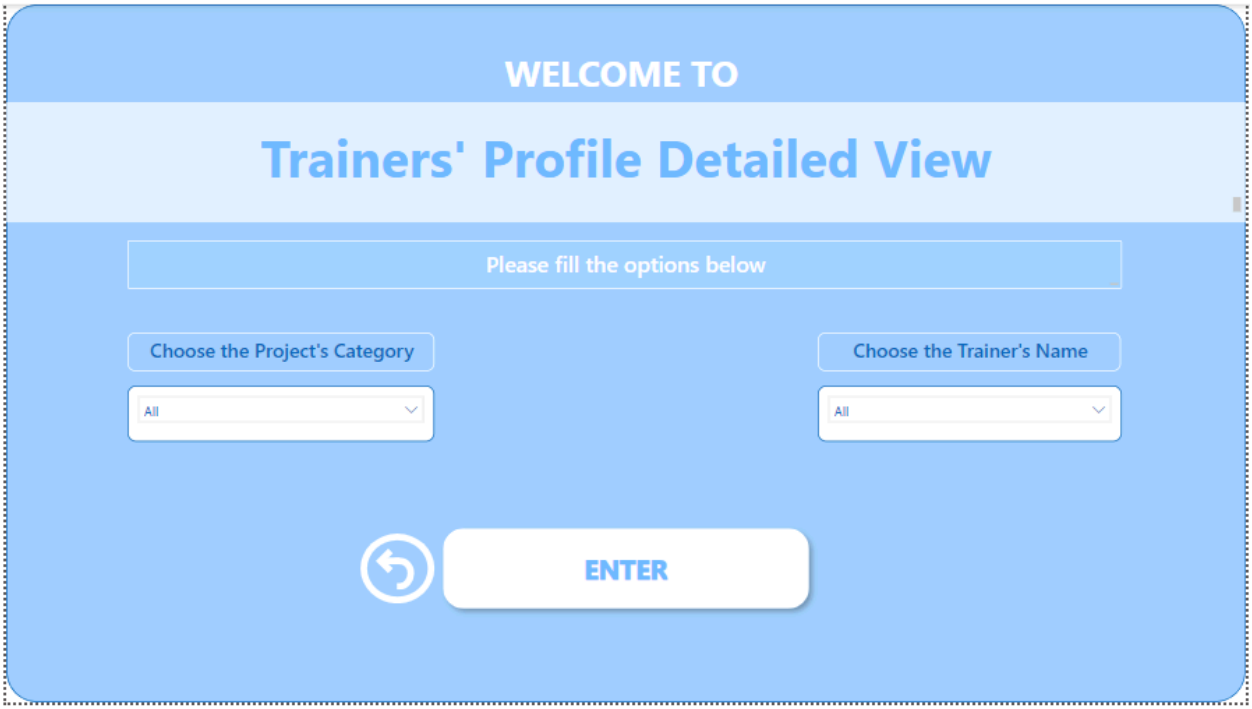
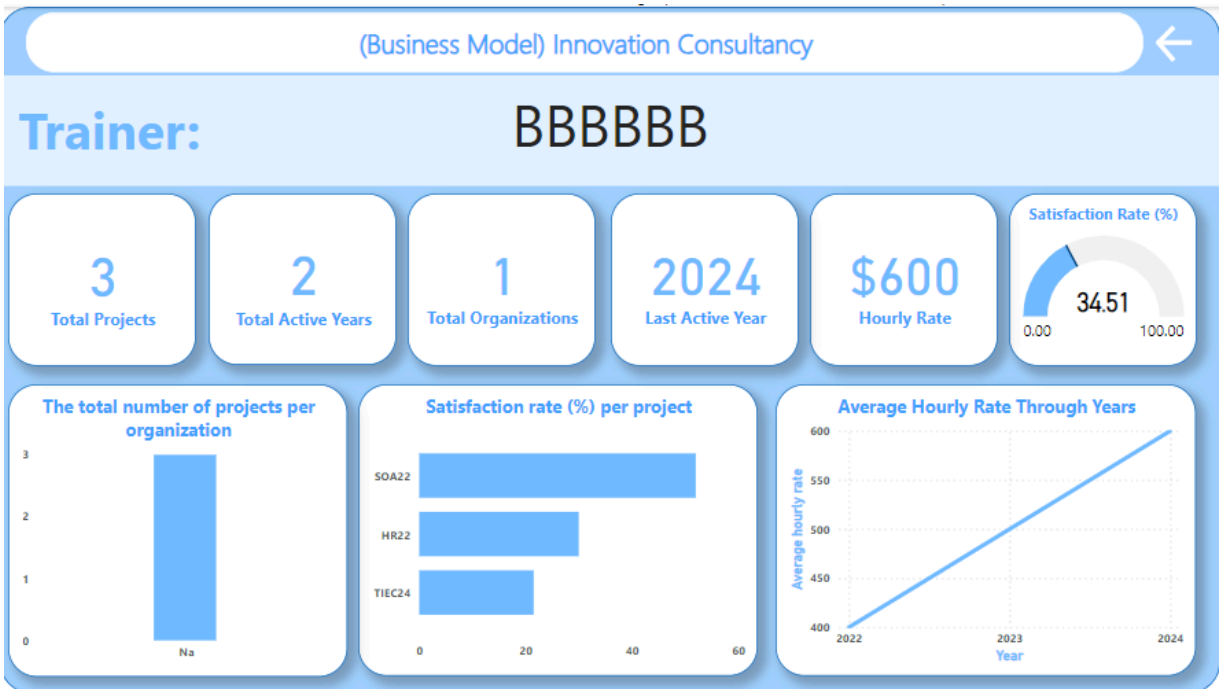
7. Analysis and Graphs:

Here, we made a front page where you need to pick the area of expertise and the trainer's name to access the detailed view of the chosen trainer.
There is a reset button to undo the filters.



After choosing from the slicers and pressing enter, a detailed dashboard including all the trainer's details and the projects, the trainer participated in.



8. Recommendations:

These are simple recommendations, we thought of while working on the project, to enhance the efficiency of the whole process:

- Fill in all fields when using the dashboard to avoid incorrect data.
- Categorize the area of expertise to subjects like(Data analysis, Marketing, etc..).
- For the project's code entry, use the first letter of each word in the project name and the last two digits in the year to ensure its uniqueness.
- Satisfaction rate, we recommend adding an instant comment section if the rank applied doesn't meet the target value. This will help get the cause of low rankings and help with improvement.
- Convert the years of expertise to experience levels instead.