

Customer Churn Rate

Customer Churn Rate:

- The customer churn rate is a metric that calculates the number or percentage of customers that discontinue using a product or service during a given time period.
- Depending on the type of business, this time frame could be a month, quarter, or even a whole year. It is, in a nutshell, the frequency with which clients discontinue doing business with a company.
- Any company that wishes to gauge its success in retaining its customers must monitor its customer churn rate.
- This metric also helps businesses pinpoint areas in their customer retention strategy that need improvement.
- A high churn rate may be a sign of problems with customer service, a deficiency in the quality of the product or service, or a failure to live up to expectations.

Types of Customer Churns:

Types of Customer Churn –

- **Contractual Churn** : When a customer is under a contract for a service and decides to cancel the service e.g. Cable TV, SaaS.
- **Voluntary Churn** : When a user voluntarily cancels a service e.g. Cellular connection.
- **Non-Contractual Churn** : When a customer is not under a contract for a service and decides to cancel the service e.g. Consumer Loyalty in retail stores.
- **Involuntary Churn** : When a churn occurs without any request of the customer e.g. Credit card expiration.

Reasons for Voluntary Churn

- Lack of usage
- Poor service
- Better price

Voluntary Churn:

Voluntary churn happens when a customer actively chooses to terminate their subscription. Business owners focus primarily on this type of churn, as these customers make conscious decisions to leave your business. There could be different reasons behind a customer's decision, but the common ones include:

- Their experience with the product or service did not meet their expectations or solve the problems they thought it would solve.
- The customer had a dissatisfactory experience with your product or service causing them to check out other alternatives.
- The competitor bought their attention with a more attractive alternative solution that suits their needs or budget.
- The customer is shutting down their operations or going out of business, and no longer needs your service.

Involuntary Churn:

Involuntary churn happens when the business discontinues the service provided to the customers due to non-payment. When a customer's payment attempt fails without them noticing, it results in the cancellation of subscriptions. The major reasons for involuntary churn are:

- Card expiration
- Hard payment declines that prevent fraudulent attempts when the card is lost or stolen
- Soft payment declines when the credit card is maxed out
- Network failures

How to calculate the Customer Churn Rate:

- To determine the percentage of revenue that has churned, take all your monthly recurring revenue (MRR) at the beginning of the month and divide it by the monthly recurring revenue you lost that month — minus any upgrades or additional revenue from existing customers.

$$\left(\frac{\text{Customers at the beginning of the time period} - \text{Customers at the end of the time period}}{\text{Customers at the beginning of the time period}} \right) \times 100$$

Example: Let's take a look at an example so that we can understand the formula better. Let's assume an organization has 1000 customers at the beginning of the year, and over the course of the year, 150 customers stop doing business with them.

Customer Churn Rate = (Lost Customers ÷ Total Customers at the Start of Time Period) x 100

Customer Churn Rate = (150 / 1000) x 100

Customer Churn Rate = **15%**

This number demonstrates that the organization lost 15% of its customers over the course of the year.

It's crucial to remember that depending on the type of business, the timeframe utilised to determine churn rate can change. For instance, a SaaS company may determine its churn rate on a monthly basis, but a retail company may determine its churn rate on a quarterly or annual basis.

Monthly Churn Rate:

Monthly churn rate refers to the percentage of customers lost over the course of a month. To calculate monthly churn rate, divide the number of customers you lost over the month by the number of customers you had at the beginning of the month. Multiply the result by 100.

Let's try an example with real numbers. We'll go with 200 customers lost with 1,200 customers at the beginning of the month.

$$(200 \div 1,200) \times 100 = \text{monthly churn rate}$$

$$0.16 \times 100 = 16$$

The monthly churn rate is 16%.

Annual Churn Rate:

Annual churn rate refers to the percentage of customers lost over the course of a year. To calculate annual churn rate, you would look at the number of customers you had at the beginning of the year, then look at the number you had at the end of the year.

Subtract those two numbers. After, divide that by the amount of customers you had at the start of the year, and multiply by 100.

For example, let's say you had 1,000 customers at the beginning of the year and 800 at the end of the year.

$$(1,000 - 800) \div 1,000 \times 100 = \text{annual churn rate}$$

$$(200) \div 1,000 \times 100 = 20$$

The annual churn rate would be 20%.

Strategies to reduce Churn Rate:

- 1. Enhance Customer Service:** One of the best methods to keep consumers is to offer good customer service. Businesses can increase their customers' trust and loyalty by responding to their questions and complaints in a timely and efficient manner.
- 2. Offer Incentives:** Providing awards for referrals, loyalty programmes, and discounts might entice clients to patronise a company for an extended period of time.
- 3. Schedule Customer Surveys:** Businesses can find areas where their products or services need to be improved by regularly conducting consumer surveys.
- 4. Personalize Customer Experience:** Companies can establish a deeper emotional bond with their clients by enhancing their customer experiences. This may result in more loyalty and lower churn.
- 5. Monitor and Analyze Churn Rate:** Monitoring and analysing customer turnover rate on a regular basis can help companies spot patterns and trends that can be exploited to increase client retention.

Revenue Churn:

- To determine the percentage of revenue that has churned, take the monthly recurring revenue (MRR) you lost that month — minus any upgrades or additional revenue from existing customers, and divide it by your total MMR at the beginning of the month.

$$\text{REVENUE CHURN RATE} = \frac{((\text{MRR BEGINNING OF MONTH} - \text{MRR END OF MONTH}) - \text{MRR IN UPGRADES DURING MONTH})}{\text{MRR BEGINNING OF MONTH}}$$

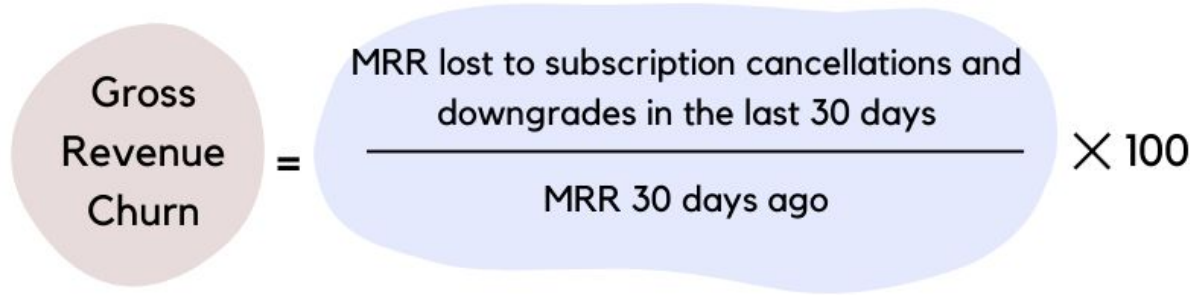
There are two types of revenue churn you should calculate:

- **Gross revenue churn** refers to the percentage of revenue lost from subscription cancellations and downgrades.
- **Net revenue churn** measures the percentage of revenue lost from canceled and downgraded subscriptions as well as factors in new revenue you've generated from existing customers.

What is MRR churn?

Monthly recurring revenue (MRR) churn is the measure of revenue lost from customers who have cancelled or downgraded their subscriptions in a given month.

Gross Revenue Churn Formula



The diagram illustrates the Gross Revenue Churn Formula. On the left, a light pink circle contains the text "Gross Revenue Churn". To its right is an equals sign. Further right is a light blue rounded rectangle containing a fraction. The numerator of the fraction is "MRR lost to subscription cancellations and downgrades in the last 30 days", and the denominator is "MRR 30 days ago". To the right of the blue rectangle is a multiplication symbol followed by "100".

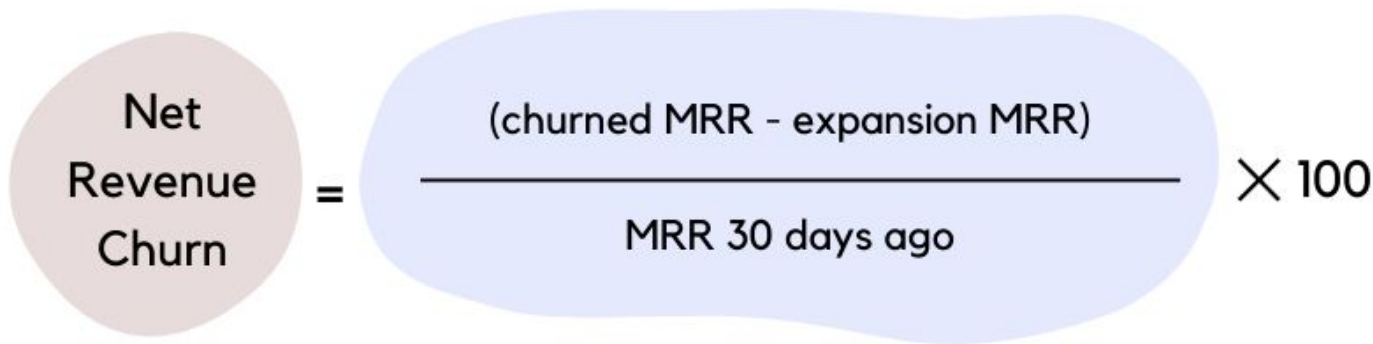
$$\text{Gross Revenue Churn} = \frac{\text{MRR lost to subscription cancellations and downgrades in the last 30 days}}{\text{MRR 30 days ago}} \times 100$$

Let's say your MRR at the beginning of the month was \$10,000. In the last 30 days, you've lost \$2,000 MRR to subscription downgrades and \$1,000 to cancellations.

In this case, your gross revenue churn would be $(\$2,000 + \$1,000) / \$10,000 \times 100 = 30\%$.

Although expansion MRR can impact your revenue churn, gross revenue churn doesn't take it into account. For this reason, you want to calculate your **net revenue churn**.

Net Revenue Churn Formula



The diagram illustrates the Net Revenue Churn Formula. On the left, a light pink circle contains the text "Net Revenue Churn". To its right is an equals sign. Further right is a light blue pill-shaped container. Inside this container, the text "(churned MRR - expansion MRR)" is positioned above a horizontal line, and "MRR 30 days ago" is positioned below the line. To the right of the blue container is a multiplication symbol "×" followed by the number "100".

$$\text{Net Revenue Churn} = \frac{(\text{churned MRR} - \text{expansion MRR})}{\text{MRR 30 days ago}} \times 100$$

Now, let's say you've also gained \$2,500 MRR from upselling your existing customers.

In this case, your net revenue churn would be $(\$3,000 - \$2,500) / \$10,000 \times 100 = 5\%$.

Example: if Company ADG had \$500,000 MRR at the beginning of the month, \$450,000 MRR at the end of the month, and \$65,000 MRR in upgrades that month from existing customers, its revenue churn rate would be -3%.

$$\text{REVENUE CHURN RATE} = \frac{((\text{MRR BEGINNING OF MONTH} - \text{MRR END OF MONTH}) - \text{MRR IN UPGRADES DURING MONTH})}{\text{MRR BEGINNING OF MONTH}}$$

$$\frac{((\$500,000 - \$450,000) - \$65,000)}{\$500,000} =$$

$$\frac{(\$50,000 - \$65,000)}{\$500,000} =$$

$$\frac{\$(-15,000)}{\$500,000} = -3\%$$

The negative revenue churn rate means you actually gained revenue. As before, you can choose a different time frame, such as quarterly or annual. Also, as the example pointed out, a major benefit to calculating revenue churn is that it's possible to include upgrade revenue.

The difference between customer churn rate and revenue churn rate:

Customer churn and revenue churn are not always the same. As an example, let's say that Company ADG has 2 product lines:

1: Basic:

5,000 customers that pay \$500/month per customer = \$2,500,000 MRR

2: Premium:

1,000 customers that pay \$1,250/month per customer = \$1,250,000 MRR

- This gives Company ADG a total of 6,000 customers and \$3,750,000 MRR. Let's also say that in one month, 180 basic customers and 20 premium customers churn. See the example below to review the customer churn and revenue churn rates.

CUSTOMER CHURN

$$\frac{(180 + 20)}{6,000} = \frac{200}{6,000} = 3.33\%$$

REVENUE CHURN

$$\frac{((180 \times \$500) + (20 \times \$1,250))}{\$3,750,000} = \frac{(\$90,000 + \$25,000)}{\$3,750,000} = \frac{\$115,000}{\$3,750,000} = 3.07\%$$

Calculating customer churn rate: cohort analysis

- As mentioned, you can calculate churn over a monthly, quarterly, or annual time frame. While this is true, there is an important caveat to consider.
- In the monthly calculation, there is an underlying assumption that no customer can churn in the first month. This is based on the assumption that your customers pay for the month up front.
- So when you take a snapshot at the beginning of the month and then divide that by the total number of churned customers, you don't have to worry about any new sales churning in that time period.
- If in the same model we calculated churn over a quarter, we could run into a problem.
- There will be some new sales from the first month in the quarter that could churn in the second or third month of the quarter.
- If those churns are accidentally included in the calculation, then we'll overstate churn.

MONTH 1:

ADG has 1,000 customers at the beginning of the month and 50 churn during the month, leaving 950 customers at the end (refer to this as Cohort A). There are 100 new sales during the month (refer to this as Cohort B).

MONTH 2:

Of the 950 customers in Cohort A, another 50 churn, leaving 900. Of the 100 in Cohort B, 5 churn, leaving 95. There are another 100 new sales this month (call this Cohort C).

MONTH 3:

Of the 900 customers still in Cohort A, another 50 churn, leaving 850. Of the 95 customers in Cohort B, 5 more churn, leaving 90. Of the 100 customers in Cohort C, 5 churn, leaving 95.

THE SUMMARY IS:

COHORT A – begins Month 1 with 1,000 customers; ends Month 3 with 850

COHORT B – Begins Month 2 with 100 customers; ends Month 3 with 90 customers

COHORT C – Begins Month 3 with 100 customers; ends Month 3 with 95 customers

- If we look over the quarter, our initial cohort of 1,000 customers only has 850 customers remaining, giving a customer churn rate of $150/1000 = 15\%$.
- During that same time frame, there were 300 new sales, of which 15 churn. If you included those 15 churns in your calculation, you'd have $165/1000 = 16.5\%$.
- The simplest way to get around this problem is to exclude all new sales from churn calculations. If you do that, you get the churn rate of Cohort A, which was our install base at the beginning of the quarter. This method gives you the true churn rate, without replacement, of your customer base over a quarter.
- You may, however, want to include the churn rate of Cohorts B and C. If that's the case, you can use a weighted average.

COHORT A – 1,000 customers; churn rate of 15%

COHORT B – 100 customers; churn rate of 10%

COHORT C – 100 customers; churn rate of 5%

$$\frac{[(1000 \times .15) + (100 \times .1) + (100 \times .05)]}{(1000+100+100)} = \frac{[150 + 10 + 5]}{1200} = \frac{165}{1200} = 13.75\%$$

Churn Rate Examples:

- **Netflix: 3.3% Monthly Churn Rate:** Netflix has one of the lowest churn rates in the video streaming industry. Its monthly churn rate is strikingly low at 3.5%, meaning that just over 96% of customers choose to stay with Netflix.
- **Disney+: 3.7% Monthly Churn Rate:** Disney+'s monthly churn rate is 5%, as of March 2023. Churn rates for the Disney Bundle, which includes Disney+, Hulu, and ESPN+, is even lower at just 2%.
- **Spotify: 3.9% Monthly Churn Rate:** Spotify is a popular music streaming service that's known for its personalized recommendations and expansive music library. It has a reported churn rate of 3.9% at the end of 2021
- **Hulu: 5.2% Monthly Churn Rate:** Hulu is one of Netflix's principal competitors. Well-known for its exclusive TV shows, it has an 11% market share in the video streaming industry and a 4.7% churn rate.
- **Adobe: 10% Yearly Churn Rate:** According to Rob Giglio, former Vice President of Adobe's Digital Media, Adobe has less than a 10% yearly churn rate and over a 90% customer retention rate.

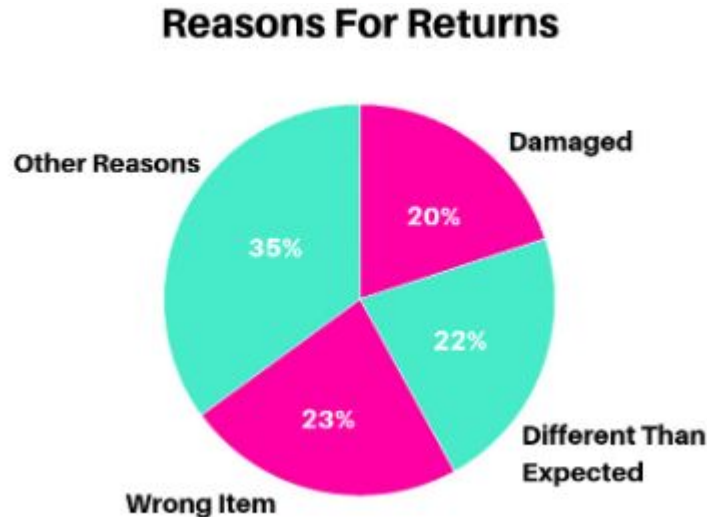
Serial Returners:

What is a Serial Returner?

- Shoppers responsible for an excessive amount of returns are called “serial returners.”
- Retailers have begun to recognize that free and easy returns are causing significant damage to their bottom line.
- For example, Amazon, Best Buy, and NET-A-PORTER changed their return policy a couple of years ago with a special caveat: “If we notice an unusual pattern of returns activity that doesn’t sit right, then we might have to deactivate the account and any associated accounts.”
- **Those customers are known as the dreaded “Serial Returners.”**

Remember the 80/20 Rule

- Before we discuss the classification of Serial Returners, let's first address your best customers based on Customer Lifetime Value, because fraudulent returns only account for around 5% of all product returns.
- These are your customers that buy frequently, return frequently, but come back to buy even more.
- If 80 percent of your sales are due to 20 percent of your shoppers, there's a good chance they're making some significant returns just due to the sheer volume at which they purchase.



The Four Serial Returner:



Compulsive Shoppers:

- Impulse purchases can be extremely lucrative for apparel retailers, particularly online.
- But when impulse turns into compulsion, things get risky.
- People with compulsive buying behavior often feel guilt and remorse after a shopping binge and return products to allay the guilt.
- These shoppers can be identified by their habit of frequently purchasing large quantities of items only to return one, if not all, of the products.

Wardrobers:

- You probably know someone who has purchased an outfit to wear for a night out only to return it the next day.
- This common practice is a form of return fraud that occurs frequently for luxury products.
- It's also seen in consumer electronics, for example, where shoppers will buy products for the Big Game only to return the next day.

Wardrobers



**Wear once and
Returns all**

Social Media Wardrobers:

- Driven by influencer-culture and social media, some shoppers are buying and wearing outfits #fortheinsta.
- In a day and age where everyone is expected to cultivate a personal brand, up to 10 percent of shoppers surveyed admit to buying clothes they're planning to snap and send back.
- While #OOTD (“outfit of the day”) posts can provide some marketing, the cost of customers leveraging your store as a “free rental service” can swiftly outweigh the benefit, as Asos recognized.

Brackets / Fitting Roomers:

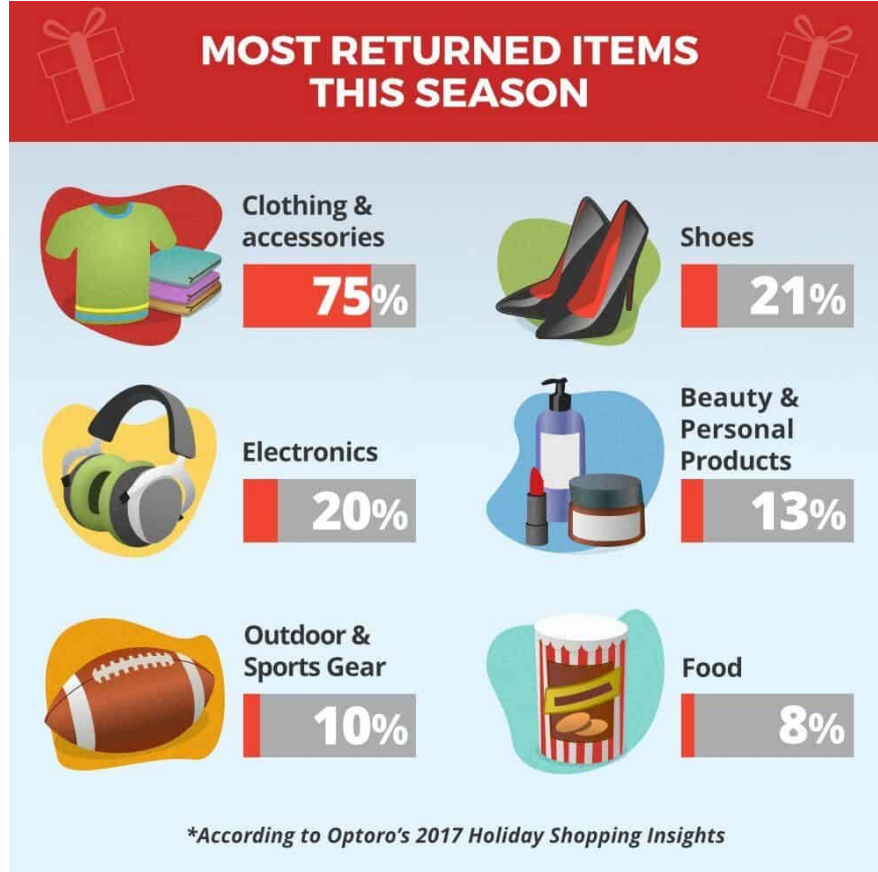
Fitting Roomers



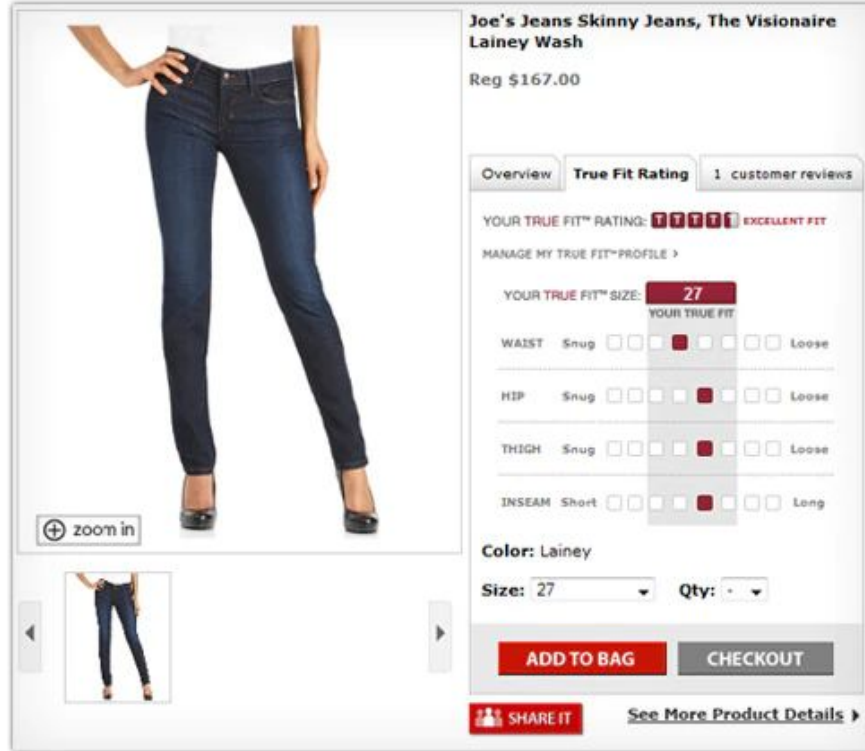
Purchase multiple sizes,
keep what fits

- Bracketing entails purchasing multiple versions of a style/item (different sizes, different colors, etc.) with the intent to return most of them, essentially turning their bedroom into a dressing room.
- Because e-commerce has made it so easy for shoppers to be indecisive without shouldering the financial burden, 40 percent of customers engage in some form of bracketing.

How to Deal with Serial Returners?



Improve sizing charts in Online Shopping:



- Up to 30% of all online clothing purchases are returned.
- This type of return can be reduced by providing shoppers with detailed information about product sizes.
- The Shopify study found that 41% of online shoppers bought more than one size or variation of an item with the intent of returning a portion of their purchase.
- Several companies are working to reduce this number by asking customers to provide their measurements and their fit preferences (such as loose, tight, or average) to help them purchase the right size the first time.

Provide better (and more) product information:

- Some retailers are improving product pages by providing the featured model's measurements and the size of the items being shown.
- For non-clothing items, retailers are offering more product photos, including 360-degree views, videos, and augmented reality to help customers visualize products.

Clarify your return policy:



- Make sure your customers are aware of your store's policy on refunds and exchanges, including details on the return time, any applicable fees, and whether they need the original receipt and price tags.

References:

[1]

<http://myweb.sabanciuniv.edu/rdehkharghani/files/2016/02/The-Morgan-Kaufmann-Series-in-Data-Management-Systems-Jiawei-Han-Micheline-Kamber-Jian-Pei-Data-Mining.-Concepts-and-Techniques-3rd-Edition-Morgan-Kaufmann-2011.pdf>



Thank You