Afterpay (ASX: APT)

An Investment Case Study By Hayden Capital

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HAYDEN CAPITAL

Hayden Capital
1345 Avenue of the Americas, 33rd Floor
New York, NY. 10105

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Afterpay Overview

Afterpay (ASX: APT) is one of the world's leading buy-now-pay-later ("BNPL") payment providers. The product offers consumers a way to pay for items with only an initial 25% down, and 0% interest. Payments are then made in 2-week intervals across four equal installments (at time of purchase, T+2 weeks, T+4 weeks, and T+6 weeks). The company is based in Melbourne, Australia.

Brands pay a 3 – 6% fee to Afterpay for this service (inclusive of processing fees). In return, brands realize the benefit of 1) higher conversion rates, 2) larger order sizes, 3) lower return rates, 4) customer lead generation from Afterpay, 5) co-marketing with Afterpay, and 6) Afterpay takes the customer credit risk with brands being paid upfront.

Afterpay Statistics:

For 2020 Fiscal Year (ended June 2020); Take-rate inclusive of late-fees and Paynow revenues

Gross Merchandise Value (GMV): AUD $11.1 Billion (+112% y/y)
Revenue: AUD $519 Million (+97% y/y)
Take-rate, as % of GMV: ~4.7%

Active Customers (FY 2020):

- Australia & New Zealand: 3.3 million
- United States: 5.6 million
- United Kingdom: 1.0 million
- The average customer is a 33-year-old female

Active Merchants:

- Australia & New Zealand: 42,800
- United States: 11,500
- United Kingdom: 1,100

Industry Tailwind

Credit Cards Are So Over…

How The Payment Industry is Structured Today

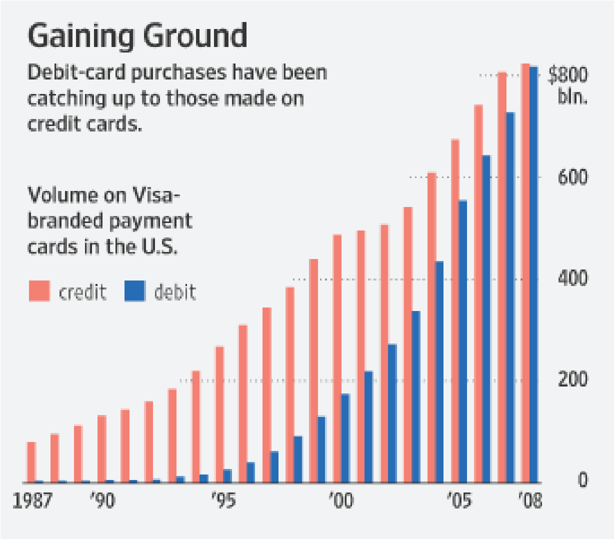
Historically in the United States, credit cards have been the preferred cash-less purchase method.

- The usage of charge cards go back to at least the late 1800's, where stores gave regular customers credit. But this balance needed to be paid in full each month and was only applicable to that retailer. This was then further popularized by the Diners Club card and American Express cards in the 1950's.
- But it wasn't until 1958, that Bank of America launched the BankAmericard, which was the first modern iteration of a credit card with a revolving credit balance and usable across a wide variety of merchants.
- Credit cards continued to gain share over the following decades, made ever-more convenient by its increased merchant adoption, which encouraged even more consumers to sign up for a credit card, which in turn drove more merchant adoption – the classic case of a flywheel model.

However starting in the 2000's, credit card usage started to decline relative to debit cards…

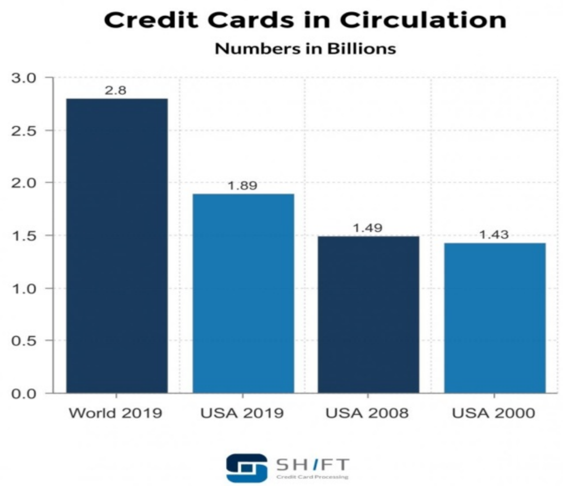
Visa Credit Card Volume

From 1987 – 2008; Source Wall Street Journal (LINK)



US Credit Cards Have Barely Grown…

From 2000 - 2019



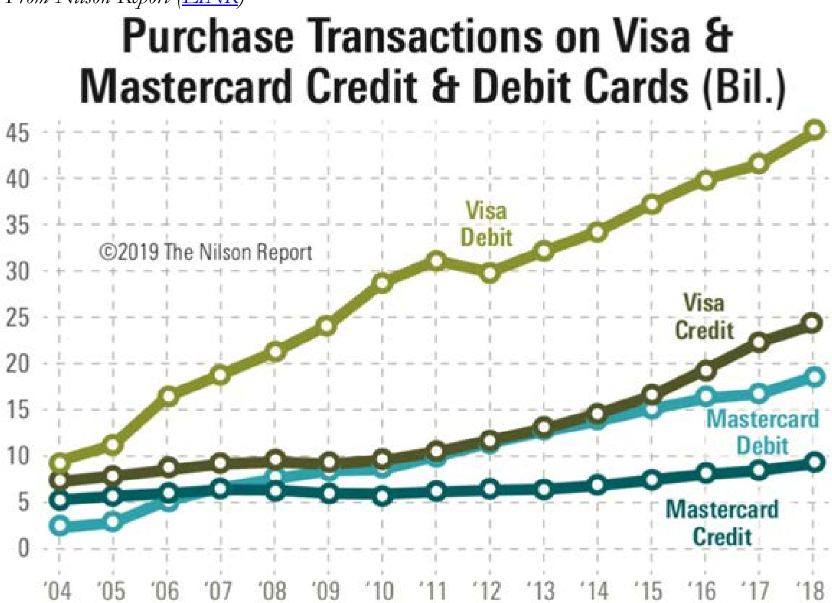
But The Industry is Shifting…

Since 2000, the number of credit cards in circulation have only grown ~1% per year, from 1.4BN in 2000 to 1.9BN in 2019.

- This is due to saturation of the market, combined with a low US population growth.
- However more concerning, is that the number of credit cards per person have also been declining, with credit card usage falling even further. For example, in 2009 the average American had 3.7 credit cards. This declined -27% within the following ten years, to just 2.7 credit cards by 2019 (LINK).
- This trend is resulting in a dramatic increase in debit card issuance and usage, especially among the younger demographics (Millennials and Gen-Z).
- In Australia, this has resulted in a decline in average transaction values – a trend that the United States is starting to follow.
  - It's especially a problem for online retailers, since smaller orders mean that shipping costs rise as a percentage of revenues (lower profit margins).

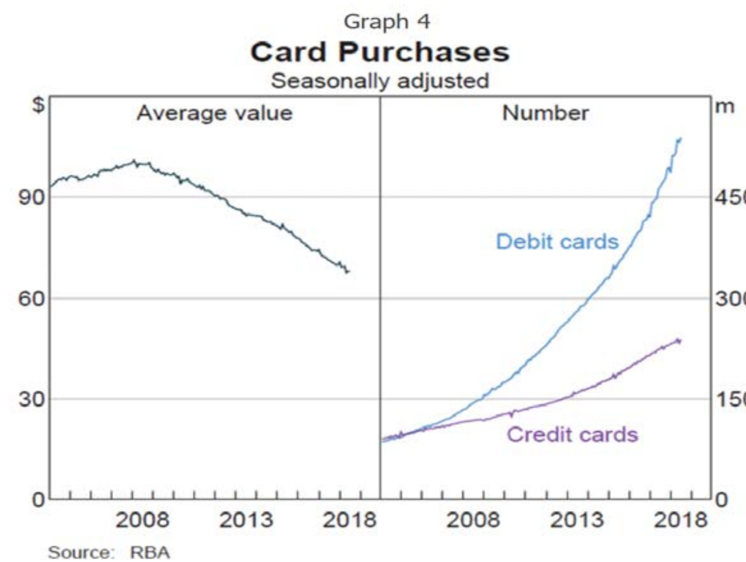
Debit vs. Credit Card Transactions

From Nilson Report (LINK)



Declining Transaction Values, Driven By Debit Cards

From Reserve Bank of Australia (LINK)



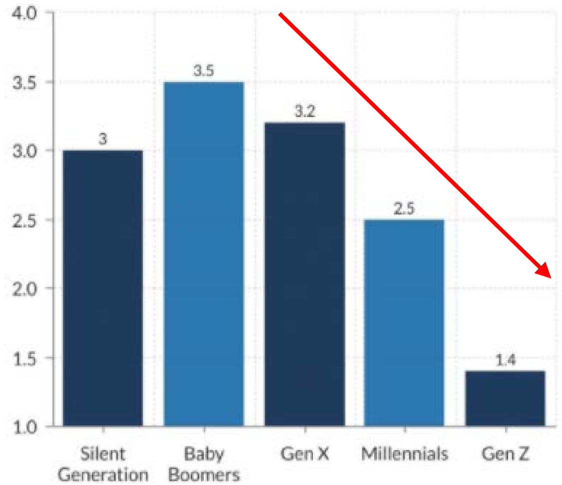
Younger Consumers Have an Aversion to Debt

Millennials and Gen-Z have strong preferences towards using debit cards vs. previous generations.

- This is due to a cultural change, accelerated by the 2009 financial crisis (watching their parent's struggles with debt) and again by the recent Coronavirus period (in Q2 2020, Visa announced -20% y/y credit usage vs. +3% y/y debit usage; LINK).
  - A NerdWallet survey found 55% of millennials would be embarrassed if friends & family found out they had credit card debt vs. just 32% for the total population (LINK).
- As such, today only 1/3rd of American 18 - 29 year old's have a credit card (LINK)
- While Younger Millennials and Gen-Z will undoubtedly increase the number of credit cards they own as their income increases and they seek to build credit, the "ceiling" for the number of credit cards per person will be lower than previous generations.
- Additionally the usage frequency for these credit cards will also be lower and used only for large purchases / specific occasions.
  - These trends are backed up by the usage habits of older millennials (who are now in reaching their late-30's).
- According to a Cardify survey, over **75% of US customers use BNPL products despite having the funds to cover the full cost of purchase.** This indicates usage is based on consumer preference, not desperation for credit (LINK).
- *Note: Outside the US, debit cards have always been more popular than credit, due to cultural influences and the lower credit card rewards offered.*

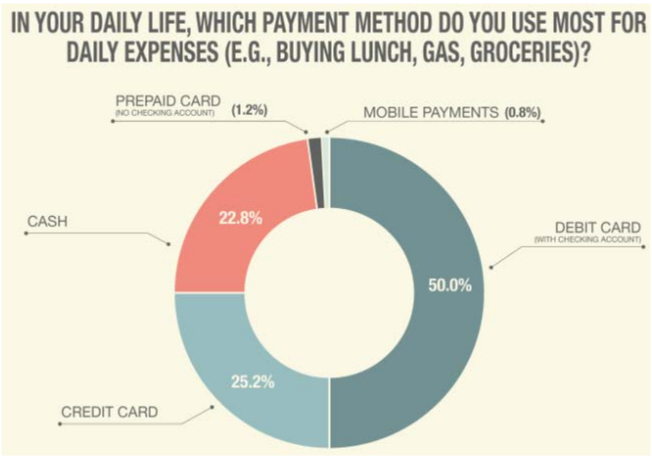
Number of Credit Cards Owned by Age Group

From Experian and Shift Processing



Debit + Cash Are Top Payment Methods for Millennials

73% of Millennials primarily use Debit Cards or Cash for their daily purchases (LINK)



The Rise of Buy-Now-Pay-Later (BNPL)

So what do you do if you want to make a purchase, but don't have the cash on hand today and don't want a credit card (or want to avoid interest fees)? Enter Buy-Now-Pay-Later (BNPL) products!

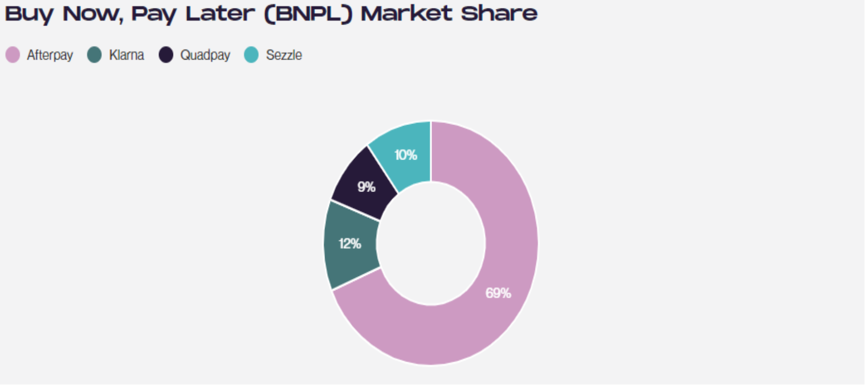
- BNPL allows consumers to make the purchase today with little friction (signing up takes <1 minute and typically is done directly on the retailer's check-out page).
- It's essentially layaway, but with items received at time of purchase instead of when full-payment is made. (In today's social media fueled, instant-gratification environment, who wants to wait??)
- The BNPL industry globally is projected to grow at a +28% CAGR over the next 3 years (LINK).

Consumers pay 0% interest, with late-fees (if any) charged at a flat-rate (vs. compounding interest as with a credit card), and immediate service shut-off in the case of a missed payment (so late-fees / the outstanding balance doesn't escalate).

- Credit cards earn their profits off the consumer and earn *more* when balances are carried-forward and when consumers spend more. This incentive is contradictory to the consumer's best interest, as credit card companies want to maximize interest payments.
- Instead, BNPL products make their profits from the merchants. Merchants pay a higher fee (vs. credit cards processing fees), in return for benefits like higher conversion rates, larger basket sizes, new customer traffic, etc.
- In this way, it's a win-win-win for the merchant, customer, and BNPL provider.

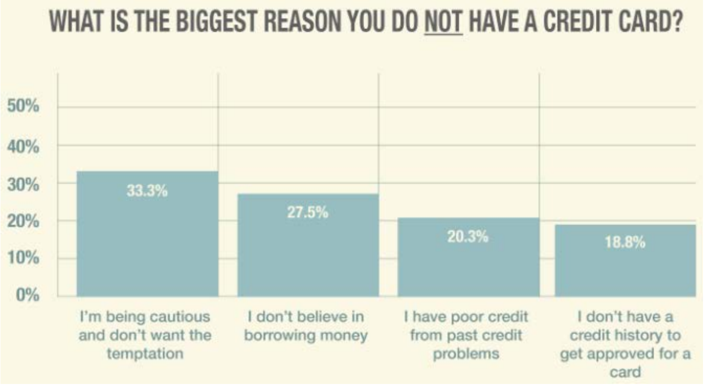
BNPL Market Share in the US

From Cardify Survey (LINK)



Why Don't Millennials Own a Credit Card?

Of Millennials who don't have a credit card, ~61% is due to an aversion to debt (vs. not getting approved)



The Players

This trend created a new breed of financing companies. The largest global BNPL companies are Afterpay & Klarna:

	Afterpay	Klarna
Business Model:	<u>BNPL Product:</u> • Pay in 4 over 6 weeks • $10 late fee + additional $7 after one week late, aggregate capped at 25% of purchase value • 3 - 6% merchant fee • *Note: Unlike other competitors (such as Klarna) which perform credit checks, Afterpay does not and instead relies upon their own methods to mitigate risk (see later slides)*	Klarna has 3 different products: 1. <u>BNPL</u> • Pay in 4 over 6 weeks • $7 late fee • Up to 5.99% merchant fee 2. <u>Financing</u> • Finance purchase over 3 - 36 months • 0% - 29.99% APR for consumers (19.99% standard) • Up to 3.29% merchant fee 3. <u>Pay in 30</u> • Allows customers to order multiple items, and pay within 30 days for only the items they keep (for example, order 10 dresses, return 9 of them, and pay for just the 1 they keep) • Up to 5.99% merchant fee
Gross Merchandise Value (GMV):	AUD $11.1 Billion	~USD $40 Billion (aggregate between the 3 products)
Revenue:	AUD $519 Million	~USD $800 Million
Valuation:	AUD $28 Billion	USD $10.7 Billion (based on last round)
Active Customers:	9.9 million	85 million (aggregate between the 3 products)
Active Merchants:	55,400	235,000 (aggregate between the 3 products)
Headquarters:	Melbourne, Australia	Stockholm, Sweden
Notable Investors:	Publicly-listed on ASX, Tencent, Coatue, Matrix Partners	Sequoia, Dragoneer, Silver Lake, GIC, Snoop Dogg, Blackrock

Afterpay

The Buy-Now-Pay-Later O.G.

Company History

Afterpay was started in late 2014 by Nick Molner (30 ys old) and Anthony Eisen (47 yrs old). As the story goes, Nick and Anthony were neighbors in Sydney. Nick was working at his parent's jewelry store St Michel Internationale at the time, and began selling their excess jewelry on eBay. In his second year of business, he was already the largest jewelry retailer on eBay Australia. After graduation, Nick was working at private equity firm Carnegie & Co during the day and packing jewelry for shipment at night.

Anthony, then CIO at Guinness Peat Group and a former investment banker at Credit Suisse, would see Nick's light also on late at night, and one day approached him stating "Every time I'm working late at night, I see your light on, also working late at night." That conversation struck up a friendship.

Through Nick's business, he could see the issues with ecommerce firsthand – low conversion rates (out of 100 visitors, only 3 would make a purchase), and the shift among younger consumers towards debit for daily purchases (which meant it was harder to buy high-priced items). Eventually this insight led the two to form Afterpay years later.

As the CIO of an investment holding company, Anthony introduced Afterpay to one of their portfolio holdings, Touchcorp, to handle the payment processing. Afterpay merged with Touchcorp in 2017 (who by that time already owned a 26% stake in Afterpay), and concurrently uplisted to the ASX where the shares trade today.

How Afterpay Makes $

Afterpay generates revenue in three different ways:

1. Afterpay Revenue: This is the main Buy Now Pay Later business, and comprises the vast majority of Afterpay's revenues. Consumers receive the service for free, and pay off their purchases over a 6-week period. Payments are then made in 2-week intervals across four equal installments (at time of purchase, T+2 weeks, T+4 weeks, and T+6 weeks). Merchants integrate Afterpay into their item description and checkout pages, and pay 3 – 6% of merchandise value.
   - This comprises ~84% of total revenues.
   - ~90% of transactions are paid with a debit card, which has lower processing fees than credit.

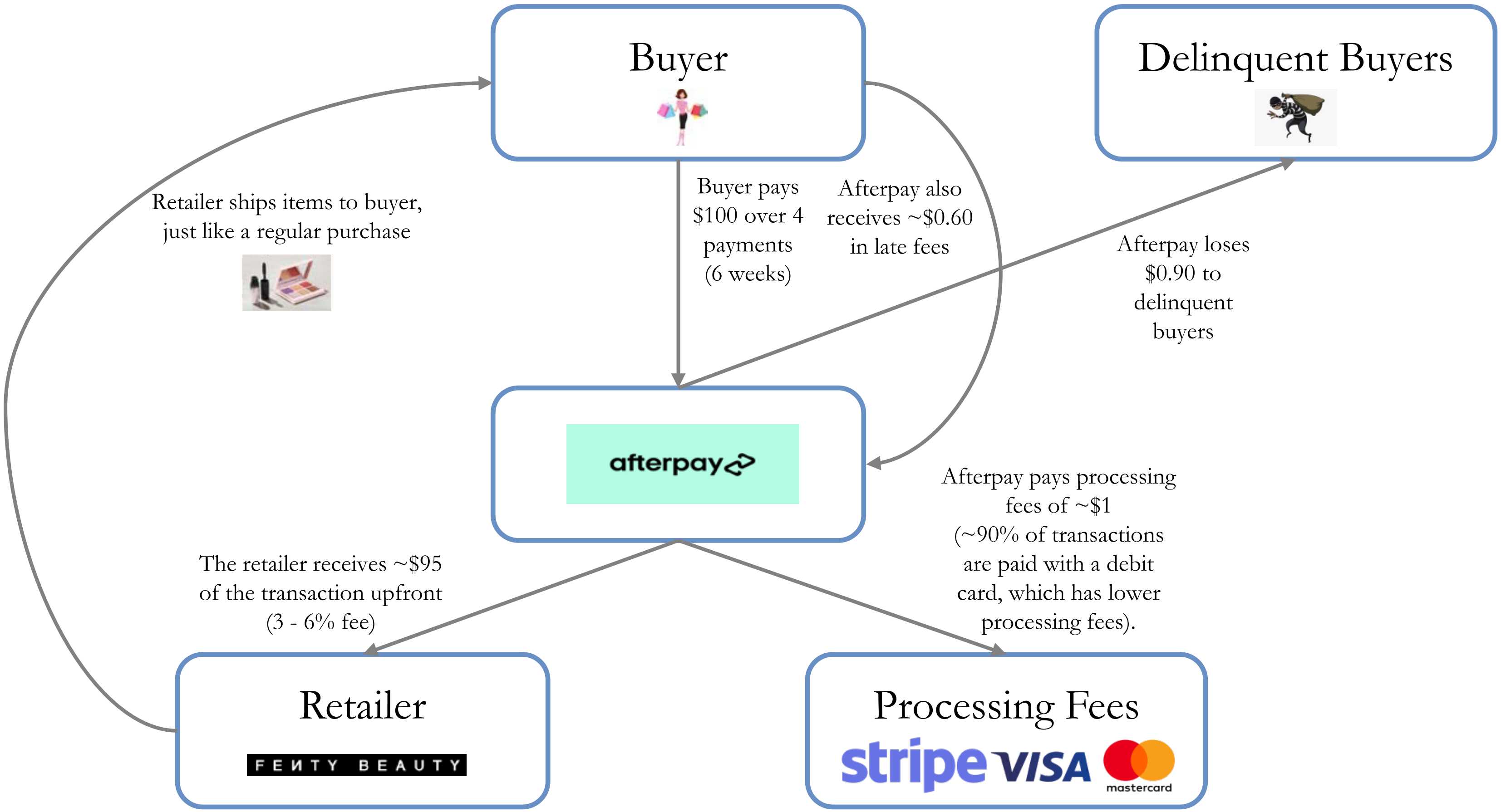
2. Late Fees (Other Income): Late fees are used to encourage customers to pay their outstanding balances on time. The terms differ by country, however generally the late fee is $7 – 10 for a missed payment. The late fees in total (across all the installment periods) will not exceed 25% of the order value.
   - This comprises ~13% of total revenues.
   - Late fees as a percent of revenues have been declining over time, and was ~21% and ~20% of revenues in 2017 and 2018 respectively. The decline is a function of more mature customer cohorts, who are familiar with the platform and loyal users (due to the one-strike policy, "bad" customers have already been kicked off the service).

3. Pay Now Revenue: This is the legacy Touchcorp business. Touch provides services to other businesses, such as fraud protection, compliance, data collection, customer identification, transaction integrity, and card payment solutions. Touch derives transaction fees for these services, in the form of either a fixed fee or percentage of transaction volume.
   - This comprises ~3% of total revenues. We expect Pay Now revenues to decline as a percentage of total revenues as the main Afterpay BNPL business grows.

The Afterpay Business Model (For Every $100 Purchase…)

Below is Afterpay's general business model:

- Total loan maturity is 6 weeks, and average duration is just 3 weeks. This means Afterpay can recycle its capital up to 17x per year.
- Assuming a ~5% take-rate and ~30% pre-tax margin (our estimate of Afterpay's Australia margin), it illustrates how Afterpay can achieve Returns on Capital of up to ~26% ($100 GMV x 5% take-rate x 30% margin x 17-loans per year = $25.50).
- This is a high capital velocity business. The quicker the payback, the higher the ROIC.



Afterpay's Growing Fashion & Beauty Market

Afterpay is primarily focused on the fashion & beauty category, unlike competitors who are willing to partner with retailers in a wider variety of verticals (general merchandise, electronics, auto parts, etc). Although seemingly a minor difference, this actually has a big implication for the business model quality.

Fashion & beauty are "impulse" / "emotional" purchases (no one *needs* a new dress).

- This means the customer journey / shopping experience starts with "browsing / discovery", as opposed to shopping with intent (knowing exactly the item you want). As such, many transactions start on the Afterpay app, which then directs free traffic to brands that offer Afterpay service.
- Other BNPL competitors need to compete on the item description page or check-out page, only after the customers know what item they want to buy.
- Afterpay customers choose to pay with Afterpay first, *then* decide the exact item to purchase.

In fashion & beauty retail, there's very much an element of FOMO – brands are constantly watching what competitors are doing. If competitors offer Afterpay, you better have it too.

- We've heard from multiple brands that offering Afterpay has now become "table stakes" in the fashion industry.

By focusing on a target category, the brand marketing message is also clear.

- A fashion label selling $200 dresses doesn't want to partner with any payment options that affect their brand message (especially since the BNPL logo will be integrated into every item description page, and not just the final checkout page). Some brands don't want a payment provider that services auto parts or groceries, to also be selling high-end dresses.
- This is unique, since BNPL is more than a payments provider. The BNPL logo is prominently featured in the item description page, and also often co-marketed alongside the brand in advertising. It's more than just one payment option among many, so the BNPL and brand's marketing message need to be compatible.

Afterpay's Growing Fashion & Beauty Market (continued)

In the United States, fashion is a ~$270BN market while beauty is a ~$90BN market, for a combined ~$360BN.

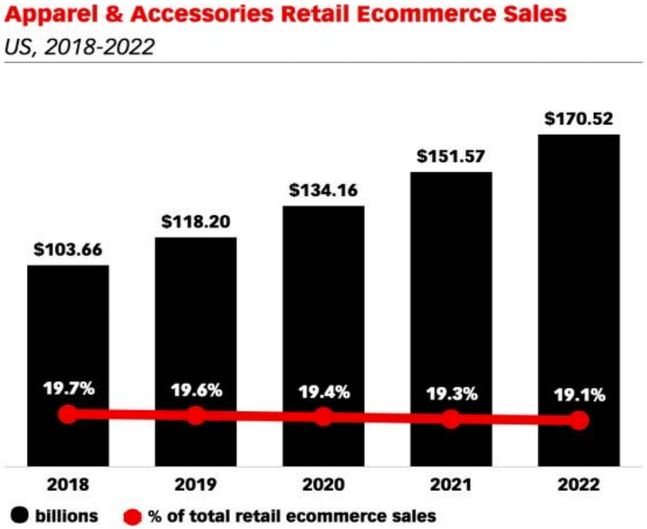
- Of this, ecommerce is ~$130BN of the fashion market (~48% online penetration), while it's ~$6BN of the beauty market (~7% online penetration), for a combined ~$136BN addressable online market (~38% online penetration).
  - Afterpay is also launching an in-store product (discussed later) to address the remaining 62% of the market.
- Compared to total ecommerce penetration of ~15 - 20%, these are attractive categories to target as an enabler of online purchases.

Both Fashion ecommerce and Beauty ecommerce are growing rapidly.

- The online fashion market is growing ~19% y/y, while online beauty is growing ~17% y/y.
- Buy Now Pay Later as a category is also growing rapidly within that.
  - For example, Afterpay recently reported US GMV growth of +330% y/y and US customer growth of +211% y/y. Meanwhile Klarna also experienced 4x the monthly active users over the past year.
- These two growth drivers provide an attractive tailwind for the BNPL industry, and Afterpay in particular.

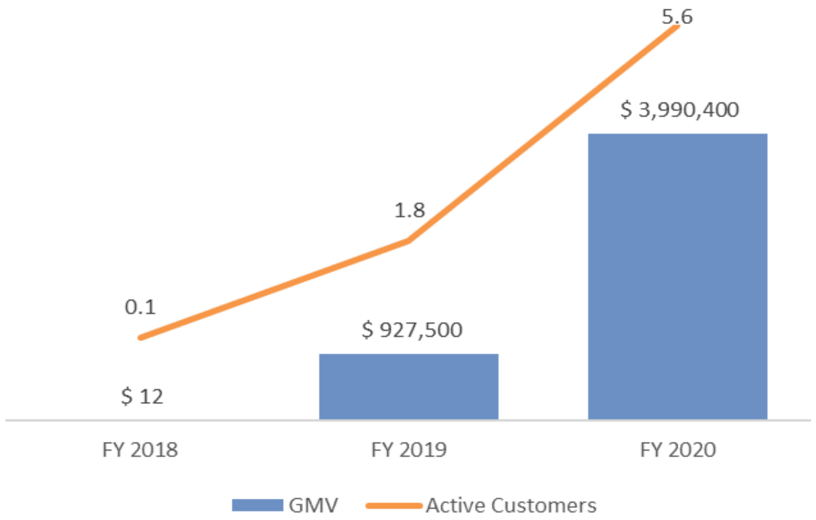
Apparel US Ecommerce Industry

In billions



Afterpay – United States GMV

In millions, AUD $ and TTM active customers



Consumers <3 Afterpay

Afterpay frequently partners with brands to provide a marketing message / brand value that highly resonates with Millennial and Gen-Z customers. Along with 0% interest fees, it has created one of the most loyal and fervent customer-base we've witnessed, especially among payments companies.

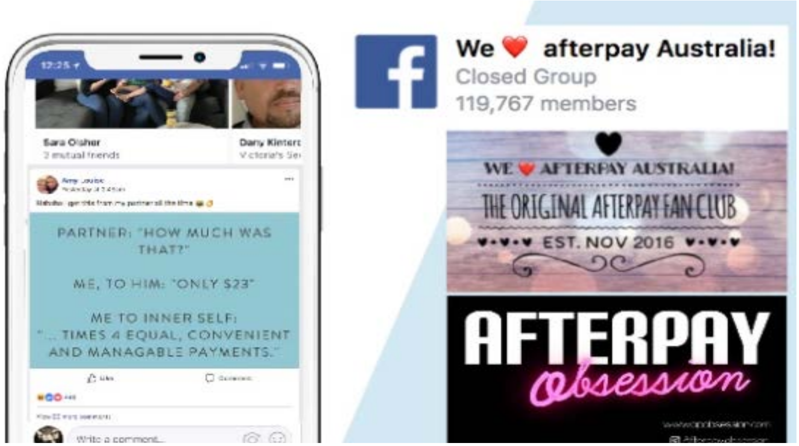
- In its most mature market of Australia, Afterpay has the highest net-promoter-score among all digital payments firms – out ranking Apple Pay, Paypal, Google Pay, Zip Pay, etc. (LINK)
- This results in usage frequency that's ~25x per year for existing mature customers, and multiples higher than competitors.

This is exemplified further by Afterpay's customer-generated fan groups across Social Media.

- Afterpay has hundreds of thousands of "fans" within Facebook groups, who chat about Afterpay's new features, new brand partners, provide technical support to each other ("how to use X feature"), etc.
- In the US, Afterpay has ~280K Instagram followers (LINK) vs. Klarna at just ~75K followers (LINK). Over time, we've found Instagram followings to be a decent proxy for company's brand loyalty and relative mind-share.
  - Afterpay's US follower base is also growing quicker, at +17K new followers per month vs. Klarna's +2K per month

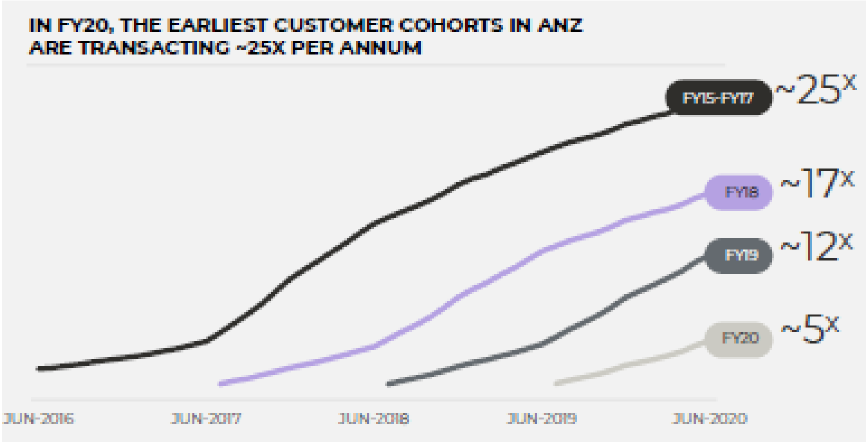
Afterpay Has 500K+ Fans Across Social Media

Afterpay has the most devoted fans among all payments companies



Customers Use Afterpay up to ~25 Times per Year

Afterpay's Australia & New Zealand Customers



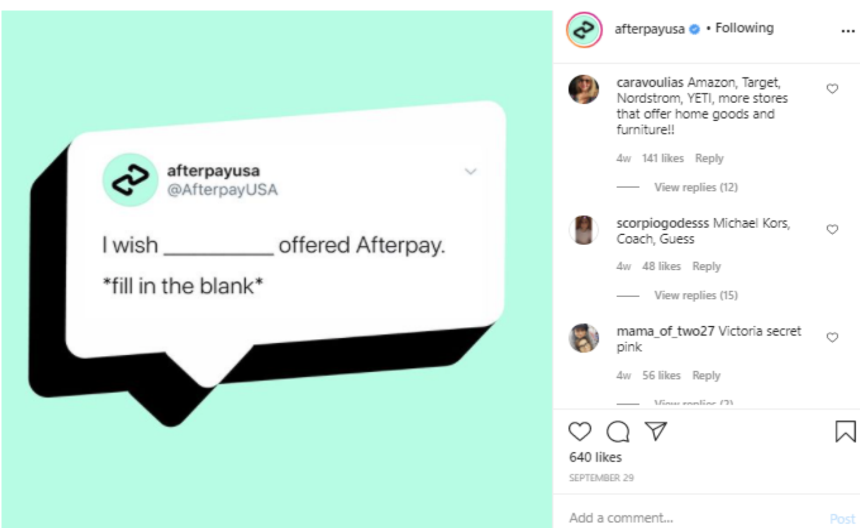
Consumers <3 Afterpay (continued)

This fan loyalty provides Afterpay with a unique method to convince new brands to sign-on.

- Afterpay will routinely ask its followers which brands they'd like to see on the Afterpay platform.
- The company will then review these results, and present them to the most requested brands.
- Instead of having to convince brands on the merits of partnering with Afterpay, the company can instead show the brand *"Hey, your existing customers are already requesting it. You're the most popularly requested brand by our followers. Not only will you attract some of our (Afterpay's) followers as new customers, but you'll also increase brand loyalty, conversion, and order sizes for your existing customers."*
- By having *actual* customer feedback to show to brands, it makes the sales process more of a "this is mutually beneficial for both of us" message rather than a "hard sell" process with the brands. It also "guarantees" a positive customer reception at launch (since it's customers themselves who wanted it).
- When Afterpay first did a similar tactic with Lululemon, Afterpay's fans bombarded Lululemon's customer service lines.
  - Lululemon actually had to ask Afterpay to tell its fans to stop bombarding the phone lines, as there were so many calls Lululemon couldn't serve their regular customer calls. Of course, Lululemon now offers Afterpay as a payment option.

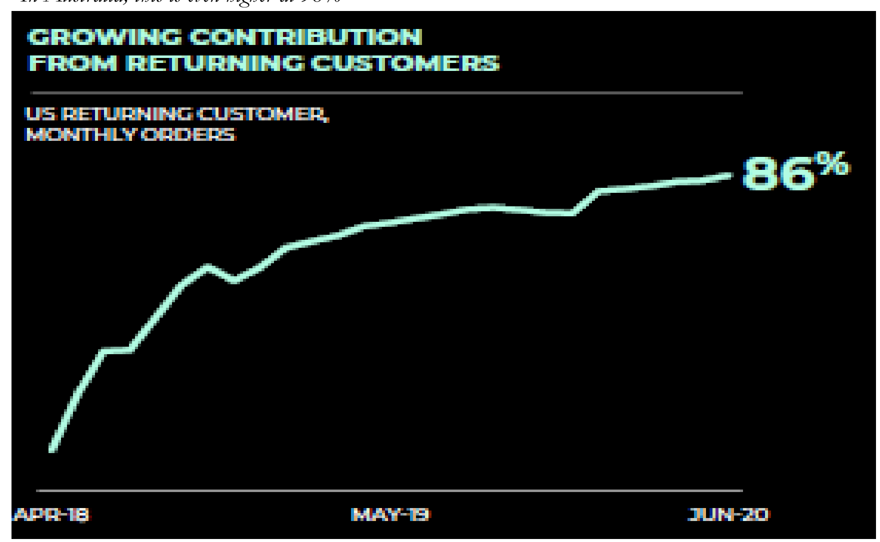
Asking its Fans Which Brands They Want on Afterpay

Afterpay USA Instagram post from September 29, 2020 (LINK)



86% of Afterpay's US Orders Are From Repeat Customers

In Australia, this is even higher at 98%



Why Do Brands <3 Afterpay?

Afterpay's biggest selling point is the KPI improvements that brands see on their site after launch.

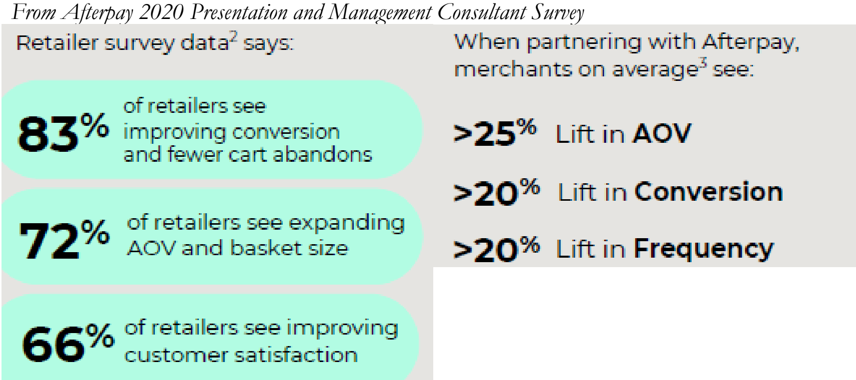
- Brands on average see a +25% in the average order size, +20% in conversion rates, and +20% in purchase frequency. They also realize lower return rates (saves on return shipping, processing, and having to throw out returned clothing), as well as 15 – 20M monthly "free" traffic leads from Afterpay's Store Directory App.
- During our research, we found brands stating that the numbers cited by Afterpay's sales team are actually *low-balling* the impact these brands witnessed. Some saw >40% AOV increases and 8x higher conversion rates vs. Google.
- In addition, numerous brands mentioned that on Day 1, ~20 - 25% of customers immediately selected Afterpay as their payment method. This is significant as evidence of the pent-up customer-demand for the product.
  - For investors, this signifies the "entrenchment" of Afterpay into a brand's business and the "rip out" cost. Brands are worried about losing 25% of their orders, if they choose to remove Afterpay later on.

Despite there being +10 different competing BNPL providers in the market, brands want to only work with the largest and most reputable BNPL providers. They also are more likely to go with who their competitors are using (i.e. FOMO).

- The request-for-proposal process is arduous, so why partner with the #4 player when you can get the #1 for a similar cost. Afterpay's scale also offers a larger customer base - since customers already have Afterpay accounts, there's no additional friction of signing up. This generates higher conversion rates / fewer abandoned baskets.

Customer Behavior Changes When Afterpay is Offered

From Afterpay 2020 Presentation and Management Consultant Survey



Brand Economics – With Afterpay vs. Without

Despite higher fees, brands make higher margins & profits with Afterpay

In USD	Non-Afterpay Customer (acquired via Facebook)	Afterpay Customer (acquired via Facebook)	Afterpay Customer (acquired via Afterpay app)	Notes
Average Order Value	$ 80.00	$ 100.00	$ 100.00	*Afterpay AOV is ~US$100, Afterpay increases*
x Gross Margin	45%	45%	45%	AOV by 25%
= Gross Profit	$ 36.00	$ 45.00	$ 45.00	
- Avg. Cost per Action	$ 10.98	$ 9.15	$ -	*Conversion is +20% of regular customer*
- Transaction Fee	$ 1.20	$ 3.80	$ 3.80	*1.5% for Non-Afterpay, 3.8% for Afterpay*
= Profit per Order	**$23.82**	**$32.05**	**$41.20**	
memo: Profit Margin %	*29.8%*	*32.1%*	*41.2%*	
memo: Incremental Profit $		*$8.23*	*$9.15*	

Afterpay's Notable Brand Partners

Australia and New Zealand

ebay, webjet.com.au, priceline pharmacy, HUDA BEAUTY, Aēsop., KitchenAid, Repco, sunglass hut, chempro, WIZARD, sportitude, Hush Puppies, INSPORT, Hannahs, SHEIN, numberoneshoes, KOOKAÏ, mydeal, MECCA, Yves Saint Laurent, LANCÔME, 1300SMILES, DAVID JONES, agoda, MICHAEL KORS, appliancesonline, Skydive Australia, QBD BOOKS, Kidstuff, SAMSUNG, CHEMIST WAREHOUSE, CHEMIST OUTLET, RY, Aje., RUNNING, ESTÉE LAUDER COMPANIES, ARMANI beauty, SWAROVSKI, DYMOCKS, Camilla, THE REJECT SHOP, VICTORIA'S SECRET, freedom, salt&pepper, Amart Furniture, Foot Locker, RIOT GAMES, drummond golf, PET FOOD Australia, Horseland, MITRE 10, BED BATH & BEYOND, MARKS & SPENCER, MYER, TerryWhite Chemmart, SKYPOINT, Kiehl's

United States

OLD NAVY, ATHLETA, BANANA REPUBLIC, GAP, FENTY SKIN, TATCHA, AMOREPACIFIC, RUGGABLE, PINKBLUSH, AMERICAN EAGLE, FURLA, ROTHY'S, FENTY BEAUTY BY RIHANNA, vineyard vines, BHLDN WEDDINGS, clarisonic, Perricone MD, Yves Saint Laurent, RTW retailwinds, ANASTASIA BEVERLY HILLS, Living proof., Kiehl's, WORLD MARKET, PACSUN, LANCER, LA MER, LANCÔME, BARRY'S, SHISEIDO, Jo Malone London, UNTUCKit, SOKO GLAM, CLINIQUE, Madewell, CharlotteTilbury, SHEIN, ba&sh, MAC, Hanna Andersson, TATI BEAUTY, OLEHENRIKSEN, BOMBAS, TILLYS, native, FINISH LINE, BIRKENSTOCK, FragranceNet.com, MARC JACOBS BEAUTY, lululemon, ROMWE, CARBON38, HAUS LABORATORIES, IT COSMETICS, asos, THE HUT, Ray-Ban, ULTA, Levi's, tarte, ESTÉE LAUDER COMPANIES, Outdoor Voices, 7 for all mankind, FTD, PUMA, FILA, new balance

United Kingdom

dermalogica, CURRENTBODY, FEMME LUXE, FOOTPATROL, zavvi, IWOOT, GYMSHARK, ELEMIS, I SAW IT FIRST, SHEIN, REISS, KOOKAÏ, SECRET SALES, everything5pounds, TESSUTI, bareMinerals, CHARLES & KEITH, boohoo, PROBIKEKIT, MYPROTEIN, lookfantastic, never fully dressed, REN CLEAN SKINCARE, size?, THE HUT, JD, R.M. Williams, hype., Unilever, ESTÉE LAUDER COMPANIES, Foot Locker, URBN, MARKS & SPENCER, asos, QUIZ, elf

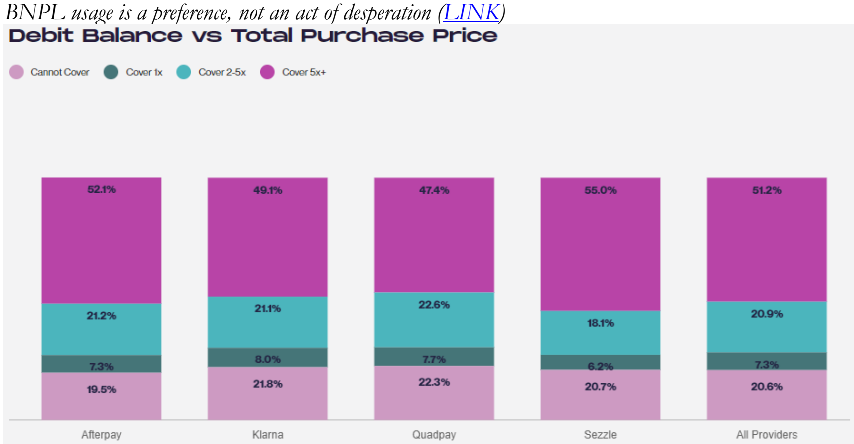
What About Credit Losses / Fraud?

Afterpay's loans are non-secured, but historical loss rates are very low at just ~0.9% of GMV and declining. We've also heard that Afterpay has never in its history collected on a debt and doesn't report to credit agencies. So how is this possible?...

- First, the misconception is that consumers use BNPL products only if they don't have access to traditional credit or have already maxed out their available credit.
  - This is false. Over 80% of customers have enough *cash* already in their bank accounts to cover the BNPL transaction. For the remaining 20%, these customers are paid bi-weekly or monthly, and plan to have the cash by the time payments are due. This signifies that BNPL products are a *preference* (helps with budgeting, managing household cash flows, etc.), and NOT a forced decision out of desperation.
  - Because of the high brand loyalty, many customers will proactively call if they know they're going to miss a payment (they feel an obligation to Afterpay) – and Afterpay will work with these customers on a payment solution. Calling ahead allows Afterpay to manage the risk ahead of time, while building customer loyalty.
  - If customers hate their payments company (a bank or credit card company for example), they certainly won't call ahead to warn the company they're not going to pay… they'll just miss it the day of, and the credit card company will need to spend extra resources to get it into collections.

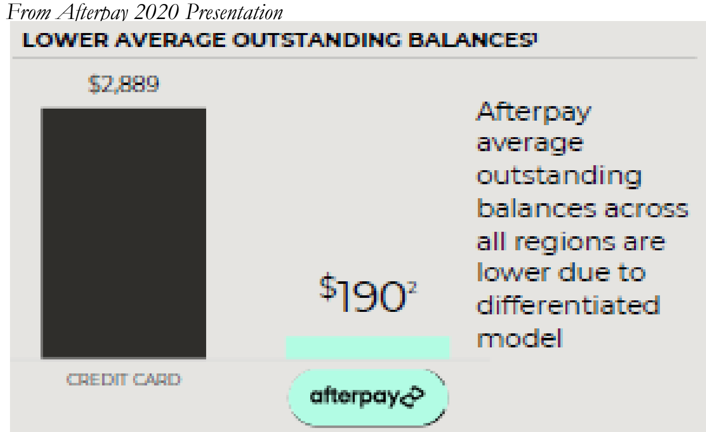
Customers Have the Cash to Repay BNPL Balances

BNPL usage is a preference, not an act of desperation (LINK)



Afterpay Outstanding Balance vs. Credit Cards

From Afterpay 2020 Presentation

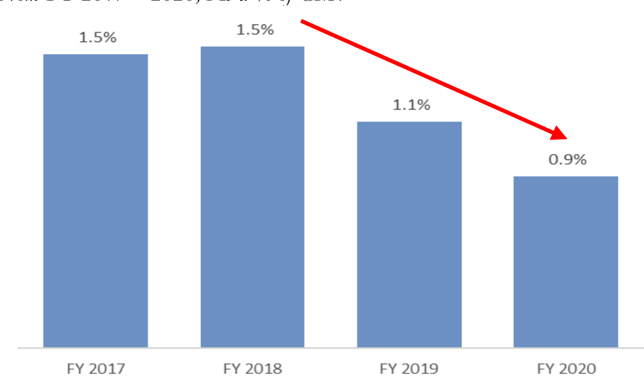


What About Credit Losses / Fraud? (continued)

- Second, after just a single missed payment, customers are blocked from using Afterpay again until the balance is paid.
  - With a total credit maturity of 6 weeks and average duration of just 3 weeks, Afterpay can tell within a very short period of time the customer's propensity to default.
  - As the customer cohorts mature, "good" customers will make an ever-larger percentage and result in naturally decreasing losses.
- Third, available credit is kept relatively low (especially compared to credit cards), at a maximum of AUD $2,000 total.
  - Customers typically can only spend AUD $100 – 200 per transaction (lower for new customers). This results in an average outstanding balance of just AUD $190 (or -93% lower than the average credit card balance).
  - A fraudulent customer isn't as painful as it is for other companies.
- Lastly, by focusing on the fashion & beauty category, Afterpay dramatically lowers the incentive to commit fraud.
  - In fashion & beauty, it's hard to resell an item at anything more than 50% its original price (even if it's brand-new with tags). Additionally it often takes weeks / months to find a buyer (need the exact size, style, brand, hard to sell used cosmetics, etc.). Meanwhile, that's capital that's tied up in depreciating inventory that might go out of style soon.
  - This is opposed to other "commoditized", easy-to-sell categories like electronics. These items can be re-sold within days, thus lowering the inventory / depreciation risk.
  - The below exhibit shows that Afterpay's categories carry both lower margins & lower absolute profits for fraudsters.
  - ***If you were looking to commit fraud, why would you choose Afterpay vs. other more lucrative categories and their BNPL providers?? Fashion & beauty is more work, for lower profits…***

Afterpay Loss Ratios Are Declining

From FY 2017 – 2020; As a % of GMV



Fraudster Economics – Fashion vs. Electronics

It's much more profitable to default & resell electronics than fashion items

In USD	Fashion Fraud (Clothing, Financed with Afterpay)	Electronics Fraud (iPhone, Financed with other-BNPL)	Notes
Retail Price	$ 100	$ 1,000	
- Initial Installment Payment (25% upfront)	$ 25	$ 250	
= BNPL's Capital at Risk	$ 75	$ 750	
Retail Price	$ 100	$ 1,000	
x Resale Margin	50.0%	90.0%	*% of retail price, recouped on Used Goods marketplace*
= Resale Price	$ 50	$ 900	
- Marketplace Fee	10	90	*20% for fashion (Poshmark), 10% for electonics (eBay)*
= Resale Proceeds	$ 40	$ 810	
- Initial Payment (25% upfront)	25	250	
= Profits from Fraud	**$ 15**	**$ 560**	
memo: ROI on Fraud	*60.0%*	*224.0%*	

The Opportunity

Afterpay: Chasing The American Dream

Thesis: Can the Australia Blueprint Be Replicated in the US?

Afterpay has a highly profitable business in Australia.

- Afterpay currently has 3.4 million customers in Australia & New Zealand (ANZ). In this region, there are only 17.3 million people between the ages of 18 – 65, which we deem as Afterpay's addressable market. This implies Afterpay has already penetrated ~20% of its total market.
- If we look at ecommerce penetration, we can similarly see just how dominant Afterpay is. There are AUD ~$36 Billion ecommerce transactions across ANZ. Of this, Afterpay generated AUD $6.6 Billion in GMV last year, or implying a ~18% share of all ecommerce transactions in the region.
- The business is so dominant, that Afterpay has achieved the coveted status of being a verb: "Why don't you Afterpay it?"
- Afterpay ANZ is currently producing ~40% EBITDA margins and still growing ~52% y/y, despite the high market share.

The company is very well-known in Australia & New Zealand, and is one of the most popular stocks among local investors. Despite that, there is still controversy / edge available today, around the US business. *(Note, this is also why this report is focused predominately on the US market.)*

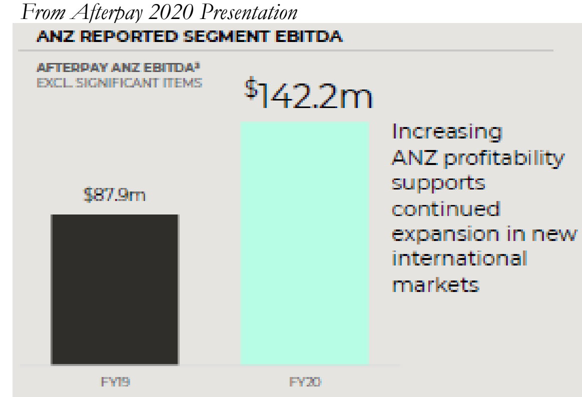
- Afterpay is reinvesting is all of its profits from the ANZ business, into the US market which they entered just two years ago.
- As such, our thesis (and source of future returns) comes from determining whether the company can replicate a similar level of success in the US, as they have in Australia.
- With the US having 10x the population and similarly 11x the ecommerce market size (~$400BN), there is still ample appreciation potential if we are correct.

Afterpay Memes

From Afterpay Obsession and #Afterpaytruth

Afterpay Australia is Highly Profitable

From Afterpay 2020 Presentation



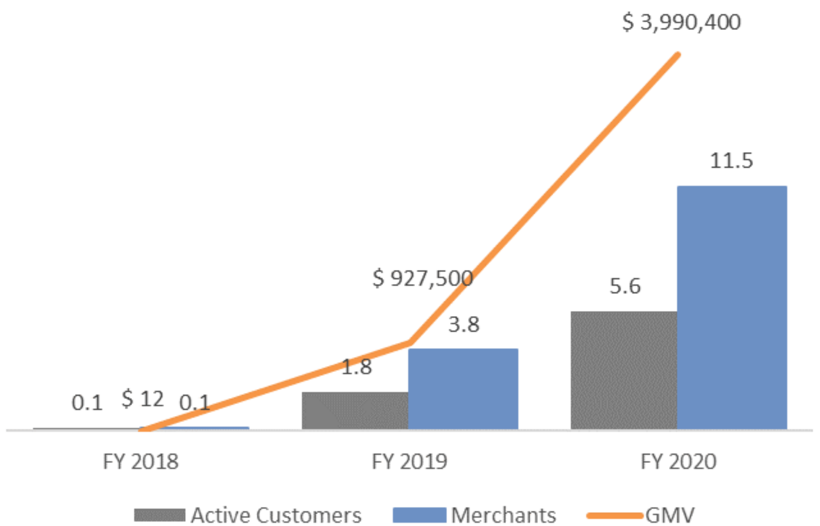
Afterpay: Taking the US by Storm

Afterpay launched in the US in 2018, and only started aggressively pushing into the market in early 2019.

- During that short timeframe, Afterpay already gained more customers in the US than their mature ANZ market (6.5M US customers vs. 3.4M in ANZ, as of FY Q1 2021). Additionally, customer cohorts are also tracking above ANZ's.
- US customers are increasing their purchase frequency (+41% y/y), as they become accustomed to the payment habit, and also as the number of merchants accepting Afterpay expands (+203% y/y).
- US customers on average use Afterpay ~4.8x per year (every 2.5 months). But this is optically low, due to the large number of new customers joining (new customers transact less frequently).
  - For example, Afterpay just added 900K new customers in Q1 2021 alone (from 5.6M to 6.5M US customers, or a +16% increase q/q).
- Additionally, this is still -64% below the frequency of ANZ customers. As Afterpay adds more merchants in the US and customer cohorts mature, we expect US customers to close the gap to their ANZ counterparts.

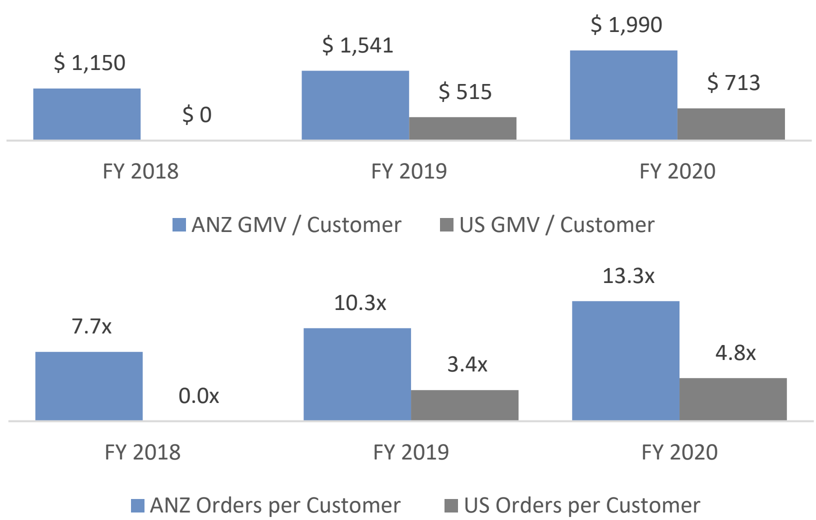
Afterpay US KPIs

GMV in AUD thousands; customers in millions; merchants in thousands



US Customers Are Only Starting to Become Addicted

Annual customer spend in AUD; annual customer order frequency



The BNPL Wars

If we look at the data, we can see there's strong momentum in the US (cohorts are tracking above ANZ's). On the demand-side, obviously the product resonates well with US shoppers.

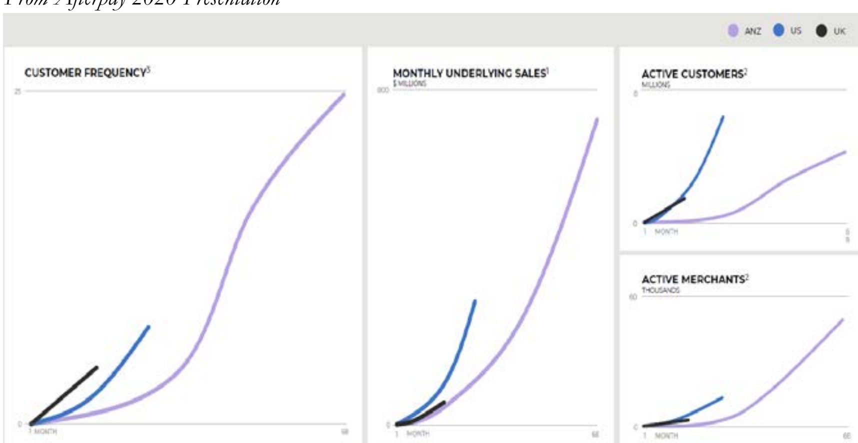
- All KPIs are tracking above ANZ's metrics, including customer order frequency, number of active customers, active merchants, and total GMV.

On the competitive front, we don't believe there will only be one winner in this market, given the "commoditized" nature of the product itself.

- Rather, like Visa vs. Mastercard, the market will consolidate to a handful of players. Thereafter, the relative popularity of the players will likely be determined by who can cultivate customer payment habits first (and keep them addicted), and who can increase the number of available merchants quickest.
- On this front, Afterpay's data indicates that not only are its customers sticker vs. competitors (user retention), but also that the customers who do find value in the service and remain customers, continue to transact more and more frequently. These customers eventually more than compensate for the initial users who dropped off (net dollar retention >100% after 2 years).
- Part of this is because of the fashion & beauty category Afterpay's chose to focus on. Out of all ecommerce categories, Fashion not only has the highest online purchase propensity, but also the highest frequency of purchase per year (LINK). Higher purchase frequency builds familiarity with Afterpay, and deeper in-grains the payment habit.

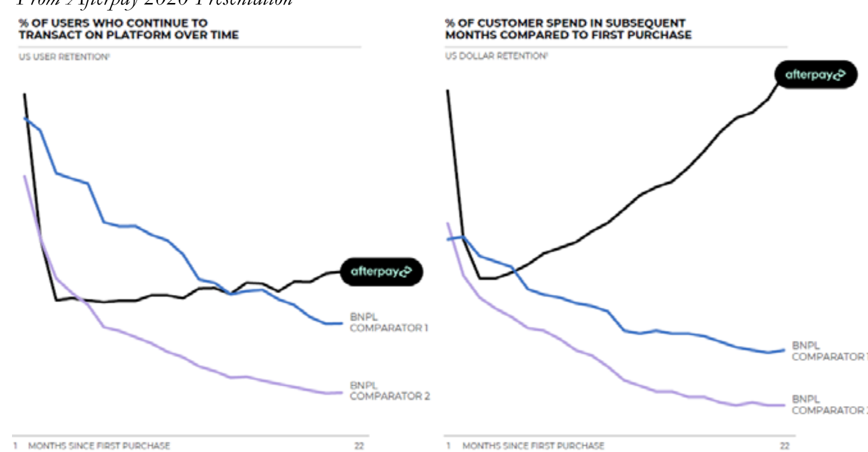
Afterpay US KPIs Have Outperformed ANZ

From Afterpay 2020 Presentation



Afterpay US Customers Are Stickier Than Competitors'

From Afterpay 2020 Presentation



The Growth Drivers

Future growth is a function of [# of Customers] x [Orders per Customer per year] x [Avg Order Size] x [Take-Rate on those Orders].

- # of Customers: This is driven by brand-awareness and co-marketing with merchants. This is why Afterpay is launching with large national brands first, despite the lower take-rates.
  - For example, if a potential customer sees the Afterpay logo featured on Forever 21's website (logos are featured prominently on all item pages), they are more likely to sign up for Afterpay ("If a brand as large as Forever 21 uses Afterpay, they must be legitimate"). The more often a customer sees the Afterpay logo across multiple brands, the more familiar they become & likely to convert to a customer. This is also why Afterpay's best use of marketing dollars, is to co-market with other brands and leverage their built-in customer trust.
  - In fact, Afterpay told us leveraging a national brand's reputation is their best customer acquisition tool. ~50% of new customers were acquired this way.

- # of Orders per Customer: This is driven by a combination of customer maturity (experienced customers are familiar with how the product works, and it becomes a part of their shopping habit), as well as the number of merchants who accept it (more merchant partners = greater opportunity to use it)

- Avg. Order Size: This will likely remain constant going forward, unless Afterpay enters other higher AOV categories. This likely won't happen until they have already "won" and built up brand loyalty in the fashion & beauty markets. Note, this is already happening in Australia, with Afterpay leveraging its brand into other categories, and only ~35% of total GMV coming from the fashion category.

- Take-Rate: Take-rates are a function of the average merchant size (the larger, well-known merchants have negotiating power to get the lowest fee rate of 3% + co-marketing dollars). Smaller SME merchants are charged higher take-rates (up to 6%), and thus are twice as profitable.
  - In order to raise take-rates, Afterpay needs to get SMEs onboard which in turn requires industry-wide adoption from the large brands (as mentioned previously, brands typically operate based on competitive FOMO). Essentially, large brands drive brand awareness / are for marketing, while the profits come from the SME merchants.

"The Flywheel":

More merchants = more use cases = customers & higher order frequency = FOMO by smaller merchants wanting a piece as Afterpay gains share in retail payment transactions = more SME merchants = higher profits for Afterpay (which is reinvested into co-marketing) = more merchants. And the cycle repeats…

Merchant Adoption – So Far, So Good…

The "moat" in this business is really based on having the widest network of merchants accepting Afterpay. The payments business (at least from a consumer stand-point) is largely a commoditized business.

- For example, why would a consumer choose to use a Visa card instead of a Mastercard? Well it's because Visa is "everywhere you want to be" (this is literally Visa's slogan, if you didn't know; LINK).
- At its core, the business is a race to acquire as many merchants (and thus customers) as quickly as possible. This is the "land-grab" phase Afterpay is under-going in the US, and so far they're showing strong momentum.
- We've shown in the prior slides that US consumers strongly demand BNPL products and Afterpay. So going forward, we believe the biggest determinant of whether Afterpay is successful, is to watch the other side (seller-side) of the flywheel, and to track momentum in merchant adoption.

Klarna is Afterpay's largest competitor both in the US and Globally. Klarna is still a private company, so US-specific merchant data is hard to come by. However, we can use sites like SimilarTech to obtain an approximate, directional indication.

- As expected, Afterpay is winning in its Australian home market, while Klarna is winning in its European home market. (SimilarWeb also corroborates this (Afterpay; Klarna)).
- In the US, Afterpay has +41% more merchants than Klarna (9,202 vs. Klarna's 6,543).
  - *(Note, these figures differ from Afterpay's US merchant count, since SimilarTech classifies it based on merchant headquarters, vs where a company actually sells its products. For example, SHEIN is a Chinese fashion brand but has local websites / apps that sell globally).*

Afterpay US Has More Merchants Than Klarna US

From SimilarTech (LINK)

Offering BNPL Options is Now Table-Stakes For Retailers

From PYMNTS Survey, LINK

"When PYMNTS and PayPal surveyed consumers, it was found that a primary factor motivating most of them to shop with one merchant versus another is the availability and acceptance of their preferred payment methods.

*PYMNTS' research suggests that **48 percent of consumers who prefer POS credit (buy now, pay later options) would not buy from merchants that did not offer it…***

Consumers are increasingly choosing BNPL options at the point of sale or checkout to the extent that its availability determines whether or not they ever even get that far with a merchant."

Optionality – Trials in the Works

Besides its United States expansion, Afterpay also has many smaller developments in the works. These have the potential to strengthen the company's business model, user loyalty, and / or addressable market even further.

Banking Services: Afterpay announced just a few weeks ago (Oct. 20, 2020) that they are partnering with WestPac to allow Australian customers to open Afterpay checking & savings accounts (LINK).

- Afterpay avoids needing a banking license, by partnering with WestPac's 10x platform.
- The most exciting aspect of this, is that it has the potential to lower Afterpay's cost basis by cutting out Visa & Mastercard ("the rails"), with payments that can be transferred directly from customer accounts to merchant bank accounts. They already have a partnership with Plaid and this would accelerate that initiative. This would be significant, as processing fees currently comprise ~26% of revenues.
- Additionally, Afterpay will be able to see transaction data for all purchases (not just those using Afterpay). This gives them insight into how Afterpay customers are spending outside their sites, and they can use this information to better target new merchants, or sell these data-insights as a service to its merchant customers ("what other stores do X company's customers, also shop most frequently?").

International Expansion: Afterpay acquired Pagantis (August 21, 2020) and Empatkali (August 26, 2020), which gives them a toe-hold in Continental Europe and Asia.

- Both of these initiatives are still very early. Pagantis is approved to operate in Spain, France, Italy, Portugal, and soon Germany. Currently Afterpay only operates in the United Kingdom in Europe, under the "ClearPay" brand.
- We have heard that Pagantis will close later this year, and then will take some time to integrate into the systems. The European expansion likely won't occur until the second half of 2021.
- Empatkali is a Singaporean BNPL company that operates in Indonesia. This was a small acquisition (~$2M USD), and from what we've heard, was largely an "acqui-hire" for the team. The Asia roll-out, if it happens, will likely happen only after the Pagantis roll-out and will focus on the "developed" markets of Hong Kong and Singapore where consumer habits are similar to Afterpay's existing customer base and have similar taste in brands.

Optionality – Trials in the Works

<u>Traffic Monetization via Store Directory:</u> Afterpay currently sends ~15 - 20M free customer lead referrals per month to its merchant partners, via its Store Directory app. Since fashion & beauty purchases tend to be an impulse / "browsing" experience, many customers will open the Afterpay App first to see what stores offer Afterpay. Only then, do they choose a brand and see if the brand has anything they'd be interested in purchasing.

- We believe that as Afterpay's lead referrals grow, they will be able to monetize this traffic. As customers grow, and thus usage of the Shop Directory increases, Afterpay can also potentially monetize with sponsored placement (promoted brands at the top of the directory).
- Afterpay can also expand the number of "Afterpay exclusive sales" and listing these offers via its Shop Directory (to get customers in the habit of starting their shopping experience on Afterpay instead of the brand's site). Afterpay already does a version of this via its "Afterpay Day" sale (LINK), but we would expect them to expand this concept over time.

<u>Afterpay "Pulse" Rewards:</u> This summer (July 2020), Afterpay announced the launch of a rewards program called Pulse in the US (will be rolled out to other countries as well). Instead of rewarding customers who spend more (for example, 1 point per $1 spent), the Pulse program instead incentives customers to make payments on-time.

- Pulse is an invite-only program. To be invited, users must make 30 on-time payments, on orders over +$40, over a 6-month period. This translates to 10 purchases (the initial 25% payment doesn't count), or at least $400 GMV every 6 months.
- Compared to the 4.8x purchases per year and $713 annual GMV for US customers currently, this program will hopefully encourage customers to use the Afterpay payment option for even more purchases (and further build the habit).
- Customers who meet these requirements (you need to re-qualify every 6-months), get access to exclusive promotions / offers, the ability to pay $0 up-front, reschedule upcoming payments, and use Afterpay for select retailers that currently aren't official merchant partners (via virtual gift cards).
- While rewards points aren't a part of the program yet, one doesn't have to imagine too much that this will eventually be a part of the Pulse program (especially since the top reason – at 59% of users – for Millennials and Gen-Z to use credit cards is to earn rewards; LINK).

Some of these initiatives will undoubtedly fail, or need to pivot in the future. However what's more important, is that it shows the aggressiveness and willingness of the Afterpay team to try and experiment with new initiatives.

In today's constantly changing world, only the most innovative companies will thrive. Innovation by definition requires trial-and-error, since it's hard to know how consumers will react until the initiative launches. These projects (and undoubtedly many more to come) are evidence that Afterpay has the DNA of an innovative firm.

Valuation

Hayden's partners began purchasing shares in April 2020, at a price of ~$27. We bought more shares after the May 2020 update on Afterpay's US business, where we received confirmation that our US thesis was on track. These shares were purchased ~$43, and subsequently we have added additional shares opportunistically.

We believe Afterpay will generate ~AUD $22 Billion in GMV (FY 2021E), realizing ~AUD $1 Billion in revenues and a ~4.6% take-rate (we expect take-rates to decline slightly in the short-term, as the US business grows quicker than the more mature Australian business).

- Over the next 3 years, we are expecting the company to decelerate, but still grow at an impressive ~50 - 100% per year. This is largely driven by the US market (which grew +330% in FY 2020). New merchant adoption is still strong, in-store roll-out just began a few months ago, and purchase frequency will increase as the number of merchant partners & brand awareness grows (similar to what Australia experienced a few years ago).

At our original purchase, this equates to a ~0.3x Price / GMV multiple. This is less than half the comparable multiple, versus mature ecommerce companies (Afterpay is essentially a hybrid ecommerce + payments company).

- Additionally, Afterpay was experiencing an +80% growth differential (growing much quicker than mature ecommerce firms), while will also generate similar margin profiles after its US investment phase is finished (Afterpay's Australia market already has ~40% EBITDA margins).

The reason we were able to acquire shares at this price, is that the market was concerned about 1) loss ratios increasing during a downturn and 2) growth slowing due merchant and customer adoption declining during a recession. Both of these proved false…

- Loss Ratios actually *declined* during the period from ~1% to ~0.7% in the FY 2H 2020 (Jan – June 2020). This was a result of Afterpay dialing back some of its credit book / risk metrics, the quick turnover of its credit book (only 6 weeks) which enables Afterpay to react quickly to changes, and the adjustment of Afterpay Australia's loan terms from 8 weeks to 6 weeks (thus requiring a 25% initial payment) to match the US.
- Additionally, we knew that merchant adoption was actually *increasing* via our conversations with brands, as these merchants 1) emphasized online channels when their stores closed, and 2) were desperate for any tools that would enable higher revenues & more purchases from online, as they sought to keep their business afloat.

Risks (Questions TBD)

While Afterpay has been a good investment for us so far, it's still early days and there are plenty of ways the company can be derailed from its current trajectory. As investors, we should pay attention to the following as potential "thesis breakers":

How will competition react in the United States (and other markets like Europe)? Klarna, Paypal, etc. certainly won't stand-still as Afterpay accelerates its market share. Will Afterpay be able to maintain its take-rate?

- Currently there is enough "white space" for players to focus on converting new merchants, rather "stealing" merchants from other players. However this becomes a bigger risk as the market matures and the amount of "white space" available shrinks.
- So far Afterpay has been able to maintain its take-rate, even in most cases where it directly faces competition under-cutting them with lower fees, during the RFP process. This is because the other benefits (lead generation, co-marketing, merchants realizing higher conversion, AOVs, etc.) has been enough for merchants to justify the higher take-rate. But how does this change over time?

Can Afterpay successfully expand outside of its core Fashion & Beauty categories in the United States (in Australia it's already done so with fashion only ~35% of GMV)? Will it be able to roll-out in-store payment in the United States successfully?

- Doing so will expand the use-cases for the product, as well as increasing the purchase frequency & in-graining payment habits / mindshare. Afterpay has been successful doing this in Australia, but will consumers respond similarly in the US?
- If not, what happens when the fashion & beauty online end-markets mature? Will Afterpay need to grow volume via new geographies, and what "right to win" does it have in those markets?

How will this industry be regulated in 5 – 10 years? Especially in more regulation-heavy markets like Europe? How does this affect Afterpay's business model?

- Currently Afterpay has avoided regulation, due to the short-term and interest-free nature of the loans. This is due to the BNPL industry being nascent and thus regulation hasn't caught up yet. How does this change as the entire industry grows and attracts regulatory attention?
- Will the bad-actions of a competitor, attract scrutiny from regulators for the entire industry, despite Afterpay itself not being at fault? How do you control / bear the consequences of your competitors?
- Can Afterpay work with regulators to find a mutually beneficial regulatory framework? Can Afterpay "shape the regulation" for the entire BNPL ecosystem? Will new Australian regulation encourage retailers to pass on payment fees to the consumers?

What happens when Gen-Z matures? Will "Gen Alpha" (the kids of Millennials) have the same preferences as previous generations?

- Will they rebel, and want to use different tools than their parents? Will new technology / devices enable new payment methods?

Having Great Friends… Thank You

A Big Thank You to Pratyush Rastogi of Farrer Wealth,
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Pratyush is the founder of Farrer Wealth, a financial advisor representing Families and HNW individuals based in Singapore.

For more information, you can find Pratyush here:
https://www.farrerwealth.com/

Contact Information

For More Information
Contact Us:

Fred Liu, CFA
Managing Partner

Hayden Capital
1345 Avenue of the Americas, 33rd Floor
New York, NY. 10105
Email: fred.liu@haydencapital.com