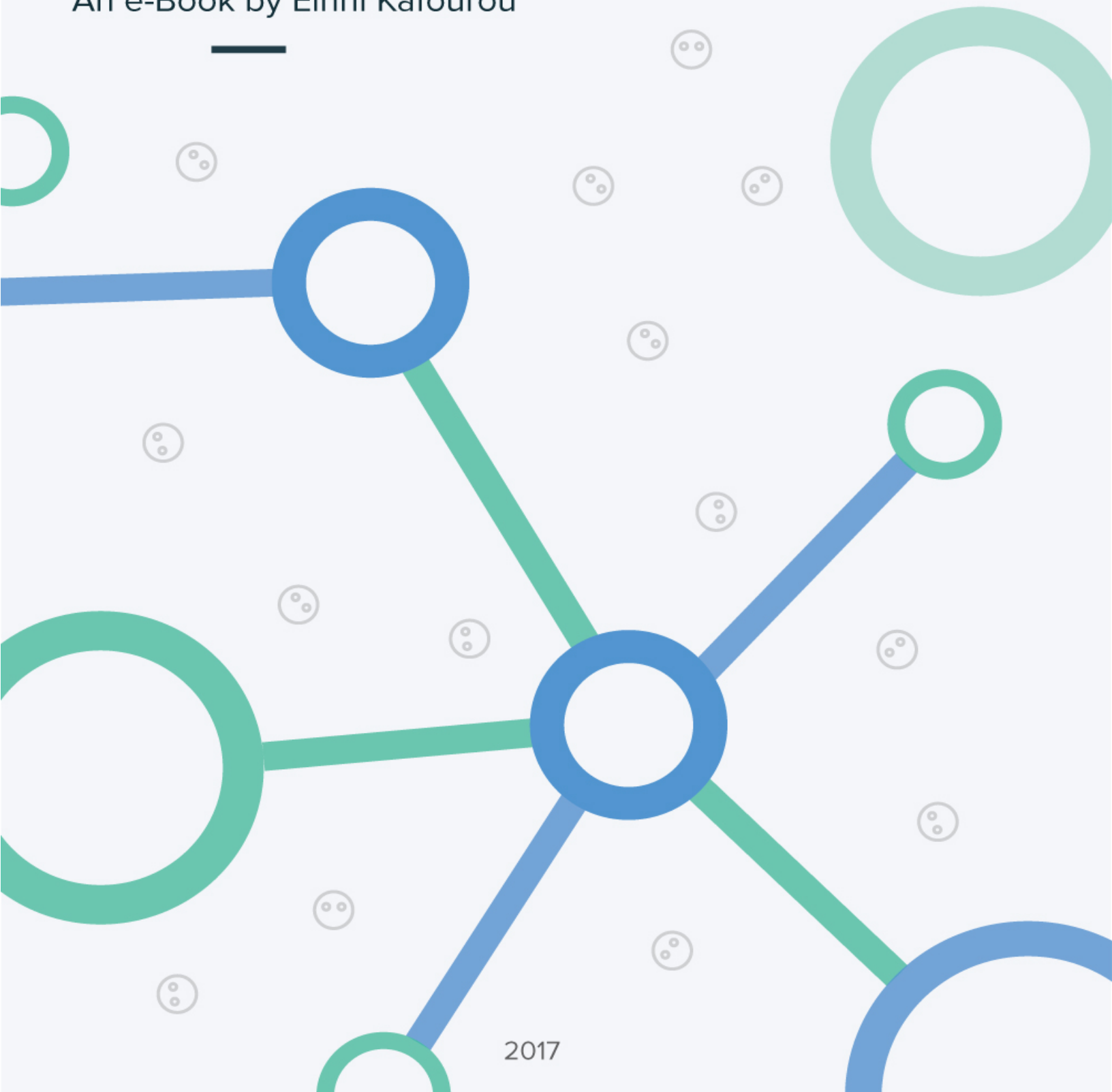
Megaventory on SaaS Churn:
Why Customers Leave?

An e-Book by Eirini Kafourou



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PART I: WHY CUSTOMERS LEAVE

Intro

The main ambition for all starting software companies is to reach out to more new people that will potentially purchase or use their product. This is true even for years after they have built an ample clientele. One may think that this can't be a bad thing, right? Well, the answer is not always a definite "yes". Any up and running business needs to also cater to the needs of its paying customers and continue building the relationship with them. As many studies have shown, it is actually more profitable and cost-effective to keep and satisfy existing customers, rather than constantly attract new ones. [1] [2]

Nevertheless, many companies tend to relax when they see their rate of new acquisitions growing up and neglect addressing those who cancel their subscription. If your company is guilty of this mistake and you are in the SaaS industry, this mini e-book is for you!

However, this isn't to say that this is just another study on how to predict churning customers. So far, most studies on churn have focused on predictive accuracy rather than descriptive explanation. In other words, they have focused on finding methods to predict churning customers and then prevent the churn with various marketing efforts. What few studies investigate is the main reasons why people actually stop using a certain service or product – and it is there that we have decided to work on.

In particular this e-book focuses on our ex-customers; those that stopped using Megaventory's services. After all, customer's past behavior is an important predictor of one's future behavior.[3]

Our main focus in this case study is to find the metrics to predict churn for our software company in order to:

- be able to predict possible churners and take proactive actions to retain valuable customers, and
- understand what needs improvement on the product (features, usability, on-boarding, payment options.

But first, let's define churn.

What is churn?

Most definitions of churn use the activity of a customer and a threshold fixed by a business rule. If the activity of the customer has fallen below the threshold, this customer is considered as a churner.[4][5]

To put it simply, *churn* occurs when a customer stops using a subscription service the customer is subscribed to.

It is worth noting that *inactivity* is not always an indicator of a client who has stopped using the service and is about to churn. Here are a few cases where inactivity taken at face value can be misleading:

- Some times in B2B products customers use services seasonally. For example, quite a few of our customers in Megaventory are retailers who sell primarily during certain times of the year. Therefore, you might see long periods of time, where the customers seem almost entirely inactive without actually intending to abandon the service.
- In other business verticals (such as businesses that sell high-end, luxury items)it is normal to have just a few transactions per year. In these cases inactivity (or rather low activity) is the norm.
- Finally, in certain retail sectors the number of transactions falling from thousands to hundreds per month may be typical – only to rise again the next month. And although this should most likely ring a bell in other cases, professionals in these industries know enough to ignore changes which would seem significant to an outsider. So in such sectors, defining churn status based on really significant changes in the activity is more appropriate.[6]

Another important metric to consider is the *churn rate* which, when applied to a customer base, refers to the *proportion* of contractual customers or subscribers who leave a supplier during a given time period. In other words, churn rate is the number of the customers you lost over the number of customers you initially started with.

This is important because churn is a possible indicator of overall customer dissatisfaction, cheaper and/or better offers from the competition, more successful sales and/or marketing by rivals, or reasons having to do with the customer life cycle.[7] As resources and time are limited, knowing where you fall behind, you can allocate your team members and funds where it will matter the most.

Who stays?

To understand why subscribed customers decide to stop using your service, you should also check the characteristics of the customers who decide to stay. These customers can reveal what is done right and help you highlight it. Also, these are your most serious customers so finding who they are and what their needs are will also help you focus your marketing efforts towards businesses with similar characteristics.

According to previous studies,[2][8][9] customers that continue their relationship with a company have two main characteristics: they pay more and they pay more frequently.

- *Purchase amount*. Customers who have a higher commitment are also likely to seek greater relationship expansion and enhancement.[8] In other words, if a consumer devotes a larger share-of-wallet to a firm, the bond should be stronger.
- *Average interpurchase time*. When the interaction frequency between people increases, their bond grows stronger.[2] As long as the interactions are satisfactory, frequency of interactions can lead to great trust, which in turn leads to longer relationship duration.[9]

Why customers leave?

In the recent literature, there is a variety of reasons that a paying subscriber might cut their business ties with you. The eight most common reasons are listed below:

1. Bad customer service. Contrary to what you may think, even if customers are satisfied with your product, they might still seek an alternative if they feel they are not treated right. According to a classic study by the research firm CRMGuru, customer service is *three* times more important than price and *five* times more important than functionality.[10]

2. Poor on-boarding experience. New customers do not only provide money to fuel your product; they also invest time and resources to learn to use it and set it up according to their needs and preferences. If this time seems impossibly long due to poor on-boarding (from absent to overwhelming), your customers would probably feel that they have to invest more than they will get back by switching to your solution.[11]

3. Missing feature. Even if your solution seemed like a good fit at start, as your customers use your solution, they may discover that it is missing an important feature. If there are no alternatives within their budget, they might stick with you for a while. However, if the feature is not implemented or a workaround is not provided, eventually they will start seeking an alternative.

4. Usability issues. Different customers have different needs. When designing and updating your software you need to ask: is the user interface right for all the users within a business and across

various industries? If the interface is not user-friendly-especially for the decision-makers- they might feel that it is not worth using it.

5. Bugs or other technical issues. Software companies rush to launch products with as many features as possible over a very limited time. This usually results in a globally incomplete product with many software bugs. As a general rule, if there are bugs and other technical / usability / user access issues keeping the customer from doing what they need to do, the customerwillsoon enough get disappointed with the solution. [12] Moreover, if your software is a B2B product critical to company operations which your customer is using regularly to provide products and services to their customers, chances are their frustration will build up if something breaks as they are probably directly losing money.

6. Unexpected Inconveniencies. If your customer base used to have your service under a freemium plan and suddenly have to pay $50 a month, chances are that some of them will opt out.[13] Another similar example is when a customer experiences difficulty in payment (for example, when your payment gateways are not accepting some payment methods). As regulations change and especially if you have an international client base, your customers might find themselves unable to pay you, if you don't offer adequate alternatives.

7. No Loyalty Programs. As stated before, customers like to feel valued. And if you don't happen to own one of the few monopolies, your customers *do* have alternatives. If there is no loyalty program or initiative in place, it's possible that your older customers might start feeling that the love is not mutual. And to an extent that would make sense if they don't get some kind of reward or discount for their continuous preference in using your services.[13]

8. Customer-related issues. Finally, it is not uncommon that, even if everything is done right, some customers will simply stop using your service. With more than 90% of new business failing in their first years[14], your customers might go out of business and no longer need your service. Moreover, they may face a financial difficulty and decide to cut down on their budget. In some cases, even a change of management can put your service out of use.

ways, depending on the customer's paying status. For churned subscriptions, we measured that time from the company's first payment until the date the subscription stopped. For accounts that were still active on the 31st of December 2016, we calculated the time from their first payment and up to the 31st of December2016.

Company Inactivity. According to the literature [4] [5], inactive users are the most probable to churn. To measure the "inactivity" of an account, we created the variable "Company Inactivity". We defined it as the time between the date a subscriber last accessed the software and their subscription expiry date. Note that for a number of churned subscribers we did not calculate this variable (and assigned it as*Missing Value*for them) because they briefly accessed the software after it had expired (we allowed them access to view their records). This exception did not affect other variables.

Days from Last Payment to Expiry. According to previous studies, an increased frequency of interactions might lead to greater trust which should in turn lead to a longer subscription duration. We expect that customers who pay long before the upcoming expiry date might be more likely to churn when the time to pay again comes. The assumption here is that the longer someone withholds pay, the more interactions they pursue with Megaventory before they are convinced of its value and when they do purchase they are committed.

Number of Users. The number of people that use the software under the same business entity is a good indication of a business' size. This may have various interpretations. For one thing, the bigger a company is, the more steady it is in terms of being able to continue supporting the payment of its tools. For another, bigger companies are in greater need to use a solution to manage their processes.

Number of Locations. Again the number of different locations (warehouse, store-fronts, manufacturing facilities) a company has is indicative of its size.

Number of Products. The number of different product codes in Megaventory maybe an additional indicator of a company's size. At the same time, it can also provide insights as to whether Megaventory's interface can handle complex information such as large lists of products. In the case this isn't possible, clients may leave the service specifically for the

reason that they cannot properly handle their catalogue (which could in turn be an indication for us that we need to redesign some parts of our platform).

Number of Suppliers and Clients. For the same reason, the number of Supplier and Clients can be indicative of a company's size and the complexity of their account info.

Number of Transactions per Day. This variable can be indicative of how "busy" a company is. To measure this, the total number of transactions (goods shipments and goods receipts) is divided with the number of subscription days.

Use of Bookmark Cards. One of Megaventory's most prominent features in terms of usability is the collection of elements we refer to as *Bookmark Cards*. A new account comes prepopulated with a few Bookmark Cards. As this feature is a core part of the Megaventory software, a client who doesn't use it is probably missing a very valuable feature. In addition to this, if users do create their own cards, we assume this is an indicator that they have understood how Megaventory works to a significant extent and are willing to use it to its full potential. This is a binary0/1 variable and we decided to associate the creation of at least *two* new cards with "1" and the creation of *one or zero* bookmark cards with "0".

Use of Saved Reports. Another feature of Megaventory is a report generator that provides users with the ability to create and save their own report views. Again, this is a binary variable: a "1" represents that at least *two* custom reports exist in the software and "0" for having saved *one or zero* such reports.

Reported missing feature. In the current analysis, we count the requests for missing product features. To account for those customers that did realize that a feature was not available but never mentioned it, we also introduced a separate value as "Not mentioned". So, this discrete variable has three values: "Not mentioned", "nice to have", for users they expressed they want a feature that is missing, but continued paying their subscription anyway, and "must-have" for users that stopped paying their subscription in 2016, after they have expressed their desire for a feature that was missing.

Reported bug or issue. Again, this is a binary0/1 variable that refers to at least one mention of a technical (not usability) bug. We assume that there might be customers that came across a

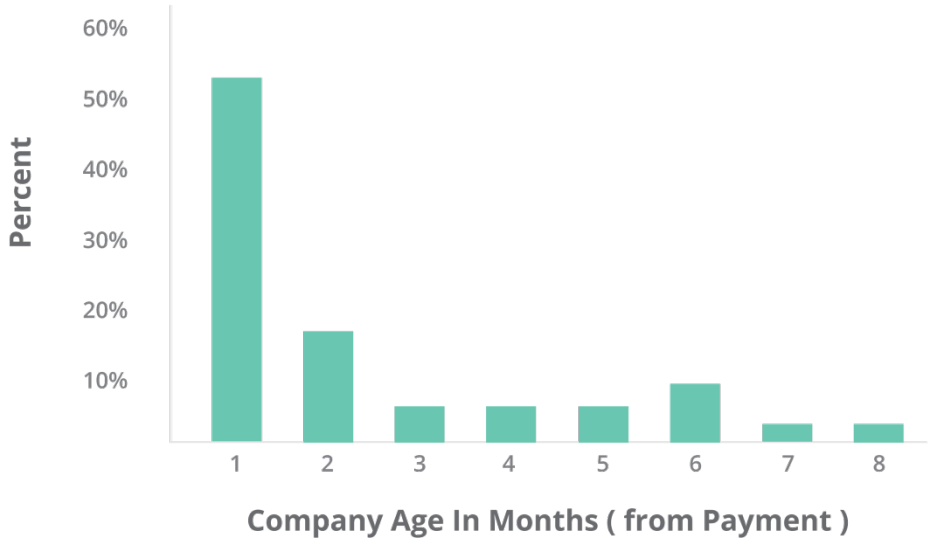
bug or technical issue and never mentioned it but we are unable to include these customers in our analysis.

Findings and Discussion

The results of our research indicate that the main factors for 2016's churn are *on-boarding* (the process in which a new customer becomes acquainted with the product) and *company size*. To avoid overcomplicating this section of the e-book we will only discuss the variables that showed some correlation with the paying status. The correlation tables of the other variables are available the appendix. So, let's see each strongly correlated variable in more detail.

1. Time to cancellation

How long do customers stay before they stop renewing their subscriptions? As seen in the following graph and frequency tables(note that these include the one-month accounts too – contrary to other mentions in this e-book)**, 70% of churned accounts pay for only one month or two. As mentioned before, time to cancellation usually tells if there is an on-boarding problem which means that people leave because they can't get their data up and running with the software**. Running a Spearman Test[1] to check whether there is a positive correlation between Status and Company Age we see that correlation is significant at 0.01 level, backing our observations.



[1] A Spearman Test or Spearman's correlation coefficient measures the strength and direction of association between two ranked variables.

According to the suggested approach, accounts of one month should not be taken into consideration in churn research because quite often these are actually “extended paid trials”. Namely, it is possible that a customer didn’t have the time to properly test the software during the 15-day trial and decided to purchase the smallest package to experiment with it a little more. As our focus in this e-book is the reason why actual paying customers decide to stop using the system, (and not why trial accounts do not convert to paying customers), we excluded all accounts which had an account age of one month.

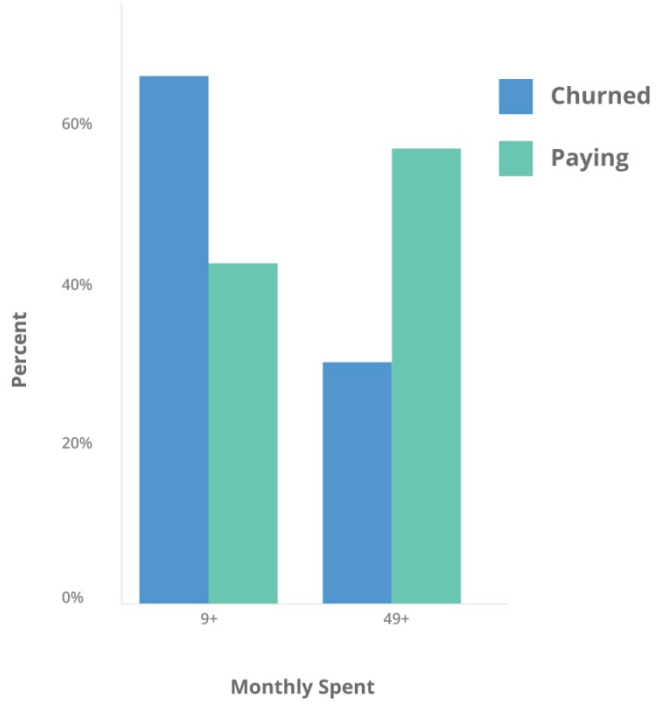
Company Age in Months (from Payment)

Valid	Percent
1	52.5
2	17.5
3	5.0
4	5.0
5	5.0
6	10.0
7	2.5
8	2.5
Total	100.0

2. Pricing Plan and number of Users

As most of our older customers are under the more expensive packages we assumed that churn might be associated with the pricing plan. As seen in the following graph, 68% of the churned accounts were under the most inexpensive plan, the Starter ($9,9/mo).

Again, a Spearman Test indicated that there is a positive correlation, at the 0.05 level, between the status of the account (churned or paying) and their monthly subscription. This finding is in accordance with previous research. [6]

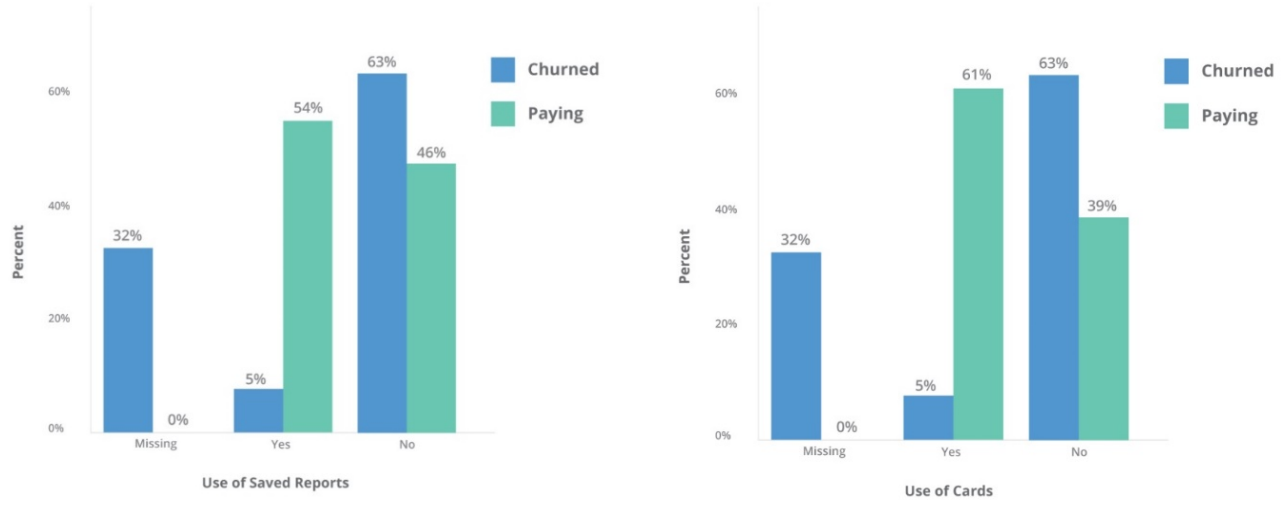


This can indicate that more established companies are more likely to turn to paying customers. An explanation to that can be that employees in larger companies are usually more experienced in using advanced tools and systems, and might need less help as far as on-boarding is concerned. On top of that, a more established company may already have an experience in using ERP tools, and thus it is easier for them to understand how to use Megaventory.

3. Use of features: Cards and Reports

A very common reason why customers stop using a software solution is that they fail to understand how to use it. To test that we picked two of our main features, *Bookmark Cards* and *Custom Reports* and examined how much these features were actually being used by our customers and if this usage metric could predict churn.

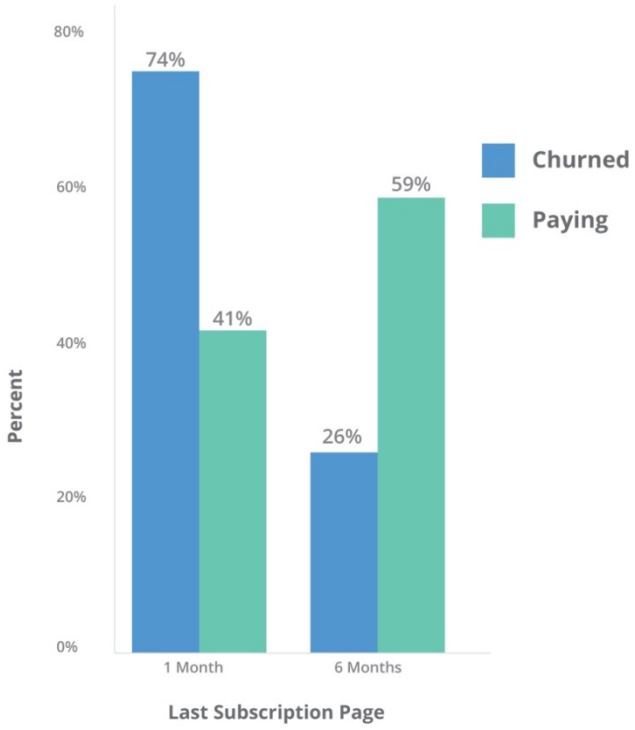
As shown in the following graphs, more than half of the paying accounts use the bookmark cards (61%) and custom reports (54%). On the other hand, very few churned accounts made use of cards (5%) and reports (5%).



Running a Spearman test for the above shows a significant positive correlation between churn and the use of Bookmark Cards and Custom Reports.

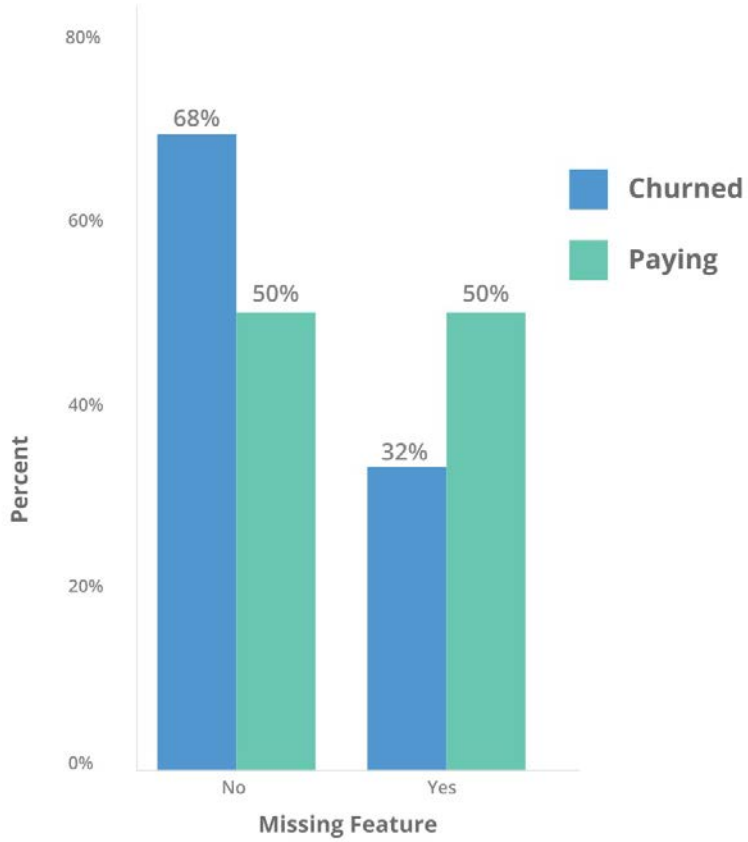
4. Last Subscription Package

As shown in the graph, 74% of churned customers opted for the 1-month subscription in their latest purchase, meaning that customers who choose a 6-month subscription are more likely to stay. A Spearman test further backs this observation, showing a positive correlation between the paying status and the last subscription package, significant at the 0.05 level.



5. Missing Feature

In the following graph we can see that 32% of churned accounts and 50% of paying customers have requested a missing feature.



There is no significant correlation between the paying status and the request for a missing feature, according to a Spearman Test, based on our existing dataset. Note however that32% of the churned accounts had requested a missing feature right before they stopped their subscription. This leads us to believe that that percentage of customers requires additional research and attention.

Another reason for this result might be that we examined *requests* rather than actual cases that a customer misses a feature. It is possible that customers who have invested time and resources in the software are more vocal about their needs, in comparison to those who are about to leave.

6. Reported bug or technical issue

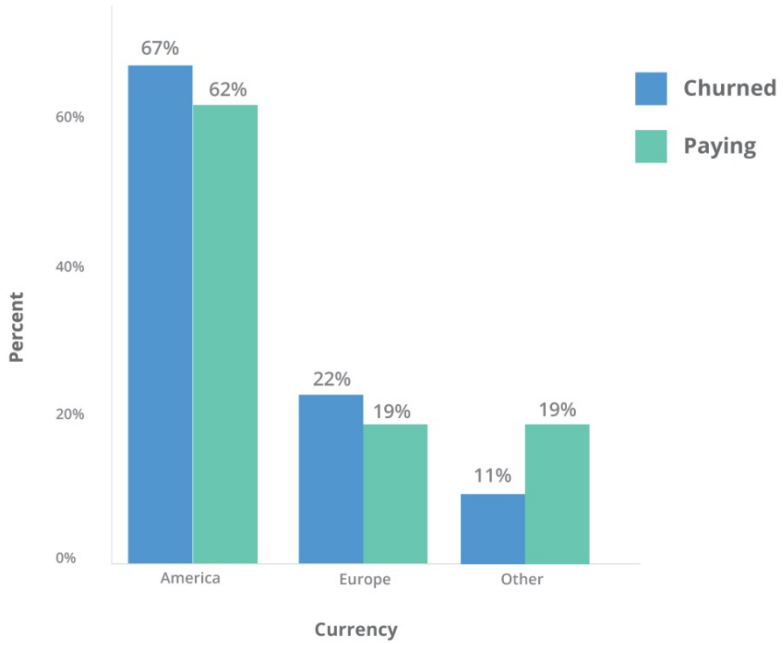
46% of paying customers have reported a bug or issue that, most of the times, was fixed. A Spearman Test indicates that there is no significant correlation, though.

Why so many customers report a bug yet continue paying for the software, can be explained by the existing literature that claims that it must be taken into account whether the customer uses negative or positive words in their complaint. A customer who uses positive words does not want to punish the company and is more likely to be even more satisfied when their problem has been solved quickly. [15]Also, dedicated customers are more likely to report a bug compared to those who are about to churn, because customers who have invested time and resources in the software are more vocal about their needs.

7. Demographic factors

The last factor we considered was the geographical location of the business. As shown in the graph, churned and paying account are evenly distributed among the various geographical locations.

We conclude that socio-demographics do not play an important role in explaining churn in this study which confirms the finding of previous studies. [16] [17]



Conclusions

The results of this analysis indicate that certain company characteristics, namely company size and the level of completing on-boarding activities constitute important factors for Megaventory's churning cases.

Results show that accounts with a higher number of users, more expensive subscription plans, and longer periods of use, are the most likely to continue using the software. The reason behind this might be that employees in larger companies are usually more experienced in using advanced tools and systems, and might need less help as far as on-boarding is concerned.

This view is further backed by results that showed that churned accounts made a very limited use of the features under research. This leads us to believe that more effort is needed to make sure that new customers have fully understood how Megaventory works and use it to its full potential.

On the other hand, the fact that a large number of customers who reported a bug or a missing feature continued paying their subscription fees, indicates that those are not serious reasons for churning.

All the above lead us to conclude that in Megaventory we need to focus on improving the on-boarding processes. That's especially true for customers who have no previous experience with an inventory management system or an ERP software in general.

We hope that this case study can inspire you and help you better measure and understand why your customers may stop using your software. After all, it is your customers -and not your leads-that make your business successful; so make sure to pamper your customers and keep them satisfied throughout their subscription period.

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Appendix

Find all the correlation tables in this link: goo.gl/fQ8UG1

Credits

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