SAAS BUSINESS MODEL

THE BUSINESS
MODEL ANALYST

SUPER GUIDE:

SAAS BUSINESS MODEL

BY DANIEL PEREIRA

THE BUSINESS MODEL ANALYST

The Business Model Analyst is a website dedicated to analyzing business model types, patterns, and innovations using the business model canvas as its primary tool. The site offers a wide variety of free and premium content, including digital products such as PDF tools, presentations, spreadsheets, ebooks & guides, and much more. **Check it out here.**

Daniel Pereira
The Business Model
Analyst Ottawa, ON,
Canada
businessmodelanalyst.com

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TABLE OF CONTENTS

INTRODUCTION

The world is changing, so are the technologies. Today's technology is so advanced that we can’t think of what is going to come tomorrow. New technologies are appearing every day. One of the results of this technological revolution is SaaS, or Software as a Service. This technological revolution has changed the way we look at business before.

At the core of the SaaS business model, the base here is the cloud. Thanks to the advancement of the internet and the introduction of cloud service, which has opened the door for SaaS to emerge. SaaS has set us free by giving us the chance to access anything from anywhere. All you need is just a device advanced enough to handle the task and a stable internet connection.

SaaS has brought almost all kinds of offline software solutions and services online. You want to edit software, but you don’t have your laptop where the editing software is installed, no worries, there are online editors. Your teammates want your suggestion on a project you are working on, but you are outside the office, there is Slack, Google Docs, Trello, and many other solutions for you. Just name one problem, and you will get the solution, thanks to SaaS.

SaaS also made the cost cheaper, by introducing subscription-based payment. Now you don’t need to pay more than you use. Unlike the on-premise software which you had to purchase even if you needed it for small work, SaaS provides you the solution to this. You only pay as you need. It is beneficial for both the user and the service provider.

Due to the recurring revenue model, service providers can focus on adding new features to their products. New startups are entering the market. But, before thinking of starting a new SaaS business, it is important to know what is SaaS? How does it work? What are the pros and cons it has? What is the secret of its rapid growth? How to get success in this kind of business? In this super guide, we will have a deep dive into the world of SaaS.

WHAT IS THE SAAS BUSINESS MODEL?

In simple terms, SaaS is referred to as a business model that includes selling cloud-based software or services by charging monthly or annual subscription fees. The services or software can be accessed via mobile application or web app, but mostly via a personal computer. Here, the software is licensed on a subscription basis and hosted centrally.

SaaS has been defined from various perspectives. In Gartner Information Technology Glossary, SaaS is defined as

"SOFTWARE THAT IS OWNED, DELIVERED, AND MANAGED REMOTELY BY ONE OR MORE PROVIDERS. THE PROVIDER DELIVERS SOFTWARE...THAT IS CONSUMED IN A ONE-TO-MANY MODEL BY ALL CONTRACTED CUSTOMERS AT ANY TIME ON A PAY-FOR-USE BASIS OR AS A SUBSCRIPTION-BASED ON USE METRICS" [1]

In another article published on TechRadar, SaaS has been identified as

"A CLOUD-BASED SERVICE WHERE INSTEAD OF DOWNLOADING SOFTWARE [IN THE] DESKTOP PC OR BUSINESS NETWORK TO RUN AND UPDATE, [USER]

INSTEAD ACCESS AN APPLICATION VIA AN INTERNET BROWSER." [2]

SaaS is also known as

"WEB-BASED SOFTWARE, ON-DEMAND SOFTWARE, OR HOSTED SOFTWARE" [3] SOFTWARE.

Though these definitions are given from various perspectives, all of them are pointing to the same thing, a software service that can be provided and accessed online. Some examples of businesses providing software as a service are Mailchimp, Slack, Google Workspace, Dropbox, Salesforce, HubSpot, Cisco WebEx, Concur, Zoom, etc.

The SaaS business model can be characterized from different points of view, at its core, the business model is based on a subscription payment set-up.

- SaaS companies offer different types of subscriptions for different products or various end-users;
- SaaS companies are hosted on a centrally located cloud;
- Unlike downloaded software, SaaS companies constantly update the software. These easy updates enable users to use up-to-date features without any delay.

THE HISTORY OF SAAS

The history of SaaS can be traced back to the 1960s, when the centralized hosting of business was pioneered. In this decade, computer hardware technology was growing rapidly. But the computing took a lot of time, and the cost of a mainframe was also higher. At that time, the tech giant IBM came up with an idea to reduce the cost. They partnered with other mainframe computer providers to form a service bureau business, which is often referred to as time-sharing or utility computing. They offered computing power and database storage to banks and many other large organizations from their data centers. [4]

In the 1990s, with the blessing of the internet, the digital era began. Daniel Kohn conducted the first secure Online Transactions. [5] With the introduction of the Secure Sockets Layer (SSL) by Netscape Navigator in October 1994, more secured and encrypted data transmission over the internet was made possible. The next thing that happened was a raid transformation of businesses. With the internet and the secure encrypted system, businesses started shifting into a new world. New e-commerce businesses were emerging.

One of the most significant things that happened at that time was Cloud Computing. The Cloud Computing software now can be installed on a remote server, which, in some cases, was maintained by third parties. A new type of centralized computing called ASP (Application Service Providers) emerged.

ASPs offered the businesses to host and manage specialized

business applications. This cloud computing service reduced the cost of businesses, by providing central administration and maintenance. Two of the largest ASP of that time were USI and Futurelink Corporation.[5]

Later, the improvement of the internet helped in decreasing the overall cost of hosting paving the path for platforms to provide more cost-effective services to businesses, and making online business processes faster and more reliable. In 1999, the Customer Relationship Management (CRM) platform was launched by Salesforce, making it the first SaaS solution.

At first, SaaS was thought to be only for startups. But the improvement of the internet was a blessing for SaaS, helping it to overcome some of the criticisms, such as being too slow or unstable, , helping it to grow rapidly. All these together lead to the exponential growth of SaaS.

SaaS is considered more or less as the extension of the ASP model, though the term SaaS is used in a more specific way, to say.

- Unlike most ASP providers — which focused on hosting and managing third-party software —, SaaS focuses on developing and managing their very own software.[6]
- Whereas SaaS doesn't require any kind of installation on users' personal computers, many ASPs required the installation of software on users' personal computers.

To date, SaaS is growing rapidly. Businesses offer much cheaper and easy-to-use solutions to their customers, making it a valid option to consider. Nowadays, SaaS products can be found for almost every business application, and it continues to grow.

SAAS ADOPTION IS GROWING

In its early days, SaaS had to walk through a rocky path. It was considered to be only for small businesses and startups. But things have changed now. With the progress of fast internet and related services, SaaS has grown rapidly. The valuation of SaaS products in the market continues to grow. Larger companies are now using SaaS platforms to provide services, because of their easy-to-use and centralized administrative process. Though like other businesses, the recent Covid-19 pandemic hit the business, it is estimated to rise again. A prediction given by Gratner [7] showed that the business will rise again by 2022.

Another statistical report uploaded by Statista[8] predicted that, over the next 18 months, organizations are planning to reduce the use of commercially licensed software. Instead, they will most probably be shifting towards SaaS products, which indicates the portable growth of SaaS in the next few years.

REVOLUTIONIZING BUSINESSES WITH SAAS

Though the emergence of SaaS services was focused on startups, small businesses, or individuals who were unable to afford large enterprise software suites, things have changed over time.

Now, SaaS is not about the cost only, it is also about the ease of access as well. Compared to the on-premise software, SaaS was found by mainstream players as closed, slow, or unstable to support many business activities.

But the improvement in internet speed and other services changed the picture. From a slow, sluggish platform, SaaS has improved as a faster and more reliable easy-to-use platform, especially for online businesses.

This cost-efficiency, simplicity of use, and improved functionality led to the escalation of the growth in SaaS. Nowadays, for all types of businesses, no matter if it is a small business or an enterprise-level, SaaS is a practical option.

SAAS VS CLOUD COMPUTING

Many people often confuse SaaS with Cloud Computing. It's true that, without cloud computing, SaaS may not have ever emerged, but the terms are not the same or interchangeable. Cloud computing and SaaS are closely related, SaaS can be seen as the subset of cloud computing.

Cloud computing is defined as

"THE ON-DEMAND AVAILABILITY OF COMPUTER SYSTEM RESOURCES, ESPECIALLY DATA STORAGE (CLOUD STORAGE) AND COMPUTING POWER, WITHOUT DIRECT ACTIVE MANAGEMENT BY THE USER" [9].

It is a set of computer services where some of its aspects are handled online, meaning that it's a huge data center, where data is stored and can be accessed using the internet. If you have software in the cloud, you can use it from anywhere, or maybe you have files in your drive that can be accessed from anywhere with a laptop or mobile connected to the internet.

By contrast, Software as a Service (SaaS) is a software delivery model in which a cloud-based software application is used by a user if they have permission or license. The user doesn't have to install and maintain the software locally, instead, they can access it via the internet.

In cloud computing, a user can customize and manage any software application on the cloud server. Users are given access to their data stored on that server via the internet. On the other hand, SaaS users just pay a monthly or annual subscription fee to access already developed, cloud-based software via the internet. Users don’t have to take any responsibility for maintaining the software or updating them. The service provider takes care of all those staff. In cloud computing, users have more control over the management and customization of their application or data, but in SaaS, there is a limitation as users are not developing it.

For example, the Microsoft Office suite allows its users to store some of their data online for easy sharing, that is cloud computing. But if anyone shifts to their Microsoft 365 — formerly known as Office 365 —, a monthly billing model, they will be able to access all the Microsoft Office applications in the cloud or have their desktop version automatically updated to the latest version, that's SaaS.

Channel is another good example of both SaaS application and Cloud Computing. It empowers retailers, wholesalers, and technologists with integration tools to sync data and automate processes among eCommerce, ERP, POS, and 3PL systems.

SAAS VS PAAS

The difference between the Platform as a Service or Platform-based Service (PaaS) and Software as a Service (SaaS) depends on what level of service is provided.

PaaS provides a platform or resources for organizations or developers that allows them to develop and run applications in a computing platform, which typically includes an operating system, programming language execution environment, database, web server, etc.

Examples of such kinds of services are Google App Engine, AWS Elastic Beanstalk, Windows Azure, Force.com, Heroku, etc. Here, the service provider manages the data center resources that support the tools. Users do not have to manage their OSes, but they are in control of the application they have built.

But In SaaS, users are not in control of the application, they are just using it. One such example is Google Docs. Users can use the docs to create their files, but they can’t control how the Google Docs app is designed.

SAAS BASICS AND ADVANTAGES

Over the few decades, the growth of SaaS has been reportedly visible. Because of the advantages that SaaS products offer, it is now used by almost every type of user, from a highly tech-savvy person to a novice, from enterprise business to startups. In comparison to the on-premise software, SaaS products come with plenty of advantages. The benefits of SaaS products are multifaceted. It benefits both the customer and service providers. A few of them are discussed below:

BENEFITS FOR THE CUSTOMER

SaaS products benefit their customers in many ways. From minimizing costs to increasing product usage flexibility, the advantages take many shapes. Some of them include:

Minimizing Costs

One of the major advantages of SaaS products is that they come with subscription-based models, which means that users can use the software based on their needs. If they want it for the whole year, they can purchase the yearly plan, or if they need it for a few days, there is a monthly subscription or pay-per-use model available. Additionally, since the service is cloud-based, the infrastructure costs for customers are also reduced.

Hassle-Free Upgrade

In SaaS products, there is no need of downloading or updating the software on users' personal computers. The service provider is responsible for updating the software. Along with that, downtime can be costly for many businesses. Typically, it happens during product upgrades. However, for SaaS software, upgrades are generally done without experiencing user downtime or with shorter maintenance windows.

Easy Accessibility

The most amazing advantage that SaaS products offer is that users can access the software from any device and in any part of the world. There is no hassle of taking your PC where you go. All you need is a good device and internet connection, and you are open to keep working on your project.

Collaborative Work Made Easier

Doing collaborative work is now easier when compared how it was a decade ago. Colleagues can work together or solve a problem from anywhere in the world, thanks to the SaaS.

Up-to-Date Features

SaaS products enable its users to experience up-to-date features almost instantly. Unlike the on-premise software, where users had to update their software by themselves, in SaaS products the service provider takes the responsibility. Therefore, the users can focus on their work.

Quick Benefits

Customers see immediate gains, as SaaS products are mainly cloud-based. In most cases, accessing the product function is as easy as signing up with a name and email address.

Higher Adoption

SaaS products can be used from anywhere in the world. This

availability has increased their adoption. The immediate benefits experienced by the user from the software increase the chance of sticking with the product for a longer period of time.

Minimizes Troubleshooting

SaaS products offer almost no troubleshooting for the users. Many times people face the problem that their application is popping up with some kind of error, hampering their work. If you are not a tech-savvy person, the situation can get worse, and you may end up paying someone else to make everything right. But, with SaaS, all the responsibilities lie in the hand of the service provider, so that you can continue working without any delay.

BENEFITS OF THE SAAS BUSINESS MODEL VENDORS

SaaS is not only beneficial for the customer only, it has benefited the SaaS Business Model Vendors as well.

Recurring Revenue

One of the most benefits of the SaaS Business Model is that it has allowed the vendors to generate revenue that is expected to continue in the future. Most of the time, vendors can predict the revenues. These revenues are also stable, and they can be counted on to occur at regular intervals.

Easy Upgrading

One of the advantages of SaaS products is that vendors can continuously update their products, unlike the on-premise software, which is time-consuming to upgrade. The easy upgrade helps SaaS service providers to fine-tune their products, add different features to their products on a regular basis and check if the users are liking them or not.

Easier Support System

Providing the best user experience to the customer is important for any business. While on-premise software supports most of the time can be time-consuming and tedious, SaaS vendors can support their users almost immediately as well as free 7, 14, or 30-day trials. Users can continue with the free plan and, if they like it, they will upgrade to a paid level.

Experimenting with Features

As the SaaS service provider is in control of the system, they can easily experiment with new features to check whether the users like them or not. Hence, they can ensure the best customer experience for their customers.

ADDITIONAL BENEFITS FOR SOFTWARE OWNERS

There are some additional benefits for software owners who are providing the services. Benefits include:

Increased Lifetime Value

SaaS business models come with an upselling strategy, that allows them to encourage customers to shift to a higher-end version of the product than the one they are using. SaaS business models also come with a cross-selling strategy. This cross-selling process allows them to sell a different product or service to their customer for increasing the value of a sale. Instead of offering a one-time option, owners can offer a menu of options to the customers. Customers can purchase a feature or a relevant service when they need it. This allows the owners to capture additional revenue even if the customer only chose to purchase the most basic plan.

Loyal Customer Base

SaaS service providers use a number of tools to increase their customer loyalty. To do this, they can offer some permanent or temporary benefits, such as free features or storage. For example, Google Photos had offered its users to use their storage unlimitedly for a longer period of time, until they terminated the unlimited usage plan in June 2021. In such a way, SaaS companies offer various benefits to their customers to increase customer loyalty.

Real-Time Data

The SaaS model provides real-time data to understand the behavior of the customers while using the software. That enables business owners to understand their customers and provide the service they need. This increases the creation of a good relationship with the customers. It also helps vendors to decide when it is the right time to scale their products.

Increased Valuations

Company valuation is mainly counted on its revenues, cash flows, and the margin of profit and loss. For on-premise software owners, they linger in a stage when their sales peak, but their previous customers stay with their original software, making no purchase to upgrade. On the contrary, SaaS providers continue to gain revenues as long as they maintain customer churn. Because of these, SaaS companies are able to trade at a much higher valuation.

CHALLENGES RELATED TO TRANSITIONING TO SAAS

Nowadays, businesses are moving towards SaaS. Though SaaS has a lot of advantages, there are some challenges associated with transitioning to SaaS. That's why it is important to understand the challenges before making the transition to SaaS. Challenges include:

- The transition requires a high degree of transformation in the business;
- Predicting the upgrading costs accurately can be difficult when the usage gets higher;
- SaaS can be proved much more expensive in the long run than on-premises software;
- Businesses will have less control over provisioning and security;
- The necessary technical expertise required to manage the change may not be available, especially for the businesses like SMBs;
- When transitioning, a certain kind of dependency is created between the SaaS provider and businesses. Almost for all the aspects of service delivery, businesses are dependent on the provider. Also, if anything goes sideways, there is nothing much they can offer;
- Under tight deadlines, data transformation can

become much more complex and challenging;

- Different types of errors can occur during the transition. For example, billing errors can lead to sending invoices to the wrong customers, causing some unexpected circumstances;
- It can take more time than expected when moving to SaaS, which can affect the business operation. Hence, it can result in losing opportunities and revenue;
- Sometimes, it gets confusing to decide which software service is the best one for the business. Most of the time, there is not much time or opportunity for the IT staff to test and pick the best option;
- Sometimes, there is a lack of availability in terms of one for all solutions. In such cases, businesses might need to use multiple SaaS products to properly integrate with the existing systems or applications;
- One of the biggest challenges that lie with transitioning to SaaS is data security. As everything from user information to their behavior is stored online, if anyhow that's leaked, it may cause the business to face some legal issues.

HOW DOES THE SAAS BUSINESS MODEL WORK?

The basic principle behind how the SaaS business model works is the 'subscription fee'. At its core, the SaaS business is based on subscription-based plans. SaaS service providers maintain cloud servers, databases, and software that enables their customers to use the product over the internet.

Users can access the software and the data from anywhere with the help of a PC or mobile device connected to the internet. Customers using their services purchase plans that can be monthly, annually, or pay-per-use.

A SaaS service provider may offer different types of subscription plans for various products or various end-users. Sometimes, they may offer a free trial plan, and later offer the premium service with a recurring subscription fee.

Another important thing about how SaaS works is the continuous update. SaaS companies upgrade their services and products on a continuous basis and push those updates to the users. These updates for SaaS products, as mentioned earlier, are much quicker than the on-premise software.

Together with the combination of consistent updates and a tailored subscription model present the SaaS product with higher customer retention than other business models. In addition, SaaS companies employ very high-touch customer success teams to their sales cycle, who continue to work with and serve their customers even after an annual or monthly

subscription is committed. Along with this, below are three basic principles that set the SaaS business model apart from more “traditional” business models.

FOCUS ON CUSTOMER RETENTION

Customer retention stands at the core of SaaS. SaaS service providers don't only sell a product, they sell a service. The users who purchase the service are not one-time customers. SaaS companies focus on keeping their customers around for a long time. Their service doesn’t just meet the customer’s initial need, it becomes an integral part of their life. For example, with services like Gmail, Zoom, or Slack, many people and businesses can’t even imagine living without them.

There is also competition in the market. There are many alternatives like Yahoo Mail, Google Meet, and Trello, for the above-mentioned services. So, they have to be focused on keeping the customer satisfied, otherwise, there are plenty of ships available for the customers to jump on.

So to keep the customers, SaaS companies focused on building long-term relationships with their customers. Companies do this by keeping in touch with customers, gathering feedback from them, and answering questions to ensure that everyone is satisfied.

ACQUIRING NEW CUSTOMERS

While SaaS companies focus on customer retention, they don't just stop there. For long-term survival in the industry, service providers constantly bring new users to their ship. They do it through various means, like advertising, SEO on blogs, social media marketing, or digital marketing.

One major tick that SaaS providers use is the ‘free plan’. They offer the customer to use their service free for a certain period of time or level. Some of these free users eventually turn into loyal customers, purchasing their premium services.

They also keep an eye on the customer churn, measuring how many customers stopped using their service on a monthly or periodical basis. Then, they try to find the reason. There are a whole bunch of user experience (UX) researchers employed in the larger companies to find this out and work on this.

USING REAL-TIME DATA

No matter whether it is a startup or a giant company, they all rely on real-time data. SaaS companies keep a close eye on their customers and try to understand their behavior, like how often they are using their service, how much time they spend on them, etc. Based on this data, they offer tailored plans to the customer.

Besides this, SaaS companies use the data to monitor if they are riding on the right track. There are various SaaS metrics used by SaaS service providers. These metrics include:

- ARPU (Average Revenue Per User), meaning understanding how much revenue a company is generating from each active customer;
- MRR (Monthly Recurring Revenue), meaning how much revenue a company is generating month-to-month;
- Churn, the rate at which people stopped using a company's service;
- Conversion rate, which is the percentage of users who become premium customers from trials or free

products.

Using all of these methods and techniques, a SaaS business model can properly work and help the business to grow.

WHAT ARE THE DOWNSIDES OF A SAAS BUSINESS MODEL?

Though SaaS has a tremendous legacy of becoming a game-changer in the industry, it has its downsides too. Let's have a look at them:

COMPETITION IN THE INDUSTRY

As the market is expanding, so is the competition. Due to its rapid growth, every day, new vendors are entering the market.

Out of these thousands of businesses, if we start to look and identify all of the success stories, we may end up finding several few ones.

Many of them are still struggling to keep up. The report published by TechCrunch in 2018, [11] 2019, [12] 2020, [13] & 2021 [14] gives us a reminder of how many startups didn't survive due to various reasons.

Then, there comes the Martech 5000 [15], which consists of more than 8000 companies, presenting us with a glimpse of how crowded the software marketing industry alone is.

GETTING THE FIRST CUSTOMER CAN BE SLOW AND FRUSTRATING

This is in fact true for any type of business that tries to enter into any industry, especially if there are some giant vendors already occupying the space. In a situation like this, getting an easy entry into the SaaS industry can be proved to be a daydream.

Here, the space is already taken by some large companies, who are already offering many services for free. For example, Google offers its users to use their Gmail service for free with a free 15 GB of cloud storage. So, if someone is getting a service for free or at a cheaper rate, why would they buy a similar service at a high cost?

Day after day, it is becoming tougher and tougher to sell, especially for startups. Companies like Google use a trick to convert their free users into premium ones, by offering them 15 GB of storage for free, and later offering them different services and motivating them to purchase their premium service. Once someone gets used to their free services, it gets harder to leave that place.

Think of Gmail, can you live a day without it? For startups using techniques, it may come with a high cost and uncertainty, because not everyone turns into a premium customer.

Another struggle with getting the first customers is the lack of data. Startups often face real problems because of not having enough data to measure whether they are on the right track or not. Along with this, there is always pressure to present your product as a viable one. All these things can lead to a frustrating experience.

BUILDING LONG-TERM CUSTOMER RELATIONSHIP

SaaS is, as it is named, a service, not just a product. So, building a long-term customer relationship is much more important than getting a new one. A SaaS service provider has to be very careful about the satisfaction of their customers. There is no way a business will survive if they take it as a passive income model.

Therefore, in order to keep the customer around, companies need to reach out to the market on a regular basis. Failing to do so may end up losing customers. There are plenty of service providers out in the market waiting for new customers. So, it is easier for customers to bounce to a competitor.

SAAS SALES APPROACHES

The SaaS business model follows two major ways to sell its service, Low-touch, and High-touch. These sales approaches are defined on the basis of whom the vendor is selling the product to, Business-to-consumer (B2C) or Business-to-Business (B2B) customers.

LOW-TOUCH SAAS SALES

Some SaaS products can sell themselves. Selling a SaaS product to prospects with minimal person-to-person interaction is generally considered a low-touch SaaS. It is designed in a way that the customers can purchase it without needing one-on-one interaction with a business employee. The main sales channels include the software's website, digital marketing (mostly through email and social media), and offering a free trial of the software optimized for onboarding from the beginning.

Low-touch SaaS products can also involve sales teams, who are mostly less focused on convincing users to buy their products rather focuses on turning the free trial users into paying users by the end of their trials. They are often called "Customer Success" teams.

HIGH-TOUCH SAAS SALES

High-touch SaaS models are typically based on the traditional methods of marketing and selling. The sales team receives a list of probable customers from marketing, hen, they get in

touch with them by cold calling or email, fix meetings to present their services and offers backed by some follow-up meeting in order to close a sale.

High-touch sales approach requires human contacts in order to generate probable leads for their customer. This type of SaaS sales approach is mostly focused on B2B. The success of this approach depends mostly on the shoulders of the sales team. They are the one who convinces the customer to use their service. The team includes sales development representatives (SDRs), account executives (AEs), and account managers (AMs). Salesforce is an example of this kind of SaaS business.

Many companies use the combination of both sales approaches in order to serve the consumers, as well as the businesses. Companies often start with a low-touch approach and, over time, they also acquire the high-touch approach too.

WHAT ARE THE STAGES OF A SAAS COMPANY?

Starting a business is not an easy path, it takes time to successfully standout business. The same strategy goes for SaaS companies. Typically, a successful SaaS product follows the same pattern. Usually, there are four phases through which a SaaS product goes. These four distinct phases are: Pre-startup, Startup, Growth, and Mature.

Next, we will break down these four distinct stages of SaaS companies:

1 - PRE-STARTUP

This is the stage where someone might be thinking of starting a SaaS business. This is where business plans are made before making steps in the market. There are a bunch of activities that take place at this stage. But every SaaS company has to answer one fundamental question: What problem are we wanting to solve and is there a demand for the solution among the probable customers?

At this stage, activities involve researching, reading, discussing, advising to identify the problem and the probable solution for this. Activities may also include:

- Researching, speaking with the targeted customers;
- Securing funds;

- Building business relationships;
- Developing a Minimum Viable Product (MVP). (A MVP is referred to as

  "A DEVELOPMENT TECHNIQUE IN WHICH A NEW PRODUCT OR WEBSITE IS DEVELOPED WITH SUFFICIENT FEATURES TO SATISFY EARLY ADOPTERS." [16]

  who can then provide feedback for future development of that product.)

There are also some common risks associated with the Pre-Startup stage:

- Failure in designing a steady business model that will enable future profitability;
- Dependency on the initial fund for longer than expected;
- Unable to manage sufficient funds to cover necessary infrastructure and employment costs.

2 - STARTUP

At this stage, the business is already launched. Now, it's time to reach out to the probable customers, motivating them to buy your product or test it for a few days without any cost. There will be limited resources but, at this point, companies start hiring and spending resources on marketing.

The Startup stage includes presenting the product and the solution that it offers to the problem that you set out to solve.

Identifying and securing the very first customers and serving them with a valuable product is very important because there is a saying '**the first impression is the last**.' Companies have to be very careful while presenting their products to their first customers.

At this stage, activities may include:

- Receiving feedback from the customers;
- Using the received feedback, polishing the product and its features;
- Implementing metrics and analytics to check if the business is on the right track;
- Hiring employees;
- Securing the initial investment or seeding money.
- However, there are some risks associated with the Startup stage of a SaaS company. These risks include:
- Failure in identifying the ideal probable customer;
- Spending more than anticipated on customer acquisition;
- Making mistakes in early hiring.

3 - GROWTH

The Growth stage is a crucial stage for a SaaS company. In this stage, customers started to roll in and the business started to show signs of sustaining itself in the market.

Here, the SaaS metrics and analytics play an important role in figuring out whether the business is running in the right direction and developing strategies to drive more customers

into the business. The company mainly focuses on sustaining its growth, scaling up the business, and making a profit.

The activities that take place in the Growth stage include:

- Securing Series A funding; (Series A funding is considered seed capital because of its design to help new companies to grow.)
- Scaling back-end improvements;
- Focusing on the improvement of conversion rates;
- Driving new customers to the business.

Risks that a SaaS company may face during this stage include:

- The appearance of competitors who can copy the business model;
- Lack of sufficient funds to handle the costs of sustaining the growth;
- Scaling too early.

4 - MATURITY

Once a SaaS company reaches its mature stage, its growth starts to fall slowly. In this stage, customers are well informed about the service company offers and they are also aware of how the service can help them with their problems.

During the mature stage, companies focus on spending the business globally, promoting it to the local people. To do so, they often hire local agents to promote and handle their business in the local area.

Activities included in this stage are:

- Adding new products or services to the pipeline;
- Developing new features for the existing products;
- Investing in research for securing additional growth and opportunities;
- Thinking about holding an initial public offering (IPO).
- The risks involved in the Mature stage are:
- Less focus on monitoring the market to bring necessary changes to the product or service;
- Stopping investing in the user experience (UX) to provide up-to-date services to the user.

Every SaaS company's long-term goal is to achieve scale, but premature scaling can lead the company, especially the startups, to fail. Understanding the stages helps companies to identify when is the perfect time to expand and know when is the right time to focus on scale.

IMPORTANT SAAS BUSINESS MODEL METRICS

1 - MRR (MONTHLY RECURRING REVENUE)

MRR (Monthly Recurring Revenue) is a SaaS metric that helps a SaaS company to analyze how much revenue they can expect to bring in every month.

Sometimes MRR is confused with ARR, but ARR metrics actually analyze the Annual Recurring Revenue of a company. Through the MRR businesses, they can gauge their income and success.

The growth in MRR is considered to be parallel with the growth of the business, similarly, the shrinking of MRR has a negative impact on the business.

MRR trends are most important to subscription-based SaaS businesses. SaaS providers must be very careful about the MRR because, once it starts to shrink, it can be very hard to control.

Another important thing companies should be considering is that MRR should not be calculated based on the active

subscription only, but also considering whether the active subscriptions are going upward or downward. Companies should also keep track of the subscriptions that have ended and the new subscriptions that are coming on board.

Businesses that are based on the recurring revenue model should calculate the MRR in order to project the future performance of their business. By calculating the MRR, a business can project out a year at a time, which will help them to review and analyze its future finance.

An MRR calculator can be unique to a business, depending on the business model. Some businesses may have a year-long contract with their customers, while others may offer their customers to sign up and cancel at any time. The latter category should pay closer attention to contemporary trends.

However, there are different types of MRR metrics available. Below, there is a discussion about the different types:

Different Types of MRR

New MRR

New MRR refers to the Monthly Recurring Revenue that is calculated based on any new monthly recurring revenue from users.

Net New MRR

Net new MRR is calculated based on different MRR metrics. It calculates what is the new MRR of the company after the upsells, churned customers, reactivated customers, and contracted customers.

Expansion/Upsell MRR

Upsell or Expansion MRR is calculated from the revenue gained from the existing users when they upgrade their subscription plan.

Churned MRR
Similar to the Upsell MRR, churned MRR is calculated from the data when existing customers downgrade or cancel their subscriptions.

Reactivated MRR
Reactivated MRR is calculated based on the data when users who had canceled their plan come back and purchase any subscription plan.

Contracted MRR
Contracted MRR is calculated when users downgrade their account but the impact is not so high. For example, they can downgrade from a $30 monthly subscription plan to a $20 monthly subscription plan.

Importance of Tracking Accurate MRR

Tracking accurate MRR is very important for a SaaS business, especially if it is a startup business. As mentioned earlier, subscription-based revenue stands at the core of the SaaS business model, and having accurate measurements will help to understand the performance of the business.

To attract investors and customers, some businesses may manipulate their data and inflate the MRR. But it is extremely important to have an accurate number for a number of reasons:

Misleading metrics can lead to unprofessionalism
Being honest about the MRR is important because investors tend to assess the revenue figures from different portfolio companies. Sometimes, there are people working for the investor who knows where to find the weak points. So, it may lead to presenting your unprofessionalism.

Passing off big growth rates on small numbers can cause self-harm

If the business is a startup, it's quite natural that the month-over-month (MoM) numbers can be tiny. Investors will not be very pleased if a business boasts a mega percentage and passes the rate off as sustainable growth at scale.

Accurate MoM fluctuation

It is normal for a SaaS business if the month-over-month (MoM) number fluctuates. Presenting the real situation to the investors is important. Business owners have to make sure that their investors are aware of the fluctuation. Otherwise, it can become a boomerang for them.

How to Calculate MRR

Now that it has been made clear how important the accurate MRR calculation is, let's see how MRR can be calculated. There are different formulas used to calculate different types of MRR.

MRR Formulas

New MRR Formula

There is no specific formula for calculating New MRR, rather it is the amount of MRR gained from new customers. But there are certain lists of things that should be avoided while calculating the MRR.

- The full value of multi-month contracts should be divided and calculated by the monthly value. If a customer pays the subscription fee quarterly, semi-annually, or annually, companies should bring them a monthly rate. The formula is a simple division, the full subscription amount paid is divided by the number of months in the contract. For example, a customer pays $600 for a semi-annual subscription. Dividing that by 6 will bring it down to a monthly rate

of $100, which should be used while calculating the MRR;

- One-time payments should not be included while calculating the MRR, as they are not recurring. Some often confuse a one-time payment with a multi-monthly payment, but it's not. There is no guarantee that the customer will purchase the product again. So businesses should be careful about this;
- Trial users shouldn't be included in the MRR calculation until the user turns into a regular customer.

Net New MRR Formula

Net MRR provides the company an overall view of the revenue gained from new subscriptions, upsells/upgrades, and revenue lost from downgrades and cancellations. The formula to calculate New MRR is:

$$\textbf{Net MRR} = \text{New MRR} + \text{Expansion MRR} - \text{Churned MRR}$$

Expansion/Upsell MRR Formula

Like the New MRR, the Expansion/Upsell MRR does not require any unique formula. It is simply the calculation of revenue from the existing customers who expand their accounts. For example, if a customer makes and upgrades from $50 per month to $80, it is $30 in expansion MRR.

Churned MRR Formula

Churned MRR is calculated by calculating the total lost revenue from existing customers who didn't renew their plan or cancel it. The total lost revenue is divided by the revenue at the beginning of a given period. For example, a company started the quarter with $15,000 in revenue, but over time it lost $600 through that quarter, the churn rate is 4% quarterly.

$$\text{Churned MRR} = \frac{\text{Lost Revenue}}{\text{Total Revenue}} \times 100$$

Reactivated MRR Formula
Reactivated MRR is calculated based on the revenue when a customer who churned in the past becomes on board again. For example, if a churned customer comes back and purchases a plan that is $50 per month, the reactivation MRR will be $50.

Contracted MRR Formula
Similar to the expansion MRR, to calculate contracted MRR no unique formula is required. If a customer downgrades its plan that is less expensive, this counts as Contracted MRR. For example, if a customer downgrades from a $40 per month plan to a $30 per month plan, the contracted MRR will be $10.

How to Grow MRR

There are a number of techniques and models to help SaaS businesses grow their MRR.

From sales development representatives to product-led growth, there are multiple ways to turn the MRR upward. Here, we will have a look at a few that tends to be most interesting and successful.

Product-Led Growth (PLG)
A successful PLG strategy gets the SaaS products in the hands of customers as quickly as possible, hence, solving their problems almost immediately. If a customer gets unique value from a product or service right away, it can then attract other new customers. By providing the customer with a valuable user experience, companies can motivate them for more frequent use. If SaaS companies focus on providing the best services — including the best customer experience —. it

will drive purchasing decisions and ultimately retain these customers.

Retain Current Customers
Retaining current customers is an absolutely necessary strategy for growing a SaaS business. There is a saying that '**it is cheaper to retain a current customer than buy a new one**'. Keeping in touch with the customers, understanding their needs, and updating the products according to their feedback is the best method to retain customers.

Invest in What Works
For general understanding, it's not a specific strategy. But most successful SaaS companies invest in what works to grow their MRR. Investing in an organic strategy to grow MRR, providing a sales team with the necessary resources can prove to be a useful technique.

2 - CAC (CUSTOMER ACQUISITION COST)

Customer Acquisition Cost (CAC) is an important metric used in SaaS business models to track a SaaS company's success. CAC is defined as the total cost that it takes to bring a customer from the first contact until the sale. It is counted by considering the sum total of the amount that it takes a business to acquire a customer. This includes the time from sales representatives along with the marketing and advertising expenses.

Importance of CAC
CAC is a very important metric for a SaaS business, because of its ability to predict whether it's going to be more difficult or easier to acquire new customers. It helps to understand when a business is the best time for acquiring new customers

by enabling them to look at the trends.

Businesses can reshape their customer acquisition strategies, and analyze the strength and weaknesses of their business by utilizing the data from CAC data. The upward CAC indicates that the marketing and sales are not very effective and that they need some strategic change in their sales and marketing. If the opposite happens, then this indicates that the current strategies are working.

In addition, Customer Acquisition Cost (CAC) is closely related to other metrics as well. Metrics like customer lifetime value, customer retention, and average purchase price are related to the CAC. To get a clear idea about how the company is doing, it is important to use CAC conjugated with other metrics.

How to calculate CAC?

CAC is calculated by combining all the funds spent for acquiring new customers. It includes the combined efforts of the sales team and the marketing team of a company, including the costs related to advertising.

For example, if the total cost for acquiring new customers is $10.000 per month and, by spending this amount, the company acquires 500 new customers every month, then the total cost of customer acquisition is $20 per customer. The lower the acquisition cost is, the better.

$$\text{CAC} = \frac{\textit{Cost of sales \& marketing efforts}}{\textit{New customers}}$$

Calculation of Customer Acquisition Cost presents how the company is operating. If the customer acquisition cost is

$500, but your average sale is $200, then it indicates that the business isn't sustainable. The acquisition cost needs to be reduced.

If the customer acquisition cost is $500, and the customer retention cost is $50, retention becomes very important. In a similar way, if the customer acquisition cost is $500 and the customer retention cost is $550, the new customer acquisition is more important.

How to improve CAC?

The best way to improve the CAC is by reducing expenses that are increasing the acquisition cost. This can be done through a deep dive into the data. By looking closely at the data, companies can find out what is working best to acquire new customers. For example, if a company is running paid promotions and sponsoring events that are not much attributed to new customers, cutting down the sponsorship would be a good decision.

Along with cutting down the cost, companies can improve acquisition costs by improving all parts of the sales funnel. The more customers a company brings to its sales funnel, the more CAC there will be.

For example, if a company is spending $1000 (without having any other cost) and converting 4% of its 1000 website visitors to their customers on a monthly basis. That means that the company is spending $1000 to generate 40 customers or spending $25 to acquire a single customer. But the company can improve the conversion by making some changes on their website.

Maybe the total cost will increase to $1200 but the company is converting 6% of visitors to their customers from the 1000 visitors. That means that the company is spending $1200 to acquire 60 customers or spending $20 to acquire a single

customer. This is a good boost from the previous amount of $25 spent earlier.

Though the example drawn here is a very simple one, in reality, there may be other factors included too, but the fundamental principle is the same. If a SaaS company spends some extra finance on its sales funnel and successfully increases the conversion rate, it will ultimately improve its CAC.

3 - LTV (LIFETIME VALUE)

LTV or Lifetime Value of a customer is considered one of the most important metrics that the companies can track. LTV is sometimes considered to be the 'most important metric' [17] for a startup. Lifetime value is defined as the amount of money a customer spends with the business throughout his relationship with the business.

In companies like real estate one, expect to see a customer once, or very infrequently. Other companies like those are based on SaaS business models and expect that a customer will make a purchase on a regular basis. The lifetime value of a customer primarily depends on how often the customer interacts with a business and makes purchases from them.

The data gathered to calculate LTV can help the company to assess the overall condition of its business. Along with providing insight into the long-term trajectory of a startup, it also provides immediate insight into specific areas that are in need of improvement.

Without calculating the customer lifetime value, a company may be able to know how much every customer cost to bring them on board, but they won't be able to know how much those customers were worth.

Importance of LTV

LTV plays a major part while a company determines and justifies customer acquisition costs to its investors. Companies like SaaS that are mainly based on recurring revenue acquire customers at an initial loss. But this is quite normal for this type of business, in fact, it's a necessary component for their long-term success strategy.

Back in 2011 when Salesforce's share price topped $128 despite a P/E of 234, many people raised questions about this. But it is important to understand that Salesforce's business model is based on a strategy of **incurring** acquisition costs upfront in order to enjoy recurring revenue for years after. The high acquisition cost of getting a customer eventually multiplied and became the LTV of the customer, if the company maintains its high retention rate.

A solid LTV approach can help a business to overcome the fear of reaction from the investors. It presents them with a string of months or years in the red and gets everyone on board with the long-term focus of the company's growth.

How to calculate LTV?

There are mainly two formulas to calculate LTV metrics. If the company doesn't expect any expansion revenue from its customers, it can count the LTV using the following formula:

LTV = *Average Customer Revenue (MRR or ARR) x Customer Lifetime*

A company can also calculate LTV by taking the gross margin percentage into account. This will present them with a clearer picture of LTV. The equation is:

$$\text{LTV} = \frac{\textit{Average customer revenue X Gross margin \%}}{\textit{Customer churn rate}}$$

How to improve LTV?
To improve LTV, a company should be focusing on adjusting its LTV when the retention effort or the improvement of the product increases the customer value. This especially goes for enterprise software companies. These companies continuously work on improving their products by adding new features and, as a result, raising the annual subscription costs.

A company should also focus on the user experience in order to improve its LTV. By offering better customer service, businesses can convince their customers to stick with them and continue to use their service. The longer the customer sticks around, the more they pay. It may sound very simple, but customer success is considered to be the defining feature of a successful SaaS company.

4 - CHURN

In simple terms, churn is 'loss'. Two types of churn are generally seen in the business, customer churn and revenue churn. Customer churn can be defined as the number of customers that cancel their subscription plans annually or monthly. Whereas, revenue churn is the amount of monthly or annual revenue lost.

Churn is a normal thing for any business but maintaining a balance in churn rate is crucial for a business to sustain itself in the market. Normally small or medium-sized businesses can expect a 3% to 5% churn monthly and less than 10% annually. Large enterprise-level companies try to maintain a

churn rate of less than one percent. A declining churn rate in subsequent years is an indicator of business growth, while the reverse can lead to the failure of a business.

Here, we will have a look into the two types of churn:

Customer Churn

Customer churn refers to the loss of customers. In a general sense, the number of customers that cancel their subscription plans annually or monthly is customer churn. It is a natural process of any business. No matter how many qualities the product or service has, businesses lose customers. But losing customers in an unprecedented way can be alarming for a business. The less churn a business has, the more customers they keep.

Importance of Customer Churn

Understanding customers is a very important thing for a company, in order to get an insight into whether their marketing strategy is working or not as well as the overall satisfaction of their customers. It has been mentioned earlier that keeping the existing customers is much more important than getting a new one.

For a business like SaaS, it is much more crucial for them to understand why, how, and where their customer may be churning.

Based on these metrics, businesses can reshape their marketing strategies and develop strategies for customer satisfaction. Additionally, it is necessary for a SaaS company to track if the business is running in a positive direction or it is going to fail somewhere.

How to Calculate Customer Churn Rate?

Customer churn is calculated by dividing the number of lost customers by the total number of customers for a month or

given period. The formula is:

$$\text{CUSTOMER CHURN RATE} = \frac{(\text{CUSTOMERS BEGINNING OF MONTH} - \text{CUSTOMERS END OF MONTH})}{\text{CUSTOMERS BEGINNING OF MONTH}}$$

For example, if a Company had 1000 customers at the beginning of a given month and only 900 customers at the end of the month, its customer churn rate would be 10%.

How to Reduce Customer Churn?

Customer churn is a natural business cycle. Almost every business goes through this cycle. But imbalanced customer churn can lead to the failure of a business. However, there are some strategies a company can take to prevent unprecedented churn.

First of all, understanding why customer churn is happening is important. Companies should have a deep insight into the factors that are causing customers to jump off of the ship. Taking steps to prevent this from happening can result in reducing customer churn.

Conducting periodical research by taking interviews or conducting surveys of customers who have churned can help companies gain an understanding of their reasons for leaving. Have you noticed the pop-up showing a message to tell why you are uninstalling software or deleting your profile? This is a kind of strategy that most companies use to understand why their customers are leaving.

Improving customer experience strategies can be proved beneficial. Enterprise-level companies employ people to research user experience and understand how they can better serve their customers. Providing necessary supporting

resources to enable customers to understand what you are offering, whether it is essential for them, is one way of improving the overall customer experience.

Making sure that you're reaching the right audience for your products is also important. Otherwise, all the marketing efforts and sales teams' time will end up for nothing.

Knowing the signs that a customer is at the edge of leaving is also crucial. If a customer doesn't log in for a month or is not using your service for a month, that's a sign that you are losing that customer. Reaching out to them before they leave increases the chance to bring them back.

No matter what you do, you will still lose some of your customers. But to make sure you don't lose too many of them, it's important that you should develop a strategy to decrease the customer churn.

Revenue churn

Revenue churn is the amount of monthly or annual revenue lost because of customer churn or other factors. To better understand a company's financial performance and outlook it is important to calculate the revenue churn along with the Customer churn.

How to Calculate Revenue Churn Rate?

To calculate revenue churn, first, you need to calculate the Monthly Recurring Revenue (MRR). First, calculate the amount of MRR lost, and then subtract any MRR from upgrades by existing customers. The amount is then divided by the MRR counted at the beginning of the month. New sales in the month should be avoided. The formula is:

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

For example, if a company had an amount of $600,000 MRR at the beginning of the month, and $550,000 MRR at the end of the month, additionally, $40,000 MRR from upgrades in that month from the existing customers, the revenue churn rate would be 1.67%.

If the revenue churn is negative, that means the company actually gained revenue. If it is positive, like the one in the example, that means the company is losing its revenue. But, for this example, it's not that bad actually. Typically a good or acceptable churn rate is from 2% to 8% for B2C and, for B2B, it should be less than 2%. [18]

To sustain a revenue churn at this level, it is important to develop some strategies. The steps pointed out in the 'How to Reduce Customer Churn' could be followed to reduce revenue churn as it is closely related to customer churn.

Customer Retention Cohort Analysis

Customer Retention Cohort Analysis is a SaaS metric that refers to the study of activities that enables businesses to understand how long they are able to maintain a customer based on their subscription model. Companies can calculate this monthly or annually.

Good customer retention may not mean the company is maintaining every customer each year, but it indicates that the company is seeing growth in the business through a balance of renewals, upsells, and contract expansions.

Importance of Cohorts Analysis

Cohort Analysis is effective for analyzing data that presents insights about maintaining customers, based on the subscription model. SaaS companies not only focus on acquiring new customers but also retain them for a longer period. This is where cohort analysis comes in, enabling companies to understand their performance. Below, there are some of the usages of cohort analysis discussed:

Impact of New Product Features

Cohort analysis helps to understand how the new product features are impacting customer retention and other metrics. By understanding how customers are interacting with the new features, companies are able to use this data for future analysis. This helps to identify where development time and resources should be placed.

New Marketing Campaigns

SaaS companies use different marketing channels to get customers. But without the analysis of whether a certain marketing campaign is working or not, companies may end up just wasting their time and money. Cohort analysis helps businesses identify the lacking and put their money into an effective method.

Understanding New Customer

SaaS companies and service providers use various strategies to acquire new customers, but how those newly onboarded customers will perform needs to be tested. For example, companies may add some questions while they are signing up. This will lead to understanding how much likely the customer is to take a key action in their service.

How to Build Cohort Customer Retention

While cohort analysis is important, it can take too much time to build a cohort analysis entirely from scratch. There are many templates available on the web for building a cohort

analysis model. These templates come with customizable features that can be modified based on the business strategy.

However, if you are thinking to use cohort analysis metrics, here are some steps that should be followed:

Start with a Goal and Questions

Setting up a goal and key questions before setting up a cohort analysis is important. Because, at the end, the result of a cohort analysis will help your team to make decisions about the product, marketing, customer experience, etc. If you don't set up goals and questions, there is a possibility of missing the point and impact of a cohort analysis.

Define the Metrics & Data Needed

After setting up the goal and key questions, now it's time to understand what data and metrics will be needed to do the analysis. For example, If you are analyzing customer retention, you will need to have data on contract size, sign-up dates, churn dates, etc., to execute the analysis.

Perform the Analysis

There are numerous tools and resources available on the web to perform cohort analysis. For example, the tech giant Goole has its Google Analytics service with a built-in tool to perform cohort analysis.

Study the Data

After performing the analysis, the final step is to have a deep look into the report. This will help you to take actions suggested by the data. While studying the report, it is important to keep in mind the original goal and questions that you set up in the beginning of the cohort analysis. Conduct different cohort analyses to get valuable insights about your business.

THE PROS OF THE SAAS BUSINESS MODEL

SaaS comes with lots of pros that otherwise may not be even imaginable. One of its major advantages is that the customer using the service becomes loyal to the company if they like the service. This loyalty can create a customer fanbase that can last for a longer period of time, enabling the company to gain recurring revenue.

There are some other advantages that come with that SaaS business model:

RECURRING REVENUE

Recurring Revenue stands at the core of SaaS business models, enabling companies to earn revenue on a continuous basis. Customers are basically renting the software or service, and paying a subscription fee on a monthly or annual basis, while on-premise software customers are purchasing the software and owning it.

RAPID GROWTH

One of the major advantages of SaaS products is that, if the product can prove valuable, it will be an instant hit. Take for example the overnight hit of the SaaS provider Zoom. During the Covid-19 pandemic, there was a huge demand created for their service and they saw a rapid growth in selling. [19]

EASE OF DEPLOYMENT

As SaaS is mainly based on the cloud, it is easy to make quick fixes, add new features, or upgrade to a SaaS product. Customers from anywhere can purchase and use the service.

PREDICTABLE REVENUE

As SaaS products are based on the subscription model, it is easier for the company to predict the expected revenue. The monthly or annual subscription model gives the security that many other business models fail to do.

THE CONS OF THE SAAS BUSINESS MODEL

The recurring revenue sounds exciting, getting the revenue is not an easy way. Many startups fail to survive in the market. Even starting a SaaS company is difficult from many other business models. There are some other disadvantages also associated with SaaS, such as:

The other negative side of SaaS, outside of the capital-intensive business model, is that it is often not a simple product. While the model itself is easy to understand, maintaining the actual product effectively can be difficult, even for people who understand all the coding involved.

This can make selling a SaaS product more difficult, as you are looking at a more narrow selection of prospective business buyers than, say, someone who is interested in an Amazon FBA or lead gen business.

UPFRONT COSTS

Securing funds can be very difficult. Without proper funds, it becomes tough to maintain the capital and manpower needed for growing the business. Many startups fail because of the lack of proper funding. Sometimes it may take more time to see the face of profit than expected.

HIGH RISK

SaaS involves high risk, a business can either grow fast or may fail fast. If the market changes more than anticipated, it can be a devastating loss for the companies. While enterprises level companies can tackle this with other products, startups don't have this luxury. A simple wrong step can crash the business and burn overnight.

CHURN

Factors like decreasing demand in the market for a SaaS product or service, or the entrance of a giant company offering a similar service with a lower cost can cause customer churn. Customers often like to change the ship if they find it more attractive, and getting them back could be almost impossible.

SAAS BUSINESS MODEL GROWTH STRATEGIES

CUSTOMER STORIES AND REFERRALS

One of the most used strategies in the SaaS business model is customer reviews and referrals. Many SaaS companies display customer reviews on their website.

It is good proof for the company to show what they are doing, why they are doing, and whether the customers are liking it or not. Companies capitalize on these success stories through various channels like marketing content, speaking events, etc.

Some SaaS providers use referrals to grow their business. Referrals can be a good strategy that often leads to better conversations with prospective customers.

THOUGHT LEADERSHIP

Becoming an expert in a specific area of service can help a SaaS company to grow fast. This strategy is most suitable for businesses that are focused on only one specific area. If a company blog or community group can provide value to the end-user outside of their product, that credibility will spread.

One example of such a strategy is followed by Lattice, a company that specializes in turning employees into high performers, managers into leaders, and companies into the best places to work. They have a community of 10.000, plus HR leaders. From there, users are able to generate content and ideas.

THIRD-PARTY RESOURCES

Using third-party resources to grow a business can be a good choice. Showcasing great customer reviews on well-known sites, like G2.com or presenting their service to be analyzed for trusted reports, like Forrester, can earn them some certification of why their product or service is valuable especially when selling to new customers.

SOCIAL MEDIA AND INFLUENCER MARKETING

Nowadays, the marketing strategies are changing, and so is the channel. Companies nowadays focus on Social Media and Influencer Marketing to present their product to the world. This strategy helps to spread the company's voice and name to end-users. These strategies help to build brand value.

Companies hire influencers related to their service or products, and spread their message through the influencers who have thousands of followers listening to them. If a top marketing influencer recommends a specific service or software, there is a high chance that the follower or that influencer may have a look at that product or service and may end up becoming a valuable customer.

TYPES OF SAAS PRODUCTS

There are various types of SaaS products available in the market. The field is growing rapidly with the new ideas brought to the market by startups along with enterprise-level companies.

Some simple SaaS examples are Netflix (a video streaming service provider), Google Docs (a popular alternative to the MS Office program), and Zoom (a video call and group meeting service provider). The types of SaaS include:

PACKAGED SOFTWARE

Packaged software solutions, by far, have taken the largest part of the SaaS market. Packaged software comes in various forms including financial management, supply chain management, human resources management, and customer relationship management. These are just a few of the most popular types. The main idea behind packaged software is to provide a complete solution for complex problems and to deliver it in one cohesive bundle.

COLLABORATIVE SOFTWARE

This type of SaaS product enables users to do teamwork on a common platform or on a common project. Products like Dropbox, Google Docs, HubSpot, and Trello are a few examples of such SaaS collaborative products.

MANAGEMENT AND ENABLING TOOLS

These types of SaaS products provide solutions for a wide range of different things, such as monitoring and evaluating of user behavior on a given website, monitoring the activity of the users on a network, testing a system, and much more.

WHAT IS THE PROCESS TO BUILD A GREAT SAAS PRODUCT?

Building a SaaS product is not so different from building any other product. However, there is a process to follow while building a SaaS product. This process includes:

DETERMINE IF IT'S THE RIGHT CHOICE

First of all, it is important to understand whether entering into the SaaS business is right for you. Considering all the pros and cons discussed above, you may first set up your mind if you are going to build a SaaS product. If you have made up your mind, the next step is to form a team. Talk to them, discuss your ideas, and consider their opinion. Hope for the best but get ready to struggle. Clear out any confusion or doubt.

DESIGN A ROADMAP AND STRATEGY

There are a few key questions that should be asked while you are building a SaaS product, such as:

- How will the new product create a better customer experience? Is there a demand for this in the market?
- What strategy do you follow to measure success by entering into SaaS-focused metrics that emphasize customer retention and recurring revenue?
- How do your product requirements change to answer these questions and help you to gain market share?

DESIGN AND DEVELOPMENT

If you have answers to all of those questions and developed a strategy then you can go design the product. While designing the product, keep in mind that the product should be attractive enough to acquire a number of customers. The product should have enough advantages that the customers must think, this is the best option for their needs.

If you’re satisfied with your design, then it's time to begin the development process. While developing the product, don’t be afraid of making any modifications if you face any challenge or come up with a new idea.

BETA TESTING

Beta testing is a must for any software. It is almost impossible to anticipate every customer's needs. Start with a small group of customers by offering them the product free of cost, or with a minimal cost. Take feedback from them and make necessary changes. Get prepared for facing any type of problem with the product. Once you are satisfied with your product, you can now bring new customers to use your product.

CUSTOMER ONBOARDING

In the SaaS business cycle, customer onboarding is a difficult task. You should consider using various channels to present your product to your targeted customers. Convincing customers to use your service is very crucial, especially when there are a lot of options available in the market.

Onboarding doesn’t necessarily mean convincing customers to purchase your product, it includes both the initial training and ongoing support. The support should last until the customers are fully comfortable with your product.

CONTINUE TO DELIVER VALUE AND MARKET

The SaaS business model is mainly based on the recurring revenue model, but this doesn’t guarantee success. There is huge competition in the market, so keeping your customer satisfied should be a priority. Otherwise, customers can anytime change the ship, and move to another one.

You should continue adding value to your product. Making upgrades, adding new features by understanding customers' needs. But, no matter what you do, there will always be a chance to lose some customers. Therefore, you should keep your marketing strategy running to acquire new customers.

TYPES OF SAAS SOLUTIONS

There are thousands of solutions available in the market. Name any problem and you will find the relative solutions in the SaaS industry. Nowadays, there are cloud-based software solutions for almost anything. From writing online to editing graphics, from live chat to social media marketing. Some of the most popular and widely used solutions are reviewed here.

1 - CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SOFTWARE

Customer Relation Management solutions (CRMs) are enabling businesses to automate their sales and marketing processes. It is becoming a game-changer for business

growth. Building and maintaining strong business relationships with clients now became easier thanks to CRM solutions. With the help of CRM solutions, responding to customer queries and complaints in a timely manner becomes easier. CRMs enable businesses to keep up with their customers by **effectively** managing customer profiles and providing them with a great customer experience.

CRM solutions automatically collect customer information and keep track of customer behavior from different channels, including the website, support logs, customer reviews, and feedback. They also collect information from social media. One such example of a CRM solution is gym management systems. This is a form of CRM solution that is customized for use in gyms and fitness clubs, handling their membership management, online billing, appointment scheduling, and much more.

2 - ENTERPRISE RESOURCE PLANNING (ERP) SOFTWARE

Enterprise Resource Planning software is mostly designed for enterprises and large organizations. These software solutions enable large companies to manage their business processes in real-time. ERPs increase the customer satisfaction level which ultimately leads to increased revenue.

The key areas ERP covers include accounting, risk and project management, supply chain management, procurement, budgeting, and compliance. The chances of data duplication are minimized by these ERP solutions. Getting accurate and up-to-date information is now easier due to ERP solutions.

Some key benefits of using ERPs include:

- Decreasing operational and management costs;
- Improving business insight;
- Providing a consistent infrastructure;
- Improving the efficiency;
- Minimizing the risk;
- Improving collaborative works;
- Providing better user adoption rates.

3 - ACCOUNTING SOFTWARE

Accounting is essential for every business, no matter how big or small it is. From simple to complicated, almost every financial aspect of a business can now be handled easily using SaaS solutions.

However, there is no one-to-one solution because different accounting solutions focus on different operational aspects. While one solution can work perfectly for one business, it may not be perfect for another one. Businesses choose solutions based on their needs. Examples of SaaS accounting solutions are QuickBooks, Xero, FreshBooks, etc.

4 - PROJECT MANAGEMENT SOFTWARE

The project management solutions enable businesses to manage different projects more easily. Managing projects can be complicated with traditional software because of constant updates provided by the team members. Using SaaS PM

software, team members can work on the same platform, hence getting up-to-date information that is accessible anytime from anywhere.

The key benefits of PMs include:

- Connecting teams, enabling access from anywhere;
- Making collaborative work easier;
- Reducing upfront costs;
- Almost zero complications with maintenance, hence enabling the teams to focus more on managing projects instead of technical aspects;
- Provides more flexibility;
- Built-in security and disaster recovery;
- The setup is easier and features are automatically added;
- Auto-updates of security patches;
- Allows team members to make impactful and timely decisions.

5 - CMS AND E-COMMERCE PLATFORMS

In this era of digital life and the internet, everything is becoming online. Traditional businesses are shifting towards e-commerce. SaaS web hosting services and e-commerce solutions include services like Content Management Systems, such as Joomla and WordPress, and shopping carts, such as Shopify, etc.

Not all e-commerce is SaaS-based, they can be open source. E-Commerce solutions such as WooCommerce, Zen Cart, Magento, and OpenCart are based on open source, while solutions like Volusion, Shopify, 3dcart, Big Cartel, and BigCommerce are SaaS-based. Nevertheless, web-hosting service is required for both types of e-commerce solutions, that is why both of these solutions fall in the same category.

6 - COLLABORATION AND COMMUNICATION SOLUTIONS

These solutions are almost similar to project management solutions. It enables team members to share simple files, instant messages, and manage fully-featured projects. For example, solutions like Slack allow team members to organize, search and work together in a centralized workspace. Features of these types of solutions vary from one to another.

For example, Slack is mostly used for casual communications, such as chat and audio conversations, Google Drive and Google Docs solutions are mostly used for file sharing and doing simple office tasks. Sometimes users integrate one solution with another to get their desired service.

7 - HR/HRM SOLUTIONS

HR SaaS solutions enable a company to manage their human resources, their performance, payroll, attendance, and other HR-related processes more easily. It is useful for both employees and managers to increase productivity and enables them less worry about administrative tasks. They can now focus more on their strategic initiatives.

The key feature of these type of SaaS solutions includes:

- Tracking applicants & recruiting;
- Scheduling interviews and pre-screening;
- Posting job board;
- Managing attendance and leaving the database;
- Learning and development;
- Handling notices, forms, and announcements;
- Performance management, analysis, and reporting;
- Developing employees' review system.

8 - PAYMENT GATEWAYS AND BILLING SOLUTIONS

SaaS billing solutions enable businesses to automate their payment processes and allow businesses to accept payments through different channels, such as debit or credit cards, mobile wallets, bank transfers, and reward programs. These solutions also cover other areas of payment handling such as reporting.

Billing requirements vary from customer to customer, SaaS solutions enable businesses to automate almost all aspects of the payment process between quote to cash.

9 - NICHE/SPECIALTY/VERTICAL SAAS SOLUTION

As mentioned earlier, there could be a thousand SaaS-based solutions. These solutions can be built on a specific niche and can include anything from a solution for gaming platforms to educational content moderation.

SAAS SALES AND MARKETING: HOW DO SAAS BRANDS ATTRACT USERS?

Back in 2014, a report published by McKinsey stated that SaaS companies must achieve an annual growth rate of greater than 20% if they want to survive in the market. [20]

SaaS marketing differs from many other industries. In SaaS, marketing businesses promote a product without anything tangible to show for it. Customers are not able to hold it in their hands. It entirely depends on convincing customers that the product is valuable for them. Customers often conduct quick research of the product, comparing it with other similar products and their prices. Based on this they may take the decision whether to buy or not to buy the product.

So businesses have to develop a marketing strategy that targets every stage of the customer's decision. The marketing should provide them with the necessary information that would convince them to try the product.

Many customers spend a fraction of their time discovering a new product. Sometimes, they sign up to an app for once but never return or make any purchase. Before even realizing the true value of a product, they make the jump to another app.

So, while marketing the product, businesses must keep these things in mind and develop a working strategy that provides customers with enough information that would present the product as a valuable one in front of a customer.

In a B2C model, customers are often presented with a self-serve SaaS product. To buy the product, the customer goes through most of the process on their own. However, in the final stage, they may take some help from the sales team, who can guide them by recommending suitable plans based on their needs, while, in the B2B model, it often takes months to convince them to buy the product or sign up for the contract.

However, there are some objectives that should be followed by the SaaS companies for their marketing strategies:

ATTRACT THE RIGHT AUDIENCE

For rapid growth, SaaS companies must target their potential customers. Rather than designing a marketing strategy, it should be designed in a manner that targets only specific segments of people.

BUILDING RELATIONSHIP WITH LEADS

Nurturing leads is as important as getting a lead. Using different channels like, emails, social media, the marketing team of a new SaaS company should nurture their leads, make a relationship with them and convince leads to test their product.

REMOVING ROADBLOCKS TO SIGN UP

There shouldn't be any obstacles while signing up. Marketers often go for optimizing conversions around various website goals. From trial sign-up to onboarding to converting free users into paying customers, every step is made easier for the customer.

ENGAGING USERS

Many times, SaaS companies offer a free trial service for their potential customers. These free users may later become premium customers. By using the free trial, users are able to understand the value of the SaaS product which leads them to become regular customers.

INCREASE THE CUSTOMER LIFETIME VALUE

Since most SaaS companies are based on the subscription model that enables them to receive recurring revenue, businesses should be focusing on customer retention. The marketing strategy should be focusing on increasing customer lifetime value by reducing churn and moving customers to higher-priced plans.

SAAS PRICING MODELS

SaaS businesses are based on their subscription models. So, it is important for a SaaS service provider to make a pricing model before onboarding customers. The pricing model affects the potential user's decision to use the service or not. The pricing model can have an impact on the growth rate of a company. A report published by PWC [21] stated that it may take up to two years for a SaaS company to break even.

Let's have a look at various pricing models SaaS companies use:

FREEMIUM

The freemium pricing model offers customers to use the product for free, with a significant number of features. But if the users want more than the basic feature-set, they need to purchase a premium package. Many SaaS companies follow this pricing model. Companies like Slack, Dropbox, or Airstory are examples of freemium pricing models.

FLAT-RATE PRICING

The Flat-Rate Pricing model comes with offering a single product with a standard feature set for a flat rate. Companies like Basecamp follow this model. They offer a flat rate of $99 per month, for which a person can use all its features.

TIERED PRICING

This pricing model is used by most SaaS providers. They offer multiple packages consisting of different feature sets and prices. Companies like Hubspot follow this pricing model.

PER-USER PRICING

This pricing model comes with a different idea. Instead of purchasing the software solution with a flat rate or choosing a feature-set, customers can pay per user. Companies like Asana follow this model, charging companies a flat rate for every person they sign up in the app.

USAGE-BASED PRICING

Finally, some companies offer to pay as per the usage, rather than feature set or users.

Finally, some products charge for usage, rather than feature sets or users. Companies like Stripe, follow this model.

WHAT'S THE END-GAME FOR A SUCCESSFUL SAAS COMPANY?

An exit strategy is considered to be key to the SaaS business model. For most companies, the end-game is simple: either go public or get bought out.

Most of the time, SaaS companies get acquired by existing enterprise-level software giants. It's a risk-free path. On the other hand, going public tends to be a much more ambitious option, but it comes with some risks as well.

The end doesn't always necessarily mean failure. Some SaaS companies establish their brand and product with the intention to get acquired by giant companies with a fair deal, as giant businesses have the necessary funds and resources to make the product a success.

BEST SAAS COMPANIES AND SECRETS OF THEIR SUCCESS

There are hundreds of businesses that are ruling the market. Here are a few examples of the best SaaS businesses that managed to become successful.

HUBSPOT

HubSpot is one of the most popular SaaS companies, with a revenue of $883 million.

It is a marketing and sales platform that focuses on enabling its customers to go through the whole buyer's journey. The wide range of tools for business growth is what made HubSpot becoming the number one choice. Their key feature is to help businesses with email marketing, blog optimization, and social media interactions.

Though there are many software companies that provide similar solutions, HubSpot stays as a leading company in digital marketing. Factors working behind their success include:

Inbound marketing
HubSpot follows the inbound marketing strategy, which means they attract customers with the content they create, not with some pushy ad campaigns, which sometimes get

annoying. Hubspot publishes content with valuable information and lets the reader decide what product to buy. They constantly publish useful and relevant content on growing a business. By following this strategy they are able to earn credibility in the readers' eyes. Just type anything related to that and you will end up getting results written by the HubSpot team at the top.

All-in-one solution
Hubspot has a wide range of tools enabling marketing and sales teams to do all the staff from one place. Users don't require jumping between different platforms to get their job done. Combining all the necessary tools in one place is what makes Hubspot more user-friendly.

Easy-to-use
One of the most noticeable features of Hubspot is its user interface (UI). Their UI is very easy to use, which helps users to navigate through different components and learn to manage Hubspot quickly, providing the user with the best user experience. Hubspot has even conducted a drunken user test in order to improve their UI and UX, which is proof of their care about the user.

To sum up, Hubspot's strengths lie in its inbound marketing strategy, all-in-one solution, and its easy-to-use UI.

DROPBOX

Dropbox is one of the most popular software companies, providing a cloud storage service. It allows its users to store and share data, along with the synchronizing feature, enabling it to synchronize files on different devices.

There are many other SaaS companies that are providing similar solutions, but Dropbox remains in the top 5. Factors

working behind their success include:

Simplicity
Simplicity stands at the core of Dropbox's service. It is so simple to use that anyone with the slightest idea of cloud storage can understand how to use their service. This minimalistic user interface enables them to provide a great customer experience to their users.

It's fast
Dropbox is not overloaded with complicated tools that, most of the time, no one uses. Its simplicity enables it to provide faster service. Additional features, like synchronizing using the LAN, made it more user-friendly.

Cross-Platform Support
Dropbox works equally with Windows, iOS, or Linux, making it a handy tool for anyone. No matter what platform you are, you will be able to access and use your data from any device, browser, or platform.

To wrap up, Dropbox is simple, doing its job perfectly and at a fast pace. It is easy to use and works fine with any platform and device.

ZOOM

Zoom is a video conferencing service provider that had seen rapid growth during the Covid-19 pandemic. Besides its video meeting service, it has features like chatbox, file sharing, screen sharing, hosting webinars, and recording option.

While there are many similar options available from various giant companies, Zoom managed to top them all. Factors working behind it include:

Easy-to-Use
The easy use of Zoom made it popular among the users. Their UI is simple yet useful, covering almost everything for a successful conference. Their service can be used from any device with only one click.

Pioneering New Features
Zoom is constantly working on adding new features to its product. These useful features are also creditable for Zoom's popularity among the users.

SHOPIFY

Shopify is a SaaS company providing a cloud-based e-commerce platform for online and retail stores. Small and medium-sized businesses who are in lack of enough funds and resources can now have their online store at a cheaper cost through this platform. It enables businesses to set up, customize, and manage their services, by providing them with the necessary tools.

Factors working behind their success:

Non-tech friendly
To start a business in Shopify, you don't need to be tech-savvy. Anyone with a little knowledge of tech can open and run an online store using Shopify. Users just subscribe to Shopify without worrying about development, updating, and server hosting.

Graphic interface
Shopify has an appealing interface without impacting its functionality. That is one of the reasons Shopify has been able to gain much popularity, it enables the user who sees this platform for the first time to handle it quickly and easily.

SURVEYMONKEY

SurveyMonkey is widely used cloud software for conducting online surveys. Today, it has gained much popularity among researchers due to its appealing features. The reasons why Survey Monkey gained its popularity include:

User-friendly interface design
SurveyMonkey's user interface is very easy to use. They guide through the design to disseminate the survey. It works well on mobile devices too.

A big choice of templates
SurveyMonkey has offered more than 200 survey templates to its users. These templates are divided into different categories, from which users can choose which one to use. There is also an option to build a survey form entirely from scratch.

SLACK

Slack is one of the best SaaS products available in the market for business communication. It enables users to organize and manage dialogues according to specific topics and have a private discussions, share files, etc. Over the years, it has become a trusted media for corporate communication because of its:

Design
The design of the Slack interfaces is so user-friendly that anyone can use it. Its interface took the messenger system to a new level.

Integration power
Slack's integration power is one of its strongest features. New technologies are entering the software market every day.

Slack can integrate these software solutions without having much trouble. This feature enables users to work in a centralized space while integrating other solutions.

SAAS LEARNING RESOURCES

1. TOMASZ TUNGUZ

Tomasz Tunguz is a venture capitalist and expert who writes **extensively** about SaaS on his website. If you want to learn more about SaaS trends, checking out his website can be a good option.

2. SAASTR

SaaStr is one of the world's largest communities of SaaS executives, founders, and entrepreneurs. The company publishes a variety of SaaS content in the form of blog posts, ebooks, podcasts, and videos. They held annual events, attracting over 15,000 SaaS executives, founders, and VCs. If you're looking for SaaS-related content or seeking out industry connections, SaaStr is a great option.

3. HITENISM

Hitenism is a blog owned by the SaaS specialist Hiten Shah. He has started three SaaS companies: Crazy Egg, KISSmetrics, and Quick Sprout, which are quite successful. He writes about various SaaS topics in his blog and offers weekly newsletters to subscribers.

4. CHAOTIC FLOW

Chaotic Flow was Started by Joel York, a specialist in the SaaS business model, who spent more than 20 years in this industry. The company specializes in four separate SaaS categories:

- SaaS Marketing
- SaaS Product
- SaaS Sales
- SaaS Metrics

They constantly publish articles covering these topics.

5. SIXTEEN VENTURES

Sixteen Ventures is a business consulting service provider. The company publishes articles related to different SaaS topics, including good SaaS churn rate to emotional disconnect during customer onboarding.

6. FOR ENTREPRENEURS

For Entrepreneurs is voted number two on the Forbes List of 100 Best Websites for Entrepreneurs. They publish articles that help both startup founders and SaaS entrepreneurs.

7. STARTUP SCHOOL

Startup School is specifically focused on helping startup SaaS businesses. They offer a curriculum, a progress tracker to track your business growth, and access to more than $100,000 worth of deals.

8. PREDICTABLE REVENUE

Predictable Revenue is a company that publishes SaaS content in the form of podcasts, webinars, blog posts, and ebooks. They also provide case studies that can help to learn how other SaaS companies have succeeded.

CONCLUSION

It is nearly impossible to cover all the aspects of SaaS, as the market is constantly growing. But, through this guide, you must now have an overall idea of what is SaaS and how the business can be done. This is not a lamp of magic, but it has something in it. Many startups struggle first, but when there's always a chance to become a million-dollar company just overnight — think of Zoom, for example, what it was then, and what it is now.

It may sound appealing to a startup business or someone thinking of becoming a billionaire by providing a SaaS solution. but don’t be fooled enough by following a daydream. If you want to get success in this industry, working hard may not be enough, working smart is the key here. Though the market is growing rapidly, it is becoming harder to find a unique solution. There are lots of examples that startups didn’t make it, even the product of enterprise-level businesses failed to keep up.

Every business has its pros and cons, and so does SaaS. That doesn't mean that you won’t see the face of success if you don’t have a lot of money to invest. A unique idea and solution can grow overnight. You just need to be cautious enough to make the right decision.

REFERENCES

The following references were consulted to create this Super Guide:

- "Definition of Software as a Service (SaaS) - Gartner Information Technology Glossary". Gartner. Retrieved 4 August 2020
- Turner, Brian. "What is SaaS? Everything you need to know about Software as a Service". TechRadar. Retrieved 4 August 2020.
- "What is Software as a Service (SaaS): A Beginner's Guide - Salesforce". Salesforce.com. Retrieved 2018-09-27.
- OECD (2015-10-05). OECD/G20 Base Erosion and Profit Shifting Project Addressing the Tax Challenges of the Digital Economy, Action 1 - 2015 Final Report
- https://www.nytimes.com/1994/08/12/business/attention-shoppers-internet-is-open.html
- Gaw, Jonathan (Oct 20, 1999). "Ladouceur Named CEO of FutureLink". Los Angeles Times.
- Software, Services. "Software as a Service (SaaS)"
- https://www.statista.com/statistics/505243/worldwide-software-as-a-service-revenue/
- https://www.statista.com/statistics/1127593/software-use-organizations-by-type/
- Montazerolghaem, Ahmadreza; Yaghmaee, Mohammad Hossein; Leon-Garcia, Alberto

(September 2020). "Green Cloud Multimedia Networking: NFV/SDN Based Energy-Efficient Resource Allocation". IEEE Transactions on Green Communications and Networking. 4 (3): 873–889. doi:10.1109/TGCN.2020.2982821

- https://techcrunch.com/2018/12/24/remembering-the-startups-we-lost-in-2018/
- https://techcrunch.com/2019/12/26/startups-lost-in-2019/
- https://techcrunch.com/2020/12/22/remember-the-startups-we-lost-in-2020/
- https://techcrunch.com/2021/12/27/remembering-the-startups-we-lost-in-2021/
- https://chiefmartec.com/2020/04/marketing-technology-landscape-2020-martech-5000/
- https://www.techopedia.com/definition/27809/minimum-viable-product-mvp
- https://www.forbes.com/sites/homaycotte/2015/08/25/customer-lifetime-value-the-only-metric-that-matters/?sh=2cb333853876
- https://blog.hubspot.com/service/what-is-churn-rate#:~:text=The%20churn%20rate%20formula%20is,The%20answer%20is%200.04.
- https://www.businessofapps.com/data/zoom-statistics/
- https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/grow-fast-or-die-slow
- https://www.pwc.com/mt/en/publications/assets/pwc-the-future-of-software-pricing-excellence-saas-pricing.pdf

ABOUT THE AUTHOR

Daniel Pereira is a Brazilian-Canadian entrepreneur that has been designing and analyzing business models for over 15 years. You can read more about his journey as a Business Model Analyst **here**.

E-mail Daniel if you have any questions at: daniel@businessmodelanalyst.com
You can connect with Daniel at Linkedin: https://www.linkedin.com/in/dpereirabr/

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