INSIGHTS
SUBSCRIPTION ECONOMICS

April 2020

THE COMEBACK POWER OF SUBSCRIPTIONS

As outlined in our previous “Thematics Insights”, we think it makes sense to dive a little deeper into the economics of a subscription and its real value. We have already identified several reasons why both consumers and businesses are subscribing more and more to products and services. But obviously there are also strong incentives for vendors to propose subscription services to their customers.

First and foremost, we know that subscriptions are the best way to monetize services or products that will be used regularly and frequently. Subscriptions also allow vendors to bring new offerings, new content or new updates to their clients more often. Obviously, this results into tighter relationships between vendors and buyers and higher customer loyalty.

The second reason is a financial one. Selling subscriptions is a very attractive business model. A subscription gives you access to a service or a product for a certain time period, usually in monthly or annual increments. If you want to continue using the service, you will have to renew your subscription for another month or another year. Each time you renew it, this creates revenue for the vendor. The vendor therefore benefits from recurring revenue that is generated at every subscription renewal. This provides high visibility into the revenue stream of a company, especially when many people renew their subscription, or, in other words, when renewal rates are high. The vendor can then plan its expenses accordingly, in particular research and development spending, with greater confidence and develop higher quality services or products. This is the virtuous circle both buyers and vendors benefit from.

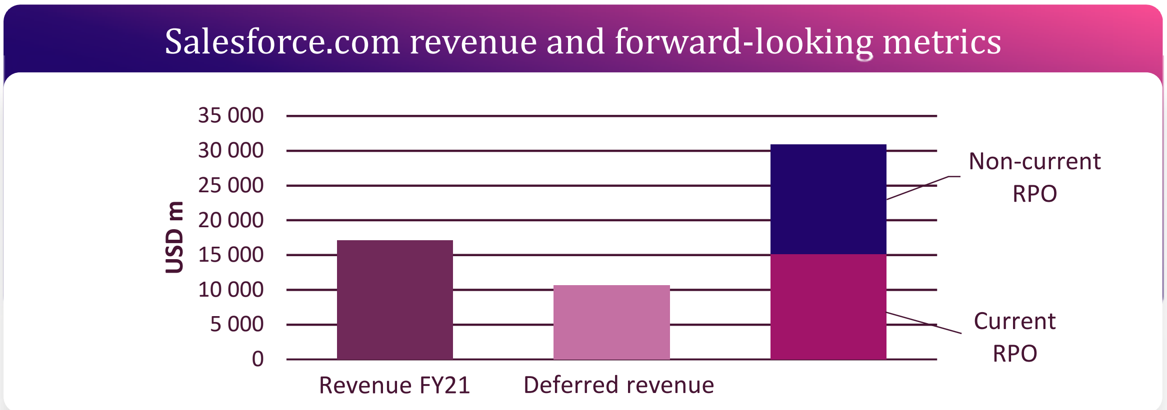
By way of illustration, let’s first contemplate what we refer to as the Product Economy, a model where companies sell a product at an agreed price. One transaction and it’s done. The company doesn’t know whether the customer will buy more or when he will replace the product if at all he does. The vendor has no visibility and every year the process starts all over again with the vendor needing to sell new products to generate additional revenue. The company doesn’t benefit from a recurring revenue stream.

Now, let’s have a look at a company that sold for $100m worth of subscriptions in 2019. Let’s imagine that on average 75% of its customers renew their subscription. Based on our analysis 75% is close to what a company selling services or products to consumers will achieve on average. This results in $75m of revenue that will flow into the P&L statement for 2020, without even prospecting new clients. Imagine the advantage that greater visibility represents for a company in relation to long term business development.

Subscriptions also have a beneficial impact on working capital. Do you know what period your latest monthly Netflix subscription bill was for? It was for the month that followed your payment. Most subscriptions are indeed paid in advance, meaning for a service that will be rendered in the future. In the business-to-business space, where annual subscriptions are more prevalent, vendors collect the cash for a service that will be performed over the next 12 months. Subscription vendors collect cash even before they start recognizing revenue!

Salesforce.com is a cloud-based company that sells customer relationship software. It was one of the first Software-as-a-Service companies to sell the access to its software through a subscription. Salesforce.com disclosed that at the beginning of a new year, about 50% of its revenue had already been paid for and will, whatever happens during the year, recognize that revenue. Obviously, this is classified in the balance sheet of the company as cash collected. It is a liability called “deferred revenue”. In its latest annual report, salesforce.com reported $17.1bn of revenue and $10.7bn of deferred revenue at the end of the year. The $10.7bn of revenue recognized this year has already been paid for. Some companies now even disclose future revenue under contract that has not yet been recognized as revenue, this is called “Remaining Performance Obligation” or RPO. This includes both paid and unpaid contracted revenue. Salesforce.com’s RPO at the end of last fiscal year was $15.1bn to be recognized in the next 12 months or 75% of its expected revenue for 2021. This is current RPO. There is another $15.8bn of RPO that will be recognized from month 13 and onwards. In total, this is $30.0bn of revenue that is contracted and will be recognized in the future.

This provides insight on the level of comfort that subscriptions deliver to a company’s business model



Source: Salesforce.com, February 2020

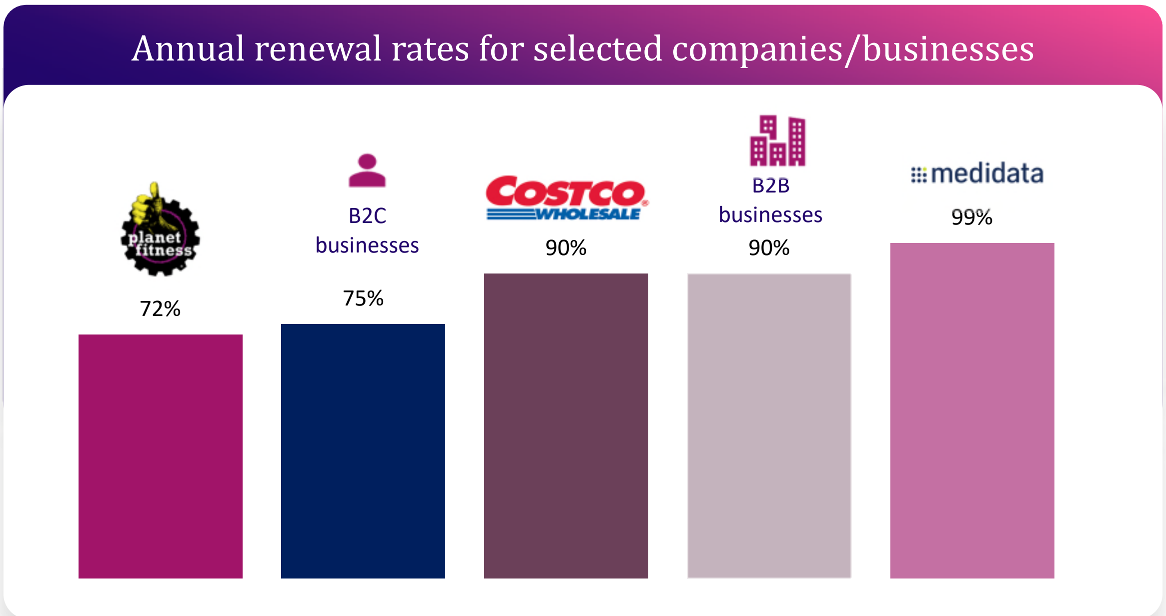
SUBSCRIPTIONS 101: THE IMPORTANCE OF RENEWALS

Renewal rates are the most important factor in providing visibility for a subscription-based model.

There is a whole range of different observations depending on who the subscribers are, the competitive positioning of the vendor and clearly the value of the service provided. Some companies operate at renewal rates as low as 40% while others are close to 100%. When you include pricing (a $100 subscription may cost $102 the year after if the vendor increases prices by 2%), some companies even manage to show retention rates that surpass 100%. In that case, it means that higher prices offset subscribers not renewing their subscription. The following numbers will however not include the pricing effect.

We first distinguish between companies that sell to consumers and those that sell to businesses. On average, business-to-consumer vendors enjoy renewal rates that hover around 75%. This is what we usually observe for video streaming services, high-quality fitness clubs or media subscriptions. Subscription-based meal kit delivery or personal shopping platforms operate at lower renewal rates while CostCo for instance, the club warehouse, has renewal rates that attain 90%.

In the business-to-business space, renewal rates reach 90% on average. In the consumer space, rates mostly depend on the product that you are selling. In the business space, this is different. It depends more on the client type than the product itself. Companies selling to small and medium size businesses (SMBs) will see lower rates as the proportion of clients going out of business is greater. On the contrary, vendors exposed to large enterprises will enjoy a much lower churn. Medidata Solutions, acquired by Dassault Systèmes in 2019, provides a software used to run clinical trials. Its customers mostly include large pharmaceutical companies. As a result, churn is very low with close to 100% annual renewal rate



Sources: Company reports, Thematics AM, April 2020

Competitive positioning also has an impact on renewal rates. Some of these services may be crucial for subscribers for their daily work activity. This is especially the case for information service providers that we described in our previous “Thematics Stories” feature. Their competitive positioning is so strong that renewal rates are rarely below 90% even though they raise prices regularly. On the contrary, some services are more difficult to differentiate. Music streaming services are forced to find ways to customize their offering with podcasts for example as music content in itself is exactly the same for every provider. Weaker competitive positioning can therefore lead to lower renewal rates, or in other words, higher churn.

Low renewal rates per se are not necessarily a bad thing and it doesn't mean such vendors cannot be successful. However, it does mean that vendors will need to adapt their sales process. As the value of the subscriber is lower, involvement of salespeople should be as minimal as possible and self-service models where clients subscribe online by themselves are prioritized. Intuit, a provider of accounting solutions for SMBs, has been very successful penetrating this type of clients. It now runs a $3.5bn business almost exclusively made up of SMBs[1].

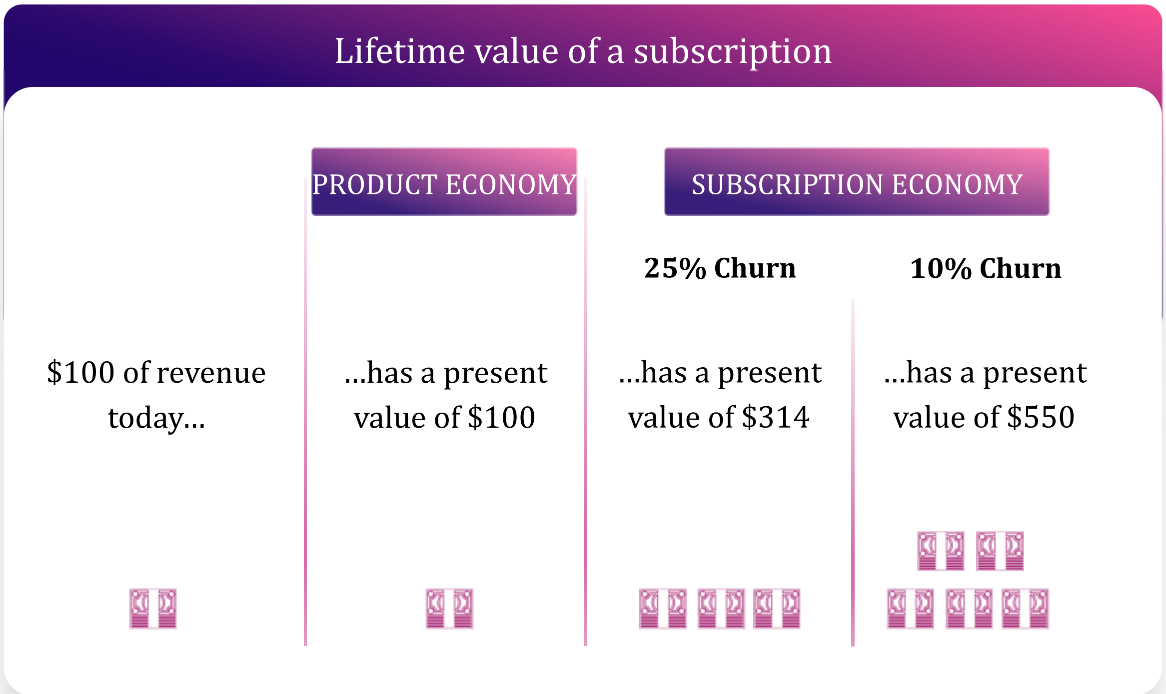
On the other side of the spectrum, selling to large enterprises with thousands of employees brings the benefit of much higher renewal rates. Large enterprises are obviously less affected by bankruptcies. In addition, for such companies, changing provider may involve operational risks. This is why this is a much stickier customer base. However, this often comes at the expense of lengthy sales cycles that can take several months. It often includes competitive bids and proof-of-concepts that the service or product will work as intended and is not putting any existing business at risk. Furthermore, such projects also involve heavy IT integration with existing systems. In summary, those deals are most of the time very profitable but winning them may prove expensive. Again, some companies focus almost exclusively on this customer segment and have become real specialist. Workday, a provider of human resource management software is one of them.

SUBSCRIPTION VALUE

Through the average renewal rate of a subscription, it is possible to compute the present value of a given subscription. In the Product Economy, $100 of revenue sold today has obviously a present value of $100. In the Subscription Economy, if on average 75% of subscribers renew each year, in other words a subscription with 25% annual churn, the revenue stream will be $100 the first year, $75 ($100 x 75%) the second, $56.25 ($75 x 75%) the third and so on. This creates a revenue stream that extends into perpetuity. Using a discount rate of 10%, we can calculate the present value of each of this revenue stream and sum them up. This results in a present value of $314, or more than 3x more valuable than a product sold in the product economy. Now, if the vendor is able to reduce the churn rate from

[1] Intuit FY19 « Small Business & Self Employed" segment revenue, source: Bloomberg.

25% to 10%, the present value of the revenue stream surges to $550. Improving churn may be as important as finding new clients.



Calculations performed by Thematics AM,using a 10% discount rate

This obviously impacts reported financials of a subscription-based business. While in the Product Economy, all sales-related revenue is recognized in year 1, this is not the case in the Subscription Economy as the related revenue stream extends over the life of the subscriber. Companies spend on sales and marketing to acquire new customers. If you know that on average your subscriber has a lifetime value of $314, you are happy to spend $150 on sales and marketing to acquire that customer as over the life of the subscriber, you will still have spent less than 50% on sales and marketing. However, in your annual report of year 1, it will show a loss of $75 or a negative EBITDA margin of 75%. You can see the details in the table below assuming 85% gross margin and other costs of $10 that don't depend on new customer acquisition such as research and developments and general and administrative costs. But from year 2, as the company doesn't have to spend on sales & marketing anymore for this specific client, EBITDA margin jumps to more than 70%, proving to be a very profitable business model.

Impact of subscriptions on financials

	Year 1	Year 2	Year 3
Revenue	100	75	56.25
Gross profit	85	63.75	47.81
Sales & marketing costs	150	0	0
Other costs	10	10	10
EBITDA	-75	53.75	37.81
EBITDA margin	-75%	71.7%	67.2%

Assumptions: 75% renewal rate, 85% gross margin, $150 cost to acquire customer, $10 of other costs

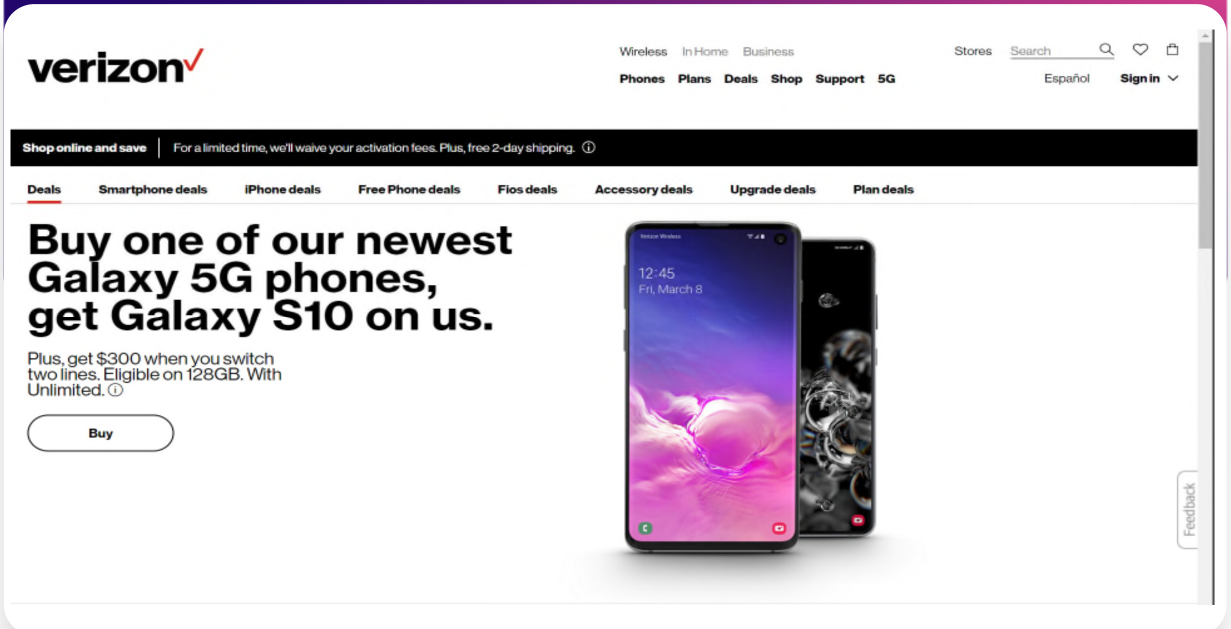
For illustrative purpose only

Relatively young companies that are still in growth mode have obviously more subscribers that are first year clients, which has a material impact on the company profitability. However, relatively mature companies where a large proportion of revenue is driven from customers acquired in previous years should benefit from relatively high margins. This is why companies showing high renewal rates usually trade at higher multiple even though they have weak profitability. When they mature, they have higher margins.

On the negative side, companies that highly depend on new customers and have low renewal rates need a very efficient sales model to survive as they have a lower customer acquisition budget if they want the subscriber to be profitable. Customers that renew subscriptions year after year are very profitable which is why all subscription-based companies try to improve their retention rate.

Have you ever wondered why your telecommunication operator was ready to offer you a smartphone and a 12 months plan at a discounted price but was making it extremely difficult to cancel your subscription? This is exactly the calculation that they are making. They have models that would predict renewal rates with which they can value how much you are worth and how much they can spend to acquire you.

Verizon offers free phone and $300 for new subscribers

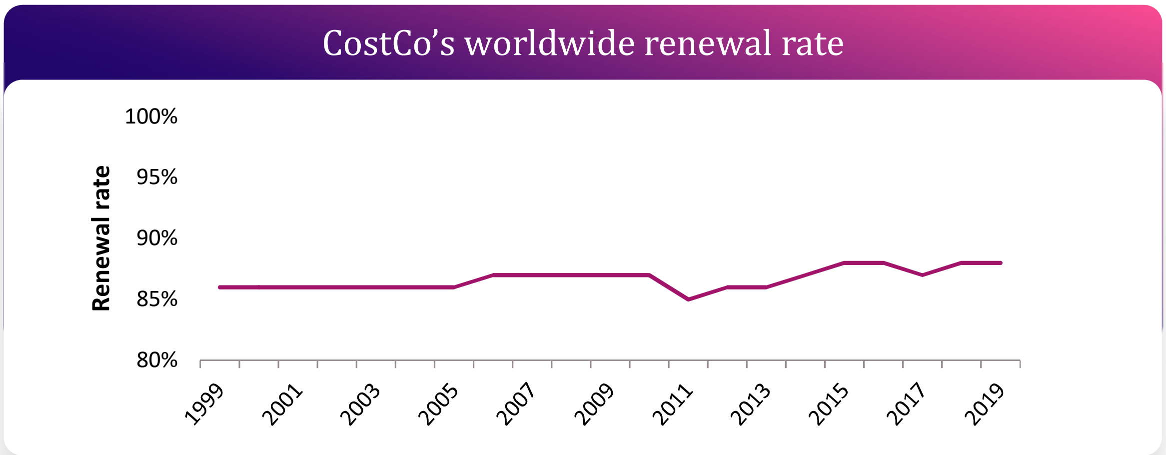


Source: Verizon Wireless website as of April 1st, 2020

CYCLICAL OR NOT?

One of the questions we often get is; are subscription-based businesses more or less cyclical than traditional businesses? While it would be foolish to say that these businesses are immune to any cyclicality and are recession-proof, some elements definitely make them more resilient than the rest of the economy.

When the economy weakens, individuals have to cut spending. While you may have changed phone every other year, you will probably extend the life of your current phone and change it only after three years or even longer. By extending the lifetime of your phone, you are saving on some expenses and at the same time, you can still use your old phone even though it may not have the latest technological innovations. This is however different when it comes to your communication plan. If you stop paying it, your phone isn't working anymore. No more calls, no more messages and no more Internet connection. So, yes, you may move to a lower priced subscription, but you keep spending on your telecom operator. This is why this would be less impacted by a recession. CostCo, the club warehouse has seen its renewal rate remain broadly stable even during difficult periods. Clients may spend less in the warehouse if needed, but they remain a CostCo member.



Source: CostCo annual reports

Over the last 10 years, software has gradually shifted from a license to a subscription model. In the past, when buying a license, you were basically acquiring the software which you could use indefinitely. In case a company had to cut IT spending, you could again just wait before upgrading to the latest version of the software and continue using your current license. Now, companies are subscribing to software services. If you stop paying Microsoft Office 365, the subscription-based version of Microsoft Office which is now mostly used across companies, your employees don't have access to Microsoft Outlook or Word anymore!

While this brings some resiliency to subscriptions, they are not completely immune in case of recessions. Your clients may go out of business and therefore stop paying subscriptions for their employees. Some will also move to lower priced subscriptions or reduce the number of subscribers they have to a specific service. This is especially true when companies have to lay off employees that will of course not subscribe anymore to the service. In some severe situations, we have also seen companies offering discounts over a couple of months to help their own clients survive crisis. Remember, it is always easier not to lose a client rather than having to reacquire the same client a few months later. It always comes down to extending the lifetime value of a customer while minimizing the acquisition costs.

While we have strong growth drivers in place that are supporting the growth of the subscription economy, the attractiveness of the business model is also pushing vendors to adopt this model and propose subscriptions to its clients. Highly recurring revenue bring high visibility into the future financials of a company as well as resiliency.

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Sam Richmond-Brown is a Client Portfolio Manager. Sam has over 13 years of experience and has held a variety of product development and product management roles based in London, Paris and Boston. In 2011, Sam joined a quantitative investment division as an investment specialist servicing the needs of a broad client base across the globe. Sam then relocated to Boston in 2014 with primary responsibility for designing, promoting and distributing investment capabilities in the US market. Sam relocated back to Paris in 2017 and most recently oversaw business development at the group’s outsourced trading desk.

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