**Interview (5)**

**1-Demographic Data**

* **Gender**: Male
* **Age Group**: 36-45
* **Job Title**: chief
* **Department**: Database services and operations
* **Experience**: 16 years
* **academic qualification**:Bachelor Degree

**2-Questions and Answers**

1-What are the challenges that affect the performance of Open Government Data?

**Our department studies government data discovers this data and makes data cleansing and classification, so our role in Open Data is preparing data to be displayed in the Open data portal. We face many challenges one of them is that we collect data from various government institutions and every institution owns part of this data so we collect this data and tie it with the owner, for example, gender is collected from National Information and Government Authority, we normally don’t take the name because we don’t need it, we take any other information about the owner. So, our target was to gather as much data as we could to analyze it. To recap the challenges are as follows collecting data from various government sources and after collecting data how to tie related data together, another challenge is in definition like Who is the head of the family? who is a Bahraini citizen? Who is the Gulf resident? so some of these definitions should be clear to enable us as IT and data engineers to extract data in the right way. These were the challenges we faced so far, some of them we overcame, and the others we are trying now to overcome.**

2-What are the challenges you overcame especially the ones that related to Open Government Data? are you had any challenges in data preparation?

**Yes, we had, sometimes we have data for a male person but in fact, the person is female so we need to validate the data by relating data from various places this was one of the challenges that we passed. Another challenge is related to logic and validation for example we have a student in university, and we need to know specifically, what the status of this student is. Did he graduate? Is he still studying? Also, according to workers at the University of Bahrain, what is the classification of? For any one of them studying at the University, we need to understand all these conditions to validate the data.**

3-Do you mean the definition of each of them?

**Yes, and we have to know how to connect their data and validate the output data by collaborating with the related government institutions, this challenge took a lot of time because we don’t have another solution unless collaborate with government institutions to extract the correct data.**

4-We know that normal people don’t have the knowledge that IT professionals have. How do you use data visualization in sharing data?

**Our role is to prepare data to be shared, we collaborate with data analysts they make these charts, indicators, and data visualizations. If the data analyst knows what data he needs, and how this data will add value then he will help me provide him with the data he needs, so here I talk about the importance of collaboration and communication between our teams, and this collaboration helped us in Open Data Portal because data analyst requires specific data to extract meaningful insights, so I provide him with data he needs and he makes dashboards. There are a lot of data visualization tools but we choose to work with two of them: Power BI and Superset. And we had an intuitive to use elastic search and Kibana.**

5-Do you see specific domains that have a better opportunity to benefit from Open Government Data to drive innovation?

**Yes, I think the world realized the value of data after the COVID pandemic ,we now use the data we have with AI to extract insights about the future, in the past we only had numbers but now I want to build on this numbers, for example, serious illness I can use data to know what is the reason of this illness and searching on the potential reasons that could lead to this illness like factories which close to residential areas, meaning that person who had this illness and live near factories ,then what is the percentage of people who had this illness and live near factories and so on.**

6-What about the other fields?

**We have now an initiative about hiring fresh grades. another initiative aims to increase awareness of the market and jobs that have a high demand among students entering high school this will help the student to draw his path and provide him with a clear vision about choosing a university in the future. We have another initiative in the real state sector which is about using a data lake we made to provide the investor with data he needs about the price of the land, hotels, and restaurants and we currently relating this data with population numbers to provide more clear indicators and figures to the investor, this initiative has been implemented.**

7-How do you see the role of technological innovation in improving the performance of data?  
**We currently have a partnership with companies in the field of AI and technological innovation, we have another authority that could benefit you more in the future direction, we have discussions with these companies and collaborate with them on how to apply the new technologies to our work and we are in evaluation phase with companies to discover how they could help us in this field.**

8-What are the technologies are they AI or Blockchain?

**I think it’s not my role to talk about this point but I think it will be AI more than anything else.**

9-How do you measure the performance of data?

**I think it’s all about the potential value that data could add in the future and this is done by validating data with government institutions and taking the data that could be beneficial to us according to demand or our project domain. So, if the strategy is clear and there is knowledge of the value data could add then our probability of success will increase.**

**10-Does that mean you finished the harder part and it’s possible now to develop the measurement procedures that are used with the data you have and classify data as valid data and not valid data?**

**We worked with government institutions as I said before to discuss the validation of data, like are the numbers of the labor force were accurate, we discussed with the statistics sector how far this data helped them. We also discussed with related institutions the results of sharing data with them and the impact on the students in the context of the market and choosing the university in the future, the data we shared was accurate and had a great impact positive on these fields.**

**11-What are the future trends that you predict in the e-government field especially Open Government Data and technological innovation?**

**I think that the future is heading toward AI, and AI will not eliminate the role of humans because it is applied by a person, and data that fed to it. AI is very useful in e-government like chatbots which could help visitors of a website by guiding them instead of manually searching for a service.**

**12- every day we see new technology and the government in the Kingdom of Bahrain does its best to provide data and serve the clients.**

**We had many initiatives like portal e-government, but e-government as a concept aims to be a complete institute serving citizens. We always work with various government intuitions on initiatives like measuring the added value of services and case studies of digitalizing archives. We reached a percentage of 90% of services that don’t need citizens to go to government institutions to make the service they want, and the Kingdom of Bahrain is one of the pioneering countries in e-government and we are working to digitalize all services.**