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MB 755 – Strategic Leadership

The Ripple effect of Strategic Leadership

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1. Introduction

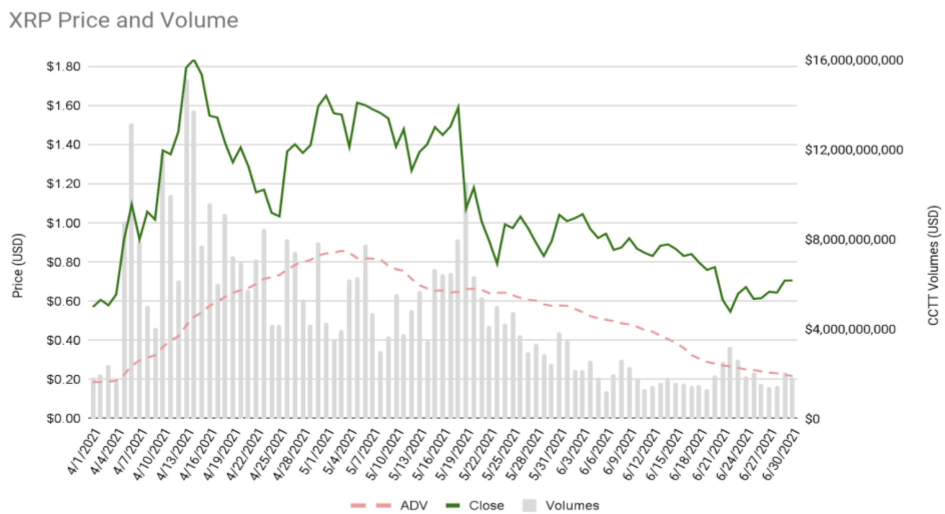
This paper aims to discuss Ripple Labs, Inc. from a strategic angle, looking into its strategic positioning to critically analyze the effectiveness of the leadership style of its CEO Brad Garlinghouse, as a resilient transformative leader within his institution and the crypto space. Based on SWOT and PESTLE analysis, along with VUCA responses, we deducted that currently Ripple, through creativity and innovation, are aligned with their projected goals despite facing a legal battle with the U.S. Security and Exchange commission, fierce competition, geopolitical conflicts, and the ban of governments from using Blockchain technology.

1.1 Ripple Labs – An Introduction

Ripple Labs, Inc. was founded in 2012 as a company that deals with financial solutions for cross-border money transfer. Ripple utilizes Blockchain technology as a protocol for faster, cheaper, and more transparent transactions compared to traditional methods by using their XRP token as an intermediate currency (Ripple, 2013). Acting as CEO, Brad Garlinghouse led Ripple into becoming one of the biggest names in the crypto space by striking deals with prominent firms in the banking and financial world, such as Standard Chartered, Accenture, and SBI group. Ripple operates in the very definition of a VUCA world (Bennet & Lemoine, 2014). Despite facing a grinding legal battle with the SEC, which saw XRP being delisted in the United States and many trading platforms worldwide, consequently losing 80% of its value, Ripple, led by Brad Garlinghouse, kept its momentum and managed to make more profits , invent new products and strike more partnerships in 2021(Browne, 2021). Currently, Ripple's XRP is the 7th largest cryptocurrency in the world, holding a market capital of 50 billion dollars at the time of writing this paper(CoinMarketCap, 2021). XRP sales (as per Table 1), in Q2 of 2021, have nearly doubled compared to the last quarter of 2020, rising from 76.3 million dollars to 150.3 million dollars. XRP's overall volume increased by 37.5% to reach a total of 203.8 billion dollars (Kiderlin, 2021). XRP also witnessed an increase in sales and unprecedented on-demand liquidity (ODL) during Q3 of 2021, despite market volatility and international regulatory oversight pressure(Ripple, 2021). The price of XRP shows direct correlation with legal outcomes by which it appears to decline, even though the quarterly financial reports show increased sales (as per graphs 1 and 2), Ripple also launched new products and regulatory framework in 2021(Browne, 2021, Cardoza, 2021). Ripple also launched its Central Bank Digital Currencies (CBDC) as an innovative approach to merge the world of cryptocurrency and governmental institutions in a bid to remove paper currency from circulation(Landberg, 2021).

Sales Summary *(dollars in millions)*	Q1 2021	Q2 2021	Q3 2021
Total ODL-related sales*	150.34	157.92	491.74
Total purchases	0.0	0.0	0.0
Sales *(net of purchases)*	150.34	157.92	491.74
Global XRP volume	**Q1 2021**	**Q2 2021**	**Q3 2021**
ADV XRP *(dollars in millions)*	2,264.26	4,492.16	2,075.89
Total XRP volume *(dollars in billions)***	203.78	408.80	189.53
Net sales as % of total volume	0.07%	0.04%	0.26%

Table 1: Ripple Labs Sales Summary 2021



Graph 2: XRP Price and Volume Q2 2021

Graph 1: XRP Price and Volume Q3 2021

2. Strategic positioning

Through PESTLE analysis (see appendix), we were able to analyze external factors facing Ripple. Looking into political and economic factors, we can assume that the trade war between the US and China, coupled with the impact of Covid-19, has changed traditional commerce around the world. This sets Ripple in a key strategic position in a new emerging market of financial technology that aims to fill the needs of a new realm in global E-commerce. The PESTLE analysis also reflects that several nations dropping the dollar standard led to an emerging need for a new medium of exchange. At this instant, Ripple won't be capable of tapping into the Chinese market, due to a nationwide ban of cryptocurrency within the Chinese borders. Nonetheless, Ripple has maintained a strong presence within the Asian continent with plans to claim a 40% stake of all Tranglo's (4 billion dollars valued, Malaysian based exchange giant) cross-border money, aiming for further expansions in the Asia Pacific region through several partnerships (Ossinger, 2021). Ripple's insight for the need to grow within Asia has seen its transaction volume grow by 130% over last year's figures (Finance Feeds, 2021). In addition to Ripple expansion on a retail and institutional levels, Ripple Labs also targeted governments in form of Central Bank Digital Currency (CBDC), with Ripple being considered ahead in the race towards digitalizing government issued money (Ripple, 2021), which further advances Ripple's strategic position as leaders not only in Blockchain technology, but also in reinventing its uses in the financial sector. Ripple's understanding of the untapped potential of Blockchain has seen it venture into several audacious projects rather than focus on its core business. The mentioned technology-based advances are a result of Ripples strong focus on its core competencies within its team and its dedication for expansion, despite the consequences of the ongoing legal battle with the SEC, which many predicted to have a long-lasting financial repercussion and compromising the company's survival altogether (Terrett & Gasparino, 2021). Even with these claims, Ripple had its most successful year so far, according to Ripple CEO (Garlinghouse, 2021), "Ripple has had a blockbuster year with ODL expansion & MENA traction, and we are gearing up to hire a few hundred people next year to fuel our growth".

Technological and environmental factors aided Ripple into attaining its newfound strategic position with the growing popularity of Blockchain and its projected global use, alongside with the Ripple's minimal negative environmental impact. XRP currently consumes 0.0079 kilowatt per hour (KwH) per transaction in comparison to Bitcoin's 707 KwH (TRG Datacenters, 2021), a factor of 0.00001 in comparison. Ripple also spearheaded the environmental movement when it declared its environmental initiative to be 100% powered by sustainable energy by 2025 and achieve net-zero emissions by 2040 (Long, 2021).

Another aspect of Ripple strategic positioning, is its competitiveness in the market. Ripple's efficiency and innovation has been one if it's main strengths in face of competition as revealed by SWOT analysis (see appendix). As depicted in figure (1), a comparison between top digital assets, shows XRP's clear advantage in terms of speed of transaction, cost, and scalability, topping the biggest names in the Blockchain space such as Bitcoin, Etherium, Dash and Litecoin. Moreover, comparing these numbers to SWIFT's, the difference is substantial, with transaction time ranging between 3 and 5 days at a cost of over 30$ on average (Morales, 2020) , making Ripple a clear winner when all criterium are taken into consideration.

Figure 1: Comparison in Utility of Major Cryptocurrencies

3. Key drivers impacting Ripple Labs

Driver	Explanation/Impact	Reference
Adoption of Blockchain technology	Blockchain technology has the potential to be globally adopted due to its practicality along with numerous other advantages. Ripple, as a startup in 2012, quickly realized how this technology could alter the future, and further enhance the technology to	(JP Morgan Case & Co, 2021)

	suit the needs of financial institutions, specifically, money transfers.	
Rigidness of financial institutions	Cross country money transfers on traditional ecosystems are expensive, slow, and inefficient, which drove institutions to seek better alternatives.	(Fireblocks, 2021)
Competition	The need to reinvent the way money moves around the world has brought several names to compete as a new leading worldwide service provider.	Refer to Threats section in SWOT analysis
Use of Blockchain in illicit financial activities	Cryptocurrency swiftly became synonymous with money laundry, sanctioned states, and illicit activities on the dark web. Ripple answered by making XRP traceable and secure under its Ripple net platform.	Refer to the Political section of the PESTLE analysis
A need for regulatory framework to organize cryptocurrency space	The lack of trust in crypto currencies can be resolved when governance and regulations are set forth to organize the industry without hindering innovation. With the lack of initiative towards this objective, ripple recently published its own vision of regulatory framework.	(L'heureux and Lee, 2020)
Central banks acknowledged the need for national digital currencies	More than 80% of all central banks are in the process of either researching or creating a national digital currency to substitute traditional paper currencies.	(Boar et al., 2020)

Table 2: Key Drivers

4. Strategic Leadership at Ripple Labs

4.1 Leadership theories

By the late 1970s, the study of strategic leadership seemed to reach a saturation level, where, apart from a few exceptions, no new profound research or theories were produced, with the question between scholars wasn't where the field should be headed, but rather if leadership even matters. A newfound interest in the mid-1980s steered the direction of the field away from supervisory leadership towards strategic leadership centered around the Upper Echelon theory and the study of Top Management Teams in what later evolved into the "new" leadership theories (Boal & Hooijberg, 2000). These new theories include transformational, charismatic, and visionary leadership theories. Further research focused on the cognitive and behavioral abilities of leaders as well as the flexibility and social intelligence displayed in strategic leadership. These new ideas came as a step forward from traditional supervisory ideas which study leadership "in" organization rather than being concerned with Leadership "of" organizations (Hunt, 1991). (Cyert & March, 1963) believe that strategic leadership is the study of people who have the general responsibility over an organization, which not only includes formal heads, but also includes top management teams. From this perspective, we can differentiate between leaders and management. As (Kumle & Kelly, 2006) state, managers and leaders differ on three different levels. When looking at skills, managers are concerned with planning and budgeting, staff organization, controlling and solving problems, whereas leaders set trends, are more interested in ensuring skills, resources and motivation are present within their environment. Looking at style, managers tend to push towards things being done right, while leaders pull their team into doing the right thing. Finally, managers focus on physical resources (i.e people and materials), while leaders tend to emotional resources such trust, respect and moral. Leadership can be described as "the ability to inspire confidence and support among the people who are needed to achieve organizational objectives" (DuBrin, 2016). DuBrin further discusses traits of a strategic leader in terms of personality and task related traits, motives, authenticity and cognitive intelligence. Other traits of leaders are transformational and transactional and it is claimed that distinction between the two is an "unwanted oversimplification of a complex phenomenon" (Yukl, 2013). Another concept of successful leadership is flexibility and adaptivity, which is described as being capable of changing behavior in response to facing unfamiliar and hazardous situations an organization might encounter (Yukl & Mahsud, 2010). We attempt to critically evaluate how Ripple Labs is led using the above theories depicted in figure 2

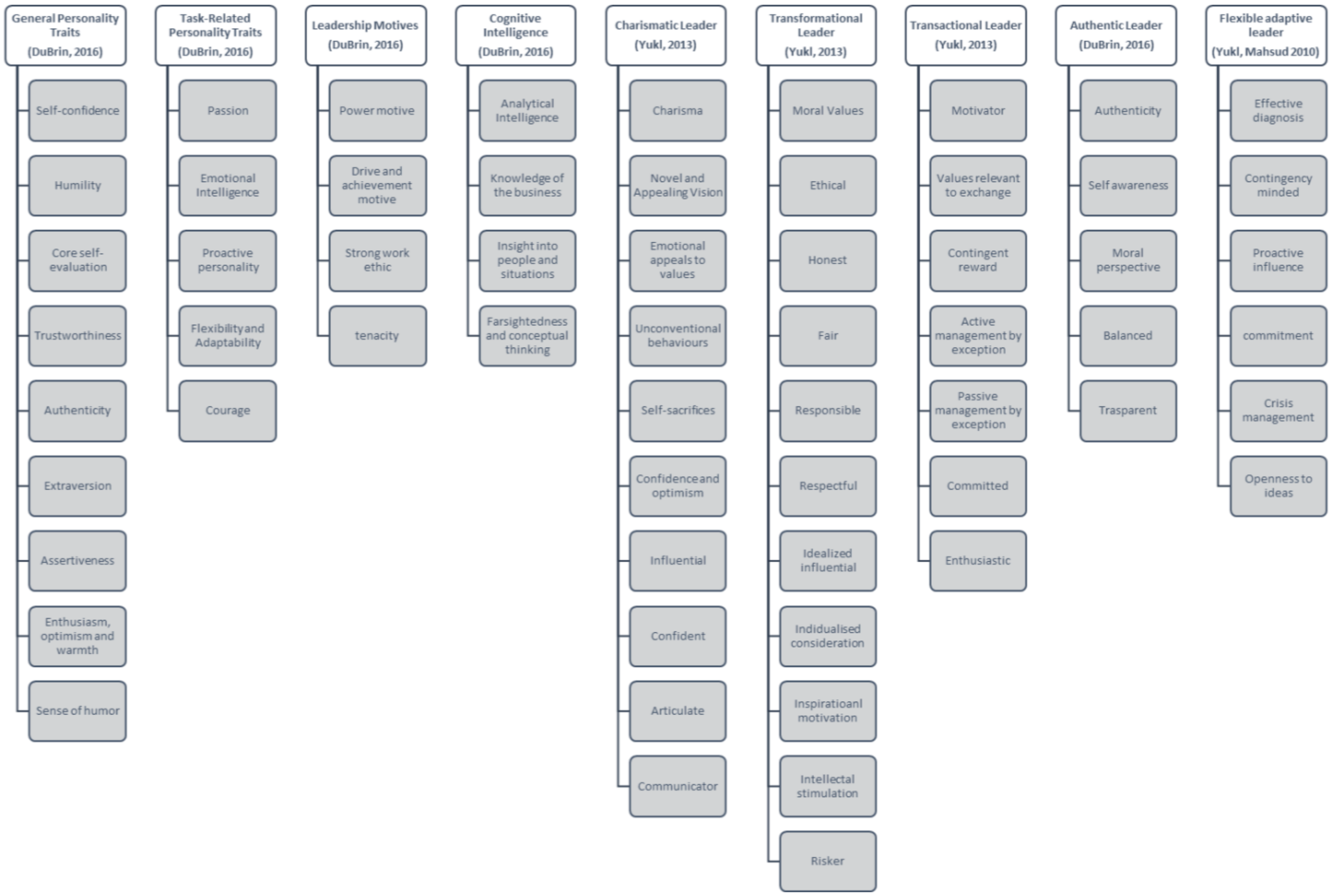


Figure 2: Strategic Leadership Theories

4.2 Application of theory in complex environments

Brad Garlinghouse graduated from University of Kansas, and continued his education at Harvard Business School. He worked in several high-profile jobs, starting as a senior Advisor at Silver Lake Partners, to CEO at Dialpad.com Inc, reaching prestigious positions at AOL and Yahoo over the span of 6 years, where he finally served as president of consumer application (Bloomberg, 2021). Looking at the timeline of his education and work experience, it can be assumed that Garlinghouse is an informed classic linear leader in education and career up to that point in his professional life. In 2015, Garlinghouse opted to leave a safe and lucrative career at Yahoo and AOL to join Ripple Labs, a three-year-old company at that time. A move considered as a risky proposition, but when explaining to his interviewer his reasoning, he states: "For me, joining this industry was a belief that there is something, a movement, a fundamental change happening…we have an opportunity to fundamentally change the way global commerce is managed…if we're successful, then that's transformative. It allows us to put our own little dent in the universe." He then gives an insight into his process for assessing opportunities. He explains a three-step procedure, the first investigates the kind of people (intelligence, ambition, motivation) involved in this business and their work environment. Second comes the market size, and finally the defensibility and differentiation of the product (Gibbs & Fujita, 2017). When analyzing these events and quotes, Garlinghouse appears to be confident, enthusiastic, passionate, and holds a high degree of courage and tenacity to commence a move into a little-known work medium. Garlinghouse also exhibits what appears to be analytical and emotional intelligence when assessing opportunities and risk, despite his enthusiasm and ambition towards the project. Another conclusion would be that Garlinghouse is a transformative, disruptive, visionary Leader, as he identifies as someone with a belief that they could bring fundamental change into the financial sector and even uses the terms “transformative” and “dent in the universe”, he also receives the idea of Blockchain technology as revolutionary when practically applied to the financial world, away from rebellious ideas of modern decentralization enthusiasts. In another interview (Maule, 2017), Garlinghouse displays high cognitive skills, charisma, composure, and a sense of humor when the interviewer pressured him with question regarding the ongoing lawsuit with the SEC, similar to when Maule asked about how much Bitcoin does Garlinghouse own, he was swift to reply “how much money do you have in the bank?”. On whether Garlinghouse can be considered an authentic leader, observing the kind of working environment that is created within Ripple Labs, it can be seen that genuine work ethics, and his transparency are reflected in Ripples open communication throughout the hierarchy. Nonetheless, a key element of an authentic leader as Dubrin (2016) stated is moral perspective, which applies to abiding with financial regulation. The SEC argues that Ripple; Christian Larsen; Bradley Garlinghouse, to their knowing, raised funds, beginning in 2013, through the sale of digital assets known as XRP in an unregistered securities offering to investors in the U.S. and worldwide (U.S. Securities and Exchange Commission, 2020). Until the present day, there so no proof to the SEC’s claim, as the lawsuit continues, therefore no sufficient evidence exists at the moment that will allow us to judge onto whether Garlinghouse is an authentic leader.

4.3 Environmental readiness to handle future challenges

Organizational environment readiness includes taking into consideration goals, support of leadership, building a culture of learning, and finances of the organization. Its goals are channeled by the mission and vision of top management as it appears to be a very influential factor in achieving sustainable growth and learning (James-Springer & Cennamo, 2021). A key figure at Ripple Labs is its Chief Technology Officer (CTO) David Schwartz. Schwartz is a co-creator of the company that went into business with the vision of disrupting the flow of money around the world. Named by Forbes as “Ripple’s trillion-dollar man”, Schwartz wrote XRP code, and helped develop nearly every Ripple financial tool in use, and “in terms technical vision he is in charge, He’s, if not the soul, he’s a key part of the soul of what we’re trying to do here.” (Castillo, 2018). Garlinghouse and Schwartz created a working environment that is described as a culture of value, that thrives on a mission to move money as easily as information without friction and little cost. Ripple’s Senior Director of Global Recruitment Jim Chauncey-Kelly believes Ripple is a destination for 500 and growing, technology veterans as well as young talent to join a fast-moving company that enables them to build products they never dreamed about. Ripple’s culture is driven by their values which is encompassed by the acronym “LEGGOS”, which stands for: “live it, enjoy it, get it done, go for it, own it, and say it”. Ripple takes great pride in a culture based on openness, willingness to help, and collaboration. (Chauncey-Kelly, 2019). From what proceeds, we can deduct that the overall work environment within Ripple appears to be well bonded, innovative, and resilient. Yukl and Mahsud (2010) believe that a flexible leader finds innovative means of handling problems and opportunities, which in many cases can differ from the way the organization normally handles such issues. Thus, it is also evident that Garlinghouse is very adaptive and flexible on a personal level as well as organizational level when observing how Ripple was managed when the SEC lawsuit was filed and in face of other threats (refer to VUCA responses). As eluded before, the lawsuit initially causing a major price drop of XRP, yet Ripple managed to rebound its losses and finished 2021 as its biggest year to date, with experts hinting to Ripple's big strides towards putting the SEC in the losing end of the suit (Ennis, 2021).

5. Conclusion

Ripple's leadership under Brad Garlinghouse created a work environment that is resilient and adaptive to an everchanging world of financial technology. Garlinghouse encompasses a variety of characteristics of a strategic leader. He can be described as an adaptive and flexible leader, and also both transactional and transformational. His mission to change the status quo of global money transfers can be described as disruptive and visionary. Not enough data is present to qualify Garlinghouse as an authentic leader with the SEC lawsuit not reaching a conclusion. The law suit itself, as elaborated earlier, can be a big factor in the detriment of Ripple labs' future despite the recent success and global expansion of both Ripple labs' operating system and its native XRP token.

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Appendix 1 - PESTLE analysis:

Political:

Tension between the US and China hit its climax in July 2018 when both countries engaged in a tariff war over exported products. President trump at the time argued that China was engaged in unfair trading practices and intellectual property theft, thus issued the United States' first round of tariffs on Chinese products, which was responded to by a similar act on American imported products (BBC, 2020). This was followed by three more rounds by each state over the course of following four months (figure 3). The political standoff between China and the United States continues to wage on, even after the election of President Biden, signaling the clear path of both American and Chinese policy makers over perceived positions as dominant world leaders. November's much anticipated virtual summit between president Biden and president Xi Jinping did not reach anticipated expectations, where no breakthroughs to ease tensions were perceived, only an agreement to prevent further escalation into a broader conflict. (Zhong & Myers , 2021). As a result of the political deadlock, we observe a rise of two axis of the conflict each lead by the mentioned nations. The coalition lead by China, which includes Russia, Cuba and Iran recognize a decline in American leadership, from their handling of the COVID-19 pandemic, internal race conflicts, and their management of military exit in Afghanistan. It is thought that this coalition seeks a bigger role in a primarily western dominated global leadership (Zhong & Myers , 2021). A key aspect of the Chinese-Russian partnership was a financial alliance to reduce their dependence on the US dollars, and as a direct result, in early 2020 only 46% of all financial interaction between the two states has dollar backed in a process called by Russian officials "de-dollarization", and further explained that any wire transfer through the current financial system, must at some point pass through American banks, giving the US government ability to freeze any transaction conducted between any two parties (Simes, 2020). Ditching US dollar as a reserve currency of transaction did not stop at countries of this coalition, but expanded to some European countries dealing with regimes under US sanctions, which would jeopardize monetary flow between countries when passing through American banks (Huang, 2019). The digital Yuan is a key threat to the reigning system, but Ripple's approach to the use of Blockchain could be seen as a threat both sides of the conflict, as it could be used as medium of exchange using their Xrapid technology and their XRP token which could free emerging markets from the USD dependency, while also providing transparency, efficiency and more importantly, traceability. Beijing's reaction to crypto space as a whole was a total ban within its state, rather than trying to regulate the uprising technology. The ban came as a result of several factors. The main factors of the ban were restriction of cross border financial flow, stop of illegal transactions through Bitcoin over the dark web, crypto mining, mainly Bitcoin mining, which consumes immense amounts of energy (Prasad, 2021). Despite the crypto ban on foreign cryptocurrencies, China was working on its own digital currency, the digital Yuan, a government issued holder claim to the People's Bank of China (Muzinich, 2021). On the other side of the spectrum, the US regulatory body is riddled with unclear rule and uncertain authority trying to find a balance between security and innovation of a 2 trillion-dollar market. "…source of confusion is whether cryptocurrencies are securities, which fall under the jurisdiction of the Securities and Exchange Commission (SEC), or commodities, which are the purview of the Commodity Futures Trading Commission (CFTC). Lawyers differ on this question, and there is considerable uncertainty within the industry over which regulatory regime, if any, applies to which currency" (Muzinich, 2021).

Economical

The ongoing COVID-19 pandemic caused the global economy to contract significantly around the world with stocks, employment, GDP growth hitting record lows globally since the early 1930s (refer to figure 4) (Chan, 2021). Yet one sector has hugely benefited from the pandemic and that's e-commerce, which has seen great strides due to global lockdowns, and this effect seem to be long lasting as the convenience of home shopping appealed to a greater audience worldwide. This growth could have been even more significant had it not been for persistent cross-country differences, regulations not being advanced enough to foster global e-commerce (OECD, 2020), and recently a worldwide supply chain crisis, with the shipping industry another winner from the pandemic. The expected profits of the sector are expected to exceed 100 billion dollars by the end of 2021, as cost of shipping increasing 10 folds from pre-pandemics levels (Pierson & Su, 2021). In response to the change in the commerce world we notice that massive companies are taking strategic decisions to breaking up their companies into smaller entities to keep up with market trends that they see as long lasting in order to maintain their profitability and where to concentrate their time and focus. Examples of such breakups are Toshiba, Johnson&Johnson, Pfizer, IBM, GlaxoSmithKline, and GE (La Monica, 2021).

Social

According to (Fitzgerald, 2021) 15% of all current retail investors entered the market in 2020. This sudden increase was due to change in the age of investors, with many young people now wanting to invest, driving the median age from 48 to pre2020 to 35 afterwards. Additionally, the drop of market-entry fees and commission, user-friendly platforms, and applications being accessible instantly from any smart device.

Technology

According to data, Blockchain technology in 2021 amassed 4.9 billion dollars in 2021 and is projected to reach 67.4 billion dollars in 2026 due to its extensive uses, with the technology already being used or being tested for a variety of fields such as banking, money transfer, health, supply chain, transportation, resource monitoring, voting, and education (Markets, 2021).

Legal

As it stands, the crypto world stands in a grey area in terms of adoption. We can find countries that has fully embraced bitcoin as a legal tender such as El Salvador (Gerard, 2021), and the Republic of Palau striking a deal with Ripple to build the country their own digital currency using the XRP ledger (Ripple, 2021). Other states issued a countrywide ban such as China, Russia, Iran, Vietnam, India and others (Orji, 2021), while others simply accept their presence with little legal framework into their use and limitations within their country causing confusion and conflicts within regulatory bodies within the country itself.

Environmental

Cryptocurrency has long been criticized for the massive amounts of energy consumption that is required, with cases of entire power grids shutting down due to over usage by mining rigs. A study done by Cambridge University estimates that bitcoin mining consumes 121.36 terawatt-hours (TWh) a year, which is more than power consumption of Argentina, Netherlands, and UAE (Criddle, 2021). Byproducts of Bitcoin and cryptocurrency mining are carbon dioxide and e–waste material as well as massive amount of water used for the cooing of mining rigs (Cho, 2021).

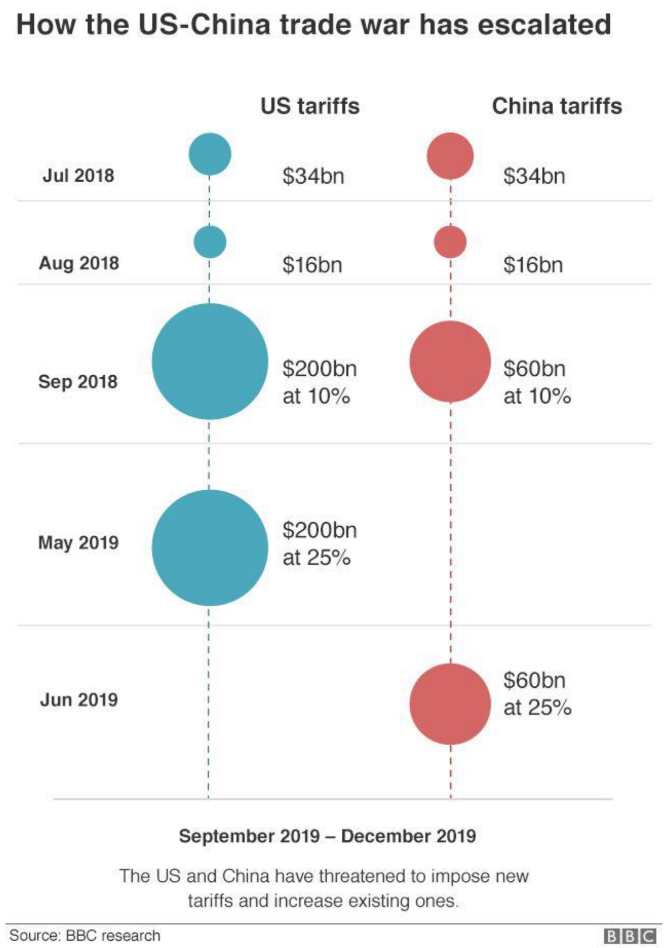


Figure 4: US-China Tariffs

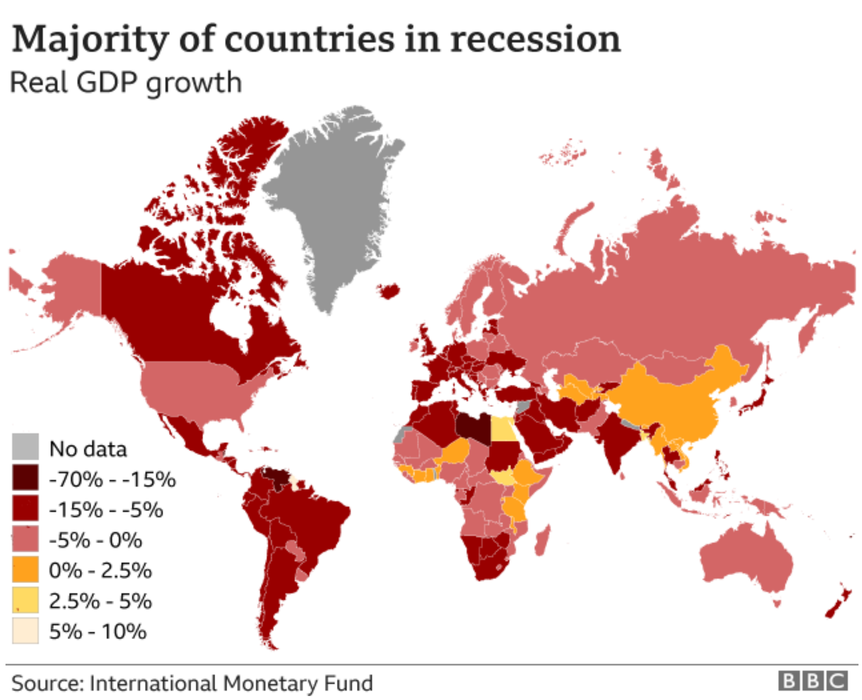


Figure 3: GDP growth during COVID-19

Appendix 2 - SWOT analysis

Strength:

Strong financial backbone

Referring to table 1, graphs 1 and 2, Ripple has made steady profit in 2021 and has an evaluated value of 10 billion dollars after raising 200 million dollars in investment rounds. Ripple's CEO also believes that his company is in strong financial position and poised to execute their vision, despite other crypto currencies slowing down or shutting down in 2019 (Browne, 2019). Ripple also intends to go public within 2022 after the SEC lawsuit comes to an end, with several investor eying big investments (White, 2021).

Environmentally friendly

Unlike other crypto currencies, Ripple's XRP was pre-mined before its launch into markets thus it is not possible from outside the Ripple ecosystem and through the general public which in turn reduces its carbon footprint immensely compared to bitcoin (Reiff, 2021). In addition to its already low environmental impact, Ripple plans to be carbon neutral by 2030, bolstering its commitment to climate change, the first in the Blockchain industry to commit to such targets (Buisnesswire, 2020).

Innovative

Since its launch in 2012 Ripple has differentiated itself from the mainstream Blockchain market by utility. In the current crypto space, there exists thousands of currencies that serve no purpose or utility other than their presence on the Blockchain, yet XRP was founded on idea that it is a crypto currency that serves inter-banks money exchange as well as a liquidity provider. Ripple also introduces other major innovations such as its Ripple net, XRPL, ripple x, even released in late 2021 a framework for cryptocurrency regulation to pick up the slack left by regulators in the United States and the world to increase clarity and licensing framework (Ripple, 2021).

Resilient

Ripple has shown great resilience to adapt to an ever changing VUCA world in an industry that is relatively very young, from its founding, to the crypto wave of 2017 and the huge sell-off in 2018, reaching its current major battle with the SEC. Despite the lawsuit's severity, and early price drop, Ripple continued to grow and expand its network with new innovations and partnerships in 2021 (Browne, 2021).

Weaknesses

Not widely adopted, despite having hundreds of partnerships with banks and financial institutions, the adoption of Ripple and its XRP is still far from being the technology of choice of the general public as is the case with any new technology that threats the status quo of the rigid financial world.

XRP's price still hold a strong correlation in price movement with Bitcoin, as diagram 5 shows, XRP and BTC still hold a moderate positive correlation in trading prices since 2017 according to the Pearson Correlation Coefficient despite the two currencies being fundamentally different in many aspects, thus the unwanted volatility of BTC has affected negatively on XRP's performance.

Weak understanding of the public of its utilities

XRP is one the most misunderstood cryptocurrency in the ecosystem, mainly due its many differences with other popular digital currencies, leaving many misconceptions looming around it such as it being called a banker's coin, labeled as decentralized, and went as far as some Bitcoin holders paying people and agencies to spread false information about XRP (Panos Writeas, 2021) to which Ripple did not respond clearly enough, or did not have enough reach on Social media platforms to clear up the many accusations.

Opportunities

With a market capital of over 2 trillion dollars (Coinmarketcap, 2021), cryptocurrency is a ripe market, being both young and still largely unregulated, opportunities are countless, and with XRP ahead of the curve in terms of utility and framework, it is believed that Ripple will go through wider adoption of its payments services (Steves, 2021).

Central banks adoption

With 80% of world central banks already testing digital currencies applicability (Weisbrodt & Gross, 2020), Ripple has already launched is Central Bank Digital Currency (CBDC) pilot and reportedly struck deals with several Central banks to develop their digital currency, such as Saudi Arabia, Bhutan, and Republic of Palao (Reuters, 2018; Ripple 2021)

Threats

Competition

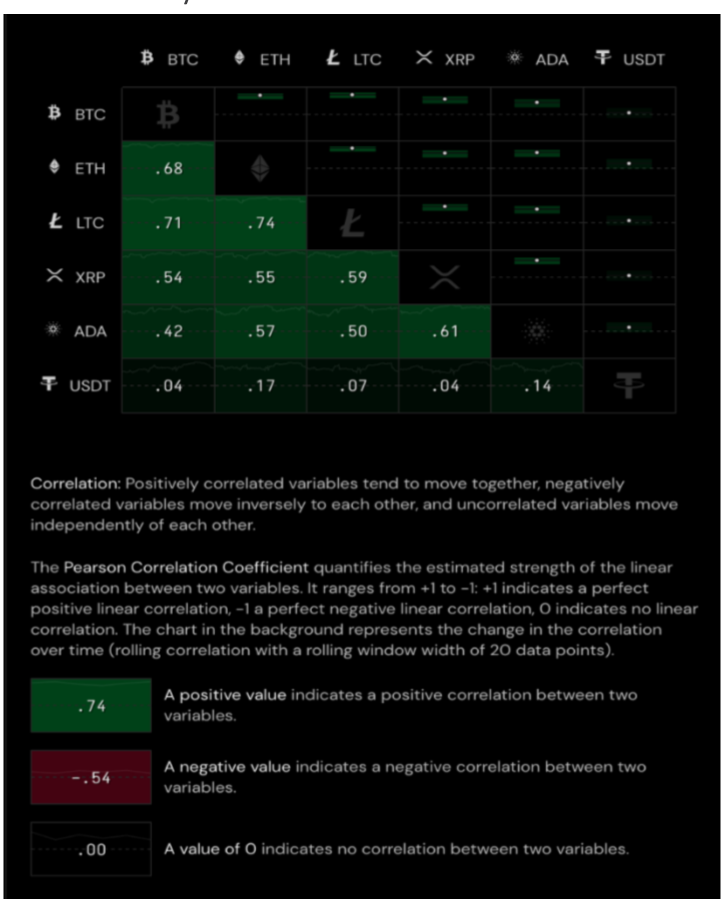
One of ripple's main objectives is to transform money transfers and the way funds move cross border from the current means used, primarily SWIFT, that has proved to be outdated, slow, prone to cyber-attacks, and costly (Sharma, 2019). Belgium Based Swift, realizing the competition they were facing, came up with SWIFT GO, an initiative which targets small and medium enterprises (SMEs) to facilitate their cross-border transfers faster and more cost efficient compared to the current system in use. With 11,000 current users already on their network, it might prove to be challenging for Ripple to justify to these users the need to immigrate to a completely new technology.

Legal war

Currently Ripple is in the midst of legal battle with the American Security and Exchange Commission (SEC) It is believed that the results of this lawsuit will shape the crypto ecosystem within the United States and the world as its ramifications will include every cryptocurrency running on Blockchain (Terrett & Gasparino, 2021) . The SEC claim that Ripple executives Bradley Garlinghouse and Christine Larson sold unregistered Securities (XRP tokens), raising 1.3 billion dollars. SEC considered XRP a security under the Howey test criterion (U.S. Securities and Exchange Commission, 2020). Ripple responded that the SEC is acting outside its jurisdiction, and it falls under the Commodity Futures Trading Commission (CFTC), more over that the criteria used to judge XRP deeming it a security dating back to the 1930s cannot apply to modern day technology (Ennis, 2021).Ripple also argue that the SEC lacked regulatory clarity on the subject and when questioned by several legal entities about XRP, the SEC never replied that it was security for roughly 8 years before the lawsuit was filed.

Regulation

Even with the SEC lawsuit resolved to Ripple's favor, the regulatory framework of crypto operation within the United States and outside is still relatively far. With some countries imposing a ban, to countries building their currency on it, it appears that Blockchain, supposing did get mainstream adoption, will need time with regulations falling behind on the organization of the industry.



	BTC	ETH	LTC	XRP	ADA	USDT
BTC						
ETH	.68					
LTC	.71	.74				
XRP	.54	.55	.59			
ADA	.42	.57	.50	.61		
USDT	.04	.17	.07	.04	.14	

Correlation: Positively correlated variables tend to move together, negatively correlated variables move inversely to each other, and uncorrelated variables move independently of each other.

The **Pearson Correlation Coefficient** quantifies the estimated strength of the linear association between two variables. It ranges from +1 to -1: +1 indicates a perfect positive linear correlation, -1 a perfect negative linear correlation, 0 indicates no linear correlation. The chart in the background represents the change in the correlation over time (rolling correlation with a rolling window width of 20 data points).

.74 **A positive value** indicates a positive correlation between two variables.

-.54 **A negative value** indicates a negative correlation between two variables.

.00 **A value of 0** indicates no correlation between two variables.

Table 3: Positive Correlation between BTC and XRP Prices (Cryptowatch, 2021)

Appendix 3 - Ripple Labs VUCA Responses

	Definitions (Bennet & Lemoine, 2014)	**Ripple labs Response**
Volatility	Relatively unstable change and sometimes unpredictable	Investing in an agile and adaptive team within Ripple's work environment
Uncertainty	A lack of knowledge of the significance the effects of an event	Uncertainty around the result of the SEC lawsuit caused Ripple to proactively act in case a ruling against ripple is made and XRP is considered a security. Ripple distanced itself from XRP to insure the company's survival (BitcoinExchangeGuideNews, 2018)
Complexity	Many interlocking elements, with multiple information drivers	Ripple launched partnerships with some of the biggest names in banking and money exchange (refer to PESTLE analysis)
Ambiguity	Lack of knowledge of a new emerging event that has no precedent to manage expectations	Ripple since its founding has experimented heavily in Blockchain technology with several products under its CTO's guidance, from RippleX, Xcurrent, Ripplenet, XRP, XRPL, and CBDCs (Ripple, 2021)

Table 4: VUCA Response