

Analysis E-Commerce with SQL

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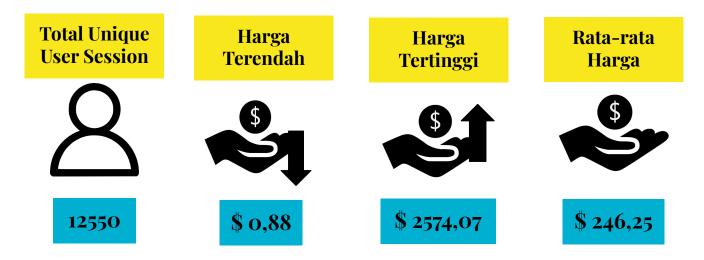
Overview

In a company, you want to see the growth or development of customers, where the development of customers is one of the important factors that can certainly make the company advance by assessing what kind of customer demand. Therefore, this paper will analyze how e-commerce companies perform, by taking into account several business metrics, namely customer growth, analyzing product trends, and product sales.

Analysis of total users and prices other than Apple and Samsung brands based on views

| | total_unique_user_session bigint | harga_terendah numeric | harga_tertinggi numeric | rata_rata_harga numeric |
|---|----------------------------------|------------------------|----------------------------|----------------------------|
| 1 | 12550 | 0.88 | 2574.07 | 246.25 |

Analysis of total users and prices other than Apple and Samsung brands based on views



From this analysis, we can see the results of the total unique user session without the Apple and Samsung brands based on the view, and we get the results of the lowest prices, the highest prices and the average prices without the Apple and Samsung brands based on the view.

Analysis of total product id based on brands starting with the letters A and K from the date after October 04, 2019



Analysis of total product id based on brands starting with the letters A and K from the date after October 04, 2019



From this analysis, we can see the results obtained from the total product ID based on the brand starting with the letters A and K from the date after October 04, 2019.

Analysis of total products and total users for each order date

| | tanggal timestamp without time zone | total_unique_product_id bigint | total_unique_user_id bigint |
|----|--|--------------------------------|--------------------------------|
| 1 | 2019-10-31 00:00:00 | 440 | 576 |
| 2 | 2019-10-30 00:00:00 | 428 | 556 |
| 3 | 2019-10-29 00:00:00 | 431 | 569 |
| 4 | 2019-10-28 00:00:00 | 459 | 588 |
| 5 | 2019-10-27 00:00:00 | 499 | 686 |
| 6 | 2019-10-26 00:00:00 | 497 | 659 |
| 7 | 2019-10-25 00:00:00 | 494 | 704 |
| 8 | 2019-10-24 00:00:00 | 476 | 631 |
| 9 | 2019-10-23 00:00:00 | 497 | 649 |
| 10 | 2019-10-22 00:00:00 | 465 | 643 |
| 11 | 2019-10-21 00:00:00 | 499 | 666 |
| 12 | 2019-10-20 00:00:00 | 535 | 724 |
| 13 | 2019-10-19 00:00:00 | 503 | 686 |
| 14 | 2019-10-18 00:00:00 | 527 | 689 |
| 15 | 2019-10-17 00:00:00 | 489 | 616 |
| 16 | 2019-10-16 00:00:00 | 483 | 673 |
| 17 | 2019-10-15 00:00:00 | 497 | 681 |
| 18 | 2019-10-14 00:00:00 | 546 | 735 |

Analysis of total products and total users for each order date

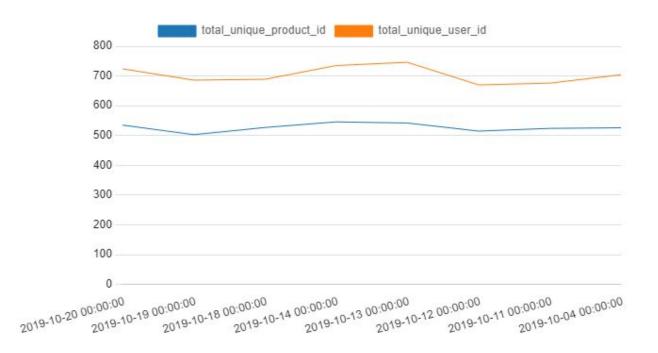


From this analysis, we can see that not all users on the same day order products, this is indicated by a gap in the line chart so that product orders never exceed users. Product orders were highest on October 14, 2019.

Analysis of total products and total users for each date whose bookings exceed 500

| | tanggal timestamp without time zone | total_unique_product_id bigint | total_unique_user_id bigint |
|---|--|--------------------------------|--------------------------------|
| 1 | 2019-10-20 00:00:00 | 535 | 724 |
| 2 | 2019-10-19 00:00:00 | 503 | 686 |
| 3 | 2019-10-18 00:00:00 | 527 | 689 |
| 4 | 2019-10-14 00:00:00 | 546 | 735 |
| 5 | 2019-10-13 00:00:00 | 542 | 746 |
| 6 | 2019-10-12 00:00:00 | 515 | 670 |
| 7 | 2019-10-11 00:00:00 | 524 | 676 |
| 8 | 2019-10-04 00:00:00 | 526 | 704 |

Analysis of total products and total users for each date whose bookings exceed 500

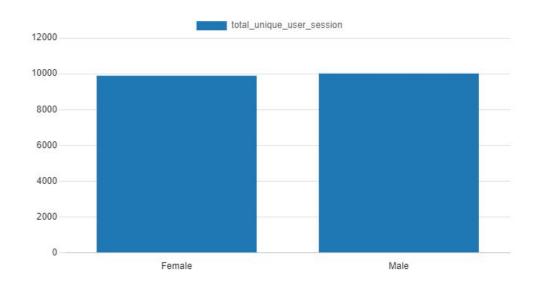


From this analysis, we can see the results that orders exceeding 500 there are 8 days, and there have been 3 consecutive days in getting orders above 500.

Gender analysis of which is more sessions in October

| | gender character varying | total_unique_user_session bigint |
|---|--------------------------|----------------------------------|
| 1 | Female | 9886 |
| 2 | Male | 10012 |

Gender analysis of which is more sessions in October

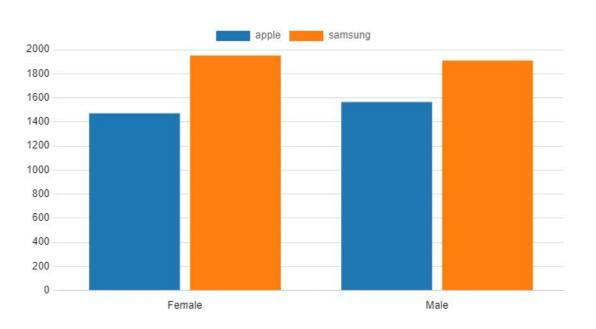


From this analysis, that Gander Male had fewer sessions than gender female in October.

Iphone and Samsung brand analysis by gender

| | gender character varying | apple bigint | samsung bigint |
|---|--------------------------|--------------|-------------------|
| 1 | Female | 1471 | 1950 |
| 2 | Male | 1564 | 1909 |

Iphone and Samsung brand analysis by gender

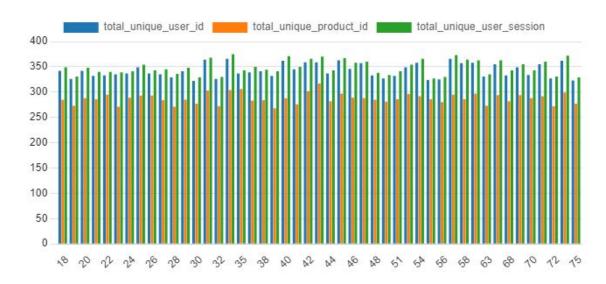


From this analysis, we can see that the Apple brand is dominated by the Male gender, and the Samsung brand is dominated by the Female gender.

Analysis of total product, total users and total sessions based on age with total users more than 320

| | age integer | total_unique_user_id bigint | total_unique_product_id bigint | total_unique_user_session bigint |
|------|----------------|-----------------------------|--------------------------------|----------------------------------|
| 1 | 18 | 342 | 285 | 349 |
| 2 | 19 | 326 | 273 | 331 |
| 3 | 20 | 342 | 288 | 348 |
| 4 | 21 | 332 | 286 | 340 |
| 5 | 22 | 333 | 295 | 340 |
| 6 | 23 | 335 | 271 | 339 |
| 7 | 24 | 337 | 289 | 341 |
| 8 | 25 | 349 | 293 | 354 |
| 9 | 26 | 337 | 293 | 343 |
| 10 | 27 | 335 | 284 | 345 |
| 11 | 28 | 329 | 271 | 336 |
| 12 | 29 | 341 | 285 | 348 |
| 13 | 30 | 322 | 277 | 329 |
| 14 | 31 | 364 | 303 | 368 |
| 15 | 32 | 326 | 272 | 330 |
| 16 | 34 | 366 | 304 | 375 |
| 17 | 35 | 337 | 306 | 343 |
| 18 | 37 | 339 | 283 | 350 |
| Tota | al rows: 47 of | 47 Query complete | 00:00:00.485 | |

Analysis of total product, total users and total sessions based on age with total users more than 320

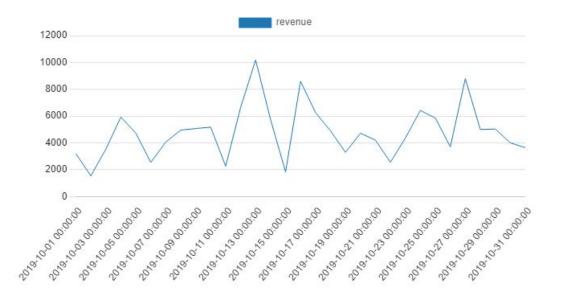


From this analysis, we can see that the most users have the age of 34 years.

Calculate revenue per day per user

| | daily timestamp without time zone | revenue numeric | total_unique_user_id bigint |
|----|-----------------------------------|--------------------|--------------------------------|
| 1 | 2019-10-01 00:00:00 | 3198.2 | 6 |
| 2 | 2019-10-02 00:00:00 | 1539.91 | 8 |
| 3 | 2019-10-03 00:00:00 | 3532.24 | 12 |
| 4 | 2019-10-04 00:00:00 | 5926.47 | 21 |
| 5 | 2019-10-05 00:00:00 | 4729.19 | 15 |
| 6 | 2019-10-06 00:00:00 | 2546.34 | 13 |
| 7 | 2019-10-07 00:00:00 | 4064.42 | 10 |
| 8 | 2019-10-08 00:00:00 | 4956.02 | 16 |
| 9 | 2019-10-09 00:00:00 | 5070.7 | 11 |
| 10 | 2019-10-10 00:00:00 | 5174.15 | 17 |
| 11 | 2019-10-11 00:00:00 | 2260.29 | 5 |
| 12 | 2019-10-12 00:00:00 | 6649.35 | 15 |
| 13 | 2019-10-13 00:00:00 | 10180.35 | 24 |
| 14 | 2019-10-14 00:00:00 | 5729.3 | 20 |
| 15 | 2019-10-15 00:00:00 | 1832.13 | 9 |
| 16 | 2019-10-16 00:00:00 | 8591.1 | 22 |
| 17 | 2019-10-17 00:00:00 | 6257.74 | 8 |
| 18 | 2019-10-18 00:00:00 | 4896.5 | 16 |

Calculate revenue per day per user

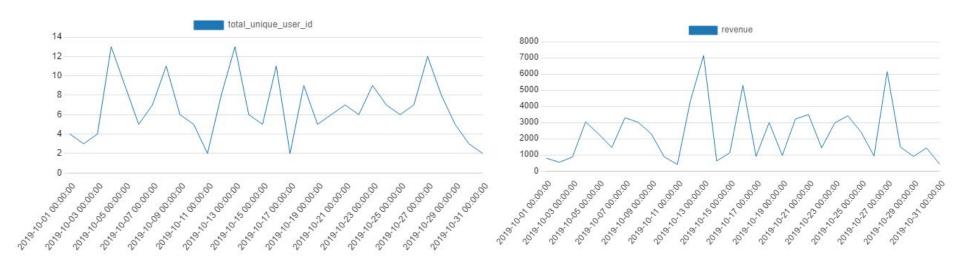


From this analysis, we can see that the highest revenue was on October 13, 2019, then the lowest revenue was on October 02, 2019.

Calculates daily income and unique men-only users for each date

| | daily timestamp without time zone | numeric 6 | total_unique_user_id bigint |
|----|-----------------------------------|-----------|--------------------------------|
| 1 | 2019-10-01 00:00:00 | 791.73 | 4 |
| 2 | 2019-10-02 00:00:00 | 543.73 | 3 |
| 3 | 2019-10-03 00:00:00 | 870.27 | 4 |
| 4 | 2019-10-04 00:00:00 | 3032.52 | 13 |
| 5 | 2019-10-05 00:00:00 | 2282.64 | 9 |
| 6 | 2019-10-06 00:00:00 | 1454.01 | 5 |
| 7 | 2019-10-07 00:00:00 | 3293.33 | 7 |
| 8 | 2019-10-08 00:00:00 | 3020.71 | 11 |
| 9 | 2019-10-09 00:00:00 | 2308.83 | 6 |
| 10 | 2019-10-10 00:00:00 | 874.96 | 5 |
| 11 | 2019-10-11 00:00:00 | 403.99 | 2 |
| 12 | 2019-10-12 00:00:00 | 4374.43 | 8 |
| 13 | 2019-10-13 00:00:00 | 7142.11 | 13 |
| 14 | 2019-10-14 00:00:00 | 622.39 | 6 |
| 15 | 2019-10-15 00:00:00 | 1127.59 | 5 |
| 16 | 2019-10-16 00:00:00 | 5289.16 | 11 |
| 17 | 2019-10-17 00:00:00 | 905.62 | 2 |

Calculates daily income and unique men-only users for each date

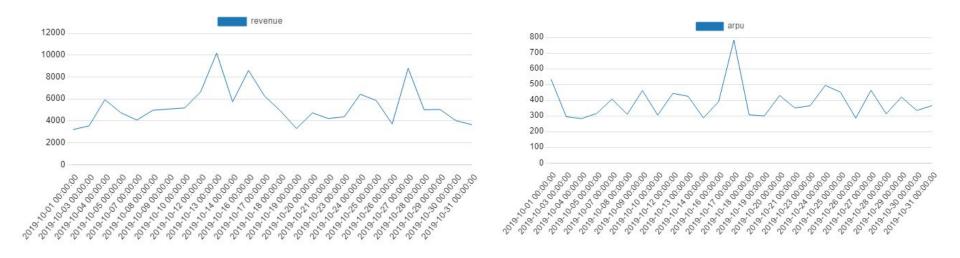


We can see the chart that left is the growth of male-only users. pGrowth is highest on the 4th and 13th, while the lowest on the 11th, 17th, and 31st. Meanwhile, the graph is a special daily income for male users. The income was highest on the 13th, while the lowest income was on the 11th.

Calculates average daily revenue per user for each date with revenue above 3000

| | daily timestamp without time zone | numeric • | arpu numeric |
|----|-----------------------------------|-----------|-----------------|
| 1 | 2019-10-01 00:00:00 | 3198.20 | 533.03 |
| 2 | 2019-10-03 00:00:00 | 3532.24 | 294.35 |
| 3 | 2019-10-04 00:00:00 | 5926.47 | 282.21 |
| 4 | 2019-10-05 00:00:00 | 4729.19 | 315.28 |
| 5 | 2019-10-07 00:00:00 | 4064.42 | 406.44 |
| 6 | 2019-10-08 00:00:00 | 4956.02 | 309.75 |
| 7 | 2019-10-09 00:00:00 | 5070.70 | 460.97 |
| 8 | 2019-10-10 00:00:00 | 5174.15 | 304.36 |
| 9 | 2019-10-12 00:00:00 | 6649.35 | 443.29 |
| 10 | 2019-10-13 00:00:00 | 10180.35 | 424.18 |
| 11 | 2019-10-14 00:00:00 | 5729.30 | 286.47 |
| 12 | 2019-10-16 00:00:00 | 8591.10 | 390.50 |
| 13 | 2019-10-17 00:00:00 | 6257.74 | 782.22 |
| 14 | 2019-10-18 00:00:00 | 4896.50 | 306.03 |
| 15 | 2019-10-19 00:00:00 | 3295.35 | 299.58 |
| 16 | 2019-10-20 00:00:00 | 4723.74 | 429.43 |
| 17 | 2019-10-21 00:00:00 | 4201.76 | 350.15 |

Calculates average daily revenue per user for each date with revenue above 3000



We can see the graph on the left is the revenue per day per user. The highest income is on the 13th, while the lowest is on the 1st. in the graph on the right is the average income per day per user. The highest average is on the 17th while the lowest average is on the 3rd.

Thanks You