Social Media Advertising and Product Development for an Online Lending Platform in India

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Hangzhou 2018

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Social Media Advertising and Product Development for an Online Lending Platform in India

An Interactive Qualifying Project Report submitted to the faculty of WORCESTER POLYTECHNIC INSTITUTE in partial fulfillment of the requirements for the Degree of Bachelor of Science

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Date:
December 14, 2018

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Abstract

This project team researched alternative banking strategies while in Hangzhou, China to assist Qianli Technologies and Onion Credit, Qianli's partner in India. Our goal was to create recommendations for future loan products and social media advertising for an online lending platform in India. The team achieved this through interviews, a competitor analysis, online surveys of current and potential customers, and a social media platform analysis. The investigation showed that the surveyed users and university students prefer loans of a longer term and larger amount than Onion Credit's platform currently offers. From the survey results and a social media platform analysis, we determined that Facebook and Instagram provide the best opportunities for an efficient future marketing campaign.

Acknowledgments

Executive Summary

Online peer-to-peer (P2P) lending, the lending of money from individual investors to borrowers, has proven to be a breakthrough model that quickly gained popularity in the late 2000's. This growth has not been without its faults. Many lenders have experienced high default rates causing investors to seek other options and companies to go bankrupt, leading many governments to impose strict regulations on this new market, especially in India. This has led to the increase in other forms of non-banking financial company (NBFC) lending to satisfy these customers' needs. Our sponsor, Qianli Technologies, is currently collaborating with Onion Credit in India. Onion Credit owns the application CashMama, which provides loans, funded by the NBFC KrazyBee, to individual borrowers.

India has a population of 1.36 billion people, which makes it the second largest country in the world. This has created immense business opportunities, but they are not without their hindrances. In regards to e-commerce, the Indian government uses Internet shutdowns and other methods to control the access to information when and where it deems necessary, which diminishes the reliability in certain areas of the country. There is additionally a growing concern in India about data privacy and the new attempts to ensure the protection of user data. This is an important topic for companies to consider because of the sensitive nature of this data.

All of these factors have created immense potential in India for financial technology companies, but proper prior research is necessary for a successful implementation any new loan platform. This new market opportunity has brought in competition which created two issues for Qianli Technologies, the first being a need for a better understanding of the customers, and the latter requiring insight into the best use of any future marketing budgets.

The team planned two major deliverables for this project in order to address the aforementioned issues. The first was to develop recommendations for future loan products for their partner in India, Onion Credit. Second, since our sponsor and their partner currently have no advertising in India, the team researched popular social media platforms in India that potential customers use to market the platform. To accomplish these deliverables, the team conducted interviews, a competitor analysis, surveys, and a social media platform analysis.

For the interviews, the team contacted experts of social media advertising and loan industry in India. The questions on social media inquired about factors companies consider when advertising on social media. The expert interview concerning the state of the Indian lending environment examined what loan purposes experts expect to grow, and what industry best practices were. Next, the team performed a competitor analysis, which examined loan amount and term offerings, interest rates and fees, and the target audience of the platforms. The team then developed and distributed surveys to two groups, CashMama users and university students attending schools in major cities in India. Inquiries for both survey groups include their loan preferences and the social media platforms they use. The team asked CashMama users specifically about their suggestions for the platform. Finally, our team performed a platform comparison analysis between the most popular social media platforms in India. Through this analysis, we examined the customer base, available features, and costs associated with each compared to how effective advertising is on each platform.

The team interviewed two experts on social media advertising and the loan industry in India. The team first spoke with a social media and digital strategies lead. She talked about the importance of tailoring an advertising campaign to the company's specific audience and goals, of

finding a balance of focus on client acquisition and brand awareness, and of high quality advertisements that gain the attention of consumers. She stressed that Indian businesses have not fully adopted social media advertising, presenting a significant opportunity for new companies that do. The team also spoke with a professor experienced in banking and finance in India. From his experiences, the personal loan market in India primarily targets personal vehicle purchases and housing loans. He claimed these loans are increasing in popularity due to working and middle classes wanting to upgrade current possessions. Each social class is feeling pressured to upgrade from what they currently have, and will need loans to do purchase goods that impact their image.

For the competitor analysis, the team analyzed the following five platforms: CASHe, Paysense, EarlySalary, MoneyTap, and AnyTimeLoan. Our sponsor's partner, Onion Credit, provided the list with some loan product information attached. In addition, we gathered more details from official websites of the platforms. The team identified several traits upon summarizing the information of the companies. For loan offerings, MoneyTap has the widest range of selections for loan terms and associated amounts, as well as the lowest interest rates. EarlySalary has the lowest processing fee requirements, followed by MoneyTap. In addition, CASHe and AnyTimeLoan had membership programs that provided exclusive loan offerings for high-level members. Comparing with the platforms, CashMama has very limited loan offerings for customers, medium-high interest rates and high processing fees.

The surveys received 125 responses from CashMama users, and 130 from university students. The team observed a significantly higher number of male respondents in both surveys. We also found a predominant presence of computer science and related majors, which results from the specialties of the universities that participated. As students from computer science have a higher potential of becoming salaried employees, this is a good sample of the student population, and is representative of potential borrowers of personal loans in the future. Other demographic questions received no responses that present significant biases.

Important information for loan product recommendations come from the surveys' loan amount and loan term responses. The team created scatterplots for the two sampled populations, and identified the clusters for the loan preferences (see Figures 1 and 2). In the plot for the student sample, most of the selections cluster at the larger loan amount and longer loan term level. This can result from the students choosing primarily education-related purposes. However, for CashMama users, the greatest cluster appears for loan amount between ₹5,000 and ₹20,000, and loan term between 15 days and 60 days. As CashMama's current ₹5,000 product for 15 days lies within the range, the scatterplot of CashMama users' loan preferences present a reasonable range for developing future loan products.
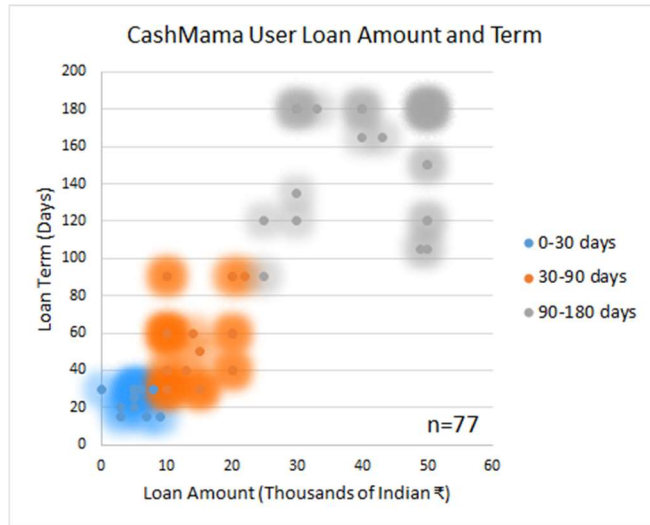
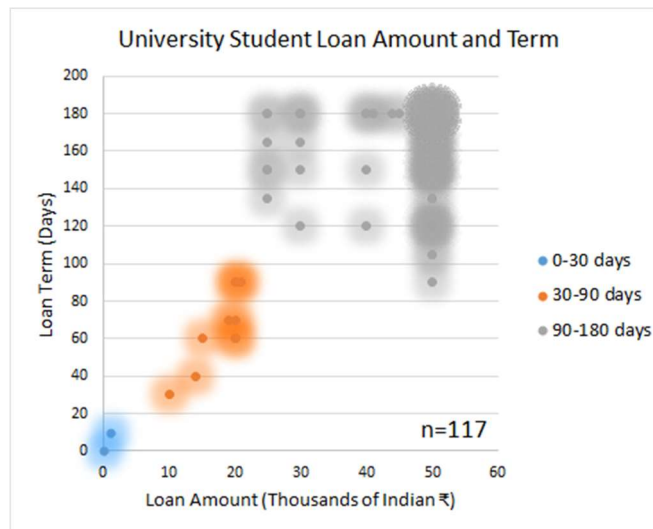*Figure 1: CashMama User Loan Amount and Term*

Figure 2: University Student Loan Amount and Term

Another project finding emerged from analyzing the survey respondents' preferences for loan type. The survey question compares payday loans (short-term loans with single repayment) and equated monthly installment loans, or EMI loans (medium to long term loans with multiple repayments). In both sampled populations, the results demonstrated uniform preference for EMI over payday loans. More specifically, 72% of received responses from CashMama users prefer EMI loans, compared to 26% for payday loans. Considering that currently CashMama only offers payday loans, this suggests EMI loans as an area for future loan strategies.

The team asked the surveyed populations to select their three most frequently used social media platforms (see Figures 3 and 4). The charts show that Facebook, Instagram, and WhatsApp are preferred social networks between both samples. CashMama users' top social media choice was Facebook, while Indian university students' top selection was Instagram. The demographic information identifies an age gap, with CashMama users mostly in their mid-thirties and university students between the ages of 18 and 22. This indicates a generational difference in social media preferences. This information enabled the team to provide

recommendations to the sponsor as to the most popular platforms to attract new customers as well as the platforms to create brand awareness for future customers.
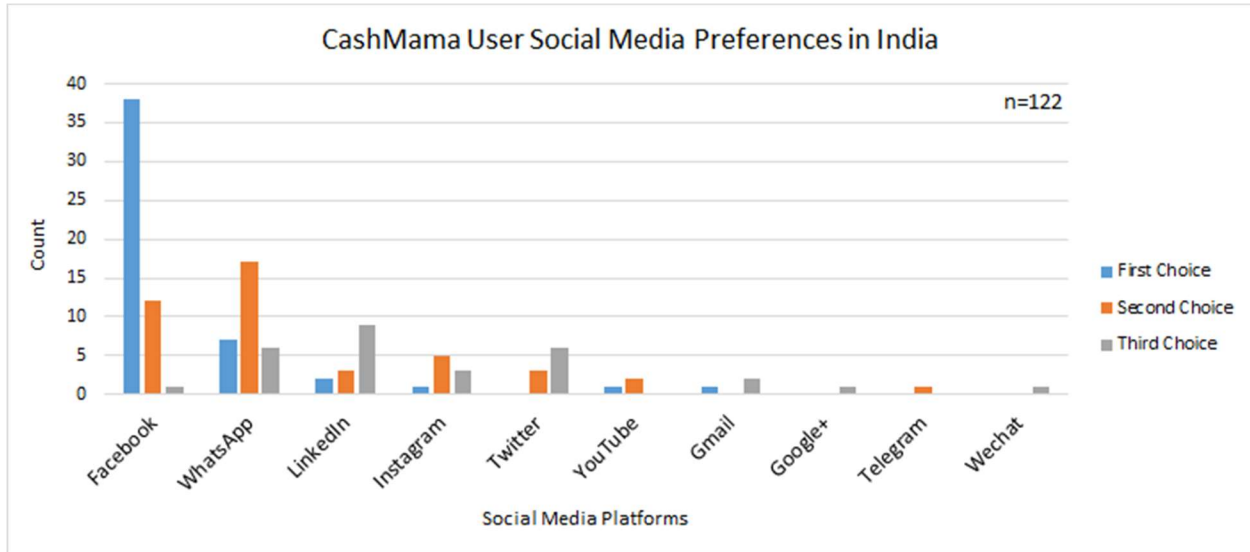

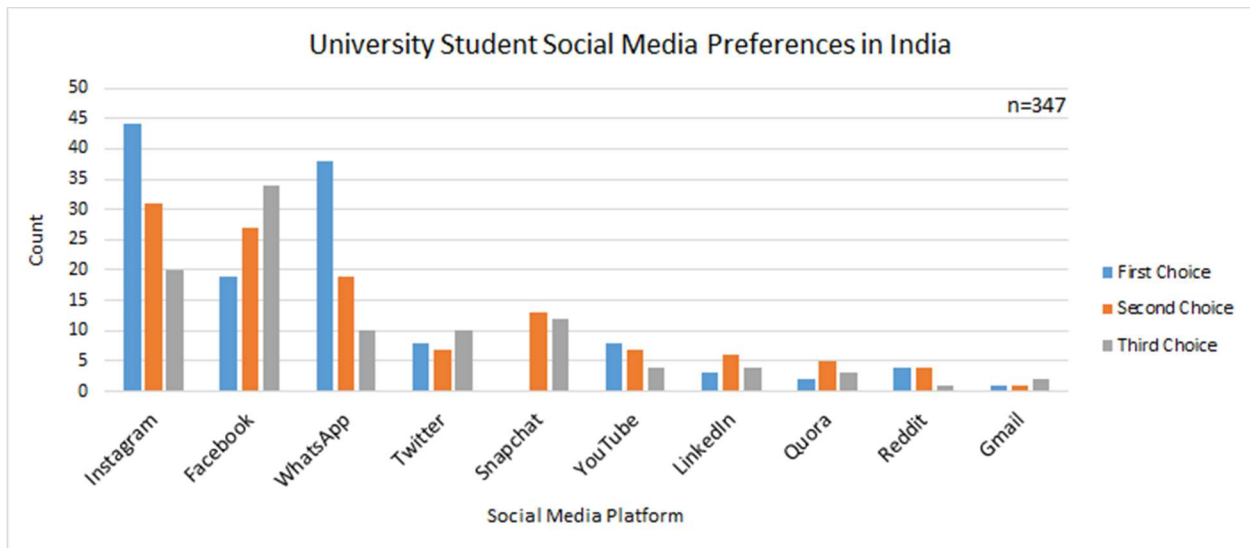*Figure 3: CashMama User Social Media Preferences in India*

Figure 4: University Student Social Media Preferences in India

The next step was to study six of the top social media platforms in India: Facebook, Instagram, WhatsApp, YouTube, Twitter, and LinkedIn. This was crucial for the sponsor because the various social media platforms attract different audiences and all have unique features that pose both benefits and challenges to companies looking to advertise. A few examples of these unique features include Facebook's ad manager portal, Twitter's 140 character per tweet limit, YouTube's video only content, and LinkedIn's professional audience.

The first set of recommendation for Onion Credit concern their loan packages. We advise that Onion Credit implement several new loan packages based on our survey findings. There were several popular options among the sample. While the ₹50,000 option was most popular among both user and student samples, we believe Onion Credit should leave a loan of this size for the future, especially considering the significant risk associated with such a large amount

(Jimenez et al., 2002). In order of popularity, the next most selected loan amounts by current CashMama users are the ₹10,000, ₹5,000, and ₹20,000 options. CashMama already has a ₹3,000 and ₹5,000 loan product, therefore, the team believes CashMama should look at implementing loans between ₹10,000 and ₹20,000 for future offerings.

With about 72% of users indicating a desire for EMI loans over payday loans, Qianli and Onion Credit should cater to this demand. Considering the sponsor's concern regarding the high risk associated with EMI loans, our recommendation is that they offer different repayment options based on generated risk management scores. This addresses the issue of borrower risk, while still catering to customer requests. Additionally, repayment options and a membership program rewarding customer loyalty and reliability could increase return borrowers, and create a steady income stream.

For social media platforms, the team recommends that Onion Credit use Facebook and Instagram advertisements to expand their business further. With their extensive user base, these platforms represent the most efficient way to reach the greatest number of social media users. Based on the surveys of current CashMama users and Indian students, both Onion Credit's target population and the predicted future target population frequently use Facebook and Instagram (See Figures 3 and 4). Finally, Onion Credit can opt to let Facebook Inc. automatically distribute the advertisements between both platforms. This will allow Onion Credit to indicate their desired target audience, and Facebook Inc. will place the advertisements appropriately without any extra effort from Onion Credit.

Through interviews, the competitor analysis, surveys, and the social media platform analysis, this project provided recommendations in two areas to Qianli Technologies. These can serve as a guide for the development of loan offerings and advertising strategies for CashMama in India. Furthermore, they can potentially improve customer experience and competitiveness of the lending platform with further investigation, implementation, and research.

Executive Summary Bibliography

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1. Introduction

With the introduction of the Internet and smartphones, the concept of alternative banking, a form of lending and borrowing that does not rely on a traditional bank, has developed increasingly over a short time. One facet of alternative banking, online peer-to-peer (P2P) lending, has provided millions of loans to individuals seeking credit across the globe. The popularity of P2P lending is due to its streamlined method of connecting borrowers to lenders with minimal overhead. A peer-to-peer platform acts as an intermediary between borrowers and lenders, allowing individuals to have access to credit without requiring traditional methods of obtaining it. Peer-to-peer platforms have several distinct advantages over banks. They are more accessible than banks via mobile applications and websites, while still presenting a variety of loan options. They also provide loan access to individuals with low credit scores by using advanced risk management techniques. These risk management algorithms can account for more factors than simply a credit score when determining whether an individual has a low chance of defaulting.

Beyond peer-to-peer lending, other alternative banking platforms are becoming increasingly prevalent. These platforms partner with non-banking financial companies (NBFC) to provide credit to borrowers, as opposed to involving a variety of individual lenders. While this decreases the number of options available to a borrower, these platforms work as a closed system while allowing for greater control of products. Another benefit to partnering with NBFCs is avoiding the numerous regulations in place concerning P2P lending. Many platforms can also eliminate the costs associated with P2P regulations this way. This kind of NBFC-partnered platform is becoming more common in India, which has notably strict P2P lending regulations.

With the introduction of alternative banking methods, the Indian credit and loan market has been evolving rapidly. With smartphones becoming increasingly available to all social classes in India, individuals have increased their information accessibility. They can therefore make more informed financial decisions. However, India's credit scoring system, Credit Information Bureau of India Ltd. (CIBIL) scores, have only existed since 2004 (Niharika et al., 2017). The government only allowed more credit information companies to operate after 2010 (Noti. 10/354, Reserve Bank of India, 2010). These platforms can lack the information that lending platforms require for adequate risk management.

Qianli Technology, a P2P lender in China, has partnered with Onion Credit, an Indian risk management company, to develop a lending platform for the Indian market. Qianli maintains the risk management service for Onion Credit, which operates the mobile lending platform CashMama in India. With such strict P2P lending laws in India, Onion Credit only operates as a lending platform for users to interact with a partnered NBFC, who in turn administers loans. While this behavior is somewhat different from Qianli's operations in China, the risk management tools that Qianli has developed are still applicable for this lending platform. Qianli has been working to adapt to borrower information available in India, but the company has been struggling to deal with the limited credit score information and India's cultural differences as compared to China. Still in its beta stage, Onion Credit's online platform, CashMama, only provides two loan offerings: one for 3000 rupees (approximately 40 USD), and one for 5000 (approximately 70 USD), with both having a repayment period of 14 days. Furthermore, with different advertising platforms available in India as compared to China, Qianli has limited experience in advertising to the Indian market.

Qianli Technology asked this project team to assist in developing suggestions for social media advertising, introducing new loan offerings, and analyzing customer feedback, especially with regards to the user experience and loan application process flow, to improve Onion Credit's operations and product. To aid the company in this endeavor, the team developed the following objectives:

1. Understand the current usage of social media advertising and available loan product offerings in India.
2. Examine current sentiments towards social media platforms and loan products of current and potential customers in India.
3. Create recommendations for social media platforms and loan products for Qianli and Onion Credit based on analyses and findings.

To accomplish the three objectives, the team performed interviews, a competitor analysis, surveys, and a social media platform analysis. The information gathered comes from experts in the fields of marketing and finance, current users of the CashMama app, and potential customers, as well as from research on loan product offerings by different NBFCs and advertising options on various social media platforms.

The team developed several suggestions for the CashMama platform. For loan products, the team found that two additional loan amounts should be introduced, a ₹10,000 and ₹20,000 offering. We also recommend the sponsor research a risk-based loan repayment system that allows low-risk borrowers access to longer terms when they apply for loans. Additionally, the team believes the sponsor should look into implementing a membership program that promotes return borrowers who consistently repay loans on time. For social media platforms, we suggest that the sponsor begin advertising on Facebook and Instagram, two popular platforms in India with a high cost to performance ratio.

2. Background

The background introduces the cultural, technological, and historical aspects of the project. The first part is an introduction to the sponsor of the research, Qianli Technology. This section provides an overview of the company, and the company's project in India, which is the focus of this research. The following section introduces the general background of peer-to-peer (P2P) lending and non-banking financial institutions and companies (NBFI/NBFC), which relate to Qianli's operations in China and in India, respectively. Since the practices in India differ from those in China, section 2.3 explains the barriers that prevent Qianli's implementation of Chinese operations in India. These include regulatory difficulties and social-political considerations. Finally, section 2.4 introduces the development of social media advertising, as well as social media usage in India.

2.1 Sponsor: Qianli Technologies

Qianli Technologies is a peer-to-peer lending company in China founded in 2015. The company uses financial technology to power its lending platform (Qianli Technologies Company Overview, 2018). Having established a foundation in China, Qianli seeks to expand the reach of the company globally. According to the sponsor, India has reached an economic development stage similar to that of China's from several years ago, which inspired interest from the company to invest in the market. Qianli began a project in September 2018 to investigate the feasibility of expanding to the market in India.

However, due to local regulations, it is difficult to invest foreign assets in India. Thus Qianli partnered with an Indian company named Onion Credit by providing technological services for the background verification process and risk management. The CashMama App, Onion Credit's online mobile lending platform, allows users to choose loan amounts and terms and submit their applications. For the funding part of the process, Onion Credit partners with a non-banking financial company (NBFC) in India, KrazyBee, which provides the loans to borrowers. Figure 5 below shows a diagram of the roles the companies play in the loan process.
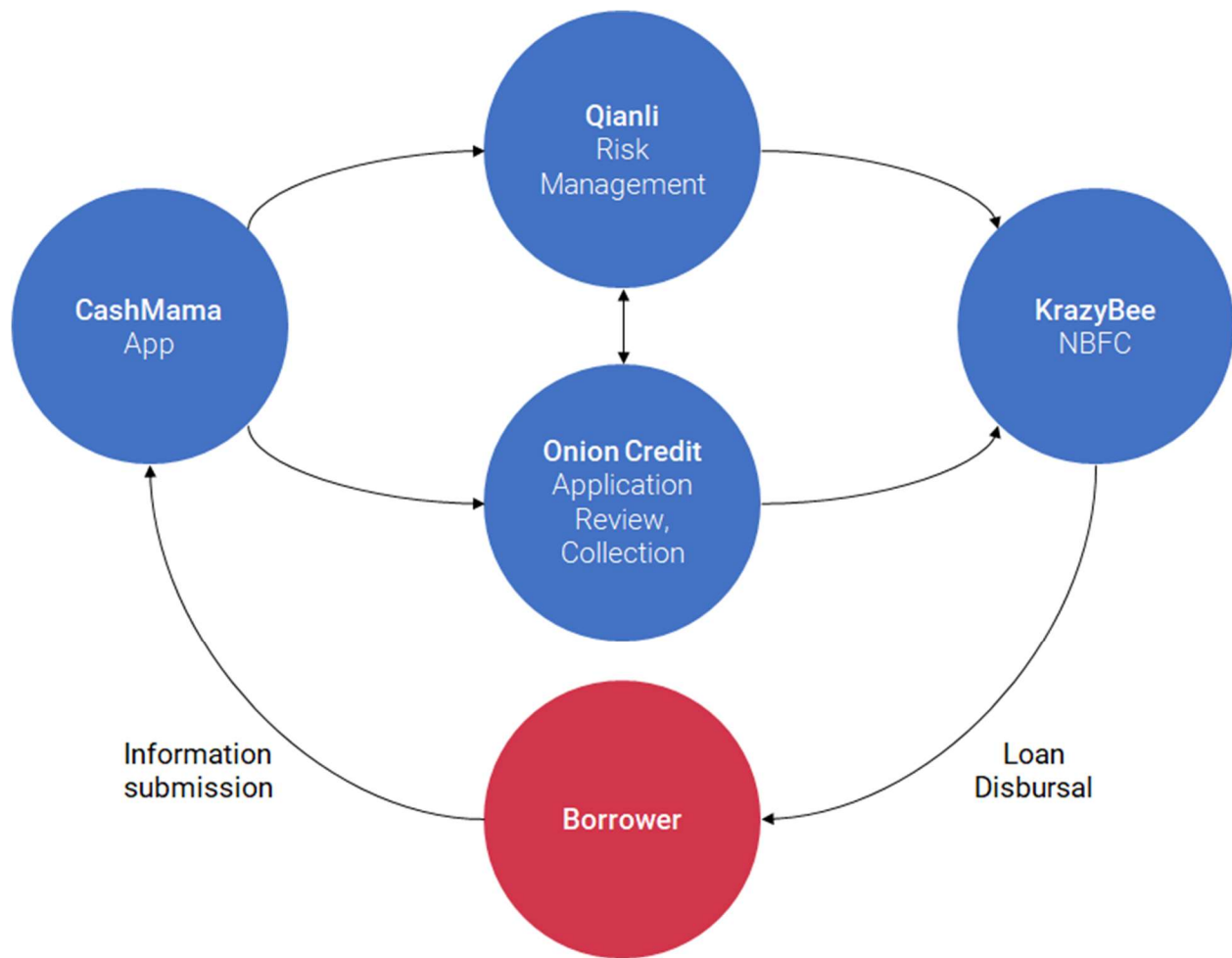
Figure 5: Loan Application and Approval Process Behind CashMama Application

2.2 Alternative Banking

The primary function of all financial institutions is to create a flow of assets between the groups with financial surpluses and deficits (Carmichael & Pomerleano, 2002). The lending and borrowing not only benefits the financial market, but also enables people to purchase higher cost goods. However, due to tight controls and regulations, traditional banks can fail to provide efficient services to people without credit history (Carmichael & Pomerleano, 2002). If that issue arises, people will seek alternative options for their financial needs.

2.2.1 Peer-to-Peer

With the emergence and widespread adoption of the Internet, there has been a recent rise in a new form of lending known as peer-to-peer (P2P), which usually manifests itself in a mobile application or platform. These platforms connect lenders to borrowers via an electronic marketplace, replacing banks as the traditional intermediary (Berger & Gleisner, 2009). Digital

P2P lending can trace its roots back to a British company, Zopa, which was founded in 2005 and quickly followed by a U.S. company Prosper in 2006 (Barry, 2018). This widespread and far reaching growth demonstrated that many people around the world desire the P2P market. P2P lending promises a change from traditional banks by creating an easy-to-use system to connect willing lenders with borrowers in need. The concept of simply logging into a website or a mobile application, filling out personal financial details and promptly receiving a loan is very attractive to customers. This is apparent when examining the early and widespread growth of these new platforms.

P2P lending quickly gained traction in the United States, Europe, and China with millions receiving these small scale loans. The economic crisis of 2008 in the United States contributed to the rise in popularity of these new financial intermediaries (Broström et al., 2018). Many traditional banks were engaging in the trading of unregulated mortgage-backed securities, and institutions were selling subprime mortgages at a rate higher than ever. This created a social distrust of the major banks in the United States and a need for loans which sent people searching for an alternative solution for their financial needs. Online P2P lending offers significant advantages over traditional bank loans such as ease of accessibility, in respect to both user interface and financial background, the ability to serve as both a means of borrowing and investing, and the ability to customize a loan that fits the customer's needs. This growth and popularity in the United States quickly prompted expansion to the Chinese market and to other countries around the world.

In order to obtain a P2P loan, users must complete a short application. The service usually requires credit score, salary, employment status, outstanding debts, and other personal financial questions. Additionally, companies that serve as online platforms require an identity verification to ensure the authenticity of the borrower. After a credit check is complete, the platform presents the customer with a variety of loan options. The financial intermediary then takes a percentage of the monthly payments before passing the rest of the interest onto the investors as seen in Figure 6 below, with the interest rate based on the financial risk associated with the borrower. This is not only a beneficial model for those seeking loans, it also provides an additional method for investors looking to diversify a portfolio. These platforms allow investors to choose approximate yield based on the amount of risk they are willing to take and facilitates the funding of many different loans at a single time. According to statistics from LendingClub

and Prosper Marketplace, two of the largest P2P marketplaces, investors on average received between 5-9% returns, substantially outperforming savings accounts and bonds that typically have a rate of 2-3% over their term (Barry, 2018). As of 2015, P2P loans had accumulated to 26.16 billion dollars with estimates that it could reach anywhere form 150-490 billion dollars by 2020 (Tom, 2017).
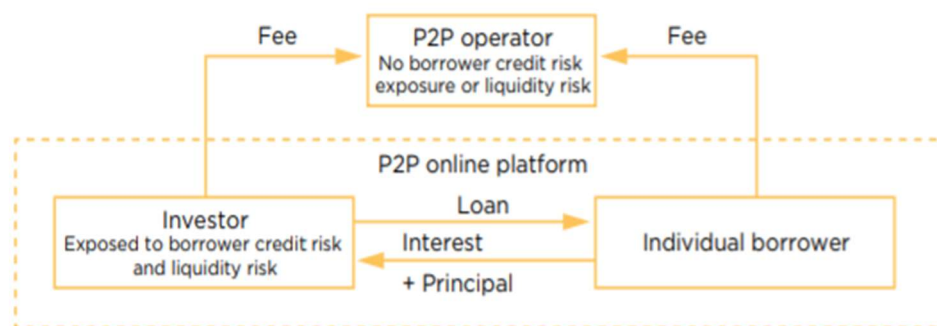
Figure 6: Basic P2P Lending Model (Davis & Murphy, 2016)

With this staggering increase in the quantity of money lent, there is a similar correlation in respect to the amount of risk associated with these loans. This risk translates to a percentage of investors that will lose money using these platforms due to a borrower's inability to repay the loan. These risks associated with the P2P lending system has led many governments to impose stricter regulation on these practices in order to better inform and protect both the lenders and borrowers. With these tighter regulations, many companies looking to expand their companies, such as our sponsor Qianli, have turned to a lending system that involves non-banking financial institutions.

2.2.2 Non-Banking Financial Institution (NBFI)

Financial institutions can be categorized into banks and non-banking financial institutions. Non-banking financial institutions (NBFIs) are important components of the financial services sector. They are institutions that provide bank-related financial services, but do not have a complete banking license, or are not supervised by banking regulatory agencies (Dima, 2012; Yin & Liu, 2016). The various services NBFIs offer include investments, risk pooling, contractual savings, market brokering, and microloans.

There are many benefits to operating as an NBFI in the financial sector. NBFIs can drive the economic growth and prosperity of a country through various means. Due to numerous regulations and the nature of banks, there are limitations to the types of services banks are able to

offer individual customers and business entities. Traditional banks are not well suited for services such as risk-pooling and insurance due to the amount of associated risks (Carmichael & Pomerleano, 2002). NBFIs are able to fill in the gap by providing such services, which help broaden the spectrum of risks available to investors, and by doing so enhancing equity in markets.

In addition, NBFIs bring more competition into the financial system (Carmichael & Pomerleano, 2002; Ofoeda & Abor, 2012). As previously mentioned, NBFIs provide many services similar to banks' offerings. Additionally, NBFIs often have lower costs for services and are willing to take more risks compared with banks, because there are usually less regulatory barriers. Thus they are able to present more competitive rates for investments and loans. By presenting competitive prices, NBFIs help mobilize the funds in the financial system, increase the accessibility to finance for more firms and individuals, and increase the efficiency of the financial system.

The effect of NBFIs on economic shocks can be both positive and negative. Under a well-established regulatory system, NBFIs can enhance the resilience of the financial system to economic shocks (Carmichael & Pomerleano, 2002; Ofoeda & Abor, 2012). NBFIs help diversify asset holdings and credit risks in the financial system by providing multiple alternatives to circulate assets between surpluses and deficits (Dima, 2012). This diversity in methods of capital transformation can strengthen the economy and provide a buffer zone in times of economic shocks. However, a lack of a coherent regulatory framework can also increase the fragility of the system to economic crisis (Carmichael & Pomerleano, 2002; Ofoeda & Abor, 2012). This vulnerability often results from intentionally increased risks in asset allocations and investments, which increase deficits and imbalance the asset circulation.

NBFIs in India are known as non-banking financial companies (NBFCs). They operate under the regulations of the Reserve Bank of India and the Securities and Exchange Board of India, and have similar business activities to regular banks. The functions of NBFCs include making loans, acquiring securities, and leasing assets. However, under regulations in India, NBFCs cannot accept demand deposits or issue checks to customers, and the Deposit Insurance and Credit Guarantee Corporation does not insure deposits with NBFCs (Karunagaran, 2012). This is the main limitation and difference of NBFCs from traditional banking.

The development of the sector began in the 1960's, aimed to fill in the gaps of financial requirements that the existing banking system in India could not meet. This sector of finance in India has undergone much transformation over the years. The success of NBFCs largely depended on their superior product lines, lower cost, and broader and more effective reach compared to traditional banks (Karunagaran, 2012). The competition the NBFCs introduced to the market has driven an increase in innovation, improved quality in services, and created more competitive prices in the financial sector of India.

The company Onion Credit partners with in India, KrazyBee, is an NBFC. KrazyBee differs from a peer-to-peer company since it provides the source of funding for the lending, instead of acting as the intermediary that connects the borrowers and the investors. During the lending process, Qianli takes part in only the technological support for Onion Credit in credit verification and risk management. Qianli does not participate in the funding component of the process, due to the various barriers for P2P and alternative banking in India.

2.3 Barriers for Alternative Banking in India

China and India have vastly different regulations surrounding business operation, with the realm of non-banking financial institutions being no exception. To properly enter a new market, our sponsor must consider the regulations surrounding NBFCs and P2P lending in India.

2.3.1 Regulations in India

As a peer-to-peer lending company in China, Qianli Technologies has experience in coordinating lending between a borrower and lender through the use of algorithms and credit checks to determine the likelihood of default. This combination of finance and technology has been working in China, with Qianli accumulating 30 million users of their application. However, the situation is slightly different in India, which has newer and continuously evolving regulations surrounding peer-to-peer lending. While this may be beneficial to consumers, these regulations make it difficult for foreign companies such as Qianli to directly expand to India. This is the reason that Qianli has chosen to collaborate with Onion Credit, providing them with a technological service. By only handling the risk management of loans through Onion Credit, Qianli can access the Indian market without lending in a P2P form.

Other recently implemented barriers to introducing a P2P lending service in India have greatly reduced the number of P2P lenders in India (Mastaram, 2017). For example, the Reserve Bank of India (RBI) has limited how much credit a lender can disburse to an upper limit of

1,000,000 Rupees, or approximately 14,000 USD (Bhakta, 2018). This limits the lender's aggregate credit exposure, preventing meaningful contributions to the platform, and causing them to search for alternative investments that are more valuable. From the borrower's perspective, there is the same limit of 1,000,000 Rupees available to loan. This prevents borrowers from attaining larger loans through P2P platforms, again turning them away from P2P.

The problems with peer-to-peer lending regulations in India continues further, with the RBI requiring that P2P companies appoint a trustee who will "monitor the flow of funds between escrow accounts of borrowers and lenders (Nahata, 2018)." The RBI additionally requires that this individual be a bank employee. With the Industrial Development Bank of India being the only bank providing this service to peer-to-peer lenders, this presents a cost for P2P companies that they cannot avoid by approaching a different bank.

Furthermore, P2P lenders must "store and process all data relating to its activities and participants on hardware located within India" (Master Directions NBFC-P2P, 2017, p.4). Thus, for international P2P companies to expand to the Indian market, the company would need to ensure it has data processing capability in the country. This regulation introduces a significant fixed cost that is infeasible for some companies.

2.3.2 Internet Access and Data Privacy

Internet access is crucial for using an online lending platform. However, Internet shutdowns in India may pose a problem to the accessibility of lending platforms in India. Since 2012 there have been 249 Internet shutdowns in India, with 111 occurring in 2018 alone (see Figure 7). The Indian government uses Internet shutdowns for a variety of reasons, such as to prevent civil unrest or cheating on examinations (Software Freedom Law Center, 2016). Without reliable access to the Internet people are unable to take full advantage of a web-based lending platform. While access to the Internet in India is less restrictive compared to Chinese policies, this is not the case in comparison to other governments in the world (Rajkhowa, 2011–2013). This has the potential to limit the effectiveness of implementing Onion Credit's lending platform in India.
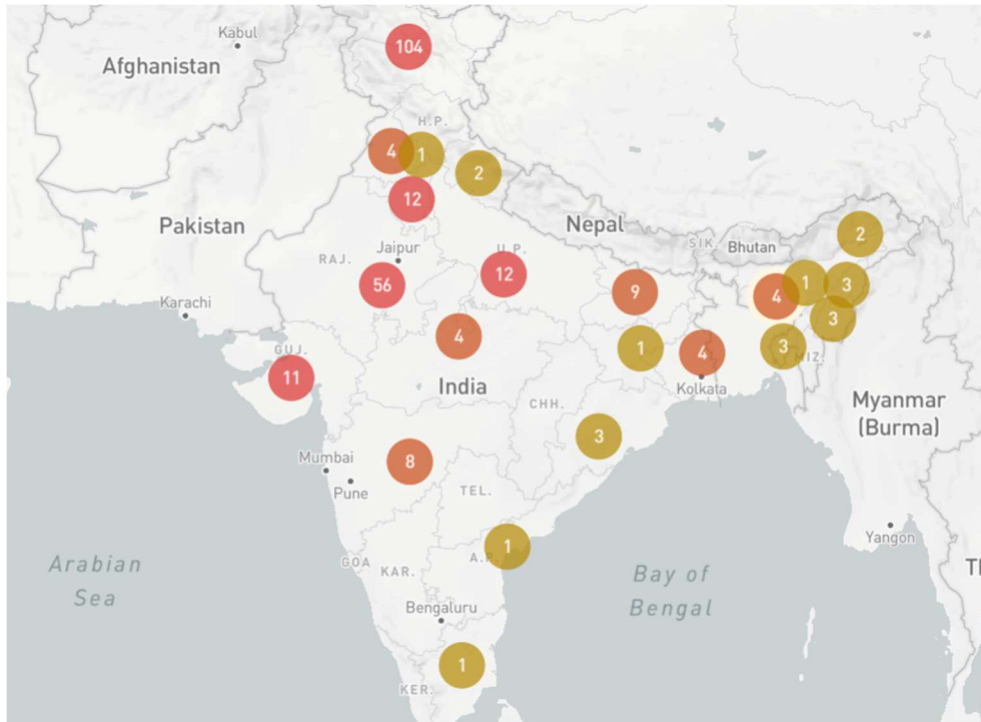
Figure 7: Number of Internet Shutdowns in India by Region, 2012 - 2018 (https://www.internetshutdowns.in/)

Various organizations in India have begun protesting these Internet policies. The Software Freedom Law Center, a Delhi based non-profit, identifies itself as the "Defender of Your Digital Freedom" (Software Freedom Law Center, 2018). Its president and legal director, Mishi Choudhary, said that Internet shutdowns deny people of their basic rights and have large social and economic costs (BW Online Bureau, 2017). As Onion Credit works to expand in India, they will need to determine whether these organizations will significantly impact the future of the Internet in India.

In addition to basic availability of the Internet, there are also unclear regulations regarding data usage. Many organizations have published articles detailing people's opinions and attempts at ensuring the protection of personal data. A study that examined the attitudes and awareness of the people of India on data privacy laws found that the people generally trusted that companies would not misuse the personal data customers gave to them. The surveyed people were not aware of the fact that companies often sell and trade personal information (Kumaraguru & Sachdeva, 2012). Since there are currently few regulations on the handling of personal data in India, properly addressing this issue in the near future will be vital for businesses planning to continue working in fields dealing with this kind of data.

Before Onion Credit continues to expand its business in India, it will need to consider the risk of Internet shutdowns and the changing data usage laws. Already laws regarding the use of Aadhaar card identification numbers, twelve digit numbers used for identification in India, have changed, forcing Onion Credit to modify the platform to meet new standards. Going forward, Onion Credit will be forced to closely monitor these situations in India and weigh the potential risks of investing in this unstable situation against the expected profits.

2.4 Social Media Advertising

As Onion Credit attempts to expand in India, social media advertising will be important in acquiring new customers. This section, looks at the prevalence of social media in the world today and then specifically its use in India.

2.4.1 History of Social Media Advertisement

In the past decade, the number of people using social media has been continually increasing. There will be an estimated 2.77 billion users of social media in 2019, up from 2.46 billion in 2017. These people represented 71% of all Internet users in 2017 (statistica.com). Globally, the average number of social media accounts per Internet user is 5.54 and the average number of actively used platforms is 2.82 (Mander, 2015).

Out of the countless social media platforms available worldwide, there is a handful of sites that are most commonly used globally. One example is Facebook with 2 billion monthly users (see Figure 8). Since these social media platforms have an incredible number of users, companies can use these platforms to advertise to a wide audience.
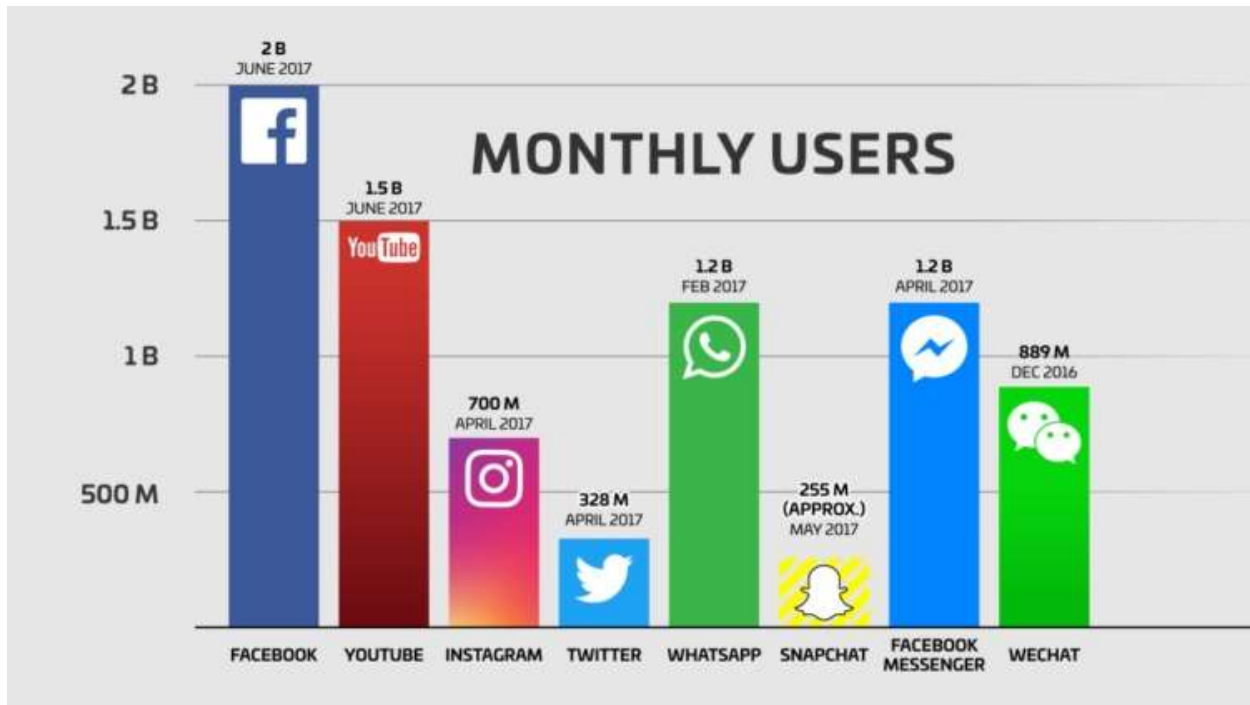
Figure 8: Global Monthly Social Media Users, 2018 (www.bigcommerce.com)

Of 18-29 year-olds with access to the Internet, 81% use Facebook and 64% use Instagram. Among the 30-49 year-olds with access to the Internet, 78% use Facebook and 40% use Instagram (Mickey, 2018). Knowing that a high percentage of younger people use social media, Onion Credit can focus on platforms that attract people of their target audience. Even though young people represent the largest percentage of social media users, there has been a growing number of older users. In 2018, 64% of people within the ages 50-64 years and 34% of people over 65 years reported using social media (Mickey, 2018).

Recently the motivation behind the usage of social media has shifted. In 2014, "sharing opinions" was one of the top reasons for using social media. Instead of sharing content, more people are now using social media to "consume content" (Young, 2018). This trend towards consumption of content has encouraged companies to make advertisements that can capture the attention of social media users.

In comparison to traditional methods of advertising, social media advertising is more efficient for a company because it is less expensive and allows for a targeted audience. The metric cost per thousand impressions (CPM) indicates the average cost of different advertising mediums required to reach one thousand people. The CPM for social media advertising is $2.50, while other traditional advertising media have significantly higher CPMs. For example, direct

mail has a CPM of $57 and broadcast TV has a CPM of $28 (Standberry, 2015). Social media platforms give companies the ability to focus their advertising dollars on specific demographics. They can direct their advertising based on indicators such as age, interests, education level, employment, or relationships. A directed advertising campaign saves a company even more money, because this technique will not waste time an energy on audiences that are less likely to purchase the product.

Many companies are already aware of the importance of social media advertising. Global social advertisement spending increased from $16 billion in 2014 to $31 billion in 2016 (Jolly, 2018). A study published in 2014 indicated that 81% of medium-sized businesses use social media, and of those 94% do so for marketing purposes (Wagner, 2014).

2.4.2 Social Media Usage in India

Social media advertising is increasing in popularity as Internet access and smartphone usage grows. 3.196 billion is the number of current social media users in late 2018, which is up 13% from 2017 (Cooper 2018). This is an astounding 42% of the world's population, and marketing experts foresee a continuation in growth as more people around the globe gain access to the Internet and smartphones. Social media advertising is even eclipsing traditional methods such as television advertising, because people are spending more time on social media platforms than watching television.

In terms of the market in India, there are similarities and differences between the usage of these platforms. For example, Figures 9 and 10 show that Facebook held the substantial majority share of mobile and desktop traffic from October 2017 to October 2018 with 85% and 58% respectively. After Facebook, there is a more even distribution of traffic, with YouTube coming in second. This is in accordance with the graph of global monthly users, but the key finding is the substantial difference between Facebook and the other platforms in both mobile and desktop traffic.
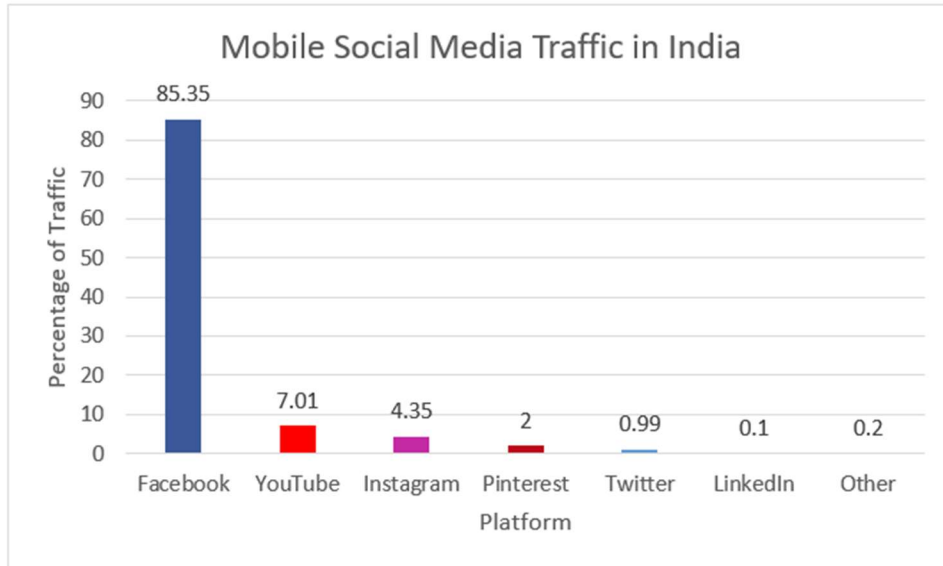
Figure 9: Total Mobile Social Media Traffic in India, 2017 - 2018 (from http://gs.statcounter.com/)

There is a large difference in the usage per platform between mobile devices and desktops, as shown in Figures 9 and 10. There is a substantial decrease in the percentage of Facebook traffic and a similar increase in YouTube traffic. The increased number of YouTube users on desktop devices is likely because larger screen sizes provide better viewing experiences.
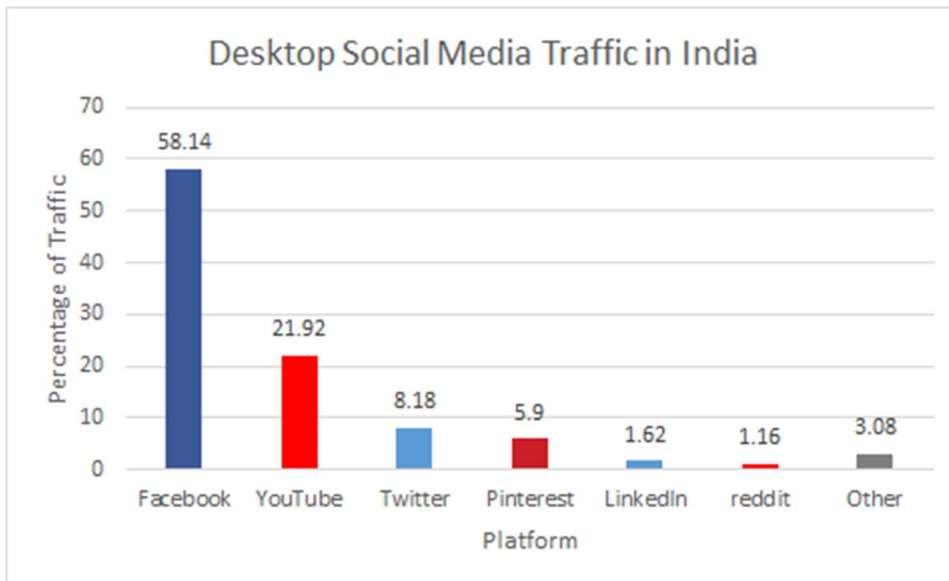
Figure 10: Desktop Social Media Traffic in India, 2017 - 2018 (from http://gs.statcounter.com/)

There are two glaring omissions to both of these graphs, the platforms WhatsApp and WeChat. In China, the most popular messaging application is WeChat, largely because the

Chinese government blocks access to WhatsApp. The case reverses in India with WhatsApp being the dominant platform and WeChat slowly fading in terms of their customer base from 25 million initial monthly users down to around 7 million current monthly users. This is due to many fundamental differences in the platforms and a smear campaign alleging that Indian officials planned to ban the app (Shaikh, 2018).

WhatsApp will soon likely be a larger revenue generator. As of August 2018, Facebook, the owner of WhatsApp, has started to monetize the platform by allowing companies to send information securely through the app (Castillo, 2018). This could lead to the introduction of banner and sponsored advertisements at a later date. WhatsApp has over one billion users every month around the globe, and a large portion of those users are from India, with an estimated monthly user count of more than 200 million (FE Online, 2018). This is a large portion of the total number of smartphones users in India, which was 291.6 Million at the end of 2017 and researchers expect the number to rise to 337 million by the end of 2018 (Tripathi, 2018). This means that currently two-thirds of Indian smartphone users are using WhatsApp at least once a month. Given that it is a messaging application, customers are likely using the app on a daily basis. This daily exposure provides a convenient communications path for companies in India to send advertisements to a constant audience once Facebook finalizes WhatsApp's advertisement methods.

Furthermore, there is massive potential for growth in the social media advertising sector of India. As stated previously, there are only about 300 million smartphones in India and the country has a population of 1.34 billion as of late 2018. This represents less than a quarter of the current population. Tripathi (2018) expects smartphone usage in India to grow by an estimated 16 percent in 2018. With more people acquiring smartphones, one can expect a proportionate increase in the number of social media users in India. As India proceeds to increase their connectivity, companies must remain current on the relevance of new social media platforms and where they are popular. For example, Snapchat is extremely popular in the United States among younger generations, but in other parts of the world people are unaware of its existence (Cakebread, 2017). Our project aims to analyze these differences and present advice for our sponsor on the platforms they should utilize to maximize their advertising efforts.

2.5 Stakeholders

With the operation of the CashMama App requiring cohesive cooperation between numerous entities to enable effective operations, there are several stakeholder groups who will either benefit or be hurt by the company having a strong advertising presence or a successful introduction of new loan products in India. Those who prove to gain from these are the borrowers, NBFIs and Onion Credit, with the risk associated being minimal. New loan products and strong advertising will threaten their competitors, who have no desire for Onion Credit to capture part of their market share.

2.5.1 Borrowers

Borrowers, as the primary customers for Onion Credit, have much to gain from access to a wider variety of product offerings. With more loan products they can choose one that suits their needs more accurately. While borrowers' benefit from advertising is less direct, knowing what Onion Credit and the CashMama app have to offer allows them to be a more informed consumer, which is especially important when it comes to making a financial decision such as taking out a loan. Through this project's recommendations, the borrowers' needs must remain at the forefront of suggestions and considerations.

2.5.2 KrazyBee

In the current structure of the loan process, once Onion Credit approves a loan, it is disbursed through KrazyBee. When customers use the CashMama App to make repayments, KrazyBee receives part of the revenue from each loan. Being this involved in the lending process makes this NBFC a major stakeholder in the CashMama app. With successful advertising, more borrowers will take out loans, presenting KrazyBee with an increased cash flow from interest payments and fees. The benefit of having a wider range of loan offerings is somewhat difficult to observe for NBFIs, but still important. By having a variety of loan products, more borrowers will have access to offerings that are suited to their needs, increasing loan disbursement potential, and therefore increasing revenue for KrazyBee.

2.5.3 Onion Credit

The entity with arguably the most at stake is Onion Credit. The company will ultimately have to decide whether to implement suggestions proposed by this IQP, with recommendations taking into account current and future customer feedback. If implementation of these suggested

improvements proves successful, Onion Credit's operations will scale up, providing increased revenue. Otherwise, they may not recover their sunk investment into certain advertising platforms, or in a product that somehow fails to correlate with this project's market research.

2.5.4 Competitors

Competitors are online lending platforms with much to lose should Onion Credit's application, CashMama, rise in popularity. With another mobile lending application vying for customers, competitors will likely lose market share, assuming the platform is a success. This study analyzes competitors primarily to determine which of their advertising campaigns or products are successful. This informed our recommendations concerning social media platforms that Onion Credit should employ, and which loan products are popular.

3. Methodology

The goal of this project was to recommend social media advertising platforms for Qianli and Onion Credit, and to develop recommendations for future loan products.

To achieve the project goal, our team had the following objectives:

1. Understand the current usage of social media advertising and available loan product offerings in India
2. Examine current sentiments towards social media platforms and loan products of current and potential customers in India
3. Create recommendations for social media platforms and loan products for Qianli and Onion Credit based on analyses and findings.

To accomplish the three objectives, the team conducted interviews, a competitor analysis, surveys, and a social media platform analysis. The gathered information came from field experts, current customers, and potential future customers, as well as from research on loan product offerings by different NBFCs and advertising options on various social media platforms. Figure 11 below shows the project goal, objectives, and relevant methodologies.
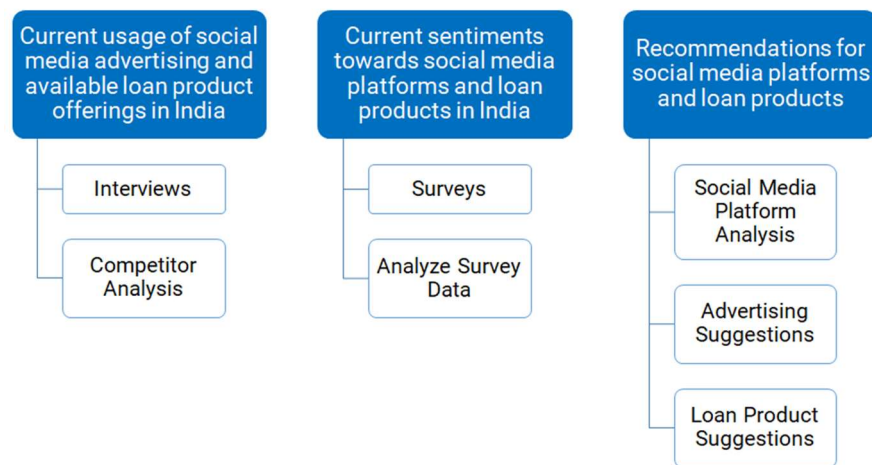
Figure 11: Objectives and Corresponding Methods

3.1 Social Media Advertising and Loan Product Offerings in India

The first objective was to understand the current usage of social media advertising and available loan product offerings in India. The team used interviews and a competitor analysis on lending platforms in India to collect the information.

3.1.1 Interview Social Media Advertising Expert

The team interviewed Arpita Shah, a social media and digital strategies lead at Bartle Bogle Hegarty: India (BBH India). The team contacted her via email by first describing our project goals, and then following up with a request for an interview (See Appendix B). We spoke to her via a Skype call. Two team members were present for this interview, with one person designated to conduct the interview and the other person designated to transcribe the conversation. The interview was in English, with no translators present, and the interviewers began by asking for permission to record the conversation.

After introducing our project and ourselves, the interview focused on asking questions about social media advertising in India and the specific differences and challenges associated with this market, specifically considering the type of loan products that Onion Credit provides (See Appendix C). The next set of questions inquired about the usage of specific social media platforms in India to confirm our prior background research of each individual site.

The interview then culminated with questions about any trends that social media marketing expert have seen over the past 3-5 years to get a better understanding of where the state of advertising has been and will go in the near future.

3.1.2 Interview Expert on Finance in India

Next, the team conducted an interview with a Professor K.V. Bhanu Murthy from the University of Delhi School of Economics, who has experience and knowledge in Indian finance, specifically banking. Similar to the previous interview, the team contacted the professor via email (see Appendix D), and conducted a written email interview at the request of Professor K. V. Bhanu Murthy, where he sent back written responses to the interview questions.

Understanding the current stage of the NBFC sector in India and borrowers' preferences was the goal of this interview. The questions we asked involved some major concerns regarding NBFCs in India, including data privacy and company image, and the benefits and drawbacks of the different types of loans NBFCs provide (see Appendix E). In addition, the team asked how

cultural reasons can affect repayment and what advice he has for new online lending platforms entering the market.

3.1.3 Transcribe the Interviews

For the social media advertising interview, the scribe took the audio recording from the meeting and transcribed it in full. The team then summarized the conversation and identified points regarding social media usage in India and considerations for a company starting to advertise in India.

For the finance interview, the team modified grammar and formatting of this email interview to facilitate readers' understanding. This interview provided context to the lending industry in India to aid our project team's understanding and ideas to create a successful online lending platform in India

3.1.4 Competitor Analysis of Loan Products

As similar loan providers are already operating in India, the team examined the differences and similarities in their existing loan offerings and compared the characteristics of these offerings against Onion Credit's current options. The team received a list of the online lending platforms for comparison from Mr. Sharat Konatham, the head of Onion Credit. The platforms were CASHe, Paysense, EarlySalary, MoneyTap, and AnyTimeLoan. Specific factors the team examined were loan type, loan security (whether the loans need collateral), loan term, loan amount, interest rates, processing fees, and target audience, where target audience expands to applicant restrictions and advertising themes. The team used the partial loan product information attached to the list from Onion Credit, as well as information obtained from the official websites of the lending platforms to analyze and compare the factors.

3.2 Social Media Platform and Loan Product Sentiments

The second objective was to examine the sentiments towards social media platforms and loan products of current and potential future customers in India. The team conducted surveys of two target populations: current users of CashMama app and university students (see Appendix F and H).

The surveys for both populations included questions about social media usage and loan product preferences. To examine opinions on social media platforms, the surveys had

respondents list the top social media platforms they frequent and select how often they used each platform. The questions on loan products involved the top considerations for borrowing a loan, the purposes or potential purposes for taking a loan, and the corresponding loan type, loan amount and term. These questions aimed to identify user and student priorities in loan considerations, and extract the repeating themes in loan purposes and preferences in loan products. This information provided ideas on developing new loan products based on customer concerns and demands.

3.2.1 Survey CashMama Users

With permission from our sponsor, the team conducted an online survey through Qualtrics with CashMama's current users in India (See Appendix F). After receiving final approval from our sponsor in regards to our questions, the team distributed the survey to registered CashMama users via email. For these surveys, in addition to understanding social media usage and loan product preferences, there were questions on basic demographics and user experience of the lending platform. The demographic questions aimed to find potential biases due to personal backgrounds and to demonstrate any potential differences between groups. At the request of the sponsor, the team added survey questions on user experience with two major components. The first part involved color scheme preferences, which examined the need for changing the app design. The second part involved determining the satisfaction level of current users and finding any repeated themes within the user comments and suggestions for the application process. This allowed the team to recognize areas of improvement from a customer perspective.

3.2.2 Survey University Students in India

The team obtained contact information for faculty from various prominent universities in India, and asked them for assistance in distributing our online survey (see Appendix G). Our email to these professors asked them to email to their students a link to the online Qualtrics survey that the team developed. University students are future working professionals. Thus, the assumption was that this sample population would serve as a reasonable representation of the potential future customers of Onion Credit's lending platform, CashMama.

This survey included general demographic questions for evaluating differences in the responses (See Appendix H). The question details include the school they attend, their major,

and their year in university. The year in university helped to narrow the scope to students who were closer to graduation and entering the workforce, and the team used the other demographic questions to identify potential differences or similarities in the responses for social media preferences and loan products based on school, major, and the level in school of the students. In addition, the surveys to university students included one question addressing user experience, which inquired about their preference for color scheme.

3.2.3 Analyze Survey Data

To examine the responses on social media usage from the surveys of Indian students and CashMama users, the team ranked the most used platforms from each of the surveyed populations, and created charts for the frequency of the social media platforms used. This served to visualize how social media usage varies for the two surveyed populations and the differences between current working professionals and students.

For the survey question on user experience, the team first ranked color schemes based on the number of responses for each choice, for both CashMama users and university students. In addition, the survey for CashMama users included a user feedback section, which consisted of a multiple-choice question on satisfaction level and an open response question. To analyze the information, our team coded the repeating themes in the open response question (see Appendix K). We located themes expressed in each response, including "health," "education," "business/foundation," and others. If respondents mentioned more than one theme, the process counted each separately. These steps abled our research to locate popular themes by charting them.

The team approached the survey questions on loan product preferences from three areas. To analyze the question on preferences for the type of loans, the team counted the responses for each selection, and compared the results from CashMama users and students to identify a general preference for the type of loans. To analyze the survey questions on loan purposes, which was an open response question, the team reviewed the answers for both the student and CashMama user populations and coded the repeating themes in the responses (see Appendix L). The scales for loan amount and loan term questions received quantitative results, thus the team plotted the data for analyzing clusters to identify loan preferences for each population. This was useful for comparing preferences of short-term and long-term loans, as well as the most popular loan amounts and terms for the different populations.

3.3 Recommendations for Social Media Platforms and Loan Products

The third objective was to utilize the team's acquired data in order to create clear and concise recommendations for our sponsor. The team divided this into two main sections, loan recommendations and social media recommendations. In regards to the loan amounts, the team narrowed down the results to the most popular loan amounts and terms. For social media, we researched the most popular and efficient platforms to advertise on based on an interview with a social media marketing expert and the preferences of the survey respondents.

3.3.1 Perform Social Media Platform Analysis

Using the interview on social media usage in India and the survey results, the team was able to identify popular social media platforms in India. After understanding the popularity of the certain platforms, the team then researched the features available on each platform and the costs associated with advertising. Each social media platform has a website page that details the features available, and prior reports created by third parties indicate the average costs of various advertising strategies.

3.3.2 Develop Recommendations for Sponsor's Online Lending Platform

The team's deliverables consist of recommendations for loan offerings and social media platforms for advertising. To create recommendations for loan offerings, the team used the results from the competitor analysis and surveys. The competitor analysis compared the offerings from other online lending platforms, and the analysis of survey results provided specific recommendations for the loan offerings based on user preferences.

To find other areas of improvement for CashMama, the team summarized the main points of the competitor analysis, including available loan interest rates, fees, and special features. The finance expert interview provided information on cultural shifts affecting the lending industry, which helped the team determine what purchases lending platforms should target in the near future.

Using our survey results specific to social media platforms, the team located the most popular social media platforms among CashMama users and Indian university students. The next step was to compare the aforementioned platforms across a variety of factors in our social media platform analysis. Accounting for these analyses, the team recommended the best sites for our sponsor to use for advertisements to reach potential customers in India.

3.4 Summary

This project's mission was to conduct research to facilitate the launch of Qianli Technologies and Onion Credit's Indian online lending platform. To accomplish this mission, the team first conducted interviews with both a marketing and Indian banking expert in order to confirm and expand upon our background research, in addition to gaining new insights about potential opportunities. The team then conducted a competitor analysis to compare different loan products on other platforms. This helped our team identify an appropriate loan amount and loan term range for our online survey questions. In addition, the team developed questions to gauge desired loan purposes and social media usage and frequency. Once we received survey results, the team then analyzed the most popular platforms in order to gain a holistic understanding of the benefits and challenges of each. Finally, the project provided final recommendations to our sponsor for both loan amounts, terms, and best platforms on which to advertise.

4. Results and Analysis

Within this chapter are findings and inferences from expert interviews familiar with Indian social media marketing and finance, as well as from surveys and other relevant research. The chapter begins with a summary of important themes from each interview, followed by a competitor analysis of lending platforms currently operating in India. The next sections analyze survey results to present a clear picture of respondent preferences and observations, and examines findings from our social media platform analysis. Finally, the team presented recommendations and suggestions for our sponsor regarding loan product development and social media advertising in India.

4.1 Expert Interviews

This section includes a summary of the team's interview with a social media advertising expert and an interview with a loan industry expert.

4.1.1 Interview with Arpita Shah

The team interviewed Arpita Shah, a manager of social media and digital strategies from Bartle Bogle Hegarty: India (BBH India). At BBH India, Ms. Shah creates advertising campaigns for a variety of companies. In this interview (see Appendix H), she opined about the factors a company must consider when starting to advertise on social media in India.

Throughout the interview, Ms. Shah stressed the importance of tailoring an advertising campaign specifically for the audience and the company's goal. Since Onion Credit plans to target young professionals, she suggested that Facebook, Instagram, and LinkedIn are platforms Onion Credit could advertise on to reach people of this age range. Within each platform, there are options to narrow down the target audience by demographic.

When creating an advertising campaign, a company must first determine their goals. Since Onion Credit is a new company, they need to balance client acquisition and brand awareness. Ms. Shah explained, "From small companies to big players, everyone is playing the loan game [in India]." Therefore, Onion Credit will need to make the most of their advertisements to convince customers that their product stands out. Consequently, Onion Credit should consider which platforms provide the most efficient options for reaching this goal.

According to Ms. Shah, social media advertising in India lags behind that in the United States by four or five years, and she thinks, "[in India] people are still learning the many ways in terms of how to use digital in their entire marketing plan." This means that advertising is generally less expensive in India, in comparison to the United States, because there are fewer companies using these platforms to advertise. Ms. Shah believes companies that do not use social media advertising are ignoring a valuable medium that companies in the United States have already demonstrated as effective. Companies with an online product, like Onion Credit, will especially benefit from a social media presence because that will allow the consumers most likely to use their product to see the advertisements on social media.

To leverage an advertising campaign fully, Ms. Shah stated that it is important to make advertisements that consumers will enjoy. Any advertisement that appears on social media is interrupting a user's experience. A high quality advertisement is more likely to gain the attention of the user, and encourage them to interact with the company.

4.1.2 Interview with Prof. K.V. Bhanu Murthy

The project team first interviewed Professor K.V. Bhanu Murthy, a professor of economics at the University of Delhi School of Economics. His expertise in the subject of banking includes Non-Performing Assets, banking structure, conduct and performance approaches, and competition in this sector. He explained that his past NBFC experience involves mutual funds, not NBFC-funded lending platforms.

In his experience, Professor Murthy indicated that the personal loan market in India mainly targets personal vehicle purchases and housing loans. He stated that personal consumption is not widely encountered in loans compared to other purposes. When asked whether the personal loan market is oversaturated, Professor Murthy strongly emphasized the importance of Indian consumers' increased need for vehicles. He claimed that several reasons for this demand are the rise of delivery vehicle jobs requiring mopeds, the social pressure on middle classes to move from scooters to cars, and an increase in the number of women drivers in metropolitan and suburban areas.

With respect to housing and household goods, people have several reasons for taking out loans of a wide range of amounts. Professor Murthy first stated that even house cleaners in India are looking to buy homes and homebuilders have begun recommending air conditioners over

alternative means, like fans. Similarly, it has now become reasonable for shops to purchase air conditioners in lieu of fans with the help of a loan.

Even though the loan market is growing along with consumerism in India, Professor Murthy explained that there are two major cultural reasons for borrowers to repay their loans. The first reason is the sense of dishonor that surrounds the concept of not paying back a debt. The second is the community's fear of misappropriating "Sarkari Paisa," or government money, the stigma of which cause many people to repay their loans on time.

Professor Murthy did not believe that NBFCs could compete with the deep pockets and security of traditional banks. However, he recommended that NBFCs and lending platforms partner with commercial banks for financing and refinancing, while focusing on marketing and other strategic skills. Furthermore, Professor Murthy said that these lending platforms could improve their public image by promoting good financial practices including saving or investing.

4.2 Competitor Analysis

To examine existing loan offerings from other lending platforms in India, the team conducted research on their loan offerings and target audience, and analyzed a small set of the top lending platforms in India. Using information from these platforms, the team performed a competitor analysis to compare the offerings of these lending platforms with CashMama and one another to produce a summary of strengths and suggestions for CashMama's current loan products.

The team analyzed five Indian platforms: CASHe, Paysense, EarlySalary, MoneyTap, and AnyTimeLoan. Our sponsor's partner, Onion Credit, provided the list for analysis with partial loan product information attached. In addition, the team gathered further details from official websites for the platforms. The information included several categories: loan type, loan security (whether the loans need collaterals), loan term, loan amount, interest rates, processing fees, and target audience. Information on target audience involve the platforms' advertising and applicant restrictions, such as employment verification, salary restriction and location-based disbursement.

4.2.1 CASHe

CASHe provides personal short-term loans for salaried people. The minimum salary for eligible applicants is at least ₹15,000 per month, with employment verification (see Table 1). On

the website homepage, CASHe claims to be "India's Most Preferred Digital Lending Company for Young Salaried Millennials". Both the applicant eligibility requirements and their advertising describe their target audience as salaried young professionals, which is the same target population of CashMama.

CASHe's offerings overlap a little with CashMama's, but provide more variety in selections. The loan amount available for borrowing range from ₹5,000 to ₹200,000, and the loan terms are 15 days, 1-month, 3 months, or 6 months. To prevent borrowers from repaying small loan over a long period, CASHe limits the loan amount available for each loan term selection. While loans with 15 days and 1-month repayment term have minimum loan amount of ₹5,000, the minimum loan amount is higher at ₹19,000 and ₹25,000 for three and six month repayment terms. In addition, to appeal to borrowers who prefer larger loan amounts with extended terms, CASHe has a reward program to provide more options exclusively for priority members. The exclusive loan offerings range up to ₹300,000 for a maximum term of 1 year, as Table 1 shows in red.

The maximum amount for borrowing depends on the loan term as well as the monthly net salary of the borrowers, which relates to their ability to repay the loan. In general, the shorter the loan terms are, the lower the amount is available for borrowing. However, the fixed maximum loan amount is very high in comparison to the term options. Thus, CASHe places an additional requirement of the loan amount not to exceed a specified portion of the monthly net salary. For loans of shorter term, the maximum loan amount shall not exceed 30% to 40% of the borrower's monthly salary, whereas for loans of three to six months, the maximum loan amount can range from 100% to 200% of the borrower's monthly salary.

The official website of CASHe lists the interest rates for the different loan term and amount combination. The flat interest rates apply to the loan amount for the entire loan term, and these rates apply to 15-day and one-month loans. The equivalent monthly rate is 3.25% to 3.5%. For longer-term loans, the interest rates apply to the entire loan amount for one month, and accumulate again in the following month. The monthly rates are lower for the longer-term options, which may due to the larger loan amount associated with these loan terms. CASHe also appeals to borrowers by offering lower interest rates for priority members of their reward program. These interest rates also vary by the loan offerings. In general, a higher interest rate correlates to a shorter loan term. In the 15-day loan cases, the flat interest rate appears lower, but

by converting to nominal monthly interest rate (multiplying by 2), the interest rate for short-term loans is very high among the analyzed companies and compared to CashMama's 3% nominal per month rate.

In addition to the higher interest rate for short-term loans, CASHe has ambiguous information on the processing fee, where one version has a significantly lower processing fee for the 15-day and 30-day loans. This contradiction creates difficulties for comparing the processing fees among the companies and with CashMama, and can present confusion to borrowers seeking loans and researching such information.

Loan Term	Loan Amount (in ₹)	Interest Rate	Processing Fees (in ₹)
15 days	5000 to min(50000, 30% monthly net salary)	1.75% flat	[Version 1] 500 for amount of 5,000 to 15,000; 750 for amount of 16,000 to 30,000; 1,250 for amount of 31,000 to 50,000 [Version 2] 200 for amounts up to 25,000; 250 for amounts of 26,000 to 50,000
1-month	5,000 to min(50000, 40% monthly net salary)	3.25% flat	
3 months	19,000 to min(100000, 100% monthly net salary)	2.75% per month	[Version 1] 2% of amount borrowed [Version 2] 400 for amount of 19,000 to 25,000; 500 for amount of 26,000 to 50,000; 750 for amount of 51,000 to 75,000; 1000 for amount of 76,000 to 100,000
6 months	25,000 to min(200000, 200% monthly net salary)	2.50% per month	[Version 1 & Version 2] 1,250 for amount of 100,000 and less; 1,750 for amount of 101,000 to 149,000; 2,250 for amount of 150,000 and above
1 year	Up to min(300000, 360% monthly net salary)	Up to 2.50% per month	[Version 1 & Version 2] max(1500, 3% of amount borrowed)

Table 1: CASHe Loan Information (www.cashe.co.in)

4.2.2 Paysense

Paysense provides a variety of loan products, such as personal loans, vehicle loans, and home renovation loans. For personal loans, Paysense offer services to both salaried employees and self-employed individuals. The income restrictions for eligible applicants are different, salaried employees need a minimum monthly income of ₹12,000, while self-employed

individuals need a minimum monthly income of ₹15,000. In comparison to the other analyzed platforms, Paysense's eligibility criteria is loose. On the other hand, Paysense has contradicting information regarding the age restriction of applicants on their website. While one instance claims that the age limit for age of eligible applicants is between 21 and 65, the other instance narrows it to 21 and 60.

Paysense specializes in equated monthly installment loans, or EMI loans, which are medium- to long-term loans with multiple repayments. Thus, the loan terms are longer than offerings by most other platforms, with the exception of MoneyTap. The loan term selections available for Paysense are 3-24 months, generally with three-month intervals. The loan amount ranges between ₹5,000 and ₹200,000. Similar to CASHe, Paysense assigns limits to the amount for borrowing for each loan term. Table 2 shows the general limits, but the additional limits are not available from public sources since they depend on customer information input.

Paysense has considerable flexibility in loan amount and term selections for borrowers compared to the other platforms, excluding MoneyTap. The loan amount and term combination puts Paysense at a more competitive state by having a lower limit for the loan amount associated with a longer-term loan. The lower limit for a three-month loan is 5,000 from Paysense. Subsequent loan offerings also have very low minimum loan amounts. This allows borrowers to repay the same loan amount during a longer period, which appeals to borrowers who prefer multiple repayments of small amount.

Paysense offers interest rates between 1.4% and 2.3%, depending on the loan selection and credit of the borrowers. This range of interest is very competitive among the five platforms, closely following the offering of MoneyTap. The processing fee Paysense demands is up to 2.5% of the borrowed amount, according to the website. This is a reasonable processing fee, but not as competitive as EarlySalary or MoneyTap's offerings.

Loan Term	Loan Amount (in ₹)	Interest Rate	Processing Fees (in ₹)
3 months	5,000-200,000	1.4-2.3% per month	Up to 2.5% of borrowed amount
6 months	10,000-200,000		
9 months	15,000-200,000		
12 months	25,000-200,000		
15 months	42,000-200,000		
18 months	56,000-200,000		
24 months	84,000-200,000		

Table 2: Paysense Loan Information (www.gopaysense.com)

4.2.3 EarlySalary

The EarlySalary strategy is to provide instant salary-advance loans for young professionals. Their primary advertising speaks to its target audience of salaried employees. In addition, EarlySalary has salary and age restrictions for applicants of loans. The borrowers must be of age 21 and above, with a monthly salary of no less than ₹18,000. There is no employment verification during the application process for the loan. Instead, EarlySalary requires the bank account from applicants to validate salary data, and thus verify the employment status of borrowers.

Because EarlySalary focuses its products on salary advance loans, the loan term and amount selections are more limited compared to most of the other platforms, excluding AnyTimeLoan and CashMama (see Table 3). The loan terms available range between 7 and 43 days, and the loan amount is between ₹8,000 and ₹100,000, in multiple of ₹1,000. The loan amount and term combination can be less feasible, such as ₹100,000 with a 43-day repayment period. Thus, EarlySalary assigns a loan amount limit using customer information. In addition, since payday loans may appeal less to customers due to the short repayment period, EarlySalary attempts to minimize the effect by lowering interest rate, enabling prepayment without penalty, and lowering processing fees.

The interest rate of EarlySalary is generally 2.5% per month, accumulating daily, but there are lower rates available by negotiation. This interest rate is lower than CASHe, AnyTimeLoan (for entry-level members), and CashMama, but higher than Paysense and MoneyTap. To make offerings more appealing to borrowers, there is no prepayment penalty for

EarlySalary, and as interest accumulates daily, borrowers only need to pay interest up to the date of repayment, which means that customers can save money on interest by paying early.

Processing fees for EarlySalary vary based on the amount of loan and the number of previous loans taken, ranging between ₹150 and ₹600 for loans not exceeding ₹60,000. For loans above ₹60,000, EarlySalary takes 1% of borrowed amount. In addition, the processing fees also decrease for subsequent loans. These processing fees are much lower than what CashMama requires, and in general is the lowest among the analyzed platforms with defined processing fees.

Loan Term	Loan Amount (in ₹)	Interest Rate	Processing Fees (in ₹)
7 to 43 days	8,000 to 100,000 In multiples of 1,000	2.50%, with lower rate available for negotiation	8,000 to 10,000: 150
			11,000 to 30,000: 300 for the first loan, 150 for subsequent
			31,000 to 60,000: 600 for the first loan, 250 for subsequent
			61,000 to 100,000: 1% of borrowed amount for the first loan, 300 for subsequent

Table 3: EarlySalary Loan Information (earlysalary.com)

4.2.4 MoneyTap

Compared to the other lending platforms and CashMama, MoneyTap has very strict customer restrictions. The eligible applicants must be between the ages of 23 and 55, with a monthly salary of no less than ₹20,000. However, MoneyTap not only accepts salaried individuals, but qualifying self-employed professionals as well, such as doctors, lawyers, and business owners. The advertising of the platform does not show preference for a specific population, though the applicant restriction implies a preference for young salaried individuals. The strict eligibility criteria are in contrast with the loan offerings of MoneyTap, which include a wide variety of selections for relatively low interest rates and fees.

MoneyTap has the largest range for loan term and amount selections among all platforms (see Table 4). Similar to Paysense, MoneyTap provides EMIs that are longer in loan term and larger in amount. However, MoneyTap also has options available for short-terms with smaller loan amounts. The loan term ranges from two months to 36 months, and the loan amount is

between ₹3000 to ₹500,000. To break down the available options combining the loan amount and terms, there are selections of ₹3,000, ₹5,000 and ₹10,000 that borrowers have to repay in the two-month period. The other options are the EMI loans. Borrowers can select a loan amount from ₹25,000 to their available credit line or ₹500,000, whichever is lower, and choose their loan terms of 3, 6, 12, 18, 24, or 36 months for repayments. The website contains a loan application demo that helps borrowers to see the available loan options MoneyTap offers.

In addition to the wide variety of selections that appeal to the customers, MoneyTap has the lowest interest rate available among the five analyzed platforms and CashMama. The general interest rate is 1.5% per month for two-month loans, and 1.25% for EMI loans, and the exact interest rate depends on individual credit score, repayment record, and defaults. Processing fees are lower compared to those of CashMama and AnyTimeLoan, but higher than the fees of EarlySalary. The specific loan details range from ₹199 for loan amount of ₹3,000, to 2% of borrowed amount between ₹25,000 to ₹500,000.

Loan Term	Loan Amount (in ₹)	Interest Rate	Processing Fees (in ₹)
2 months	3,000	1.5% per month, exact rate depend on credit	199
2 months	5,000	1.5% per month; exact rate depend on credit	399
2 months	10,000	1.5% per month; exact rate depend on credit	499
3, 6, 12, 18, 24 or 36 months	25,000 to 500,000	1.25% per month; exact rate depend on credit	2% of borrowed amount

Table 4: MoneyTap Loan Information (www.moneytap.com)

4.2.5 AnyTimeLoan

Among the five platforms analyzed, AnyTimeLoan is the only one operating as a peer-to-peer lending platform to offer personal loans. Their business accepts self-employed individuals and salaried employees, similar to MoneyTap, but without as many eligibility restrictions. Beside personal loans, AnyTimeLoan provides education loans for primary and secondary school, and Micro, Small and Medium Enterprises (MSME) Business Loans. This study only analyzes personal loans from this platform.

As shown in Table 5, the loan offerings of AnyTimeLoan are similar to those from EarlySalary, but with a shorter range of loan term selections, and larger range of loan amounts. The loan amount available is between ₹1,000 and ₹100,000, and the loan term ranges from one day to 30 days. AnyTimeLoan offers short-term loans with a highly varying loan amount, and thus the platform limits the loan amount available to first-time borrowers by assigning membership levels, with the higher ranges available for high-level members of the peer-to-peer platforms. The information in red provides the detailed offerings available to different members. At the first level of membership, users can borrow from ₹1,000 to ₹50,000; the second-level members can borrow up to ₹70,000; and the highest-level members can borrow up to ₹100,000. The maximum loan amount is subject to eligibility based on customer information, similar to the other platforms.

General interest rates are between 0.05% per day and 0.15% per day, which also breaks down by the level of membership. For the general users at the first level of membership, the interest rates are 0.07%, 0.1%, and 0.15% per day for 1-6 days, 7-14 days, and 15-30 days of loan period, respectively. These convert to 2.1%, 3% and 4.5% nominal monthly interest rates, with the 4.5% interest rate for 15-30 days the highest compared to all other platforms and CashMama. Although lower interest rates are available for higher-level members, the entrance-level interest rate is too high for a loan that borrowers need to repay in less than a month.

The processing fee AnyTimeLoan charges is ₹750 or 1.5% of the loan, whichever is higher. Taking the higher amount of the two options assures the profitability. However, it is relatively less reasonable for the loan amount proposed. As the loan available ranges from ₹1,000 to ₹100,000, for the applicants seeking a smaller amount of loan, such as the minimum amount of ₹1,000, the processing fee AnyTimeLoan charges can be too high relative to the loan they want. From the customer perspective, with the processing fee too high, borrowers seeking small loan amounts are less likely to choose the loan product on AnyTimeLoan's platform. This places AnyTimeLoan at a disadvantage when competing with other platforms.

Loan Term	Loan Amount (in ₹)	Interest Rate	Processing Fees (in ₹)
1 to 30 days	General: 1,000 to 100,000	Ranges from 0.05% to 0.15% per day	max(750, 1.5% of borrowed amount)
	Silver members: 1,000 to 50,000	Silver members: 0.07% for 1-6 days; 0.1% for 7-14 days; 0.15% for 15-30 days	
	Gold members: 1,000 to 70,000	Gold members: 0.05% for 1-6 days; 0.07% for 7-14 days; 0.1% for 15-30 days	
	Platinum members: 1,000 to 100,000	Same rates as for Gold members	

Table 5: AnyTimeLoan Loan Information (www.anytimeloan.in)

4.2.6 Summary

Upon comparing the categories, consistency exists for loan type, loan security, and target audience. All of the reviewed platforms provide unsecured personal loans to individuals. Since CashMama only provides personal loans, the comparison with other companies, some of which offer additional services, focuses specifically on personal loans. There are major similarities in the target audience of the platforms, from the perspective of customer eligibility and platform advertising (see Table 6). After gathering and summarizing the information, the team identified the following traits for the analyzed platforms:

1. All platforms offer personal loans. Some platforms offer additional types of loans.
2. All platforms offer unsecured loans. The loans do not require collaterals for any amount or term.
3. All platforms provide location-based services.
4. Most platforms prefer salaried employees as borrowers. Some platforms offer loans to self-employed individuals as well, but usually with additional restrictions.

Company	Loan Type	Security	Employment Verification	Salary Restriction	Age Restriction	Target Audience	Location Based
CASHe	Personal Loan	Unsecured	Yes	15,000+	18+	"India's Most Preferred Digital Lending Company for Young Salaried Millennials"	Yes
Paysense	Personal Loan Vehicle Loan Home Renovation Loan Mobile & Electronics Loan	Unsecured	No	Salaried: 12,000+ Self-employed: 15,000+	[Version 1] 21-60 [Version 2] 21-65		Yes
EarlySalary	Personal Loan Purchase on Credit School EMIs	Unsecured	No	18,000+	21+	"... [Supporting] young professionals to come over their ... financial need"	Yes
MoneyTap	Personal Loan	Unsecured	No	Salaried and self-employed: 20,000+	23-55		Yes
AnyTimeLoan	Personal Loan Education Loans Business Loans	Unsecured	No	Salaried and self-employed	Not specified	"P2P lending... instant... loans to salaried individuals & self-employed individuals (MSME's)"	Yes

Table 6: Competitor Comparison

The loan offerings of these platforms vary in many areas. Upon analyzing the information combined, the team identified the following traits on loan offerings and specifications:

1. MoneyTap has the widest range of selections for loan terms and associated loan amounts, by offering both short-term loans and EMIs of longer period. EarlySalary and AnyTimeLoan offers payday loans, but the selections are much more generous compared to CashMama's offerings. CashMama has comparatively more rigid loan offerings available to customers.

2. MoneyTap has much lower interest rates compared to all other platforms. The interest rates of other platforms are generally in the range of 2% to 3%, with the exception of AnyTimeLoan having higher rates for 15-30-day loans. CashMama's interest rate is within the general range.

3. CASHe has contradicting information on processing fees. Among the rest, EarlySalary has the lowest processing fees, and AnyTimeLoan has relatively unfeasible processing

fees. At 8-12% of borrowed amount, CashMama has much higher processing fees than Paysense, EarlySalary and MoneyTap, but more reasonable compared to AnyTimeLoan.

4. To attract returning customers, CASHe and AnyTimeLoan have membership programs that offer more loan selections with lower interest rates and fees for high-level members.

4.3 Surveys of CashMama Users and University Students in India

On behalf of the project team, the project sponsor distributed the appropriate survey to CashMama users, while deans, directors, and professors at Indian universities sent surveys out to the students. The team received 125 responses from CashMama users and 130 responses from university students. Considering the amount of total questions and the level of willingness to participate, the majority of the questions were optional to answer. Therefore, some questions received fewer responses than the total number of administered surveys.

4.3.1 Demographics

As Figure 12 and Figure 13 show, the distributions of gender for CashMama users and university students are similar, with the majority of respondents being males. This could result from the majority of the CashMama users being males, but the skew may not apply to the general population of loan borrowers. For students, this might result from the majority of responses coming from technical schools, which traditionally have a higher ratio of males to females in India. In both cases, response bias may exist because of the skewness.
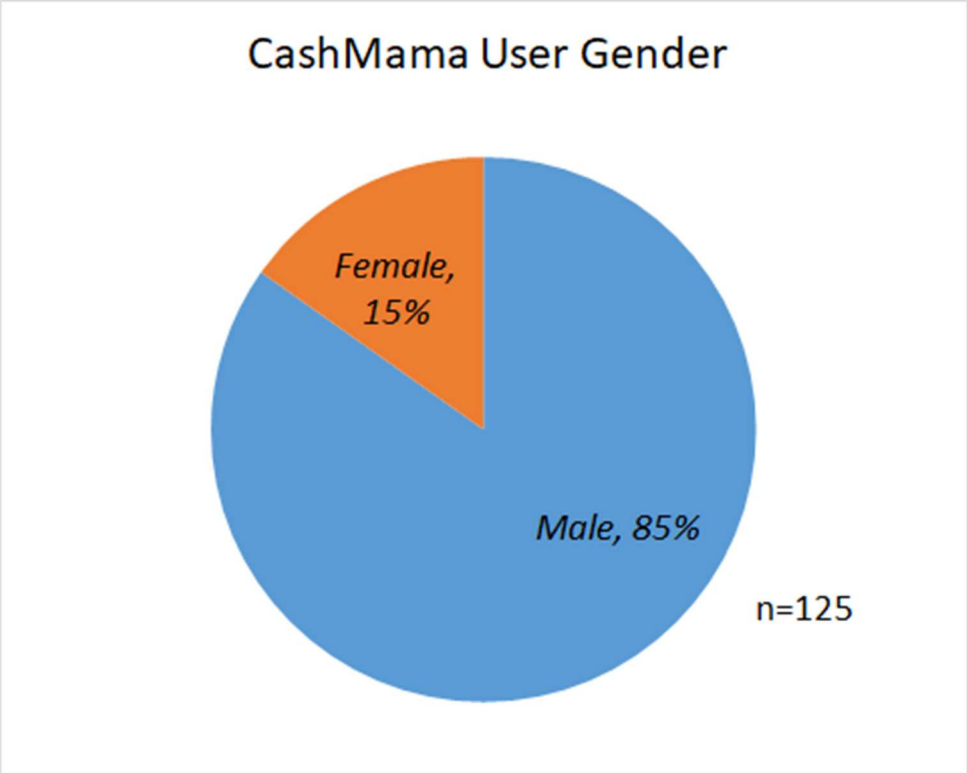
Figure 12: CashMama User Gender Comparison
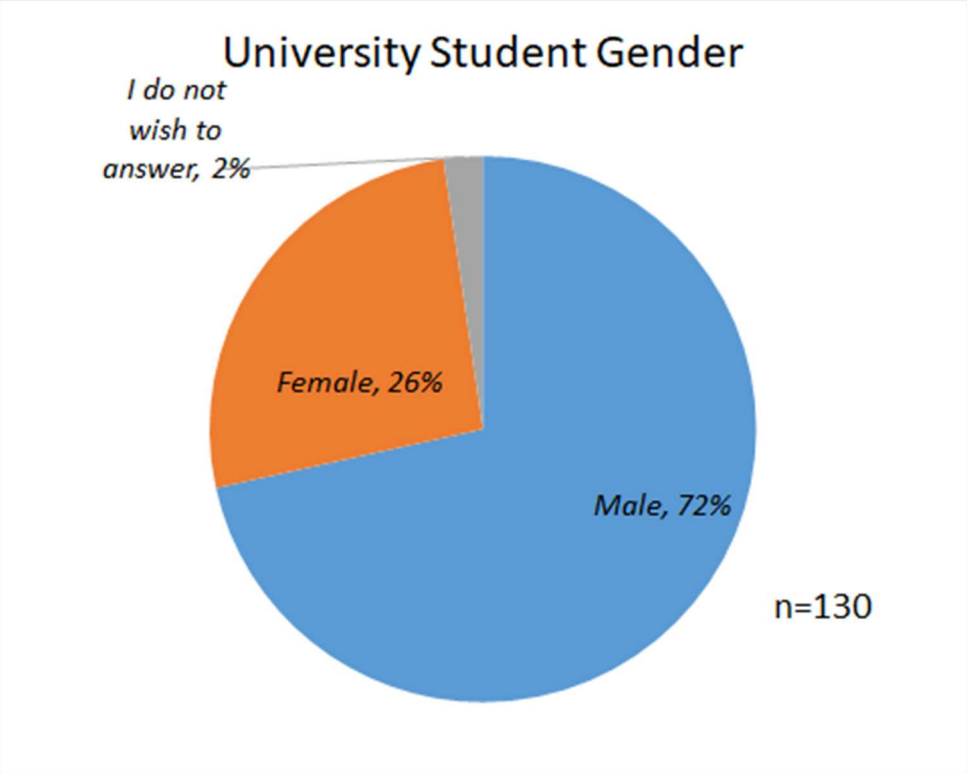
Figure 13: University Student Gender Comparison

The question about the age for CashMama users received 123 responses out of the total 125 surveys. Most of the respondents are between the ages of 20 to 40, with a close-to-normal distribution (see Figure 14). This distribution facilitates the analysis since the respondents represent the age of the target audience, and the results will present little bias due to skewness in the age distribution of the respondents.
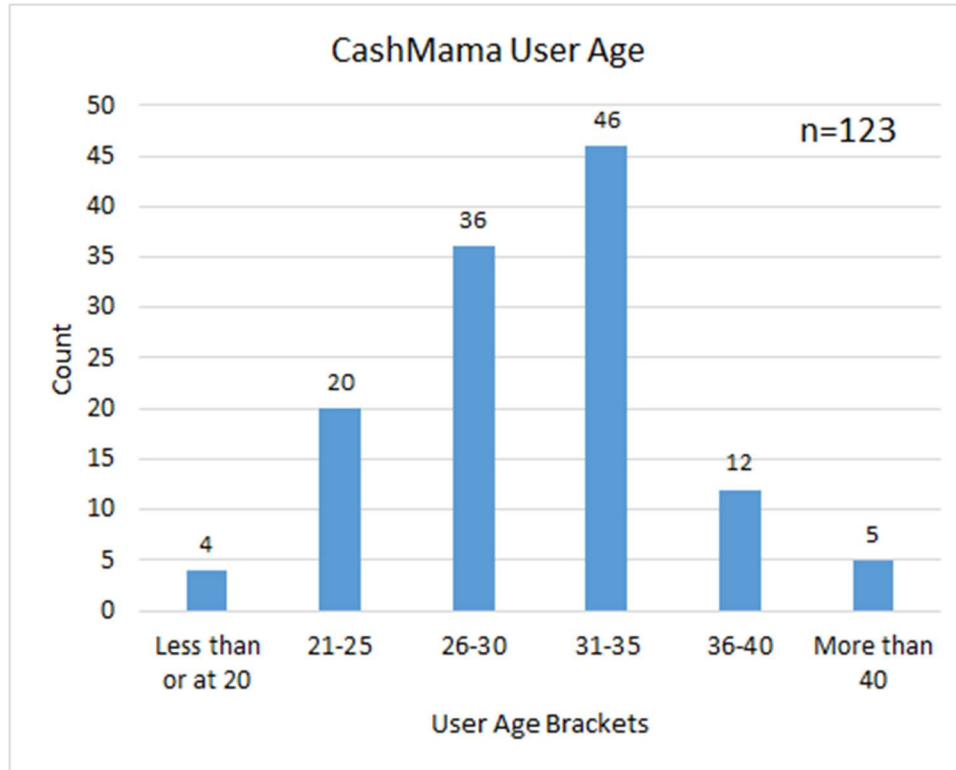
Figure 14: CashMama User Age Distribution

Similar to age distribution, the individual salary of CashMama user respondents presents a close to normal distribution of responses (see Figure 15). The normally distributed individual salary reduces the chance of bias in response due to financial abilities to pay back loans. In addition, the majority of the respondents claim to earn a monthly individual salary between ₹15,000 and ₹30,000, which is above the minimum monthly income that most lending platforms prefer according to the competitor analysis.
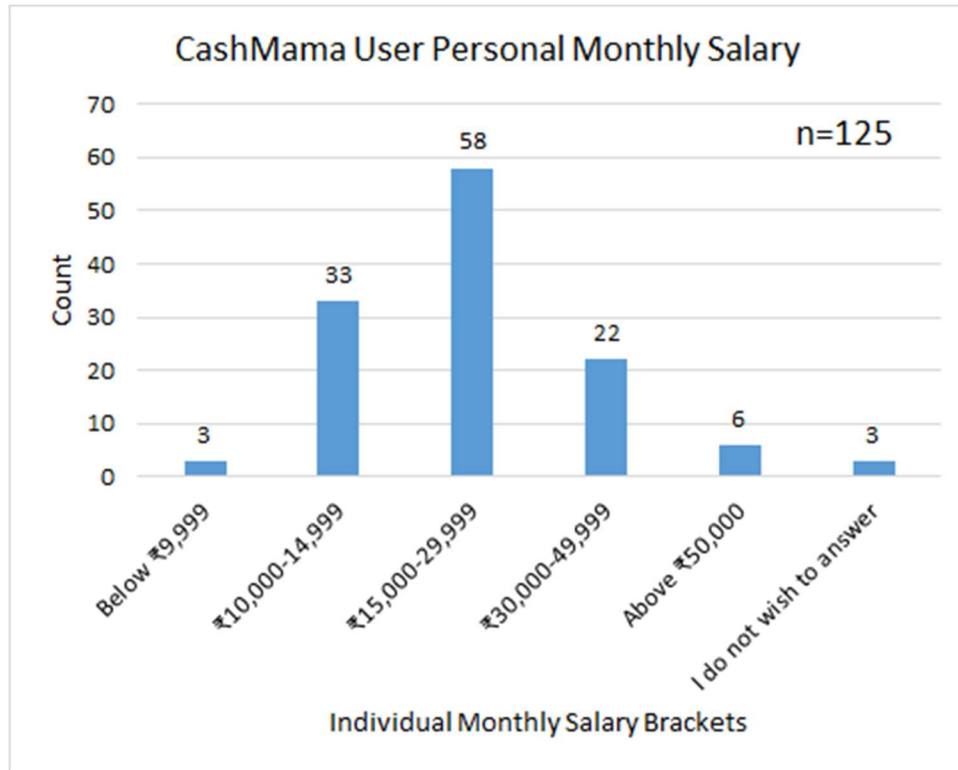
Figure 15: CashMama User Individual Monthly Salary

For the university student population, the majority of the survey respondents are in their first or second year of university, accounting for 55% of responses, followed by upperclassmen (third or fourth year) with 34% of responses, and graduate students with 12% of responses (see Table 7). First- and second-year students are further away from graduation and entering the working force. Therefore, it is important to consider that many respondents likely have limited experience with personal finance.

School Year	Count	Percentage
Undergraduates - 1st/2nd year	71	55%
Undergraduates - 3rd/4th year	44	35%
Master	12	9.2%
Doctorate	3	2.3%
Total	130	100%

Table 7: Student Year in School

Figure 16 presents the majors of surveyed students. We received 121 out of 130 total surveys, and omitted two responses for containing no information. The graph identifies

Computer Science and Computer Science Engineering as the two most-represented majors from the survey results, by a significant margin. This could be due to the students of computer-related majors being more familiar with online operations and accepting of online lending platforms, or due to them being more responsive to an online survey request.
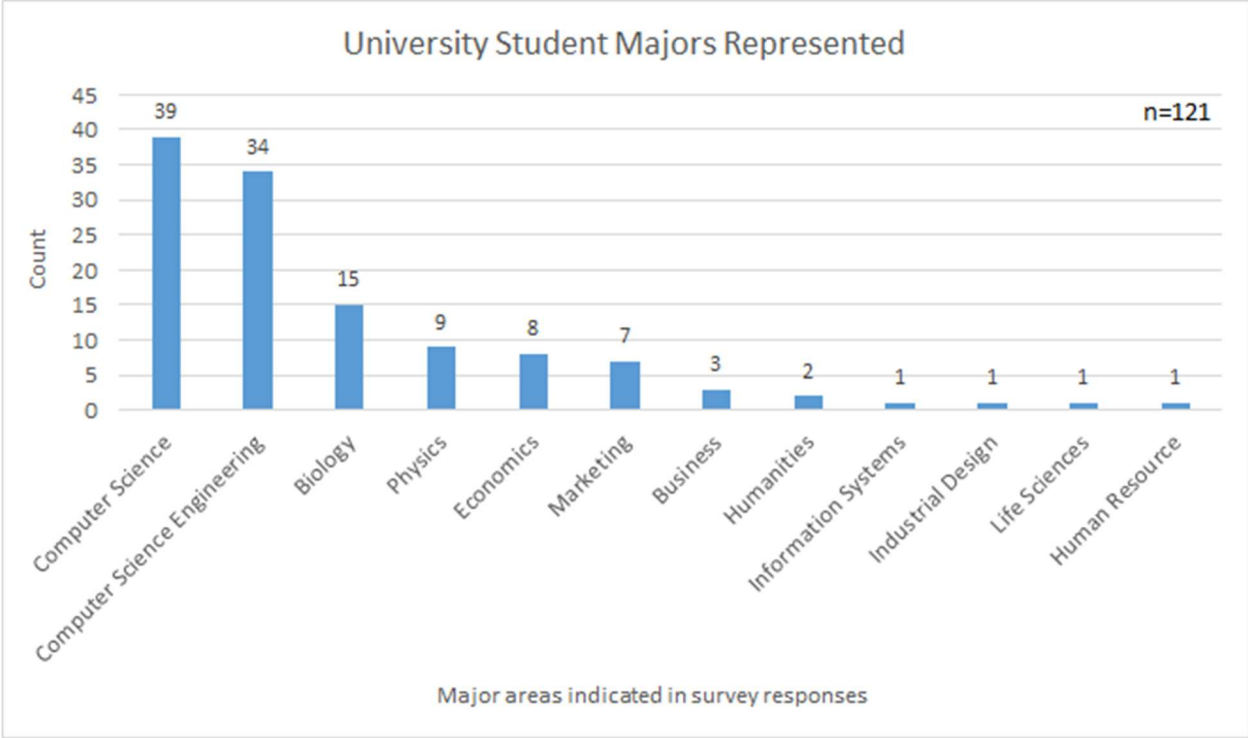
Figure 16: University Student Majors Represented

4.3.2 User Experience

At the request of our sponsor, the team included survey questions on user experience. The preference for color themes of the lending platform was the only user experience aspect that applied to both surveyed populations. The question asked, "What is the color theme you prefer the most?" where one choice had the current color theme of CashMama app. The survey of CashMama users received 73 responses for the question out of 125, and the current color theme of CashMama received second place in respondents (see Figure 17). The first choice for color preference is the orange-green combination. However, it is worth noting that the color of the national flag of India has the same color scheme of orange and green, and while the shades are slightly different, the similarity in colors can be the cause of the observed preference.
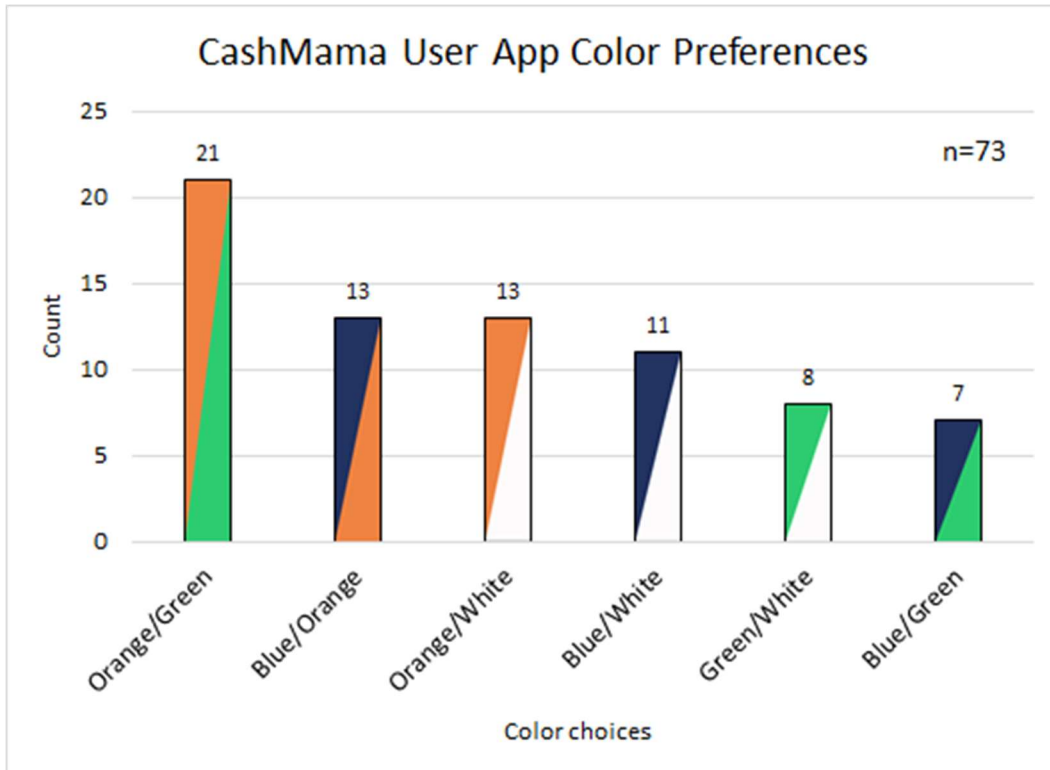
Figure 17: CashMama User App Color Preferences

For the student population, 55 students out of the total 130 selected the blue and white combination, indicating that the sample prefers this the most (see Figure 18). Similar to the user population, CashMama's current color theme of blue and orange was second place, with 21 individuals choosing it.
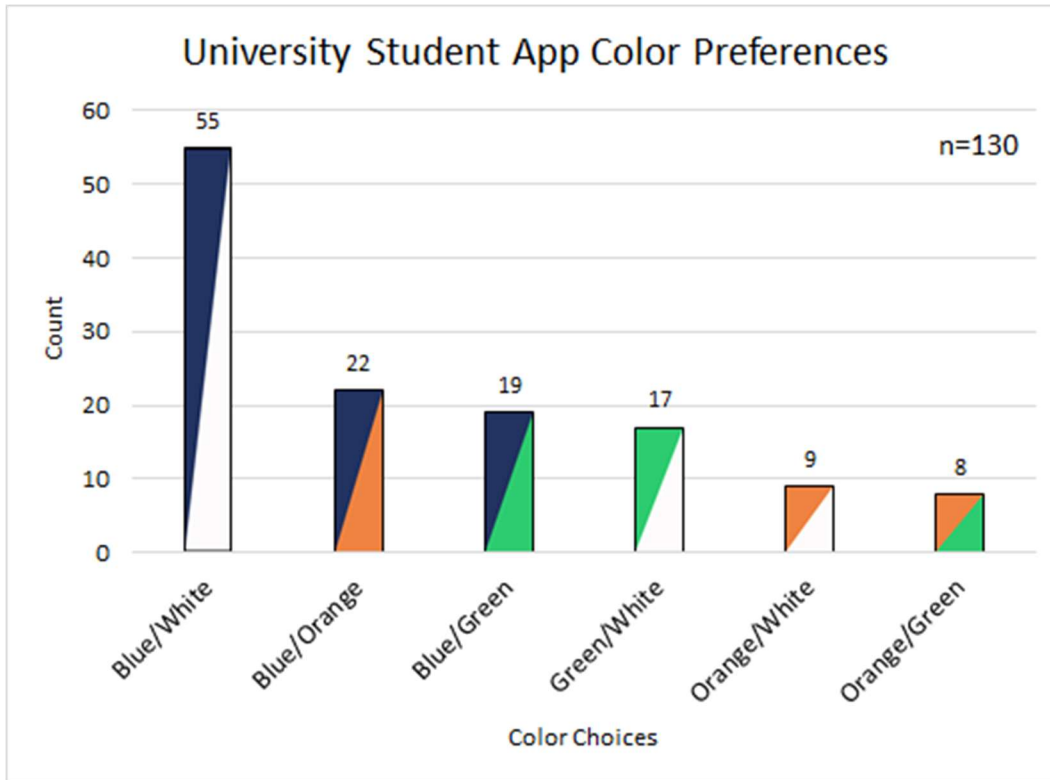
Figure 18: University Student App Color Preferences

After comparing the results of CashMama users to university students, the team discovered that a shared preference exists for CashMama's current color scheme, which was the second most-selected in both populations. This suggests there is no need for Onion Credit to change the platform appearance.

Another component to user experience in the survey involved the questions about the application process of CashMama. The rating average of the app on Google Play Store is 3.7 out of 5, and according to the manager of Onion Credit, this is mainly due to the business just starting and the slow process of manual approval and disbursement. Thus, prior to survey distribution, the team assumed user satisfaction level would be relatively low.

The survey result reaffirmed the ratings on Google Play Store. There are 85 recorded responses for the question of "How satisfied were you with the loan process?" (See Figure 19). The majority of responses are positive, with 41 out of the 85 recorded respondents extremely satisfied with the process. For dissatisfied respondents, 17 out of the 85 are extremely dissatisfied. Assigning scores from 1 to 5 for the extremely dissatisfied to the extremely satisfied level, the result yields an average rating of approximately 3.7 out of 5. This was nearly identical to the current rating on Google Play Store.

The distribution presents a skew toward the extremes, showing more responses at the extremely satisfied or extremely dissatisfied level for their user experience. This was the expected result since users with either very good or very bad experience were more likely to respond to the survey, compared to users having an average experience with the app. The distribution is similar to the observed rating distribution on Google Play Store.
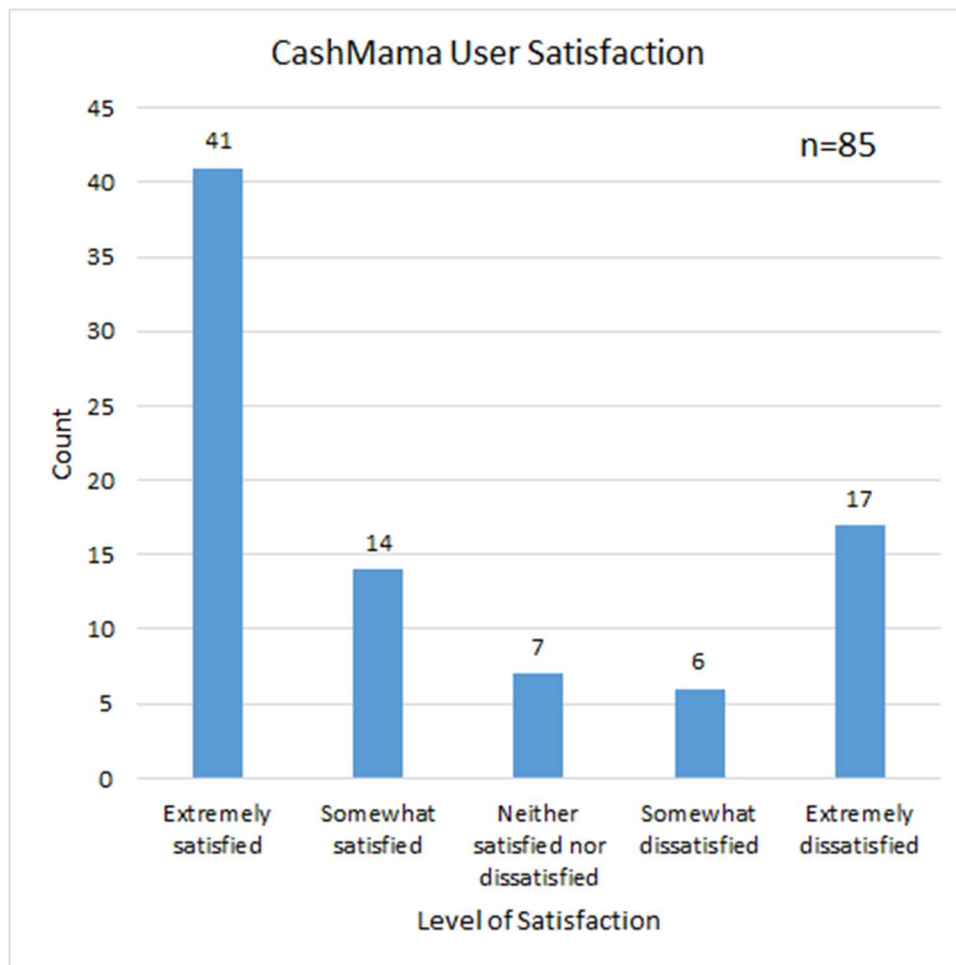
Figure 19: CashMama User Satisfaction Levels

Additionally, the survey on user experience asked the respondents to provide any recommendations or comments they have. There were 50 recorded responses for this question, and to summarize the information, the team reviewed the responses and coded the themes for the responses (see Appendix K). The majority of respondents provided no additional recommendations. Many either commented good or bad experience, or inquired about their loans. In general, these responses account for 36 of the total responses. Two contradicting themes appear in user comments (see Figure 20). There were two responses commenting about

fast service and process time, but also one comment on the process being too slow. Additional comments and suggestions included high interest rate, inquiring service in a specific location, minimum documentation required with CashMama, the platform needs an update, and incomplete loan application.
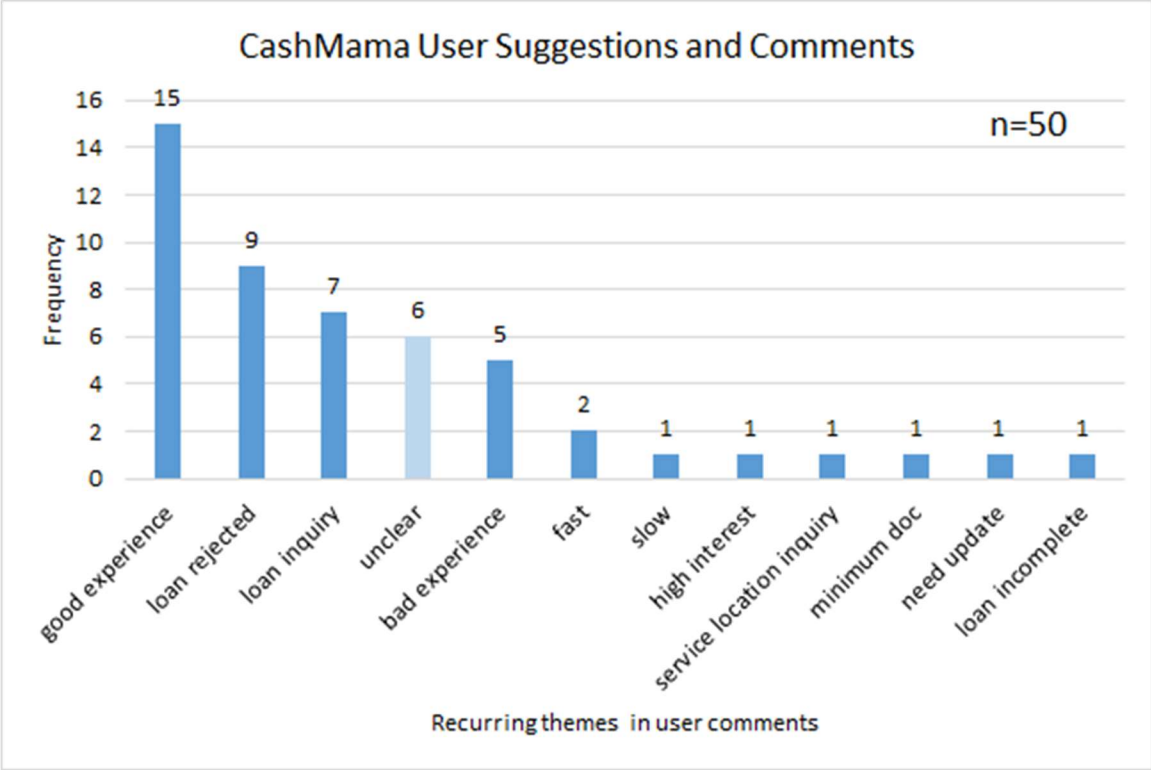
Figure 20: CashMama User Suggestions and Comments

4.3.3 Loan Preferences

To analyze the survey results on loan purposes, the team reviewed the responses from CashMama users and university students and coded the recurring themes (see Appendix L). For responses containing multiple themes, the team counted the response for all the themes. For the CashMama users, our survey received 80 responses, which became 82 coded responses due to multiple purposes indicated in some answers (see Figure 21). After summarizing, the team found that many responses are either unclear in meaning, or only refer to personal use. Otherwise, the team discovered that health reasons appear most frequently among CashMama users. The next frequently recurring theme for loan purpose was business, followed by education and multiple other purposes.
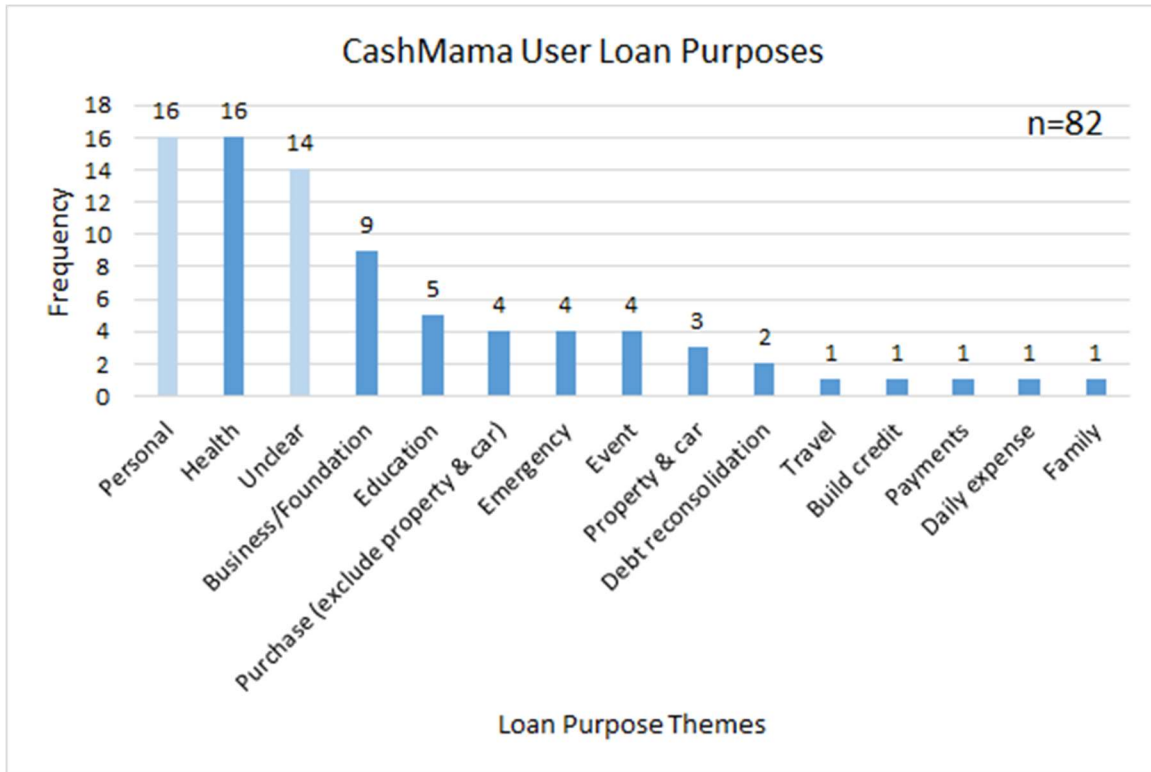
Figure 21: CashMama User Loan Purposes

The team received 124 responses from university students regarding their loan purposes, which summarized to 145 coded responses (see Figure 22). From this set of data, the obvious and most popular loan purpose for university students was education, with 87 individuals indicating that they would use a loan for this purpose. Beyond this, respondents indicated interests in using a loan for startups, or for property and car. Both categories received the same number of responses. The occurrence of health-related answers tied with health-related purposes for fourth place, with only 7 responses out of 145.
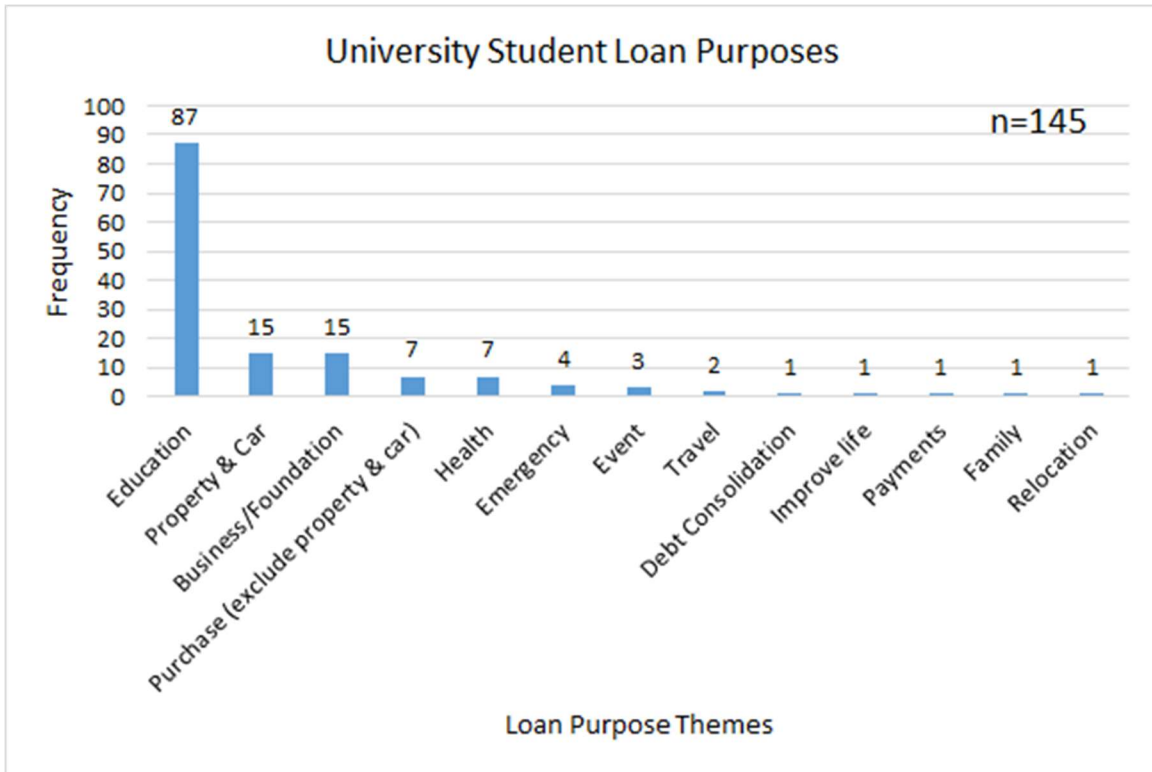
Figure 22: University Student Loan Purposes

There are several major discrepancies in responses between the two surveys, which indicate how different generations have different needs based on their past or current experiences. For example, health expenses appeared to be a significant need for CashMama users, but not for students. Instead, education is the top priority of the student population, outnumbering all other concerns.

The next part of loan preferences consists of the loan amount and term selections associated with respondents' loan purposes. Figure 23 provides a scatterplot of the selections CashMama users made for loan amount and loan term. In the survey question, loan amount inputs determine the available range for loan term selection. Note that the figure visually identifies several clusters for loan amount and term combinations. For loan amounts below ₹10,000 with corresponding loan terms below 30 days, most users prefer a ₹5,000 loan for the maximum repayment period. Comparing this to the current offerings of CashMama, which is ₹3,000 or ₹5,000 for 14 days, the result suggests a preference from the borrower perspective of a longer repayment period. On the contrary, for loans between ₹10,000 and ₹25,000 with a 30 to 90-day payment term, a cluster appears for lower loan amount of ₹10,000 to ₹15,000 and shorter loan term of 30 to 60 days. For loans of ₹25,000 and above with longer-term between 90 days to

180 days, there is consistency in preference for the longest loan term available for the maximum loan amount.
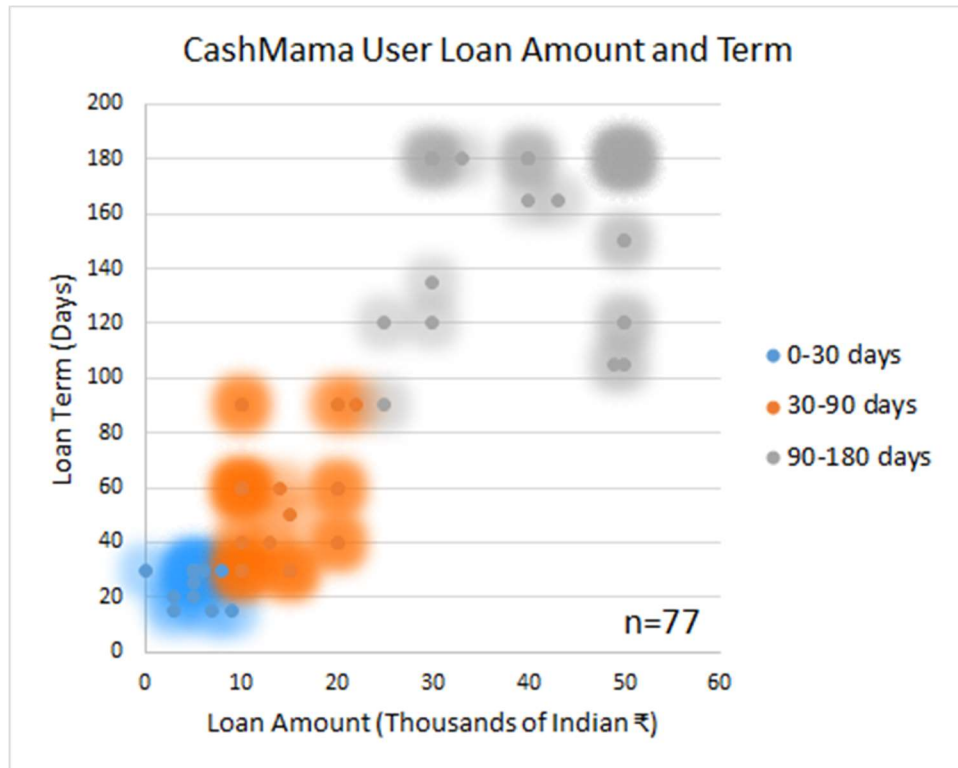
Figure 23: Scatter Plot of CashMama User Loan Amount and Term

With the vast majority of students expressing that their need for education-related loans, our expectation was that students would select a long loan term with a high loan amount, as Figure 24 demonstrates. However, note that the survey only allowed for a maximum selectable amount of ₹50,000 and a maximum term of 180 days. It is unclear whether students would have preferred an even larger loan amount, or whether they automatically chose the maximum value. However, it is apparent that students prefer large loans, which are currently beyond our sponsor's scope. For loans with amounts between ₹10,000 and ₹25,000 and terms between 30 and 90 days, the cluster visually demonstrate that students prefer a loan sized around ₹20,000 for 60 to 90 days. However, this preference is far less obvious compared to the selections at maximum. There is limited information in the "short-term" loan category, covering loan amounts of less than ₹10,000, thus leaving the team with an inability to confidently observe desirable loan amount and loan terms in that region.
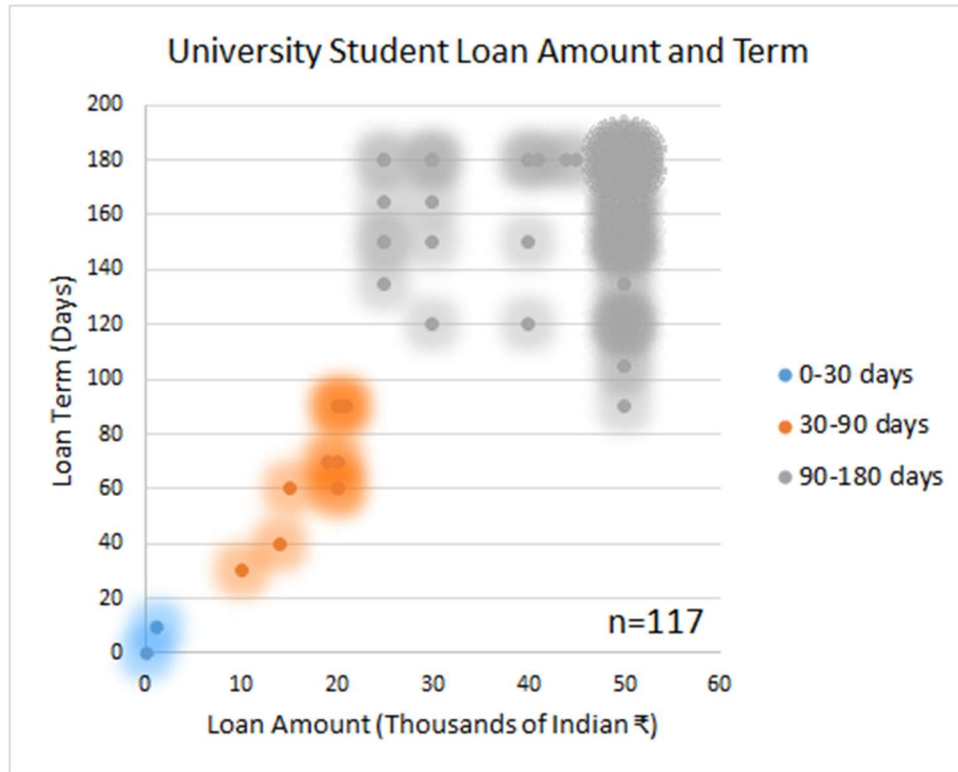
Figure 24: Scatter Plot of University Student Loan Amount and Term

Comparing the scatterplots for the two populations, both populations clearly preferred the maximum loan amount and loan term. This provides limited use for loan product development, since the current loan offerings drastically differ from this range. However, referring to CashMama's current loan offerings, the scatter plot of CashMama users provided a reasonable range for loan products with the clusters around lower amounts and shorter terms.

For the question of "What are the most important things you consider when acquiring a personal loan?", the survey instructed the respondents to make three selections from the list as their top concerns. The survey of CashMama users received 213 data points from 71 respondents for this question (see Figure 25). Among the listed choices, "Loan amount" was the top priority, with 40 individuals indicating it was a concern. Respondents' second most important considerations were "interest and fees," and "personal information security." Both had a count of 34 selections. Concern for loan term was unexpectedly low in fifth place. The remaining options received significantly lower selections.
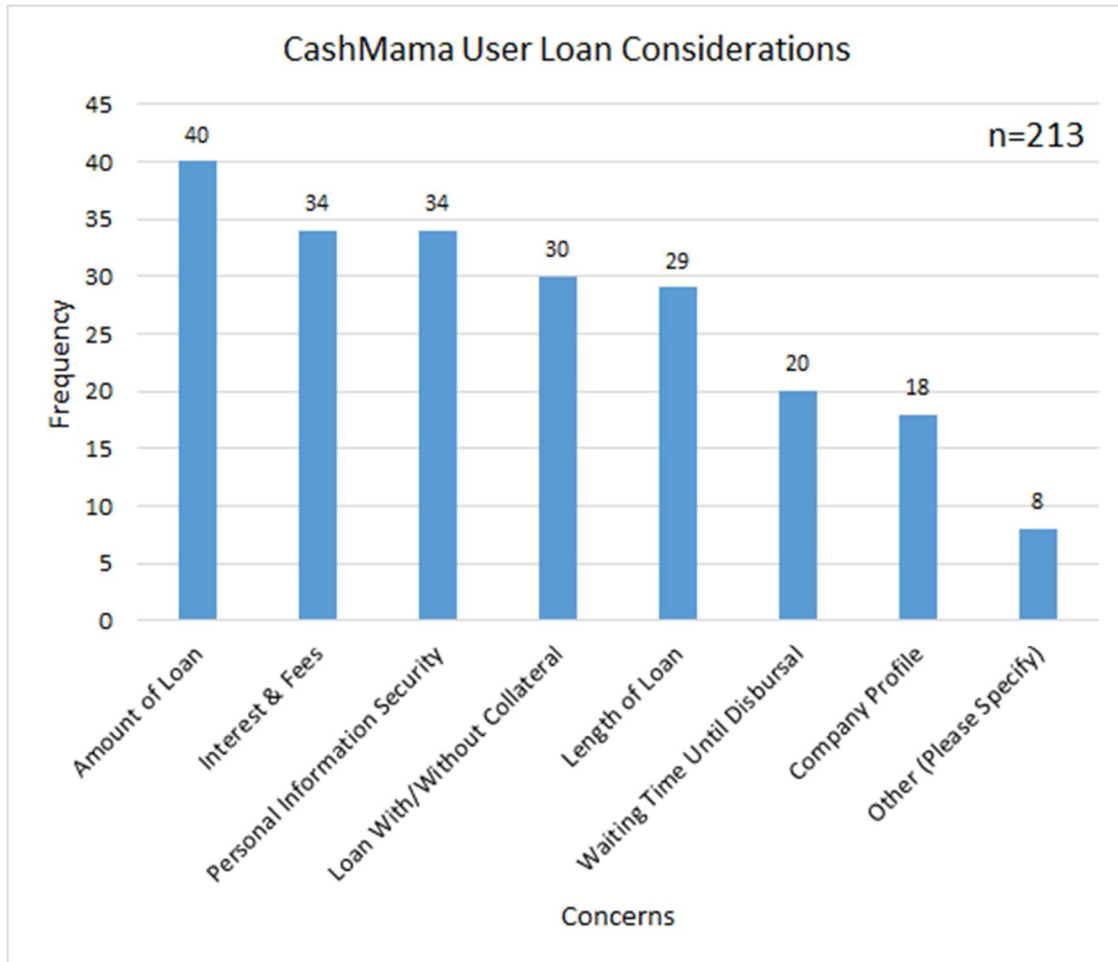
Figure 25: CashMama User Loan Considerations

There were 390 data points for the question on loan considerations, coming from 130 Indian university students (see Figure 26). Among the options, "Interest and Fees" was the top concern with 121 student selections. The second most important consideration was the amount of loan, with 74 counts for selections. The third top consideration was the length of the loan, with 57 counts. The remaining options received below 40 selections each. Comparing the number of selections for the top choice and for the second choice and thereafter, the graph showed a heavy skew toward the top concerns.
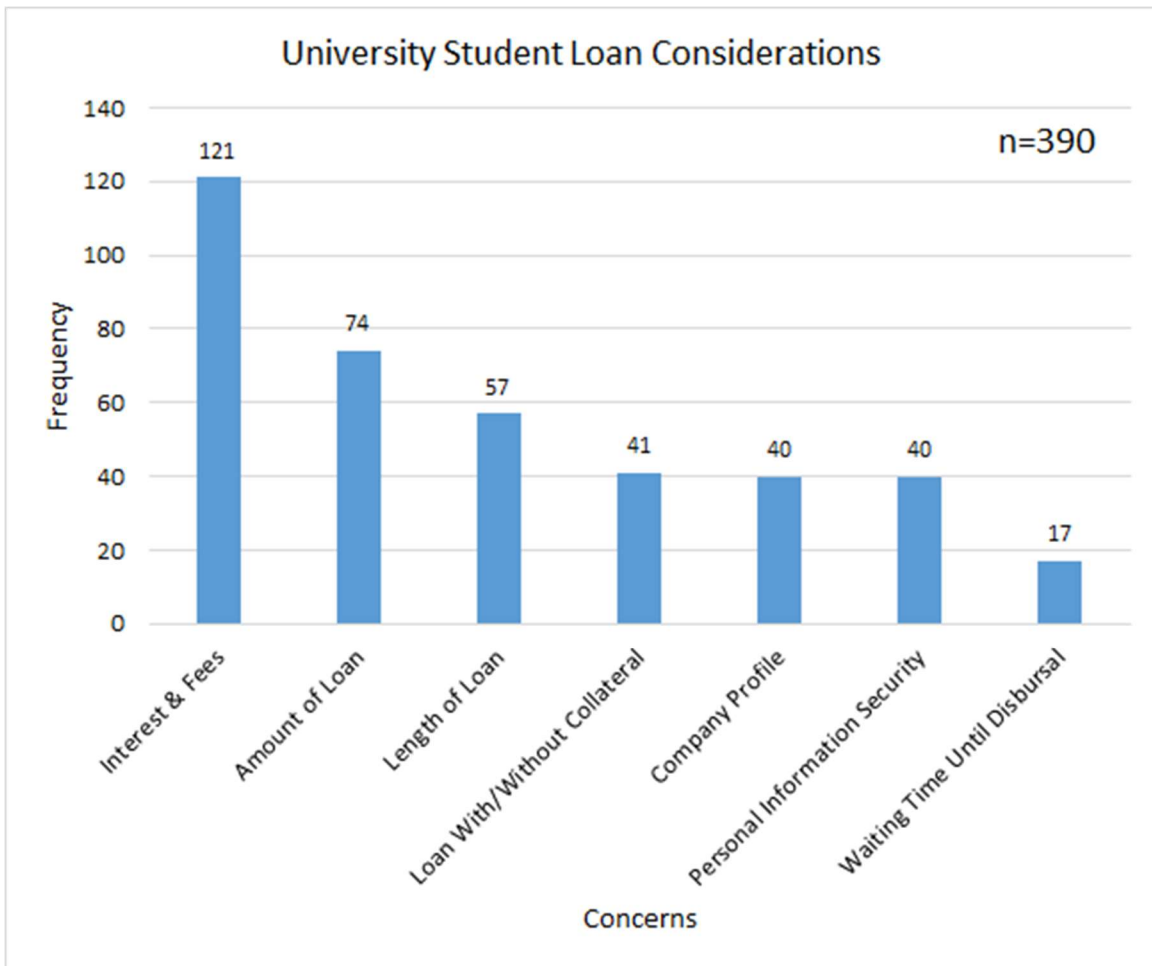
Figure 26: University Student Loan Considerations

Both users and students selected "loan amount" and "interest and fees" as their top considerations when searching for a loan. Concern over personal information security was high among CashMama users, which suggested a high level of awareness for data privacy among them, and potentially all customers. However, information security was one of the student sample's lowest concerns, likely indicating a generational gap in privacy concerns. Both samples also indicated that "Waiting time until disbursal" and "company profiles" were lower priorities when considering loan offerings.

While CashMama currently focuses on payday loans, the survey results suggest the potential for CashMama to provide loans of larger amounts for longer periods with unexpectedly skewed breakdowns (See Figure 27). Of the 95 responses from users of CashMama, which offers payday loans, 72% of the respondents preferred EMI loans. The preference for payday loans was

significantly lower at 26%. This shows a strong preference for EMI loans from borrowers in general.
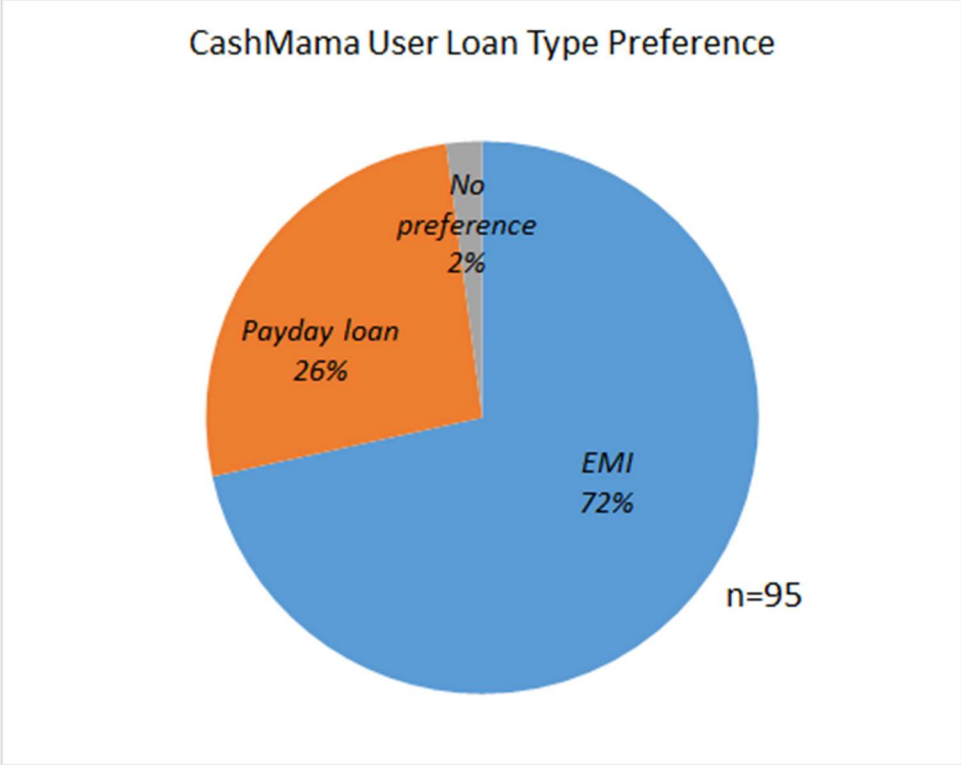
Figure 27: CashMama User Loan Type Preference
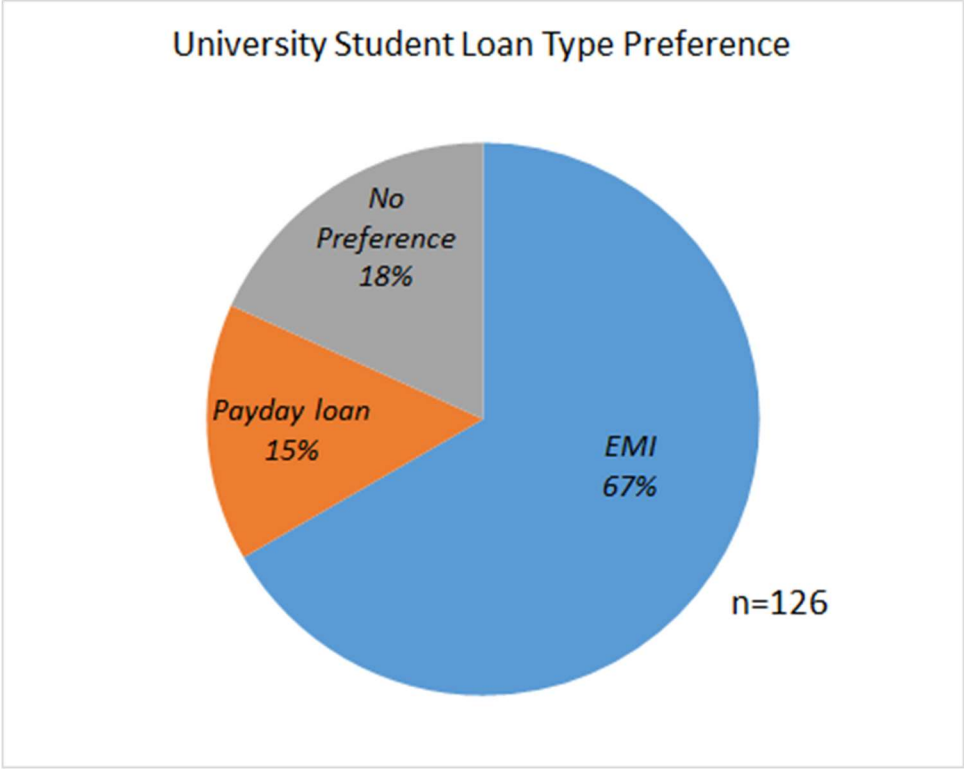
Figure 28: University Student Loan Type Preferences

4.3.4 Social Media Usage

A key aspect that the team analyzed for our sponsor in our surveys was the popularity of social media platforms between the two populations. The investigators of this portion measured this by asking survey participants to list, in an open response format, their top three social media platforms. The team received 50 responses to this question from CashMama users and 130 from current students in India. This is less than 50% of users, but 100% of students, which could indicate the importance of social media in the lives of the two sample demographics. This open-ended format allowed our team to remove any biases in regards to which options participants were limited to and allowed the team to identify any new platforms we may not have considered. The following graphs show their respective responses (see Figure 29 and Figure 30).
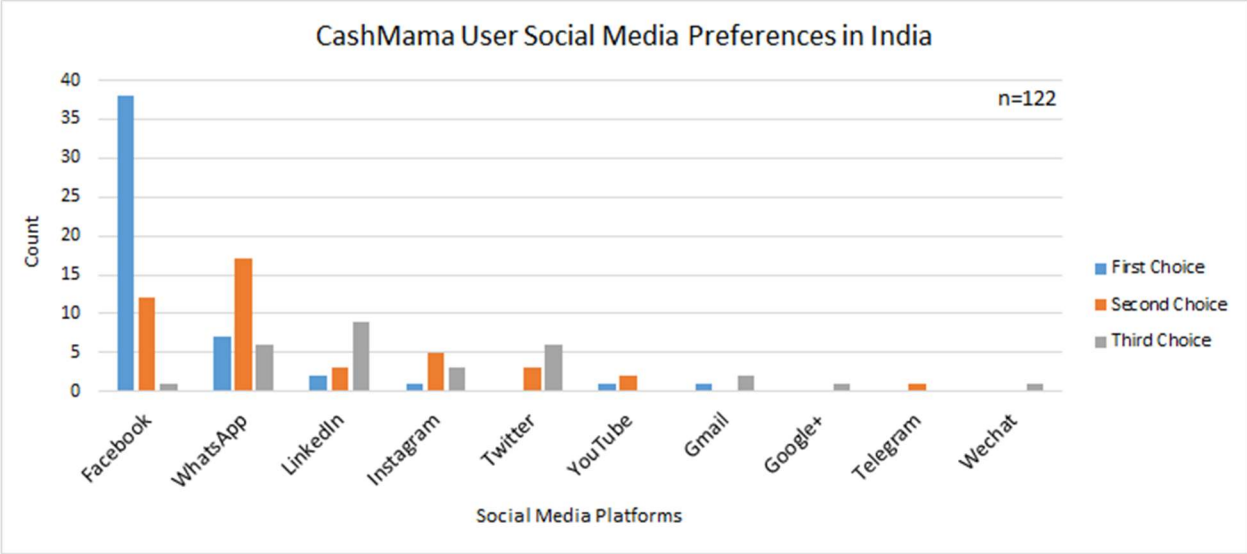
Figure 29: CashMama User Social Media Preferences in India
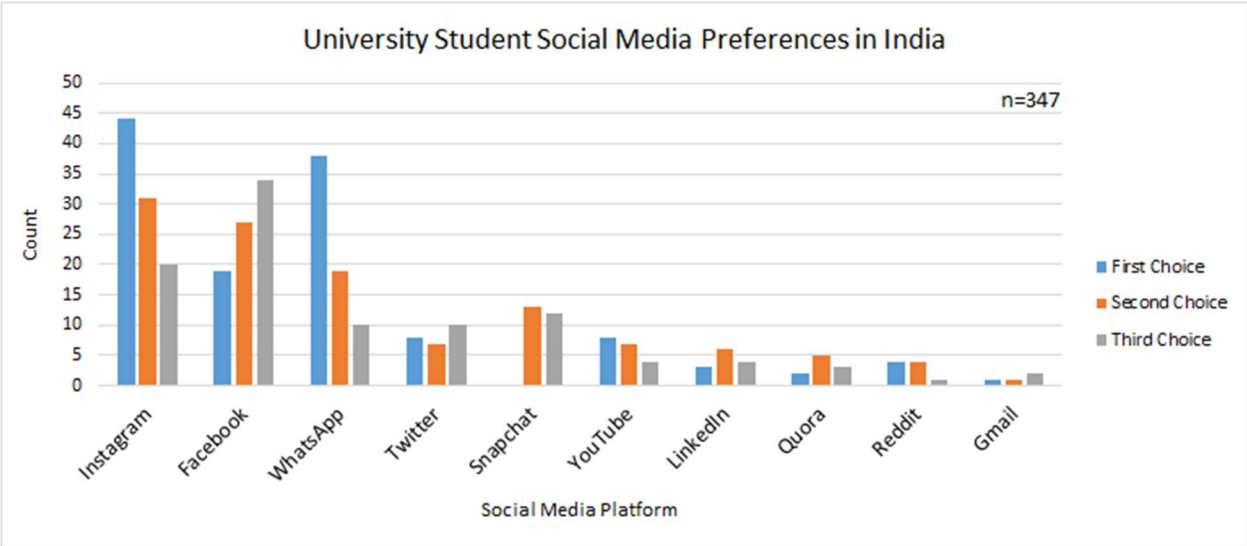
Figure 30: University Student Preferences for Social Media Platforms

Before comparing these graphs, note that there is a large difference in the sample size because the survey did not make any of our questions mandatory and users did not have to fill out all three options. In both cases, CashMama users and students, the graphs demonstrate that Facebook is extremely popular, holding the first and then second ranking respectively. This is in agreement with both our background research and our interview with Arpita Shah. It is also very apparent that there is a discrepancy in the popularity of certain platforms between age groups with Instagram being a prime example. With students aged 18-22 it is extremely popular but with CashMama users, who are mostly between the ages of 31-35, it has minimal usage (see Figure 29

and 30). Since Facebook and Instagram are the two most widely used platforms between these demographics, this is especially important to consider when creating recommendations for our sponsor in order to maximize marketing and advertising spending.

4.4 Social Media Platform Analysis

The third objective of this research required the team to perform an analysis of six popular social media platforms (Facebook, Instagram, WhatsApp, YouTube, Twitter, and LinkedIn). This investigation looked at average costs associated with advertising campaigns on each platform, as well as factors that would affect these costs in the future. In addition, this analysis includes an overview of the features provided by each platform, and the impact such features might have on a company's advertising campaign.

4.4.1 Facebook Inc.: Facebook, Instagram, and WhatsApp

In order to advertise on either Facebook or Instagram, a company has to use Facebook's ad manager. This enables a company to create advertisements with specific goals and audiences. One benefit of Facebook Inc. advertising is that a company can opt to allow Facebook Inc. to distribute advertisements automatically. Although WhatsApp, owned by Facebook Inc., does not yet allow advertisements, people theorize that the advertisements will work similarly to those already on Facebook and Instagram. Many sophisticated advertisers do not distinguish between their budget for advertisements on Facebook and Instagram (Gesenhues, 2018). This implies a smaller company, such as Onion Credit, can establish an advertising campaign and let it run on both platforms, creating a bigger audience with minimal added effort.

Cost-per-click (CPC) on Facebook and Instagram varies depending on the region, target audience, and time of advertisement. In Asia-Pacific, advertisers in India paid the second lowest CPC at $0.12 (eMarketer, 2016). While there is little data on the cost of social media advertising in India specifically, it tends to be lower than worldwide averages. AdEspresso conducted a study that says the worldwide average CPC of an advertisement on Facebook and Instagram is $0.35 and $0.80, respectively. These averages will vary depending on other factors. Targeting people aged 18-24, 25-34, and 35-44 and advertising during the months of October, November, and December create higher costs per click (Barker, 2018). Since October, November, and December make up a high spending period in a number of countries, this affects the worldwide average that behaviors in India might not reflect.

Without a large budget to compete with other companies, Onion Credit will have to weigh the benefits associated with advertising. Since young professionals fall into the higher CPC age demographic, the extra cost of advertising specifically to these people could resultantly provide a worthwhile return. Similarly, if there was a high spending season, advertising would be more expensive, but there might be more people in need of payday loans.

4.4.2 YouTube

We are currently entering the downfall of traditional cable television and the rise of on-demand streaming platforms. Not only is this happening in the United States (Khanna 2018), but also in India. YouTube is currently the largest of these platforms and shows no signs of slowing its growth. Approximately 87% of television viewers in India have an additional screen in front of them as they are watching television, which leads to consumers diverting their attention during advertisements (Rafeeq, 2018). Furthermore, estimates indicate that by the year 2025 over half of the current television viewers in India will unsubscribe from their current paid television services (Rafeeq, 2018). These numbers show a clear trend in the market for the next 5-10 years. To be relevant in the marketplace, a company must be up to date not only with the best current advertising platforms, but also anticipate where consumers will view advertising in the future. In India, YouTube currently has 225 million active users every month (Mitter, 2018) and is only going to continue to grow as the population gains access to more affordable and faster Internet services.

YouTube is a unique platform in this group of social media platforms as users mainly interact with each other via video media. This presents an opportunity for companies to use video advertising rather than banner or column advertisements as seen on other platforms. While other platforms may have options to distribute video advertisements, YouTube advertisements affect user experience the least since individuals are already watching videos rather than scrolling through text. These video advertisements provide companies with the ability to explain their brand or their industry in depth, to inform and attract consumers to their individual brands. In addition, companies can choose to pay an additional cost to remove the "skip" option on their advertisement. This guarantees the user will watch the entire advertisement as they wait to watch their desired content.

Similar to many social media platforms, YouTube makes it very easy for any sized company to start advertising on their platform. The key to any successful marketing campaign is

a quality advertisement. YouTube makes creating this extremely easy by offering companies both tips for creating quality advertisements as well as partner platforms to create the advertisements. This implies no need for smaller companies that do not have a large advertising budget to hire a third party marketing company. Once the company creates the advertisement, it can arrange many different payment options to fit the desired outcome whether that be to build awareness, grow interest, or drive action. YouTube uses a bidding auction where it enters a set cost per day and automatically fills in an advertisement into videos based on the target goal and demographic until reaching the set budget limit. This is a great technique for companies to assign specific budgets for advertising and is a widely adopted system for many platforms. Since there can be fluctuations in results from these campaigns due to many factors like quality of ad, target audience, and market interest, YouTube does not publish specific costs to advertise on their platform. Third parties have estimated these figures for 2016 as between ₹0.70 and ₹17 for cost per view and CPC respectively. Estimates for 2018 are between ₹70 to 210 for CPM (Dey, 2018).

4.4.3 Twitter

   Each of these social media platforms has a characteristic that sets it apart from the rest. Twitter's distinguishing characteristic is its 140 word "tweets," meaning all posts and advertisements cannot have more than 140 words. This provides a unique challenge as well as opportunity to companies looking to advertise on this platform. In India, Twitter currently has approximately 30 million active monthly users (statistica.com) which is relatively small compared to other platforms mentioned previously.

   There are five types of Twitter ad campaigns: Tweet Engagements, Website Clicks and Conversions, App Installs, and Video Views. All of these are relatively self-explanatory except for Tweet Engagements, which makes a company's individual tweets reach their desired target audience to create an increase in replies, favorites, and "retweets" where a user reposts your tweet to their own personal page for their followers to view. One major factor that makes Twitter attractive to companies looking to advertise on social media is the fact that 64% of Twitter users in India follow brands and Twitter has a large number of influencers, people who have amassed a large following and credibility (Team echoVME, 2016). This constitutes a large audience that is constantly looking at new products to consume.

Twitter uses a similar bidding style to other platforms where companies can set their daily allowance for a campaign and their objectives. While there is substantial data for the United States, there has been no reliable and consistent source for the specific CPM in India. On Twitter.com, their recommended daily allowance in the United States for a consistent impression on customers is to start at $30 (₹2110) per day, but there is no minimum requirement per day. Additionally, for comparison, the average CPM for Q1 2018 in the United States was $6.48 (₹456.9) (Rodriguez, 2018).

4.4.4 LinkedIn

LinkedIn is a social media platform designed to enable and encourage professional networking, which narrows down the target population from the beginning. LinkedIn has 500 million users worldwide, with 50 million of them located in India. This is on the lower end of the user populations analyzed, but the analysis should include LinkedIn nonetheless.

The biggest upside to LinkedIn is the fact that you can more accurately target a specific audience due to the amount of information users enter into their database. In addition, LinkedIn makes it easy to pay for ads using controlled spending via a total budget, a daily budget, or setting a bid on the maximum amount spent per click, impressions, or delivered InMails (messages delivered to personal mailboxes). One of the biggest drawbacks with LinkedIn is that the advertising is primarily business-to-business rather than business-to-consumer. This means that businesses are looking for communication mechanisms to improve their companies as a whole or to hire new employees. This differentiates LinkedIn advertising from other social media platforms, where advertisements aim to drive customer sales or brand awareness.

There is no associated CPM for LinkedIn in India. For comparison, LinkedIn in the United States has an approximate CPM of $8.39 (₹591.5) as of mid-2018 (Dey, 2018).

4.4.5 Summary

After analyzing Facebook, Instagram, WhatsApp, YouTube, Twitter, and LinkedIn, several overarching themes arise. While costs vary among these platforms, the region, target audience, and time of advertisement can affect the cost. Each platform has unique audiences and features that can influence an advertising campaign. By weighing all of these factors, a company can decide which platforms are the most effective for their specific advertising campaign

5. Recommendations and Conclusions

This study researched the preferred loan products of young professionals and students in India as well as their social media preferences to assist Qianli Technologies' expansion to India via the app CashMama. Based on the findings of this investigation the team created a list of recommendations for the sponsor. These recommendations serve as a guide for future expansion of loan products and maximizing the effectiveness of social media marketing at Onion Credit.

5.1 Loan Recommendations

Based on our competitor analysis and survey findings, this project recommends that Onion Credit implement several new loan package options. While the ₹50,000 option was most popular for both the user and student samples, we believe it is too early for Onion Credit to create a loan of this size, especially considering the significant risk associated with such a large loan (Jimenez et al., 2002). The next most popular selections of current CashMama users are the ₹10,000, ₹5,000, and ₹20,000 options, in order of decreasing popularity. Considering CashMama currently offers a ₹3,000 and ₹5,000 option in their app, only one available option is within the desirable range. Therefore, the team believes CashMama should look at implementing loans between ₹10,000 and ₹20,000 for future offerings.

With about 72% of users indicating a desire for EMI loans over payday loans, Qianli and Onion Credit should consider catering to this demand. The sponsor expressed concern over the risk associated with EMI loans, which Onion Credit is not currently comfortable handling. Our suggestion, while considering our sponsor's concern, is that they offer different repayment options based on risk management scores. This would address the sponsor's concern with borrower risk while still offering the loan characteristics many users want. Additionally, different repayment options that reward customer loyalty and reliability could promote return borrowers, and a steady income stream.

CashMama users indicated that interest and fees are important factors they consider when applying for loans. As the interest rate of loans available on CashMama are comparative to competitors' offerings, the team believes this should not be a concern to our sponsor. However, our team discovered during the competitor analysis that it is often difficult to locate information on loan interest and other fees on popular lending platforms. Websites of top competitors like

Paysense and CASHE either have no fees clearly stated, or contain conflicting information. Thus, CashMama can differentiate itself from these platforms by clearly stating online the fees it charges for each loan.

While both samples had different top choices for favorite color scheme, the blue and orange combination came in second for both samples. As this is the current color scheme of CashMama, it eliminates the need to adjust the color theme on the platform. We recommend that CashMama remain with this color combination.

Figure 31: Current CashMama App Home Page

The team also recommends CashMama implement a membership program in the near future. From our competitor analysis, several popular online lending platforms have programs that reward members who consistently pay back loans. Some of these perks borrowers earn include more loan selections, lower interest rates, and lower fees. This is a method of encouraging credible returning customers that could benefit the platform in the future.

5.2 Social Media Advertising Recommendations

After considering our research, interviews, and platform analysis, the team recommends that Onion Credit use Facebook and Instagram advertisements to further expand their business. With their extensive user base, these platforms represent the most efficient communications path to reach the greatest number of social media users. In addition, based on the team's surveys of current CashMama users and Indian students, both Onion Credit's target population and the

predicted future target population frequently use Facebook and Instagram. On these platforms, Onion Credit can choose to have a focused goal of client acquisition.

Since Facebook Inc. owns both Facebook and Instagram, Onion Credit can opt to let Facebook Inc. distribute the advertisements between both platforms. This will enable Onion Credit to indicate their desired target audience and Facebook Inc. will place the advertisements appropriately, without any extra effort from Onion Credit. If the initial indicated demographics do not reach the target audience effectively, Onion Credit can easily choose to pause and edit the campaign.

Even though Instagram has a higher CPC in comparison to Facebook, the team believes that is an important expense in order to attract young professionals. A significant number of the Indian population in the 18-29 year old age group who report social media usage have an Instagram account. If Onion Credit is able to appeal to this audience on Instagram, they will hopefully be able to expand their business and move towards reaching their goals for the future.

5.3 Future Direction

Since the customers of Instagram are largely younger people, who represent future Onion Credit customers, we recommend Onion Credit uses Instagram advertisements for brand awareness and education. This implies the company's potential future customers will have already heard of Onion Credit and, if they decide to acquire a loan in the future, that they are familiar with the process. As payday loans are not a familiar concept among young professionals in India, this kind of preemptive advertising could help Onion Credit gain an even larger customer base. However, the team believes the company does not currently have the financial freedom for this extra expense that provides little short-term revenue.

In the future, our sponsor said they hope to provide larger, longer-term loans. Based on the survey results, there is a demand for this among students and young professionals. Once Onion Credit is fiscally able to provide larger loans, they can investigate the possibility of promoting loans for larger items that the survey respondents expressed interest in obtaining. These items include loans for education, business, and housing purposes. Survey responses also indicated a desire for strong information security and privacy on the CashMama platform. While this is outside the scope of this research paper, it is an important consideration for Qianli, Onion Credit, and future research.

Professor K.V. Bhanu Murthy's insights contain valuable recommendations and suggestions for the sponsor's future loan products. Professor Murthy emphasized the Indian peoples' growing need for vehicles, no matter their social class. As Onion Credit grows and expands loan offerings, they should consider developing loan products specifically for scooters or mopeds. With the cost of two-wheeled vehicles ranging between ₹30,000 and ₹60,000 (www.olx.in), Onion Credit should delay developing this large loan product until they feel comfortable in their algorithms and operations in India.

5.4 Conclusion

The goal of this project was to assist Qianli Technologies and Onion Credit by improving their understanding of current users and future potential customers in India. Through interviews, a competitor analysis, surveys, and a social media platform analysis, the team created two key recommendations for Onion Credit. The first is to offer new loan products between ₹10,000 and ₹20,000, the second is to focus their advertising budget on utilizing Facebook and Instagram advertisements. This will attract new customers in the future as well as provide them with additional loan options. Both of these aspects will contribute to an increase in loan disbursements, which will translate to an increase in revenue for the company.

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Appendix A. Interview Informed Consent Statement

We are a group of students from Worcester Polytechnic Institute (WPI). We are interviewing experts in the fields on social media advertising and finance/financial technology. We hope this research will allow us to provide recommendations to our sponsor company's partner, Onion Credit, regarding their future social media advertising and creation of new loan products.

Your participation in this interview is completely voluntary and you may withdraw at any time. If requested, no names or identifying information will appear in any of our project reports or publications, and answers will remain anonymous.

This is a collaborative project between Qianli Technologies and WPI, and your participation is greatly appreciated. If interested, we can send you a copy of our results at the conclusion of the study.

Appendix B. Interview Social Media Advertising Expert Request

Interview Contact Message

Dear <contact's name>,

My name is <student's name>, a third-year student at Worcester Polytechnic Institute (WPI) in Worcester, Massachusetts. WPI is a research university in the United States, and during the third year of study, students are expected to complete a research project focusing on social sciences.

My team and I are currently in Hangzhou, China conducting sponsored research on improving a startup company's loan product offerings. The project duration is seven weeks, and during this time we hope to interview some experts in the field of social media advertising as part of our project. This would be crucial in our understanding of advertising in India, as well as the effect of culture and technology on the industry, now and in the future. We learned from <source for the contact information> that you <title, job, area of study, etc.>. We would like to have an interview with you on the topic if possible.

Please let our team know if or when an interview is feasible for you. We thank you for your time, and hope to hear back soon.

Sincerely,
<student's name>

Appendix C. Interview Social Media Advertising Expert Questions

Entrance of Interview:

(See Appendix A.)

Scribe: Record date and time.

Interviewer: "For our records, what is your name, title, and area of expertise?"

Interview Questions

1. What experience do you have with social media advertising in India?
2. What major differences are there between social media advertising in India, compared to the United States?
3. Specifically, is there a difference in the popularity of the platforms, such as Facebook, Instagram, Twitter, LinkedIn, WhatsApp, and YouTube?
4. In your opinion, what is the state of social media advertising in India?
5. How have you seen a change in the usage of social media in India over the past 3-5 years in terms of social media advertising?
6. Are you aware of any relationship between the age of users and their preference for certain platforms?
7. Do you think certain platforms are more effective for advertising intangible products, such as loan products?

Appendix D. Interview Finance and Fintech Expert Request

Interview Contact Message

Dear <contact's name>,

My name is <student's name>, a third-year student at Worcester Polytechnic Institute (WPI) in Worcester, Massachusetts. WPI is a research university in the United States, and during the third year of study, students are expected to complete a research project focusing on social sciences.

My team and I are currently in Hangzhou, China conducting sponsored research on improving a startup company's loan product offerings. The project duration is seven weeks, and during this time we hope to interview some experts in the field of finance and financial technology as part of our project. This would be crucial in our understanding of the loan industry in India, as well as the effect of culture and technology on the industry, now and in the future. We learned from <source for the contact information> that you <title, job, area of study, etc.>. We would really like to have an interview with you on the topic if possible.

Please let our team know if or when an interview is feasible for you. We thank you for your time, and hope to hear back soon.

Sincerely,
<student's name>

Appendix E. Interview Finance and Fintech Expert Questions

Entrance of Interview:

(See Appendix A.)

Scribe: Record date and time.

Interviewer: "For our records, what is your name, title, and area of expertise?"

Interview Questions

1) What is your past study or work experience in finance?

2) What is your area of expertise in finance?

3) What is your opinion about personal loans provided by NBFCs through online lending platforms?

   a) Is the personal loan market over-saturated, or is there room for growth?

   b) What are some concerns regarding the data security of these platforms? Are the concerns growing, or reducing?

   c) Are these loans considered beneficial or predatory to borrowers? What can companies do to improve their image in this regard?

4) When considering payday loans and EMIs, what are the benefits and drawbacks of each to loan disbursers?

5) People have different purposes for taking a loan. What purposes make a borrower prefer payday loans over EMIs, and vice versa?

Appendix F. Survey for Current Users of CashMama

Entrance of Survey

The result of this survey will be used for a sponsored school research on understanding social media and loan preferences of people in India. Your participation in this research is voluntary. Please be assured that your responses will be kept completely anonymous.

Survey Questions

What is your gender?

- Male
- Female
- I do not wish to answer

How old are you (Please select a range)?

- Less than or at 20
- 21-25
- 26-30
- 31-35
- 36-40
- More than 40

How many people are in your household?

- 1-2 People
- 3-4 People
- 5 and more
- I do not wish to answer

What is your household income?

- Below ₹9,999
- ₹10,000-14,999
- ₹15,000-29,999
- ₹30,000-49,999
- Above ₹50,000
- I do not wish to answer

What is your personal monthly salary?

- Below ₹9,999
- ₹10,000-14,999
- ₹15,000-29,999
- ₹30,000-49,999
- Above ₹50,000
- I do not wish to answer

Have you applied for a loan through CashMama?

- Yes
- No

[For users that select yes: start]

How satisfied were you with the loan process?

- Extremely satisfied
- Somewhat satisfied
- Neither satisfied nor dissatisfied
- Somewhat dissatisfied
- Extremely dissatisfied

Do you have any suggestions or comments about the CashMama experience?

_____

What was your purpose for acquiring the loan?

_____

[For users that select no: start]

If you were to acquire a personal loan, what might be the purpose?

_____

[question for all users: start]

What is your preferred loan amount for that purpose?
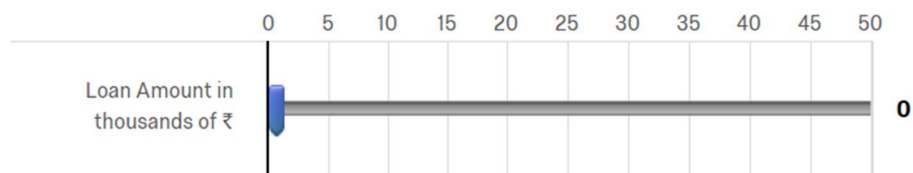
What is your preferred loan term for that loan amount?

| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | |
| Loan term in days | | | | | | | | 0 |

| | 30 | 40 | 50 | 60 | 70 | 80 | 90 | |
| Loan term in days | | | | | | | | 30 |

| | 90 | 105 | 120 | 135 | 150 | 165 | 180 | |
| Loan term in days | | | | | | | | 90 |
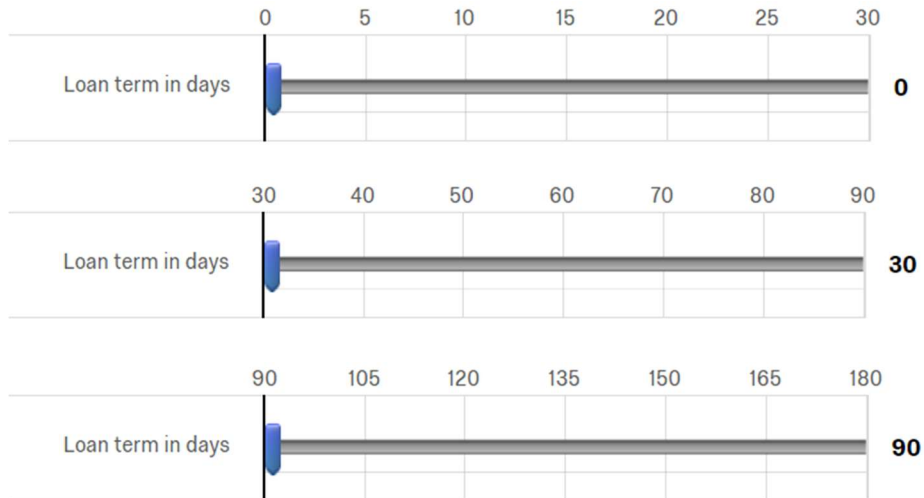
What type of loan do you prefer?

- Payday loan (Short term, single repayment)
- EMI (Medium to long term, multiple repayments)
- No preference

What is color theme you prefer the most?
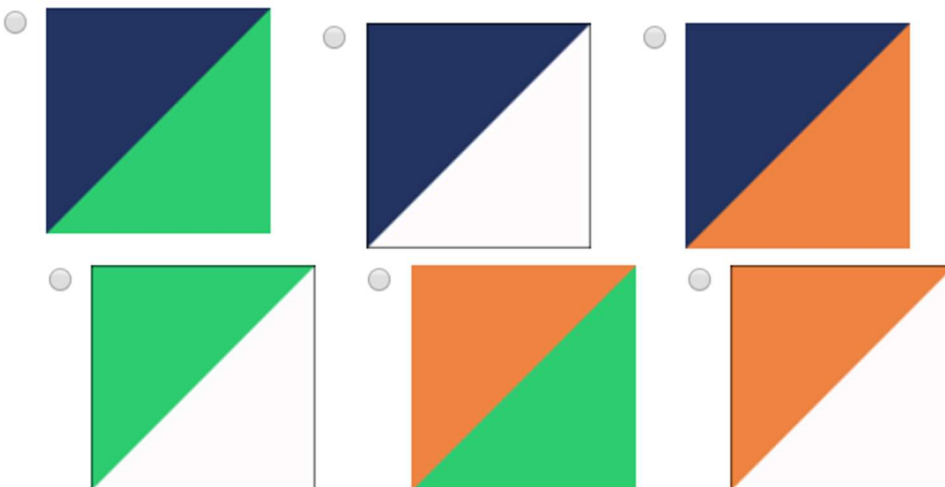
What are the most important things you consider when acquiring a personal loan? (Please select three.)

[options randomized]

- Amount of Loan
- Company Profile
- Interest & Fees

- Length of Loan

- Loan With/Without Collateral

- Personal Information Security

- Waiting Time Until Disbursal

- Other (Please Specify) _____

What are the top social media platforms you use (please list from the most frequent to the least)?

1. _____

2. _____

3. _____

How frequently do you use each of them?

	Every day (1)	2-3 times per week (2)	1 per week (3)	Less than 1 per week (4)
1st Choice (1)	○	○	○	○
2nd Choice (2)	○	○	○	○
3rd Choice (3)	○	○	○	○

Appendix G. Email to Indian Universities to Request Distribution of Surveys

Dear <_____>

My name is <_____>, and I am a student at Worcester Polytechnic Institute (WPI) in Worcester, Massachusetts, an engineering college in the United States. During the third year of study, students at WPI are expected to complete a research project with a focus on social sciences. Along with three other students, I am currently in Hangzhou, China working with Qianli Technologies, our research sponsor, for seven weeks. Qianli Technologies is a peer-to-peer lending platform that operates in China, and they are currently working on expanding with Onion Credit in India.

Onion Credit is a startup company in India that provides small loans quickly to approved applicants. They have asked us to look at their current business, and provide recommendations on how they can better market their product as they hope to expand in the near future. One of our target audiences are university students who are about to graduate. In order to gain data for our research, we hope to send out short surveys to students with your help.

We found your contact information on your university's website and were wondering if you or any other professors at your university would be interested in helping us with our project. If you have any questions or concerns, feel free to email me at any time. We can send you a copy of the survey for you to approve and we will keep all data anonymous by not asking for the names of the students who respond to the survey.

Thank you for your time

Appendix H. Survey for University Students in India

Entrance of Survey

The result of this survey will only be used for a sponsored school research on social media and loan product preferences of people in India. Your participation in this research is voluntary. Please be assured that your responses will be kept completely anonymous.

Survey Questions

What is your gender?

- Male
- Female
- I do not wish to answer

What school do you attend?

_____

What is your year in school?

- Undergraduate- 1st / 2nd year
- Undergraduate- 3rd / 4th year
- Master
- Doctorate
- Post-doctorate

What is your major?

_____

What are the top social media platforms you use (Please list from the most frequent to the least.)?

1. _____
2. _____
3. _____

How frequently do you use each of them?

	Every day (1)	2-3 times per week (2)	1 per week (3)	Less than 1 per week (4)
1st Choice (1)	○	○	○	○
2nd Choice (2)	○	○	○	○
3rd Choice (3)	○	○	○	○

What is the color theme you prefer the most?
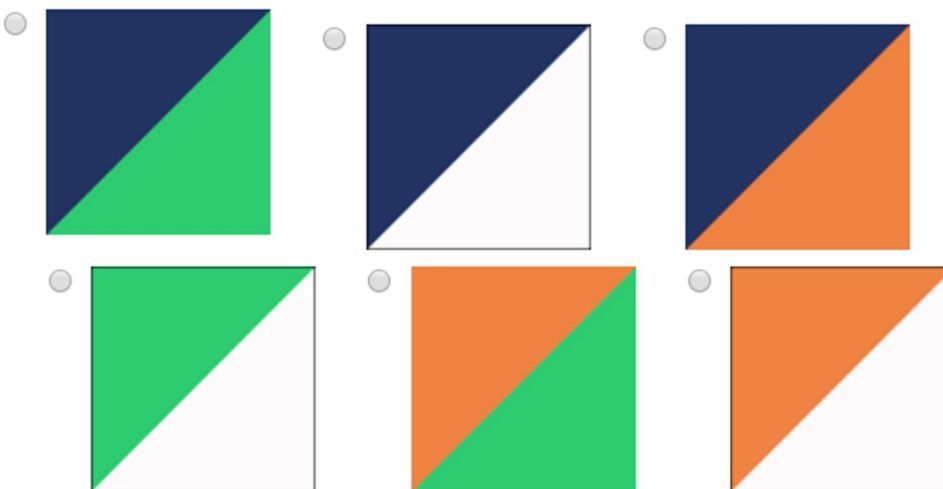
If you were to acquire a personal loan, what are the most important things you consider? (Please select three.)

[options randomized]

- Amount of Loan
- Company Profile
- Interest & Fees
- Length of Loan
- Loan With/Without Collateral
- Personal Information Security
- Waiting Time Until Disbursal
- Other (Please Specify) _____

If you were to acquire a personal loan, what might be the purpose?

_____

How much would you be willing to borrow for this purpose?

	0	5	10	15	20	25	30	35	40	45	50	
Loan Amount in thousands of ₹												0
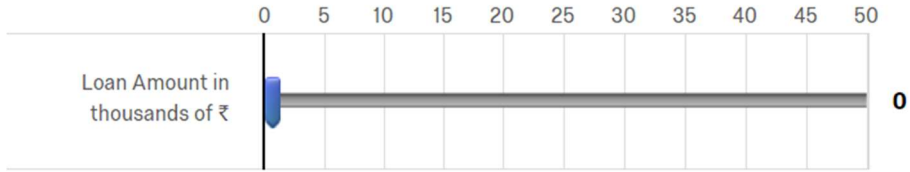
What is your preferred loan term for that amount?

	0	5	10	15	20	25	30	
Loan term in days								0

	30	40	50	60	70	80	90	
Loan term in days								30

	90	105	120	135	150	165	180	
Loan term in days								90
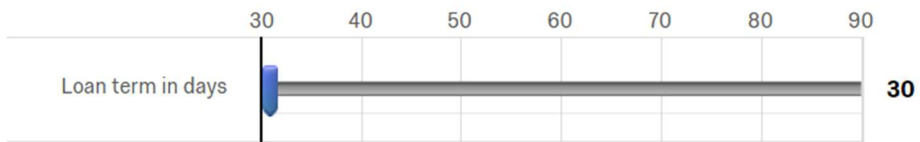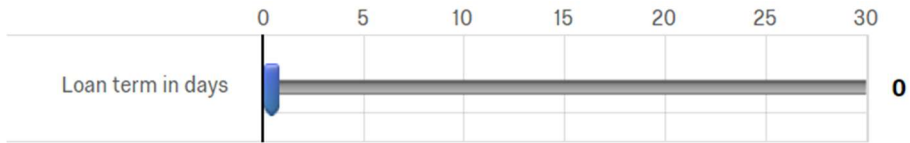
Appendix I. Verbatim Transcript of Advertising Interview with Arpita Shah

Geoffrey Hadden: Just before we go along, are you okay with us recording this interview just so we can transcribe it later?

A: Arpita Shah: Sure, sure.

G: Okay, I just wanted to put that out there. So obviously, my name is Geoff Hadden.
Sarah Burns: And I am Sarah.

A: Hi Sarah.

G: And we are doing a project in Hangzhou obviously about consumer loan products for the Indian market. And the point of this interview, obviously, we wanted to look at marketing strategies. Specifically social media marketing strategies in India. So if we could start off, just a little bit about yourself and your area of expertise and where you work.

A: Okay. So I work with BBH India and I manage social media strategies as well as digital strategies. And I handle a lot of grants from insurance, which is into finance- general insurance mostly. To <a French name>, which specifically caters to Lebanese and Lebanese cuisine. We also manage bank size, which is German. So that's about it- those are the kinds of accounts that I manage out of BBH India.

G: And then, what specifically would you do- what specifically is your role? I know you said managing the accounts, but could you get a little more specific into that please.

A: Sure. So I basically handle social media marketing, as well as digital planning, for all of these brands that I mentioned earlier. And it's everything, right- social media in terms of creating content, as well as advertising, which is acquisition of fans, as well as getting people to sign up.

G: So then, I don't know if you personally have experience with it in the United States, but do you see any differences in the trends in the United States in terms of popularity of platforms as well as the relative costs associated with them?

A: Yeah, so I think India is a very different market all together, right- in terms of social media. I think what the U.S. has at least in terms of platform, would be like Instagram. Because I think everyone is using Instagram extensively in the U.S., Facebook not so much. There are new and more innovations that are happening in the U.S., that India becomes a secondary market when

there is any new testing that has to be done. It's always primarily done in the U.S., but in India we are slowly catching up. We've been increasing our fan base on Instagram, as well as other platforms. In the U.S., there would be a lot of teenage population which would be extensively using Snapchat and here we don't have a lot of Snapchat users. Pinterest, again, is a very widely used network in the U.S and here not so much. I mean it's not that popular in India. It would be women more, versus men. And even in the skew of women, more 25-28 plus- on Pinterest I'm talking about. Youtube, again, it's extensively used here. So I think we are at par with the U.S. Consumption point of view may differ, but more or less would be the same and I think doing a lot of efforts of localizing the content here. So there are more and more masses that get onto Youtube side of the story, not human content or video content.

G: And then, more specifically companies' advertising on these platforms, do you notice any differences in relation to costs or differences in effectiveness from the U.S. to India? Like one platform might be more effective or anything along that nature?

A: Yeah, I think a lot of it depends on the clients and the marketing teams and the brands that are actually advertising a lot. So the U.S., because they are highly evolved, they've adopted digital, they're ahead. I think India is 4 or 5 years lagging behind in terms of advertising, and they're slowly catching up. But I think, what's different here is that people don't understand digital and digital advertising very nicely. So it's a struggle. You have to first make the client understand what it is going to bring to the brand, because brands and even marketers don't understand this medium per say. So this shifts and spends a little less in terms of digital, but high in terms of TV and print and radio. But it's slowly easing because there are a lot of brands that are digital first brands who only focus on digital advertising and when they have made a name for themselves in the digital universe, they'll actually go out and probably do a national roll out. I mean, that's one of the brands that I manage. Insurance is a digital first insurance company and all operations brand digitally. And it is now that we've gone national, we've done print, radio, TV, and everything.

G: So yeah, as a company that their primary point of access to the customers is a mobile application- so, in your opinion, do you think that the Indian market is still at a stage where the social media advertising is not as effective as traditional forms or- you described that it might be 4 or 5 years until the U.S., but do you think it is currently an effective strategy or are advertising dollars best spent on more traditional forms of advertising.

A: No I think, given the nature of the business- it's a mobile app, I think social media would be the best platform from an acquisition and awareness point of view. Because what you want to do, you want to educate the people in terms of what your app is going to be all about. At the same time, you want to acquire a lot of people, right? Either its downloading the app or it's going to the website and doing any kind of transaction. So I think social- Google will play a very important role. Like I said, if you were to use traditional forms of media, you could do it at a later stage when you know you have a strong enough base on digital so you know that people who search after seeing your traditional marketing at first at least know you've been a well-established company- not just a start up just going to start right now.

G: Okay, and then going along with that, I was just wondering- a big part of advertising is demographics, and do you find a large difference in the demographics for platform? I know in the United States, the older generation is just now starting to adopt Facebook, but younger generations have adopted Instagram and Snapchat. Do you find that discrepancy in India, where a younger group prefers a different platform as opposed to an older, more professional generation?

A: Yeah, so I think what you just described, right now how the shift is happening in terms of us as well, where the older generations are starting to use Facebook- where older generations are starting slowly and gradually starting to use Facebook here. And what's happening is that younger people are moving away from Facebook and they're going to Instagram and going to other platforms where they don't really have to interact with family, because family is technically on WhatsApp, on Facebook now. But they have not made roads into Instagram, not yet made roads into Snapchat. Those are the platforms where younger people are more to be found. So yeah, demographics play a very important role, because say you are targeting a certain group- say 25-35 year old person, the person may have a digital footprint across social platforms. They would have an account on Facebook, would have a handle on Instagram, would also be using LinkedIn extensively, could be in the job search phase. I don't know if Snapchat would be a great enough platform. I think Snapchat could be used from an advertising perspective, but nothing you could possibly do a content roll out medium.

G: So I know we've done a lot of background research into this, and it's somewhat difficult to find specific statistics in regards to cost per platform for India. I know they generally do averages for a lot of bigger companies, as well as give worldwide averages. And for the

couple platforms that have provided it, it seems to be a lot cheaper to advertise in India on these platforms than it is in the United States. I don't know if you can attest to this, or what your experience with the associated costs with advertising on these platforms.

A: Like I said, in the US I think everyone has adopted digital very beautifully. Here in India, people are still learning the many ways in terms of how to use digital in their entire marketing plan and what to do and what not to do. So I think even brands have become a little open in terms of bringing down their cost per view or even cost conversion. But again, it differs from category to category. It may not be in the U.S. it's not expensive and in India it's a lot cheaper. I think here also, it's becoming a little expensive given that people are seeing value in what digital brings to the table. People are seeing what digital conversions are just one digital deployment and actually end up giving you a lot of impressions and a lot of reach with that. So people are realizing the importance of that here, and that's why would might not be able to find anything for the cost per platform or anything like that. Because slowly and gradually people are getting used to it. But I think a lot of people do invest in Facebook and Google. These two platforms become very, very important from a reach parameter and a impressions parameter, as well as acquiring new audiences into their brand.

G: Yeah, absolutely. So obviously our sponsor is in the financial industry, and more specifically in payday loans and small short term loans. In your opinion, I know it's a little bit of an on the spot question, but do you think that for a company like this, is it more important to educate a potential customer on the possible effects of this loan or would it be better to do more of a brand awareness campaign? In regards to they want to get more people to know their name, versus it's a relatively complex system to educate them about the types of loans they have.

A: So I think loans as a category, there are a lot of players in India. From small companies to big players, everyone is playing the loan game here. What's the differentiating thing that your client brings on board- that's the part that you have to focus on from an education standpoint. Awareness. So I think a combination of both education and awareness is very, very important, because loan as a category also people are not familiar with the concept of loans and what are the different types of loans that you can get. If you say that it is a payday loan, then I am assuming that it is something that for a certain period of time you can use their money to buy whatever you want to, and then later on return it once your pay happens. Or something like that, right?

G: Yes, more or less.

A: So I think you'll have to start explaining that also to the Indian audience, because a lot of times what happens is the Indian mindset is such that you rely on a debit card or a credit card. So I think this takes away the burden of you having to keep track of your credit card payments, or anything like that and how the loans can be very, very different for you and how it's just a use it sort of thing. Correct me if I'm wrong here, but I think you'll have to do a combination of both education as well as awareness.

G: And then we also just recently researched about- we know WhatsApp is an extremely popular messenger app in India. And there were some rumblings from Facebook that they were going to start attempting to monetize WhatsApp. Have you heard- become some of the information is a little bit confusing and hard to read, I don't know if you know about their plans to start monetizing this platform?

A: So they've already started doing that, it's in the beta phase to roll out monetization for certain brands. A couple of companies that I can give you examples and then I think you can research about them to better understand. One is 1MG, which is a pharmaceutical company where you can actually upload your doctor's prescription and they'll tell you if these medicines are available or not available. And then they'll tell you the cost and it's delivered to your place. So that's one part of WhatsApp's monetization. The other client is Book My Show. Book My Show is a ticketing platform, which has partnered with events, movie theaters, concerts, music festivals, and everything. So you just go there, on WhatsApp, you just tell them if these show times are available or not available and the cost and everything. And they send you a payment link, and you just have to go there.

G: So then how does the respective company, or how does WhatsApp make money- is there a fee charged per click or how does the payment structure work?

A: I don't know, because WhatsApp has not really come out into the open and said they were going to be using monetization. Because in India, everyone uses WhatsApp from your old grannies to your kid who's in school would be using WhatsApp. So they've not really done that. The other things is WhatsApp doesn't really want to make this platform where they monetize it extensively, because WhatsApp is a one-on-one conversation. So you wouldn't want to see an add in between all that.

G: Of course. And then, one other thing I was looking into is, with a platform like YouTube, obviously your advertisements are going to be primarily video based, as opposed to a traditional banner advertisement. Do you find that for a smaller company, that these video ads are going to be more labor intensive to create which will generate a higher expense- for a company in a smaller start up stage, do you find that these video ads are almost more expensive than what they are worth or is it pretty translatable the extra cost that goes into it turns out to be worth it in the end in terms of the amount of impressions that it might generate?

A: So here in India, they're really found a way to walk around it. I mean, if you create a video, you don't only put that video up on YouTube, but you also slice it and put it up on different platforms. So you're actually creating maybe one video, but you made that video in such a way that you can create 6 second videos out of it- you create 16 second videos out of it. So they can be repurposed on Facebook, on Instagram, and on other places as well so that ultimately you can see whether the ad is working for you or not working for you and then you get results out of it. I mean, whatever your objective is- whether you want to drag traffic to the website or whether you want to actually do a sale online.

G: Okay, and then again going along with the small versus big company, I know obviously the bigger companies is allowed to spend a significantly more amount on their advertising and they can push that traffic. Do you find that there is any disadvantage for a smaller company as opposed to a bigger company in terms of how their ad gets distributed or are these social media platforms making it quite fair no matter the size of your company in terms of the return on your investment?

A: I think that they're absolutely working for both parties- small and big companies. While I understand that big companies do have a lot of money to spend and smaller companies might not have, which is a setback that small companies would have to face or are facing right now, but I think social media platforms are absolutely fair in terms of what you are optimizing your campaign for- what you're spending versus the kind of return you're getting back is something you'll have to plan very thoroughly. It may not just be you have a marketing mix such as Facebook, Google, Instagram and be traditionally- that doesn't mean that will work for me. It doesn't really work like that, but you have to optimize each and every single platform. Even on

Facebook, your strategy on timeline might be different versus the kind of audience that you'd want to acquire is different.

G: Okay, and then obviously half the battle is actually applying your advertisement on these platforms, but the other half is the creation of the advertisement. Do you find that- which is almost more important, is it a quality ad or make sure that you are targeting the right population or is it a pretty equal balance between the two?

A: I think that it is an equal balance between the two, because if it's not a quality ad, even if you are showing your ad to the right demographic, they're not going to click it because it's not a great looking ad. Or it's not a very different piece of advertisement they've not seen from competition or anyone else.

G: Okay, and then one of my final questions is, do you think that these platforms have structured their advertisements in a way that minimizes the effect on the user experience? Because obviously I know I've had some times on social media where it's almost been a pain seeing ads sometimes. But do you think, in your experience, these platforms have done enough to balance that content versus advertising in the user experience?

A: No, that was the whole issue with Facebook, because everyone started using the platform as just a reach medium. People started reaching out to people and it just became an ad platform. And that's why Facebook is now moving towards creating two timelines, one is your personal timeline- which is only going to be friends and family and everything which is important for you and something that you engage with, and the second timeline is going to be content from brands that you are interested in. So I think that Facebook is working towards that. Instagram also, even if I'm seeing Instagram, there are a lot of ads that you see- whether they are relevant or not relevant, that's a different thing altogether. But I think what is happening is that, at least nowadays, people have the power of just going and unsubscribing from brand on a platform or even hiding the ad altogether. So a lot of people have started doing that, because they are digitally aware. So it's not a problem as such, but I think what brands need to understand is that they need to bring in a mixed balance of content and not just a sponsored story.

G: Okay, this is my final question- if there is a smaller company and their advertising budget is quite limited, do you have a recommendation as to the most effective form of advertisement per their dollar- like if they could only pick one or two platforms to

advertise, where would their money be best spent, in term of translating those advertising dollars to sales?

A: So I think you'll have to start off by deciding what the objective is, whether its brand awareness or traffic to the website or actual sales. Depending on that, I think you'll be in a better position to narrow down the platforms, but in my mind, I think Facebook and Google will give you the best results. What is your objective- whether its awareness or website clicks or its full conversions, I think Facebook and Google could be two platforms where you could actually see great results and you can optimize these platforms. You have the ability to run the ad. If it's not working, you can pause it and change the content and then run it again on Facebook. On Google, also, you can pause the campaign if you're not seeing great results you can probably optimize your target audience in terms of who you're reaching out to. You can see whether those keywords are working or not working for you and then how you can better that.

G: And then, I know we have been looking into more traditional social media aspects, but when you say Google as a form of advertising, talking about paying for your website when certain keywords are searched to pop up higher than other ones, is what I presume you are talking about?

A: Yeah.

G: Okay. Thank you for your time.

Appendix J. Transcript of Interview with Professor KV Bhanu Murthy

1. **Peter Beretich: What is your experience with study or work in finance?**
   In my opinion, it is overloaded with secondary market research. Primary markets and market micro-structure is underworked. Banking is even less worked.

2. **P: What is your area of expertise in finance?**
   In finance: stock market research, insurance, and IPO market. In banking: Competition, Structure, Conduct, Performance Approach, and NPAs. Have not really worked on NBFCs except Mutual Funds.

3. **P: What is your opinion about personal loans provided by NBFCs through online lending platforms?**
   What is a personal loan: In my opinion: (I interpret personal loans mainly as vehicle (two-wheeler and 4-wheeler, consumer durables) and housing loans (rather than consumption loans).

4. **P: Is the personal loan market over-saturated, or is there room for growth?**
   No. There is room for growth.
   Reasons for growth on demand side:
   i) *Young professional get handsome perks including automobile and housing loans as a part of their 'package';*
   ii) *Middle classes are trying to "catch up with the Joneses". Those who owned two-wheelers are now ambitious of owning cars (small or second hand ones);*
   iii) *There is a growth in home delivery services which require vehicles (two-wheelers);*
   iv) *E-Rickshaws are proliferating, which require small loans;*
   v) *Women drivers are increasing in Metros and sub-urban areas;*
   vi) *Even 4th class employees like Janitors aspire to own two-wheelers;*
   vii) *House maids aspire to buy own homes;*
   viii) *Small businesses like vegetable supplier and poultry farmers now are on the lookout for loans to buy 3-wheelers, re-furbish or build small pick up vans, rather than loading on the back of their cycle;*
   ix) *Small shops no longer have fans but buy mini air-conditioners;*
   x) *House builders no longer recommend coolers they install air conditioners.*

5. **P: Loans provided by NBFCs through online lending platforms?**
   NBFCs cannot compete with secure Banks with deep pockets, and extremely large Debt-Equity ratios (leverage). They should collaborate with commercial banks. Rely on banks for re-finance and finance; and instead rely on their own marketing and strategic skills.

6. **P: Do you consider these loans beneficial or predatory to borrowers? What can companies do to improve their image in this regard?**
   Too defensive. NBFCs should encourage savings and sell savings plans to the public and at the same time offer good loan products. Convince borrowers that it is better to 'save your own money', pay a small interest on loans from NBFCs and recover their own interest through 'savings plans.'

Appendix K. Coding Table for Survey Responses of User Comments

Coding	Response features
Good experience	Only about good service, app or experience
Loan rejected	Only about loans being rejected
Ask for loan	Responses asking about loan statuses
Unclear	Responses in Hindi, or the meanings being unclear in context of user comment
Bad experience	Only about poor service, app or experience
Fast	Comment on fast service or process
Slow	Comment on slow service or process
High interest	Comment on the interest being too high
Service location inquiry	Comment asking for loan service in a specific location
Minimum doc	Comment on the app requiring less documentation
Need update	Comment on the app needing an update
Loan incomplete	Comment on the loan still in process

Appendix L. Coding Table for Survey Responses of Loan Purposes

Coding	Response features
Health	Medical, medical emergency, health, healthcare
Emergency (excluding medical)	Emergency, [emergency situation]
Education	Education, study, student loan, school, school loan
Business/Foundation	Business, startup, foundation, company
Property & Car	Home, house, property, car, land
Purchase (exclude property & car)	Buy [something], [items for purchase]
Events	Marriage, wedding, festival
Payments	Fees, bills
Debt Consolidation	Debt consolidation
Daily expense	Daily expense
Improve life	Living standards
Personal	Personal, personal loan, personal use
Family	Family, household
Travel	Travel
Relocation	Moving
Build credit	Build credit
Unclear	Responses in Hindi, responses without understandable meaning as purposes for loans

Appendix M. Survey Data from CashMama Users

SurveyData_CashMa
maUsers.csv

Appendix N. Survey Data from University Students

SurveyData_University
Students.csv

Appendix O. Comparative Spreadsheet from Onion Credit

ComparativeAnalysis.
xlsx