EVALUATING MARKET IMPACT ON FINANCIAL TECHNOLOGY IN A DEMONETIZED INDIA

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Preface and Acknowledgements

Preface

This report is the culmination of a one-year long Practicum Program coordinated by the International Development program at Johns Hopkins School of Advanced International Studies (SAIS). For this course, Master's candidates in International Development and Economics are assigned to teams and linked with public, private, and non-profit entities in order to develop and execute a research program comprised of both desk and field research, providing the opportunity for students to gain practical on-the-ground experience.

Ethan Green, Ornella Kaze, Aniket Maitra, and Greg Weissman were paired with Quona Capital, a leading impact investing firm based in Washington D.C. Quona invests in companies in the financial services sector in emerging markets in order to expand access to and enhance technology, distribution, and financial services in order to deepen financial inclusion in countries most in need. In early 2017, Quona raised over $140 million for the Accion Frontier Inclusion Fund, which it manages, in order to continue its efforts to expand financial inclusion through investing in companies which drive access to and advancements in financial technology (FinTech).

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SAIS Team Bios

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Executive Summary

On November 6, 2016, Prime Minister Narendra Modi demonetized the 500 rupee and 1000 rupee notes, making over 80% of the value of all bills in circulation invalid. While this obviously led to considerable confusion and unrest in India, it also threw investors and actors in the financial inclusion field into disarray. As an impact investing firm with a mission of ensuring social returns, Quona Capital's investments became especially vulnerable to the changes permeating the Indian economy. Tasked with developing a framework to determine market level indirect impact assessment using the case study of NeoGrowth, a portfolio client of Quona, the SAIS Quona team embarked on a two-week trip to Bandra West, Mumbai.

In Mumbai, we spoke with over 20 merchants, met with industry leaders, and researched the implications of demonetization on the Indian economy as a whole. With the merchant interviews, we discovered a wide variety of opinions on the government's actions. Given demonetization's main purpose of turning the Indian economy into a cashless society, electronic payment systems (EPS) have emerged as dominant forces at the forefront of the transformation. As a result, financial literacy has become a critical element of facilitating the adoption of the EPS and other forms of financial technology.

From our surveys, we found that although many merchants had Point of Sale (POS) machines, they did not have the education necessary to use these machines. Additionally, many did not know how to best leverage their existing financial resources: opening numerous bank accounts and keeping some dormant. Another key finding was that while the move prompted the economy to contract in the short-term and many vendors complained of business losses nearing 70%, Prime Minister (PM) Modi has remained extremely popular. In elections, after demonetization, in the most populous state of India, Uttar Pradesh, and Modi's BJP party kept its significant majority.

In order to analyze the impact of demonetization, we focused our research on a company called NeoGrowth, which is one of Quona's two portfolio companies in India. By providing loans to micro, small, and medium sized business owners, NeoGrowth's mission fits within Quona's overall goal of expanding financial inclusion in India. Examining NeoGrowth business practices allowed us to analyze how financial inclusions efforts would be impacted and how they could be improved upon. Furthermore, we looked at how Neogrowth measured impact before demonization, which focused mainly on the social indicators, providing recommendations to look at market impact.

By implementing a market-impact analysis framework, referred to as the "Growth Trifecta," we identified three categories of activities which can measure market impact: knowledge sharing, industry leadership, and innovation. Implementing activities that fall within these three categories can help ensure NeoGrowth's market impact moving forward in post-demonetization India.

Section 1: Introduction

1.1 Overview of the Indian Economy

India began the process of economic liberalization over 25 years ago. In the summer of 1991, Dr. Manmohan Singh (who would later become the Prime Minister) quoted the famous line from Victor Hugo, “No power on earth can stop an idea whose time has come,” alluding to the economic changes that would take place as India moved forward.[1] Liberalization became a central platform of Indian policy and was designed to decrease government intervention in business, push economic reforms, open the country up to the global economy, discourage monopolies in the public sector, and promote competition in the market.[2] Since that time, India maintains positive GDP growth rates and with a GDP of almost $9 trillion, India is one of the world's largest economies (behind China and the United States in terms of Purchasing Power Parity).[3]

1.2 Financial Inclusion in India

India continually prioritizes financial inclusion through partnerships with organizations such as the Alliance for Financial Inclusion—a global organization which provides policymakers with financial inclusion enhancing strategies that specifically target impoverished citizens. As of 2014, India held nearly 21% of the global unbanked population. Given that nearly 65% of the Indian population has access to an account at a formal financial institution, the ranking referring to the country’s unbanked population is relative in nature and may be partially attributable to India being the world’s second most populated country with a population of 1.3 billion people.[4]

With a mobile penetration rate of 47% in 2015, India is home to the world’s second largest mobile consumer base. By the year 2020, this value is predicted to rise by 21 percentage points.[5] On the digital inclusion front, this level of growth presents an opportunity for Indian Financial Technology (FinTech) firms by providing them with a broader channel through which they may reach their market base. In an economy where cash is king, the push towards digital financial inclusion will need to emphasize the value of digital services in order to alter the deep-rooted practice of using cash as a primary form of payment.

The fundamental challenge of inclusivity in India lies in rural areas where 70% of the population currently reside.[6] Investments in infrastructure to enhance access and connectivity to mobile networks will facilitate the process of providing financial services for India’s geographically disadvantaged citizens.

[1] “Profile Manmohan Singh,” BBC, accessed May 8, 2017, http://www.bbc.com/news/world-asia-india-19700141

[2] “25 years of liberalization: A glimpse of India’s growth in 14 charts,” Firstpost., accessed April 17, 2017, http://www.firstpost.com/business/25-years-of-liberalisation-a-glimpse-of-indias-growth-in-14-charts-2877654.html

[3] “Country Comparison,” CIA World Factbook, accessed April 17, 2017, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2001rank.html

[4] GSMA The Mobile Economy: India pg 23

[5] GSMA The Mobile Economy: India pg 4

[6] GSMA Rural Coverage India Case Study

In an effort to improve the rate of financial inclusion, India's government has introduced the following reforms:

- Pradhan Mantri Jan-Dhan Yojna (Prime Minister's People's Money Program): a public initiative that began in 2014 to increase financial services by providing every household with a bank account. The program has created over 200 million new bank accounts nationwide, however usage of these accounts have been stymied by the population's lack of financial literacy, a dearth of ATMs, and a preference for using cash.[7]
- Aadhaar: launched in 2009, Aadhaar provides each resident of India a 12-digit identification number linked to biometric data. Since its inception, nearly 97% of the Indian population has been issued an Aadhaar number, which has profound implications for financial inclusion efforts due to its ability to streamline customer identification.
- Unified Payment Interface (UPI): a mobile application that generates a Virtual Payment Address (VPA) which is then linked to a bank account, facilitating peer-to-peer payments or transfers across banks
- India Stack: a set of apps that enable government entities or the private sector to access India's Aadhaar records in order to facilitate the creation of new digital financial services.

Additionally, in 2015, the Indian government approved the creation of two new banking models, Payment and Small Finance banks which would allow non-banking entities, under supervision of the Reserve Bank of India (RBI), to provide basic financial services and small-balance loans, respectively.

1.3 Demonetization and FinTech

Demonetization is defined as stripping a currency unit of its status as legal tender. Money is pulled from circulation and replaced with new notes/coins, or the central bank simply implements a new currency bill. It is generally meant to combat inflation, corruption and crime, discourage a cash-dependent economy, and facilitate trade. On November 8, 2016, in a special address to the nation, Prime Minister Modi announced the demonetization of the 500 rupee and 1,000 rupee notes which would be replaced by new 500 rupee and a new 2,000 rupee notes. This process rendered 86% of the value of currency and 24% of total existing notes in circulation invalid.[8] The Prime Minister gave people a two-month window until the end of the 2016 to convert their existing currency to new currency or deposit it into a bank account, preferably one created under PMJDY. Demonetization was a shock to India's economy that had many financial analysts speculating about the reaction of capital markets, banking interest rates, and political implications in the short-term.

[7] World Bank Database

[8] "Are banks equipped to replace 2,300 crore pieces of Rs 500 and Rs 1,000 notes," Indian Express, accessed April 17, 2017, http://indianexpress.com/article/opinion/web-edits/rs-500-rs-1000-notes-are-banks-equipped-to-replace-1874-crore-pieces-of-notes-4364746/

Despite many of the worries caused by demonetization in terms of economic forecasts and how financial markets would react to the news of the demonetization, India has weathered the induced shock to the economy well. While there were reductions in the major indices of the Bombay Stock Exchange and the National Stock Exchange of India, the latest reports put India's growth rate at 7% in the last quarter and credit ratings agencies such as Moody's did not lower India's credit ratings.[9][10][11][12] Falls in the stock market that were assumed to be caused by demonetization may, in reality, have been due to other factors including the election of Donald Trump and the strengthening of the US dollar.[13]

Many institutions such as Moody's and the International Monetary Fund predicted that there would be a decline in corporate activity, lower sales volumes, and reduced cash flows, with businesses exposed to retail sales impacted the most. However, it was also pointed out by analysts at Moody's that there would be positive changes such as growth in government revenues, improvement in operations in India by improving speeds at which manufacturers receive payments, and reductions in corruption.[14] Even with large changes in the money supply, the central bank of India, the RBI kept repurchase interest rates at 6.25% throughout the period and afterward, citing issues such as inflation which appeared to be more pressing than demonetization.[15] The government's rationale for carrying out demonetization was to eradicate counterfeit currency, fight tax evasion (1% of the population pays income tax), eliminate black money from money-laundering and terrorist financing activities, and to promote a cashless economy and spur financial inclusion through the use of financial technology.[16]

[9] "NIFTY: IND," Bloomberg, accessed May 7, 2017, https://www.bloomberg.com/quote/NIFTY:IND

[10] "Sensex crashes 1,689 points on black money crackdown, U.S. election," accessed May 7, 2017, http://www.thehindu.com/business/markets/Sensex-crashes-1689-points-on-black-money-crackdown-U.S.-election/article16440924.ece

[11] "Moody's Affirms India's Baa3 Rating: Maintains Positive Outlook", Moody's, accessed May 7, 2017, https://www.moodys.com/research/Moodys-Affirms-Indias-Baa3-Rating-Maintains-Positive-Outlook--PR_356437

[12] "India GDP Growth Beats Expectations in Q4," Trading Economics, accessed May 8, 2017

[13] "How much has demonetization affected the stock market?", LiveMint, accessed May 7, 2017, http://www.livemint.com/Money/hRb1noUQV17fmP0o1GNQEJ/How-much-has-demonetisation-affected-the-stock-market.html

[14] "Moody's: India's demonetization has mixed impacts on sovereign, banks, and corporates," Moody's, accessed May 7, 2017, https://www.moodys.com/research/Moodys-Indias-demonetization-has-mixed-impacts-on-sovereign-banks-and--PR_358584

[15] "Analysing RBI's policies: Understanding the rationale behind unchanged repo rates," The Indian Economist, May 7, 2017, https://theindianeconomist.com/rbi-unchanged-repo-rates/

[16] "Demonetization," Investopedia, accessed May 7, 2017, http://www.investopedia.com/terms/d/demonetization.asp

With regard to FinTech, demonetization caused a surge in usage of digital financial services nearly overnight as consumers struggled to adapt to an economy that was suddenly unfriendly to the use of cash.[17][18] Although trends have since stabilized somewhat, development of new digital banking models such as the Bharat Interface for Money (BHIM) app which leverage the power of Aadhaar and the India Stack have the potential to change the shape of the FinTech market in the future. **Figure 1** presents highlights of the impact of demonetization on three key Fintech companies.

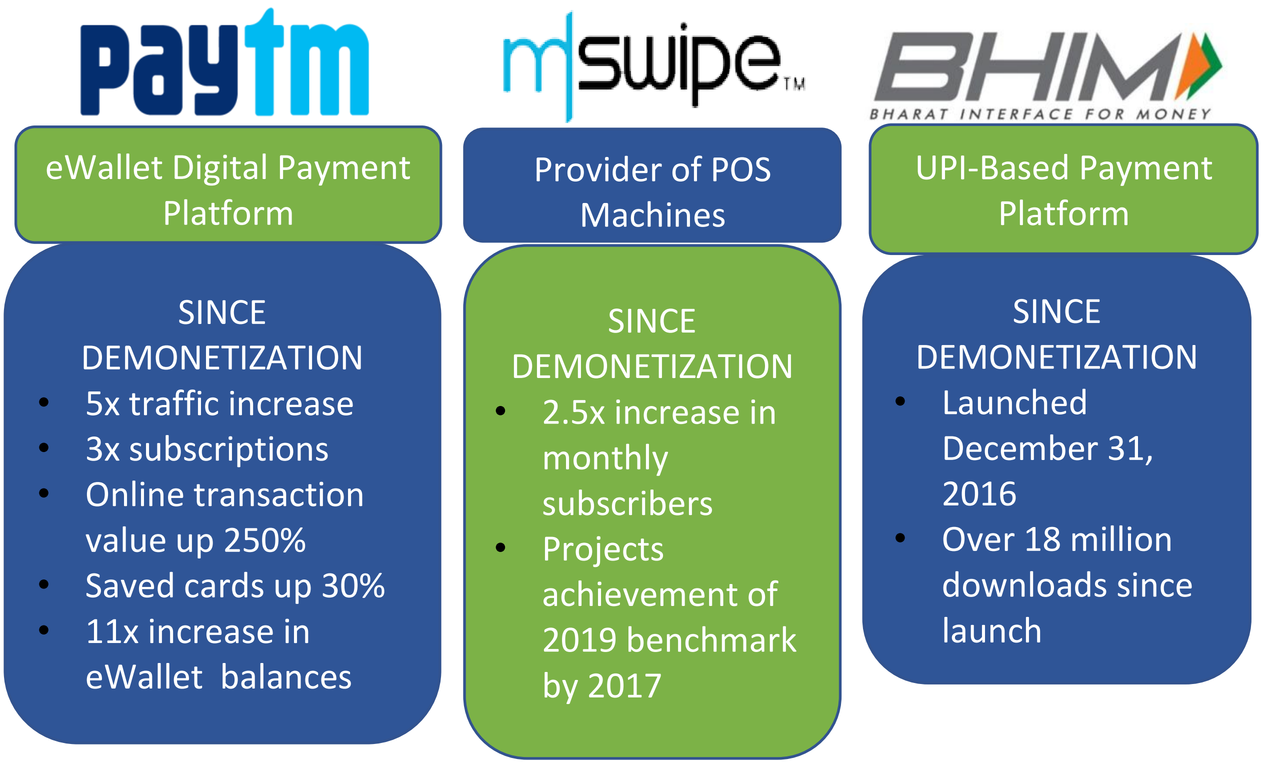

Figure 1: Key FinTech Companies in India

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[17] Gupta, Komal. "Digital payment platforms record surge in transactions after demonetization." LiveMint. November 2016.

[18] Jain, Mayank. FinTech Tracker: In A World Of BHIM And UPI, MSwipe Is Betting On Tiny Card Swipe Machines. Bloomberg Quint. March 4, 2017.
< https://www.bloombergquint.com/business/2017/03/04/fintech-tracker-in-a-world-of-bhim-and-upi-mswipe-is-betting-on-tiny-card-swipe-machines>

Section 2: Research Summary and Results

2.1 Research Objective and Hypothesis

Our project consisted of two interconnected goals. We were to assess demonetization's impact on the financial inclusion landscape in India with a particular focus on Micro, Small, and Medium Enterprises (MSMEs). After doing so, we determined new ways to support the development and measurement of market-level indirect impact performance indicators for Quona Capital's portfolio companies.

Research plans and surveys were based on Quona Capital's theory of change which states that an increased salience of FinTech in developing markets will deepen financial inclusion by introducing cost-effective channels through which marginalized citizens can gain access to financial services. Given demonetization's overarching goal of transitioning India into a cash-less, digital economy, our research was apt for identifying the links between FinTech and financial inclusion in India.

2.2 Methodology

Our research was conducted in the Bandra West region of Mumbai, India from January 8th to January 19th, 2017. The research sought to obtain primary qualitative data which could inform Quona of in-country experiences that could not be grasped through the quantitative data reported to them by their portfolio clients.

Data was collected through a focus group with four impact investors and eleven semi-structured interviews with senior-level individuals at various organizations. Two of the interviews were conducted upon our return to Washington, DC to retrieve updates on the changes that had occurred since our departure from India. Interviews consisted of open-ended questions from an interview guide compiled by our team. Stakeholder interviews occurred lasted 60 to 90 minutes. Initial connections to the stakeholders were provided through our client and advisors. Though a snowball sampling method, we subsequently solicited interviews via email through contact recommendations provided by our initial interviewees. At the end of each interview, we affirmed the confidentiality of statements and requested to maintain connections for any follow-up questions that we would have after our trip.

We additionally conducted a 16-question face-to-face survey with over 25 randomly selected merchants from which we obtained a total sample of 17 respondents in the Bandra West area. Each merchant was informed of their anonymity and the purpose of our study, and if business owners gave consent, they were included in the survey. The respondents included owners of clothing stores, a juice stand, tourist shops, a toy store, a used car business, a flower stall, miscellaneous stalls (phone cases, cigarettes, etc.), a shoe stall, a pharmacy, a painting shop, and a jewelry store.

Interviews were conducted for a duration of 30 minutes. Initial background questions were followed by questions relating to transaction methods used by businesses, how demonetization impacted payment methods, and questions related to debt.

Survey questions were discussed among the four group members and the most important questions were compiled for the final survey with additional input and questions from Adam Hartmann and other individuals from the Quona Capital team. All stakeholder interviews and a majority of the merchant surveys were conducted in English. For merchants who were not able to communicate in English, team member Aniket Maitra conducted the interviews in Hindi with a transcribed copy of the survey.

Stakeholder interview research results will draw from our interviews with individuals from the following organizations:

Aavishkaar is an early-stage impact investment firm which focuses on providing financial products and services to Indian entrepreneurs in India. We additionally spoke to spoke to individuals at **IntelleCap** and **IntelleGrow**

PayTM is India's largest mobile payments and commerce platform. The PayTM wallet application enables users to book air tickets and taxis, refill mobile accounts, and send money transfers.

Tata Capital is the flagship financial services company of the Tata Group. It is primarily a holding company that holds investments in its subsidiaries and other group companies we spoke to.

Vuclip is a firm that offers video-on-demand services for emerging markets offering subscribers with a selection movie titles, TV Shows, sports, news, and music videos in several languages

The Finance & Markets Global Practice is a joint World-Bank IFC initiative that aims to help countries build efficient and stable financial systems which are essential to promoting economic growth and reducing poverty and increasing shared prosperity

MSwipe is a mobile Point of Sale solutions provider and a leading card payment processor in India. The service functions with any bank and merchants can access accounts via mobile application or online via the website.

Omidyar Network is a Philanthropic Investment firm which makes investments in for-profit companies as well as provides frats to non-profit organizations regardless of the sector. They invest in organizations that have the potential to embody innovation, scale, and sustainability.

Accion is a nonprofit with an aim of making high-quality, affordable financial services available worldwide. They provide seed funding and assistance for promising start-ups and adjacent technologies through impact investing initiatives.

2.3 Results: Stakeholder Interviews

Shortly after our research trip came to an end, we compiled and analyzed the data we gathered during our trip. Throughout the analysis period, we identified key themes which are discussed below:

Theme 1: Reasons for Demonetization[19]

When asked why the Indian government decided to implement the demonetization policy, the primary reason that emerged was the prospect of curbing circulation of black money. According to one of the interviewees, black money is defined as any good or service that does not get taxed and hence can be linked to corruption. However, it was also stated that black money is not necessarily illegal money. Three of the interviewees affirmed that demonetization alone would do very little to obstruct the flow of black money. It was described as an inherent part of development given India's high rate of inequality. When the Indian economy transitioned from independence it taxed citizens at exorbitantly high rates (ranging from 70-80%), resulting in the creation of a parallel economy where individuals circumvented the formal system by failing to fully disclose the income they generated. Thus, unless the shock of demonetization induces behavioral change, the primary goal of inhibiting the prevalence of black money will not be realized.

Demonetization was additionally identified as strategy through which India could formalize the informal cash dependent economy. Businesses would be forced to adopt more transparent digital payment systems that would in turn widen the country's tax base. For instance, it was stated by one of our respondents that in the mining industry—which

[19] Findings derived from Stakeholder Interviews (name redacted). 8-19 January 2017.

accounts for approximately 40% of GDP—approximately 70-75% of the wages are distributed in cash daily rather than on a periodic basis as is done in the formal economy. This form of payment dominates the unregulated informal economy and provides participants in the sector with little incentive to adhere to regulated accounting and disclosure standards.

A final reason for demonetization was identified as the effort to boost bank activity amongst under-and unrepresented individuals. One respondent indicated that there was no direct correlation between demonetization and financial inclusion. The policy change instead served as parallel to financial inclusion by accelerating the digitization of the Indian economy. Less cash in the economy leads to more cash being stored in the banks.

Theme 2: The Impact of Demonetization[20]

In regards to the main impacts of demonetization, the general consensus was that it was too soon to tell. It was estimated that concrete data would not circulate until the end of the upcoming summer (about ten months after demonetization). According to some of the respondents, the chaos portrayed by the media was not the reality on the ground. Evidenced by the lack of protests and public outcry, it is generally perceived that Indians follow the principle of Jugaad a word encapsulating the idea that India is capable of finding a way around any problem. Or as one respondent put it, "The notion of enterprise [in India] is there across the board."

Prior to our arrival, individuals and firms alike did experience some short-term effects of the abrupt policy change. As intended, the most immediate effect was a reduction in the use of cash as a form of payment. Our interviewees identified several spillover effects from the removal of the 500 and 1000 rupee notes in circulation, including a reduction of land prices (cash is used to cover 50% of land purchases), a reduction in commercial activity for cash-based MSMEs, an increase in railway bookings which could be bought with cash by 700%, and increased liquidity in the banking system which caused interest rates to decrease by 50-150 basis points.

In reference to the formalization of the economy leading to larger portion of the population now being visible to tax authorities, one respondent indicated "In this country, for the first time, everyone has a bitter pill in his mouth. Those who enjoy a bitter pill everyday begin to enjoy it."[21] Thus, as a result of demonetization, more individuals were subject to taxation and would thereby face the additional burdens faced by those who previously fell into the formal economy.

> ***"In this country, for the first time, everyone has a bitter pill in his mouth. Those who take a bitter pill everyday begin to enjoy it."***

The negative impacts of demonetization were especially felt by Micro-Finance Institutions (MFI's) who lost their ability to collect repayments on loans from MSMEs who had lost such

[20] Findings derived from Stakeholder Interviews (names redacted). 8-19 January 2017.

[21] Stakeholder Interview (name redacted). 10 January 2017.

a significant portion of the business that they could no longer generate enough revenue to cover their debt obligations.

On a more positive note, payment providers reaped significant benefits from demonetization. Both payment providers we spoke to mentioned a significant rise in sales of Point of Sale (POS) machines, allowing them to earn much higher revenues than they would have otherwise. To highlight the significance of their growth, one firm's operations grew by 50% in the months since demonetization, when in a typical year they would grow by 10% over nine months. The second firm proclaimed that it received 500 new leads a day thereby greatly reducing acquisition costs and allowing those funds to be utilized for alternative endeavors. Due to increased demand for their services, both companies have increased their staff and expanded their reach to new cities to fulfill the needs of an enlarged consumer base.

The investors we spoke to remained optimistic that demonetization was indeed beneficial for the economy and their businesses. Few of their portfolio clients were negatively impacted by demonetization and those that had been were MFIs which had already begun to stabilize after having adopted more flexible lending policies during demonetization. Moving forward, more stringent investment selection strategies and portfolio monitoring policies will be implemented.

Theme 3: Improving the Implementation of Demonetization[22]

Despite the approval of the goals of demonetization, all respondents agreed that demonetization was poorly executed. They provided general fundamental modifications which the government should have considered prior to implementing the policy. To reduce the long queues at banks in the immediate panic that ensued following PM Modi's announcement, banks and ATM should have been better prepared with a sufficient supply of 2,000 rupee notes. It was also indicated that the 2,000 rupee notes were too large to fit in ATMs. In designing the new notes, standardization of sizes should have been applied.

There was one unique solution that could have eased the transition. It involved administering demonetization in two separate phases. Hence, rather than debilitating a large portion of the economy all at once, one note could have been moved out of circulation at a time. The second phase would have exhibited less shock but could have mitigated the losses faced by business owners who did not have change to provide potential customers.

Theme 4: Future Trends in FinTech and Financial Inclusion[23]

Realizing that demonetization had set the stage for advancements in FinTech, we asked respondents what they perceived to be the next biggest trends in FinTech and financial inclusion. The distribution of payment bank and small finance bank licenses topped the list for garnering influence in the new digital landscape. Eleven payment bank licenses had been issued (one of which had been granted to PayTM) compared to ten small finance bank licenses. Small finance banks would be particularly practical for encouraging financial

[22] Findings derived from Stakeholder Interviews (names redacted). 8-19 January 2017.
[23] Findings derived from Stakeholder Interviews (names redacted). 8-19 January 2017.

inclusion as they were mostly comprised of rural banks. Most large banks have been unwilling to incur the additional costs of operating in rural areas.

Although the payment systems were already in place prior to demonetization, Unified Payments Interface (UPI) and Aadhaar were mentioned as prevalent trends. Increased usage and enhanced interoperability were identified as the key trends for the two programs. E-wallets appear to be losing their competitive edge. Two investors hinted that UPI could overtake the E-wallet market while another claimed that e-wallets were structurally unprofitable. One of the payment providers we spoke to continues to offer e-wallet services through its app and does not intend to suspend those operations in the near future.

Cyber security was identified as a new opportunity for both entrepreneurs and investors. Enhanced cyber security together with a robust regulatory framework will prevent the breach of confidence in the financial system, which can lead to destabilizing ripple effects in the sector.

Theme 5: Challenges in Financial Inclusion[24]

One of the prescribed reasons for demonetization was to dis-incentivize the use of cash. To reach this outcome, the India Government sought out ways to raise the cost of its use in addition to introducing digital means as the primary form of payment. Low levels of financial literacy and connectivity served as bottlenecks that proved very difficult to overcome.

Not only do large banks shy away from rural areas but the lack of connectivity—in the form of infrastructure development and accessible mobile networks and Automatic Teller Machines (ATMs)—is recognized as one of the major barriers to achieving full financial inclusion in India. Low connectivity in rural areas has also prevented individuals from receiving timely confirmation of real-time payments—a key component of digital payment systems.

Financial literacy programs have been deemed as offering a very low Return on Investment (ROI). For this reason very few firms, including some of the ones we interviewed, have spent little effort on implementing such programs. When questioned about who should focus their efforts on fostering a financially literate population, one of the interviewees suggested that all entities (regulators, the government, investors, and FinTech companies) had to take on the task. It was also recommended that rather than spewing out piles of overwhelming information, financial education should be funneled incrementally on a need-to-know basis. As discussed in our interviews, the problem within India's economy is that citizens associate little to no costs to conducting cash transactions versus digital ones, which may incur transaction fees. Lower-income individuals also have a much higher velocity of money than wealthier citizens, thus the perceived costs of processing simple transactions regularly increase rapidly. At the individual level, the government's introduction of no-frills accounts (zero balance accounts) quells some anxieties about incurring transactions costs. MSMEs can

[24] Findings derived from Stakeholder Interviews (names redacted). 8-19 January 2017.

be more easily convinced by illustrating how their profits could be amplified by transitioning to digital means.

Capacity constraints faced by current market players may obstruct the ability for the market to meet the increased demand for digital services. Although payment providers have made great strides in extending their services to reach a broader network of consumers, one of the payment providers revealed that their servers witnessed multiple crashes due to the high volumes of requests. This resulted in some transactions being debited twice since customers could not tell whether their initial transactions had been properly processed. To prevent consumer confidence from deteriorating, the company acted swiftly to ensure that the transactions were corrected and the funds returned within three business days.

4. Results: Merchant Surveys[25]

This section describes the key points that emerged from the merchant surveys. The maximum number of employees in any given business was seven and our surveys generally tried to avoid speaking to franchises. About 45% of the businesses surveyed had POS machines, 36% of respondents that didn't have a POS machine were interested in having one in the future, 40% of businesses had smartphones, and 20% of businesses surveyed used smartphone transactions like PayTM. Respondents reported the various sources from whom they heard about demonetization, including newspaper, television, radio, WhatsApp, YouTube, and word of mouth.

Compared to the positive outlook presented by the investors we spoke to, the realities on the ground provided differing perspectives of the effects of demonetization on the average brick-and-mortar businesses. Many respondents were unhappy with the way that demonetization was carried out as it resulted in cash shortages faced by individual consumers and an overall money supply shortage in India. Qualitative data indicated that respondents were especially unhappy with the timing of the demonetization since it occurred during the religious festival season of Diwali and Christmas—a time period in which many businesses depend on for sales. In addition, the policy was poorly implemented and anecdotal evidence stated that most ATMs did not have enough new 500 rupee and 2,000 rupee notes and the new 2,000 rupee notes were not standardized to fit the ATMs. A fury of panicked individuals trying to exchange old notes for new ones and depositing current cash amounts that served as India's primary means of conducting transactions resulted in massive queues at bank branches. As one respondent put it "we have become beggars for our own money" expressing the deep frustration of long lines, ATM maximum withdrawal amounts, and ineffective measures of dealing with problems such as incorrect balance amounts (in one instance, a respondent said the ATM didn't give the amount he requested but debited his account anyway).

Many businesses mentioned issues like not being able to use any other form of payment besides cash to maintain operations as their own suppliers would only accept cash purchases. While no large civil unrest followed the announcement of demonetization and PM

[25] Findings derived from Merchant Surveys (names redacted). 8-19 January 2017.

Modi's attempts to transform India to a more modern and formal economy were commended, many cited that demonetization's faulty implementation was the key issue. One of the respondents stated that "The big fish have swam to the deep end of the sea and all the small fish are dead" highlighting that while one of demonetization's intentions was to get rid of corrupt and illegal activities, individuals, families, and small businesses were hurt as a result.

The majority of business owners reported having an individual bank account but no business account. In the aftermath of demonetization, most respondents reported having no support from the government and cited concerns such as suppliers wishing to be reimbursed only in cash. Respondents also mentioned that they had no outstanding loans and questions that were personal in nature such as whether participants had been denied loans was not asked.

In general, certain themes emerged from the interviews. Respondents experienced a business downturn in the immediate aftermath of demonetization with widespread shortages of cash revenues. This effect was pronounced for luxury businesses such as jewelry shops, given the lower amounts of discretionary spending as a result of maximum fixed withdrawal amounts from ATMs. Many MSME's had little change in demand as card expenditures were not capped. While many MSME's had no point of sale (such as credit card machines) instruments before demonetization, they had an interest in learning more about them or purchasing them after demonetization. There were some merchants who did not know how to use POS machines or how to obtain access to them. One of the merchants mentioned that they did not have a POS machine simply because an agent never reached out to him indicating that he was unaware of the various methods of gaining access to the machines such as through banks or online platforms.

2.5 Conclusion

The shock brought about by demonetization forced several merchants to incur significant losses due to a diminished capacity to generate revenues. As most of the MSME's we spoke to conducted a significant portion of their business in cash, the inability to produce change for the large 2,000 notes prevented customers from purchasing their products. It is for this reason that many merchants were dismayed with the new policy and demonstrated sentiments that were in stark contrast to the outlook presented in our stakeholder interviews. It was agreed upon by all stakeholders that demonetization was in fact necessary; India and its millions of small business owners would soon recover from the short-term losses incurred at the onset of the policy change.

Stakeholders identified the removal of black money, fighting corruption, digitizing the Indian economy, and promoting financial inclusion as reasons for which they believed demonetization was implemented. While curbing the circulation of black money and prevalence of corruption were the initial catalyst for demonetization, the path towards turning India into a cashless society has emerged as the predominant objective. This goal has proven to be challenging given the large role that cash plays in India's economy. Rather than allowing cash to sit in accounts and earn interest, citizens held on to their funds because they were accustomed to having physical forms of legal tender and they were not sure when they would get it again. Low levels of financial literacy and connectivity in remote areas also inhibited the rapid acceptance of digital payment platforms. In the future, the diffusion of financial literacy programs that inform and advise individuals about the benefits and uses of financial services in addition to infrastructure development of communications technology, will allow India to better enforce behavioral change.

After completing our research, our general conclusion was that demonetization did not initiate the process of transitioning India into a digital economy. This trend was already in place through the initiatives previously mentioned in Section 1. Rather, demonetization has accelerated the adoption of FinTech by widening India's digital consumer base. It is thus critical for impact investors such as Quona Capital to monitor market trends in order to ensure that its current and future portfolio clients remain competitive within the new digital landscape. The following section will introduce one of Quona's portfolio clients in India which was impacted by the changes that occurred as a result of demonetization.

Section 3: NeoGrowth and Social Impact

3.1 NeoGrowth Background

Starting operations in August 2012 in Mumbai, NeoGrowth provides a unique model to for small and medium-sized businesses in India. It operates at the forefront of the financial inclusion market seeking to expand access to capital. Through a unique model designed specifically for small and medium Indian merchants, NeoGrowth continues to expand and, after growing its loan book five times from 2014-2015, currently operates in Bangalore, Mumbai, Chennai, Delhi and Pune, with plans to expand to Hyderabad, Ahmedabad, Lucknow, and Chandigarh. It has an internet presence through NeoCashOnline, designed for online customers. Additionally, four impact investors currently back NeoGrowth: Omidyar Network, Aspada, Khosla Impact, and the Accion Frontier Inclusion Fund (AFIF).[26]

NeoGrowth's statement of purpose shapes how it approaches operations: to be the market leader in short tenure, small-ticket business loans for merchants accepting electronic payments. The firm built its business case on the fact that the underwriting methods for determining loan worthiness excludes more than 50% of Indian businesses. The loans NeoGrowth gives are centered on creating a positive social impact[27]. Through flexible repayment plans that are more suited to the borrower's need than traditional lending services, NeoGrowth services are geared towards addressing specific barriers that many borrowers face within India's economy. These barriers include (1) difficulties in credit assessments with a dearth of adequate financial history/credit footprint, (2) limited to no options for unsecured loans, given a lack of capital, (3) extremely limited funds, that when provided, come with a strict repayment schedule, and (4) lengthy and cumbersome application processes, which reduce the number of prospective borrowers. NeoGrowth's central product is a loan that is marked against future credit and debit card sales. With all of these issues, NeoGrowth gears its products to alleviate the fact that *access to capital* remains a central problem for business owners in India. As more than 30% of NeoGrowth lenders were found to be ineligible for credit by other lenders, NeoGrowth's impact on providing access to capital is clear. Traditional, larger, banks have struggled to meet the demands of businesses requesting loans of less than $150,000 (9664005 rupees)[28].

To address these issues, while ensuring a steady flow of profits, NeoGrowth combines electronic payments systems with the loans themselves. When a merchant obtains a loan through NeoGrowth, his/her electronic payment system funnels a certain amount of the sales to repaying the loans. It is the first lending platform in India to offer loans against future card sales. This allows for businesses heavily impacted by seasonal changes to pay back loans in conjunction with their sales rather than falling behind and losing valuable credit due to the weather or holidays. After making a loan based on alternative data for credit assessment, NeoGrowth obtains the funds through the automated collections, which remains based on business performance through the lifespan of the loan. With the minimal documentation required, funds are provided on a quicker basis to businesses that can build

[26] NeoGrowth Social Impact Report 2016

[27] NeoGrowth Social Impact Report 2016

[28] NeoGrowth Social Impact Report 2016

up a positive credit score and obtain approval for further loans. These merchants can construct a strong credit score with NeoGrowth and then get access to larger pools of capital through more traditional lenders. This model fits within the central government's efforts to push micro and small businesses towards electronic payment systems. Additionally, with the expansion of services offered by growing firms such as MSwipe, PayTM, and BHIM, the need for NeoGrowth's business model should only grow.

Along with the central government's efforts, market trends also indicate future opportunities for NeoGrowth: the retail market is expected to be $950 billion by 2017/2018 (from $520 billion in FY2013)[29]. With the growth in retail business expected to have a large cashless element, NeoGrowth's product should play a large role in this expansion. Moving forward, NeoGrowth sees its addressable market as 20-25% of merchants with POS machines[30].

[29] NeoGrowth Social Impact Report 2016

[30] NeoGrowth Social Impact Report 2016

Section 4: The Growth Trifecta and Case Study

4.1 Impact Assessment

While many models exist for assessing impact of new companies in the FinTech sector, there are few that are able to adequately assess market impact.

Current Model

Quona's current impact framework, referred to as the 'AQM Model' is a management tool for making performance-based decisions about their portfolio companies, and was developed in concert with the Accion Frontier Inclusion Fund (AFIF). The model highlights three performance areas and categorizes results into either direct or indirect impact:

Area	Type of Impact	Definition
Access	Direct	Increasing salience of FinTech
Quality	Direct	Products meet customer's needs
Market	Indirect	Company's activities have spillover effects in the market

While Quona has had great success in measuring direct impact in the forms of Access and Quality, Indirect impact at the market level is notoriously difficult to measure and yet may represent the most critical element of impact assessment. Unlike traditional direct outputs, indirect impact cannot be measured by observation alone nor is it distinctly quantitative in nature; there are powerful elements of qualitative research that must be considered and taken into consideration as well in order to assess attribution of success. The ability to determine the exact additive value of a firm is difficult to quantify due to the long-reaching impact and time required for a firm's efforts to take effect. For example, a firm that conducts financial literacy trainings can monitor how many people were trained, but the full impact of the training my not be felt immediately and so is difficult to determine just from quantitative analysis alone. Surveys, discussed more below, are useful tools for determining this impact but still do not tell the complete story.

There are several methods that can be leveraged for assessing indirect impact at the market level, most notably RCTs and formal or informal ongoing customer surveys. RCTs are useful in their ability to extract the effect of individual interventions, however they are often costly and time consuming, and would be unable to fully assess the impact of a single company's operations on an entire business sector. Customer surveys would be useful for assessing social impact of a company's actions, however would fall short of determining the full level of impact on the market. Furthermore, the amount of time it would take to gather and analyze the data from the surveys would be unsustainable for a small company that should be focusing on maintaining operations. In order to fully assess indirect impact, new strategies are needed.[31]

[31] https://ssir.org/articles/entry/measuring_the_indirect_impacts_of_market_innovators

While many companies have developed strategies and frameworks for addressing the issue of impact assessment, they focus primarily on the overall process[32] data gathering, such as the Lean Data model, or on trying to evaluate the effectiveness of a company after the fact, such as with the RCT model.[33] It is with this context in mind that we developed our market-level impact assessment framework.

4.2 The Growth Trifecta

In order to support Quona's efforts to determine its portfolio companies' impact on their respective markets, we have developed a framework that codifies and organizes common strategies directly linked to the development of financial sector regulations, innovation, local talent, and business model scalability. In an effort to make this framework more flexible, we have organized these various activities into three interconnected areas of focus The purpose of this framework is to provide Quona Capital and its portfolio companies with a market-impact analysis tool that enables constant monitoring of market-growth driving activities. This model is referred to as the Growth Trifecta.

The Growth Trifecta (Fig. 1) is comprised of three separate categories of activities which affect market growth: knowledge sharing, industry leadership, and innovation: **(1) Industry Leadership, (2) Innovation, and (3) Knowledge Sharing.** Success and performance in these areas will ensure not only proper dissemination of knowledge and encouragement of favorable regulatory and business environments, but will also guarantee a company's presence and leadership in the sector. It is important to note here that the success of the Growth Trifecta assumes a priori the financial success of a company.

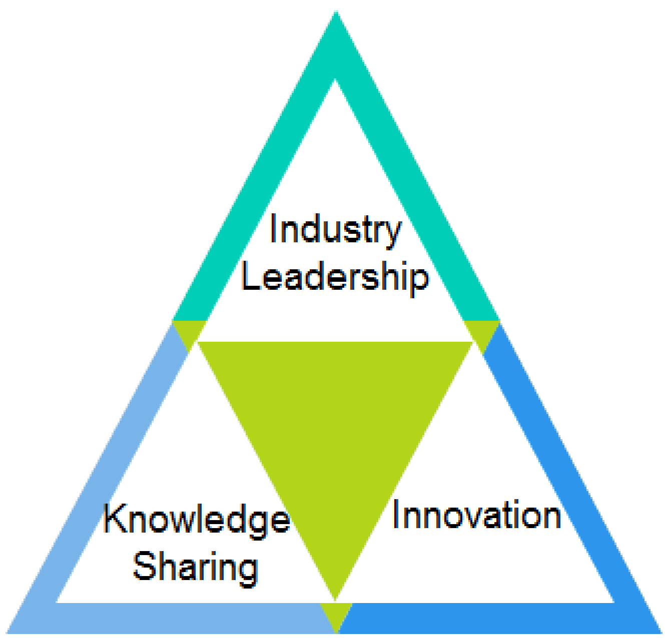

Figure 4: Growth Trifecta developed by SAIS Team

Industry Leadership

Industry leadership refers to the extent to which a company participates in industry associations, partners with other organizations and companies in the sector, and engages with the government to encourage passing of

32 https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjL9Zy18PnTAhUB5yYKHTU_C04QFggzMAE&url=http%3A%2F%2Fwww.ifc.org%2Fwps%2Fwcm%2Fconnect%2F7ddc9a80488552c3ac8cfe6a6515bb18%2FMeasuring%2BImpact%2BFramework%2BMethodology.pdf%3FMOD%3DAJPERES%26CACHEID%3D7ddc9a80488552c3ac8cfe6a6515bb18&usg=AFQjCNFxR02EIhFsNovsbiDG3l2dEMBoAQ&sig2=6qmScBIHJR1OeXs_j2woXA

33 https://ssir.org/articles/entry/the_power_of_lean_data

supportive regulation. Broadly speaking, industry leadership will vary widely across Quona Capital's portfolio companies as KPIs will change depending on the presence and power of industry associations in each of Quona's countries of operations.

General KPIs should reflect (i) the company's efforts to obtain and maintain a leadership role within industry associations, and (ii) the company's efforts to build and maintain relationships with local government officials in order to take a proactive role in shaping policy.

<u>Innovation</u>

A company's efforts to innovate, either at the product or operational level, will change the way the sector operates, ensuring products regularly adapt to changing customer needs, and enhancing the customer acquisition process. A company can only be successful in creating ripple-effects in the market if they are continuously driving innovation and operating at the forefront of their industry. In this sense, success in this area can be seen as a proxy for larger-scale impact on the field. Key indicators that should be measured will reflect (i) development of new product lines, (ii) development of new business practices, and (iii) the presence and role of a company in industry associations and contact with the government in order to affect change in favor of the sector. Additionally, it is important to focus on the number of companies operating with similar business models as this may be correlated with influencing larger trends as well. Success in this area will be particularly relevant to sourcing new investments, which will provide capital for growth, further increasing the capacity for market-level change.

It is important to note here that innovation should not necessarily always be pursued for the sake of innovating, and that efforts to innovate should be targeted around market demands.

<u>Knowledge Sharing</u>

Knowledge sharing, the third and final pillar, indicates the degree to which a company disperses information to others in the sector and the public through formal research, blog posts and media presence, and active education of the customer base. Knowledge sharing contributes to an actively growing industry through the dissemination of best practices and lessons learned from successes and failures. This is a key differentiator in market leadership as it allows an entity to establish itself as a knowledge hub from which various stakeholders may source information that may be conducive to growth. This tactic further promotes innovation and reduces the efforts needed in gathering market data that may already be available. Indicators that can be used to monitor knowledge sharing includes those such as the number of media publications (blogs, reports, etc.) in a year, the number of industry meetings and conferences attended or organized, as well as the number of public interviews conducted.

4.3 General Applicability and Functionality

The strength of this model lies in its applicability without requiring long term and high cost testing. Instead, the Growth Trifecta provides both Quona Capital and its portfolio companies with a framework that will allow it to assess its direct and ongoing contributions to the market without expending valuable resources to assess indirect impact on the market. In effect, our model replaces indirect market-level impact with a proxy-level analysis, assessing market impact through measuring activities that may more directly affect the market.

This model can be applied at both the investor and portfolio company levels. For Quona Capital, the Growth Trifecta can function as both an ongoing evaluation tool for its existing portfolio companies as well as a component of Quona's screening process for new investments. As an evaluative tool, the Trifecta will allow Quona to ensure that (a) its existing companies are on their way to becoming leaders in the industry and (b) its future potential portfolio companies will be of the caliber and quality that meet Quona's standards for investment. Quona should work with its portfolio companies to develop strategies for each of the three areas in order to help guide their portfolio companies towards becoming leaders in the industry.

For each portfolio company, the Trifecta can serve as a platform and guide for creating an internal baseline of activity in order to ensure some measure of impact at the market level. Portfolio companies should analyze the FinTech market in their respective countries and develop strategy both internally and with support from Quona Capital. Finally, unlike RCTs, which only assess impact after an intervention has already occurred, the Growth Trifecta allows for constant monitoring of progress towards objectives to allow for real-time strategy changes as needed without sapping valuable time away from maintaining present operations.

The Growth Trifecta builds directly into both Quona's theory of change. A large group of companies in the same sector all operating uniformly to accomplish the same goals will have a spillover effect, attracting new investors and spurring the creation of a more favorable regulatory environment. As Quona's portfolio companies engage in all three areas of the Trifecta, they will be taking an active role in expanding and enhancing the market for FinTech which, as it grows, will facilitate deeper financial inclusion.

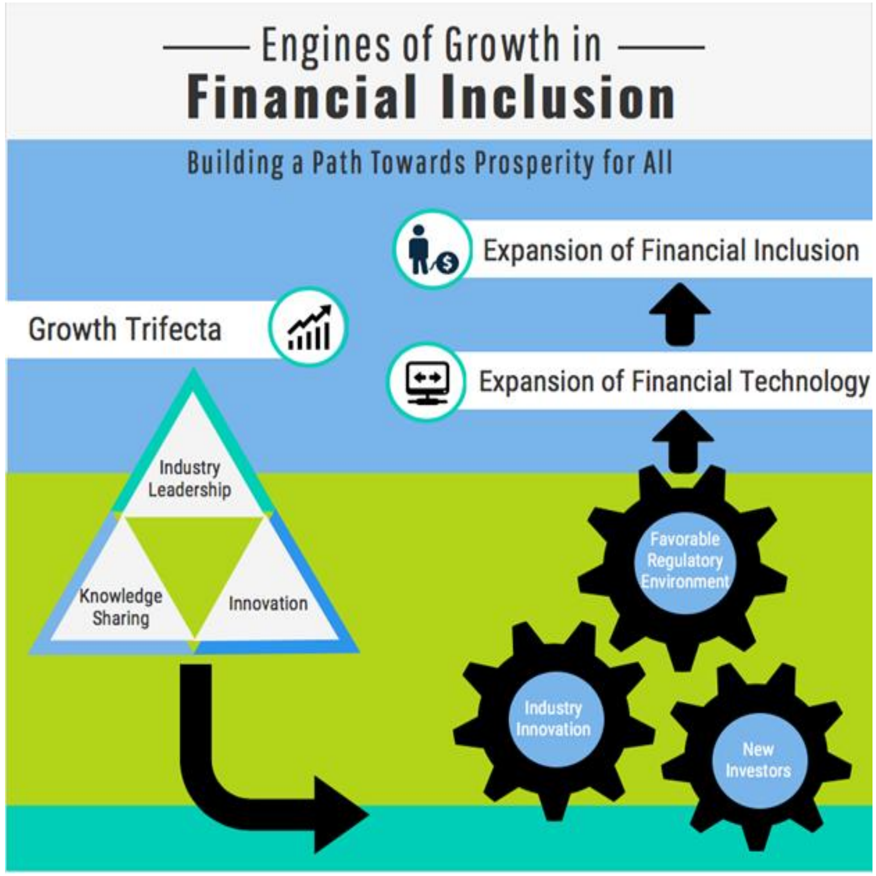

Figure 5: Engines of Growth in Financial Inclusion

4.4 Applying the Model: NeoGrowth

As we apply this framework to NeoGrowth, given the context of a demonetized India, several key indicators and focus areas arise for each component that Quona and NeoGrowth should monitor.

Industry Leadership

For industry leadership, in order to adapt to the changing marketplace for FinTech in India, NeoGrowth must ensure that it is actively pursuing leadership roles within industry associations while simultaneously maintaining direct contact with the government at every possible level in order to press the passing of favorable regulations. Success in this field will come from leveraging the power of industry associations, which is why leadership roles are critical.

Industry Leadership		
Indicators in this field demonstrate a company's impact vis-a-vis its role in organizing and coordinating market forces to catalyze sector-level innovation and spur the creation of a positive regulatory environment for the field		
Indicator	**Interpretation**	**Operationalize/Actionize**
What	*How do positive or negative trends for this indicator demonstrate success*	*How NG can leverage indicator to demonstrate correlation between business operations and overall beneficial market conditions for financial technology and inclusion*
# times company invited to conferences, speaking events	Increases or decreases in the number of invitations speaking events or conferences will indicate the extent to which NeoGrowth is seen by the public or the industry as a leader whose opinions and experiences are additive and valued	As the number of invitations to speaking events held by the government, private, or non-profit sectors increase, NeoGrowth will be able to assert that its efforts and operations are widely seen as successful. Should they lag, NeoGrowth should strive to increase its presence and visibility within the industry in order to gain attention and influence
# times NG featured by media in articles, etc.	Interpreted similar to the previous indicator, however instead of focusing on NeoGrowth's perception within the industry, increases or decreases here will indicate NeoGrowth's public perception as an industry leader	Increases in NeoGrowth's media presence will allow it to viably claim that not only is it becoming more publically visible, but that others in the industry will be more likely to view NeoGrowth as successful and a sector leader
# of meetings organized with industry to identify and address market needs	Trends in this area will indicate the strength of NeoGrowth's perception within its industry by acting as a proxy for other companies and industry associations' willingness to meet with them, acting as evidence of positive perceptions of NeoGrowth	The more effort that NeoGrowth places into taking an active role in mobilizing the industry to take action around issues of importance, the stronger any claims about its role as a leader in the industry will be. Additionally, organizing these meetings will give NeoGrowth an opportunity to influence other companies in the industry in order to further action towards common goals

# meetings held with government officials	Similar to above, growth in this area will indicate NeoGrowth's perception as a leader in the field as perceived by government officials	Efforts to engage with the government (and the government's corresponding willingness to do reciprocate) will further validate claims that NeoGrowth is a leader in the industry, whether they act alone or as part of a syndicate. Connections within industry associations and through the Board of Directors should be leveraged to increase the frequency of these meetings which, if absolutely necessary, may require changes to the Board if they are unwilling to support NeoGrowth in these efforts
# of government actions changed by allies	While difficult to interpret the full extent to which NeoGrowth influenced the passing of sector-favorable regulation, trends in this sector may act as a proxy for the effectiveness of NeoGrowth's efforts to affect change at the regulatory level and its influence on government officials	NeoGrowth should constantly strive to have its allies act as representatives for the cause of advancing FinTech as a vehicle for financial inclusion, and constantly leverage the bargaining power gained through cooperation with other companies in the sector in order to encourage local actors to advocate for the passing of positive regulation
Market Share (including total number of companies)	Growth/reduction in overall market share indicates the reach, relevance, and price competitiveness of NeoGrowth's services in the Indian market	All efforts should be made to become a leader in market share in order to maximize both visibility and profit

Innovation

In order to ensure a strong market base, NeoGrowth must begin monitoring its efforts to experiment with new customer service models that meet the needs of the eager but poorly-informed market base. Success in this area will depend heavily on NeoGrowth's ability to analyze customer's needs through regular conversations with them or, alternatively, through cooperation and partnerships with fellow companies in the sector. NeoGrowth should also look to its allies in the government as sources of information, using the contacts formed as part of their Industry Leadership strategy stressing that information provided to NeoGrowth will only further support efforts to improve the lives of Indians throughout the country. Based on the current administration's stated goal of encouraging the use of digital financial services discussed in Section 1, it seems reasonable to expect that government officials would be able to provide extensive support in this area in order to encourage further innovation.

Innovation		
Indicators in this category reflect the importance of a FinTech Company's continuing innovation. Positive trends in this field should be viewed as examples of effective innovation that reflects the needs of the market and actively contributes to financial inclusion.		
Indicator	**Interpretation**	**Operationalize/Actionize**

What	*How do positive or negative trends for this indicator demonstrate success*	*How NG can leverage indicator to demonstrate correlation between business operations and overall beneficial market conditions for financial technology and inclusion*
# new product lines/iterations of existing products launched and used	The launch and success of new product lines or adaptations of existing product lines will demonstrate NeoGrowth's understanding (or lack thereof) of the current market needs	By innovating whenever pertinent and possible, NeoGrowth will demonstrate its contribution to the FinTech marketplace by demonstrating new methods for providing valuable services to customers, thus increasing financial inclusion
# new customer service models launched and used	Based on the results of our research and the potential link between financial literacy and customer service models, NeoGrowth should constantly be adapting its customer service models in order to not only provide quality customer service but also provide avenues for increasing customer's financial literacy more broadly	If successful, new customer service models will enable NeoGrowth to potentially have dramatic impact on the FinTech market by demonstrating the power of providing financial literacy training directly to its customers via its customer service models
# competitors with similar business and/or customer service models	Attempts to duplicate or replicate NeoGrowth's business model will indicate the perception of NeoGrowth's business model as viable and profit-generating	Any attempts made to replicate NeoGrowth's business model will provide support to the claim that the model has gained traction and visibility in the market to attract attention from entrepreneurs and other industries
# new customers since launch of new products	Provides an indicator as to the relevancy of new product lines/iterations of existing product lines	Whether by designing a new product or improving on an existing product, successful innovation that attracts customers and becomes profitable will enable NeoGrowth's success, thus increasing its bargaining power and the potential for it to have broader impacts on the market
# repeat customers using new products	In concert with attracting new users, the development of new product lines that are attractive to customers already using existing product lines demonstrates NeoGrowth's capacity to understand and meet the needs of an increasing client base	Attracting new customers demonstrates NeoGrowth's capacity to continually create and provide new and valuable services
Customer Feedback Analysis	Success in obtaining strong customer feedback on its products and services will give NeoGrowth critical information necessary to develop new products	Customers will be willing and able to provide feedback if they feel as if their needs are being met and they appreciate the service; digital methods for data collection will ease the quantitative burden of gathering mass data or, alternatively, occasional focus groups with customers may be implemented

Knowledge Sharing

Finally, with regard to sharing knowledge, NeoGrowth must actively be sharing its successes and failures to adjust to the new market, particularly with regard to areas surrounding financial literacy, primarily: customer acquisition, service, education, and retention. NeoGrowth has already demonstrated its capacity and willingness to share knowledge via the publication of its social impact reports, which should be continued, however should begin actively sharing updates to product lines as well as thought research.

Knowledge Sharing		
The sharing of best practices, successes and failures, etc. to empower the sector, improve product development, spur innovation, and encourage other companies to behave similarly		
Indicator	**Interpretation**	**Operationalize/Actionize**
What	*How do positive or negative trends for this indicator demonstrate success*	*How NG can leverage indicator to demonstrate correlation between business operations and overall beneficial market conditions for financial technology and inclusion*
# of blogs/media publications produced and viewed (web analytics)	Positive or negative trends in this area will demonstrate the popularity and visibility of NeoGrowth's activities to the general public	As media publications and their viewership increase, NeoGrowth can strongly claim that its perspectives and opinions are gaining traction in the overall market which suggests that its publications are actively contributing to the cause of advancing financial inclusion. Negative trends should be adjusted by reviewing social media presence and overall media strategy
# of meetings attended w/ industry to identify and address market needs	Trends in this area will demonstrate NeoGrowth's efforts to disseminate knowledge directly through industry associations such as the NPCI or projects sponsored by the Center for Financial Inclusion	If NeoGrowth has not attended many meetings, they should strive to increase collaboration and participation in industry associations
# of formal research/blog posts (sharing of new products) produced and shared publicly and viewed (web analytics)	Formal thought research, while time consuming, provides a more legitimate platform beyond simple media updates for NeoGrowth to share its best practices and successes	Without being overly cumbersome or time intensive, NeoGrowth should strive to produce thought pieces whenever possible, even if they are in the form of informal blog posts on their website. Topic areas may include their successes, thoughts on FinTech in the Indian economy, results from programs they run, or general updates on operations. More formal research should only be begun once NeoGrowth has secured additional funding and moved out of the start-up phase
Overall web analytics	Acts as evidence of successful marketing strategies and word-of-mouth	If web analytics are low, it is evidence that NeoGrowth is not gaining visibility or traction, which then will hinder further knowledge sharing efforts. Strategic changes should be made to marketing campaigns and presence on social media platforms

Financial Literacy Education	Efforts to increase financial literacy nationwide will directly contribute to NeoGrowth's usability as a FinTech company, as well as expansion of the sector as a whole	NeoGrowth should begin efforts to analyze the financial literacy levels of its customers and develop mechanisms to increase it, either through training models to be dispersed via loan officers, chat-bots on its mobile app, or through other customer service models as deemed appropriate by senior management
General participation in Industry Associations	Participation in industry associations will spread the word about NeoGrowth's activities and successes and therefore draw further attention to it, increasing its potential reach and impact	Even if NeoGrowth is not speaking at events, it should strive at a bare minimum to be on the email list for newsletters and speaking events/meetings in order to set up a baseline of participation that can be expanded on in the future

The monitoring of efforts in these three key areas will create a benchmark which Quona can use to evaluate NeoGrowth's success and simultaneously provide NeoGrowth with a baseline of activity which it can use to adjust strategy going forward.

Section 5: Recommendations

5.1 Recommendations for Quona Capital

1. Determine Data Gathering Process
   In order to most effectively gather primary data which will ensure that any and all strategies reflect on-the-ground realities, it is recommended that Quona work with NeoGrowth in order to etermine an adequate reporting model. It is recommended that Quona fold the Growth Trifecta indicators into its existing reporting platform for NeoGrowth, and require semi--annual data collection.

2. Test Model and Indicators with NeoGrowth on a Short-term Scale
   Quona should evaluate the feasibility of the model with NeoGrowth and develop strategies for the company to address as many indicators as possible. Over the course of one year, Quona should monitor NeoGrowth's efforts to achieve pre-determined goals, and then re-visit the model, activities, and developed indicators in order to gauge its progress.

3. Apply Model to Other Portfolio Companies
   Should Quona and NeoGrowth find that the model is (a) appropriate for their needs and (b) not dependent on an overly burdensome reporting process, Quona should select a second portfolio company and work with them to develop individualized strategies and indicators as dictated by the Trifecta.

4. Evaluate the Growth Trifecta for Utility in Screening Process
   In addition to serving as a strategy-guiding and evaluative tool for existing companies, the Growth Trifecta can function as a part of the screening process. Instead of looking at specific indicators within the three areas, however, Quona should evaluate potential investee's efforts to impact the market more broadly. It is important to note here that due to Quona's focus on funding young companies, it may be the case that potential investees have focused efforts primarily on maintaining business operations rather than market impact. In this case, Quona should use the Growth Trifecta model to assess the *potential* for market impact by observing the company's (i) scale and reach, (ii) social media presence, and (iii) CEO and Board Member network strength.

5.2 Recommendations for NeoGrowth

In addition to the indicators listed in Section 4, which are considered recommendations for implementing the Growth Trifecta, it is further recommended that NeoGrowth leverage the results of this report in order to adapt its business model to reflect the new realities. In order to fully assess its customer's needs, it is recommended that NeoGrowth develop and distribute a customer survey that aims to assess:

- Overall customer comfort with broader financial services (ask how many they use and how often)
- Satisfaction with the current product
- Additional needs (what services would you like to use but do not know how to access)

This survey can be distributed via mobile technology and will provide greater insight and ability to take full advantage of the Growth Trifecta.

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