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Buy-now Pay-later: Business Models and Market Overview

MASTER THESIS IN
MANAGEMENT ENGINEERING

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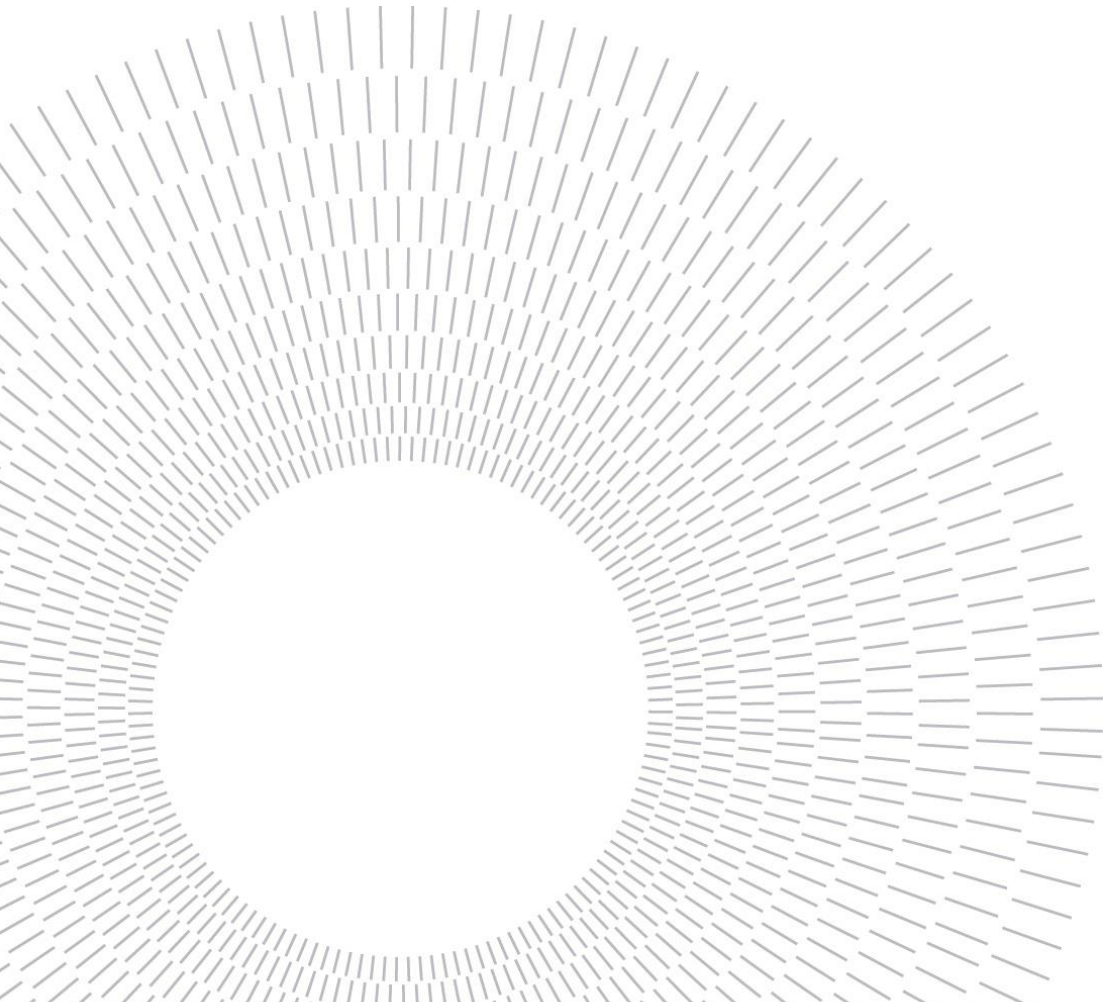

Abstract

This study is an overview of Buy-now Pay-later, also known as BNPL. Buy-now Pay-later consists of an instrument to finance purchases at the point-of-sale, a relatively new trend in the consumer market that has rapidly gained force in the last 5 years. The current thesis is focused on the identification, assessment, and classification of the BNPL products available on the market, aiming at spotting and describing the main business models embraced by providers. Most of the literature about BNPL has focused on macro-trends and future prospects; this thesis, instead, completely shifts to a thorough analysis of the products and how they are shaping the market. Throughout the product census and analysis, six business models were found: short-term merchant subsidized credit, industry-specialized BNPL products, BNPL Marketplaces, and merchant-managed BNPL solutions. The characteristics and peculiarities of each business model are discussed and some remarks for future investigations are done.

Keywords: BNPL, fintech, installments, payments, point-of-sale, merchant, shopping, DTC, business model.

Abstract in lingua italiana

Questo studio è una panoramica del Buy-now Pay-later, noto anche come BNPL. Buy-now Pay-later consiste in uno strumento per finanziare gli acquisti presso il punto vendita, una tendenza relativamente nuova nel mercato dei consumatori che, negli ultimi 5 anni, ha rapidamente acquisito forza. La presente tesi è focalizzata sull'identificazione, valutazione e classificazione dei prodotti BNPL disponibili sul mercato, con l'obiettivo di individuare e descrivere i principali modelli di business abbracciati dai fornitori. La maggior parte della letteratura su BNPL si è concentrata su macrotendenze e prospettive future; questa tesi, invece, si sposta completamente su un'analisi approfondita dei prodotti e di come stanno plasmando il mercato. Durante il censimento e l'analisi dei prodotti, sono stati individuati sei modelli di business: *short-term merchant subsidized credit, industry-specialized BNPL products, BNPL Marketplaces, e merchant-managed BNPL solutions*. Per concludere, vengono discusse le caratteristiche e le peculiarità di ciascun modello di business e vengono fatte alcune osservazioni per future indagini.

Parole chiave: BNPL, fintech, rate, pagamenti, punto vendita, commerciante, shopping, DTC, modello di business.

Contents

Introduction

The global payment sector is a changing and prone to disruption environment. The market is demanding more flexible, dynamic, and performing payment methods and customers are looking for alternative ways of credit.

The current trends of the industry have been shaped by an increased appetite for digital services partly driven by the eruption of COVID-19. As Capgemini (2021) mentions, from a user perspective, there is a growth in the affinity with B2B digital payments, a tendency to share personal data and a propensity to try new digital products.

To cope with this, retailers feel the pressure to transform digitally, incorporate new technologies and maintain a diversified payment trail (Capgemini, 2021). This ecosystem has been attractive for the emergence of new platforms, players, and the creation of new business models to satisfy the needs of both providers and customers.

In this sense, buy now pay later is one of the new products that gained a lot of force in the previous years and came out as an alternative to credit cards and as a solution for customers that are keen to explore new credit options, especially the under 30.

Buy now pay later, also known as BNPL is a response to the traditional ways of credit by moving financing at the point-of-sale usually interest free or below the interest charged by common lines of credit. This is interesting for the merchants because it seems to increase the average order value, attract new consumers, favor cart conversion and foster engagement and customer retention not only for individuals that struggle to access credit but also for those who are willing to have control over their expenses without unexpectedly harming their budget.

In other words, BNPL is a short-term finance product that allows customers to purchase in installments (Blackbullion, 2021) at an agreed payment schedule and generally accruing either no interest or below the market interests, which make them more flexible and especially attractive for consumers that may not be able to get traditional lines of credit. (Congressional Research Service, 2021)

The profile of a BNPL provider is usually tied to a technological environment as most of the solutions are online and most of them are start-ups or fintech companies (Congressional Research Service, 2021). It is not common to see traditional banking involved directly in BNPL mainly because a disruptive wave like BNPL is usually

leaded by new ventures and due to the fact that retail banking is a sector where product innovation has been embraced very slowly with products like mortgages and saving accounts barely changed in decades (Exton Consulting, 2021)

When shopping online and in-store, buyers are increasingly using innovative payment solutions and BNPL solutions are among the most popular. However, there is still little research into BNPL's business models, the actual number of BNPL solutions in the market and their real impact on buyers' behavior, sellers' sales, and the payment industry as a whole.

From an academic perspective buy-now pay-later has not been a widely researched topic. In fact, as Figure 1 shows the first documents related to BNPL date back to 2001 and until 2010 there were less than 2 publications per year, suggesting that the topic has barely been subject to investigation and possibly not extensively available as a product.

However, publications are showing and increasing trend from 2017 with a peak of 8 publications in 2021. This is aligned with the fact that most of BNPL solutions available in the market have been launched from 2014 and on, as will be shown in this study, raising the interest from the academic community.

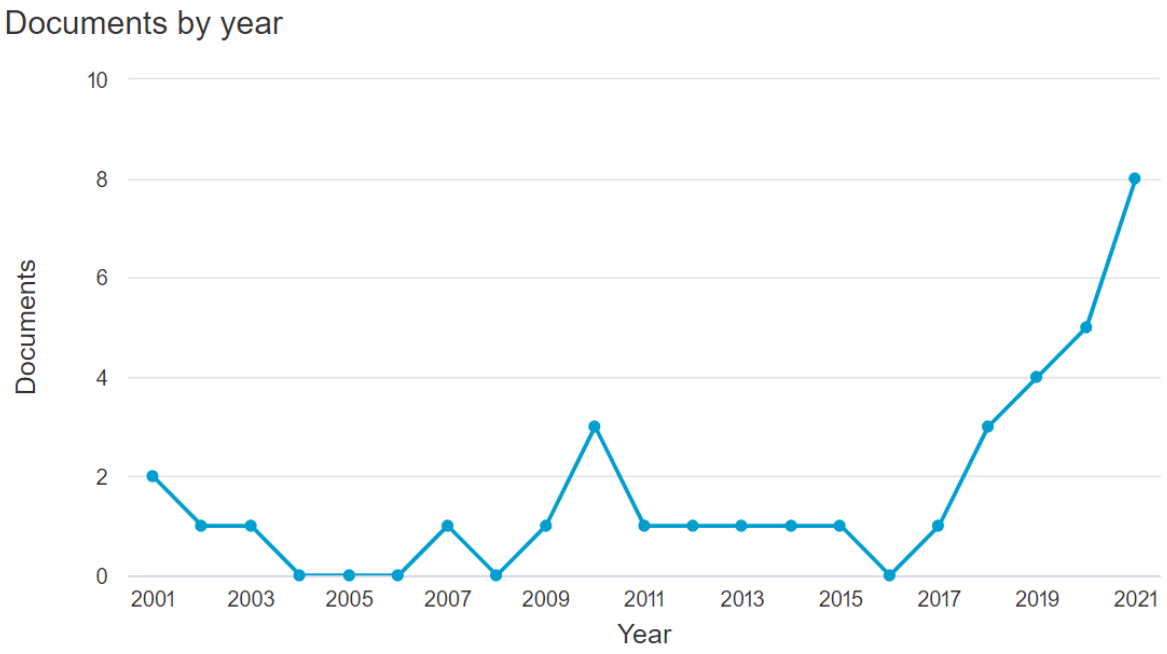

Figure 1. BNPL publications per year. Source: Scopus, updated on 23/11/2021

Analyzing where BNPL has aroused more interest, Figure 2 shows that the United States and Australia are by far the countries where buy-now pay-later has had more publications with 10 and 8 documents published respectively.

In this sense, Australia is considered one of the most mature markets in BNPL with a vast offering both online and in-store, more than 10% market share, growing approval rates (The Paypers, 2021) and wide consumer and retailer adoption. (Reserve Bank of Australia, 2021)

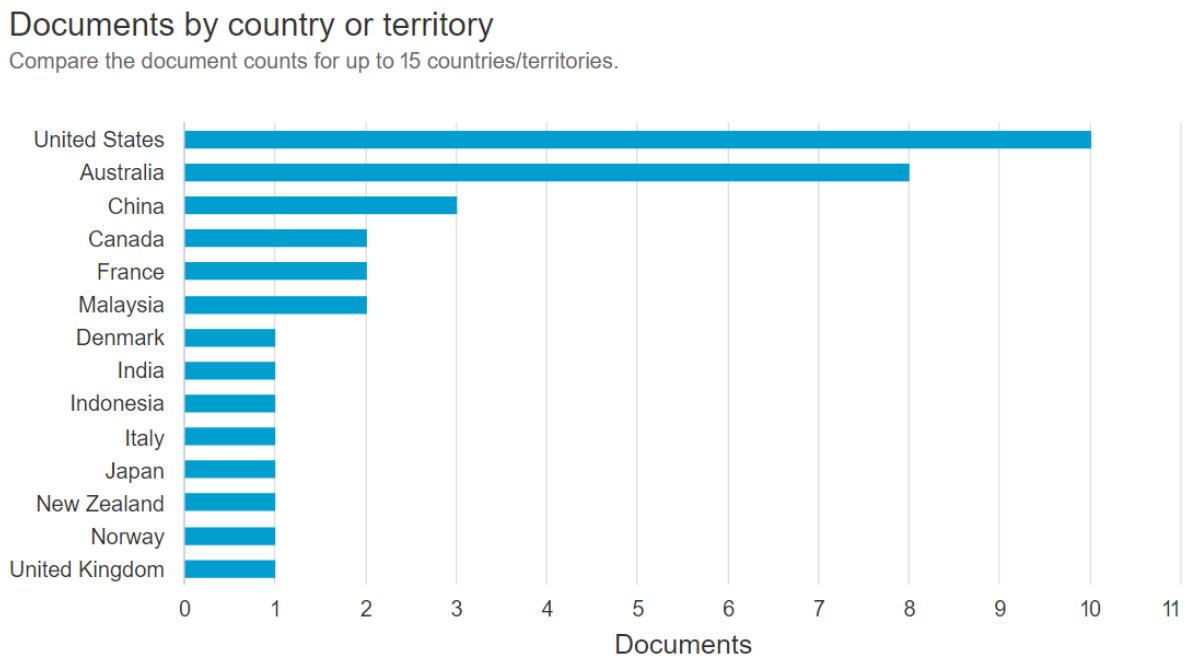

Figure 2. BNPL publications per country. Source: Scopus, updated on 23/11/2021

In contrast, Buy-now Pay-later has awakened notable interest from the business press in the last 5 years. Acquisitions and merges, customer reviews, industry trends, customer risks and opportunities are just some of the BNPL topics discussed on a daily basis in what has been considered one of the hottest trends in the fintech environment.

Figure 3 offers an overview of the popularity score of buy-now pay-later overtime. Popularity score is an index from Google Trends that goes from 0-100 and assesses the interest on a particular search relatively to the highest point on the chart for the selected time span.

In this case, the inserted search was “Buy-now pay-later" + "BNPL" + "Buy now pay later" which means that any of the three terms is taken into account. The graph shows that the peak on popularity is now but also exhibits a sustained raise in popularity over the whole-time span and with a higher slope from 2015.

Figure 3. Popularity Score of ‘BNPL’ by date. Adapted from Google Trends.

Currently the media and specially some consulting firms and the BNPL companies themselves have populated the web of macro-trends about BNPL such as market share, demographics, most popular products, user base, benefits of BNPL adoption, transactions value and a bunch of metrics that are still coming out and doing a great

job on offering a general understanding on how the business is going what are their prospects.

However, this insights lack in a vast majority of an integrated comparison and an into-depth analysis of the solutions available, their points of difference and parity and the niche each one of them is targeting.

The scope of this research is to analyze BNPL coming from a census of the solutions currently available in the market, their characteristics and how they create and capture value.

This analysis aims at getting an overview of the BNPL business models available in the market. Online searching will be used to determine a representative sample of BNPL products worldwide. Each BNPL solution will be studied into depth highlighting their main characteristics, identifying a set of common variables to evaluate, and run a benchmarking of all the solutions.

A thorough analysis of this benchmarking will allow to spot the main business models operating in the BNPL industry and will provide their main characteristics in terms of value proposition, revenue streams, infrastructure, actors involved, key resources and key processes.

Therefore, this study will respond to the following research questions: What are the current BNPL solutions out in the market? What are the main characteristics of the

BNPL solutions? How the solutions available in the market differentiate and relate with each other? What are the main business models shaping the BNPL industry and what are they peculiarities?

All in all, the objectives of this study are to map a representative sample of BNPL solutions currently operating in the market, to determine the main business models used in BNPL solutions and to characterize the business models found and the niche they are tackling.

The first chapter also known as Executive Summary offers a wrap-up of all steps followed during the thesis, the most relevant information discussed and most important takeaways of the study, done in a very business-oriented way.

The literature review will discuss the main insights that can be found from the research available. It follows a logical structure that goes from an initial understanding about the main generalities of the market, the target customer and BNPL itself. Then, it tackles the main trends and how is the business expected to be in the future. It is followed by a geographical analysis, also considering the difference between online and in-store POS. Finally, it closes with a study on the main variables and metrics already analyzed and the possible gaps in the studies available.

The methodology is the spine of the analysis conducted. It responds to the following questions: How was the research designed? How were the variables defined? How

were the prospect solutions determined? What were the solutions included in the study? How were the variables assessed? How was the benchmarking run? How was the final analysis carried out? How were the final business models selected?

In the Analysis & Results section, all the analysis carried out during the study are exposed. This is, a PEST analysis of the BNPL industry, all the most outstanding explanatory figures of the BNPL solutions studied, summary dashboards to have an overview of the variables assessed, correlative charts between variables and the takeaways from them to spot the business models and the business models obtained with a thorough explanation of their characteristics.

Finally, the conclusions section will wrap-up the major takeaways of the study and the limitations of the analysis, giving all so suggestions and considerations for further studies.

1. Executive Summary

BNPL is a very trendy wave of products consisting of offering credit in a different way to the traditional loans and credit cards by focusing on financing at the point-of-sale, thus, on a particular purchase.

These products promise to offer merchants a boost in terms of sales by fostering larger conversion rates, larger average basket sizes and more engaging from the customers which also tend to benefit from below the market to zero interests and are more accessible to customers that cannot reach credit easily.

Besides, BNPL products show a high affinity with online POS due to its convenience, easy implementation and intuitive use while customers are shifting to digital spending mainly behind COVID-19 Pandemics, and this is expected to have a lasting impact on eCommerce. (Kaleido Intelligence Limited 2021)

Due to these factors, BNPL is showing an increasing relevance in the payment industry worldwide and specially in mature eCommerce markets such as North America, Europe, Australia and Central Asia, led by Klarna, Paypal and AfterPay and followed

by a number of incumbent FIs and a high number of start-ups entering the market. (Kaleido Intelligence Limited 2021)

This project aims at getting an overview of the BNPL solutions available in the market. Online searching is used to determine a representative sample of BNPL offering worldwide. Each BNPL solution is studied into depth highlighting their main characteristics and benchmarking it with the rest of solutions.

The objective is to come out with the main business models that operate in the BNPL market and describe them. Figure 4 shows the methodological path followed in the project with the ladder representing the main activities performed to achieve each relevant process represented on each block.

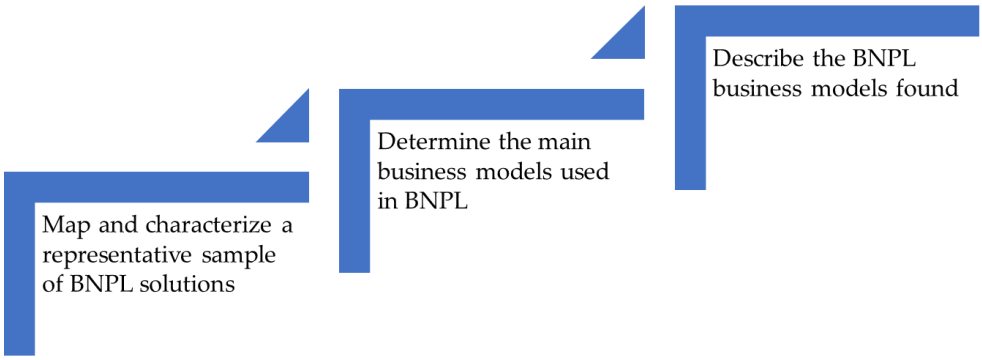

Figure 4. Methodological framework

In the first part BNPL solutions are scouted and then clustered by geographical area of operation, dividing them into 5 different regions: North America, Asia-Pacific, MEMEA (Europe, Middle East, and Africa, excluding UK), UK and LATAM.

A pivotal characterization of each product is done taking care of analyzing the following variables: **Type of actor (incumbent or start-up), Country of origin, served area, operating scheme, UX, revenue model, credit scoring/user assessment, value added service.**

This is followed by a variable definition in which all the variables to be evaluated in each product are determined. This is to have a clear point to benchmark the solutions and come out with some patterns in how they operate and how they converge and diverge with each other.

An analysis of the variables, looking for aggregating and desegregating criteria is the main pilar to determine the business models and the description is also driven by the variables spotted.

In this sense, 74 solutions were analyzed, and the analysis show different trends. First of all, about 60% of the solutions analyzed come from Asia-Pacific, mainly behind Australia and Singapore and MEMEA.

These solutions were launched mainly after 2017 and not before 2012 were just a few vertically specialized products were already operating.

With vertically specialized it is intended that the product is heavily focalized in one or a few industries and the business model is arranged to effectively serve that area. This pattern was assessed and 10 out of the 74 products were labeled as industry-specific solutions. The most popular industries were travel and health care services.

The way consumers interact with BNPL products is mostly done online and so does remain with it comes to acquiring. In fact, out of the 74 products scouted 72 offered an online POS.

Transaction fees and late fees are the most common ways to charge the parties. The most widely used are interests on the purchase but fixed settlement or service fees per transaction are also exploited.

Usually, a short financing time will mean moving the customers' costs of financing to other actors such as merchants or card issuers. Instead, a longer financing time makes impossible for other parties to absorb all the risks related to the customer and in consequence it would be impossible to grant the customer and interest-free plan.

Other sources of classification for the products are the nature of the industry, the credit limit and the revenue model.

Based on these criteria the following models were determined:

a. Short-term merchant subsidized credit: Products that are entirely or mostly subsidized from merchants that assume the costs that otherwise the customer

will pay. This products usually have weekly, biweekly or monthly payment plans of up to six instalments. Categories using these products are mainly consumer goods and providers pay a lot of attention to the promotion of the merchants they cover.

b. Industry-specialized BNPL products: Usually high-ticket size purchases entering in very specific categories mainly related to professional services or luxury, non-disposable items work under this kind of products. The number of instalments and time of financing is carefully studied to fit the industry in which operates. It usually involves long-term relationships between the merchant and the customers.

c. BNPL Marketplaces: Products that instead of integrating their payment method in a merchant checkout opt for including a list of products form different merchants on their website. This way, the profit comes from a mark-up they put on the products they sell and may also include some customer fees. This model is not widely used.

d. Merchant-managed BNPL solutions: Solutions designed for customers that do not want to get involved another brand in their purchase process. These products are unlabeled, and the merchant gets complete ownership on the branding. The merchant usually gets more participation on the term definition, but these models could have huge differences on the revenue streams, value

proposition, strategic partners and cost structure but they share the fact that the product does not claim ownership.

The major takeaways of the study are the need of evaluating the impact of each business model in the industry and the benefits and cons that it could bring to customers, merchants and the society, the utility of having an accurate source of information to avoid incompleteness or mistaken information that could have implications on the classification.

On the other hand, the study has been able to cope with the initial research questions by mapping a sample of products, analyze them, compare them and then offering a qualification according to the business models determined.

2. Literature Review

Buy now, pay later solutions (BNPL) are defined as a financial instrument to allow consumers to finance purchases with specific terms at the point of sale. The point of sale is often considered online, and the terms vary according to the service provider policies. (PYMNTS.com, Paypal 2020)

BNPL offers a fast access to credit, frequently part of the checkout experience, and typically offers zero-interest rates allowing to split a transaction in instalments over a short timeframe. (Kaleido Intelligence Limited 2021)

BNPL rise has been possible mainly due to a combination of a series of fintech payment platforms emerging and partnering with leading e-commerce retailers and marketplaces to offer interest-free credit at the checkout commonly dividing the payment across multiple fixed installments. (CAPCO 2020)

Many consultants and researchers think of BNPL as a force that could change the customer credit market and have very positive impacts on consumerism. This is also

positive for customers of the traditional credit business since banks need to improve the customer experience to protect their base. (CAPCO 2020)

BNPL is predominantly used in ecommerce. However, their presence in-store has been also explored by some products launched for face-to-face point of sale (PoS) generally using QR codes or by issuing 'debit' cards. (CAPCO 2020)

It is important to note that it is still a concern the fact that BNPL is growing fast but it remains difficult to assess the eligibility of a potential user, thus, their capability to pay back the credit plan. Regulators and banks have not stepped in yet in the BNPL industry, at least not widely, but their presence could be critical in order to make BNPL solutions sustainable and profitable in the future. (CAPCO 2020)

Millennials are the most representative population of early adopters of BNPL. This is because of the high variety of payment methods that they employ to shop online, their high usage of credit cards and their tendency to be budget-conscious and financially responsible when purchasing. (PYMNTS.com, Paypal 2020)

PYMNT BNPL studies found out that the most important usage drivers are budgetary considerations such as avoiding charges and unclear financial trends; convenience, the number of merchants that accept the solutions and trust that their information is secure. (PYMNTS.com, Paypal 2020)

In other words, BNPL users want to monitor their spending and have a clear understanding of the fees they are paying and the interests' rates. They tend to value rewards when choosing a payment option for purchases. (PYMNTS.com, Paypal 2020)

Regarding purchase categories, clothing surges as the most popular industry for BNPL users. Entertainment, reading material and household furnishing are common purchases among BNPL users as well. (PYMNTS.com, Paypal 2020)

Many buyers are showing shifts in behavior mainly driven by COVID-19 Pandemics. Customers are shifting to digital spending, and this is expected to have a lasting impact on eCommerce. (Kaleido Intelligence Limited 2021)

The Pandemics has also created reliance on digital shopping channels and an increasing demand for credit mechanisms that is expected to settle even after the pandemics, meaning an important shift for merchants that would see how digital channels gain force. (Kaleido Intelligence Limited 2021)

In mature eCommerce markets such as North America, Europe and Central Asia BNPL solutions are gaining force, led by Klarna, Paypal and AfterPay and followed by a number of incumbent FIs and a high number of start-ups entering the market. (Kaleido Intelligence Limited 2021)

BNPL has high potential as a substantial percentage of those who have not used it express that they will be "very" or "extremely" interested in doing so. In this sense, a

smooth integration of BNPL solutions and digital wallets is considered a plus. (PYMNTS.com, Paypal 2020)

BNPL growth and success has been also related to the growth of digital wallets and mobile commerce. The current user of BNPL services is more likely to use their mobile phones to buy-now pay-later and according to CAPCO's study (2020 p. 6) customers are willing to integrate BNPL into their credit card or current account but are not interested in involving their banks.

It remains interesting to see how banks and credit card issuers are responding to the rise of BNPL that could potentially lead to a fall of traditional credit demand. It is not clear now how they are responding but consultants suggest a defensive play to take advantage of their position of trusted agents.

This means, as CAPCO suggests (2020 p.9) trying to invest in instalment solutions, creating their own BNPL solutions as Mastercard, Visa and American Express are doing and partnering with existing BNPL providers in order to diversify their credit offering and respond to rising consumer needs.

Bridge millennials must be a particularly attractive demographic for BNPL providers. According to PYMNTS.com this is a demographic that, despite having financial resources, is searching for ways to finance purchases without creating debt or paying fees. (PYMNTS.com, Paypal 2020)

This is also enforced by CAPCO's research (2020 p. 6) that shows that the BNPL user is not mostly used by low-income personas but by budget conscious and more 'credit averse' consumers that look for flexibility to manage their finances and, thus, prefer BNPL to other forms of credit.

CAPCO (2020 p. 8) also suggests that contrary as it may be thought more aged demographics such as Gen Y and X (35 to 44-year-olds) are not reluctant to trying new credit solutions and in fact, according to their study, they are the biggest users of BNPL followed by boomers (over 65s).

Holiday shopping appears a good opportunity for BNPL solutions to take action. Currently, credit and debit cards remain the most likely means of payment for holiday shopping, but BNPL solutions can motivate consumers to purchase more, particularly for millennials. (PYMNTS.com, Paypal 2020)

According to Kaleido Intelligence (2021, p. 14) BNPL users in Australia are expected to double between 2019 and 2023. Australia has over 19 million e-commerce users, cross-border purchases are very popular (specially through online marketplaces), and retail spending is the most popular as far as domestic ecommerce spending is concern.

Kaleido Intelligence (2021, p. 14) highlights Afterpay, Zip Pay and Payright as the key players in Australia. A thorough analysis will be done in the methodology.

United Kingdom, in contrast, might see a low growth on cross-Border ecommerce due to Brexit but a high growth of mobile ecommerce, mainly behind a high smartphone adoption and an important usage of mobile wallets. (Kaleido Intelligence Limited 2021)

Despite those ups and downs BNPL finder.com study (2020 p. 2) mentions that "BNPL is the fastest-growing online payment method in the UK - at double the growth rate of bank transfers and more than three times that of digital wallets, according to a February (2020) report by the payment processor Worldpay".

According to CAPCO (2020 p. 4) UK's BNPL main players are Klarna, Laybuy, ClearPay and Paypal credit. Klarna leads with almost 10 million UK customers but LayBuy and ClearPay, both in the UK from 2019, are growing fast.

As the UK BNPL remains a largely unregulated market, regulation is expected to take place in the next few years as the market is estimated to grow 8 times between 2018 and 2025. (Kaleido Intelligence Limited 2021)

India has been described as a market with lots of potential since Indians are already familiarized with microloan concepts and fintech is growing fast. In the country the majority of online purchases are done on domestic sites and cross-border sales are dominated by marketplaces. (Kaleido Intelligence Limited 2021)

All of mentioned plus a dramatic expected ecommerce growth mainly behind an increase in smartphone ownership will make of India the second largest BNPL market by 2025 according to Kaleido Intelligence (2021, p. 16)

Although some articles have studied the trends in the market doing some sort of geographical distinction. A characterization of the solutions available worldwide remains rather vague and in some regions unexplored.

The literature available shows a tendency to overfocus on macro-trends such as expected CAGR, regulation, market size, etc., but is neglecting the peculiarities of the business models available in the market.

A good proxy of the business models available in the market is done by McKinsey (2021). They affirm that most of the BNPL products available now involve these five models: Integrated shopping apps, card-linked installment offerings, off-card financing solutions, virtual rent-to-own models and vertical-focused larger-ticket plays.

Integrated shopping apps which are commonly the leading Pay in 4 providers that involve consumers through the whole purchase journey, from prepurchase to post-purchase. This means that that they can monetize not only their financial product but also affiliate marketing, cross-selling of credit cards, banking products among others. (McKinsey, 2021)

The key differentiators of this model are the capacity of being initiators of the purchase process, the versatility to generate new revenue drivers, their low cost of consumer acquisition and advance technological capabilities. (McKinsey, 2021)

On the other hand, off-card financing solutions are solutions with average ticket sizes around $800 and with average credit durations about eight or nine months. These models require the customer to pay an APR and are partly subsidized by the merchant depending on the industry. (McKinsey, 2021)

Traditionally the offering is focused on categories where cart conversion is very important and that have high abandonment rates. These solutions also have high ticket, lower-frequency purchases and the consumers are less engaged with them than consumers using Pay in 4. (McKinsey, 2021)

Rent-to-own models are focused mainly in two categories, furniture and electronics. In these models, APRs are considerably higher than in the previous two and are not subsidized by merchants. (McKinsey, 2021)

A model very similar to the way sales financing has worked historically is vertical-focused larger-ticket plays. This model usually has category specialists with average ticket sizes varying according to the industry. (McKinsey, 2021)

3. Methodology

3.1 Research Design

The current study, based on a descriptive design and a quantitative research approach, uses the following methods to get a closer view of the Buy-Now Pay-Later business model, with a focus on the current solutions available in the market.

In the first part, an overview of both BNPL and its prospect customers is provided. This is followed by the design of a PEST analysis, mainly to gain an understanding on the current regulation on BNPL but also to show the political, economic, social, and technical environment surrounding the model.

After it and to gain a complete view of the situation of the entire industry, the focus is on characterizing the current solutions available in the market. These solutions are clustered by geographical scope, dividing them into 5 different regions: North America, Asia-Pacific, MEMEA (Europe, Middle East, and Africa, excluding UK), UK and LATAM.

This is mainly behind demographic similarities that can potentially drive acquisition patterns and have an influence in the product characteristics. For instance, LATAM consumers have lower banking formalization than other regions, this drives the providers to offer alternatives to debit and credit card methods to pay the instalments.

The characterization of the solutions is done by evaluating a set of variables considered relevant to fully understand the way in which the product operates. These variables were preliminary defined and are: **Type of actor (incumbent or start-up), Country of origin, served area, operating scheme, UX, revenue model, credit scoring/user assessment, value added service.**

A thorough study of each solution was done considering the previous variables. Appendix A offers a sample of the systematic approach followed for all the solutions.

3.2 Variable definition

The above-mentioned variables constitute a pivot series of variables designed to have a first overview of the solutions and being able to define a final, wider set of variables that would be used to characterize and compare the BNPL solutions.

The full list of variables was defined as follows:

- **Type of actor:** Nominal variable whose possible answers are either start-up or incumbent. It works for having and overview of the proportion of these to actors and also see whether it is a difference on how each of them are approaching BNPL.

- **Company name:** Provides the number of the BNPL provider, a provider could have more than one BNPL product.
- **Product name:** Provides the name of the BNPL product offered by the provider. In some cases, the product corresponds to the very same company name.
- **Year of release:** This refers to the year of release of the BNPL product. This date could differ from the foundation of the provider, and this is carefully checked.
- **Country of origin:** The country which the product was first released on.
- **Region of operation:** The country(es) on which the service takes place.
- **Cluster:** Nominal Variable. Five possible options: North America, Asia-Pacific, MEMEA, UK and LATAM. Classifications are based on the core country of operation in case the solution is offered in more than one cluster. If there are substantial differences in the product characteristics the product is split (e.g., PayPal Credit USA and PayPal Credit UK)
- **Industry specific:** Nominal and dichotomous variable. Options are "YES" and "NO". It assesses whether the product is designed to be used in one or a set of very specific sectors or it does not necessarily exclude the inclusion of merchants by their sector.
- **Industry 1:** Slot designed to specify an industry of an industry specific solution.
- **Industry 2:** Slot designed to specify an industry of an industry specific solution.
- **Industry 3:** Slot designed to specify an industry of an industry specific solution.

- **Minimum checkout value*:** Quantitative variable that reflects the minimum purchase that the customer can do. If no minimum purchase is sat value is assumed as $0.
- **Maximum checkout value*:** Quantitative variable that reflects the maximum credit limit allowed by the solution. This value is not always publicly disclosed by the provider, or it varies among users; in this case the most widely accepted value is considered (based on merchant descriptions or user reviews). When no value is found it is assumed as "N.A".
- **Minimum number of installments:** The minimum number of instalments in which the credit can be spread.
- **Maximum number of installments:** The maximum number of instalments in which the credit can be spread.
- **Time between installments (weeks):** The instalment payment term sat by the provider. Expressed in weeks, so for fortnightly payments value is 2 and for monthly payments value is 4.
- **"Is a hard credit check performed?":** Nominal Variable (YES/NO). A hard credit check is intended as a detailed monitoring of the credit reports that usually has an impact on the customer's credit score because it leaves a footprint in the official review of the credit reports. (creditkarma, 2021)
- **"Is there a late fee?":** Nominal Variable (YES/NO). It assesses whether the provider charges a fee when a payment deadline is missed. It excludes the

possible penalties incurred if the provider revolves to a collection agency, so it just takes into account direct fees cashed by the provider.

- **Late fee value:** Value charged by the company in case of a late payment. $0 if they do not charge them. In case the value is a fraction from the purchase, or the due installment value is calculated assuming the maximum checkout value as the purchase value.
- **"Is the customer charged?":** Nominal Variable (YES/NO). "Yes" in case the customer is charged a fee related to the transaction or the use of the product (excluding late fees).
- **Minimum APR%:** Minimum Annual Percentage Rate that the customer is charged (it excludes fixed fees charged by the provider).
- **Maximum APR%:** Maximum Annual Percentage Rate that the customer is charged. In other words, the APR% that the customer is charged under the most expensive variant offer by the provider (it excludes fixed fees charged by the provider).
- **Fixed Fee Customer*:** Includes any service fees, transaction fees, maintenance fees that do not depend on the purchase value.
- **"Is the merchant charged?":** Nominal Variable (YES/NO). "Yes" in case the merchant is charged a fee related to the transaction or the use of the product.
- **"Variable fee?":** Nominal Variable (YES/NO), used to evaluate if there is a variable fee related to a purchase (in general, transaction or service fees).

- **"Fixed fee?":** Nominal Variable (YES/NO), used to evaluate if there is a fixed fee related to a purchase (in general, transaction or maintenance fees).
- **Variable fee value (merchant):** Average variable fee per purchase charged by the provider to the merchant.
- **Fixed fee value (merchant)*:** Average fixed fee per purchase charged by the provider to the merchant.
- **"Does have an app?":** Nominal Variable (YES/NO). "Yes" if the provider offers the product throughout a mobile app.
- **"Online pos?":** Nominal Variable (YES/NO). "Yes" if the purchase can be done online.
- **"In-store pos?":** Nominal Variable (YES/NO). "Yes" if the purchase can be done at the physical store of the merchant.
- **"Offers a virtual card?":** Nominal Variable (YES/NO). "Yes" if the provider offers a virtual card to manage the user purchases.
- **"Works with physical card?":** Nominal Variable (YES/NO). "Yes" if the credit limit or transaction depend on a credit/debit card either provided by the company or a third party.
- **Number of merchants:** The number of merchants affiliated to the provider which the customers can purchase to. Value is "0" in case the provider offers the products itself and "1000000" in case the customer can purchase in any merchant.

- **"Requires a down payment?":** Nominal Variable (YES/NO). Down payment means that the first instalment needs to be paid at the moment of the purchase.

*All values are expressed in US Dollars (values were rounded for simplification); conversion rates were taken as Table 1 shows.

CONVERSION	RATE
EUR to USD	1.12
GBP to USD	1.34
INR to USD	0.013
SGD to USD	0.73
MXN to USD	0.047
AUD to USD	0.72
CAD to USD	0.8
COP to USD	0.00025
ARS to USD	0.01
PHP to USD	0.02
VND to USD	0.000044
AED to USD	0.27
MYR to USD	0.24
ZAR to USD	0.063

SAR to USD	0.27
JPY to USD	0.0088
CZK to USD	0.045

Table 1. Conversion rates of the currencies used

3.3 Solutions selection

The solution selection was held in order to generate a representative set of solutions for further evaluation and comparison. The process was entirely done based on primary and secondary sources available in the web and no interviews, surveys or any direct experimentation was carried out.

Different sources were consulted based on searches done in order to scout the prospect solutions. After grouping lists from different searches based on country of origin, year and some other keywords, a comprehensive list that spotted most of the BNPL providers worldwide was taken as the basis for the sample selection.

The list (Dealroom.co, 2021) includes 182 presumably BNPL providers from all over the world. It worked as the pivotal point for the final selection and the process was done case by case.

Disqualifying factors for a potential inclusion in the final list were:

- Lack of comprehensive information: When doing the research, information about the product was not properly disclosed to further analyze the solution

either because there was not a formal website or due to very limited information about the way the product operates.

- Non-operative products: Products in development that have not been launched in the market were not considered.
- B2B products: The analysis conducted was limited to B2C offering.
- Inconsistencies with the BNPL principles: As it was considered BNPL as a product that aims to defer a payment in instalments at the point-of-sale products that happened to not match these criteria were discarded. For instance, products that offered to cash-back a previous purchase were not included.

This exercise resulted on the final list of 74 BNPL products analyzed in the current study. The company name, product, year of release and country of origin is provided in Table 2.

COMPANY NAME	PRODUCT NAME	YEAR OF RELEASE	COUNTRY OF ORIGIN
WIPEI	WIPEI BNPL	2019	Argentina
AFTERPAY	AFTERPAY BNPL	2014	Australia
OPENPAY	OPENPAY BNPL	2016	Australia
HUMM	LITTLE THINGS	2019	Australia

PAYRIGHT	PAYRIGHT BNPL	2019	Australia
FLEXIBOND	FLEXIBOND BNPL	2020	Australia
PAYLATER TRAVEL	PAYLATER TRAVEL BNPL	2017	Australia
BUNDLL	BUNDLL BNPL	2020	Australia
BOLETOFLEX	BOLETOFLEX BNPL	2021	Brazil
PAYBRIGHT	PAYBRIGHT PAY IN 4	2019	Canada
PAYBRIGHT	PAYBRIGHT PAY MONTHLY	2009	Canada
ADDI	ADDI BNPL	2018	Colombia
TWISTO	TWISTO BNPL	2020	Czech Republic
VIABILL	VIABILL BNPL	2014	Denmark
LUNAR	LUNAR BNPL	2021	Denmark
ALMA	ALMA BNPL	2019	France
COFIDIS	PAGODIL	2012	France
CRESH	CRESH BNPL	2018	France

PLEDG	PLEDG BNPL	2017	France
SIMPL	SIMPL BNPL	2016	India
LAZYPAY	LAZYPAY BNPL	2017	India
JIFITI	JIFITI BNPL	2014	Israel
SCALAPAY	SCALAPAY BNPL	2019	Italy
SPLITTY PAY	SPLITTY PAY BNPL	2021	Italy
SOISY	SOISY BNPL	2015	Italy
PAIDY	3-PAY	2008	Japan
SPLIT	SPLITX	2020	Malasya
KUESKIPAY	KUESKIPAY BNPL	2020	Mexico
PAGARIS	PAGARIS BNPL	2017	Mexico
GRAVITY	GRAVITY BNPL	2019	Mexico
BILLINK	BILLINK BNPL	2009	Netherlands
LAYBUY	LAYBUY BNPL	2017	New Zealand
LATITUDE	LATITUDE BNPL	2017	New Zealand

JUNGLE	JUNGLE BNPL	2020	Philippines
BILLEASE	BILLEASE BNPL	2020	Philippines
PARCELA JA	PARCELA JA BNPL	2020	Portugal
TAMARA	TAMARA BNPL	2020	Saudi Arabia
PACE NOW	PACE BNPL	2020	Singapore
ATOME	ATOME BNPL	2019	Singapore
HOOLAH	HOOLAH BNPL	2018	Singapore
RELY SINGAPORE	RELY SINGAPORE BNPL	2020	Singapore
PAYFLEX	PAYFLEX BNPL	2019	South Africa
PAYJUSTNOW	PAYJUSTNOW BNPL	2019	South Africa
APLAZAME	APLAZAME BNPL	2020	Spain
PAGANTIS	CLEARPAY BNPL	2021	Spain
KLARNA	KLARNA PAY IN 4	2019	Sweden
DIVIDEBUY	DIVIDEBUY BNPL	2015	UK

BUTTER	BUTTER HOLIDAYS	2017	UK
FLY NOW PAY LATER	FLY NOW PAY LATER BNPL	2015	UK
PAYMENT ASSIST	PAYMENT ASSIST BNPL	2013	UK
MONZO	FLEX	2021	UK
ZILCH	ZILCH BNPL	2019	UK
TYMIT	TYMIT BNPL	2019	UK
SPLINTR	SPLINTR BNPL	2021	United Arab Emirates
POSTPAY	POSTPAY BNPL	2019	United Arab Emirates
TABBY	TABBY BNPL	2020	United Arab Emirates
PAYPAL INC.	PAYPAL CREDIT	2014	USA
PAYPAL INC.	PAYPAL CREDIT	2016	USA

PAYPAL INC.	PAY IN 4 U.S	2020	USA
PAYPAL INC.	PAY IN 4 Australia	2020	USA
PAYPAL INC.	PAY IN 4X	2020	USA
PAYPAL INC.	PAY IN 3	2020	USA
AFFIRM	AFFIRM BNPL	2017	USA
SEZZLE	SEZZLE BNPL	2016	USA
SPLITIT	SPLITIT BNPL	2012	USA
UPLIFT	UPLIFT BNPL	2014	USA
SUNBIT	SUNBIT BNPL	2016	USA
QUADPAY	QUADPAY BNPL	2017	USA
PERPAY	PERPAY FINANCING	2014	USA
ZEBIT	ZEBIT BNPL	2015	USA
FOUR	FOUR BNPL	2019	USA
GREENSKY	GREENSKY	2006	USA
FUNDIIN	FUNDIIN BNPL	2020	Vietnam

WOWMELO	WOWMELO BNPL	2019	Vietnam

Table 2. Buy-now Pay-later, list of products.

3.4 Processing methods

All the variables were filled in an excel spreadsheet for each one of the solutions. There were variables particularly difficult to find since providers are not forced to publicly disclosed.

In case of a variable that cannot be find directly from the provider (e.g., a provider that do not tell what are their merchant fees) research on secondary sources is conducted. Although an official response cannot be achieved a widely accepted value is tried to obtain.

In this scenario, merchant terms & conditions of the product, customer blogs, news, interviews, and business reviews of the product are analyzed looking for the most accurate value as possible.

However, there are some cases in which it was impossible to find a proxy of the value, specially for what the company charges to the merchant concerns. This is coped by omitting the value and adding an NA.

The next step in the processing was the analysis stage. For this purpose, Power Bi software was used as the main tool to generate dashboards, tables and cross information.

Figure 5 provides the step-by-step path to grasp the insights needed to identify the main business models with the solution census and the PEST analysis as an initial standpoint.

In the first part, wrapping-up figures, tables, and diagrams are done aiming at having an overview of what the products are and their main characteristics, similarities, and differences. This is the first point in which some really differentiating variables are spotted.

With some of the variables already spotted the next step consists in identifying what are the main factors that could potentially; differentiate one business model from the other, be a decision point for the company that directly impacts the solution and the relationship with the different actors (e.g., Who is the company charging?)

Next step is a sort of classification of the solutions according to the patterns identified in the first two steps. Here, the business models start to come up and the next step requires their formalization, so name them in a way that explains their peculiarities.

Finally, an overview of each business model has been done and it is the most important outcome of this analysis.

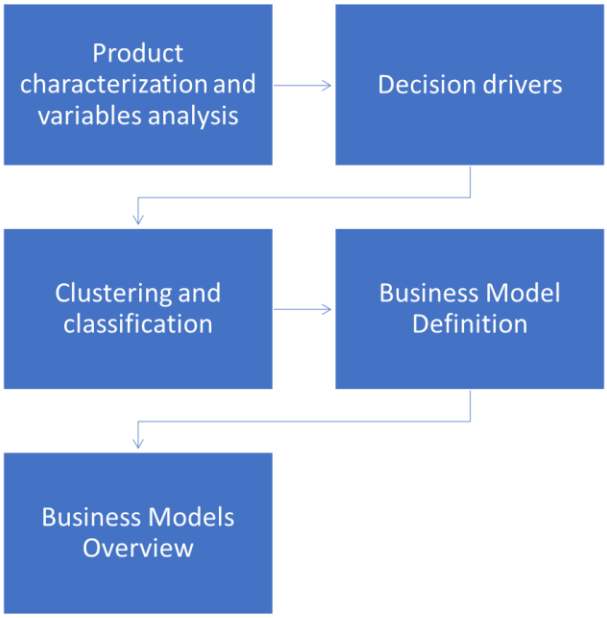

Figure 5. Data Analysis logical flow

4. Results & Discussion

4.1 Industry Overview

Buy Now Pay Later industry has massively expanded in the last two years, becoming a useful service for both merchants and consumers. Providers such as Klarna, Afterpay, or Affirm have already paved a way towards the ecommerce ecosystem, by acquiring new customers and expanding their footprints. According to Bank of America, the market for these apps is likely to grow 10-15x by 2025 to eventually process USD 650 billion -USD 1 trillion in transactions. There is a need for a better understanding of how these services work, so we present the bigger picture: the size of the market and business models in this space.

At present, there is an uplift in the usage of BNPL solutions for shopping, mostly driven by trends such as Gen Z and Millennials looking for convenient budgeting tools, and the lack of interest fees in many cases. As well, the COVID-19 pandemic has also played a crucial role in pushing this new shopping habit further for the obvious reason: it's financially convenient.

According to a Worldpay report, in 2020, pay later accounted for 2.1% of ecommerce transactions worldwide, continuing to earn market share, and expected to double by 2024. One can also observe that while a few years ago Australia and Sweden were the top markets in this area, now, the UK and the US are catching up on this. BNPL equates to around GBP 9.6 billion in annual spending in the UK, while in the US accounted for almost USD 20 billion in 2019.

Moreover, per a Coherent Market Insights report, the BNPL platforms market worldwide was estimated at USD 7,320.6 million in 2019 and is expected to reach USD 33,638.3 million by 2027 at a CAGR of 21.2% between 2020 and 2027. During the forecast period, the fashion industry is anticipated to hold a dominant position in the market.

4.2 PEST Analysis

4.2.1 Political Dimension

BNPL remains highly unregulated right now as it does not get inside the credit conduct rules in most of the countries. However, some authorities are reviewing regulations for BNPL solutions as some consider BNPL unsecured credit and others a source of unnecessary debt.

In the UK, authorities require very transparent disclosure for BNPL products informing the customers, for instance, how interest will be charged if the BNPL offer

is not repaid within the due date. This information must include the principal amount on which the interest would be charged, the date from which it would accrue, and the interest rate applied. (PWC, 2019)

The FCA is aware that the Consumer Credit Act 1974 has not been able to match the new scenarios posed by BNPL solutions and BNPL companies will become regulated by the FCA bringing into table more strict regulatory requirements regarding affordability checks, credit limits and treatment of defaulting borrowers.

This is because contrary to regulated consumer credit purchases that are subject to affordability checks and create a financial footprint for the individuals, BNPL's soft credit checks and poor capability to correctly assess if a customer is already blacklisted from another BNPL provider, facilitate that consumer accumulate large amounts of debt across various BNPL platforms. (Keystone Law, 2021)

The incoming set of regulations in the UK are likely to have an impact on sales, which will affect merchants benefited from BNPL's customer conversion. However, companies like Klarna believe that working together with the regulators will bring benefits for BNPL companies in the long run but ask for a "modern, proportionate and fit for purpose" framework.

In contrast the context in the US is more complex since laws vary by state and the discussions regarding BNPL regulation are less extended. However, an study by Credit Klarna suggests that US BNPL consumers could be struggling to meet the deadlines.

In fact, the study highlights that 40% of US consumers who used BNPL have missed more than one payment, and 72% of those saw their credit score decline.

Currently, loan federal regulations cannot be fully applied to BNPL providers because their instalment plans are not catalogued as loans. Thus, BNPL providers are not able to consult credit reporting bureaus to assess the ability of a potential customer to repay.

As tensions between state governments and BNPL services have emerged, fitting BNPL into the US regulations is becoming necessary in the foreseeing future to guarantee a safe environment for both merchants and customers.

In contrast, in Australia BNPL providers have not been subject to regulation since the Australian National Consumer Credit Protection Act does not apply to short-term interest-free credits. The industry has eventually adopted a self-regulatory approach. The Australian Finance Industry Association (AFIA) announced on the 1st of March 2021 that its Code of Practice for the BNPL sector has come into effect. According to their statement, 'AFIA's BNPL Code goes above and beyond the law in Australia, setting best practice standards for the sector and strengthening consumer protections. It does this while preserving customer choice to make purchases and payments in a way that suits their needs and preferences.'

BNPL providers that are compliant with this Code must carry out assessments before a customer can make a purchase and conduct additional checks to prevent consumers from stretching their arm further than their sleeve will reach. BNPL disputes under

the code will be managed by the Australian Financial Complaints Authority, where a designated committee will have the power to publicly denounce companies that provide loans services outside the Code's standards.

ASIC says that as BNPL services continue to grow, more legislation will need to be introduced. From October 2021, BNPL companies must comply with the regulator's 'design and distribution obligations', which involves regularly assessing whether their products are a good fit for a customer.

EU efforts are pointing at consumer protection, fair competition, financial supervision, and a pro-innovation attitude boosted by a regulatory flexibility but under the current approach lay completely at the providers and the market forces behind them.

The European commission is proposing a regulation demanding that information related to credit must be presented clearly so that consumers understand what they are signing up for and tightening up the rules under which creditworthiness is assessed.

As new BNPL services are entering the European Market from Australian, New Zealand and US markets the general perception is that the degree of regulation is higher than the one faced in the early stage of development overseas and this will likely impact growth.

The general pattern worldwide among the authorities is that somehow BNPL solutions are allowing millions of consumers to borrow more than they can afford, and this is especially critical in this time of economic crisis.

In consequence, regulations in the following years can be expected and remains a question whether it will have a major impact on consumption, growth and how BNPL solutions can adapt to a probably more restricted panorama.

4.2.2 Economic Dimension

The current worldwide economy is characterized by a well diffused uncertainty. The Covid-19 pandemics has posed a contraction in the global economic growth, but vaccine access has emerged as a hope to return to pre-pandemic ranges in terms of inflation and economic growth.

In this recession context, BNPL solutions have emerged as a safeguard and represent the trending payment method right now. However, the big question is to see if the model is sustainable since as providers and authorities have pointed out there is a worrying number of struggling borrowers suggesting that the capacity to properly manage risk must be verified.

Nonetheless, the number of BNPL transactions, providers and affiliates continue to grow and so does the attention from venture capitals, incumbents, and banks. As a matter of fact, giants like PayPal, Mastercard and Square have partnered with or acquired companies to grow their BNPL capabilities.

Incumbents also play a role as payment networks, gateways, digital wallets and card issuers. But according to McKinsey (2021) banks are not responding on time to the disruption of BNPL with just a few doing fine enough to compete as they tend to adopt an attitude of watch and see.

Banks that underestimate the threat may see continued loss in share and could lose out on participating in a growing value pool and gaining share among younger and new-to-credit customers, as banks in Australia and China did when facing a similar situation. To avoid that outcome, US banks need to understand the landscape for POS financing and choose from among the emerging models. (McKinsey, 2021)

4.3 Sample characteristics and figures

After getting an overview of the BNPL market based on the external analysis performed, a detailed understanding of the BNPL solutions and the way they operate was needed to grab the insights for the identification of the main business models currently running.

4.3.1 Location and industry

As Figure 6 shows about 60% of the solutions analyzed come from Asia-Pacific, mainly behind Australia and Singapore and MEMEA. North-America, mainly driven by the United States and the United Kingdom are very important players as well with about 30% of the solutions themselves.

On contrary Latin-America, with 6 solutions spotted accounting to about an 8% of the sample, reflects the technological and social barriers that make particularly difficult BNPL to be implemented in this region.

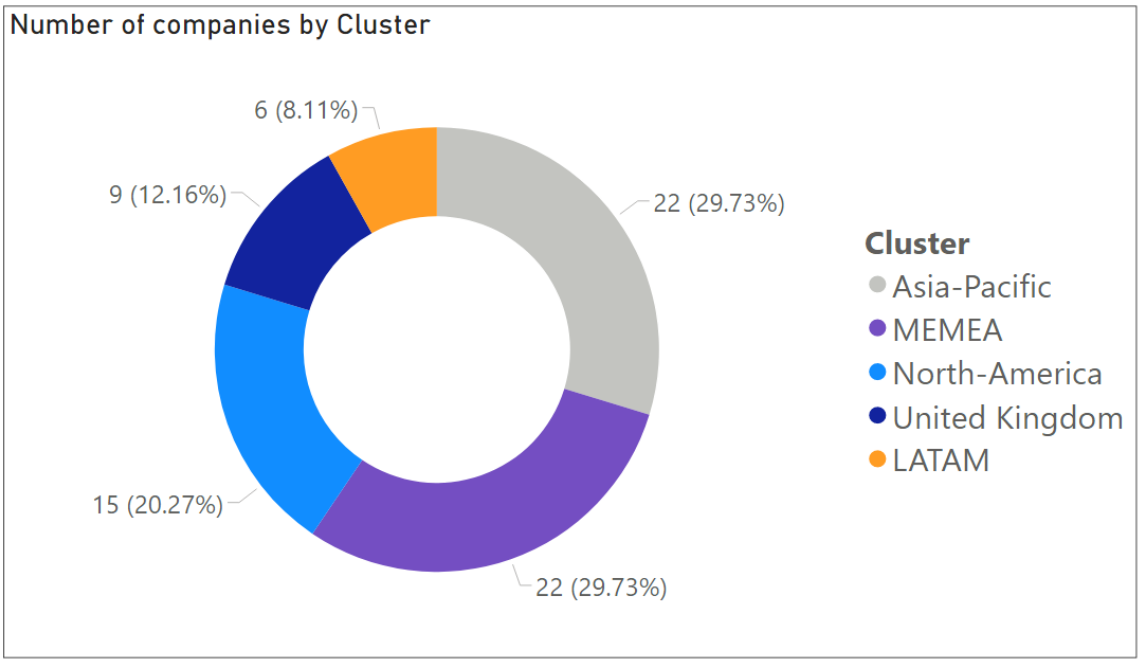

Figure 6. Geographical distribution of the sample

Regarding the date of implementation, it was found than more than 70% of the products were launched from 2017 and just 5% before 2012 as Figure 7 shows. In 2020, 18 BNPL products came out being the most prolific year in terms of offering thus far.

In addition, the first products considered were mostly vertically specialized meaning that Buy-now Pay-later as a financing retail product did not formally emerge until the last decade.

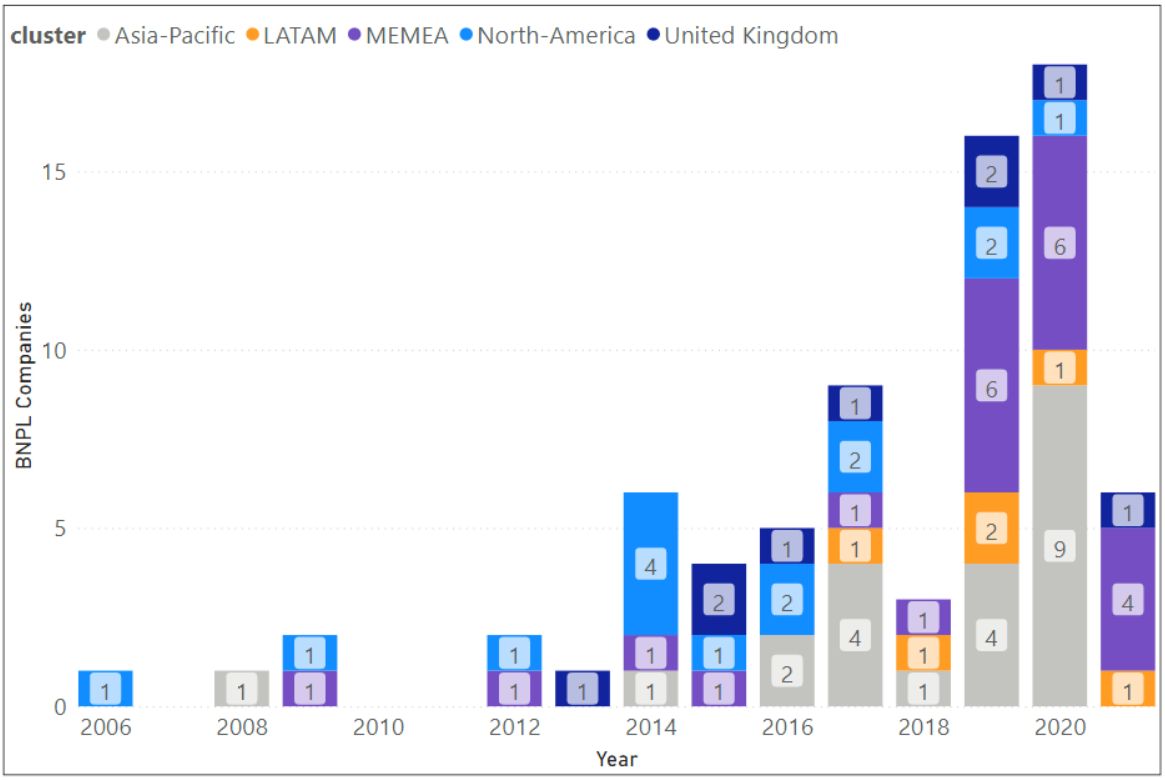

Figure 7. BNPL Products launched by year.

With vertically specialized it is intended that the product is heavily focalized in one or a few industries and the business model is arranged to effectively serve that area. This pattern was assessed and 10 out of the 74 products were labeled as industry-specific solutions. (Figure 8)

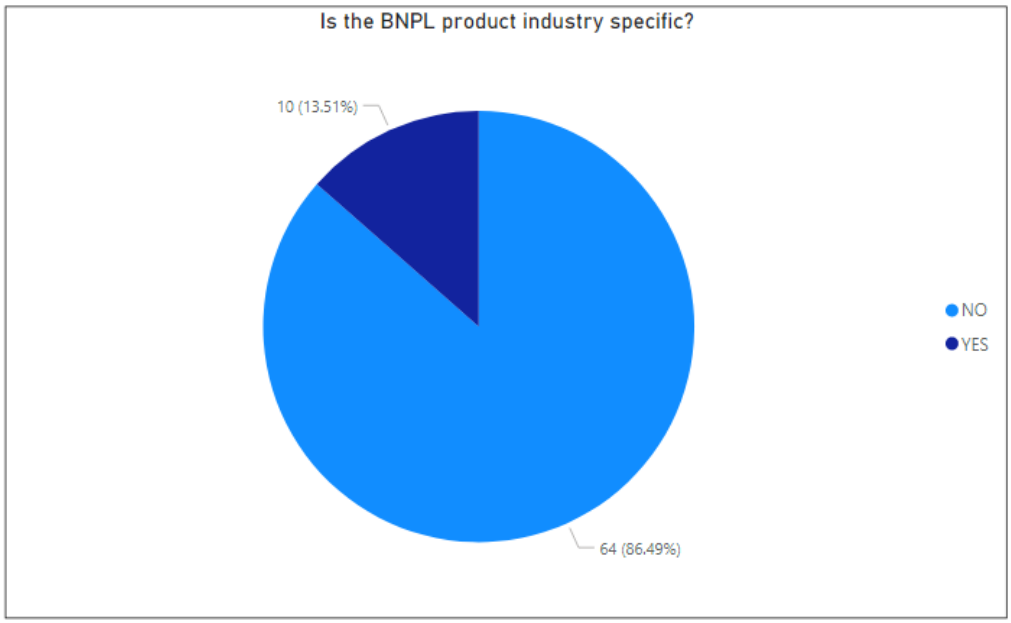

Figure 8. Proportion of vertically specialized products.

The most predominant industries were travel, with some offerings focused on flights and hotels financing; health care services, mainly related to dental plans and optical solutions and automotive as Figure 9 shows.

INDUSTRY	NUMBER OF SOLUTIONS
TRAVEL	4
HEALTH CARE SERVICES	3
CAR DEALERS	2
APPLIANCES	1
HOME IMPROVEMENT	1
HOME RENTALS	1
LUXURY	1
VETERINARY	1

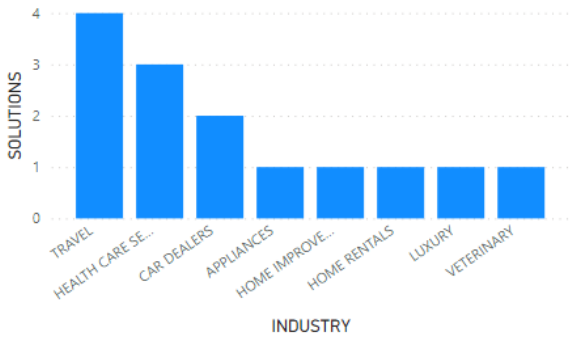

Figure 9. Distribution of vertically specialized solutions by industry.

4.3.2 Point-of-Sale patterns

The way consumers interact with BNPL products is mostly done online and so does remain with it comes to acquiring. In fact, out of the 74 products scouted 72 offered an online POS.

The remaining 2 do not exclude the possibility to offer an online POS but the decision lays on the merchant, since they are white label products and most of the terms are at the merchant's choice.

On the other hand, not all the products are thought to offer an in-store POS. In fact, 26 products are not offering an in-store POS. However, this is a feature that has been included recently in an important mass of products so it is not unreasonable to think that having the chance to BNPL in a physical store will be more common in the foreseeable future.

Figure 10 provides a tree diagram categorizing these attributes. Level 1 wonders about the presence of an online POS. In contrast, level 2 does the same for the in-store pos. Level 3 asks whether the provider offers a virtual card to complete the purchase and level 4 about the use of a specified card as the way to make the transactions possible, thus, as a tracker and regulators of the credit limit.

As the figure shows, virtual cards are a valid and used mechanism for making in-store BNPL purchases possible. About one out of three solutions available In-store offer virtual cards contrasting to a much lower 15% for solutions not available in-store.

Provider offered or chosen cards as the mechanism to control the spending limit of the users are not a particularly popular way to operate among the solutions scouted. In fact, just 14 out of the 74 products chose this approach. It can be noticed that almost 65% of those products are also offered in-store most coming from products that feature a virtual card suggesting that the strategic choice of offering a virtual card relates with the idea to have a card ruling the system.

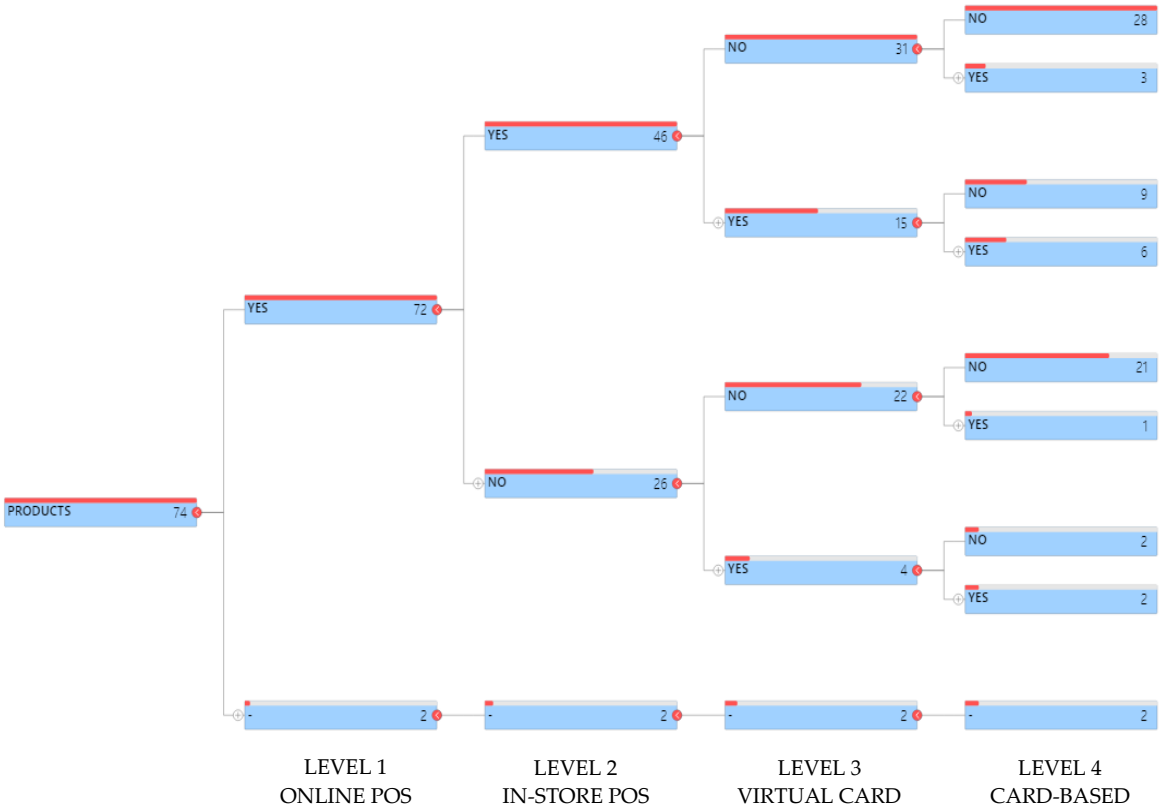

Figure 10. Tree Diagram front-end interaction

Going to the revenue side. One of the most relevant strategic decisions of BNPL provider concerns the actors that will be charged, and most specifically whether the final consumer would be subsidized or not.

Figure 11 reveals that a slight majority of the products do not charge a fee to the customer, about a 13% more than the solutions that do charge the customer on the purchase. It is important to show that 2 solutions leave this decision to the merchant.

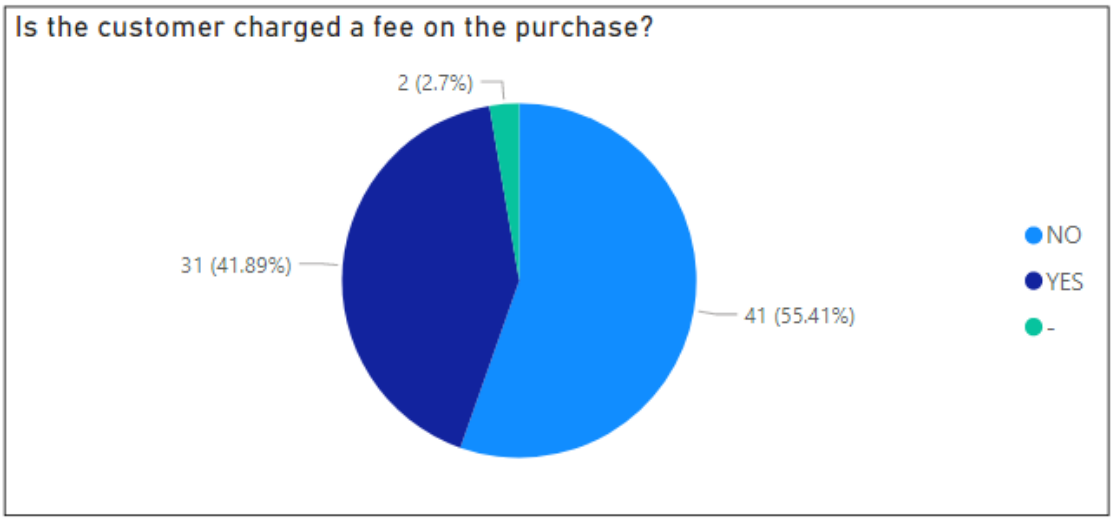

Figure 11. Proportion of products that charge a fee to the customers.

This measure is highly correlated with the maximum number of installments available to the customer. It can be seen that the percentage of charged customers goes from a 23% in the range of 1 to 5 installments permitted to a 79% for products that work with 18 installments or more.

This could be driven by a higher risk for providers that offer installments in a large term making impossible to 100% subsidized the customers since the costs are way to high to rely solely on the merchants or other revenue enhancers.

Figure 12 shows this trend for the three instalment ranges that were decided according to APR% similarities.

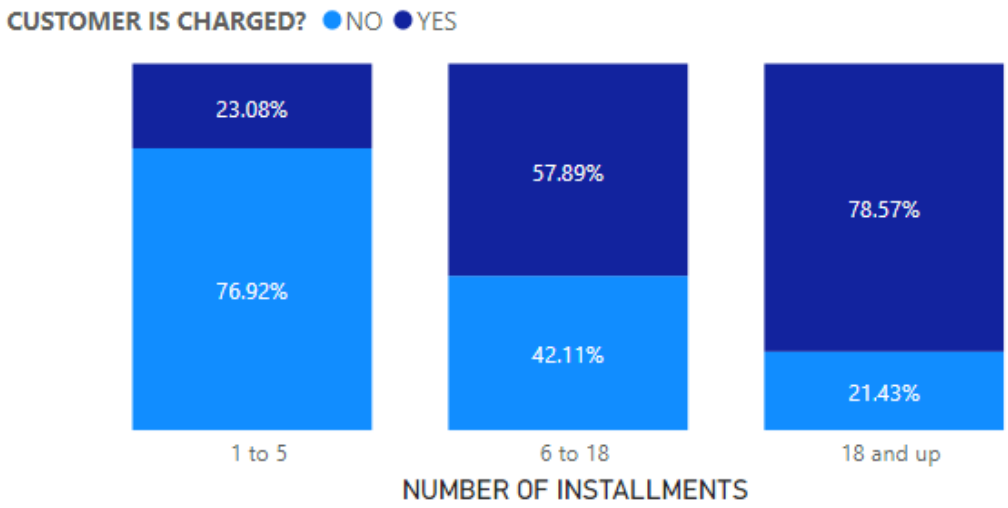

Figure 12. Number of customers charged by instalment range

Late Fees are another revenue stream for most of the providers since 65% of the products include them. Not charging it could be considered a point of difference and tend to be highly marketed by those who don't ask for it.

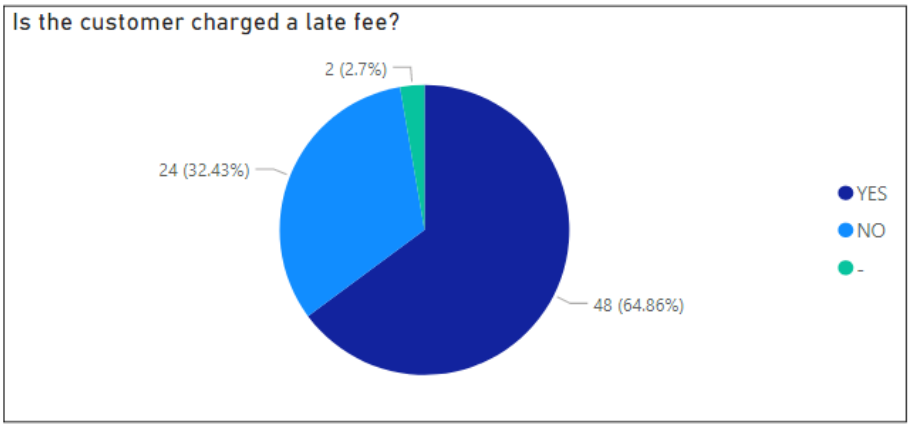

Figure 13. Proportion of products that charge a late fee.

In contrast, merchants come out as an important source of revenue for most BNPL solutions, since a lot of benefits in terms of volume, conversion and engagement are

promised by the providers. Just about 16% of the products do not charge merchants directly and this number is mainly behind products that do not have a merchant constraint, in other words, products that can be used with any merchant, meaning that in reality almost every product with a limited merchant base charges them.

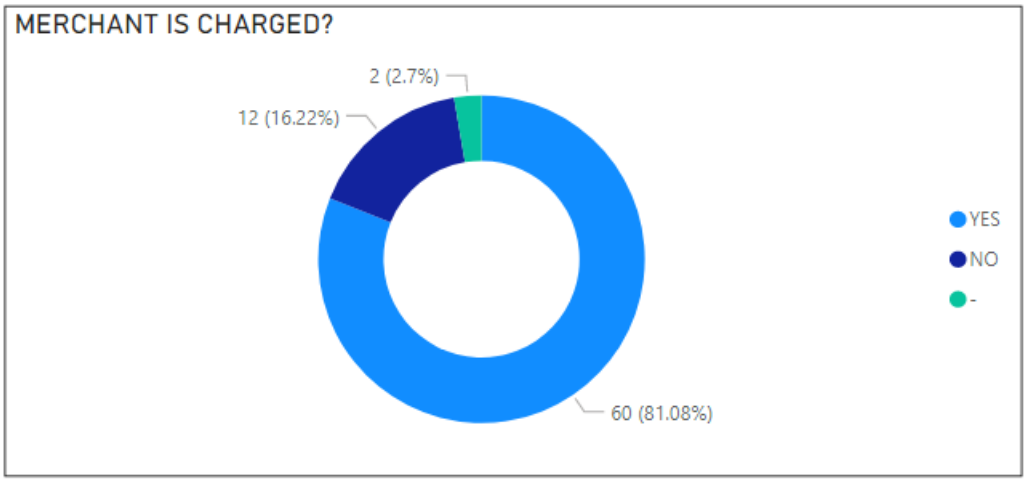

Figure 14. Proportion of products that charge merchants.

Another critical decision for providers is the credit assessment of the incoming users. This is an important measure to determine the capacity of the potential user to repay the debt. Two out of three products feature soft credit checks, which is an appreciated approach by customers since it does not affect their credit score, but at the same time it is less reliable and generates more risks for the providers.

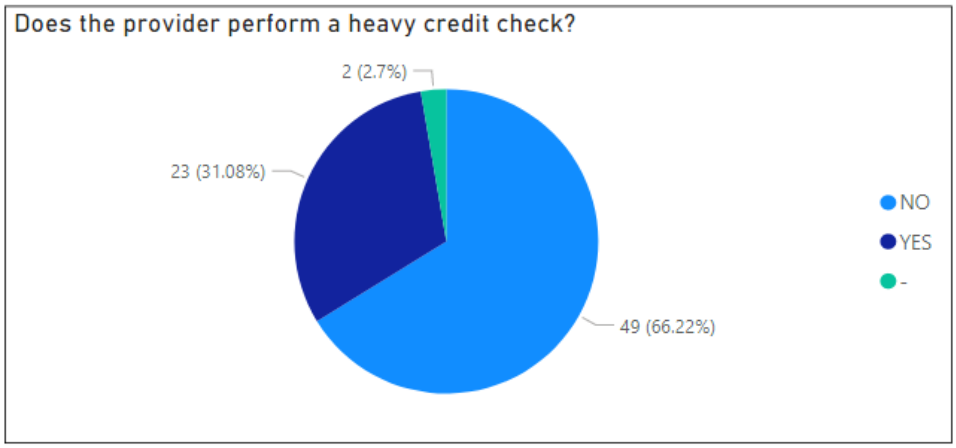

Figure 15. Proportion of solutions that perform hard credit checks

The presence of a hard credit check shows a correlation with the credit limit value. Solutions that offer spending limits below $2000 require hard checks in about 26%. However, this number raises to a 50% for credit limits over $10000 as Figure 16 illustrates.

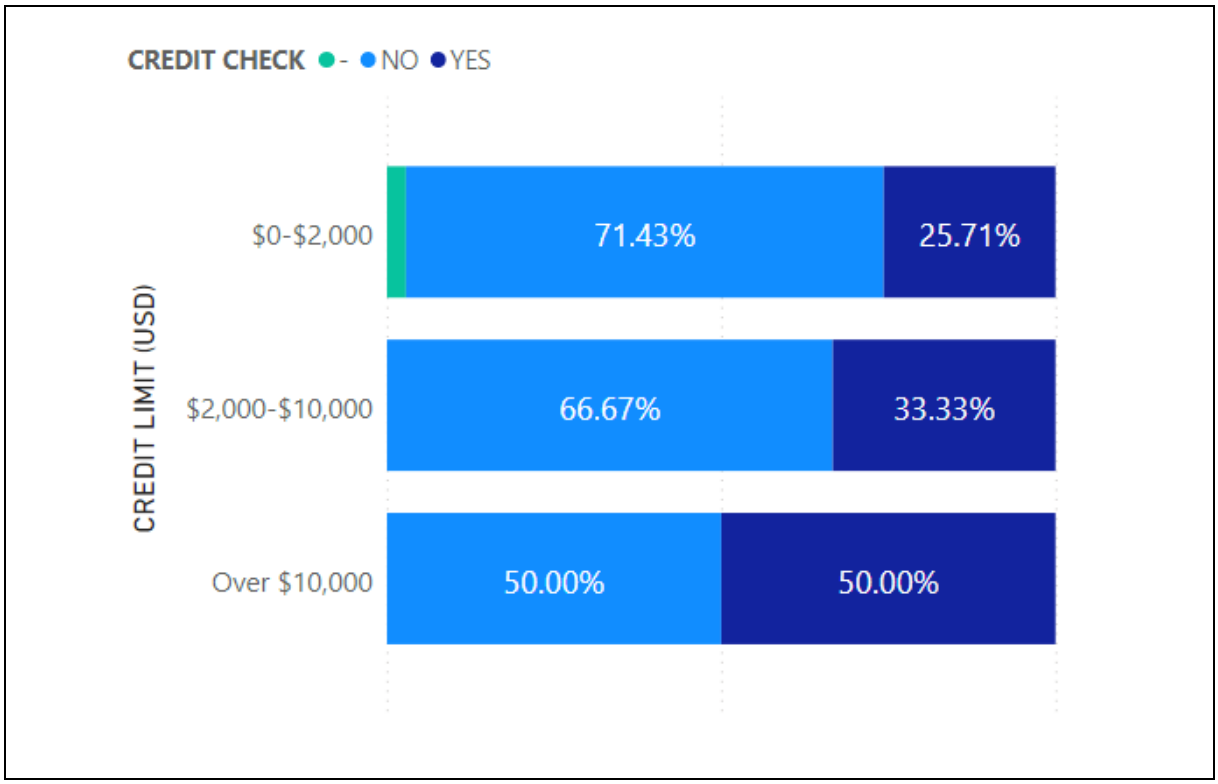

Figure 16. Proportion of hard credit checks by credit limit range.

Among the common measures that are implemented by BNPL products there comes the presence of a down payment, intended as the first instalment due at the moment of the purchase. 82% of the products offer require this down payment.

In majority the list of products that do not require down payment are solutions designed to snooze payments and cover them in few instalments.

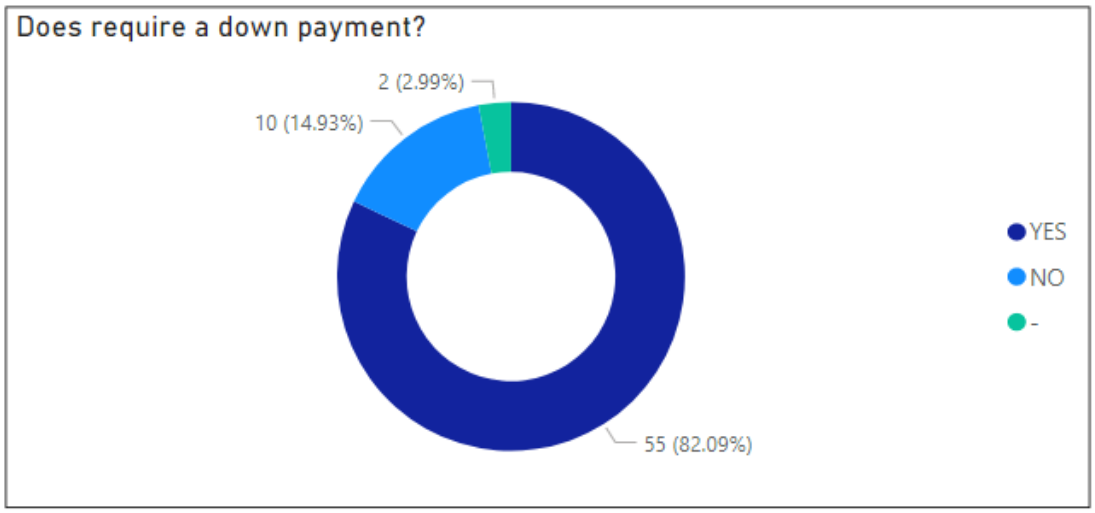

Figure 17. Proportion of solutions that require down payments

As Figure 18 the fees charged both to the merchants and the customers depend a lot on the credit limit granted to the customers that would be highly correlated with their average basket size. It also shows a notable raise in customer fees when the credit limit is higher and a steadier interest for the merchants that is the lowest at the range of $2000-$10000.

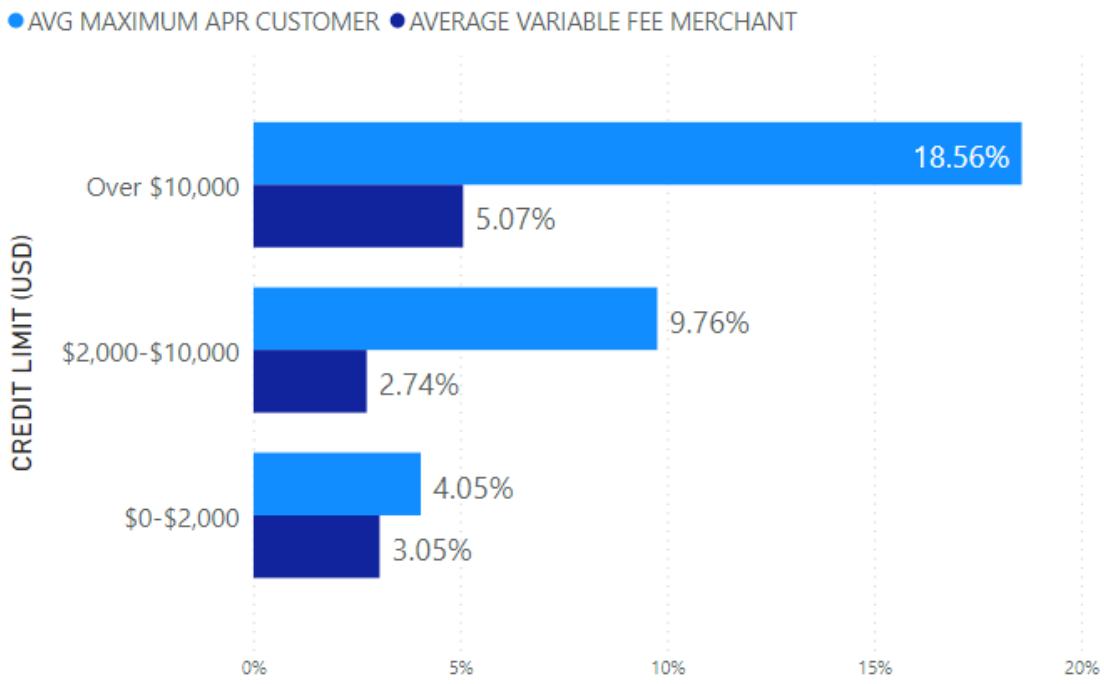

Figure 18. Average merchant and credit fees by credit limit

4.3.3 Decision drivers

Based on the previous analysis, some variables emerge as potential sources of differentiation between the different business models and serve to create clusters of solutions that share particular characteristics.

The very first choice might be how to arrange the revenue model. In this sense in most of the cases the margin comes either from the merchant or both the customers and the merchant.

Transaction fees and late fees are the most common ways to charge the parties. The most widely used are interests on the purchase but fixed settlement or service fees per transaction are also exploited.

Both customers and merchants are price sensible. Providers are not willing to charge consumers in purchases planned in few installments and with average basket values in the low percentile, instead, the merchant acts as a subsider absorbing the costs of the customer with the promise to benefit from higher volume, conversion and engagement.

Other alternatives to this model in this niche are products that are not dependent on a market base but that offer the possibility to buy anywhere. These products are card-based and make profit mainly out of arrangements with the card issuers but possibly adding some customer fees.

Besides, there is another model thought to approach this price and instalments bracket. Models that instead of redirecting the customers to the markets' website, decided to offer the products from different stores in their website in a sort of marketplace.

For these products the main profit stream is a mark-up price that they apply in the item and customer fees if they choose to charge them. So, in this case the merchant acts as a supplier in a B2B agreement but it is not subject to the variable and fixed fees in discussed before.

Another important decision for the merchant that will shape the business model will be the time in which the customer will be able to repay their purchase. Usually, a short financing time will mean moving the customers' costs of financing to other actors such as merchants or card issuers.

Instead, a longer financing time makes impossible for other parties to absorb all the risks related to the customer and in consequence it would be impossible to grant the customer and interest-free plan.

In this sense, financing time constitutes a differentiator between customer subsidized and non-subsidized credit. This is not a rule but a trend as customers in a short-term plan would tend to have lower APRs than customers that chose solutions available to repay in longer terms.

However, financing time and when the profit comes from are not the only decision variables that help to shape the solution mechanisms. Cart sizes and credit limits constitute explanatory variables that place the solutions in different niches.

The vast majority of solutions work with credit limits of less than $2000 and are offering markets mainly focused on disposable items such as clothing, electronics, furniture among others.

In general, credit limits above $2000 are designed to approach the very same markets but with the peculiarity to allow to sustain financing in a larger span, thus, offering more flexibility also in term of number of purchases financed at a time.

Nevertheless, this change in span is mainly driven by products with credit limits above $10,000 as Figure 19 suggests. This is an average maximum number of instalments offered of 28 comparing with barely 8 in the $0-$10,000 range.

This relates with what already shown in Figure 17 that shows a significantly higher APR for both the customer and the merchant in this credit limit range.

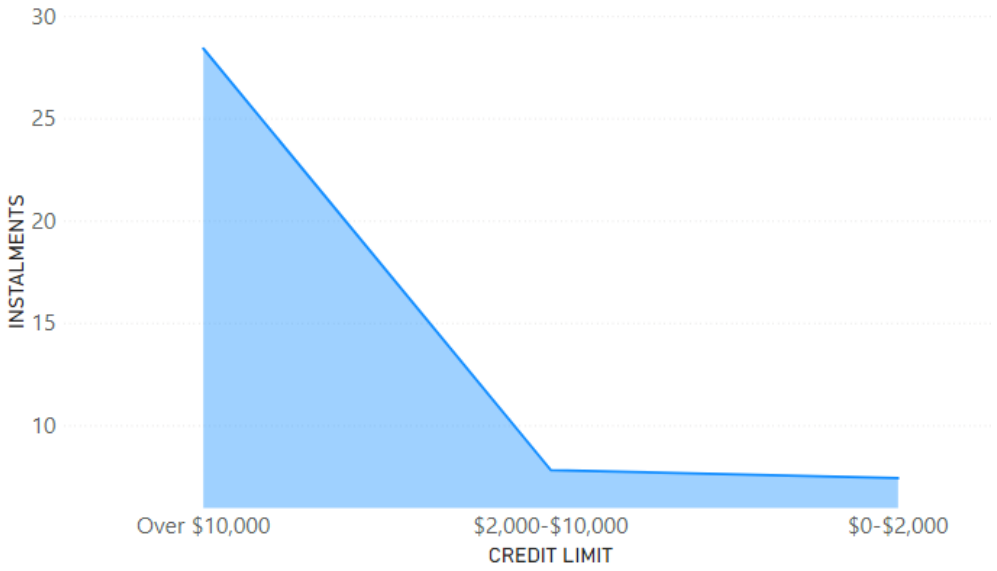

Figure 19. Average number of instalments by credit limit

Deepening into the characteristics of the solutions in this range, there were 12 products scouted 3 of which are industry specific and operate in the industries of Luxury, Travel and Health Care Services respectively (see Figure 20). The 9 remaining although are not industry specific products show a pattern of being thought for non-disposable items or the high-end products of the retailers offered.

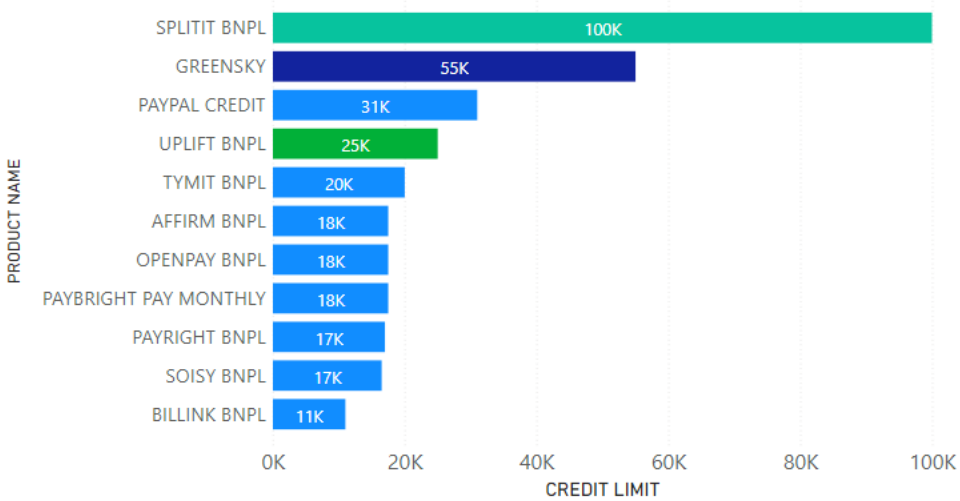

Figure 20. Products in the above $10k range by credit limit and industry

The nature of the industry in which the product focuses here emerges as another source of classification. As it could be seen 3 industry-specific products belong to the above $10,000 credit limit range and the total number of industry specific products scouted were.

This kind products aimed to serve industries that were traditionally either characterized by no financing offering or financing typically conducted using personal investment loans.

This is why the choice of tackling a whole different industry usually means a sort of differentiation in terms of the niche and product characteristics. In fact, industry specific products show higher APRs (Figure 21).

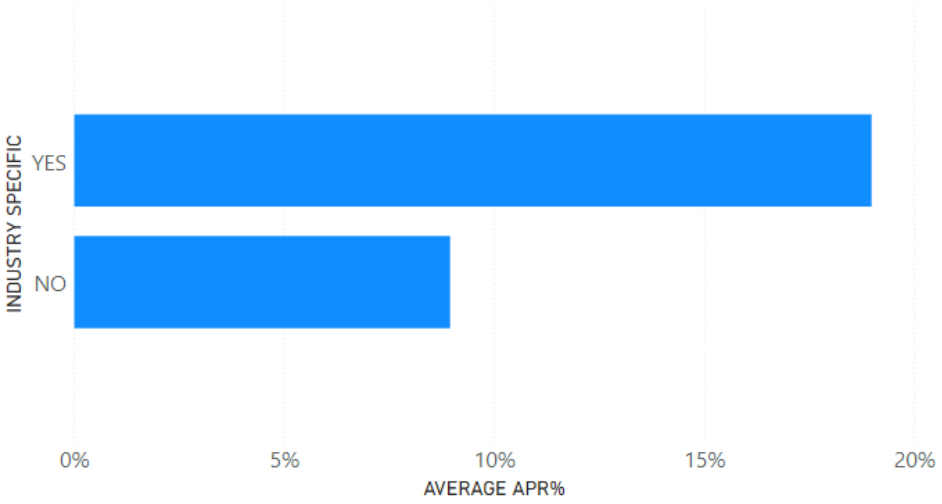

Figure 21. Average APR% for industry and non-industry specific products

4.3.4 Business Models

4.3.4.1 Short-term merchant subsidized credit

This kind of business models are focused on offering a financing mechanism in which the customers benefit from low to zero costs when purchasing a good and to make it possible the merchant cover these costs paying an interest on the purchase value and possible some additional transactions and service fees.

In compensation, the merchant benefits from no risk, so they receive the money upfront usually in short to no time from the purchase. These models promise the merchant to enjoy higher average purchase values due to the extra acquisition power that the customer experiences when splitting the value in instalments.

These models are sustainable for short-term financing, since the merchant is able to cover the risks while still being profitable. That is why these kinds of purchases go

from financing from 1 to 4 months and usually are split in two to four instalments to be paid weekly, biweekly or monthly.

These models are very common for the acquisition of fashion and electronic products with reasonably low purchase sizes. Other popular products offered in this model are furniture, beauty care, sports equipment and jewelry.

In this business model lay the most common BNPL type of products such as 'Pay in 4', widely extended in the US, Australia and Europe and 'Pay in 3' mainly used in the UK.

The biggest players implementing this model are PayPal, Klarna and AfterPay that cover an important portion of the market. There are also some emerging players mainly covering Asia-Pacific, LATAM and Africa.

Merchant promotion is very important for this kind of models. In fact, most providers always include a shop section when a list of all the merchants affiliated is displayed. Categorization is also widely use and allows to easily find the merchants that offer what the customer is looking for.

Promotional banners are a widely implemented strategy by merchants in order to incite customers to purchase.

The customer persona for this kind of product tend to lay in the category of millennials. They are users that do not have access to traditional financing or even having it are looking for smarter ways to manage their budget. They are really propense to purchase online, price sensible and shopping addicts which make them likely to look for the best

deals and will find the convenience of splitting a purchase with little costs very attractive.

The propensity to purchase makes this niche also a risky one in the sense that has the potential to struggle to repay the debt. To cope with this, some providers add costs related to late purchases and support on credit bureaus and innovative algorithms to study the risk profile of each customer and reject it or restrict their credit limit if needed.

4.3.4.2 Flexible merchant-managed solutions (white label)

White label BNPL solutions are a still narrow group of products that focus on customers that want to offer a BNPL product themselves. In other words, this kind of products work as integrators of instalment payments in the merchant's back end but do not show up front.

These are products designed for merchants that want to incorporate BNPL but in a strategic decision do not consider favorable to offer it using a third-party provider. The BNPL product is then 'unlabeled' so it does not take ownership of the buying experience at the checkout.

These kinds of products are also known for offering less friction in the purchase process as the user do not need to register in a BNPL separate platform and tend to enjoy lower transaction fees in comparison with the regular subsidized credit.

The merchant often benefits from more autonomy in the implementation process as the number of instalments and the repayment period may be agreed and not

necessarily is determined by the provider and also more flexibility with the same parameters.

Important players scouted in the white label BNPL are American Jifiti and Italian Soisy. Both consider themselves as digital facilitators and act as multisided platforms.

In case of Jifiti, the platform connects lenders, which are in the majority banks, and merchants, taking charge of the product development, merchant sales support and onboarding process.

Soisy, instead is financed by a common fund of private investors which get guaranteed profits between 4 and 8% and offers maximum flexibility to merchants that can choose payment terms from 1 to 36 instalments with different fees.

As it can be seen these models can have some variation on the revenue streams, value proposition, strategic partners and cost structure but they share the feature of making the branding a merchant owned one.

4.3.4.3 Industry specialized products

These business models have products designed to target specific industries with traditionally high-ticket sizes and very particular payment structures that make very appealing a BNPL product for both the merchants and the customers.

The product is thus entirely offered to a business that works in the provider target industry. In general, these products are very popular for professional services such as

health care services, home improvement services, car maintenance and repairment and veterinary.

Professional services tend to create long-term relationships between the merchant and the customer. This relationship often comes with large ticket sizes that require either payment plans offered by the merchant or the user to revolve to financial institutions to get loans.

The previous characteristics often pose a liquidity issue for the merchant that would prefer to get paid the full amount upfront and for the customer that would rather split the payment in order to afford it without incurring in the commitment that a loan implies.

Therefore, industry specialized BNPL products cope with this issue by offering the convenience of liquidity for the merchant and the affordability for the customers understanding the needs of both the actors.

These models show higher APRs for the customers, tend to show long term commitments so solutions from 6 to 36+ monthly instalments and also variable costs for the merchants.

4.3.4.4 BNPL Marketplaces

BNPL marketplaces are products that instead of integrating in the checkout of the merchant partners opt for incorporating a set of products from different partners in their site and sell them themselves.

They do not explicitly charge the merchants or the customers. They reach an agreement with the merchant getting a discount rate on the products and then apply a mark-up to the customers.

PerPay was the only company out of the solutions scouted that applies this model. It incorporates more than 1000 brands which can show that there is not a problem of scalability.

4.3.4.5 Direct-to-customer BNPL

These models do not create relationships with merchants. Instead, they approach the customer directly by offering a product in which they can pay a product in instalments almost anywhere.

It is common that these products incorporate a card that would allow the customer to make purchases in their favorite merchants until reach a credit limit to then generate a periodic payment.

The revenue model of this kind of products lays on partnerships with the card issuers that will give a cut on the purchases of the customers and additional fees charged to the customers if applicable.

All in all, D2C BNPL are products capable of reaching an important mass of businesses due to the lack of a merchant linkage. This is attractive for customers that want more flexibility in what to purchase but it is still a business model that requires further attention.

5. Conclusions

This thesis aimed at identifying the main BNPL products worldwide and determining the main business models that are operating in the market. Based on a comprehensive analysis of the solutions present in the market, it can be concluded that BNPL products are more complex and richer than a mere finance POS solution they offer different aggregated values to customers and merchants being part of the whole purchase journey.

BNPL solutions have been raising popularity worldwide and currently there are more than 200 products in operation and a lot more coming out. This analysis focused in 74 of the most representative and relevant products worldwide finding a high penetration and maturity in the Australian, American and European Market, an increasing interest in Middle East and central Asia and still a lot work to do to reach maturity in LATAM.

The products currently offered are varied and not necessarily all have the same features, but some common patterns can be found in most of the BNPL solutions. The definition of POS financing really is the final goal of BNPL products, but they tend to

have an important role in the purchase journey with most of the BNPL providers playing important roles on merchant's awareness and marketing.

Another important common characteristic is the risk absorption that the BNPL providers adopt. These solutions are usually a bridge between the merchant and the customer in which the customer pays to the provider in instalments and the merchant gets paid upfront usually up to a few days after the purchase.

This is a characteristic that should not be neglected because it makes BNPL solutions relevant in the sense that differentiate it from an owned payment plan offered by a provider to their customers.

Furthermore, online presence is almost a qualifying characteristic for BNPL products, as it was seen that all 74 solutions offered online POS. This supports the initial conception of a high affinity between BNPL and e-commerce.

There were also huge differentiators spotted in the analysis. This is to say, that there was not found a uniformity in terms of the offering. BNPL products take different strategic decisions, have different target customers, varied source of profit among others.

The main differentiators identified in this analysis turned out to be the time of financing, the industry, the credit limit and the revenue streams. These 4 variables and some of its different combinations explain the 5 business models spotted in this analysis.

The study successes to classify the 74 products studied, with the biggest part belonging to the merchant-subsidized business model coinciding with the biggest players Klarna, PayPal and AfterPay and with the most common group of products 'Pay in 4'.

Although the study gives a good proxy to the business models operating in the market there is still space to deepen into the biggest sample of solutions including B2B business solutions that were not taken into account and could have substantial differences with the models described.

It is also important to note that further studies would benefit from more direct sources of information that could guarantee a higher level of accuracy and completeness. In the case of this study, as was previously stated, not all the information was found on primary sources and also some information was not in secondary sources either.

The BNPL firms are not obliged to publicly disclosed their fees and revenue structure and reaching out the firms in order to get the information could be a good approach that is suggested to be implemented in further studies.

The thesis showed and supported the impacts and benefits explained and marketed by the BNPL providers but did not focus on evaluate whether these impacts were actually taking place in the scale that were proclaimed.

A study on the real impact of BNPL firms on both merchants and customers would be a good compliment to this study, specially if a distinction between each business model is done.

It is important to know that this is a moving industry that is evolving at a fast pace. As it was noticed in the scouting process there are tons of start-ups and incumbents trying to come out with new BNPL products that may not match any of the models already discussed in the current study.

It is fundamental to remark that the business model spotted are an attempt to offer a statistically acceptable classification of the solutions available in the market, but other classifications and further models can also be able to understand the BNPL market.

Finally, this research has contributed by putting a pivotal point for further studies that should do a more comprehensive analysis of external and internal values in BNPL. By doing this, it has offered an acceptable sample of BNPL solutions, it has described them and studied the more important business models surrounding them just like it was stated in the introduction.

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A. Appendix A

PayPal

PayPal is an American enterprise founded in 1999 that works mainly as an online payments system but has also moved into the BNPL market serving the US, the UK, France and Australia from 2020 processing more than $3.5 billion in transactions and reaching more than 7 million consumers.

PayPal has different BNPL products, and this is mainly behind their specific business strategy in each country.

In the US, PayPal offers two products Pay in 4 and PayPal Credit. Pay in 4 is an interest-free payment method split in 4 installments due every two weeks starting from the purchase.

Pay in 4 allows you to handle shopping cart values between $30 to $1500 and there are no fees associated with this payment method if paid on time. Initially, the company was charging a late fee but in August 2021 they announced that they will no longer

charge customers these fees when they miss payments mainly as a competition strategy.

Missing a repayment means that, depending on the country, the credit rating and credit score may be affected, impacting the ability to obtain further credit.

On the other hand, PayPal Credit is designed for purchases of $99.00+ and it is a credit line without interest if paid in full in 6 months. PayPal also requires the customer to cover a minimum monthly payment to avoid interest.

In case conditions are not met, customers are charged an APR of 23.99% with a minimum interest charge of $2.00 and that is subject to vary with the market based on the Prime Rate.

As stated by the company "PayPal Credit is subject to credit approval as determined by the lender, Synchrony Bank, and is available to US customers who are of legal age in their state of residence. You must pay with PayPal Credit to get the offers. Minimum purchase required is before shipping and tax. Offers not valid on previous purchases, returns or exchanges."

Pay in 4 is also available in Australia to natural persons of at least 18 years of age residing in Australia who have a valid and verifiable Australian residential and email address, mobile telephone number and hold a PayPal account. The shopping cart values allowed are from 30 AUD to 1500 AUD.

In France, PayPal offers the product 'Pay in 4X' which has the same conditions as the American 'Pay in 4' with the exception that the eligible purchases are from 30 EUR to 2000 EUR and the instalments are due every month so should be paid within three months.

In the UK two BNPL services are available 'Pay in 3' and PayPal credit. Pay in 3 can be used in purchases from £30 to £2,000 and the three instalments are due every month starting from the purchase, for the rest it works in the same way as Pay in 4.

PayPal credit in contrast has some differences with the US version. In the UK, the interest-free offer is granted if paid in full in 4 months and any remaining balance due after this period will be charged interest at 21.9% p.a. (variable).

PayPal credit UK is designed for £99.00+ expenditures and can be used multiple times getting automatically the 0% interest for 4 months on each purchase. If one misses a payment PayPal will charge a late fee of £6.00 and their credit record may be affected.

PayPal credit both in the US and UK requires the approval of a line of credit. To determine the size of the credit line PayPal uses the information provided in the application form along with internal PayPal data and an external credit check. In the U.S the minimum credit line offered is $250, there is no a minimum limit in the UK.

The user experience of a BNPL user with PayPal is very similar to the experience of a regular acquisition with PayPal. It all starts at the checkout on the merchants that

include PayPal in their payment methods, but PayPal also promotes the merchants that allow Pay in 4 in their website.

In the checkout, depending on the merchant it is possible to find a 'Pay later' button that along with the PayPal traditional button will redirect to the PayPal checkout. In the checkout, both the options of Pay Now and Pay Later will appear, so in case Pay later is available, all the options of Pay later (PayPal credit and Pay in 4/4x/3) will appear in separate checkboxes.

After checking the desired Pay Later option, the user needs to click continue and a new menu with all the transaction details will appear before the final confirmation to approve the purchase.

If Pay in 4, 4x or 3 (depending on the country) is selected this menu will show the total amount to pay on top, then the sum and date of each of the payments and a summarized list of the key conditions of the payment. This is, "No sign-up fees", "Interest-free automatic payments" and "No impact to credit score".

At this point, the user can either cancel the transaction or click continue. If the user decides to progress, a new window asking the billing address and the mobile phone will appear and a button of 'Agree and Apply' that needs to be clicked to progress to the last step.

The last step before completing the transaction consists of choosing a card for automatic payments and checking the box to agree with the Loan Agreement and Payment authorization. Then, just a click on 'Agree and Continue' and the credit card will be charged immediately with the first instalment and the transaction will be concluded.

Not all PayPal customers are granted the use of their Pay Later products in the locations where it is available. PayPal first performs some financial checks that vary depending on the product and the location.

Paypal does perform a financial assessment to approve BNPL products to their users, mainly for PayPal credit. These assessments involve a credit score check, an income study, age and residence verification among others

In the US, PayPal is partnered with a bank called Synchrony Bank, which will review any application and then complete an audit. PayPal credit requires a minimum credit score of about 700 for approval. This is a widely accepted estimation since official data is not publicly disclosed.

PayPal credit UK will ask the prospect customers to submit a form and requires the applicants to:

- Be UK residents aged 18 years or older
- Have a good credit history

- Have not recently been declared bankrupt
- Be employed and have an income greater than £7,500 per year

As Paypal has scrapped most of the fees from BNPL products to customers, the most important income comes from the fees they charge to the merchants.

According to fool.com (2020) Paypal makes money on BNPL by charging a processing fee to merchants, which is the same way they make money from most other e-commerce transactions. PayPal charges merchants a fixed base fee plus 2.9% of the transaction value (in the USA).

Affirm

Launched in 2012 in Silicon Valley, Affirm is a FinTech startup that offers consumers the ability to pay for purchases over time, interest-free at the point of sale. The network empowers shoppers, but also gives merchants the ability to advance growth via new payment options.

Affirm BNPL products are what they call payment plans. A customer can select either splitting their purchase in 3, 6 and 12 instalments that are to be paid monthly. At the checkout, Affirm will show the APR%, the total interest to be paid during the whole plan, the total amount to be paid and the installment value.

Affirm assures that they don't charge any fees. That means no late fees, no prepayment fees, no annual fees, and no fees to open or close your account. Depending on the size

of a purchase and where one is shopping, the payment plan may include interest and they guarantee that it will not change overtime.

Recently, affirm partnered with amazon to launch a BNPL product directly oriented to the giant. The tie-up between the two firms will enable Amazon consumers to split purchase payments of $50 or more into equal installments, without late fees or hidden charges, according to the release.

At this time, Affirm is available only to shoppers residing in the United States. Affirm hopes to expand its services to customers outside the U.S. in the future. The partnership with Amazon could be the door to enter other markets.

Affirm users can use affirm.com or the mobile app to make their payments. Affirm will send a remainder so that they user don't forget to pay. Affirm organizes the payments in a sort of list of every transaction the user has done.

The above-mentioned list includes the full amount that the user owes, and a classification based on the merchant.

Sezzle

Sezzle is an American fintech company born in 2016 and headquartered in Minneapolis that started offering a BNPL product in 2017. Sezzle operates in the US and Canada with 3 million active consumers, around 40k active merchants and more than 1 billion of merchant sales in the last 12 months.

Sezzle product consist of a 4 interest-free instalments method payable over 6 weeks. Sezzle markets on their website to offer an instant approval decision right after signing up and to not having an impact on user's credit score.

Sezzle partners with more than 40000 stores as per what is described on their website among which the biggest one is the American wholesaler target. The stores available are well categorized in their website by a series of menus that split by category, trending brands, 'brands we love', most popular, new in among others, and also include banners and ads from specific brands.

The UX is very minimalistic in both the website and the app and works as a sort of marketplace redirecting to the shops that they partner with. In addition, there are two separated sections for shoppers and for merchants when the conditions and characteristics of the product are explained, and a blog called sezzleu.

Sezzleu is probably the main differential value of the company because it includes a list of articles that somehow encourage the customer to get to know the merchants and their products. It is done by two sections one focus on the merchant itself called shopping guides and one focus on products listing various merchant options.

There is a third section named Financial Wellness that switches the attention to the customers showing articles on financial education and advice on investing and managing debt that is an aggregated value as well.

As most of BNPL services, Sezzle makes money via merchant fees as well as late payment (or penalty) fees. The majority of its profit is generated by merchant fees. In their website Sezzle affirms: “The Parties agree that Sezzle's payment processing fee is 6% plus 30¢ per transaction. The standard rate may vary by industry classification and could be higher due to our view of the associated risk profile of the industry.”

Other important sources of income are the rescheduling convenience fees that is a fee of up to $5.00 to allow a User to delay the Payment Schedule (up to 2 weeks) and allows to avoid the account reactivation fees charged when failing to make a scheduled payment for more than two days and are up to $10.00.

Lastly, for what credit assessment concerns Sezzle uses the user’s personal credit report from a credit bureau to identify any business risks related to offer financing to the customer. However, Sezzle does not perform "Hard Checks" or "Hard Pulls" thus as already noted does not impact users’ credit score.

Splitit

Splitit is an American fintech company founded in 2012 and headquartered in New York. Their sole product is a card based BNPL solution with no interest, application, or fees.

Splitit is accepted by more than 2,000 e-commerce merchants in over 30 countries and shoppers in over 100 countries. Splitit has an R&D center in Israel and offices in London and Australia.

Splitit works with the customer existing credit which means there is neither registration nor credit checks. Once the user gets the credit card accepted, they can access the payment option at the checkout from the retailer.

The payments can span over 3, 6, 12 or 24 months depending on the retailer and the first payment will be redirected to the card once the retailer confirms the shipment.

Making and monitoring payments is also simple with Splitit. When one purchases an item, Splitit asks them to provide an email. The email enables them to set up an account with the support portal on the Splitit website.

One can use this portal to monitor their installments and make payments. Beyond the portal, they will also see the installments on their monthly card statement, and Splitit sends a monthly email confirming the payment.

A unique and exciting feature of Splitit is that its installment plans will not impact the users' credit score. Every month, users' bank will only see the installments made. Even if a payment method is declined, the credit score remains unscathed.

However, any late payments will be charged interest at your card's APR until they are paid off. It is still important to pay attention to your payment's due dates and make timely payments.

Splitit places a hold for the full balance on users' credit card. This may be an issue if the user has a low spending limit. It can also negatively impact customer's credit utilization. Retailers may place maximum or minimum purchase values on the customer. For instance, James Avery requires a minimum $10,000 purchase to utilize Splitit.

Splitit is also only available for Visa and Mastercard leaving out users from American Express and Discover cards.

Splitit retailer portfolio features small-to-medium sized businesses with expensive products. Thus, Splitit is more oriented to users opting for luxury purchases but that want to break them down into more convenient rates.

Splitit's source of revenue is transaction fees, paid by the retailer when a customer uses the Splitit payment option online or in the physical store: Splitit charges an average rate of 3% of each transaction. There are no late fees.

Splitit announced in July 2021 that it is going to bring installment payments to in-store retail locations worldwide. This will integrate Apple Pay and Google Pay to smooth out the customer payment experience.

This offering is provided for shoppers interested on making large value purchases like luxury items, jewelry, furnishings, and sporting retail featuring La-Z-Boy Furniture Galleries, Gem Shopping Network™, PROCAM, Fabergé, KEF and Aftershock PC Australia with some other brands in the waiting list.

Uplift

Uplift is a BNPL startup based in Sunnyvale, California and with offices in New York, Reno, and Guadalajara. Founded in 2014 by Brian Barth previously, founder of the travel startup SideStep, uplift is mainly focused on travel payments claiming to be committed to "provide people with a better way to pay for the things that matter most, the ones that elevate people's lives".

Uplift is available in Canada and the USA and their partners include airlines such as Alaska Airlines, Air Canada, Aero Mexico and Lufthansa among others, cruises, hotels & resorts, travel agencies and a couple of retailers.

Uplift has a dedicated section to list their partners where they put huge banners with the partner logo and name. Additionally, uplift has a menu that split the partners in Stay, Airline, Cruise, Vacation Packages, Travel Agency and Retail.

Uplift offers what they call closed-end installment loan products that are made by an Originating Bank (in most of the cases CBW Bank) and by Uplift itself in Colorado, this service is design to finance a purchase from a merchant's site, so that Uplift pays to the

merchant on the user's behalf and the users commits to repay the loan according to the terms fixed.

The way Uplift operates is pretty similar to the main BNPL providers. The user needs to visit the website of an uplift's partner and after choosing what to purchase, the uplift payment option will appear at the checkout.

Uplift will request to enter the buyer information (Name and last four digits of the social security number) and will perform a check that will lead to either approve or reject the transaction. Finally, if the transaction is approved the last step is to pick the desired plan and complete the purchase.

In a nutshell, the terms and conditions vary according to the merchant and the user profile. APR ranges from 0% to 36% and different payment plans including 6-, 11-, and 18-months duration. A down payment may but not necessarily will be required and the service is available for purchases between 100$ and $25,000.

To verify eligibility, Uplift will do a soft credit check and verify the user's identity. Some websites claim that the credit score required needs to be over 550 although this is not mentioned in Uplift's terms of use.

Sunbit

Sunbit is a US-Israeli fintech company founded in 2016 and headquartered in Los Angeles, California. It is mainly focus on buy now, pay later technology and heavily

oriented to auto dealership service centers, optical practices, dentist offices and specialty health care services.

The product is available in more than 8000 locations in the USA and Sunbit puts a very interactive shop directory that allows to filter in a map by entering a city, zip code or retailer name. By default, the location set is Los Angeles and the number of retailers displayed depends on how the map is zoomed.

Regarding the characteristics of the product, Sunbit offers what they call flexible payment plans. This is, 3-, 6- or 12-month installments that they user can choose from to split his purchase and if it is a dental care service the plans expand to 18 and 24 months as well.

The terms and conditions of the product are simple. A down payment is always required and it varies depending on the loan amount and term; the loan amount is from $50 to $10000 depending on the industry and is financed by Transportation Alliance Bank, Inc., dba TAB Bank.

There are two ways to benefit from a 0% interest rate, a deferred interest promotion, that allow avoiding interest in selected merchants if the loan is paid in full within 1 month of the date of agreement and choosing a 3-month 0% APR plan available to all approved customers at participating merchants only.

Otherwise, the APR range depends on the industry, merchant location, and customers' state of residence and goes from 0 to 35.99% APR. Colorado residents and merchant locations: 9.99-35.99% APR for loans of $1,000 or less; 9.99-20.99% APR for loans over $1,000 but not more than $3,000; 9.99-14.99% APR for loans over $3,000; Maryland residents and merchant locations: 9.99-23.99% APR; Massachusetts: 9.99-17.99% APR for loans less than $1,000; 9.99-22.99% APR for loans from $1,000 to $6,000; 9.99-19.99% for loans over $6,000; New York residents and merchant locations: 9.99-15.99% APR.

Sunbit is currently looking to expand its merchant affiliate base and is using a referral promotion to promote it. In their website they have a banner offering a $100 gift card for every auto service center, optical practice, or dental office referred that becomes a Sunbit partner.

QuadPay

QuadPay is an American digital payments company founded in 2017 by Brad Lindenberg and Adam Ezra and headquartered in New York City. The company was recently merged with the Australian Zip into a single BNPL Brand with a sole product that serves 5 continents, 51000+ merchants and seven million customers.

The product offered is designed to split the purchase in 4 interest-free instalments. The first installment is due at the checkout and the remaining 3 are spread over 6 weeks. The selection starts at the checkout on the merchants that include QuadPay in their

payment methods, the user can reach this window either from the organic website of the merchant or by QuadPay's app or website which intentionally promotes all the merchants adhered.

QuadPay has different sources of income. The main one consists of a merchant fee on each purchase, it is not publicly disclosed but it is estimated between 3 and 6%. Then, there is a convenience fee charged to the customer and accounts for $1 per installment, thus $4 per purchase and late payment fees apply as well and are up to 7$ per purchase depending on the users' state of residence.

The customer has what QuadPay calls "available spend" which is the total amount available for purchases from Merchants using the account, and it is reduced by any currently outstanding amounts from previous purchases. This number is determined by QuadPay and can change anytime by QuadPay's sole discretion.

When registering with QuadPay, the user needs to be aware that is giving the right to be subject to evaluation of creditworthiness. QuadPay can refer to consumer reports and to all information associated with the customers' identity held by any national credit bureau. However, QuadPay does not complete hard credit checks, thus not affecting the users' credit rating.

One of the most differential features of QuadPay is the possibility to create a one-time use card similar to a prepaid card. This is useful for both In-store and online payments.

For in-store purchases the user needs to define and do an estimate of what they are going to spend, and this would be the in-store card balance, then the card will be generated and will need to be added to a wallet (either Google Pay or Apple wallet), at this point the user will be ready to pay holding the phone near the reader.

In case of online purchases the card data will autofill the payment check out in seconds and the user just needs to confirm the order.

QuadPay has a varied set of merchants affiliated, that account for around 40k and are grouped in the following categories: Zip Exclusives, Womens, Mens, Beauty & Health, Clothing, Education, Electronics, Food & Beverage, Home & Furniture, Jewelry & Accessories, Kids & Babies, Pets, Shoes, Sports & Outdoors, Travel & Entertainment and Trending. So, it is not industry-specific, and it is mainly focused on consumer goods.

PayBright

PayBright is a Canadian company co-founded by James Fox and James Hyssen in 2009 and born as Health Smart Financial Service. It launched its first product in the spring of 2009 consisting in six and twelve interest-free plans with an instant approval process.

The current offering of the company still includes healthcare but also entered the retail sector launching a Pay in 4 products in 2019. The company merged with Affirm and

turned into the referral company for the Canadian market keeping a separated portfolio.

Paybright is partner of more than 7000 merchants in Canada. The website includes a list of all the categories Home & Furniture, Electronics, Fashion, Beauty & Wellness, Sporting Goods, Hobby & Leisure and Auto featuring widely recognized brands such as Apple, Sephora, Samsung, eBay among others.

The company offers two products one for smaller purchases and one for larger purchases, as follows:

1. **Pay in 4.** Consists of 4-interest-free biweekly payments with: no interest or fees, no impact on credit score, easy automatic payments. It is designed for carts to up to CAD$1500. In case of late payments, the fee is CAD$10.

2. **Pay Monthly.** It's an option for big purchases available for a narrower set of retailers. The number of installments of this solution can be from 6 to 60 and the APR is between 0% and 29% depending on the user credit score and the merchant. There is also a monthly processing fee between CAD$1 and CAD$4. Missing a payment involves a late fee of CAD$30.

Paybright revenue streams come from the fees and interest charged to the customers in the applicable plans but also from the merchants that are charged variable fees per transaction between 2% and 5% depending on the agreement.

Concerning the credit assessment this is what PayBright includes in their T&C: “For “Pay in 4” payment plans, a “soft” credit check may be conducted with a credit agency at the time of your application, but no “hard” credit check will be performed, subject to the terms of the Credit Report Consent. For “Pay Monthly” payment plans, a “soft” credit check may be conducted with a credit agency when you pre-qualify on PayBright's website and a “hard” credit check will be conducted and will appear on your credit report at the time you submit an application to make a purchase using PayBright on a retailer website, subject to the terms of the Credit Report Consent”.

ViaBill

ViaBill is a Danish start-up founded in 2014, based in New York, Copenhagen and Madrid and currently serving the US, Denmark, and Spain. The company offers a sole BNPL product claiming to increase the basket value and improve conversion rate.

ViaBill is available for a narrow but varied group of categories that include Fashion, Electronics, Kids, Food and drinks, Home, Beauty and Wellness and Entertainment and Sports. The number of retailers affiliated is about 5000 and keeps growing.

The product is designed to split the purchase in four equal interest-free installments to be paid monthly. From a merchant perspective the interest rate consists of 2,9% plus a 30 cents fixed cost per installment.

The process is very easy, ViaBill will integrate their payment option in the merchant's checkout so that the user can click the option and will be redirected to ViaBill's page to create a free account.

The account gets immediate approval, this means no hard checks performed. The requirements are to be 18 year or older, have a valid email address, a valid US mobile number, enough funds to pay the first installment and to have a debit/credit card available to make the purchase.

When the user's sign in for the first time the credit limit will be $300. The first payment of 25% of the price should be done at the checkout and the rest in the successive three months and are going to be taken out from the payment method on the last working day of every month.

Late fees are either $29 or the amount of the missed installment if less than $29. This late fee will raise if the customer keeps missing payments, and it is the only extra fee that the user is accountable for. When a payment is missed the due balance of the next month will include the missed payment and the late fee.

Perpay

Perpay is a fintech company based in Philadelphia founded by Christian DiMarco in 2014. It serves more than 3 million members and was ranked the 5th fastest-growing company in the country by INC Magazine in 2019.

Perpay product is a no-interest, eight-installment payment plan that can be deferred on a weekly, bi-weekly or monthly basis. To set up a Perpay account, users will need to submit their most recent pay stub to determine your spending limit.

Perpay has a different way to make profit. Instead of charging an interest to the customers, they apply a mark-up on the products from the retailers. In this way, they will not redirect to the retailer website but include their products in a sort of marketplace in their website.

They include in the marketplace more than 1000 brands of different categories from electronics to fashion, including retailers like Ashley HomeStore and Nintendo. The marketplace is not accessible if the user is not already signed up.

To create an account some requirements, need to be met. This is being full-time employed (this is checked by providing three months of employment history), having a minimum annual income of 15000, an active mobile phone and no bankruptcies.

No hard credit checks are performed, and the customer will not incur in any extra further fees unless it misses a payment. In this case, the late payment fee will be up to $35. A payment is considered late if the payment is not received within six days of the due date.

A value-added service by Perpay is called ‘credit building”. A user will qualify for credit building after completing four months of on-time payments which must exceed

$200 to qualify. Then Perpay will report the automatic direct deposit payments to the major credit bureaus (Experian®, Equifax®, and TransUnion®).

Bread

Bread is a fintech company founded by Josh Abramowitz and Daniel Simon in 2014 and based in New York. Bread allows to make online purchases and pay them over time, but it is not a direct lender, instead they support on Cross River Bank for short-term installment loans released to the customer.

Bread has two BNPL solutions, SplitPay and which are disclosed at the retailers' checkout upon availability. The user needs to add the items to the card, select Pay-over-time at the checkout and then enter some personal information to get a confirmation from Bread payment plan.

If the user is eligible, they will be presented with the financing terms offered and sample payment amounts. The check does not affect customers' credit score as a soft inquiry is completed to check eligibility. If you choose to accept your Bread's loan terms after your Bread pre-approval, we will not perform a hard inquiry with any of the credit reporting agencies.

Once the customer has taken out a loan, Bread may report repayment information about your loan to the consumer reporting agencies, which may impact your credit score.

American Express

American Express is a multinational financial company specialized in payment card services. It was founded in 1850 in Buffalo, New York and is headquartered in Lower Manhattan New York.

American Express is one of the most valuable brands in the world and has a varied portfolio including insurance, finance and travel services plus corporate banking, traveler's cheques, credit cards and charge cards.

In early 2021 American Express introduced its new BNPL brand, 'Pay it Plan it'. It is a flexible payment option linked to some of the personal credit cards offered by the company.

Pay It Plan It covers two different payment options:

- Pay It designed to cover small purchase amounts (less than $100) right in the American Express App.
- Plan It designed to split up larger purchases (over $100) into monthly payments with a fixed fee.

Eligible transactions will show a Pay It or Plan It button on the Amex mobile app.

Klarna

Klarna is a Swedish start-up founded in 2005 that currently operates in 17 countries serving 90 million shoppers, partnering with 250.000 businesses. Its main market is Europe with presence in Austria, Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Norway, Poland, Spain, Sweden, Switzerland, and the UK but it also operates in Australia, Canada, New Zealand, and the US.

Klarna offers a portfolio of payment plans that vary among countries. Their main services are:

- Pay in 21 days: (Available in Belgium) Lets shoppers select this option at the checkout to have 21 days for trying on the product before paying. If shoppers pay on time this option has neither interest nor surcharges.

- Pay in 14 days: (Available in Austria, Finland, Germany, The Netherlands, Norway and Sweden) Lets shoppers select this option at the checkout to have 14 days for trying on the product before paying. If shoppers pay on time this option has neither interest nor surcharges.

- Pay in 10 days: (Available in Denmark and Italy) Lets shoppers select this option at the checkout to have 10 days for trying on the product before paying. If shoppers pay on time this option has neither interest nor surcharges.

- Pay in 30 days: (Available in The Netherlands, Poland, Switzerland the UK, and the US) Lets shoppers to select this option at the checkout to have 30 days for trying

on the product before paying. If shoppers pay on time this option has neither interest nor surcharges.

- Klarna Financing 3-24: (Available in Austria) Allows shoppers to split their purchase into 3, 6, 12 or 24 monthly installments. The costs and conditions are disclosed at the checkout.

- Klarna Financing 6-36: (Available in Sweden, the UK, and the US) Allows shoppers to split their purchase into 6, 12 or 24 or 36 monthly installments. The costs and conditions are disclosed at the checkout.

- Pay in 4: (Available in Australia, Canada, New Zealand, and the US) lets shoppers split their purchase into four equal installments to be paid every two weeks, with the first due at checkout. Installments are interest-free, but the company charges a late fee if the payment is unsuccessful after two tries. There is no penalty for making a payment early or paying off your balance in full before the final due date.

- Pay in 3: (Available in France, Italy, Spain and the UK) lets shoppers split their purchase into three equal installments to be paid every 30 days, with the first due at checkout or when order has been delivered. Installments are interest-free, but the company charges a late fee if the payment is unsuccessful after two tries. There is no penalty for making a payment early or paying off your balance in full before the final due date.

Klarna also offers a Pay Now option. This is similar to making an immediate purchase with a debit or credit card, but you check out using the app, so you have access to in-app content like price-drop notifications and exclusive deals with Klarna's retail partners.

Klarna mainly operates through a mobile application available in google play and app store. Klarna's app works as a shopping browser by showing the brands and stores by categories and allowing users to access their websites inside the app.

The app also let's save the desired purchases in a wish list available in another menu. The last menu, called 'my Klarna' is the setting menu and lets modifying the profile, seeing the pending payments, the previous purchases, and the returned products, tracking the ongoing deliveries, viewing the stores that the user has purchased from, checking, adding, and removing payment methods, accessing a support section, tracking the CO2 print from the products acquired and clicking on a dedicated section for luxury stores.

Klarna makes money via merchant fees, late payment fees, interest on consumer loans, as well as interest on cash.

Regarding the merchant fees, Klarna generates the bulk of its revenue by charging merchants a fixed transaction fee and a variable percentage fee. The fees are dependent upon the payment method the customer chooses as well as the country.

Taking the United States as an example, businesses must pay a $0.30 transaction fee. The variable fee ranges anywhere from 3.29% to 5.99%.

Klarna charges late payment fees should the invoice not be settled on time. These late payment fees are charged on a monthly basis and can go as high as $35.

Klarna Financing allows customers to spread the cost by paying monthly. Customers will complete a minimum of 3 payments while the payment period can last up to 36 months. Klarna charges merchants $0.30 fixed and 3.29% variable fees.

On top of that, consumers will have to pay interest on the loan, which can range from 0% to 29.99% APR. This gives Klarna an additional stream of income.

Klarna, just like any normal bank, uses the cash residing on those accounts to lend it out to other institutions, such as said banks.

They then collect interest from these institutions (also called Net Interest Margin).

So why would an online store give away shares of their revenue to have payments processed? Because, as the company states, having Klarna as your payment solution leads to a 44% increase in orders (i.e. conversion rate) and a 68% increase in order volume.

Another big advantage for the merchant is the fact that whether or not the customer ends up paying, Klarna already transfers the money for the transaction.

Lastly, Klarna also offers its merchants a set of tools to increase sales. These include:

Business insights: a dashboard tool to analyze metrics such as the number of orders, weekly sales, or conversion rates

On-site messaging: a chatting tool which allows merchants to answer their customer's most pressing questions

List of Figures

List of Tables