

An Overall Analyses of PayPal

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Abstract. PayPal Company is the leading aerospace company in contemporary times. As a result of pandemics recently, the global aviation industry has been severely impacted, and the operational risks faced by PayPal have also expanded. Based on the business strategy and profit model of PayPal Company in recent years, this paper analyzes the dangers that the PayPal Company has experienced in its operations and growth from the standpoint of the interaction between its resources, operations, and financial data over the last three years, in order to forecast its future growth.

Keywords: Financial analysis; Financial ratio; SWOT analysis.

1. Introduction

This paper evaluates PayPal's performance in profitability using information that the company has made public. It also examines the risks and chances that PayPal faces in terms of the market environment, governmental regulations, and external changes.

This paper is organized into four main parts. The first section is an introduction, which focuses on introducing the background of the research object, research purpose, significance, and basic content as well. The second part involves a deeper analysis of PayPal company. It consists of three models to provide a conclusion for this research work. Firstly the business model will be discussed to take a view on how PayPal generates profits. Then using SWOT analytical method to find various environmental factors of PayPal's company affecting group development strategy. The next model is the financial analysis of PayPal, including the analysis and review of PayPal's profitability ratio, cash flow, and profit margin. Moving to the discussion section, risks from external and internal circumstances will be referred to and analyzed how they may cause an adverse effect on the company. The last part is the conclusion of the research, which is combined with the conclusion of the previous content and the future outlook for PayPal company. This paper enriches the research related to PayPal and provides implications for providing a reference to investors' valuation.

2. Business Analysis

This part analyzes the business model of PayPal, finds out the threats and opportunities faced by PayPal through SWOT analysis, and gives some appropriate development suggestions in some places.

2.1 Business Model

A business model describes the rationale of how an organization creates, delivers, and captures value [1].

2.1.1 The customer market

Paypal's customers are segmented into two categories, consumers consisting of individuals and merchants consisting of businesses, providing a two-sided network payment platform for more than 392 million consumers and 34 million merchants, wherein the entire ecosystem gets more valuable with the increasing of customers and merchants.

2.1.2 The business model

As can be seen in table1, PayPal services are divided into core business and derivative services, realizing the ecological mode of "online + offline + social networking + payment" and building a comprehensive platform for promoting the development of the global digital economy. Moreover,

with the launch of Super apps, a closed ecosystem containing many functions that people would use every day, in 2021, PayPal gives users a seamless, contextualized, integrated, and efficient experience.

Table 1. PayPal Business Overview

Type	Customer category	business	function
Core products	For consumers	PayPal	Payment application
		Venmo	A payment platform with social attributes
		Xoom	Cross-border remittance service platform
	For merchants	Braintree	Mobile e-commerce receipt and gateway
		zettle	Offline hardware device provider
		hyperwallet	Institutional payment technology provider
Value-added products	For consumers	PayPal credits	Credit accounts without annual fee
		Pay in 4	buy now pay later without interest
		happy returns	Return service provider with QR code
	For merchants	Paypal working capital	Working capital loan service
		paypal business loan	Provide large loans
		simility	Risk management platform
		paydiant	Mobile payment technology developers
	For both	honey science	Preferential platform

2.1.3 Profit model

(1) Revenue streams

Paypal earns money from two different revenue classifications: transaction revenues and other value-added services. Transaction revenues include fees charged to merchants and consumers based on total payment volume (“TPV”) [2]. Transaction fees are currently commonly charged at ordinary rates and small commodity rates. For the ordinary rate, the Asia-Pacific region adopts a uniform charging standard, the tiered electric pricing system. As can be seen in table 2, the larger the total amount of transaction collection, the lower the rate is. For small items, PayPal charges a 6% fee and a flat fee of \$0.05. Revenues from other value-added services are primarily derived from revenue earned through partnerships, referral fees, gateway fees, subscription fees, and so on.

Table 2. PayPal Transaction Fee

	monthly sales volume (dollars)	rate
Standard rate	Below 3000	4.4%+\$0.30
Open rate	3,000-10,000	3.9%+\$0.30
	10,000-100,000	3.7%+\$0.30
	Over 100,000	3.4%+\$0.30

(2) Cost structure

PayPal is a cost-driven structure, whose biggest cost is transaction expenses, which give birth to operating revenue, followed a research and development expenses, an essential prerequisite for improving gross profit and also the source of enterprise core competitiveness [3].

Table 3. PayPal cost expenses overview

	2021	2020	2019
Transaction expenses	10315	7934	6790
Research and development expenses	3038	2642	2085
Other expenses	7756	7589	6178

2.2 SWOT Analysis

2.2.1 Strengths

(1) Online scale advantage: Compared with offline, PayPal has more advantages in online payment. In the early stage of its establishment, PayPal was acquired by eBay, the head e-commerce platform, which provided PayPal with a stable online payment scene. Additionally, PayPal expanded its online payments business globally, holding the largest market share in cross-border transactions. As of 2021, PayPal had more than 390 million C-terminal users and 3,400 merchant users worldwide. According to Metcalf's Law, the value of the Internet is measured by the square of the number of Internet nodes. As the number of Internet customers grows, the benefits generated by the Internet increase exponentially [4]. Therefore, As the scale of PayPal constantly grows, its value may become more evident.

(2) Scientific research advantages: As of 2021Q4, PayPal's huge payment network has connected more than 392 million consumers and 34 million merchants, and it has maintained deep cooperative relations with many banks, card organizations, and regulators, accumulating massive user behavior and transaction data. This is the basis of user insight. Through self-developed algorithms and improved technical infrastructure, the company helps merchants achieve precision marketing and risk management, so as to guarantee large-scale high-performance processing capacity and high-quality, differentiated user services. PayPal has continued to increase payment authorization rates by leveraging its strong data sets, machine learning, artificial intelligence, network tokenization, strong partnerships with payment networks and issuers, and linking different sources of funds in digital wallets.

(3) Security advantage: It should be pointed out that PayPal did not disclose the account information of both parties, which ensured the security of the transaction. As far as the buyer is concerned, users only need to use their email as an account and execute the password as the payment instruction, without providing the credit card information to the seller. Therefore, it avoids security risks since there is no need for providing personal information to the seller. Moreover, It also avoids the risk of credit card information leakage to a certain extent. Based on research, shoppers' willingness to buy increased by 54% if merchants accepted PayPal. As far as sellers are concerned, PayPal provides credit guarantees for merchants, which avoids payment refusal caused by credit card crimes to some degree [5], effectively reducing the risks borne by merchants.

(4) Ecologic dominance: Relies on its data traffic, PayPal combines diversified derivative businesses to generate synergistic effects, improving user stickiness. PayPal was distributed in multiple business types such as payment, finance, and lifestyle services, and established partnerships with companies in three fields: Foreign Trade Station, Marketing and Promotion, Logistics, and Warehousing. It improves user activity and accumulates high-quality customer insights, thus tempting more cooperators to access the port, lessening the average customer acquisition cost, and finally producing obvious network effects. In the future, it is suggested and expected to actively expand offline application scenarios, strengthen the penetration breadth and depth of the full scene, establish a strong ecological system integrating education, medical care, travel and transportation, shopping and entertainment, and continuously deepen social attributes to enhance user viscosity.

(5) Good user experience: The first requirement for an exemplary user experience is to meet the customer's exact needs, without fuss or bother. Next comes simplicity and elegance that produce products that are a kind of enjoyment to own and use. True user experience goes far beyond giving customers what they say they want [6]. It needs to satisfy additional demand from customers instead. PayPal not only provides basic functional services but also provides language services to meet users' psychological needs. The relevant interface of PayPal provides four kinds of language services, namely Chinese, English, French, and Spanish, which bring additional surprises to customers. Moreover, With its unique grassroots nature, low threshold, small variety, and personalized financial services, Internet finance just make up for the shortage of traditional financial services [7]. As a result, PayPal helped solve the financing problem of small and micro enterprises, and helped online lending get out of the box of acquaintances society.

2.2.2 Weakness

(1) Scarce source of income: PayPal currently focuses on payment and credit, and transaction commission accounts for almost all sources of income.

(2) Dependent on connectivity: PayPal relies on Internet connectivity and digital literacy. This has become a constraint on growth in emerging and less developed countries.

(3) Low penetration rate of the digital wallet market in the US: Before the rise of digital payment, the penetration rate of bank cards in the US was much higher than that in China, and offline bank card payment was quite mature. Compared with card payments, improvements in digital payments have been relatively limited, so there is little incentive for U.S. residents to make the widespread shift from cards to digital payments. Therefore, whether offline or online, using bank cards to pay is the preferred way of payment for American residents. On the contrary, The penetration of digital wallets is high since the Chinese payments experience has remarkably improved when China leapfrogged from cash payment to digital payment.

(4) Unstable base in payment scenario: As a cross-border e-commerce platform, eBay relies on PayPal as the payment channel to control information flow and payment flow, making sure that its e-commerce ecosystem is in a closed-loop state, which also causes a strong dependence on eBay for PayPal. After PayPal being separated from eBay, PayPal still needs to rely on a third party due to the lack of a platform within the system, so its bargaining power will not be high accordingly.

2.2.3 Opportunities

(1) Regional expansion opportunities: with the prosperity and development of the Internet economy and increasingly close international economic ties, the penetration rate of e-commerce and the use of e-commerce digital wallets are increasing, making online payment unstoppable. Countries like India are pushing for cashless or fewer economies, providing a big opportunity for PayPal's market expansion. However, in the Middle East, Africa, and Latin America, credit cards still dominate online spending while cash dominates offline spending. With the improvement of infrastructure, PayPal and other electronic payment platforms will have huge development space.

(2) The separation of eBay: PayPal will have greater flexibility since it can cooperate with other e-commerce platforms, thereby setting up the base for payments. Attract more attention through the electric business platform to develop outside the box. When the number of payment users outside the system increases significantly, the flow will be diverted to the e-commerce platform inside the system to form a positive cycle. More importantly, the exclusivity of payment channels inside the system will further help PayPal to stabilize the base of the payment scene and consumer habits.

(3) Development of blockchain: With blockchain, a key underlying technology of digital currency, start maturing, the potential of the digital wallet market may be greatly released. Therefore, it may allow PayPal to become a giant centralised cryptocurrency exchange. PayPal has 426 million users worldwide, among which the U.S. market covers 203 countries and regions. In addition, 8% of PayPal users worldwide are merchant users, that is, 34 million. The ubiquitous payment landscape and huge user base also fit the no-borders nature of digital currencies.

2.2.4 Threats

(1) Competition in the field of traditional banking: The essence of artificial intelligence is endowed with the prediction of the machine, as predicted cost reduction, by a machine can replace artificial prediction value will decrease, but people with complementary judgment ability will improve [8]. Machines may have an advantage over humans in environments where tasks are clearly defined: but humans' ability to make comprehensive judgments in complex, variable, and dynamic situations is still something robots cannot replace for a while. If traditional banks improve the comprehensive analysis and judgment ability of their staff, or directly acquire mobile payment companies, their competitiveness will not be underestimated. In addition, photonic payment services launched by traditional banks are not completely dependent on the network, and there is no upper limit on the payment amount, which is very suitable for small payments without a card or network. However, due to the low penetration rate, they cannot compete with PayPal for the time being.

(2) Competition in the field of mobile payment: Although PayPal, Visa, Mastercard complement each other's advantages to compete less and focus instead on their other competitors in the payments space, PayPal still faces international competition pressure from social platforms, e-commerce platforms, and payment platforms, such as Apple Pay, Android Pay, Masterpass, Amazon Pay, and Facebook Pay (Meta Pay). For PayPal, the pressure of international expansion is self-evident. In this case, the status of third-party payment tools such as PayPal is bound to be affected. Therefore, PayPal needs to constantly seek new ways to prove and differentiate the value of its payment solutions.

(3) Threat of digital currency: The development of digital currencies: In essence, the digital yuan ("money") with the third party payment platform ("purse") are not comparable, but the payment system established around the digital RMB can be compared with the third party payment system. The former has a certain comparative advantage in safety, convenience, and cost aspect. The digital yuan effectively eliminates fees by bypassing any third-party bank or local institution, while allowing transactions to be executed instantly. With the expansion of e-commerce, social media, and remote working trends, the world is becoming increasingly digital, posing a certain threat to the future development of PayPal.

(4) Stringent economic policies: In countries such as China and Japan, there are strict economic policies that are constraints set up in allusion to such companies. For example, from the perspective of the Chinese market, PayPal officially entered the Chinese market in 2005, and its market share declined sharply after being squeezed by Alipay's free strategy. What's worse, PayPal officially stopped running the third-party payment business in 2011 because it did not obtain the third-party payment license issued by the Central bank as foreign capital. After that, PayPal's business center in China began to change direction to provide cross-border payment services for small and medium-sized merchants in China, as well as Chinese consumers.

3. Financial Analysis

This part mainly analyzes the profitability of PayPal through four indicators, which are operating profit, profit rate, profit ratio, and free cash flow. It focuses on historical trend analysis, but Visa is selected as Benchmark for comparative analysis where necessary.

3.1 Operating revenue

Sustained increase in revenue: The amount of revenue shows a continuous trend which increased step by step from nearly thirteen thousand million in 2017 to almost twenty-five thousand million in 2021, an approximately twofold increase.

Revenue growth slackens off: In 2021, the revenue growth rate slowed down. Two reasons could be summarized: First, the agreement between PayPal and eBay ended, As a result, sales deposits of eBay will now be deposited directly into the seller's bank account, potentially reducing much of the revenue of PayPal. Second, with the global pandemic effectively controlled, people return to normal daily life and adopt other forms of payment and remittance. Graham and Dodd first put forward two important concepts to reflect the persistence of earnings: permanent surplus and temporary surplus [9]. Given that the outbreak is a sudden event and is not expected to occur in the future, Part of the 2020 profits is more likely to be a temporary surplus. Therefore, it may be expected that PayPal's growth rate will continue to increase between 2019 and 2021 if dividend from the COVID-19 pandemic is excluded.

Table 4. PayPal, operating revenue analysis

	2021	2020	2019	2018	2017
Operating revenue	25371	21454	17772	15451	13094
Growth rate	18.26%	20.72%	15.02%	18.00%	20.77%

3.2 Profit margin

The profit margin is the relative index of enterprise profit level in a certain period. As can be seen in table 2, All the mentioned profit margins increased between 2017 and 2021 in the mass. In nearly three years, only the net profit margin declined between 2020 and 2021, which was primarily due to a decline in net incomes from strategic investments in 2021 compared to the previous year, according to 10-K. Based on the above result, we can draw a conclusion that the company is considered to be well-managed and effective in terms of the main business.

However, there are huge disparities when compared with Visa, whose profit margins are all averagely above 50 percent, keeping nearly a 30% gap with PayPal in every mentioned measure. According to the obtained results, we can say Visa has more funds to invest and is more efficient to turn sales into profits. The main reason may be Visa's sheer size and the network effects that come with it.

Table 5. PayPal, profit margin analysis

	2021	2020	2019	2018	2017
Gross profit margin	46.99%	46.62%	44.94%	46.53%	48.87%
Operating profit margin	16.80%	15.33%	15.30%	14.20%	16.24%
Net profit margin	16.43%	19.59%	13.84%	13.31%	13.71%

Table 6. Visa, profit margin analysis

	2021	2020	2019	2018	2017
Gross profit margin	82.41%	82.67%	85.01%	84.62%	85.68%
Operating profit margin	65.56%	64.46%	65.29%	62.86%	66.15%
Net profit margin	51.07%	49.74%	52.57%	49.98%	36.49%

3.3 Profitability ratio

Profitability ratios reveal how the firm is profitably organizing its activities. The owners expect a reasonable rate of return on their investment [10]. This part analyzes two metrics, wherein the Return on assets (ROA) indicates a company's profitability in respect of its total assets, and the return on equity (ROE) is the measure of a company's net income divided by its shareholders' equity.

As can be seen in table 6 and table 7, on the one hand, the return on assets and return on equity of the two companies are both high, showing a growing tendency in general. It indicates that the two companies have good asset utilization efficiency, and the management has high efficiency in obtaining income and growth from equity financing. On the other hand, the profitability ratios of Visa are much higher than that of PayPal in all the years analyzed. The higher the ROE, the better an enterprise is at turning its equity financing into profits. And higher ROA illustrates that Visa can make more money with a smaller investment. Investors may prefer Visa in terms of the data mentioned.

Table 7. PayPal, profitability ratio analysis

	2021	2020	2019	2018	2017
Return on assets	5.50%	5.97%	4.79%	4.75%	4.40%
Return on equity	19.95%	22.72%	15.22%	13.11%	11.69%

Table 8. Visa, profitability ratio analysis

	2021	2020	2019	2018	2017
Return on assets	14.85%	12.63%	16.65%	14.88%	9.85%
Return on equity	31.21%	31.33%	35.52%	30.86%	20.40%

3.4 Free cash flow

Free cash flow (FCF) is how much money a company has left after paying for operating expenses and capital expenditures. The more free cash flow a company has, The more dividends it can distribute, as well as more opportunities for debt repayment and growth.

Table 9 shows an increasing trend in the free cash flow of PayPal in the mass. Finally, it reach five hundred four thousand thirty-seven million in 2021, which means PayPal has strong cash flow ability. Therefore, PayPal almost has all the financial resources it needs to pursue acquisitions that fit its business model without relying on debt, making it possible for PayPal to rapidly expand its market.

Table 9. PayPal, free cash flow analysis

	2021	2020	2019	2018	2017
Free cash flow	5437	5108	3384	4660	1864

4. Conclusions

To conclude the comprehensive discussion on PayPal, including the services provided by the company, brief background details, value, swot analysis, and company ratio analysis. PayPal is still one of the world's top Fintech companies, according to the results of using the SWOT method of PayPal's advantages and weaknesses based on the current business climate. The main categories of the company's business include Payment and credit. Moreover, because of the coronavirus, the need for merchants to operate digitally surged, while the need for personal contactless payments shot up, which accelerate the transformation from face-to-face shopping and traditional in-store payment methods (e.g. cash), to e-commerce and digital payments (e.g. QR code). Thereby leading to the company's profits surging in 2020. However, the company's growth began to slow recently, which is mainly due to the effective controlling of a global pandemic. Therefore, people gradually return to normal daily life and be able to adopt other forms of payment and remittance. Accordingly, PayPal very likely won't be able to maintain its high growth rate in 2020 just by relying on the online consumption scenario.

It looks as if the business of PayPal start to fall, however, one of the good news may be that this change in consumer behavior may be permanent. What's more, PayPal issued a press that It is committed to becoming a digital wallet that goes beyond payment, financial services, commerce, and shopping tools. This may illustrate that PayPal will comprehensively expand the consumption scene online and offline in the future. Going forward, I expect PYPL to continue its solid growth rate for a long time as each new generation becomes more inclined to use digital financial services. This should allow PYPL's core business to continue to generate solid cash flow at an increasing rate while providing excess cash to invest in other growth areas.

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