

Meta-Data Analysis

1. InterimSandbox FinalData IntegratedSheets Group1

| S No. | Variable Name | Data Type | Modelling Type | Description | Levels | | | | | | |
|--|---------------------------|------------------------|----------------|---|--|--|-------------------------|---------|----------|---------|----------|
| 1. | Booking ID | Numeric | Nominal | Unique Booking ID | 684920 levels | | | | | | |
| 2. | User ID | Numeric | Nominal | Unique Eatigo User ID | 136177 Levels | | | | | | |
| 3. | Restaurant ID | Numeric | Nominal | Unique Restaurant ID | 647 levels | | | | | | |
| 4. | Made on Date (dd/mm/yyyy) | Numeric | Continuous | Booking Made on date | | | | | | | |
| 5. | Made at Time (h:mm) | Numeric | Continuous | Booking Date Made at Time | | | | | | | |
| 6. | Made on Day | Character | Nominal | Booking Made on Day of the Week | 7 levels | | | | | | |
| 7. | Made in Month | Character | Nominal | Booking Made in Month of the year | 12 levels | | | | | | |
| 8. | Booking_lat | Numeric (Latitude DMM) | Continuous | Geographic latitude at which the unique user was located while making the booking | | | | | | | |
| 9. | Booking_long | Numeric | Continuous | Geographic longitude at which the unique user was located while making the booking | | | | | | | |
| 10. | Booking Date(dd/mm/yyyy) | Numeric | Continuous | Booking Made for Date | | | | | | | |
| 11. | Booking Day | Character | Nominal | Booking Made for Day of the Week | 7 levels | | | | | | |
| 12. | Booking Day Grouped | Character | Nominal | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;">Booking Day grouped into Weekday and Weekend</td> </tr> <tr> <td style="text-align: center;">Mon, Tue, Wed, Thu, Fri</td> <td style="text-align: center;">Weekday</td> </tr> <tr> <td style="text-align: center;">Sat, Sun</td> <td style="text-align: center;">Weekend</td> </tr> </table> | Booking Day grouped into Weekday and Weekend | | Mon, Tue, Wed, Thu, Fri | Weekday | Sat, Sun | Weekend | 2 levels |
| Booking Day grouped into Weekday and Weekend | | | | | | | | | | | |
| Mon, Tue, Wed, Thu, Fri | Weekday | | | | | | | | | | |
| Sat, Sun | Weekend | | | | | | | | | | |
| 13. | Booking Month | Character | Nominal | Booking Made for Month of the Year | 12 levels | | | | | | |
| 14. | Booking Year | Numeric | Nominal | Booking Made for Year | 1 level | | | | | | |
| 15. | Booked the Same Day? | Character | Nominal | Whether Made on Date = Booking date: | 2 levels | | | | | | |

| | | | | | | | | | | | | | |
|------------------------------------|------------------------------------|-----------|------------|---|--------------------------------|----------|---------------------------------|--------------|------------------------------------|-------------|-----------|---------|----------|
| | | | | <table border="1"> <tr> <td>If Made on date=Booking Date</td> <td>Yes</td> </tr> <tr> <td>If Made on Date != Booking Date</td> <td>No</td> </tr> </table> | If Made on date=Booking Date | Yes | If Made on Date != Booking Date | No | | | | | |
| If Made on date=Booking Date | Yes | | | | | | | | | | | | |
| If Made on Date != Booking Date | No | | | | | | | | | | | | |
| 16. | Days in Advance of Booking | Numeric | Continuous | Number of days between Booking Date and Made on Date Example: If Booking Date = 23/03/2017 and Made on Date = 26/03/2017 then Days in Advance of Booking = 3 | | | | | | | | | |
| 17. | Days in Advance of Booking Grouped | Character | Nominal | Days in Advance of Booking Grouped as: <table border="1"> <tr> <td>Days in Advance of Booking = 0</td> <td>Same Day</td> </tr> <tr> <td>Days in Advance of Booking = 1</td> <td>Previous Day</td> </tr> <tr> <td>1<Days in Advance of Booking <= 31</td> <td>Pre-Planned</td> </tr> <tr> <td>>=32</td> <td>Missing</td> </tr> </table> | Days in Advance of Booking = 0 | Same Day | Days in Advance of Booking = 1 | Previous Day | 1<Days in Advance of Booking <= 31 | Pre-Planned | >=32 | Missing | 4 levels |
| Days in Advance of Booking = 0 | Same Day | | | | | | | | | | | | |
| Days in Advance of Booking = 1 | Previous Day | | | | | | | | | | | | |
| 1<Days in Advance of Booking <= 31 | Pre-Planned | | | | | | | | | | | | |
| >=32 | Missing | | | | | | | | | | | | |
| 18. | Booking Discount | Numeric | Continuous | % Discount Aailed on Booking | | | | | | | | | |
| 19. | Booking Discount Grouped | Character | Ordinal | Booking Discount Grouped <table border="1"> <tr> <td>10% & 15%</td> <td>10-15</td> </tr> <tr> <td>20% & 25%</td> <td>20-25</td> </tr> <tr> <td>30% & 35%</td> <td>30-35</td> </tr> <tr> <td>40% & 45%</td> <td>40-45</td> </tr> </table> | 10% & 15% | 10-15 | 20% & 25% | 20-25 | 30% & 35% | 30-35 | 40% & 45% | 40-45 | 5 levels |
| 10% & 15% | 10-15 | | | | | | | | | | | | |
| 20% & 25% | 20-25 | | | | | | | | | | | | |
| 30% & 35% | 30-35 | | | | | | | | | | | | |
| 40% & 45% | 40-45 | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | |
|------------------------------------|---|-----------|------------|--|----|---------------------------|---|----------------------------|----------------------------------|------------------------------------|---|----------------|---------|--------|--------|----------|
| | | | | 50 | 50 | | | | | | | | | | | |
| 20. | Booking Status | Character | Nominal | Status of the Booking <table border="1"> <tr> <td>Attended</td> <td>Booking was Attended</td> </tr> <tr> <td>Cancelled</td> <td>Booking was cancelled in advance</td> </tr> <tr> <td>No-Show</td> <td>Eatigo User did not turn up for Booking</td> </tr> </table> | | Attended | Booking was Attended | Cancelled | Booking was cancelled in advance | No-Show | Eatigo User did not turn up for Booking | 3 levels | | | | |
| Attended | Booking was Attended | | | | | | | | | | | | | | | |
| Cancelled | Booking was cancelled in advance | | | | | | | | | | | | | | | |
| No-Show | Eatigo User did not turn up for Booking | | | | | | | | | | | | | | | |
| 21. | Booking Status Grouped | Character | Nominal | Booking Status Grouped as: <table border="1"> <tr> <td>Attended</td> <td>redeemed</td> </tr> <tr> <td>Cancelled or No-Show</td> <td>not redeemed</td> </tr> </table> | | Attended | redeemed | Cancelled or No-Show | not redeemed | 2 levels | | | | | | |
| Attended | redeemed | | | | | | | | | | | | | | | |
| Cancelled or No-Show | not redeemed | | | | | | | | | | | | | | | |
| 22. | Booking Source | Character | Nominal | Eatigo Platform from which the Booking was Made: <table border="1"> <tr> <td>Eatigo App from App Store</td> <td>iOS</td> </tr> <tr> <td>Eatigo App from Play Store</td> <td>Android</td> </tr> <tr> <td>Eatigo website accessed via mobile</td> <td>Mobile Web</td> </tr> <tr> <td>Eatigo website</td> <td>Website</td> </tr> <tr> <td>Others</td> <td>Others</td> </tr> </table> | | Eatigo App from App Store | iOS | Eatigo App from Play Store | Android | Eatigo website accessed via mobile | Mobile Web | Eatigo website | Website | Others | Others | 5 levels |
| Eatigo App from App Store | iOS | | | | | | | | | | | | | | | |
| Eatigo App from Play Store | Android | | | | | | | | | | | | | | | |
| Eatigo website accessed via mobile | Mobile Web | | | | | | | | | | | | | | | |
| Eatigo website | Website | | | | | | | | | | | | | | | |
| Others | Others | | | | | | | | | | | | | | | |
| 23. | Diners Ungrouped | Numeric | Continuous | Number of Diners the booking was made for | | | | | | | | | | | | |
| 24. | Number of Diners | Character | Nominal | Number of Diners Grouped as: <table border="1"> <tr> <td>If Diners Ungrouped <=10</td> <td>Exact Number. Eg, if Diners Ungrouped = 1, then</td> </tr> </table> | | If Diners Ungrouped <=10 | Exact Number. Eg, if Diners Ungrouped = 1, then | 11 levels | | | | | | | | |
| If Diners Ungrouped <=10 | Exact Number. Eg, if Diners Ungrouped = 1, then | | | | | | | | | | | | | | | |

| | | | | | | |
|-----|--------------------------|-----------|------------|---|----------------------|-----------|
| | | | | | Number of Diners = 1 | |
| | | | | If Diner Ungrouped > 10 | >10 | |
| 25. | Promotion Code | Character | Nominal | Whether an additional Promotion Code was Used for the Booking: | | 2 levels |
| | | | | If Promotion Code was used | Yes | |
| | | | | If promotion Code was not used | No | |
| 26. | Restaurant Status | Character | Nominal | Status of the Restaurant at the time of recording the data | | 3 levels |
| | | | | If restaurant is active on Eatigo | Active | |
| | | | | If restaurant is permanently removed from Eatigo | Banned | |
| | | | | If restaurant is temporarily removed or closed | Pending | |
| 27. | Restaurant Cuisine | Character | Nominal | The cuisine that the restaurant specializes in | | 17 levels |
| 28. | Restaurant Minimum Price | Numeric | Continuous | The least Price Amount that the User will have to pay for that restaurant | | |
| 29. | Restaurant maximum Price | Numeric | Continuous | The maximum price Amount that the User will have to pay for that restaurant | | |
| 30. | Average Price | Numeric | Continuous | The Mean Price for that Restaurant | | |

| | | | | | | | | | | | | | | | |
|-----------------------------|-------------------------------|---------------------------|------------|--|-------------------|-----------|-----------|----------|-----------------------------|----------|----------|--------|------------|--------|----------|
| | | | | $\frac{(\text{Restaurant Minimum Price} + \text{Restaurant Maximum Price})}{2}$ | | | | | | | | | | | |
| 31. | Restaurant Tier | Character | Ordinal | | | | | | | | | | | | |
| 32. | Tier | Character | Ordinal | Restaurants Grouped into Tier According to Price <table border="1"> <tr> <td>Most Expensive</td> <td>Tier 5</td> </tr> <tr> <td>Expensive</td> <td>Tier 4</td> </tr> <tr> <td>Neither Expensive Nor Cheap</td> <td>Tier 3</td> </tr> <tr> <td>Cheap</td> <td>Tier 2</td> </tr> <tr> <td>Very Cheap</td> <td>Tier 1</td> </tr> </table> | Most Expensive | Tier 5 | Expensive | Tier 4 | Neither Expensive Nor Cheap | Tier 3 | Cheap | Tier 2 | Very Cheap | Tier 1 | 5 levels |
| Most Expensive | Tier 5 | | | | | | | | | | | | | | |
| Expensive | Tier 4 | | | | | | | | | | | | | | |
| Neither Expensive Nor Cheap | Tier 3 | | | | | | | | | | | | | | |
| Cheap | Tier 2 | | | | | | | | | | | | | | |
| Very Cheap | Tier 1 | | | | | | | | | | | | | | |
| 33. | Tier Grouped | Character | Ordinal | Tiers grouped further: <table border="1"> <tr> <td>Tier 4 and Tier 5</td> <td>High Tier</td> </tr> <tr> <td>Tier 3</td> <td>Mid Tier</td> </tr> <tr> <td>Tier 1 and Tier 2</td> <td>Low Tier</td> </tr> </table> | Tier 4 and Tier 5 | High Tier | Tier 3 | Mid Tier | Tier 1 and Tier 2 | Low Tier | 3 levels | | | | |
| Tier 4 and Tier 5 | High Tier | | | | | | | | | | | | | | |
| Tier 3 | Mid Tier | | | | | | | | | | | | | | |
| Tier 1 and Tier 2 | Low Tier | | | | | | | | | | | | | | |
| 34. | Restaurant Country | Character | Nominal | The country in which the Restaurant is present | 1 level | | | | | | | | | | |
| 35. | Restaurant Broad Area | Character | Nominal | The broadest level geographic categorization of restaurants across Singapore | 4 levels | | | | | | | | | | |
| 36. | Restaurant Latitude | Character (Latitude DMM) | Continuous | The geographic latitude at which the restaurant is located | | | | | | | | | | | |
| 37. | Restaurant Longitude | Character (Longitude DMM) | Continuous | The geographic longitude at which the restaurant is located | | | | | | | | | | | |
| 38. | Restaurant First Booking Date | Numeric | Continuous | The date when the restaurant was booked for the first time | | | | | | | | | | | |

2. InterimSandbox_FinalData_VendorData_Group1

| 1. | Variable Name | Data Type | Modelling Type | Description | Level |
|-----|-------------------------|-----------|----------------|---|-------|
| 2. | Restaurant ID | Numeric | Nominal | Unique restaurant ID | 647 |
| 3. | Number of Bookings | Numeric | Continuous | Number of Bookings made for that restaurant ID | |
| 4. | Attended Bookings | Numeric | Continuous | Number of Bookings Attended for that restaurant ID | |
| 5. | Cancelled Bookings | Numeric | Continuous | Number of Bookings Cancelled for that restaurant ID | |
| 6. | No-Show Bookings | Numeric | Continuous | Number of No-Show Bookings for that restaurant ID | |
| 7. | Proportion of Attended | Numeric | Continuous | Proportion of Bookings Attended for that restaurant ID $\left(\frac{\text{Attended Bookings}}{\text{Number of Bookings}} \right) \cdot 100$ | |
| 8. | Proportion of Cancelled | Numeric | Continuous | Proportion of Bookings Cancelled for that restaurant ID $\left(\frac{\text{Cancelled Bookings}}{\text{Number of Bookings}} \right) \cdot 100$ | |
| 9. | Proportion of no-Show | Numeric | Continuous | Proportion of No-Show bookings for that restaurant ID $\left(\frac{\text{No-Show Bookings}}{\text{Number of Bookings}} \right) \cdot 100$ | |
| 10. | Unique Users | Numeric | Continuous | Number of Unique users who booked that restaurant | |

| | | | | | |
|-----|---------------------------------|---------|------------|--|--|
| 11. | Repeat users | Numeric | Continuous | Number of bookings made by repeat users for that restaurant $\text{Number of Bookings} - \text{Unique Users}$ | |
| 12. | Proportion of Repeat Users | Numeric | Continuous | The proportion of repeat bookings of total bookings $\left(\frac{\text{Repeat users}}{\text{Number of Bookings}} \right) \cdot 100$ | |
| 13. | Ration of Repeat to new Users | Numeric | Continuous | For every new user that comes, how many repeat bookings are made for that restaurant $\left(\frac{\text{Repeat users}}{\text{Unique Users}} \right) \cdot 100$ | |
| 14. | 10-15 Discount group | Numeric | Continuous | Number of users who booked with a discount in the 10-15% range | |
| 15. | 20-25 Discount Group | Numeric | Continuous | Number of users who booked with a discount in the 20-25% range | |
| 16. | 30-35 Discount Group | Numeric | Continuous | Number of users who booked with a discount in the 30-35 % range | |
| 17. | 40-45 Discount Group | Numeric | Continuous | Number of users who booked with a discount in the 40-45% range | |
| 18. | 50 discount Group | Numeric | Continuous | Number of users who booked with a 50% discount | |
| 19. | Promotion Code Bookings | Numeric | Continuous | Number of promotion Code bookings | |
| 20. | Without promotion Code Bookings | Numeric | Continuous | Number of Without promotion code bookings | |

| | | | | | | | | | | | | | | | |
|-----------------------------------|---------------------------------------|-----------|------------|--|-----------------------------------|--------|------------------------------|--------|-----------------------------|--------|-------|--------|------------|--------|---|
| 21. | Proportion of Promotion code Bookings | Numeric | Continuous | Proportion of promotion Code Bookings $\left(\frac{\text{Promotion Code Bookings}}{\text{Number of Bookings}} \right) \cdot 100$ | | | | | | | | | | | |
| 22. | Promotion Driven | Character | Nominal | Whether bookings for a restaurant are promotion driven or not <pre> if Promotion Code Bookings - Without promotion Code Bookings >= 0 => "Yes" else => "No" </pre> | 2 | | | | | | | | | | |
| 23. | Restaurant Minimum Price | Numeric | Continuous | The minimum price for that restaurant | | | | | | | | | | | |
| 24. | Restaurant maximum price | Numeric | Continuous | The maximum Price for that restaurant | | | | | | | | | | | |
| 25. | Average price | Numeric | Continuous | The Average Price for that restaurant $\frac{(\text{Restaurant Minimum Price} + \text{Restaurant Maximum Price})}{2}$ | | | | | | | | | | | |
| 26. | Tier | Character | Nominal | The Tier category the restaurant falls under: <table border="1"> <tr> <td>Most Expensive</td> <td>Tier 5</td> </tr> <tr> <td>Expensive</td> <td>Tier 4</td> </tr> <tr> <td>Neither Expensive Nor Cheap</td> <td>Tier 3</td> </tr> <tr> <td>Cheap</td> <td>Tier 2</td> </tr> <tr> <td>Very Cheap</td> <td>Tier 1</td> </tr> </table> | Most Expensive | Tier 5 | Expensive | Tier 4 | Neither Expensive Nor Cheap | Tier 3 | Cheap | Tier 2 | Very Cheap | Tier 1 | 5 |
| Most Expensive | Tier 5 | | | | | | | | | | | | | | |
| Expensive | Tier 4 | | | | | | | | | | | | | | |
| Neither Expensive Nor Cheap | Tier 3 | | | | | | | | | | | | | | |
| Cheap | Tier 2 | | | | | | | | | | | | | | |
| Very Cheap | Tier 1 | | | | | | | | | | | | | | |
| 27. | Restaurant Cuisine | Character | Nominal | The Cuisine offered by that restaurant | 17 | | | | | | | | | | |
| 28. | Restaurant Status | Character | Nominal | The current status of the restaurant: <table border="1"> <tr> <td>If restaurant is active on Eatigo</td> <td>Active</td> </tr> <tr> <td>If restaurant is permanently</td> <td>Banned</td> </tr> </table> | If restaurant is active on Eatigo | Active | If restaurant is permanently | Banned | 3 | | | | | | |
| If restaurant is active on Eatigo | Active | | | | | | | | | | | | | | |
| If restaurant is permanently | Banned | | | | | | | | | | | | | | |

| | | | | | | |
|-----|-----------------------|-----------|---------|--|---------|---|
| | | | | removed from Eatigo | | |
| | | | | If restaurant is temporarily removed or closed | Pending | |
| 29. | Restaurant Broad Area | Character | Nominal | The Broad Area that restaurant falls under | | 4 |

3. InterimSandbox_FinalData_UserSheet_Group1

| S.No | Variable Name | Data Type | Modelling Type | Description | Level |
|------|-----------------------------------|-----------|----------------|--|--------|
| 1. | User ID | Numeric | Nominal | Unique User ID | 136177 |
| 2. | Number of Bookings | Numeric | Continuous | Number of Bookings per User | |
| 3. | Number of Bookings Attended | Numeric | Continuous | Number of Bookings attended per user | |
| 4. | Number of Bookings Cancelled | Numeric | Continuous | Number of Bookings cancelled per user | |
| 5. | Number of Bookings No-Show | Numeric | Continuous | Number of Bookings No-Show per user | |
| 6. | Average number of Diners | Numeric | Continuous | Average group size the user books for | |
| 7. | Average Number of days in Advance | Numeric | Continuous | Average Number of Days in Advance the user makes a booking | |
| 8. | Average minimum price | Numeric | Continuous | Average minimum price of the restaurant attended by the user across all their bookings | |

| | | | | | |
|-----|-----------------------------------|---------|------------|--|--|
| 9. | Average maximum price | Numeric | Continuous | Average maximum price of the restaurant attended by the user across all their bookings | |
| 10. | Last booking date | Numeric | Continuous | Latest date at which the user made a booking | |
| 11. | Number of Banned | Numeric | Continuous | Number of bookings made at banned restaurants | |
| 12. | Number of Active | Numeric | Continuous | Number of bookings made at the active restaurants | |
| 13. | Number of Pending | Numeric | Continuous | Number of bookings made at the pending restaurants | |
| 14. | Number of promotion Code Bookings | Numeric | Continuous | Number of bookings made using a promotion code | |
| 15. | Jan Bookings | Numeric | Continuous | Number of bookings made in the month of Jan | |
| 16. | Feb Bookings | Numeric | Continuous | Number of bookings made in the month of Feb | |
| 17. | Mar Bookings | Numeric | Continuous | Number of bookings made in the month of Mar | |
| 18. | Apr Bookings | Numeric | Continuous | Number of bookings made in the month of Apr | |
| 19. | May Bookings | Numeric | Continuous | Number of bookings made in the month of May | |
| 20. | Jun Bookings | Numeric | Continuous | Number of bookings made in the month of Jun | |
| 21. | Jul Bookings | Numeric | Continuous | Number of bookings made in the month of Jul | |
| 22. | Aug Bookings | Numeric | Continuous | Number of bookings made in the month of Aug | |
| 23. | Sep Bookings | Numeric | Continuous | Number of bookings made in the month of Sep | |
| 24. | Oct Bookings | Numeric | Continuous | Number of bookings made in the month of Oct | |

| | | | | | |
|-----|--------------------|---------|------------|--|--|
| 25. | Nov Bookings | Numeric | Continuous | Number of bookings made in the month of Nov | |
| 26. | Dec Bookings | Numeric | Continuous | Number of bookings made in the month of Dec | |
| 27. | Monday bookings | Numeric | Continuous | Number of bookings made on Monday by the user | |
| 28. | Tuesday bookings | Numeric | Continuous | Number of bookings made on Tuesday by the user | |
| 29. | Wednesday bookings | Numeric | Continuous | Number of bookings made on Wednesday by the user | |
| 30. | Thursday bookings | Numeric | Continuous | Number of bookings made on Thursday by the user | |
| 31. | Friday bookings | Numeric | Continuous | Number of bookings made on Friday by the user | |
| 32. | Saturday bookings | Numeric | Continuous | Number of bookings made on Saturday by the user | |
| 33. | Sunday bookings | Numeric | Continuous | Number of bookings made on Sunday by the user | |
| 34. | Unique restaurant | Numeric | Continuous | Number of Unique Restaurants tried by the user | |
| 35. | Unique cuisine | Numeric | Continuous | Number of unique restaurants tried by the user | |