

# Advances in Peer to Peer Lending: An Evidence from India

Dr. Nitin Balwani, Sriti Smaraki Mohanty, Shrestha Banerjee, Abhishek Ghosh, Prof. Namrata Nanda, Dr. Rajendra Kumar Sinha

Dean – Planning & Development, IFIM Business School, Bangalore
PGDM Student, IFIM Business School, Bangalore
PGDM Student, IFIM Business School, Bangalore
PGDM Student, IFIM Business School, Bangalore
Research Mentor, IFIM Business School, Bangalore

Professor & Chairperson – Centre of Excellence in Banking, IFIM Business School, Bangalore

Article Info Volume 82 Page Number: 1308 - 1326

Publication Issue:
January-February 2020

Article History
Article Received: 14 March 2019

Revised: 27 May 2019 Accepted: 16 October 2019 Publication: 07 January 2020

#### Abstract:

**Purpose:** This study aims to examine the lending procedure of peer to peer lending platforms and its advancement in India.

**Design/ Methodology/ Approach:** Content analysis was done for the working mechanism of peer to peer lending platforms. For Sentiment analysis of customers, reviews were taken from social media sites and analysis was done using IBM Watson Analytics tool. A comparison between different peer to peer lending platforms was done by drawing data from internet sources.

**Findings:** The outcome of the study suggested that the peer to peer lending companies are adopting the technologies to mitigate the risk involved in lending and gaining popularity among the borrowers and lenders.

**Practical Implications:** The peer to peer lending platforms can be the alternative way of lending for the quick and hassle-free transaction than the traditional way.

**Originality/ Value:** The novelty of this study enumerates the business model of the lending platforms in India without the involvement of financial intermediaries.

**Keywords:**Peer to peer lending, Credit Risk, sentiment analysis, Lending procedure, Escrow account.

## I. INTRODUCTION

In the generation where everyone is associated with the wide operation of the internet, there is a lot of adoption of the phenomenon of exploring financial intermediation over technology. With the upgrade of technology, there has been a dramatic modification in the way of living and judgmental capability of individuals. There is an old connection between lending and borrowing, starting from the days of usurious money lending to intimidate by the bank and financial institution. Technology is currently leading for removing the constraints of physical existence for lending decision and is buzzing to form an advanced virtual space for operating lending decisions. Because of this, an evolution of business

model called as peer to peer lending or p2p lending has formed (Roy, 2015). The global financial crisis, big data, investor appetite for alternative sources of yield and improved analytics, quick response times, quicker loan approval times and quicker funding are some factors that made the way for innovations in credit platform (Bv and Satish).

Peer to peer lending (P2P lending) is interpreted as an online marketplace where lenders or investors can lend to individuals or small business without traditional financial intermediaries (Mateescu, 2015). Mainly it is a method of Debt financing which doesn't include an arbiter that is an official institution and will reduce a huge amount of paperwork and saves time. Peer to peer lending has seen a gradual development due to ease in receiving



credit without having to deal with any financial intermediaries (Mezei et al., 2018).

Everyone is not the part of banking system some might not have enough of collateral or regular income to be eligible for a loan. They are a quite conservative institute that tries to hedge or avoid risks. It has hardly developed, and the same old process is formed which leads to the delay of the transaction at the end they lose track of time until the actual money arrives. It worsens for those who can't present a credit score and full fill the basic demands of banks and end up helpless. Due to all these the borrowers move away from NBFC's and local money lenders towards P2P lending portals (Gorton et al., 2010).

The slowdown in lending by the bank during 2016-2017 was one of the factors that played a major role in the rise of the alternative lending industry in India. Loans to business slowdown, driving various business to look at other methods of financing. By 2023 Peer to peer lending in India is set to rise into a \$5 billion industry (Srinivas, 2018). The market in India is widely spread and has great potential for P2P lending platforms. The platform in India is not driven by money, instead, it directly goes from lender to borrower (Saleem, 2018). In India, RBI evaluates the regulation of peer to peer lending platforms (Patel, 2018). The start-up culture has seen growth in recent days. currently, there are numerous opportunities for P2P lending to build a stronghold over the financing sector. India has been a dominating and regulating the financial markets and carrying out its legacy which is required by p2p lending companies, which mostly focus on their customers. This paper reviews the development in the current era of technological innovations in lending i.e. peer to peer lending and to give an overview of peer to peer lending platforms in India.

# II. LITERATURE REVIEW

The Lending system began in Antiquated Greece and Rome. One of the oldest ways of lending was started by pawnbrokers (SivaShankar, 2018). To diminish the risk of the lenders, pawnbroker lends to the

borrower by collecting collaterals from them. At the initial stage, the process was carried by exchanging of products. For instance, individually receive cash from the lender and consequently, they gave the identical measure of products to him. At the time of zamindar, individuals get the cash from him and afterward work for him to reimburse the amount.

In the early 1800s, the new period of lending emerged. In this advanced era, the building society and saving fund society was initiated. Afterward, the framework has replaced with property loan and with the surety of the property, general population got the loan. After that with the advancement of technology, the lending framework has got feasible development (Caldararo, 2013).

From 1950 with the involvement of technology in banks and financial institution the modern lending system has established. To supervise and make regulations to the banking system the government framed organizations in their nations like RBI in India, Monetary Authority of Singapore (MAS) in Singapore, and Federal Reserve System in the USA. Based on their needs and purposes bank started providing the loans to its customers. Secured loans, unsecured loans, Subsidised loans, and Concessional loans these are the different kinds of loans provided by banks and other financial institutions.

Banking and Financial services changed into the digital world which has created the pathway to the digital lending system. In the twenty-first century, digital era of the lending system was originated. In the modern lending system, a lot of financial software is emerged to decrease the manual work and the traditional procedure associated with this system. Due to the introduction of online banking and mobile banking, the lending procedure has become so easy for both borrowers and lenders.

From a survey in 2010 Lending Tree.com, state that 21% of prospective home loan consumers shopped online. Also, according to BBVA survey that was held in 2015, a 45% rise in consumer loans through mobile phones. Now, the emergence of Fintech created way more changes within the lending system



and furthermore gives rise to numerous peer to peer lending sites (SivaShankar, 2018).

One of the variables that considerably influence lending is economic dissimilarity. Lenders in high-GDP per capita nations demonstrate an inclination to give money for low-GDP per capita nations-facilitating capital flow from developed to developing countries. Other than that migration and colonial past also affect lending which is positively connected with lending and geographical distance which has negatively associated with it (Singh et al., 2018).

The bank had a monopoly on lending money to business and people before the financial crises of the noughties. This made a funding gap for new and developing business. If a bank chooses to lend money to SME it was frequently at a high-interest rate. This suppressed the expansion of the start-ups and of growing business attempting to contend with established ones that had comparatively quick access finance. Likewise, it created trouble for individuals to borrow money from the bank regardless loans were protected against their fixed assets. Then the innovative advances of the early 2000s opened opportunities in several industries. The concept of social media was born, the sharing economy started to shape, the concept of Fintech surfaced by challenging traditional financial institutions (Mackonochie, 2016).

A turning point in the ongoing history of peer to peer lending was the bankruptcy of Lehman institutions and no longer able to secure credit at a reasonable level of interest as a result peer to peer lending emerged as a viable substitute. In the United Kingdom due to the substantial growth of the digital lending system, the first peer to peer lending platform was established in 2005 named as Zopa that lent over \$635 million to borrowers (Lichtenwald, 2014). Especially where traditional financing has become harder to get, Peer to peer lending is turning into attractive alternatives for many customers (Steinisch, 2012).

Peer to peer lending system is one of the small and micro credit patterns which depend on the internet and technology for the completion of debt and credit through the p2p web network communication platform. Generally, the borrowers are people and small and medium-size organizations also the small investors those have deficient money and restricted investment channels (Ruiqiong & Junwen, 2014).

Trust in borrower plays two vital parts one is it drives lenders willingness to lend more proficiently than trust in intermediary likewise it carries the significant effect of trust in intermediary on the lender's willingness to lend. One of the most important factors that impact lenders' trust in borrower is the quality of information of borrowers' loan request (Dongyu et al., 2014).

Create trust is critical to the various online transaction (Laura et al., 2011). (Duarte et al., 2012) found that there is a higher probability of getting a loan and pay at a lower interest rate of borrowers who seem more trustworthy than who appear less seem reliable. Also, borrowers who trustworthy have a better credit score and low default rate than who appear less trustworthy. This indicates appearance conveys information for the person's reputational capital (Lin et al., 2013). found that borrows online friendship behave as credit quality signals. It increases the likelihood of successful funding, related with lower ex-post default rate and lower interest rates on funded loans. There are several components that impact success funding in peer to peer lending. Especially that factors grouped under four categories, according to previous research these are a) characteristics of loan that is rate of loan, amount of loan and duration of loan b) personal information of borrowers' for example gender, working life, age credit level and so on c) voluntary data that include loan description and photograph d) soft information which includes group affiliation and friendship network (Han et al., 2018).

Peer to peer lending platforms connect the individuals who have excess money and want to lend with the individuals those who looking for the loan. Due to the advancement of technology we get a



powerful tool that can nullify the issues that traditional banks face (Gandhi, 2017).

P2P lending gives customers more privilege in choosing the way of lending and the objects of lending. The information flow in this system is quicker and transparent. As p2p lending depends on decision model and the data that available in the system, IT techniques such as data mining, big data analysis, and credit auction are an important element in it (Wang et al., 2015).

In p2p platforms mechanism of effective pricing plays a vital role (Ma et al., 2017). It bears less transaction cost due to the replacement of expensive middle-man with the cost-effective platform (Klafft, 2008). The business model is simpler because they are not under strict regulations of banking, they don't capture deposits, they don't have to maintain idle balance. Operating cost is an important element to decide interest margin in the banking system. In the case of online platforms like p2p, most of the process is automatized and use technology as strength thus improving the efficiency (Cinca et al., 2015). In p2p platforms, investors get a higher return of their investment whereas cheaper for the borrowers as compared to the traditional bank (Klafft, 2008).

Loan settlement becomes an easy process because of direct interaction between lenders and borrowers in most of the p2p lending platforms. Borrowers get a loan quickly and at best interest rates also investors can explore multiple investment options. Investors are now assured of fixed monthly returns because of multiple investment opportunities (Pushpa & Phani, 2016). Some of the banks will not lend money to individuals and organization those don't have any credit history. P2P platform can lend money in this situation (Altus Consulting, 2016). The benefit in p2p lending is borrower can get a loan without collateral and at a lower rate (Yum et al., 2012). So basically, the advantages can be categorized as following a) Offer better rate of return than traditional bank and low fees for borrowers b)

provision of lend to some categories of borrowers those who unable to access lending from the bank. c) P2P lending is more responsible and of more social value than traditional banking d) Innovation of technology improves the speed and quality of service to both lenders and borrowers (Milne & Parboteeah, 2016).

One of the basic problems that peer to peer lending face is information asymmetry. This problem arises when the platform used for microfinance activities, where the customers are economically underprivileged (Yum et al., 2012).

A financial institution has a risk management department which is monitor by proficient financial analyst those are probably more expert than the individual lenders. In the banking system, the credit risk is managed by the financial institution. But in p2p system credit risk is assumed by the individual who put at risk of their moneylending to other individuals. Assignment of interest rate depends on the assigned grade. If the interest rate is high the rate of default also become high (Cinca et al., 2015).

For P2P loans credit risk is an important concern (Emekter et al., 2015). The factors that affect the determination of the loan defaults are loan amount, annual income, debt to income score, credit score and revolving line utilization (Jin & Zhu, 2015). With the maturity of loans, the mortality risk also increases. The Cox proportional hazard test reveals that the probability of loaning default is due to an increase in credit risk of the borrowers. However, the higher probability of default is not justifying significantly by the higher interest rate that currently charged for the riskier borrower. High default risk is resulted by more adverse selection which in turn is a result of increasing spreads on riskier borrowers (Emekter et al., 2015).

One of the factors that that describe default is loan purpose for instance wedding is the less risky loan purpose whereas small business is the riskiest (Cinca et al., 2015).



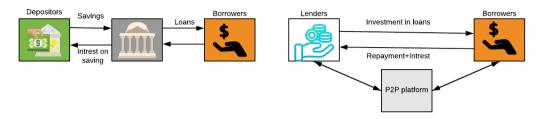


Figure 1 Banking model versus peer to peer lending model

## 2.1 India peer to peer lending

Traditionally in India borrowing from family, friends and unorganized money lender has been the primary source of capital for micro and small business also for individual borrowers to meet their financial requirements. This type of p2p lending is generally informal ways of lending. Online platforms called up and modified this traditional financing mode and act as a matching platform between lenders group and borrower (Deloitte, 2017).

In India, the peer to peer business seems to be riding support on the development of consumer lending, which is presently appearing to be fascinating for both banks, non-banking financial companies and for informal lenders. As compared to the traditional investment the rate of return generously higher in peer to peer lending (Bothra & Agarwal., 2017). There are various p2p lending platforms in India. The first peer to peer lending was launched named as I-lend (Srinivas, 2018). Some of the platforms primary objective is to be social effect and to give easier access of credit to the small entrepreneurs by emerging in the business targeted at microfinance activities.

P2P lending platforms are generally tech organizations enrolled under companies act and help the lenders and borrowers to create a match between them. After they registered themselves on the website those found worthy are permitted to participate in the lending and borrowing process because of diligence is carried out by the platforms.

The companies generally follow reverse auction model. In this model, lenders bid loan proposal for the borrowers and the borrowers has the flexibility to either accept or reject the proposal. Also, some of the companies provide various extra administrations like credit assessment; recovery etc. Peer to peer platforms facilitates the documents for the lending and borrowing arrangement. The lenders transfer money to the borrower's account from their bank accounts. In the name of the lender, the platforms facilitate the collection of post-dated cheques from the borrowers for the reimbursement of the credit. Along with the platforms also help in the recovery process, follows up for repayments and if requires to be, employs recovery specialist too (Reserve Bank of India, 2016).

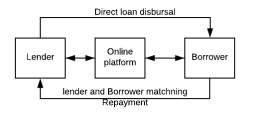
The companies are obliged to apply to central bank that is RBI Reserve Bank of India for peer to peer lending license (Adriana, 2018)RBI created a guideline in 2017 the companies those are operating in per to peer lending platforms classified as NBFC-P2P, which is the twelfth category of NBFC introduced by Reserve Bank of India (Rajiv M Ranjan, 2018).

# 2.1.1 The business model in India

The p2p business model in India categorized in two types

- a. Direct loan disbursal model
- b.Partner assisted Disbursal business model





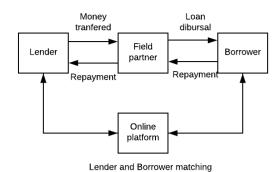


Figure 2 Direct disbursal Model versus Partner assisted disbursal Model (Source- Deloitte, 2017)

### 2.1.1.1 Direct disbursal model

In this model peer to peer platform directly matches the requirement of lenders and borrowers. It mainly focuses on urban, educated customers who understand the alternative model and can transact online for personal loan segment. To maintain and control better some of the platforms maintain nodal or escrow account. Both borrower and lenders deposit money in the nodal account and both disbursements and repayments are done by the nodal account of the p2p platform.

### 2.1.1.2 Partner assisted disbursal model

In this model to manage customer acquisition, disbursement and collection of fees, peer to peer platform tie up with field partner. The p2p platform mainly responsible for onboard lenders and offers matching services. This model emphasized on unsecured loan (Microfinance) to low-income households.

Earlier research in p2p lending focuses on the use of alternative data sources by Fintech lender (Jagitani et al., 2012). External stakeholders play a major role in interaction with lending websites. A promising research topic is to know more about the lending model organization mechanism (Bachmann et al., 2011). Previous research demonstrates the mechanism and advances in peer to peer lending in the world's perspective (Zhao et al., 2017). There is a lack of research which focuses on the business model of Indian peer to peer lending companies.

#### III. OBJECTIVES

Our objective in this research is based on the India context. These are: -

- a. To capture and analyse customers sentiments towards these platforms. Also, we described how lending process advances from ancient till now.
- b. To describe the business process model of the selected platforms.
- c. To make a comparative study on different peer to peer lending platforms in different aspects.

#### IV. METHODS

In India where the dearth of an asset is a common problem faced by SME and MSMEs bank reject to give a loan. Without collateral and credit score it is difficult to get loan from the bank for individual. In such case peer to peer lending is the best alternative. Our research is basically exploratory research which includes lenders and borrowers of India as a population. Social media is one of the major sources of data. We had collected customers reviews of the companies from the social media sites. The sources include Facebook, Mouth shut and the official site of the companies. By considering the availability of the data we have taken 6 companies. The sampling techniques that has been used in this research project as purposive sampling technique. We have captured sentiments of the customer as number cloud. We have used IBM Watson analytics as one of the major



tools. In the meanwhile, we did a content analysis to describe the working mechanism of the companies. We have formed flowcharts to represent the lending mechanism and matrix to do comparative analysis under different aspects.

#### V. RESULTS

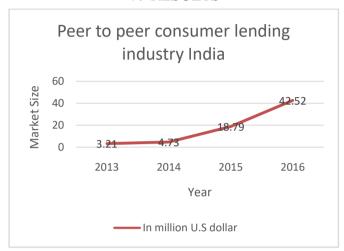


Figure 3 Peer to peer consumer lending industry in India

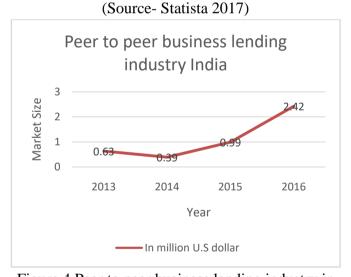


Figure 4 Peer to peer business lending industry in India
(Source- Statista 2017)

The above line charts illustrates the market size of peer to peer consumer lending(Figure 3) and business lending industry India (Figure 4) from 2013 to 2016. In 2016, the peer to peer consumer lending market in India amounted 42.52 million U.s dollar and in business lending market amounted 2.42 million U.S dollar. In India, the peer to peer lending marketplace is growing continuously with the passage of the year.

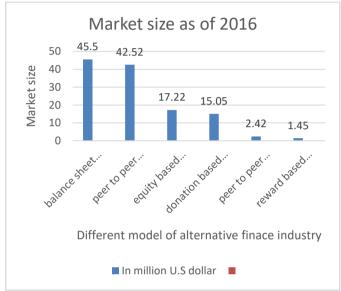


Figure 5 Market size of alternative finance industry
India by model
(Source- Statista 2017)

The bar graph (Figure 5) demonstrates the market size of the different model of the alternative finance industry of India in 2016. This graph illustrates that peer to peer consumer lending industry amounted 42.52 million us dollar. Peer to peer business lending industry amounted 2.42 million us dollar in 2016



# 5.1 Sentiment Analysis

Sentntiments of customer towards the companies

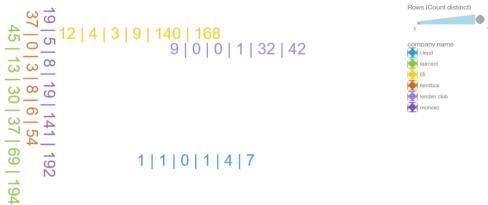


Figure 6 Lenders and borrowers' sentiments towards companies

The above word cloud (Figure 6) is retrieved from IBM Watson analytics tools by taking different customer's reviews from the social media site to analyze the positive and negative sentiments towards companies. The numbers of word cloud from left to right represent 1star to 5 stars and at the end total number of reviews. Form the above represent we can observe that from total collected reviews company wise 57.14% of I-lend,35.5% of Faircent,83.3% of I2I,11.11% of Lendbox,76.190 % of Lendenclub and 73.44% of Monexo customers have positive opinion about the companies.14.28% of I lend ,23.195 of Faircent,7.14 % of I2I,68.52% of Lend box,21.43% of Lendenclub and 9.89% of Monexo the customers gave negative feedback for respective companies.

The above data shows that I2I captures maximum positive sentiments followed by Lendenclub and Monexo. Lenders and borrowers are happy with the transparency, Hassel free services. So, for I2I customers mention that the company is reliable and safe for investment due to the availability of principal protection approach and provides the good return. Some customers are shows positive feedback for the robust procedures and quick services. It Provides personal loans at 12% and promises to provide up to 30% returns for investors.

Monexo is the first Indian peer to peer lending company and its the leading company. It doesn't have any branches and basically, it is online with low overhead cost. CRIF is one of the key partners. Leading company as PWC is there internal auditor in India. Customers are happy with their services as well as their lending process. It also provided loans for students to pay for their colleges. Loan disbursement is easy and hassles free. Some of them felt poor customer services but there were quite a few.

Lendenclub customers are recommended the platform because of hassle-free service and the precise process. Lendbox captures maximum negative reviews some of the customers are not satisfied with the service.

After analyzing we can conclude that customers gave a maximum percentage of positive reviews for i2i funding, Monexo and Lendenclub. The company mechanism and procedure for lending is better than other selected companies. I2I use credit scoring model to evaluate risk for the borrowers and use principal protection to assure lenders good return. Lendenclub uses the marketplace model. Monexo is the old company which used alternative financial modelling as the mechanism. As customers are satisfied with the companies the models are convenient for lenders and borrowers.

## 5.2 Working Mechanism

As mentioned one of the research objectives is to describe the working procedure of the selected six companies. The platforms worked based on different working technique and have a different business



model. To demonstrate the mechanism, we used flow charts. Basically, the flowchart illustrates the working flow and loan transaction of the selected peer to peer lending platforms of India. We explained each step of flowcharts by describing how the members of the platforms act. However, we also described what are the steps taken by these platforms to reduce the risk.

#### Monexo

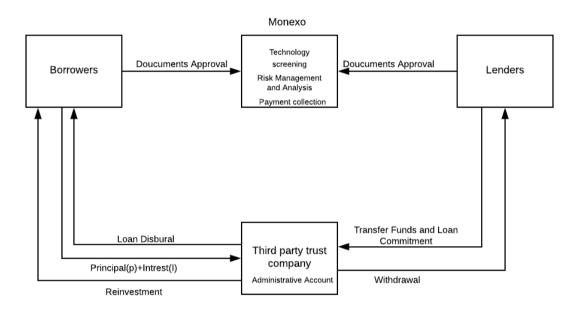


Figure 7 Monexo business process (Source-monexo.co)

To become borrower and lender in Monexo they have to complete an online form and upload the required documents. The entire process is online, using technology to lower the cost of borrowing and solid return for lenders. Lenders include individual as well as institutions. Once approved as a lender, has to transfer a minimum of 1 lakh to the thirdparty escrow account which is managed by IDBI Trusteeship Service Limited (ITSL) to starts lending on the platform. Lender can browse loans in the platform and decide which loans to fund based on his risk-return criteria and targeted portfolio. Lenders have an option either they can fund loan manually or can use auto invest feature where loans are funded automatically based on the criteria of lending. Monexo screens the information and determines an interest rate that appropriate to the probability of repayment of the borrowers. After

screening if accepted borrower loan will be made visible on the marketplace. To completion as soon as lenders have funded loan the money is deposited to borrower's bank account. Once a loan is disbursed lender start receive monthly repayments into an escrow account from the borrowers.

Sometimes as the loans are unsecured it is possible for the lender to lose their principal investment and there is a possibility that borrower may default. Monexo offers various stages of risk mitigation which protects lenders from fraud or defaults.

During the entire process, Monexo has implemented industry-based practice for protecting the safety and security of personal information for instance platform send one time password when one initiate transaction. Monexo does not handle directly any borrower or lender money. The third-party administrative account stores all funds safely and



securely and conducts all financial transaction. So, if the company shut down there is no additional risk to the lender. Monexo is the 1<sup>st</sup> Indian online p2p platform which implemented the global best practice of appointing Third party Company to be an independent custodian of lenders fund. Monexo screen thoroughly each borrower by using CRIF

High mark and CIBL report to access credit history to ensure borrower carry less default risk. Lenders are also given a transparent view on the risk levels of all loans through Monexo rating system from M1 safest to M8 riskiest. Monexo allows lenders to diversify their portfolio to protect against default risk **I lend** 

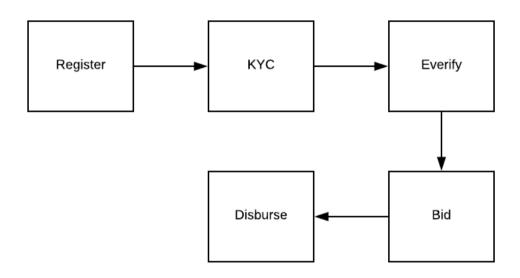


Figure 8 I-lend business process (Source-i-lend.in)

I lend act as a facilitator between lender and borrower for the loan transaction. The business model of I-lend works on peer to peer concept. The platform does not decide the interest rate. It decides by the lenders and borrowers. The borrower can request a Minimum loan of Rs.25,000/- to a maximum loan of Rs.5,00,000/.

The working process starts with the registration of borrower and lender on the site. I lend verifies all the information which was provided during the time of registration. The information includes personal, professional and financial details. I lend verifies information through other available resources which is line with the KYC norms set by RBI followed through the BFSI sector. After the verification, the listing is published on the site for all approved borrower and lenders. A lender can see the listing of borrowers to decide before lending to the borrower which contains information such as the purpose of the loan, the reason of lenders make offers to them, personal and financial information. To diversify the risk borrower can receive offers from various lender although lender can lend to the various borrower. Once a borrower loan is 100% funded the loan is disbursed, which involve loan agreement between borrower and lender, transfer of money from the lender to the borrower for the loan amount and transfer of EMI from the borrower to the lender.



#### **Faircent**

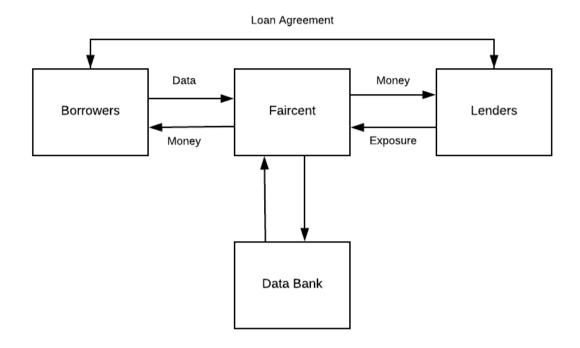


Figure 9 Faircent business process (Source-faircent.com)

Faircent is India's first peer to peer lending (p2p) to get Certification of Registration (CoR) from Reserve Bank of India as an NBFC-P2P. Visitors become as registered lenders or borrowers as per there requirements. The platform does verification based on personal, financial and professional information provided of all of its registered borrowers and lenders. Loan amount varies from 30.000/- to 5,00,000/- for personal purpose and for business purpose borrower can apply for a loan up to 10,00,000.Interest rate assigned ranges from 12% to 28%. After the verification completed, the amount lender wishes to invest has pre-funded to the lender's escrow account.

The loan amount, loan period and interest against an individual are calculated and suggested by an automated system, which analyses the borrower's capability to repay the loan. Lenders can make an offer to borrowers requirement on the basis of first come first serve. There can be multiple deals. A

lender can fund up to 20% of a borrower's total loan requirement so each loan will be funded by at least 5 lenders.

A formal contract is signed between borrower and lender and borrower has provided the required number of post-dated cheques towards security and repayment of first EMII. once the agreement is reached and then the loan amount is transferred to borrowers account and then the borrower has to pay for repayments for the within given time period. Loan disbursal process begins only after a minimum 75% of the borrower's fund requirements have been fulfilled.

Repayments are done through an online automated process which is been tracked through their unique account on Faircent site. If borrower repayment is a delay, he has to pay penalty directly to the lender as part of the process.



# i2i funding

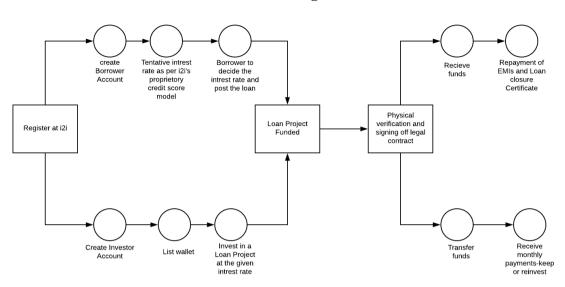


Figure 10 i2i funding business process (Source-i2ifunding.com)

i2i is an online platform that connects investors those who are looking for alternative investment opportunity for higher returns and qualified borrowers who want unsecured personal loans. To register, borrower and investor should fill personal details and create a login Id. Registration is free for all users. To create borrower account one-time listing fee 100 levied and borrower should fill the online form along with required documents. One can choose to have co-borrower for a faster loan. To lend in this platform lender has to pay a one-time nonrefundable fee of 500+GSt at the time of registration furthermore investor has to fill online form so that the virtual wallet at 12i will activate. Before each loan listed, i2i's proprietary credit evaluation model takes into consideration 50+ parameters such as credit history, financial and other behavioural patterns of the borrower and analyze it. Based on the analysis the underwriting team allocates i2i recommended interest rate with an i2i report for each loan. This helps borrower and investor to not only set the financial interest rate but also to know the

risk link with each loan. Next step is borrower can post the loan higher or equal to the interest rate provided by i2i. Also during this period borrower can increase the interest rate to attract lenders. An investor can lend to single or multiple borrowers to diversify the risk. After the commitment to lend lenders can access the documents shared by borrowers. Then loan gets funded and to avoid speculation, all the investors for the loan will access an equal interest rate. After that i2i conduct physical verification of the borrower. After verification borrower and investor has to sign a legal contract. After all the above process successful, investors are obliged to transfer to a Nodal escrow account for disbursal and on next working day, the money will transfer to borrower's bank account. Then repayment schedule will provide to the borrower and a loan closure certificate will be issued to the borrower after the total amount has been repaid. An investor can utilize and reinvest the repayment money in the platform also will receive income statement.



#### Lendenclub

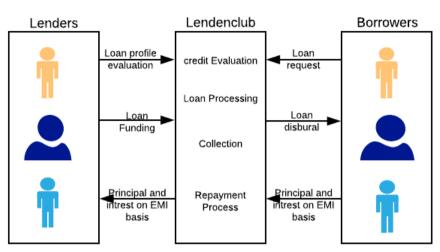


Figure 11 Lendenclub business process (Source-lendenclub.com)

LenDenclub brings verified lenders and borrowers together in one platform. They bring each and everything on one platform so that lenders can get better returns on their investments. It follows good transparency. It ensures high earnings which don't carry a high-risk disclaimer. The company does a systematic background check and also study's recovery options. Lenders and borrowers register by providing basic information and fulfilling KYC norms as per RBI guidelines. After registration borrower request loan in the platform. In Lendenclub verified borrower's personal, professional and financial information through digital verification mechanism. After the completion of verification, the profile is processed by platforms proprietary S-Algo

(screening Algorithm). Once the screening criteria met the borrowers are listed on the platform. Also, they visit each of borrower's house before his loan amount is transferred to his account. The lender can be individual or institutional. Lenders can lend to multiple borrowers by creating a portfolio as diversification can mitigate the risk. A borrower can see loan funded by approved lenders. The documentation process is hassle-free. After the loan disbursed convenient and automated fixed monthly payments are done for repayments. Then EMI is collected in an Escrow account through auto debt. Then the amount is remitted to the lender's account.

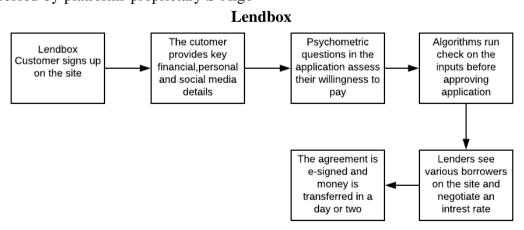


Figure 12 Lendbox business process (Source-lendbox.in)



Lendbox is an online marketplace which helps individual borrowers to connect with institutional and individual lenders for funding their loan on an adjusted interested rate.

To register in Lendbox customers sign up on the sight. During the time of registration, customers provide key financial, personal and social media details. Lendbox verifies each customer that is both borrowers and investors data so that all the information showed in the platform is authenticated. By using sophisticated technology and machine learning algorithm lend box check the borrowers financial, personal, professional and background information. This approach ensures that individual with the less favourable CIBIL score is also can get a loan if they are creditworthy as platform's proprietary machine learning algorithm generate more holistic credit profile of the borrowers. Borrower can borrow between 25,000

and 5,00,000. After the registration borrower and lenders can send their proposal to each other along basic information which includes reason, how much amount of loan, preferred interest rate, and tenure etc. This proposal can accept, reject renegotiated or send receiver can send a counter-proposal. Both the investor and borrowers can strike multiple deals at one point in time. Lenders see various borrowers on the site and negotiate an interest rate. After both the parties accept the loan offer an agreement is made for amount and interest rate, they sign a formal contract. Hence further the agreement is e signed loan is disbursed. All the transaction of money is directly between investors and borrowers. After loan disbursed lenders will receive EMI. If a borrower not able pay an EMI within defined time, a penalty is levied on the borrower which is payable to investor directly.

# 5.3 Comparative analysis

Table 1 Comparative Analysis of platforms

Company	Lendbox	Faircent	Lendenclub	i2ifunding	Monexo	I lend
name						
Founded in	Oct 5, 2015	2013	Jul 7, 2015	Oct-15	Jul 24, 2014	Apr 8,2012
State	Delhi, Delhi, India	Haryana, Haryana, India	Mumbai, Maharash tra, India	Noida, Uttar Pradesh, India	Mumbai, Maharashtra, India	Hyderabad, Andhra Pradesh India
Category	Financial Services, Lending	Banking, Financial Services, Lending	Internet, Lending, Peer to Peer	Crowdfunding, Finance, Financ ial Services	Financial Services, Fin Tech, Market place, Peer to Peer	Lending, Marketplac e, Peer to Peer
Automated Investing	No	No	No	No	Yes	No
E-Contracts	Yes	Yes	Yes	Yes	Yes	NA
Escrow/Noda l account	Yes	Yes	Yes	Yes	Yes	Yes
EMI Statement	Yes	Yes	Yes	Yes	Yes	Yes
Interest Income Statement	No	No	No	No	Yes	No
Loan stats (Platform level)	No	Yes	No	No	No	No
Reconciliatio n process updates	No	No	No	No	No	No



EMI	Bank A/C	Platform Wallet	Platform Wallet	Bank A/C	Bank A/C	NA
Transfer to						
EMI	11 <sup>th</sup>	Day of deduction	Day of deduction	11 <sup>th</sup>	5 <sup>th</sup>	NA
Transfer on						
(each month)						
EMI	No	No	No	No	No	NA
deducted on						
salary day						
Interest rate	Open Auction	Reverse Bid	Fixed	Fixed	Fixed	Fixed
bidding						
CIBIL/Exper	No	No	No	No	Yes	No
ian						
Reporting						
Investor	Yes	Yes	Yes	Yes	Yes	Yes
Dashboard						
Tenure	3 months to 36	6 months to 36	3 months to 24	3 months to 36	6 months to	6 to 36
	months	months	months	months	36 months	months

(Source- wordpress.com & crunchbase.com)

As per the above table (Table 1) observations are made. It describes the platform on various levels which are different from each other. Monexo is the only platform which has automated investing option and CIBIL or Experian reporting. The second observation is of e-contract which every company follows between lenders and borrowers to make the process quick and without physical meet. Nodal or escrow account are used to hold third party amount for settlement. A separate nodal bank is required for the nodal account and an escrow account held by a third party on behalf of the other two parties that means for lenders and borrowers during transaction. This temporary account which operates until the completion of the transaction process. All platforms operate through an escrow or nodal account which help to save cost time and effort. After loan agreement, the transferred money from lender's nodal or escrow account should transfer to borrowers' bank account. After the transfer of EMI from the borrower to lender every platform provides EMI statements. Day of transfer of EMI varies from one platform to other. In none of the platform, EMI deducted on salary day. In some platform EMI transfer to the platform's wallet so that money is reinvested in borrower's from there platform without hassle. Only Faircent shows loan stats in the platform level. About the interest rate bidding for the borrower, there is three type of bidding followed by the above platforms i.e. fixed, reverse and open auction bidding. In fixed rate bidding completely

based on the platforms credit algorithm which has taken all type of risk into consideration. In open auction, the model allows lenders to decide their risk-reward appetite and then bid. In the reverse model, idea is to give a fair deal to the lender. In this model, a borrower with high credit risk may get an interest rate which is lower the benchmark range for its type of borrower. The current regulation allows these platforms to lend for not more than 36 months. As peer to peer lending facilitate a loan for short terms so the tenure period lies between 36 months for every p2p platforms.

# VI. DISCUSSION

Peer to peer lending or online social lending connects borrowers and lenders so that individuals can directly lend and borrow from each other without any involvement of traditional financial intermediaries. Everyone cannot be a part of the banking system because eligibility to get a loan and enough collateral to meet the bank's requirement. Peer to peer lending platform can beneficial to those individuals. In recent time, advances in peer to peer lending marketplace and a large amount of data availability, create a roadmap to the new research possibilities. Digital India major factor for the growth of the peer to peer lending marketplace. This study analyses how the lending process advanced from traditional to modern process. How the India



peer to peer lending came into existence and how it is regulated

This study exhibits three objectives in India's p2p lending which contributes the literature review by examining how the lending procedure advances and p2p platform come to existence. Furthermore, the literature review explains the type of business models followed in India. For analysis, six companies were taken which are I lend, i2i-funding, Lendenclub, Lendbox, Monexo, and Faircent.

The first part of the analysis described the sentiments of the customers towards these companies. The sentimental analysis described the satisfaction of customers towards peer to peer platforms. The result shows that i2i-funding, Monexo, and Lendenclub captured maximum positive feedbacks from the customers. Customers were satisfied with their transparency and quick and easy procedure. It suggests us the gaining popularity of these platforms by lenders and borrowers. The model they have used convenient enough to attract lenders and borrowers. The negative reviews mainly due to bad customer service so platforms should also take care of the service for the customer. From the sentimental analysis, the lenders and borrowers can reveal which company to follow and where to invest. From the company perspective based on the feedback of customers, the company can know the area where they must improve so they can increase their retention rate of customers and can become trustworthy.

The second part of the analysis depicts the working model of p2p companies Lenders and borrowers can contact directly through the platform. documentation and application are done digitally which leads to transparency and hassle-free service. Credit risk in peer to peer platforms relies on lenders or investor. Lenders can lend to the various borrower to diversify their portfolio and minimize their risk. To reduce the risk default companies not only check the personal and financial information but also check the social media data of the borrowers, peer to peer lending platform is a great opportunity those who want to borrow unsecured loan instantly and for a

shorter span of time for a personal purpose such as home improvement, travel, wedding medical emergency, debt consolidation etc. Also, one can get a business loan, but it depends on the platforms. By observing the flowcharts lenders and borrowers will get to know the working model of the companies. How the companies check the creditworthiness of the borrowers and protect the invested money of the lenders from the fraud.

The third part is the comparative analysis, in this analysis, it compared companies under different attributes. Every platform operates online to connect directly lender and borrower. All the platform conducts online agreement between lender and borrower before loan disbursed and provide EMI From the comparative analysis, statements. customers can compare the platforms and take decision according to that. For the platform level, each platform can compare with other platform and can improvise process to reduce default. One of the major concerns is that only Faircent provide statist in the platform. If all other platforms also provide the transaction data in the platform it will be easy for lenders to tract the defaulter rate. Lenders should invest in the platforms which assist loan recovery.

#### VII. LIMITATION AND FUTURE SCOPE

There is a scarcity of data available about the loan transaction in the peer to peer lending platforms. Data collected from the social media site which can be irrelevant as well as the review data can be manipulated. In the future, one can extend the research about the p2p lending platforms in India and can use the questionnaire method to collect reviews about platforms. The emergence of the blockchain in p2p lending can ensure that all transactions are recorded at the real-time and in chronological order. In the era of digitalization, the peer to peer lending platforms can adapt by leveraging the blockchain technology so that manipulation of data will not be so easy to deal. The credit scoring and CIBIL scoring will be done with safety along with several precautions. Blockchain and bigdata emergence can change the way of loan disbursed, repaid and appraised. So, application of blockchain and big data in p2p lending can be a prominent research area. But the actual test would be the acceptability among the people.



# VIII. CONCLUSION

Peer to peer lending platforms is gaining popularity as an excellent investment option in India because investors are showing interest towards this new opportunity. It is a good opportunity for both investor and borrower as it provides the most flexible boundary condition and a better interest rate. It will play a major role in shaping the financial future of the country.

After demonetization, private money lender got affected for which p2p lending platforms got benefited. Peer to peer lending platforms expands their technology to facilitate future growth. Due to the impact of Cashless transaction evolution of digital India more and more individuals are moving towards borrowing money online, which creates a quick and hassle-free process and direct connection between lenders and borrowers as compared to a bank or any other sources. However, still, investors have many concerns related to the safety of capital and risk involved with p2p lending. The emergence of p2p lending is diversified and therefore if conducted properly can result in a large amount of unorganized lending and borrowing into its fold. Platforms should advance their technology and look for the better way to protect investors money. The regulator needs to keep a keen eye watch and track necessary actions especially in the initial days for the betterment of the industry and as well as for the lenders & borrows for unscrupulous activities. The p2p lending platform needs to monitor strictly on the advertisement and promotional messages. Till now in India, there is no standard industry-wide data available for p2p lenders. P2p lenders that have got a license from RBI need to put out their default numbers on their website so that the default rate can be tracked and act regarding the same.

## Acknowledgement

The satiation and euphoria that accompany the successful completion of this research would be incomplete without the mention of the people who made it possible. We thank the research team of

Accendere Knowledge Management Services, CL Educate Ltd. for their unflinching guidance, continuous encouragement and support to successfully complete this research work.

#### IX. REFERENCES

- [1] Adriana, D., & Dhewantoa, W. (2018).
  REGULATING P2P LENDING IN
  INDONESIA: LESSONS LEARNED FROM
  THE CASE OF CHINA AND INDIA. Journal of
  Internet Banking and Commerce, 23(1), 1-19.
- [2] Altus Consulting (2016). Peer to peer: the meteorite approaches [PDF file]. Retrieved from https://www.orcamoney.com/wpcontent/uploads/2017/03/2851-Altus-P2P-Lending-White-Paper\_FINAL-2.pdf
- [3] Bachmann, A., Becker, A., Buerckner, D., Hilker, M., Kock, F., Lehmann, M., ... & Funk, B. (2011). Online Peer-to-Peer Lending-A Literature. Journal of Internet Banking and Commerce, 16(2).
- [4] Bothrab, N., & Agarwal, M. (2017). India Peer to Peer Lending Report [PDF file]. Vinod kothari consultants. Retrieved from http://vinodkothari.com/wp-content/uploads/2017/10/India-Peer-to-Peer-Lending-Report-2017.pdf
- [5] Bv, P., & Satish, P. Prospects Of Non Conventional Souces Of Credit-A Case Study On Peer To Peer Lending In India.
- [6] Caldararo, N. (2013). The theory of banking: Why banks exist and why we fear them. International Journal of Sociology and Anthropology, 5(4), 116-132.
- [7] Chen, D., Lai, F., & Lin, Z. (2014). A trust model for online peer-to-peer lending: a lender's perspective. Information Technology and Management, 15(4), 239-254.
- [8] Deloitte. (2017). FinTech in India Ready for breakout [PDF file].Retrieved from https://www2.deloitte.com/content/dam/Deloitte/in/Documents/financial-services/in-fs-fintechindia-ready-for-breakout-noexp.pdf
- [9] Duarte, J., Siegel, S., & Young, L. (2012). Trust and credit: The role of appearance in peer-to-peer



- lending. The Review of Financial Studies, 25(8), 2455-2484.
- [10] Emekter, R., Tu, Y., Jirasakuldech, B., & Lu, M. (2015). Evaluating credit risk and loan performance in online Peer-to-Peer (P2P) lending. Applied Economics, 47(1), 54-70.
- [11] Gandhi, R. (2017). The dawn of p2p lending. Business Today. Retrieved from https://www.businesstoday.in/magazine/features/with-demonetisation-came-a-severe-cash-crunch-and-the-new-normal-needed-new-business-models/story/242990.html
- [12] Gorton, G., Metrick, A., Shleifer, A., & Tarullo, D. K. (2010). Regulating the shadow banking system [with comments and discussion]. Brookings papers on economic activity, 261-312.
- [13] Han, J. T., Chen, Q., Liu, J. G., Luo, X. L., & Fan, W. (2018). The persuasion of borrowers' voluntary information in peer to peer lending: An empirical study based on elaboration likelihood model. Computers in Human Behavior, 78, 200-214.
- [14] Jagtiani, J., & Lemieux, C. (2017). Fintech Lending: Financial Inclusion, Risk Pricing, and Alternative Information.
- [15] Jin, Y., & Zhu, Y. (2015). A data-driven approach to predict default risk of loan for online Peer-to-Peer (P2P) lending. In Communication Systems and Network Technologies (CSNT), 2015 Fifth International Conference on (pp. 609-613). IEEE.
- [16] Klafft, M. (2008). Online peer-to-peer lending: a lenders' perspective.
- [17] Larrimore, L., Jiang, L., Larrimore, J., Markowitz, D., & Gorski, S. (2011). Peer to peer lending: The relationship between language features, trustworthiness, and persuasion success. Journal of Applied Communication Research, 39(1), 19-37.
- [18] Lichtenwald, R. (2014). The History of Peer to Peer Lending. Peer & social lending. Retrieved from http://peersociallending.com/news/history-peer-peer-lending/
- [19] Lin, M., Prabhala, N. R., & Viswanathan, S. (2013). Judging borrowers by the company they keep: Friendship networks and information asymmetry in online peer-to-peer lending. Management Science, 59(1), 17-35.

- [20] Shabna e., shri hari subhashri r., sridevi r., monisha p., kavimani s. (2018) role of certain drugs in cardiotoxicity induction for the experimental purpose. Journal of Critical Reviews, 5 (4), 1-5. doi:10.22159/jcr.2018v5i4.26326
- [21] M, S. (2018). Interesting things about History of Lending [Blog post]. Habile Technologies Retrieved from https://habiletechnologies.com/blog/interesting-things-about-history-of-lending/
- [22] Ma, B. J., Zhou, Z. L., & Hu, F. Y. (2017). Pricing mechanisms in the online Peer-to-Peer lending market. Electronic Commerce Research and Applications, 26, 119-130.
- [23] Mackonochie, J. (2016). The History of P2P Lending. Retrieved from https://learn.off3r.com/history-of-p2p-lending/
- [24] Mateescu, A. (2015). Peer-to-Peer Lending [PDF file]. Retrieved from https://www.datasociety.net/pubs/dcr/PeertoPeerL ending.pdf
- [25] Mezei, J., Byanjankar, A., & Heikkilä, M. (2018). Credit risk evaluation in peer-to-peer lending with linguistic data transformation and supervised learning.
- [26] Milne, A., & Parboteeah, P. (2016). The business models and economics of peer-to-peer lending.
- [27] Patel M. (2018). Crowdfunding by Start-ups and Small Businesses- What We Know and What We Don't Know. SME World. Retrieved from http://library.ediindia.ac.in:8181/xmlui/bitstream/handle/123456789/7327/SME%20World.pdf?seq uence=1
- [28] Ranjan, R.M. (2018). FY 19 Beginning of a New Era for P2P Lending in FinTech Sector. IIFL. Retrieved from https://www.indiainfoline.com/article/article-latest/fy-19-beginning-of-a-new-era-for-p2p-lending-in-fintech-sector-118022800167\_1.html
- [29] Reserve Bank of India. (2016). Consultation paper on peer to peer lending [PDF file]. Retrieved from https://rbidocs.rbi.org.in/rdocs/content/pdfs/CPER R280416.pdf
- [30] Roy, A. (2015). Peer to Peer Lending: Business Models [Blog post]. Retrieved from



- http://vinodkothari.com/blog/peer-to-peer-lending-business-models/
- [31] Ruiqiong, G. A. O., & Junwen, F. (2014). An overview study on P2P lending. International Business and Management, 8(2), 14-18.
- [32] Saleem, S. Z. (2018). Lessons for P2P lending in India. Livemint. Retrieved from https://www.livemint.com/Money/tuI4wvfqdbVH 9nQVYC1M5I/Lessons-for-P2P-lending-in-India.html
- [33] Singh, P., Uparna, J., Karampourniotis, P., Horvat, E. A., Szymanski, B., Korniss, G., ... & Uzzi, B. (2018). Peer-to-peer lending and bias in crowd decision-making. PloS one, 13(3), e0193007.
- [34] Srinivas, M. (2018). Peer-to-Peer Lending and its Growth in India [Blog post]. Razorpay. Retrieved from https://razorpay.com/blog/peer-to-peer-lending-and-its-growth-in-india/
- [35] Steinisch, M. (2012). Online alternative to bank loans, credit cards [PDF file]. Consumer Action News. Retrieved from https://www.consumer action.org/downloads/english/CA\_News-Summer\_2012.pdf
- [36] Wang, H., Chen, K., Zhu, W., & Song, Z. (2015). A process model on P2P lending. Financial Innovation, 1(1), 3.
- [37] Yum, H., Lee, B., & Chae, M. (2012). From the wisdom of crowds to my own judgment in microfinance through online peer-to-peer lending platforms. Electronic Commerce Research and Applications, 11(5), 469-483.
- [38] Zhao, H., Ge, Y., Liu, Q., Wang, G., Chen, E., & Zhang, H. (2017). P2P lending survey: platforms, recent advances and prospects. ACM Transactions on Intelligent Systems and Technology (TIST), 8(6), 72.
- [39] Tiwari R, Tiwari G, Rai AK. "Self-Emulsifying Drug Delivery System: An Approach to Enhance Solubility." Systematic Reviews in Pharmacy 1.2 (2010), 133-140. Print. doi:10.4103/0975-8453.75055
- [40] Suresh, G., Narayana, K.L., Kedar Mallik, M., Srinivas, V., Jagan Reddy, G. Processing & characterization of LENS™deposited Co-Cr-W alloy for bio-medical applications(2018) International Journal of Pharmaceutical Research, 10 (1), pp. 276-285.