**Business Rules and Data Modeling**

Business Rules can best be described as an outline of operating procedures that would help programmers understand the functionality the customer needs. For example, if you run a small clothing store, you likely have a return policy. No refunds or exchanges after 30 days. That is a business rule. Or say you are car dealership processing credit applications. Credit score must be above 580 for auto loan. That is a business rule that likely pairs with another condition to reach the end goal of 'customer purchasing car with loan' (1).

Business rules relate to data modeling by explaining the relationship between entities. Entities would best be described as nouns that occur in your business that you want to track data for. For example, the small clothing store has items for sale, purchase transactions, return transactions, receipts, and customers. That customer likely has a card number, name, email, and other things related to them that the store would be interested in. The provided business rules help to establish a relationship between purchase date and return date that would be important to the owner to have included in the software that will require entity attributes.

Modeling the business rules as entities and relationships will help data modeling in establishing interaction points between the data. Whether that be a comparison, an if clause, or something else, we know what data is needed, to produce the desired outcome. Knowing what needs to be stored will help with making the best organizational choices (2).

**Sources**

1. <https://www.ibm.com/topics/business-rules>
2. <https://powerbi.microsoft.com/en-us/what-is-data-modeling/#:~:text=Data%20modeling%20is%20the%20process,between%20those%20bits%20of%20data>.

Responses

Hi Taylor,

I really like your post, as it was one I didn’t consider when writing my discussion. I like that your article very clearly highlights the similarities of the structures which concentrate on the differences in data. From my perspective, and I only word it like that because I’m not certain if it’s correct, is that entity relationship diagrams diagram data relationships and object relationship diagrams diagram object relationships. They are essentially the same I think? If we take a user as an example, the user is the entity and the object. The user has data we need to store in the table for ERD. I believe that corresponds very strongly with object attributes. Then in contrast, while a piece of user data, like email, may not correspond to their order, the user does correspond to their order. Those objects interact while all the data may not be necessary. I would be curious to see a side by side diagram example for the same businesses, as I expect that they would be very similar.

Hey Amanda,

I like that you emphasize the amount of time to be saved from having an agreed upon plan. And I agree that it becomes a common language for all the stakeholders. For me, it is about the visual structure. I feel like an ERD helps me personally understand which objects or loops need to be nested where in the site. Primarily so it can access what it needs, but also so that it can be planned more accurately. I think of the data model diagrams as essential for dividing up the work and making it as easy as possible for sub-teams. However, I may be thinking in terms of processes rather than data. But the data sets will eventually be needed for different processes, so I think it’s supposed to overlap some.