

Internet Based Social Lending

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Abstract

Social lending is community-based lending. The “family and friends” loans community has been extended and formalized to create a marketplace of borrowers and lenders. In Internet-based Social Lending (IBSL), the company runs a website that connects potential lenders with potential borrowers. By removing the overheads and bulky infrastructure of the banking system, IBSL provides lenders a higher rate of return in exchange for only slightly higher risk. Borrowers here are those who are unsatisfied with the rates offered by banks or those that fall outside of the traditional banking systems due to unattractive credit ratings, high risk profiles or project-based, sporadic compensation. Borrowers are also attracted by the possibility of getting lower interest rates. We believe that this has the potential to impact the genesis of many small and medium level enterprises, besides providing a perennial source of financial leverage. The focus of this paper is not just the underlying technology and innovation, but also the market it creates. We take the example of one of the key players in the field, Zopa, and study its organization.

Keywords: Social Lending, community, technology, dominant design, value net, microfinance

1. Introduction

Social Lending fills an interesting space between microfinance, which has gotten a lot of press lately and traditional lending.

A. Why IBSL - Emerging Trends

Two key driving factors for IBSL lately are—

Internet empowers Community Lending

Social lending organizations have relied on networks to accomplish their goals. Networks are required to spread information and raise the funds necessary to sustain and ensure the growth of organizations. Social lending organizations need to connect borrowers who need loans with individuals who will lend them money. The Internet fosters the creation and maintenance of these networks. It reduces the cost of transactions, thus making borrowing of funds possible at cheaper rates and providing financial value to the borrowers. It facilitates lenders to achieve value by giving them the option to choose the borrower and also the rate at which they wish to lend. For the enablers (social lending

organizations), the internet brings together the community aspect.

Long Tail

The “long tail” **Error! Reference source not found.** is about the economics of abundance. Social lending organizations connect networks of lenders with those in need of loans. This is a long tail approach to borrowing and lending, as it looks beyond “big” loans and instead concentrates on markets for smaller loans. An efficient feedback loop is possible among the stakeholders of the social lending firms. This makes the system more customer-adaptive and capable of different offerings to exploit niche markets.

B. *Technology, Market and Organization (TMO) components*

The Technology of IBSL focuses on the websites’ automated payments, automated risk profiling, and leveraging automation to reduce the cost to service the loan. The organizations that manage social lending need to have strong financial and technical skills; they must also focus on the mission of connecting people and filling in the ‘structural hole’ left by this market failure. The market of this “long tail” industry, is built by expansion on traditional community (friendship/family) roles, by connecting borrowers and lenders. It also builds on eBay-style reputation and relationship engines and serves a significantly underserved and large pool of potential customers.

We explore potential new entrants in the domain and strategic directions for incumbents for growth and protection of their business. The rest of the paper is organized as follows. In section 2 we start by a discussion of the key players and try to gauge if a dominant design has emerged. In section 3, we talk of the various characteristics of IBSL as an innovation, assessing its ‘disruptiveness’ and ‘openness’. We discuss the technology and standards in section 4, and the market growth factors for this emerging sector in section 5. We conclude by highlighting the value constellation around IBSL and a perspective on Zopa as the system builder.

There have been various research work in the domain of microfinance, both in academia [13] and in by the industry players [14]. The work of Coleman [13] in fact talks of how internet could play a leading role in the evolution of micro-finance. The field of social lending has been addressed by Rupert Ayton and Stephanie Sarver in [11] where they talk of

the challenges that are faced by the intermediaries in the business. Professor Hulme and Collette Wright have done a detailed survey [12] via interviews, articles and press releases, but the focus is on user experience and the social trends in this space.

2. Organization - Key Players

Even though this is a very new area, there are a couple of incumbents: Zopa and Prosper, the two biggest players, though Google has shown interest and Virgin is working in a similar space (though with a completely different model). It will be interesting to see how (and whether) incumbents have *appropriated* and *controlled* their market and secured it against potential entrants with significant resources.

There are various mechanisms of loan delivery. Zopa, for instance, emphasizes risk-averseness to investors, spreading the risk across all borrowers and forcing lenders to choose one or more borrowers to assist with lower interest rates. Prosper, on the other hand, directly allows lenders to fund individual borrowers. The community aspect is brought out differently: Prosper uses a reverse auction to allocate parts of its loans, and the lenders choose who gets funded based not only on the abstract numbers (home ownership, Debt-to-income ratio, credit rating) but also on a personalized plea. This causes problems in some markets with interest rate caps— laws against usurious interest rates which block lenders from getting what they consider a proper return to compensate them for lending to higher-risk borrowers.

Zopa-US while still connecting lenders with borrowers on an individual basis, emphasizes community by posting the same personalized plea *without* the hard data, but lenders reduce their returns slightly to favor a single borrower (give her a lower rate). While it would appear that IBSL is very early in the area of ferment, we would argue that it is actually in the transitional phase: The products exist, and this is a series of process innovations, modifying first, traditional lending tools and second, microfinance. The processes described above are different experimental approaches to the innovation of social finance.

A. Stakeholder - Zopa

Zopa stands for “Zone of possible agreement”: The area between a seller’s lowest price and a buyer’s highest price. The company says: "If there's no Zopa, there's no deal." We have chosen Zopa as the focus of our study, because besides being the first mover in this market, it also has various models, from which we believe that the dominant design might emerge.

B. Dominant Design

The dominant design of IBSL is still not established. The concept, technology and platform for bringing together lenders and borrowers through the internet is in place and similar across social lending organizations. However, the mode of operation of each IBSL organization is still different.

For example, Prosper allows a borrower to choose the lender he wants to give his money to. It also facilitates its own internal credit rating of borrowers. Zopa-UK has introduced this model just recently. Virgin Money institutionalizes pre-existing relationships between borrowers and lenders.

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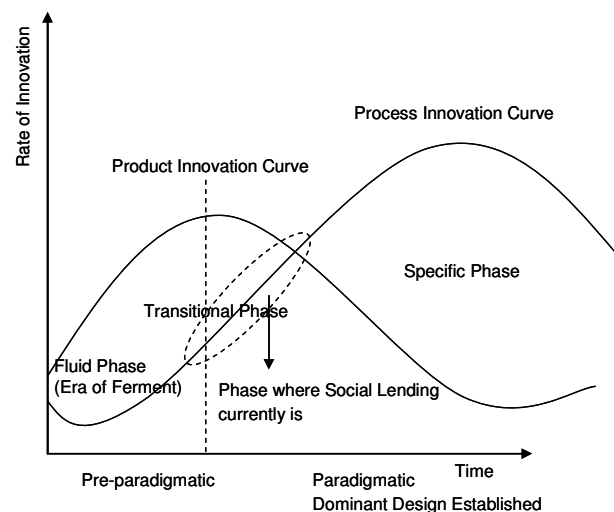


Figure 1 – Product and process innovation for IBSL

Hence, even though the designs for delivering services have emerged, there is not one dominant design which is being followed by the industry as a whole. Eventually, all organizations in the social lending space will converge to one dominant design, one or a combination of the existing ones.

3. Innovation - IBSL

Innovation is invention combined with commercialization [2] with the use of new knowledge which can be market or technological. According to Porter[4], it is a new way of doing things that is commercialized. IBSL has emerged as a new way of lending and is indeed very commercial. IBSL alters the traditional banking business by focusing on the market knowledge, which is the knowledge of distribution channels, customer needs and expectations and makes commerce possible from them.

Market knowledge is equally important to the technological knowledge for the success of an innovation. In the Abernathy-Clark model[15], IBSL classifies as a *niche innovation* with

technological capabilities being preserved, while market capabilities are being destroyed or new markets are being defined. IBSL is thus, significantly changing the market dynamics.

Success for an innovation is also dependent on two critical factors: imitability and complementary assets[5]. The concept of IBSL is replicable and for a firm to be successful in this space, the *complementary assets* will play an important role. Complementary assets are— service, reputation, market information, distribution and brand. For this reason, *Zopa and Prosper are devoting resources on assets. The focus of our study is also on their markets.* Google and Yahoo are potential threats as they have required complementary assets and can build the technological capabilities quickly.

With the maturity of Web2.0, the technological solution has moved quickly from fluid space through transitional phase to specific phase[6] today(Figure 1). As this industry matures further, there will be focus on process innovation and product innovation (loans) will be incremental. An incumbent like Zopa can differentiate itself by investing in the complementary assets as mentioned earlier.

A. Assessing IBSL - Disruptiveness

According to the Disruptive Technology change model proposed by Clayton Christensen[16], disruptive technologies have the potential to create new markets or take root among the incumbent's worst customers. Disruptive technologies are typically cheaper and have the tendency to move upstream. Once successful, they can truly be the next platform or product and establish a completely new paradigm, unlike incremental or even radical innovations, which are predictable and hence easier to harness.

In IBSL, while the underlying technology is a fusion of existing web technologies, the idea to institutionalize the personal loans market via internet is truly novel, and will also introduce a whole new set of customers, earlier unable to transact, since they were not able to meet the stringent measures of banking system.

Besides creating a new market, lesser costs than existing products, initially worse performance on traditional metrics (like bank's risk and diversification profile, liquidity provisions, service, security, growth in deposits, assets) and technology difficult to protect via patents are the key characteristics which define that IBSL is indeed a disruptive innovation.

Being a disruptive process, IBSL is also redefining the parameters on which traditional lending service providers (like banks) are rated. There is no human face here for the transactions, but at the same time, it is online lending and borrowing 24x7 and at own choice of return.

As shown in Figure 2, IBSL has started at a lower level in terms of the gamut of services offered to people, but is growing at a faster pace, and would be soon able to catch up with the demands of the customers, first at the lower end of the market, and then at the higher end of the market.

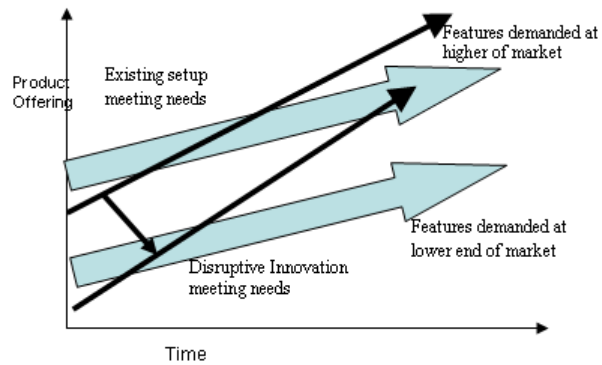


Figure 2 - Disruptiveness of IBSL[7]

Hence, while the underlying technology is not disruptive, the idea and concept in itself are quite disruptive.

B. Assessing IBSL - Openness

Open Innovation or Distributed innovation, is the idea of sharing research contributions to other companies and industries and also having an open funnel of innovation to allow ideas from outside to come in. A lot of work has gone into the nature of open innovation models and whether they are successful. At the extreme end is Linux Open source development projects, where the network of users and developers converge and the result is an inexpensive, modular and extremely useful system.

Whether IBSL in terms of technology or market, could follow the model is yet to be analysed. Open Money[17] was one of the first initiatives to allow users to define the standards for money transactions and give recommendations freely. While recommendations and discussions are enabled on Zopa, it lacks the aspect of joint development, financial or technical by any of outside members. This might not be possible to reverse anytime soon.

4. Underlying Technology & Standards

The technology for social lending sites (Zopa, Prosper) is Web2.0 based. That not only gives it various social/community features, but also immense potential to build on new software. Web2.0 is a heterogeneous mix of relatively familiar and emerging technologies on the web, which have matured in the recent years to provide a stable platform for Social sites. By using the publicly created and donated internet based software services, development times are reduced and complexity, both of project delivery and the overall IT solution are decreased.

WEB 2.0 goes beyond improving the IT delivery; it delivers an IT solution where control of content is put into the user's domain. Currently, the most effective community software deployed are—

- Listings on Zopa with rankings– This is a key measure of requirements listings, for both borrowers and lenders alike.
 - Zopa Blogs, discussion and chat forums– For new users, this is an immense knowledge base, wherein they can ask questions, suggest changes and new features.
 - Finance News, ‘this month at Zopa’, ‘Other stories’ – Based mostly on RSS feeds and also enabling the user to get alerts, these services enable Zopa to be up-to-date.
3. Community Management– In addition, there are public and private questions/answers which are used to link up lenders and borrowers in listing sessions.
 4. System Management- As a part of the networked information ecology, Zopa integrates its listings and comments with Delicious, Diff, Reddit, Facebook and StumbleUpon further increasing the *trust factor* of the site.

While in Zopa, the listings for borrowers and lenders are together, in Prosper lenders place separate bids, though the enabling technology is the same. There are other features of Web2.0 that social lending sites can use like folksonomy and social bookmarking. These could create dual benefit of increasing popularity using network effects and also the openness of the microcontent of the site will increase, furthering the organizational objective of providing a platform for transactions and communications via internet are enabled.

For technology, Zopa studied the way that other financial lending institutions had structured and integrated their businesses. These were invariably rigid systems with little interaction between the various components[8]. For instance, when an application was received it was initially entered onto a receiving system, then when the loans were accepted they were re-entered onto a servicing system for the lifetime of the loan. Zopa, simplified this by combining the systems into one and encapsulated it with a work-flow solution. Thus when an application is received it is entered and passes through all the servicing processes (underwriting, decision and disbursement) on the one system. This was accessed through a common WEB interface. This decreased the cost of integration for themselves and for their partners significantly.

Technology for security is a prime concern for sites dealing with public funds. An integrated issue is that of identity management wherein, different identities are a hassle sometimes and flexibility in others. Appropriate technology has to be provided to cater to the users preferences for identity management. Verification of data collected and security of personal data is important. Verisign technology is adopted by Zopa.

This enables the four key pillars required for a secure site to be built in Zopa–

1. Privacy enhanced Identity management– Identification of users and what they want to reveal about themselves
2. Trust Management– While in-built credit rating provided by Zopa, credit-score, affordability and stability of the borrower are provided; another element of trust is the number of defaulters who have failed to pay loans in Zopa.

Currently the internet as the sole delivery mechanism used by the main players reaches its market through the use of static devices such as PC's. As we see the internet becoming ever more mobile, new technological barriers are appearing. Foremost amongst these are the issues surrounding security: security of delivery of service (the constant fight against denial of service attacks); security of personal data -held both on the mobile devices and on the organisations systems; security on the delivery of information to and from the client's mobile devices – such as PIN.

Interoperability issues due to the variety of platforms and standards worldwide are also a concern. With a choice of WAP, SMS or rich client based (JAVA predominantly) solutions it is harder for a unified solution to be rolled-out worldwide, thus increasing the costs.

These issues are akin to those surrounding current m-banking solutions for which solutions are being formulated. When a dominant design is created it will increase the available market size significantly, not just in emerging markets where mobile telecommunications are the dominant communications infrastructure, but also in developed markets where mobile technologies are the preferred method of communication across all social strata and where static based internet access tends to be a luxury of the upper echelons.

5. Market

The model of Social Lending is but one part of a much larger money lending industry. The industry is particularly well structured and ranges from the institutional lending of banks, through the socially enabled lending of mutual societies, down to the debt consolidation of finance companies. In each of these cases the borrower and the lender engage in contracts that the lender has drafted. Social Lending differs from this in the amount of control that both the borrower and the lender have. Both engage in negotiating the terms, of the contract. A recent survey showed that 70% of borrowers and 81% of lenders felt this level of control was significantly important to their reasoning for using social lending, instead of high street banks.

A. Network Effects

IBSL sites display *network externalities* as more people use it. More users here mean more capitalization and lower rate for borrowers and risk diversification to lenders. Under the Prosper model, which uses a *reverse Dutch auction* to set borrower's and investor's interest rates, the *network effects* are clear in that the more users that are available to fund a

loan, the more competitive or likely the loan is to be funded. The Zopa model, on the other hand, uses its own proprietary market to set interest rates and the spread. Under this model, the *network effects* are similar, however, as each Certificate of Deposit(CD) that the borrower buys requires investment in one or more “worthy” borrowers.

These positive feedback cycles also assist in the social, as well as the financial, capital that IBSL creates. Other marketplaces online, such as eBay, utilize feedback systems and bulletin boards, which create community and interpersonal relationships amongst its users. This has the ability to create *extensive, bridging weak ties*, such as between eBay users and sellers in eBay’s **eBay Live** conference. Weak ties assist in the creation of *value constellations*. Such bulletin boards would allow for *stronger ties* to be created, spreading the benefit possibilities to further investment opportunities.

Other network *externalities*, potentially exist as the networks grow, such as a likely decrease in default and bankruptcy as consolidation loans become more available to other borrowers at other rates. Reduction in crime is possible, as removal of obstacles to credit means less people going to usurious moneylenders.

B. Value Net

The IBSL market is filled with under served actors who can capture value out of the traditional value net. Zopa and Prosper are addressing value in both social capital as well as financial capital, however, it is important that they keep all the players in mind. The value net that they’re looking at is:

- Their *customers* are the borrowers, who get a lower rate on a loan or a loan that they otherwise couldn’t get.
- Traditional finance institutions would appear to be competitors, but currently are *complementers* to their service. Traditional finance institutions will have lower defaults on debt due to debtors consolidating credit cards and future solvent customers.
- *Suppliers* (of capital) get a safe and slightly higher return than traditional savings vehicles like CDs or bank accounts via the Zopa model. Other suppliers of capital in the Prosper model get to choose their own risk/reward profile, choosing interest rates to match risk.
- The *competitors* to social lending are informal lending, from friend and family relationships, payday lending, as well as grey or black market lending such as loan sharks and moneylenders. Informal friends and family receive value as their loans are formalized and structured. There is

potential for Traditional finance institutions, currently *complementers*, to become *competitors* at the margin where the risk/reward and credit/default profiles overlap as IBSL grows.

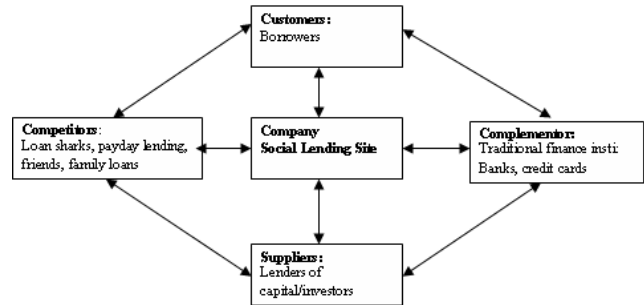


Figure 3 - IBSL Value Net

The only formalized players in this space currently are the payday lending schemes in the US, who are under investigation in several states for their questionable practices[9]. The fact that these loans are often informal, or on the black market, indicates that the lack of capital to these players is a *market failure*. Institutionalizing these loans provides value to most of the players in the market, as described above. The social lending site captures a bit of the value in each area, earning money on the spreads between borrowers and sellers.

With the lifestyle changes and the subsequent changes in technology used in the banking and lending industries we see in general, IBSL will also have to change to reflect these needs. A recent survey by Celent estimates that the 6% market usage of mobile based banking in 2007 in Europe will rise to 25% by 2010. This increased use of mobile banking is seen by many of the mainstream credit providers as a means of manoeuvring closer to their clients and offering a broader range of services. IBSL needs also to provide these services to maintain parity of service.

6. Conclusions

Social lending lowers the barriers to entry for borrowers, extending the capital markets. But it also appeals to two types of lenders: firstly, those who see greater returns than can be extracted than from existing institutional types; and those who are attracted to the philanthropic yet flirtatiously risky element of this type of lending, these tend to be the more financially literate investors.

A. Emerging Value Constellation

“A single company rarely provides everything any more. Instead the most attractive offerings involve customers and suppliers, allies and business partners, in new combinations..... reconfiguration of its relationships and business systems.”

As social lending becomes more mainstream, (currently 74% of people would consider borrowing this way), and with lower costs of administration, it can appeal to both people and institutions looking to invest as lenders, as part of their portfolio of investments. Increasingly it is being used as a vehicle for capital raising by entrepreneurs. Where bank charges are too extortionate, or the cost of losing ownership of their enterprises to venture capitalists or investment angels is too great, social lending provides the best of both worlds.

B. Zopa as a system builder

Zopa, with its eco-system could become the “system-builder” of social lending. System-builders “force unity from diversity, centralization in face of pluralism, coherence from chaos (and) often involve destruction of (existing) systems.” Arguably their founder, Richard Duvall, was the first to envision social lending’s logical extreme: millions of people lending and borrowing money through a secure, efficient and transparent online marketplace, just as they trade on eBay.

We have seen that the technology and the idea of IBSL is quite disruptive, to truly harness the power of the network, more open source development of the technology and the market ideas is required.

C. Mobile Internet Based Social Lending

Increasingly, to align itself closer to its customer base, Zopa, like all Internet based lenders, be they formal banking structures, credit unions or community based lending models need to utilise mobile devices as a distribution channel. The earlier that they pursue this model, the sooner they will dominate their market and create an extra barrier to entry.

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