

Name	Fuad Hasyim DS Batch 35
Link	<a href="https://drive.google.com/file/d/1bI5ZsYl3BhhKyUMy-jF1bliF4bJKd2TN/view?usp=sharing">https://drive.google.com/file/d/1bI5ZsYl3BhhKyUMy-jF1bliF4bJKd2TN/view?usp=sharing</a>
Question	<p>(Gambar kan menggunakan <b>bar chart</b> apapun dengan terlebih dahulu membuat <b>calculated field IF ELSE untuk menghitung Age dan Grouping Age</b>. tambahkan label dan color pada bar chart tersebut untuk memudahkan penarikan insight.</p> <p>Hint (age grouping example)</p> <pre>if [age] &lt;= 20 then 'Group &lt;=20'  ELSEIF [age] &gt;= 21 and [age] &lt;= 40 then 'Group 21 - 40'  .......</pre> <p>end</p> <p>Untuk mengetahui target customer BeeCycle. Kamu membuat visualisasi untuk melihat distribusi customer berdasarkan gender dan umur.</p> <p>Dimana untuk category umur, kamu membagi umur customer kedalam (Hint : CASE WHEN or IF ELSE)</p> <ul style="list-style-type: none"> <li>· umur customer &lt;= 20 tahun maka '<b>Group &lt;=20</b>'</li> <li>· umur customer antara 21 dan 40 tahun maka '<b>Group 21 - 40</b>'</li> <li>· umur customer antara 41 dan 60 tahun maka '<b>Group 41 - 60</b>'</li> </ul> <p>umur customer lebih dari 60 tahun maka '<b>Group &gt;60</b>'</p> <p>Dengan grouping age yg sudah di define, selanjutnya jawab pertanyaan berikut</p> <p><b>Grouping age apa dan gender apa yg memiliki transaksi paling tinggi di BeeCycle?</b></p>

<b>Visualizatio</b> <b>n</b>	<table border="1"> <thead> <tr> <th>Gender</th> <th>Age Group</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td rowspan="3">F</td> <td>Group 41-60</td> <td>1.588</td> </tr> <tr> <td>Group 21-40</td> <td>1.342</td> </tr> <tr> <td>Group &gt;60</td> <td>157</td> </tr> <tr> <td rowspan="3">M</td> <td>Group 41-60</td> <td>1.484</td> </tr> <tr> <td>Group 21-40</td> <td>1.168</td> </tr> <tr> <td>Group &gt;60</td> <td>214</td> </tr> </tbody> </table>	Gender	Age Group	Quantity	F	Group 41-60	1.588	Group 21-40	1.342	Group >60	157	M	Group 41-60	1.484	Group 21-40	1.168	Group >60	214
Gender	Age Group	Quantity																
F	Group 41-60	1.588																
	Group 21-40	1.342																
	Group >60	157																
M	Group 41-60	1.484																
	Group 21-40	1.168																
	Group >60	214																
<b>Answer</b>	<ul style="list-style-type: none"> <li>· <b>Group 41 - 60 Female</b> punya transaksi paling tinggi.</li> <li>· <b>Group 41 – 60 Male</b> di urutan kedua.</li> <li>· Kelompok usia &gt;60 kontribusinya sangat kecil.</li> </ul> <p>Jadi target utama campaign apabila berbicara jumlah penjualan product tertinggi yaitu pada group <b>Perempuan usia 41 – 60 tahun</b>.</p>																	
<b>Question</b>	<p>(Gambar kan menggunakan <b>stacked bar chart</b>,tambahkan label percentage dan color pada bar chart tersebut untuk memudahkan penarikan insight).</p>																	
	<p>Karena bulan Oktober depan akan ada campaign. Kamu punya ide untuk menghilangkan warna product tertentu yg menjadi kegemaran customer.</p>																	
	<p><b>Warna apa di tiap tahun yg menjadi warna paling populer dibeli oleh customer?</b>          (eg : berdasarkan quantity atau total price rupiah)</p>																	

## Visualizatio n



## Answer

Terjadi **pergeseran tren warna produk**:

- **2016–2017** warna Merah (Red) dominan.
- **2028–2021** warna Hitam (Black) dominan.

## Question 3

(Gambar kan menggunakan **Text Table**, tambahkan highlight color sehingga user dapat mengetahui secara cepat transaksi tertinggi)

Hint : Gunakan filter dimension product name TOP 10 berdasarkan quantity.

Karena campaign bulan Oktober tsb hanya terbatas untuk tiap2 toko cabang. kamu punya ide, bagaimana hanya mengambil TOP product\_id dari masing2 toko cabang. sehingga kamu melakukan query untuk menjawab pertanyaan berikut :

**TOP 10 product name apa saja yg paling populer dari masing-masing territory / origin country?**

Vizualization	<p>Product Name: Water Bottle - 30 oz.</p> <p>Category: Accessories</p> <p>Territory Country: Australia</p> <p>Unit Sold: 124</p> <table border="1"> <thead> <tr> <th>Product Name</th> <th>Category</th> <th>Territory Country</th> <th>Unit Sold</th> </tr> </thead> <tbody> <tr> <td>Water Bottle - 30 oz.</td> <td>Accessories</td> <td>Australia</td> <td>124</td> </tr> <tr> <td></td> <td></td> <td>United Kingdom</td> <td>64</td> </tr> <tr> <td>Sport-100 Helmet, Red</td> <td>Accessories</td> <td>Australia</td> <td>68</td> </tr> <tr> <td>Sport-100 Helmet, Blue</td> <td>Accessories</td> <td>Australia</td> <td>63</td> </tr> <tr> <td>Road Bottle Cage</td> <td>Accessories</td> <td>Australia</td> <td>63</td> </tr> <tr> <td>Patch Kit/8 Patches</td> <td>Accessories</td> <td>Canada</td> <td>79</td> </tr> <tr> <td></td> <td></td> <td>United States</td> <td>77</td> </tr> <tr> <td>Mountain Tire Tube</td> <td>Accessories</td> <td>United States</td> <td>64</td> </tr> <tr> <td>Mountain Bottle Cage</td> <td>Accessories</td> <td>Australia</td> <td>76</td> </tr> <tr> <td>HL Mountain Tire</td> <td>Accessories</td> <td>United States</td> <td>87</td> </tr> <tr> <td>Fender Set - Mountain</td> <td>Accessories</td> <td>Australia</td> <td>66</td> </tr> </tbody> </table>	Product Name	Category	Territory Country	Unit Sold	Water Bottle - 30 oz.	Accessories	Australia	124			United Kingdom	64	Sport-100 Helmet, Red	Accessories	Australia	68	Sport-100 Helmet, Blue	Accessories	Australia	63	Road Bottle Cage	Accessories	Australia	63	Patch Kit/8 Patches	Accessories	Canada	79			United States	77	Mountain Tire Tube	Accessories	United States	64	Mountain Bottle Cage	Accessories	Australia	76	HL Mountain Tire	Accessories	United States	87	Fender Set - Mountain	Accessories	Australia	66
Product Name	Category	Territory Country	Unit Sold																																														
Water Bottle - 30 oz.	Accessories	Australia	124																																														
		United Kingdom	64																																														
Sport-100 Helmet, Red	Accessories	Australia	68																																														
Sport-100 Helmet, Blue	Accessories	Australia	63																																														
Road Bottle Cage	Accessories	Australia	63																																														
Patch Kit/8 Patches	Accessories	Canada	79																																														
		United States	77																																														
Mountain Tire Tube	Accessories	United States	64																																														
Mountain Bottle Cage	Accessories	Australia	76																																														
HL Mountain Tire	Accessories	United States	87																																														
Fender Set - Mountain	Accessories	Australia	66																																														
Answer	<p>Produk Water Bottle – 30 oz. paling mendominasi (124 penjualan), artinya pelanggan di Australia sangat responsif terhadap produk aksesoris gaya hidup.</p> <p>Helm dan bottle cage juga laku menunjukkan kesadaran akan keselamatan (safety) tinggi.</p> <p>Jadi, pasar Australia cenderung mengutamakan lifestyle &amp; safety gear.</p> <p>Australia/UK: fokus pada branding gaya hidup &amp; campaign sport lifestyle.</p> <p>US/Canada: fokus pada promosi durability, reliability, dan bundling spare parts.</p>																																																
Question 4	<p>Karena sudah lulus probation nih.. kamu diminta untuk membuat sendiri analysis untuk si Bos. Beberapa step yang perlu dilakukan adalah :</p> <ol style="list-style-type: none"> <li>Membuat objective analysis (contoh : Karena next campaign mau dibuat maksimal , kita akan menghighlight top2 product)</li> <li>Membuat business question (contoh : Apa saja product yg paling populer dari segi jumlah transaksi?). Dalam case dashboard, secara best practice buat 2 - 5 business question dalam 1 dashboard yang mendukung objektif pada no 1.</li> </ol>																																																

	<p>3. Gambarkan chart untuk menjawab masing-masing pertanyaan pada no 2, dan gabungkan menjadi 1 dashboard.</p> <p>4. Tulis Actionable knowledge atau next action setelah mendapat jawaban dari poin 3 (contoh : product abc yg paling tinggi sehingga kita akan fokus untuk promosi product tersebut).</p>																																																																																																																																																									
Objective	Karena akan ada campaign baru, kita perlu mengidentifikasi produk, warna, dan segmen customer yang paling berkontribusi terhadap penjualan, sehingga campaign bisa diarahkan ke area paling potensial.																																																																																																																																																									
Business Question	<p><b>1:</b> Segmentasi customer (Age &amp; Gender) mana yang paling banyak melakukan transaksi?</p> <p><b>2:</b> Apakah ada perbedaan preferensi warna produk di tiap tahun?</p> <p><b>3:</b> Produk apa saja yang paling populer (Top 10) berdasarkan jumlah transaksi/quantity dan Country mana yang menghasilkan produk paling laku?</p>																																																																																																																																																									
Visualization	<p><b>Bicycle Campaign Product Insights</b></p> <p><b>Top Color Trend by Year (Soal 2)</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Color</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>2021</td><td>Yellow</td><td>13.59%</td></tr> <tr><td>2021</td><td>Silver</td><td>8.89%</td></tr> <tr><td>2021</td><td>NA</td><td>42.39%</td></tr> <tr><td>2021</td><td>Blue</td><td>6.79%</td></tr> <tr><td>2021</td><td>Black</td><td>12.23%</td></tr> <tr><td>2021</td><td>Red</td><td>14.13%</td></tr> <tr><td>2020</td><td>Yellow</td><td>8.38%</td></tr> <tr><td>2020</td><td>Silver</td><td>7.89%</td></tr> <tr><td>2020</td><td>NA</td><td>43.94%</td></tr> <tr><td>2020</td><td>Blue</td><td>13.67%</td></tr> <tr><td>2020</td><td>Black</td><td>16.11%</td></tr> <tr><td>2019</td><td>Yellow</td><td>8.25%</td></tr> <tr><td>2019</td><td>Silver</td><td>10.79%</td></tr> <tr><td>2019</td><td>NA</td><td>44.10%</td></tr> <tr><td>2019</td><td>Blue</td><td>8.38%</td></tr> <tr><td>2019</td><td>Black</td><td>15.98%</td></tr> <tr><td>2018</td><td>Yellow</td><td>12.47%</td></tr> <tr><td>2018</td><td>Silver</td><td>10.81%</td></tr> <tr><td>2018</td><td>NA</td><td>41.28%</td></tr> <tr><td>2018</td><td>Blue</td><td>19.53%</td></tr> <tr><td>2017</td><td>Yellow</td><td>17.51%</td></tr> <tr><td>2017</td><td>Silver</td><td>51.69%</td></tr> <tr><td>2017</td><td>NA</td><td>29.66%</td></tr> <tr><td>2017</td><td>Blue</td><td>29.66%</td></tr> <tr><td>2016</td><td>Yellow</td><td>19.29%</td></tr> <tr><td>2016</td><td>Silver</td><td>65.00%</td></tr> <tr><td>2016</td><td>NA</td><td>15.71%</td></tr> </tbody> </table> <p><b>Top 10 Products by Territory Country (Soal 3)</b></p> <table border="1"> <thead> <tr> <th>Product Name</th> <th>Category</th> <th>Territory Country</th> <th>Unit Sold</th> </tr> </thead> <tbody> <tr><td>Water Bottle - 30 oz.</td><td>Accessories</td><td>Australia</td><td>124</td></tr> <tr><td>Water Bottle - 30 oz.</td><td>Accessories</td><td>United Kingdom</td><td>64</td></tr> <tr><td>Sport-100 Helmet, Red</td><td>Accessories</td><td>Australia</td><td>68</td></tr> <tr><td>Sport-100 Helmet, Blue</td><td>Accessories</td><td>Australia</td><td>65</td></tr> <tr><td>Road Bottle Cage</td><td>Accessories</td><td>Australia</td><td>63</td></tr> <tr><td>Patch Kit/8 Patches</td><td>Accessories</td><td>Canada</td><td>79</td></tr> <tr><td>Patch Kit/8 Patches</td><td>Accessories</td><td>United States</td><td>77</td></tr> <tr><td>Mountain Tire Tube</td><td>Accessories</td><td>United States</td><td>64</td></tr> <tr><td>Mountain Bottle Cage</td><td>Accessories</td><td>Australia</td><td>76</td></tr> <tr><td>HL Mountain Tire</td><td>Accessories</td><td>United States</td><td>87</td></tr> <tr><td>Fender Set - Mountain</td><td>Accessories</td><td>Australia</td><td>66</td></tr> </tbody> </table> <p><b>Customer Segment (Soal 1)</b></p> <table border="1"> <thead> <tr> <th>Gender</th> <th>Age Group</th> <th>Quantity</th> </tr> </thead> <tbody> <tr><td>F</td><td>Group 41 - 60</td><td>157</td></tr> <tr><td>F</td><td>Group 21 - 40</td><td>1.342</td></tr> <tr><td>F</td><td>Group &gt;60</td><td>1.588</td></tr> <tr><td>M</td><td>Group 41 - 60</td><td>214</td></tr> <tr><td>M</td><td>Group 21 - 40</td><td>1.168</td></tr> <tr><td>M</td><td>Group &gt;60</td><td>1.484</td></tr> </tbody> </table>	Year	Color	Percentage	2021	Yellow	13.59%	2021	Silver	8.89%	2021	NA	42.39%	2021	Blue	6.79%	2021	Black	12.23%	2021	Red	14.13%	2020	Yellow	8.38%	2020	Silver	7.89%	2020	NA	43.94%	2020	Blue	13.67%	2020	Black	16.11%	2019	Yellow	8.25%	2019	Silver	10.79%	2019	NA	44.10%	2019	Blue	8.38%	2019	Black	15.98%	2018	Yellow	12.47%	2018	Silver	10.81%	2018	NA	41.28%	2018	Blue	19.53%	2017	Yellow	17.51%	2017	Silver	51.69%	2017	NA	29.66%	2017	Blue	29.66%	2016	Yellow	19.29%	2016	Silver	65.00%	2016	NA	15.71%	Product Name	Category	Territory Country	Unit Sold	Water Bottle - 30 oz.	Accessories	Australia	124	Water Bottle - 30 oz.	Accessories	United Kingdom	64	Sport-100 Helmet, Red	Accessories	Australia	68	Sport-100 Helmet, Blue	Accessories	Australia	65	Road Bottle Cage	Accessories	Australia	63	Patch Kit/8 Patches	Accessories	Canada	79	Patch Kit/8 Patches	Accessories	United States	77	Mountain Tire Tube	Accessories	United States	64	Mountain Bottle Cage	Accessories	Australia	76	HL Mountain Tire	Accessories	United States	87	Fender Set - Mountain	Accessories	Australia	66	Gender	Age Group	Quantity	F	Group 41 - 60	157	F	Group 21 - 40	1.342	F	Group >60	1.588	M	Group 41 - 60	214	M	Group 21 - 40	1.168	M	Group >60	1.484
Year	Color	Percentage																																																																																																																																																								
2021	Yellow	13.59%																																																																																																																																																								
2021	Silver	8.89%																																																																																																																																																								
2021	NA	42.39%																																																																																																																																																								
2021	Blue	6.79%																																																																																																																																																								
2021	Black	12.23%																																																																																																																																																								
2021	Red	14.13%																																																																																																																																																								
2020	Yellow	8.38%																																																																																																																																																								
2020	Silver	7.89%																																																																																																																																																								
2020	NA	43.94%																																																																																																																																																								
2020	Blue	13.67%																																																																																																																																																								
2020	Black	16.11%																																																																																																																																																								
2019	Yellow	8.25%																																																																																																																																																								
2019	Silver	10.79%																																																																																																																																																								
2019	NA	44.10%																																																																																																																																																								
2019	Blue	8.38%																																																																																																																																																								
2019	Black	15.98%																																																																																																																																																								
2018	Yellow	12.47%																																																																																																																																																								
2018	Silver	10.81%																																																																																																																																																								
2018	NA	41.28%																																																																																																																																																								
2018	Blue	19.53%																																																																																																																																																								
2017	Yellow	17.51%																																																																																																																																																								
2017	Silver	51.69%																																																																																																																																																								
2017	NA	29.66%																																																																																																																																																								
2017	Blue	29.66%																																																																																																																																																								
2016	Yellow	19.29%																																																																																																																																																								
2016	Silver	65.00%																																																																																																																																																								
2016	NA	15.71%																																																																																																																																																								
Product Name	Category	Territory Country	Unit Sold																																																																																																																																																							
Water Bottle - 30 oz.	Accessories	Australia	124																																																																																																																																																							
Water Bottle - 30 oz.	Accessories	United Kingdom	64																																																																																																																																																							
Sport-100 Helmet, Red	Accessories	Australia	68																																																																																																																																																							
Sport-100 Helmet, Blue	Accessories	Australia	65																																																																																																																																																							
Road Bottle Cage	Accessories	Australia	63																																																																																																																																																							
Patch Kit/8 Patches	Accessories	Canada	79																																																																																																																																																							
Patch Kit/8 Patches	Accessories	United States	77																																																																																																																																																							
Mountain Tire Tube	Accessories	United States	64																																																																																																																																																							
Mountain Bottle Cage	Accessories	Australia	76																																																																																																																																																							
HL Mountain Tire	Accessories	United States	87																																																																																																																																																							
Fender Set - Mountain	Accessories	Australia	66																																																																																																																																																							
Gender	Age Group	Quantity																																																																																																																																																								
F	Group 41 - 60	157																																																																																																																																																								
F	Group 21 - 40	1.342																																																																																																																																																								
F	Group >60	1.588																																																																																																																																																								
M	Group 41 - 60	214																																																																																																																																																								
M	Group 21 - 40	1.168																																																																																																																																																								
M	Group >60	1.484																																																																																																																																																								
Answer	<p><b>Group 41 - 60 Female</b> punya transaksi paling tinggi.</p> <p><b>Group 41 – 60 Male</b> di urutan kedua.</p> <p>Kelompok usia &gt;60 kontribusinya sangat kecil.</p>																																																																																																																																																									

	Jadi target utama campaign apabila berbicara jumlah penjualan product tertinggi yaitu pada group <b>Perempuan usia 41 – 60 tahun</b> .
	Pada tahun 2016 dan 2017 warna paling disukai oleh customer adalah warna merah masing-masing sebanyak 65% dan 51,69%. Kemudian pada tahun 2018 sampai dengan tahun 2021 warna paling disukai customer adalah NA, rentang 41 – 44% setiap tahunnya.
	<p>Produk Water Bottle – 30 oz. paling mendominasi (124 penjualan), artinya pelanggan di Australia sangat responsif terhadap produk aksesoris gaya hidup.</p> <p>Helm dan bottle cage juga laku menunjukkan kesadaran akan keselamatan (safety) tinggi.</p> <p>Jadi, pasar Australia cenderung mengutamakan lifestyle &amp; safety gear.</p> <p>Australia/UK: fokus pada branding gaya hidup &amp; campaign sport lifestyle.</p> <p>US/Canada: fokus pada promosi durability, reliability, dan bundling spare parts.</p>
Actionable knowledge	<p><b>Produk Fokus Campaign untuk meningkatkan jumlah transaksi (sum of Quantity):</b></p> <ul style="list-style-type: none"> <li>Campaign bulan Oktober sebaiknya mempromosikan <b>Top 3 Produk</b> yang consistently tinggi quantity-nya.</li> </ul> <p><b>Warna Promosi:</b></p> <ul style="list-style-type: none"> <li>Gunakan warna <b>Merah &amp; Hitam</b> pada campaign karena paling populer tiap tahun.</li> </ul> <p><b>Target Customer:</b></p> <ul style="list-style-type: none"> <li>Campaign diarahkan untuk <b>usia 41–60 (female dominated)</b> mungkin bisa gunakan influencer marketing di segmen ini.</li> </ul> <p><b>Target Market Geografis:</b></p> <ul style="list-style-type: none"> <li>Fokus distribusi campaign ke <b>Australia dan UK</b> sebagai pasar utama.</li> </ul>