

Assignment for Business Insight Analyst

Please, answer all items. Incomplete assignment will be considered invalid for evaluation.

Please, provide your answers for question 1,5 and 6 in word document, for question 2,3 and 4 in ppt, excel or suitable another format.

1. In your opinion, what are key 3 critical success factors for cash payment business (operating cash collection kiosks)? Maximum a page.
2. Please, complete online payments industry analysis in Azerbaijan. Maximum 10 slides (ppt file).
3. Please, analyze **the payment_data** file in either POWER BI or MS Excel, (you can use another software that you use better) and come up with your main findings in ppt file. Maximum 7 slides. Audience for your presentation is the company management.

Data is about monthly payments of digital wallet users in different services such as mobile, utility, bank and etc. Columns refer:

payment date: date of payment

payment type: whether customer pays by card or wallet balance

payment amount: amount of payment

customer ID: ID of customer (it is unique)

service category : category of service (ex: bank, utility, travel etc.)

service ID: ID of service (ex: Azericell, Azerisig, Kapitalbank etc.)

payment status: whether payment successful or not

4. As eManat, our payment kiosks cover all Azerbaijan except Nakhchivan region. Management ask you with creating a business plan to expand eManat's payment kiosks into the Nakhchivan region of Azerbaijan. Your objective is to analyze the feasibility of this expansion and provide a profit and loss statement (P&L) to determine its suitability. You don't have to come up with exact numbers, but outline your approaches for gathering data, conducting market analysis, assessing operational requirements, and estimating financial performance.

5. Excel Skills:

- a. What is the correct formula to write in cell C5, C6, C7?

	A	B	C
1	Provider	Weight	Amount
2	Bakcell	0.3	100,000
3	Azercell	0.5	200,000
4	Nar	0.2	150,000
5	Total Amount		
6	Average Amount		
7	Weighted Average Amount		

- b. Company A is looking into four potential projects and will accept them if the IRR is 10% or above, as shown in cell E2. What is the formula used in cell C2, which can be copied down to cell C3 through C5, to generate the results shown below?

	A	B	C	D	E
1		IRR	Accept or Reject		Decision rule
2	Project 1	12.5%	Accept		10%
3	Project 2	9.3%	Reject		
4	Project 3	8.2%	Reject		
5	Project 4	11.1%	Accept		
6					

- c. What is the formula used in cell B2, which can be copied down to cell B2 through B10, to generate the results shown below? (Please use LEFT, RIGHT or MID functions)

	A	B
1	ID	Result
2	AZE5051	5051
3	AZE222	222
4	AZE8555545	8555545
5	AZE1	1
6	AZE000265	000265
7	AZE6565	6565
8	AZE85555	85555
9	AZE1125	1125
10	AZE0002	0002

- d. We have sheet name Providersinfo which have columns Provider ID (column A) and Provider Name (column B). What is the formula used in cell C2, which can be copied down to cell C2 through C6, to generate the results shown below? (Solve it in 2 different ways: using Vlookup and Index functions)

Provider ID	Provider Name
1	Azercell
2	Bakceall
3	Nar
4	Kapital
5	Rabitə
6	ABB
7	Azəriqaz
8	Azərişiq
9	Azərsu
10	Azəristilik

	A	B	C
1	Provider ID	Total Amount	Provider Name
2	5	1,242,337	Rabitə
3	8	974,615	
4	1	272,184	
5	3	81,169	
6	7	1,100,964	

6. SQL Skills:

- a. Assume a schema of **Provider** (Provider_id, Name, Release_date) , **Transactions** (Transaction_id, Provider_id, Amount). If there are 5 records in the Provider table and 20 records in the Transactions table, in the result of the following SQL query how many rows will be displayed:

Select * From Provider, Transactions

- b. Use an SQL function to calculate the sum, average, max and min of all the Transaction Amount column values in the Transactions table.

SELECT , , ,

FROM

- c. Select all records where the Provider column has the value 'Bakcell' or 'Azercell'. Please, fill the gaps.

```
 * FROM Transactions  
 Provider = 'Bakcell'  
  = '';
```

- d. List the number of customers in each provider, ordered by the provider with the most customers first.

```
SELECT  (CustomerID),  
Provider  
FROM Customers  
  
ORDER BY .
```

- e. Use the correct function to return the number of records(providers) that have the commission value set to 2.

```
SELECT  (*)  
FROM Providers  
 Commision = 2;
```

- f. Use the IN operator to select all the records where Provider is NOT "Bakcell" and "Azercell".

```
SELECT * FROM Transactions
```

- g. Write a SQL query to get the third highest salary of employee from Employee table.

Employee ID	Employee Name	Department ID	Salary
1	Ali Aliyev	BI	1,000
2	Vali Valiyev	MRK	1,500
3	Aytan Aslanova	SALE	500
4	Shamil Babayev	BI	700
5	Gunay Abbasli	IT	2,000