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# People-to-People Lending: The Emerging e-Commerce Transformation of a Financial Market

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**ABSTRACT**

This paper provides an overview of the concept of people-to-people (P2P) lending, a relatively new e-commerce phenomenon that has the potential to radically change the structure of the loan segment of the financial industry. P2P lending creates a marketplace of individuals and a social fabric through which these individuals interact. It provides efficient information transfer, thus perhaps creating more perfect markets. P2P lending requires information systems support to make it function, and to provide a social network mechanism that may be crucial for its success. We discuss different P2P lending marketplace models, and how information systems support the creation and management of these new marketplaces, and how they support the individuals involved. We conclude by providing some important research questions and directions, and issues for which further investigation is called.

**Keywords**

Electronic commerce, information technology support, lending, social networking.

**INTRODUCTION**

People-to-people (P2P) lending, an emerging alternative to traditional institutional lending, is a relatively new e-commerce phenomenon that has the potential to radically change the structure of the loan segment of the financial industry. Just as eBay enabled yard sales to cross state and country borders, this new P2P lending finance model through the Internet allows lending and borrowing money among strangers to scale up dramatically. For members of Lending Club, for instance, lenders make fractions of loans that are aggregated to form a complete loan for a borrower. Lending and borrowing money among strangers is certainly not a new phenomenon, but traditionally the process is managed by finance middlemen, such as banks and credit card companies. As the Internet shrinks the world, potentially the finance middlemen can be bypassed and replaced with a more efficient market provided by IS support including e-commerce tools. P2P lending institutions can indeed revolutionize the way loans work because they can provide not only the middleman functionality, but also the marketplace itself. Clearly e-commerce tools and IT innovation are changing the way we conduct many types of transactions. P2P lending is facilitated through these types of tools and systems. Despite its recent fast growth in fame as well as money raised, P2P lending remains a field understudied in academia. We seek to improve our understanding of the challenges associated with establishing and managing P2P lending marketplaces, and their design issues.

This paper's goals are twofold:

1) To provide an overview of the concept of a P2P lending marketplace: we describe the several types of P2P marketplaces. We discuss P2P lending marketplaces based on comparison analysis of P2P lending through two different lenses. Through a business lens, we compare P2P lending models along two business strategy-related dimensions. Through an information system (IS) lens, we look at the supporting/enabling roles of IS in P2P lending.

2) To offer a launch point for future research: we pose some interesting, highly relevant questions worth exploring, as well as significant IS-relevant issues emerging from P2P lending environments including regulatory issues.

Our paper is organized as follows. We first describe the P2P lending process and model. This includes a typology. Next we discuss the roles of IT for P2P lending platforms, followed by issues surrounding P2P marketplaces. We conclude by providing some important research questions and directions.

**PEOPLE-TO-PEOPLE LENDING**

**The People-to-People Lending Model and Marketplaces**

The term people-to-people (P2P; also person-to-person, peer-to-peer, or social) lending describes lending and borrowing activities that occur directly among individuals. P2P lending connects people with money to invest to people needing money, allowing them to bypass traditional financial services middlemen. In contrast, the lending model of traditional financial institutions, such as a bank, can be described as institution-to-people. Banks, for example, pool the supply of money (e.g., saving accounts and other investments) on the one hand and lend it out to a pool of loans on the other. In this traditional model, the "lenders" usually invest in financial instruments such as a saving account or CD, often with a fixed return rate, and are only indirectly connected to any lending activities. The "borrowers" receive their loans out of the money pool that the bank has available. In P2P, a lender can choose the borrowers to whom he/she wants to lend money.

P2P lending is not a new phenomenon. Lending among family members or within communities has existed long before the rise of lending institutions. The emergence of the Internet revived the concept of P2P lending; in addition, it allowed moving P2P lending from the family, friend, and community domain to a larger scale, eliminating geographical limits. P2P lending marketplaces, a type of electronic marketplace, facilitate many activities associated with lending and borrowing. In contrast to traditional financial institutions, P2P lending marketplaces are primarily facilitators of lending activities. P2P lending marketplaces do not pool the supply of money as banks do, but instead provide technologies and mechanisms to help people connect to each other, and handle regulatory issues. For example, they allow lenders to search and locate loan requests and facilitate a series of transactions from transferring money to borrowers' accounts, collecting payments, imposing penalties, to handling default through collection processes.

**Types of People-to-People Lending Marketplaces**

A typology helps to group entities into groups (also called types) by similarity (Bailey 1994). Typologies help to reduce complexity by describing these types according to their common characteristics, thus helping researchers analyze and compare the types' similarities and differences (Bailey 1994). Examining existing P2P lending marketplaces shows that they differ on several dimensions such as the motive for lending (for-profit versus altruistic motives), focus of interest group (e.g., offering loans to students, people with disabilities, entrepreneurs in developing countries, or no focus), degree of separation between lenders and borrowers (e.g., lending to family members versus lending to strangers), mechanism to determine interest rate (auction-based versus price setting), or focus of specific region (e.g., cross-nation versus one-nation). A major challenge of creating typologies is to find the dimensions on which to group the entities into a typology that supports meaningful analysis while remaining parsimonious. We choose to categorize P2P lending marketplaces along two dimensions that characterize the participants they support: (1) motive (purpose or reason) for lending, and (2) the degree of separation among participants. We chose these two dimensions because the behaviors of lenders and borrowers tend to differentiate the most along these dimensions, hence the challenges and opportunities faced by P2P marketplaces are likely to differ the most at the extremes of these dimensions. Therefore, we expect the resulting typology to best expose interesting research questions. In this section, we explain the two dimensions, how the behaviors of P2P marketplace participants differ, and some unique challenges P2P marketplaces face.

*Motive for Lending*

The dimension *motive for lending* describes why lenders lend money to others. The two main motives can be classified as economic and philanthropic. The motive influences several aspects of the lending process, e.g., the selection of borrowers, the level of risk taking, and the determination of interest rates. People lending with economic motives invest in loans because they want to earn profit and expect an adequate return on their investment. These lenders regard P2P lending as an alternative investment instrument alongside others such as securities. The expected risk and return dictate their selections of borrowers and loans. Prosper and Lending Club are both examples of P2P lending marketplaces that support economic motive lenders.

Other P2P lending marketplaces focus on supporting people who want to help others to overcome adverse circumstances. Often these P2P lending marketplaces focus on target borrower groups with common problems. For example, Kiva's goal is to help entrepreneurs in the third world by providing startup funds, and people's motivation to lend is primarily altruistic. Lenders select loans based on reasons other than expected return, e.g., they may focus on supporting women who don't have ready access to credit.

*Degree of Separation*

The dimension *degree of separation* describes the relationship between lenders and borrowers. The closest relationship between a lender and borrower is kinship or family. The next close one may be friendship or acquaintance. The one on the opposite end of the spectrum is stranger. With increasing degrees of separation, lenders and borrowers are less connected by

common ties: friends, acquaintance, community, region, culture, country, globally. P2P lending marketplace Virgin Money, for example, focuses on supporting lending and borrowing activities among family and friends. Conversely, Lending Club and Prosper focus on matching people within the U.S. who are unrelated. Kiva matches lenders and borrowers globally.

The degree of separation is likely to influence the social pressure a lender can apply to a borrower as well as the ability to evaluate a borrower's trustworthiness and ability to pay back the loan in time, thus making risk assessment difficult. In general, social pressure and the ability to evaluate trustworthiness would be greater with decreasing degree of separation and less with increasing degree of separation. When lending to a family member or friend, a lender tends to know the borrower well enough to evaluate whether he/she is likely or able to pay back the loan. Also, the lender can directly contact the borrower if any repayment problems occur. The borrower might feel more social pressure, because he/she knows the lender personally and thus feels an obligation to fulfill the repayment promise. Conversely, if a lender doesn't know the borrower, it will be difficult for the lender to evaluate the borrower's level of trustworthiness and to accurately assess risk and appropriate interest rate. Also, a borrower might feel less obligated to repay. This certainly may discourage lenders. This brings unique challenges to P2P lending marketplaces as they must provide mechanisms to facilitate match-making, to increase social pressure, and to help lenders evaluate borrowers' trustworthiness.
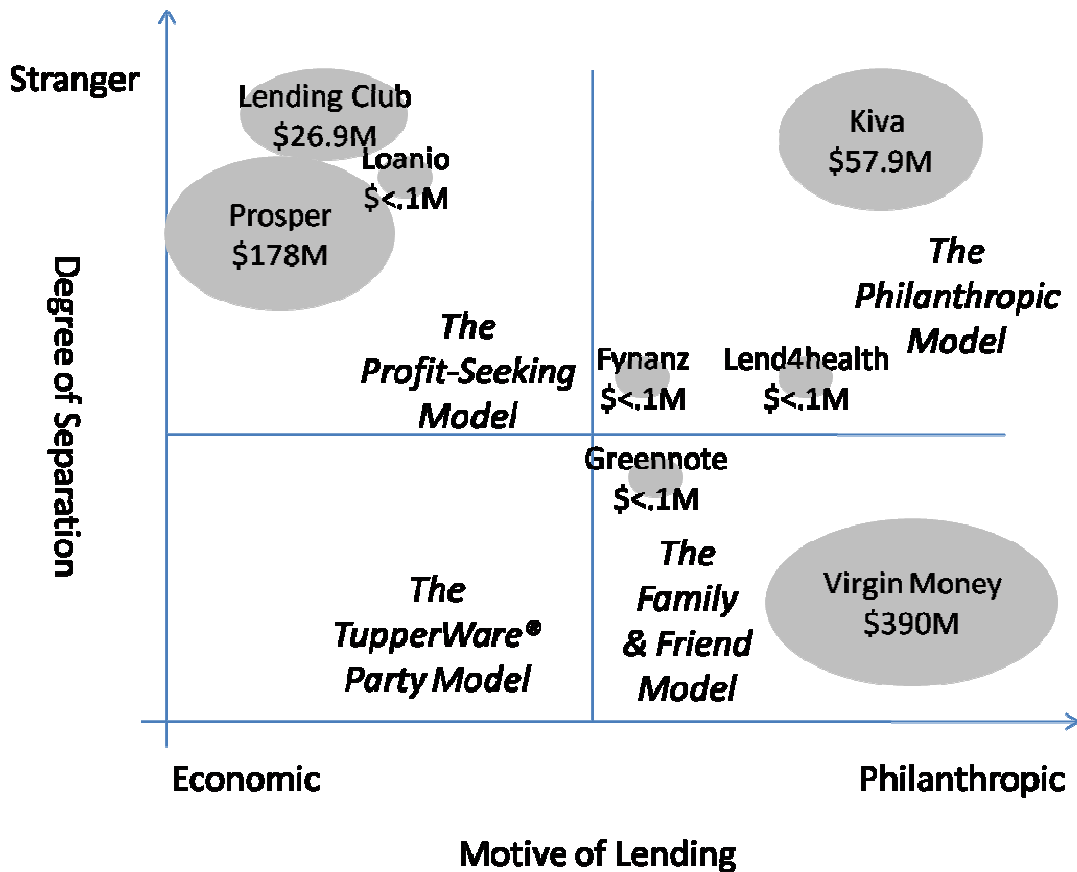
**Figure 1. Types and Size of P2P Lending Marketplaces[1]**

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[1] Sources: http://www.wiseclerk.com/group-news/tag/virgin-money/; lend4health.blogspot.com. The size of the ovals representing US P2P lending marketplaces reflects the size of cumulative loan volume in January 2009 since launch, which cannot be compared directly due to different time spans. Pertuity Direct (omitted) pools money and is not P2P lending per definition.

Categorizing current P2P lending marketplaces in the United States along the aforementioned two dimensions shows that there are four types of P2P lending marketplaces (Figure 1): the Profit-Seeking Model, the Philanthropic Model, the Family & Friend Model, and the Tupperware Party Model. Current US P2P lending marketplaces mainly fall in one of the four categories although these models can overlap. For example, loans at Prosper are primarily between strangers, although family and friends are also able to bid on listings and get in lender-borrower relationships. Next, we describe these four models in more detail and illustrate the similarities and differences within each category through examples.

**The Profit-Seeking Model**

In the Profit-Seeking Model, the lenders consider lending money to strangers as an investment that will return profit. Prosper and Lending Club are popular examples. Both companies have experienced considerable growth since they were established. Prosper, launched in February 2006, attracted more than 890,000 members in its first three years and generated $179 million in 29,000 loans. Lending Club generated $28 millions in more than 3,300 loans (as of February 18, 2009) since its launch in June 2007.

Potential borrowers post requests for loans in listings on the P2P lending marketplace's Web site. Individuals willing to lend their money then make bids. Currently there are two price-setting mechanisms. Prosper employs an auction-style price mechanism. The borrower specifies the maximum interest rate he/she is willing to pay. Lenders then specify the bid amount they want to lend and the minimum interest rate they require. On popular listings when the sum of the bids exceeds the requested amount, lenders might bid down the maximum borrower rate. As of October, 2008, 66% of the loans where bid down by an average of 4%. Conversely, listings on Lending Club have a fixed interest rate. Lending Club determines the interest rates taking into account the borrower's credit grade as well as other factors that reflect a borrower's credit risk. Both Prosper and Lending Club generate revenue by collecting fees on funded loans from borrowers and assessing servicing fees to lenders.

The value proposition of P2P lending for borrowers is that they are able to obtain loans with lower interest rates than bank loan rates. The average interest rates by credit grade on Prosper for 36-month personal loans are listed in **Error! Reference source not found.**. For Lending Club, the rate for personal loans by borrowers with the best credit grade is 7.37% (as of February 18, 2009), while the bank rate for personal loans is over 13% on average (Sviokla, 2009).

| Credit Grade (Credit Score) | Number Of Loans | Average Borrower Rate on Loan |
|---|---|---|
| AA (760-) | 3530 (12.2%) | 9.8% |
| A (720-759) | 3323 (11.5%) | 12.5% |
| B (680-719) | 4397 (15.2%) | 15.4% |
| C (640-679) | 5646 (19.5%) | 18.0% |
| D (600-639) | 5156 (17.8%) | 21.2% |
| E (560-599) | 3298 (11.4%) | 25.6% |
| HR* (520-559) | 3524 (12.1%) | 25.6% |
| NC** | 143 (0.2%) | 22.3% |

* H = High Risk
* NC = Non Credit - discontinued February 2007

**Figure 2. Average Interest Rates based on Borrower Credit Grade for Prosper (as of October 27, 2008)**

The value proposition for lenders is that P2P loans offer an alternative investment option. Market forces predict that interest rates increase with assessed risk. Borrowers with low credit ratings will incur higher interest rates and higher default rates. Lenders create portfolios of loans and each person's overall interest earned depends upon his/her portfolio. A reliable number of the average return on investment (ROI) of a P2P lending marketplace is not available until a larger number of loans mature. As the current high default rates (Figure 3, left diagram) indicate, historic default rates from credit companies might not be good predictors for P2P lending marketplaces. In addition, the sum of defaults and late payments is considerably higher (Figure 3, right diagram). Since late payments might turn into defaults, the true default rates of P2P lending at Prosper are likely to be higher. Lending Club's default rates tend to be lower than Prosper, perhaps due to Lending Club's stricter requirements for borrowers (Lending Club requires a minimum credit score of 660).
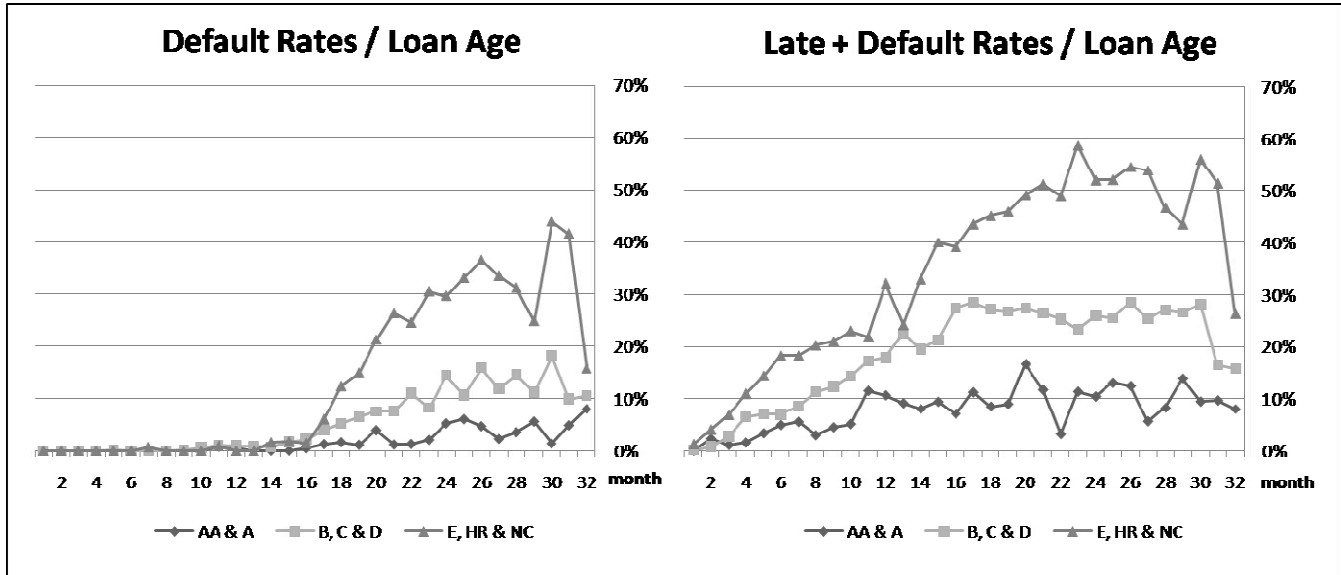
**Figure 3. Default Rates and Late Payments/Default Rates by Credit Grade and Loan Age (Prosper, October 27, 2008)**

**The Philanthropic Model**

P2P lending marketplaces following the Philanthropic Model focus on lending money to improve borrowers living conditions. These P2P lending marketplaces often focus on target borrower groups with particular problems, such as people who need student loans, health care loans, or business loans in developing countries. Examples include Kiva (developing countries), Fynanz (student loans), and Lend4health (health problems).

At this point in time, we can only speculate about lenders' appetites for risk and interest rate for this model. Often times borrowers only need to repay the principals with no interest. Philanthropic investors might be willing to take more risks and invest in risky borrowers to help them independent of risk. Kiva, for example, describes its loans as providing progress support. A loan on Kiva might help a woman in a small village in Africa buy chickens to start an egg business. Kiva wants to differentiate its purpose from that of facilitating donations. It enables real loans to entrepreneurs who are expected to repay their loans. Kiva wishes to support progress which in some sense is a more positive idea than donating money. Thus far, Kiva has been quite successful, reporting that a loan is made every 22 seconds (Kiva Impact This Week, February 6, 2009, http://www.kiva.org/app.php?page=businesses).

**The Family & Friend Model**

The key characteristic of the Family & Friend Model is that the "marketplace" facilitates loans that often have already been negotiated between lenders and borrowers who are already acquainted. Technically, this is not strictly a marketplace, but it does facilitate the legal aspects of lending. Virgin Money is one example. The advantage for both the borrower and lender is to be able to formalize and document the loan, thus reducing disagreements and disputes. The borrower and lender agree on the interest rate and payback plan together. Virgin Money offers several services such as creating the loan documents, organizing the payment process, and facilitating the payments of borrowers.

**The Tupperware Party Model**

The Tupperware Party Model refers to lending among family members and friends based on economic motives. At a "Tupperware party," the host/hostess wants to earn money and primarily asks family members and friends to buy products and services. Tupperware parties bring the customers to the marketplace provided by the supplier. Currently there is no strict example of this model. P2P lending marketplaces that facilitate families and friends only for economic motives might be neither socially acceptable nor viable. Additionally, other P2P marketplaces, such as Prosper, already allow lenders to bid on family members' or friends' listings. In such cases, Prosper facilitates the loan; the borrower does not have to make embarrassing requests to family members and friends.

**SUPPORTING ROLES OF IT AND RESULTED CHARACTERISTICS OF P2P LENDING**

IS research is interested in how IT supports and shapes business operations and the resulted artifacts. In this section, we examine how IT supports and shapes P2P lending. The IT support is discussed from three aspects: market maker, investment strategy enabler, and community builder.

**Market Maker**

A fundamental function of a P2P lending marketplace is to provide a secure and efficient marketplace for borrowers and lenders to trade. A series of transactions on P2P lending marketplaces are routinized through information systems. These include user authentication, account verification, credit checking, credit reporting, loan creation and processing, funds transfer, and settlement. Using the databases and search engines on P2P Web sites, lenders can search through loan requests and borrower profiles. They can use filtering systems to automatically match loan requests according to pre-specified criteria. The use of electronic information systems increases effectiveness and reduces transaction costs (Bakos, 1997). Routinized processes also increase standardization, improving security, and subsequently, trust. IT has remarkably reduced the cost of providing large amount of rich data. The effects are reduced uncertainty and better decision support. Rich data about loans, lenders, and borrowers also improve market transparency and attract lenders.

The use of IT for transaction support results in several features of P2P lending. First, the Internet has extended the reach of P2P lending to a wide geographical area. Just as eBay has enabled people from every corner of the world to come to the sale in one's backyard, P2P lending is allowing lenders and borrowers across a country or continent to trade. Second, by expanding the borrower and lender pools, lenders can micro-manage their money through making multiple small loans, each as low as $25. Third, information systems make self-service available 24/7. Moreover, by cutting out the intermediary such as a banker, consumers obtain direct control over the terms and conditions of their financial relationships (*Lessons from the P2P Community*, 2008). Fourth, without the traditional intermediaries, operation costs are expected to be lowered.

**Investment Strategy Enabler**

Complex investment strategies often depend on accurate and timely information. Large borrower pool, low transaction cost, and direct control over loans only partially provide the condition for a diversification strategy, the information necessary for decision support is the missing part. Information about borrowers' financial stability and credit is especially important to lenders who manage a diversified loan portfolio. Information of borrowers' social capital, such as network and region, is important to lenders who take the social aspects into consideration. Because most P2P lending models, with the exception of the family-and-friend model (e.g., Virgin Money), involve lending to strangers, lenders depend on every information scrap to assess risk and returns of potential loan opportunities. Research has shown that lending decisions are based on information such as a borrower's economic status (credit grade, debt-to-income ratio), social status (endorsement of loan request by friend), and the detail of the loan request (Greiner and Wang, 2007). Some P2P lending sites provide additional information or a means of direct contact. For instance, Prosper allows a potential lender to contact a borrower directly to ask questions.

Another strategy-enabler is automatic profiling and matching tools. Ideally, the availability of more complete and timely information about individuals in the marketplace should yield more market efficiency, where interest rates adjust to reflect the positions of both borrowers and lenders. Yet, substantial interest rate dispersion exists in P2P lending marketplace (Garman, Hampshire, and Krishnan, 2008). Electronic markets and information do not necessarily reduce search cost. Information overload and equivocality lead to high search cost and price dispersion (Grover, 2006). When the number of alternatives exceeds the limit one can process, decision performance suffers (Keller and Staelin, 1987). Empirical results show that the information-load effect remains more or less constant for 10 to 25 alternatives (Malhotra, 1982). For P2P lenders, for each lending decision, there are hundreds of alternatives from which to choose. For instance, on Prosper, the daily average numbers of listings in 2007 for the following credit grades are: AA and A: 137; B, C, and D: 701; and E, HR, and NC: 1495. P2P lending marketplaces need to support lenders in setting up search strategies and help find loans that fit the strategies. Lending Club offers a portfolio management tool that reflects lenders' risk and relationship preferences (*Lessons from the P2P Community*, 2008). Zopa, a major P2P lending market in the UK, has implemented SAS credit scoring systems to score borrowers and assign them to one of four credit categories. Zopa then matches lenders to borrowers based on a risk-return profile (*Social Leader Zopa Scores with SAS*, 2007).

A direct result of the execution of investment strategies is that lenders gain much more control over where their money goes, a critical feature separating P2P lending from the traditional financial markets. P2P Lenders can choose why and to whom they lend their money, and they are actively doing so. The level of loan micromanagement is high. Based on data collected from Prosper for the period between October 2005 and July 2008, the average amount bid by lenders on individual loans was about $90, whereas each lender lent about $3000 in total on average. So, on average, each lender invested in about 33 different loans. This may lead to a high level of portfolio diversification. On the one hand, this might reflect a lack of

confidence in borrowers' payback; on the other hand, the numerous lending opportunities with a wide range of interest rates offer lenders a myriad of choices of risk and return management. The scale reached by the aggregated loan requests and the rich information about them lay the foundation of the micromanagement strategy, which itself contributes to finer diversification and risk management.

**Community Builder**

More or less, P2P lending models build on and promote the idea of social lending and 'help each other as a community.' P2P often involves some type of connection between the borrower and lender, e.g., a hometown, college, or occupation. The social bond is believed to not only attract funding but also encourage responsible behavior (*Lessons from the P2P Community*, 2008), so that both lenders and borrowers benefit. IT provides community support to many P2P lending marketplaces in the form of groups, rating systems, forums, blogs, and affiliations. Lending Club allows borrowers to specify geographical, company, school, and association affiliations on their loan listings. The icon of a particular affiliation will show color if a lender and borrower are affiliated.

The rich data provided at P2P marketplaces help to build community. Prosper, Lending Club, and Kiva all have blogs where members share their experiences. Kiva posts stories and pictures of borrowers together with payment progress updates. Stories and pictures put a human face on financial transactions. The stories of borrowers and payment progress serve more than a surveillance mechanism. Lenders on Kiva do not earn interest. Their goal is to support entrepreneurs in developing countries to get their businesses off the ground. Progress reports keep the lenders posted about the impacts they have made on borrowers they have chosen to help, yielding a high level satisfaction for being part of Kiva, a warm and altruism community. One Kiva lender says this is a major source of motivation for her to actively lend money to the many entrepreneurs in need, and whether they are paying back or not is not really important to her.

Communities help cultivate trust, a key factor to the success of P2P lending marketplaces. It is believed that groups are motivated to discipline members who are cheating, because misbehavior of a single member could potentially harm other members and the community as a collective. Furthermore, members feel obligated to the group to behave (Hogg, 1993). Therefore, lenders are more willing to lend to people who belong to a group. Also, a group's reputation can serve as a proxy for its individual members' trustworthiness (Ba, 2001). Those who belong to a high rating group have better chances to get funded (Greiner and Wang, 2007). Hence, borrowers are motivated to join groups with good reputations and maintain the high reputations. On Prosper, groups are evaluated based on the repayment history of loans associated with the group. Groups that outperform an expected default rate receive higher ratings. Group members are thus interested to see that their fellow members fulfill their payment obligations.

**RESEARCH AGENDA**

P2P lending is an under-researched area. To our knowledge, there is only one forthcoming article in any major peer-reviewed Information Systems (IS) or business journal (Berger and Gleisner 2009) so far. Research in P2P lending presented at IS conferences looked at the operation and effectiveness of P2P marketplace Prosper (Kumar, 2007), trust-building mechanisms (Greiner and Wang 2007), factors determining the success of loan listings (Klafft 2008), behavior of risk-averse lenders (Iwakami and Ito 2008), P2P lending marketplace Zopa UK (Ortega and Bell, 2008), and the potential of P2P lending to create a more competitive credit market (Garman et al. 2008). An online search for working papers will bring up more non-peer reviewed studies (see www.ssrn.com).

The Structuration Model of IT described in Orlikowski and Robey (1991) provides a framework for a research agenda that addresses interesting questions about P2P lending. The model considers structuration a continuous process of the interactions of three interdependent forces: Institutional Properties, Information Technology, and Human Actors. Four types of influence in organizational structuring are described: a. IT as a product of human actions; b. IT as a medium of human actions; c. conditions of interaction with IT (institutional properties impact human actors); and d. consequences of interaction with IT (to the institution). In Table 1, we list IT-related research questions in each of the four types of influences. In our discussion, Institutional Properties refer to the characteristics of P2P lending organizations and those outside these organizations that have impacts on them, such as regulation authorities, partners, and competitors. IT refers to the information systems and tools that support the P2P marketplace, e.g., the transaction support systems, rating systems, and community support tools. Human Actors refer to those who directly interact with IT. These include the lenders and borrowers, and workers of the P2P lending organizations.

In addition to the research questions in Table 1, there are many exciting ones that do not directly involve IT artifacts. A few are listed:

- How can P2P lending increase market efficiency and reduce price dispersion?

- How does P2P lending impact on traditional financial markets?
- What can traditional financial institutions learn from P2P lending?
- How does the environment (e.g., interest rate development, crisis) influence P2P lending?
- Who are the different stakeholders and what are their interests/goals in P2P lending (marketplaces, borrower, lenders, partners, government, P2P competitors, traditional credit institutions)?
- How do the P2P industry and P2P models evolve?
- What are the key challenges and key success factors of P2P lending marketplaces?
- Are P2P lending models viable?
- How have P2P lending institutions developed?
- How will P2P lending institutions evolve?

| Type | Research Questions |
|---|---|
| a. IT as a product of human actions | How to design effective member support software (such as search engines, filters, and community support tools) for borrowers and lenders? |
| | How do regulations influence IT in P2P lending? |
| | How do lenders and borrowers appropriate the IT features (e.g., search engines, filters, user forums) offered by P2P marketplaces? |
| | How do user appropriations influence IT in P2P lending? |
| b. IT as a medium of human actions | How do information characteristics (e.g., information overload, information quality, ambiguous or conflicting information) affect lenders and borrowers' behavior/strategy? |
| | How can IT help to improve the information characteristics (e.g., reducing information overload, increasing information quality) to support lenders and borrowers? |
| | How do IT characteristics (e.g., availability of a forum, chat, blog, community building) affect lenders and borrowers' behavior/strategy? |
| | How do currently available IT features limit or facilitate lenders' decision processes? |
| | How can IT support effective portfolio and listing management? |
| | How can IT support different types of lending and borrowing behaviors/strategies? |
| | How can IT support lenders and borrowers to effectively share their experiences and expertise? |
| c. Conditions of interaction with IT (institutional properties impact human actors) | What is the "P2P culture" among borrowers and lenders? |
| | What norms, shared values, knowledge develop in P2P that govern the lending exchanges? |
| | What are the shared meanings and collective knowledge that lenders and borrowers draw from when interacting with P2P lending IT (lending and borrowing)? |
| | How do the culture, norms, shared values, and collective knowledge influence lender and borrower activities? |
| d. Consequences of interaction with IT to the institutional properties | How can IT support finding lenders or borrowers violating shared norms and rules (e.g., verifying borrower identification, fraud, deception)? |
| | How can IT be used to develop norms and a stock of collective knowledge on P2P lending? |
| | How do unfaithful appropriations of IT affect the values and norms of P2P lending? |

**Table 1. Research Questions Organized around the Structuration Model of IT**

## CONCLUSION

P2P lending marketplaces continue to grow dramatically. The Harvard Business Review declared P2P lending to be one of the top 20 breakthrough ideas for 2009 (Sviokla 2009). Offering loans to those who don't have access to traditional credit, championing social causes, aggregating lenders explicitly, creating relevant communities of lenders and borrowers, and so on are certainly differentiators of these new marketplaces from traditional ones. Traditional financial institutions have yet to enter this new realm. We expect P2P lending to grow and evolve. There is much to learn about how to structure the P2P lending marketplaces, how to structure communities, and how to support all the participants.

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