# Supporting Document for Created Database Design

## Background:

In our background study, we have had to search and research on very broad spectrums of web analysis as Ecommerce is a large domain and then we had to choose one aspect of Ecommerce business. For example, Ecommerce Businesses include huge online stores as well as libraries and food chains. We studied all business models including B2C, B2B, C2C because Web Analysis is done for all these Ecommerce Domains and Businesses and it is done differently for all these models.

We tried to create a generic Web Analysis database, something like what Google Analytics would be using. We had gradual success in doing so but realized, because we don’t have a concrete business model, at the end, the database can’t show exact results and analyze.

Hence, we decided to choose a Business model and we created a Database according to it. Then we reduced the database to the only required tables to point a clear direction of what we want to show unlike showing all tables such as adding inventory which doesn’t have to do much with Web Analysis. Now the tables you will see will all be used in Analysis.

## Model:

We have chosen an online store, which follows B2B model. It was getting very confusing at times so we had to break it down to what the users can create, view. What will and should be saved. So, in the next heading, you will see processes of what went through our heads and what a user will process.

## Processes:

### Existing Entities

Carts:  
 Products (Cart Items):  
 Product Reviews:  
 Ratings  
 Comments  
Users

### Entities Processes:

Users:  
 Can View:  
 Product Category  
 Product  
 Comments of Products  
 Ratings of Products  
 Can Create (Creates in Sessions):  
 Cart:  
 Order  
 Comment  
 Rate  
 Update Preferred Category  
 Update Favorite Product  
 Can View his/her own History:  
 Session:  
 Product Visits  
 Product Categories Visited  
 Product Reviews Visited:  
 Comments Visited  
 Comments Created   
 Ratings Viewed  
 Rated  
 Created Orders  
 View Favorite Products  
 View Preferred Categories

### Planned Analyses & Metrics:

### Carts Web Analysis

Carts Web Analysis: One Instance of a cart (One Change Signifies):  
 Any One Command:  
 Add Product to Cart (Cart Item):  
 Change its Quantity  
 Change Variations:  
 Color  
 Size  
 Etc  
 Remove Product from Cart  
 Checkout (Create Order)

### Session Web Analysis

Session Web Analysis: One View (One URL) in One Session:  
 Command:  
 View  
 Action:  
 Favorite Product  
 Preferred Category  
 Add to Cart   
 Comment  
 Reply (Which are Comments in Database)  
 Rate

### Special Metrics for Web Analysis

Session Duration  
Number of Sessions  
View (URL) Visits Including:  
 Product Categories  
 Products  
 History:  
 Orders  
Number of Visits  
Time Durations of:  
 Views (URL)  
 Sessions  
Inactive Times:  
 Through Mouse Hovering  
 Keyboard Tapping  
Bounce Rate  
Average Time per Specific Products  
Average Time per All Products  
Average Time per Site  
Scroll Depth

### Special Tables & Attributes for Web Analysis:

Session\_Table  
Active\_Status\_Table  
View\_Table  
Load\_Group\_Table  
Load\_Mini\_Group