Core Factors That Make Afterpay's Success

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Abstract. The outbreak of Covid-19 has contributed significantly to the growth of e-commerce and the boom in the Buy Now Pay Later (BNPL) market. This was accompanied by increased purchasing power and financial flexibility for consumers through "zero interest" installment plans. In 2022, Afterpay, as a leading BNPL company, was acquired by Square, another large digital payment company, at A$39 billion. This is the most high-profile M&A deal in the global fintech sector to date. This paper provides a comprehensive analysis to explain how Afterpay has achieved success since there are only six years after its launch in Australia. From the business model perspective, Afterpay's business model of not making money from its customers combined with the first-mover advantage of its rapid expansion is one of the keys to Afterpay's success. Meanwhile, after analyzing the company's capabilities, the result indicates that Afterpay is backed by its strong technological capabilities, which effectively reduces its credit risk and allows it to keep up with its rapid international expansion. That analysis can provide references for fintech companies' business models or technical support systems.

Keywords: Afterpay; BNPL; Fintech companies.

1. Introduction

1.1 Background

The global ban caused by Covid-19 has increased e-commerce transactions. Faced with economic stagnation, the market for Buy Now Pay Later (BNPL) has risen rapidly as a key form of payment for consumers and businesses to alleviate financial strain. E-commerce platforms are merging BNPL services with their online operation platforms to suit the online shopping needs of their clients and then, enhance BNPL usage.

In recent years, more corporations have entered the Australian BNPL industry, including formidable competitors like Apple, CBA, and PayPal. Afterpay is a market leader in Australia due to its product attributes, which include quick credit, 4 interest-free installment payments, and no additional charge.

Afterpay launched in 2014 and has since offered installment payments in the US, New Zealand, and the UK, and entered the UK market trading under the ClearPay brand. In 2021, US payments giant Square announced that it had reached an agreement to acquire Afterpay for A$39 billion, which was already finished in 2022. In just six years, Afterpay has gone from a zero-valuation startup to a successful company valued at A$39 billion and continues to be a market favorite, becoming an important contributor to ASX's technology stock sector.

1.2 Literature Review

Due to the innovation of payment services and changes in consumer preferences, Australia's payments system has undergone significant transformation in recent decades [1]. In the 1990s and early 2000s, many countries implemented real-time gross settlement (RTGS) systems, which can reduce large risk exposure caused by delayed settlement of funds between institutions [2]. Advances in technology mean that the use of relatively costly cheque payments can be replaced by real-time payments with instant transfers. Then, the Australian payments system had a landmark change when the New Payment Platform (NPP) was launched to the public in 2018. Funds can be made instantly available in recipients' accounts by institutions due to the real-time settlement of NPP payments in central bank funds, which further eliminates settlement or credit risk [3]. Fitzgerald & Rush also emphasized that the launch of the NPP represented a substantial improvement in the Australian payment infrastructure by enabling quick, flexible, and data-rich payments to meet the demands of Australia's modern economy [4]. Thus, technological innovation, such as NPP, enhanced the evolution of Australia's payment system to an ecosystem.

Economic activities are increasingly reliant on digital payment systems, as evidenced by the growth of e-commerce platforms (such as online marketplaces) and digital platforms (such as app-based social media) [1].

The expansion of these platforms has resulted in a variety of payment technologies that facilitate online transactions. Australian Government also claims that new entrants have become increasingly influential in the provision of innovative payment services. These new suppliers are frequently technology-focused enterprises (fintech) that offer a variety of supplementary services, as a result of customer preferences shifting towards online commerce and digital payments [1].

By entering Covid-19, the preferences of customers and merchants were further shifted to e-commercial. ATM withdrawals were significantly decreased due to payment preference changes, and this change appears to be a permanent shift [5].

Various types of electronic installment payment arrangements – known as BNPL services – are widely used and accepted in recent years [6]. BNPL is a type of short-term loan that allows users to pay in installments without interest fees. Customers can simply divide their payments into multiple equal payments, and repay them via debit or credit cards in installments.

In 2020, several ASX-listed BNPL providers report that the value of BNPL transactions grew tripled over the previous two fiscal years, contributing to a substantial large increase in trading volume on the Australian market [6].

The emergence of new suppliers and business models, as well as technical advancements, have made it possible for these new payment services [1]. For Australia, more than 20 companies are proving BNPL services, making the market competitive.

1.3 Objective

This paper aims to explain why Afterpay was able to expand in the market in a relatively short period and was acquired at a very high valuation through its business model and capability. The remaining sections are structured as follows: Section 2 discusses Afterpay's business model by applying the business model analysis canvas. The next part analysis the capability through operating, risk control, and technology. Then, section 4 concludes the paper.

2. Analysis of Afterpay's business model

2.1 Introduction of Afterpay

Afterpay is a technology-based company founded in 2014 by Australians Nick Molnar and Anthony Eisen. On May 2016, the company was listed on the Australian Securities Exchange with an IPO of AU$25 million. Since its listing, the company has been favored by the market with its unique business model and has developed rapidly.

Afterpay offers its users a BNPL payment system. Consumers can choose to pay in installments instead of paying the full amount of items, with no interest or transaction fees charged during the period. Greatly meet the needs of consumers shopping in installments.

This new business model enabled the rapid development of Afterpay's business, and in 2017 it merged with Touchcorp, another payment company, that is the developer of Afterpay's system. The group effectively integrates the advantages of both parties, then the company operates two main businesses: Pay Later (Afterpay) and Pay Now.

Afterpay operates in Australia, New Zealand, Canada, the United States, Italy, Spain, France, and the United Kingdom (under the Clearpay brand), and tends to expand the market of Asia and Europe. With more than 16 million active users worldwide and underlying sales of A$22.4 billion until 2021 7]. Afterpay has operated a successful business model for both buyers and sellers. During the COVID-

19 pandemic, online shopping was gradually becoming a mainstream market. E-commerce presents a wide range of investment opportunities, which attract many investors. With continued government stimulus, Afterpay has been able to take advantage of the e-commerce boom and grow rapidly while keeping bad debts low.

In August 2021, Square announced it would pay A$39 billion in shares to acquire Afterpay. Such rapid valuation growth is a testament to the strength of Afterpay. This acquisition has been finished by January 2022.

In the following parts, the article demonstrates how Afterpay has become one of the most successful fintech companies through the analysis of its business model.

2.2 Afterpay's business model canvas

Table 1. Afterpay's Business Model Canvas

Key Partners	Key Businesses	Value Proposition	Customer Relation	Consumer Segmentation
1. NAB 2. Touchcorp 3. Matrix Partners 4. Good on You 5. Australian Retailers Association 6. Thread Together 7. MagicLinks 8. Square	1. Pay Later (Afterpay) 2. Pay Now **Key resources** 1. Technology: Transaction Integrity Engine and Afterpay Operating Platform 2.Rapid expansion	1.Free service if installment payments are made on time 2.Limited late fee 3.Customers' credit rating will not be affected	Pulse Rewards: Customers can earn points to unlock new benefits **Channel** 1. Afterpay Website 2. Money App 3. ANZ Afterpay Card	Most are Millennial and GenZ consumers 1. NorthAmerica 65% 2. APAC 22% 3. Clearpay(UK Market) 13%

Cost Structure	Source of Income
1. Cost of sales 2. Losses 3. Employment expenses 4. Operating expenses	1. Afterpay service 98.5% 2. Pay Now 1.5%

2.2.1 Key Partner

In 2016, Afterpay and National Australian Bank (NAB) announced their agreement to fund a Secured receivables Funding Facility, which provided a structurally efficient and low transaction approach to enable Afterpay's strong growth profile [8].

In 2017, a new Australian holding company called "Afterpay Touch Group Limited" was established as Afterpayand Touchcorp agreed to a merger [8]. Touchcorp is responsible to develop and maintain Afterpay's system, providing long-term technical support. It improved the digitization of the Afterpay platform and the smoothness of information integration.

In 2018, Afterpay cooperated with Matrix Partners which is a successful technology-focused firm in the United States, attracting talented people around the world [9].

In 2020, Afterpay noticed their corporation with Good on You (a global leader in sustainable fashion brand ratings). Good on You gave each fashion brand rating based on ethical and sustainable criteria. The aim is to raise Afterpay's greater awareness of the environmental consequences [10].

In 2021, Afterpay and the Australian Retailers Association maintained their partnership by jointly introducing financial literacy classes for retail staff. In response to Australia's textile waste issue, Afterpay also formed a relationship with Thread Together. As a result, tonnes of new clothes had been saved from landfill. Moreover, Afterpay claim that they cooperated with MagicLinks (a B-Corp Certified social commerce company) to integrate a live shopping technology platform to inspire customers to ship more consciously [7].

In 2021, Afterpay is planned to be acquired by Square, which enables the business to improve consumer outcomes and bring added value and differentiation to Afterpay [7]. And Afterpay was officially acquired by Square in 2022.

2.2.2 Key Business

According to Afterpay's annual report, the company operated two main businesses: Pay Later (Afterpay) and Pay Now after the businesses of Afterpay and Touchcorp merged.

Afterpay provides a platform to allow customers to buy products on a "buy now, receive now, pay later" basis. Afterpay claims that customers don't have to pay an extra amount for the merchant's products because they provide a maximum of 6 weeks installment payment terms. From the retail merchants' perspective, the affordability and flexibility of the Afterpay service are market-appealing, and Afterpay undertakes all customers' non-payment risks. Thus, Afterpay facilitates transactions between retail businesses and end consumers.

The Pay Now the business operates three divisions: Mobility and Payments, Health and Retail Services [8]. The Touch System Platform enables customers to buy things in several ways fast and easily.

2.2.3 Value Propositions

Regarding the number of online payment methods provided by The Reserve Bank of Australia, the number of BNPL transactions has significantly increased over the past few years, with decreasing usage of credit cards [6]. Compared with credit cards, the value propositions of Afterpay are that they provide a free service if customers pay installment payments on time. And Afterpay only charges customers a limited late fee, while the traditional credit card will charge customers relatively high-interest fees. Thus, Afterpay has transformed the way people pay for products and services [7]. Besides, customers' credit ratings will not be affected by transaction records on the Afterpay platform.

2.2.4 Customer Relation

Afterpay provides a platform for making a better connection between customers and retailers. Thus, Afterpay doesn't face after-sales service while they state that delivery/quality of products and any refunds are the responsibility of the shop where customers made the transaction or the Third Party Supplier that sells the Third Party Goods accessible through their Website [11]. However, Afterpay takes over the customer's credit default risk. Merchants can receive the full amount of goods paid by APT when the customer purchases the goods, and then the customer repays the goods in installments to APT. In return, Afterpay charges a small fee based on a percentage of the transaction from merchants.

Afterpay enhanced its loyalty program by launching Pulse Rewards. Customers can earn points after responsible spending behaviors to unlock new benefits, such as exclusive offers or flexible payment dates.

2.2.5 Channel

Afterpay is a firm powered by technology. Customers may easily access all brands that accept Afterpay's BNPL payment model on the website, which combines all cooperative merchants with its in-store and online offerings. After customers click on their favorite brand, the webpage will directly jump to the website of that brand. At the end of online shopping, customers select Afterpay at checkout. Meanwhile, customers can set up Afterpay cards to shop in-store.

Then, based on numerous transaction records, Afterpay's Transaction Integrity Engine will be utilized to evaluate the clients' potentially fraudulent conduct and repayment capabilities. It will assess automatically whether to provide installment payment options to prospective consumers. After the approval, the merchants receive the amount of the product after deducting the platform commission, and the customer will receive the product.

In 2021, Afterpay launched the Money app which was designed to help customers manage their money to better suit their lives. In addition, Afterpay launched an in-store card (ANZ Afterpay Card) to enhance the experience for customers [7].

2.2.6 Customer Segmentation

Regarding Afterpay's annual report in 2021, there are 16.2 million active customers and this continued to increase across all the regions. Those active customers are mainly from North America which is around 65%, APAC and Clearpay are taking the rest.

Moreover, active merchants increase by approximately 77% than last year, which is more than 98,000. 64% of active merchants come from APAC, 29% come from North America, and Clearpay takes the rest. The annual report emphasizes that enterprise merchants made up 65% of Group Underlying Sales in FY21.

From an age perspective, Millennial and Gen Z consumers are less likely to use credit cards and credit-based products. They trust Afterpay since they can purchase responsibly with their favorite brands. Those customers play an important role in that Afterpay's international impact and economic empowerment continue to increase.

2.2.7 Key Resources

As one of the most unique technology-based financial institutions on the Australian market, Afterpay owns Transaction Integrity Engine and Afterpay Operating Platform with the support of Touchcorp technology. Based on transaction data, the former is used to evaluate the possible fraudulent conduct and repayment capabilities of clients. The latter platform allows merchants to manage and track sales made using Afterpay, while consumers may use it to monitor account activity. In just a few years, APT has completed its business expansion from seizing the local market to expanding overseas markets. APT becomes more valuable as it integrates with more than 100,000 merchants. The rapid expansion of APT has captured a favorable opportunity in the new market of BNPL.

2.2.8 Source of Income

As the annual report mentioned, the total income for Afterpay was $924.7 million in 2021. In specific, 98.5% of income was from Afterpay service, and Pay Now made a 1.5% contribution.

In the Afterpay position, the primary income was from the merchant income, and affiliate fees, with a small contribution of late fees. Afterpay income had increased to A$822.3 million until 30 June 2021.

The income of Paynow was combined with the transaction fee and integration fee. Transaction fees refer to the fees charged by the platform for each successful transaction (including fixed rates and commissions); while integration fees are charged when developing new customers or providing additional services to existing customers. As a result of the closure of the e-Services Australia business unit, Pay Now's Revenue decreased to $13.8 million for the year 2021.

2.2.9 Cost Structure

The cost structure of Afterpay was contributed by four parts: cost of sales, losses, employment expenses, and operating expenses.

Since Afterpay went public, the group maintained its development into new markets, industries, and products whiles investing in people, platforms, customers, and merchant acquisition. The cost of sales for the year 2021 had grown up to $249.6 million associated with larger underlying sales. About 98% of the cost was contributed by Afterpay service.

Since the group launched in Australia in 2015, Afterpay has successively launched in markets of New Zealand, the US, the UK(Clearpay), Canada, Spain, Italy, and France. The new regions have initially higher losses during their growth phase. As the company undertook all non-payment risks, the group had A$195.1 million receivable impairment expense in 2021, which represented 0.9% of underlying sales, remaining the same as in 2020.

Afterpay approximately had 1,300 employees globally, with $150.9 million expense on employment. About 75% growth over the prior year was mainly to support Afterpay’s continued global expansion.

Operating expenses including marketing expenses and others were $298.6 million for the year 2021. These parts of costs help Afterpay to grow its brand awareness and improve technology to support global business

2.3 Afterpay’s Business Model Analysis

Under Afterpay's business model, customers who pay on time are free, which encourages responsible spending without accruing fees, interest, or long-term debt [12]. Afterpay is aimed to make money from merchants, not from customers, which is fundamentally different from its competitors. This new business model makes Afterpay popular in the market. Customers are attracted by the no-interest nature while larger basket sizes of customers and better repeat purchase rates make more merchants join Afterpay. Additionally, Afterpay assumes financial risk post-transaction, decreasing retailers’ financial exposure to chargebacks and fraudulent payments.

Extreme capital efficiency and the singularity of Afterpay's value-capture approach are the primary forces of its business model. Afterpay uses capital to bridge the capital gap between paying its retail merchant clients in advance and receiving full payment from the end consumer. Within a maximum of six weeks, Afterpay aims to recover the entire value of the transaction. Thus, Afterpay increases the potential volume of transactions by improving the efficiency of recovering capital.

With the repaid expansion of business, a large number of new customers joined Afterpay and the underlying sales increased by 90%, are making pressure on Afterpay’s risk management. However,

The continuous strengthening of Afterpay’s risk management and the benefits derived from returning customers show that Afterpay could continuously control Gross Loss [7]. Besides, the Afterpay business model is distinguished by the low percentage contribution of late fees, which adds to customer loyalty and confidence.

Moreover, another key aspect is merchants' deployment of Afterpay has been influenced by "peer pressure" exerted by Afterpay's developers. Early users of the service rapidly had a competitive advantage over competitors who did not accept Afterpay. To avoid the risk of losing business from competitors, merchants had to adopt the Afterpay service. It has led to a large number of merchants adopting the service over time, resulting in a product that is practically ubiquitous in its target markets and industries [13].

3. Capability Analysis

3.1 Operating Capability

Compared to most fintech companies in the market, Afterpay's overall performance is relatively optimistic. Since 2016, with the popularity of the global e-commerce retail industry, Afterpay has attracted consumers around the world with its unique business model. The average annual growth rate of its platform transaction volume is more than 100%. The transaction volume increased from 140 million Australian dollars in 2016 to 22.4 billion Australian dollars in 2021, achieving a huge increase.

As Figure 1 shows below, Afterpay’s total revenue has also maintained a rapid growth rate. After the merger of Afterpay and Touchcorp in 2017, afterpay’s total revenue increased to 142.3 million. In 2020, the covid-19 made more consumers choose to shop online, and people’s payment methods had changed a lot. Until 2021, Afterpay’s total revenue has reached $924.7 million, proving that Afterpay's profitability is continuously improving, as shown in Fig.1.

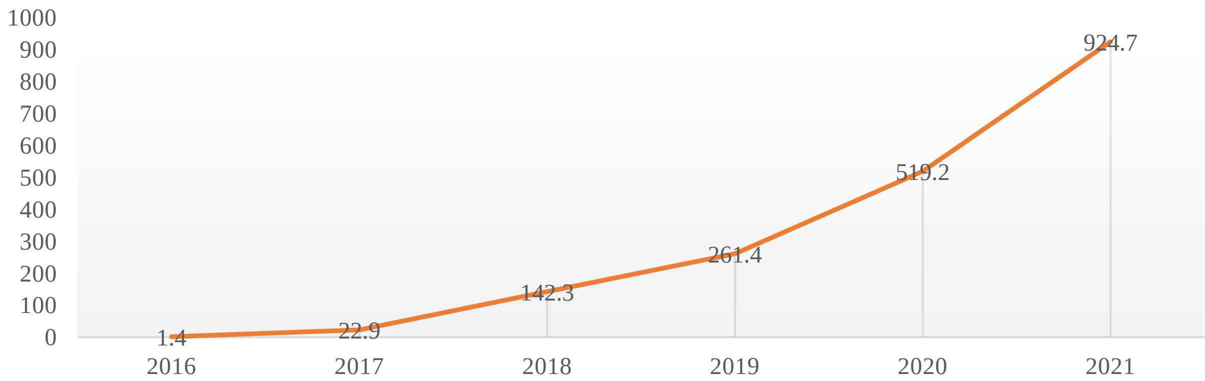

Fig. 1 Afterpay's Total Revenue from 2016 to 2021

Since 2016, Afterpay has continuously expanded in the global market. The active customers were only 1 million in 2016, while there are more than 16 million followers in 2021. Moreover, Afterpay had more than 98,000 merchants in 2021 by integrating merchant resources.

3.2 Risk Control Capability

As an innovative company in consumer finance, Afterpay's business model means that it will take over the credit default risk of customers from the merchant. If a large number of customers default, the capital chain of Afterpay must be affected. Thus, the biggest potential risk for Afterpay is bad debt. Thus, good control of bad debts is also one of the essential conditions for its success.

From the data shown in the annual reports, Afterpay's risk management capabilities can effectively manage the transaction risk associated with delivering BNPL services. Afterpay has been keeping bad debts in a good position and the rate of bad debts has declined over time. In 2020, Afterpay's receivables reached A$782 million, and gross loss was less than A$94.5 million, accounting for only 0.9% of the underlying asset, an all-time low [10]. Moreover, Receivables Impairment Expense reached A$195.1 million for the year ended 30 June 2021, an increase of A$100.6 million from the prior year, and, Gross Loss represented $194.9 million of the Receivables Impairment Expense, which is remain at 0.9% of Underlying Sales, even the newer Clearpay and North American regions have initially higher losses [7]. In Afterpay's 2021 annual report, the group emphasized that during a period in which 6 million new customers joined the platform and underlying sales increased by 90%, the remaining lower rate of gross loss was attributed to Afterpay's proprietary risk management techniques and high proportion of returning customers, which enables Afterpay to continuously manage Gross Loss [7].

Combining artificial intelligence and big data technologies, Afterpay created a risk management system called "Transaction Integrity Engine". This system is mainly for preventing real-time fraud and credit assessment, then helping them minimize bad debts. Transaction Integrity Engine captures and analyzes information provided by consumers to assess whether Aftertpay provides services. For instance, Afterpay checks the validity of the consumer's bank card. Then, Afterpay evaluates the consumer through information such as the current repayment amount and the consumer's transaction history. The weights of different evaluation factors will be continuously updated and adjusted according to the transaction data accumulated by the Afterpay platform, and the analysis process will be automatically executed by the system in real time. Afterpay expects the recognition rate of its "transaction integrity engine" to improve as its customer database expands.

3.3 Technical Capability

Afterpay has reached in-depth cooperation with Touchcorp at the beginning of its establishment to make up for its deficiencies. Touchcorp is an ASX-listed company that provides technical services to customers including 7-Eleven, Commonwealth Bank, Medicare, and private health funds. In the early days, Afterpay had weak technical support and lacked R&D strength, thus it decided to collaborate with Touchcorp to compensate for its technological deficiencies. In 2017, Touchcorp and Afterpay moved from in-depth cooperation to merger and integration. This business merger provided the strong technical basis for afterpay's rapid market expansion.

After the integration is complete, Afterpay has agreed with Touchcorp, and Touchcorp will serve as the department exclusively for Afterpay. It is responsible for developing and maintaining the system. Specifically, Touchcorp is in charge of developing contracted Afterpay products and providing long-term technical support. Touchcorp's advanced secure transaction processing technology provides Afterpay with the needed technology to enable its platform to smoothly serve a large number of customers and merchants while performing real-time security and anti-fraud checks on every transaction in the background [14].

4. Conclusion

This study is aimed to explore key factors that make Afterpay from a start-up company to the second-largest BNPL service provider in the world in six years, and then acquired by Square at US$29 billion. By applying the business model canvas, this paper finds that Afterpay's business model aimed to make money from merchants, instead of customers, by providing users with four interest-free installment payment options. This option creates a time lag between consumption and payment, satisfying the user's need to defer payment. Thus, Afterpay uses this attractive business model to expand global markets rapidly, which takes the first-mover advantage. In addition, from the perspective of the company's capabilities, the result indicates that Afterpay is backed by its strong technological capabilities. Afterpay absorbs and merges with Touchcorp to create a technological advantage, which effectively reduces its credit risk and allows it to keep up with its rapid international expansion. The technology to manage risk is key for fintech companies to control their bad debts and to be able to gain in the market. This article can provide a reference for fintech companies, and recommend them to improve their technical support, such as Anti-fraud, and IT services. However, regulators have consistently concerns about BNPL, because it presents the possibility for welfare losses for financially unsophisticated, over-optimistic, and overconfident. Regulation for the BNPL market will improve in the future, creating more uncertainty for the market.

References

[1] Australian Government, 2021. Payments system review From system to ecosystem. [Online] Available at: https://treasury.gov.au/sites/default/files/2021-08/p2021-198587.pdf

[2] Bolt, S., Emery, D. & Harrigan, P., 2014. Fast Retail Payment Systems. [Online] Available at: https://www.rba.gov.au/publications/bulletin/2014/dec/pdf/bu-1214-6.pdf

[3] Rush, A. & Louw, R., 2018. The New Payments Platform and Fast Settlement Service. [Online] Available at: https://nppa.com.au/wp-content/uploads/2020/07/the-new-payments-platform-and-fast-settlement-service.pdf

[4] Fitzgerald, E. & Rush, A., 2020. Two Years of Fast Payments in Australia. [Online] Available at: https://www.rba.gov.au/publications/bulletin/2020/mar/pdf/two-years-of-fast-payments-in-australia.pdf

[5] Bullock, M., 2020. Panic, Pandemic and Payment Preferences. [Online] Available at: https://www.rba.gov.au/speeches/2020/pdf/sp-ag-2020-06-03.pdf

[6] Fisher, C., Holland, C. & West, T., 2021. Developments in the Buy Now, Pay Later Market. [Online] Available at: https://www.rba.gov.au/publications/bulletin/2021/mar/developments-in-the-buy-now-pay-later-market.html [Accessed 2021].

[7] APT, 2021. Afterpay *Limited FY21 Annual Report,* s.l.: s.n.

[8] APT, 2017. Annual Report for the year ended 30 June 2017, s.l.: Afterpay Touch Group Limited.

[9] APT, 2018. Annual Report for the year ended 30 June 2018, s.l.: Afterpay Touch Group Limited.

[10] APT, 2020. Afterpay limited FY20 Annual Report, s.l.: s.n.

[11] Afterpay, 2022. *Afterpay.* [Online] Available at: https://www.afterpay.com/en-AU/terms-of-service

[12] Afterpay, 2014. Founded in Sydney, Australia. [Online] Available at: https://corporate.afterpay.com/our-story

[13] Nabtrade, 2020. The rise of afterpay and a new business model. [Online] Available at: https://www.nabtrade.com.au/insights/news/2020/08/the_rise_of_afterpay#:~:text=They%20provide%20a%20tweak%20to,a%20small%20percentage%2Dbased%20fee.

[14] Victoria, I., 2017. Afterpay and Touchcorp merger paves the way for international expansion. [Online] Available at: https://connection.vic.gov.au/afterpay-and-touchcorp-merger-paves-the-way-for-international-expansion