



# PROCEEDINGS

International Conference on Small and Medium Enterprises Development  
**Innovation and Sustainability in SME Development**  
Bali, 14-16 June 2012



ISBN 978-602-18426-0-7

***Proceedings***  
**Innovation and Sustainability in SME**  
**Development**

International Conference on  
Small and Medium Enterprises  
Development

Bali, 14-16 June 2012

**Institute for Research and Community Service**  
**Parahyangan Catholic University**  
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Indonesia  
Email: [info@sme-international.info](mailto:info@sme-international.info)

ISBN:978-602-18426-0-7

***Proceedings***  
**Innovation and Sustainability in SME**  
**Development**

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**Publisher:**  
**Institute for Research and Community Service**  
**Parahyangan Catholic University**

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## PREFACE

It is a great pleasure to welcome you all in the First International Conference on Small Medium Enterprise (SME) Development. The organizing committee, is really glad to have great and continuous support from many parties so we have successfully organized this event.

We have accepted more than 90 abstracts from Asia, Europe, Africa, Australia and the United States and finally we have received 50 full papers which have been carefully reviewed (blind review) by acknowledged scientific committee.

We are very thankful for the time and energy spent by our scientific committee that has given thoughtful and constructive feedback that enhances the quality of submitted papers.

Those papers have been classified into five categories:

1. Sustainability in SME Development
2. Innovation in SME Development
3. SME in General
4. Corporate Social Responsibility and Micro Financing
5. Poster papers

The papers presented in this proceeding have shown a great ranging of high quality research, representing research in different countries. The accepted papers come from Asia, Australia, and Europe.

There are two invaluable speeches that will be delivered by renowned speakers, Dr. Mike Herrington from Global Entrepreneurship Monitors and Prof. Rhenald Kasali, PhD. from University of Indonesia. The committee also organizes two workshops in commercialization and innovation. We have also prepared business presentation and SME exhibition to make both practices and knowledge transfer process happening in this conference.

We really hope that the conference can have a fascinating discussion and offer opportunity to researchers, academics, practitioners and government to further collaborate. We commit to have annual conference in SME Development to strengthen networking in SME research and practices. We believe this event will benefit all of us and finally, enjoy the conference and enjoy Bali.

**Catharina Badra Nawangpalupi, PhD.**

Chair of Organizing Committee

International Conference on SME Development 2012: Innovation and Sustainability in SME Development



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## The Model of Crowd-Sourced Microfinancing to Support Small and Micro Businesses in Indonesia through Interactive Site

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### Abstract

Economy crisis that hit Indonesia in the year 1997/1998 and 2008/2009 shows that small and medium-sized businesses have proven as a self-sufficient business group that has a strong resistance. Unfortunately, these independent business groups, especially small and micro businesses that have low income are not easy to get capital or financing from the banking institutions due to lack of financial history. One of the funding solutions to small and micro businesses is microfinancing. There are some institutions in Indonesia that have already engaged in microfinancing, but none of them have maximized the use of internet technology, particularly the use of interactive and social media sites that have the ability as a catalyst and mobilizer of the mass. In this study, we would like to propose a microfinancing business model to fund micro-businesses involving donors/funders, volunteers, field partners, coaches and non-profit organizations that work together in the process of screening, supervising, and managing the use of funds. This model is adapted to the behavior of Indonesian society, raising the confidence of lenders and the transparency of partners and organizations so that funds can be distributed to the right persons, be managed in an appropriate manner so as to improve the quality of life for borrowers and to achieve the highest possibility of refund rate. This business model will be implemented through a web-based system that enables all parties involved to communicate and support each other.

*Keywords:* microfinance; crowdfunding, business model; small business development

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## 1. Introduction

Economy crisis that hit Indonesia in the year 1997/1998 and 2008/2009, shows that small and medium enterprises (SME) have proven as a self-sufficient business group that has a strong resistance in the face of the crisis. Indonesian Ministry of Small and Medium Enterprise announced that up until 2010, there were almost 53 million unit of SME in Indonesia and those units provide jobs to almost 100 million citizen of Indonesia. Statistically mentioned by Indonesian ministry of SME's website (<http://www.depkop.go.id>), the number of micro enterprises in Indonesia is 1.059.129 units; 26.926 unit small enterprises, 1.498 unit medium enterprises and 161 unit large businesses. Those figures reflect how Indonesia really depends on SME growth and SME will become a key factor to develop Indonesian.

Although the role of SMEs is very strategic, but stiff competitions, especially against large corporations and other modern competitors have put SMEs in a disadvantageous position. Moreover, in Indonesia, most SMEs conduct their business in traditional ways, including in the production and marketing process. In general, SMEs are facing two major problems, financial and nonfinancial issues (organizational management).

According to Urata, 2000, issues in the financial problems are:

1. The mismatch between the available funds that can be accessed by SMEs
2. No systematic approach to the funding of SMEs
3. High transaction costs, caused by the credit procedures are quite complicated so it took a lot of time while the number of loans disbursed small
4. Lack of access to formal sources of funds, whether caused by the absence of banks in remote areas and lack of adequate information
5. Interest loans for investment and working capital is high enough
6. Many SMEs are not yet bankable, either due to the absence of transparent financial management and lack of managerial and financial capability

In addition to the financial problem, Urata, 2000 described issues in management organizations (non-financial) as following:

1. Lack of knowledge on production technology and quality control caused by the lack of opportunity to keep abreast of technology and lack of education and training
2. Lack of knowledge of marketing, which is caused by the limited information that can be reached by SMEs on the market, in addition to the limited ability of SMEs to provide products / services in accordance with market demand
3. Lack of resources to develop human resources
4. Lack of understanding of finance and accounting

Looking at the problems above, we come across a question: What is the solution to overcome the financial and non financial of SME in Indonesia? One possible solution that can be offered is a community-driven development (CDD) by Dongier at al., 2003. Studies and practical experiences suggest that CDD can improve the effectiveness and efficiency of services in many sectors and contexts, including in a group-based microfinance sector. Evidence suggests that certain models of both individual and group-based microfinance can extend the reach of financial services and achieve high repayment rates. Some microfinance programs rely on local groups that, because they know community members' characters and economic activities, can provide peer pressure.

Moreover, Hemer, 2011 said that the idea of CDD for individual and group-based microfinance can be

implemented using crowd sourcing and crowd funding mechanism that is already proven as an established way to fund social and/or not-for-profit projects, particularly in the Third World. Many organizations which have a long tradition of fund-raising for social and/or not-for-profit projects (e.g. the Red Cross, Oxfam, NGOs and other organizations for development aid) employ the instrument of crowdfunding rather virtuously. The term crowdfunding itself is derived from the better known term crowdsourcing, which describes the process of outsourcing tasks to a large, often anonymous number of individuals, a "crowd of people" (here: the Internet community) and drawing on their assets, resources, knowledge or expertise. In the case of crowdfunding, the objective is to obtain money. According to Lambert and Schwenbacher, 2010: "Crowdfunding involves an open call, essentially through the Internet, for the provision of financial resources either in form of donations (without rewards) or in ex-change for some form of reward and/or voting rights in order to support initiatives for specific purposes"

As the provision of capital can take the form of donations, sponsoring, pre-ordering or pre-selling, fees for membership in clubs, crediting or lending and Private Equity (PE) investments, the complexity of processes varies greatly. These different forms of capital provision can be ranked in a graph, starting from very simple processes (donations) through to more complex and highly regulated forms (investments) as illustrated in Figure 1.

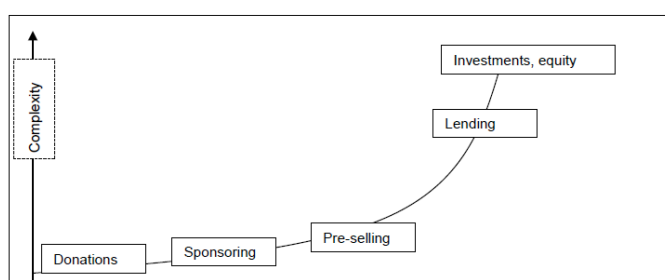


Fig 1: The major forms of capital provision ranked by process complexity

The figure 1 above shows that lending process has a quite high complexity, especially if large numbers of donors and micropayment transaction have to be managed. Hemer, 2011 said that many initiators of ventures are either inexperienced or not interested in managing the crowdfunding process themselves and prefer to hand over this task to "intermediaries".

In this paper, we propose a model of a crowdfunding system that acts as intermediaries, among crowdfunders, volunteers, field partners, coaches and non-profit organizations that work together in the process of screening, supervising, and managing the use of funds, to provide a comprehensive solution to the problem of SMEs in terms of finance and nonfinance.

Moreover, this system will be implemented in a web based system that exploits the capabilities of social networks and other new features of Web 2.0, especially the function of "viral networking and marketing", which enables the mobilization of a large number of users in specific web communities within a relatively short period of time. The use of web will enable the proposed platform to integrate communications and workflows for all parties involved in the process of funding requests, lending, donating, repayments, financial oversight, controlling, and reporting of all activities.

### 2.1. Typology of actors in the crowdfunding arena

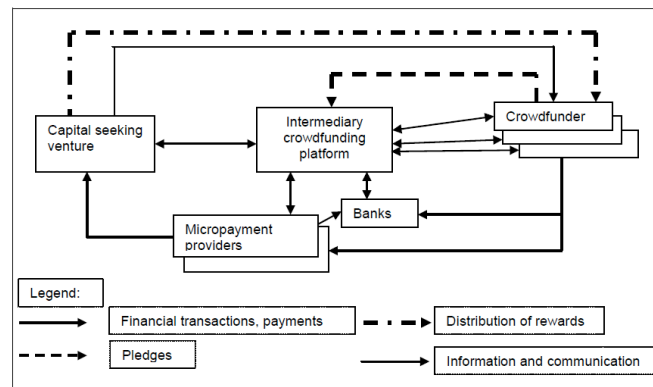


Figure 2 shows a general crowdfunding platform, that tend to be web and software based as mentioned by Hemmer, 2011. They act as neutral facilitators both for the project initiators and the crowdfunders. They have a wide range of activity and intensity where most platforms do not do more than offer a physical (internet) platform, websites to present the projects, proven procedures and the software through which the financial pledges are collected and administered. But some platforms make greater efforts and give advice, organise public relations, make arrangements with micro-payment providers etc.

Indonesian Ministry of SMEs promulgated the law on small enterprises number 9 of 1995, which defines a small enterprise (SE) as a business unit with total initial assets of up to Rp200 million, not including land and buildings, or with an annual value of sales of a maximum of Rp1 billion, and a medium enterprise (ME) as a business unit with an annual value of sales of more than Rp1 billion but less than Rp50 billion. Tambunan, 2007 mentioned that law does not define microenterprises (MIEs) explicitly. However, since MIEs are the smallest size category of enterprises, it is included in the Ministry of SMEs data. Biro Pusat Statistik (BPS), which regularly conducts surveys of SMEs, uses the number of workers as the basis for determining the size of enterprise. In its definition, MIEs, SEs and MEs are business units with, respectively, 1–4, 5–19 and 20–99 workers, and large enterprises (LEs) are units with 100 or more workers.

As defined by Britannica Encyclopedia, microfinance is a means of extending credit, usually in the form of small loans with no collateral, to nontraditional borrowers such as the poor in rural or undeveloped areas. As these financial services usually involve small amounts of money; small loans, small savings, etc, the term microfinance helps to differentiate these services from those which formal banks provide. According to Kiva.org, there are three kinds of costs the Micro Finance Institution (MFI) has to cover when it makes microloans.

1. The cost of the money that it lends
2. The cost of loan defaults
3. Transaction costs, is not proportional to the amount lent.

The first two are proportional to the amount lent. For instance, if the cost paid by the MFI for the money it lends is 10%, and it experiences defaults of 1% of the amount lent, then these two costs will total \$11 for a loan of \$100. An interest rate of 11% of the loan amount thus covers both these costs for either loan.

The transaction cost of the \$500 loan is not much different from the transaction cost of the \$100 loan. Both loans require roughly the same amount of staff time for meeting with the borrower to appraise the loan, processing the loan disbursement and repayments, and follow-up monitoring. Suppose that the transaction cost is \$25 per loan and that the loans are for one year. To break even on the \$500 loan, the MFI would need to collect interest of  $\$50 + 5 + \$25 = \$80$ , which represents an annual interest rate of 16%. To break even on the \$100 loan, the MFI would need to collect interest of  $\$10 + 1 + \$25 = \$36$ , which is an interest rate of 36%. At first glance, a rate this high looks abusive to many people, especially when the clients are poor. But in fact, this interest rate simply reflects the basic reality that when loan sizes get very small, transaction costs loom larger because these costs can not be cut below certain minimums.

### 3. Related Work

There are several platforms that already provide a system for microfunding with different approaches. In this paper, we study and compare the lending process of two platforms namely Kiva and Zidisha.

Kiva ([www.kiva.org](http://www.kiva.org)) is the first platform offered to public since 2005. Kiva allows microfinance institutions around the world, called "Field Partners", to post profiles of qualified local entrepreneurs on its website, Kiva.org. Lenders browse and choose an entrepreneur they wish to fund. The lenders transfer their funds to Kiva through PayPal as a payment gateway. After receiving a user's money, Kiva aggregates loan capital from individual lenders and transfers it to the appropriate Field Partners, who then disperse the loan to the entrepreneur chosen by the lender. As the entrepreneurs repay their loans with interest, the Field Partners remit funds back to Kiva. As the loan is repaid, the Kiva lenders can withdraw their principal or re-lend it to another entrepreneur.

Zidisha ([www.zidisha.org](http://www.zidisha.org)) founded in 2009. Unlike Kiva, Zidisha is a peer-to-peer microfinance internet platform that allows people to lend small amounts of money directly to entrepreneurs without intermediary microfinance institutions. Zidisha facilitates direct dialogue and microlending transactions between individual web users worldwide and computer-literate, low-income entrepreneurs in developing countries. Zidisha borrowers access the internet then create their own profile pages through which they share photos and information about themselves and their businesses. As they repay their loans, borrowers continue to share updates and dialogue with lenders via their profile pages.

### 4. Results

In this paper, we propose a business model that describes the rationale of how our system creates, delivers, and captures value (economic, social, or other forms of value). The business model is conceptualized using Osterwalder model that is called Business Model Canvas. Moreover, we also propose crowdfunding typology, that is modified based on Hemer's model.

#### 4.1. Proposed Business Model

In Figure 3, we propose a business model canvas consists of nine business model building block, that are



partner network, key activities, key resources, value proposition, customers segment, customer relationship, distribution channel, cost structure and revenue streams.

<b>PARTNER NETWORK</b> <ul style="list-style-type: none"><li>- Banks</li><li>- Payment Gateway Institutions (BCA klikPay, Mandiri ClickPay)</li><li>- Non-government Organizations</li><li>- Koperasi</li><li>- Universities (part of community services)</li></ul>	<b>KEY ACTIVITIES</b> <ul style="list-style-type: none"><li>- Risk management</li><li>- Screening SMEs</li><li>- managing the platform/system</li></ul>	<b>OFFER</b> <ul style="list-style-type: none"><li>- Lend to SMEs</li><li>- Give chances to contribute in community developments</li><li>- Loans for SMEs</li></ul>	<b>CUSTOMER RELATIONSHIP</b> <ul style="list-style-type: none"><li>- Progress tracking</li><li>- Regular progress report</li></ul>	<b>CUSTOMER SEGMENTS</b> <ul style="list-style-type: none"><li>- Crowdfunders</li><li>- SMEs</li></ul>
	<b>KEY RESOURCES</b> <p>The platform (crowdfund web based system)</p>		<b>DISTRIBUTION CHANNELS</b> <ul style="list-style-type: none"><li>- The platform</li><li>- NGO</li><li>- Koperasi</li><li>- Universities partners</li></ul>	
<b>COST STRUCTURE</b> <ul style="list-style-type: none"><li>- Risk management fee</li><li>- System development/maintenance</li><li>- Screening fee</li></ul>		<b>REVENUE STREAMS</b> <ul style="list-style-type: none"><li>- optional donations</li></ul>		

Fig 3: The business model canvas

#### 4.2. Typology of proposed crowdfunding projects

Our proposed typology involves 2 different parties that are not appeared in Hemer model, they are payment gateway and Field workers. Field workers can be consist of NGO, Universities (as part of community service) The roles of field workers are:

1. Examine the feasibility of SMEs
2. Calculate the amount of loan required
3. Collects entrepreneur stories, pictures and loan details and uploads them to the system
4. Provide a training and knowledge's update required by the SMEs entrepreneur

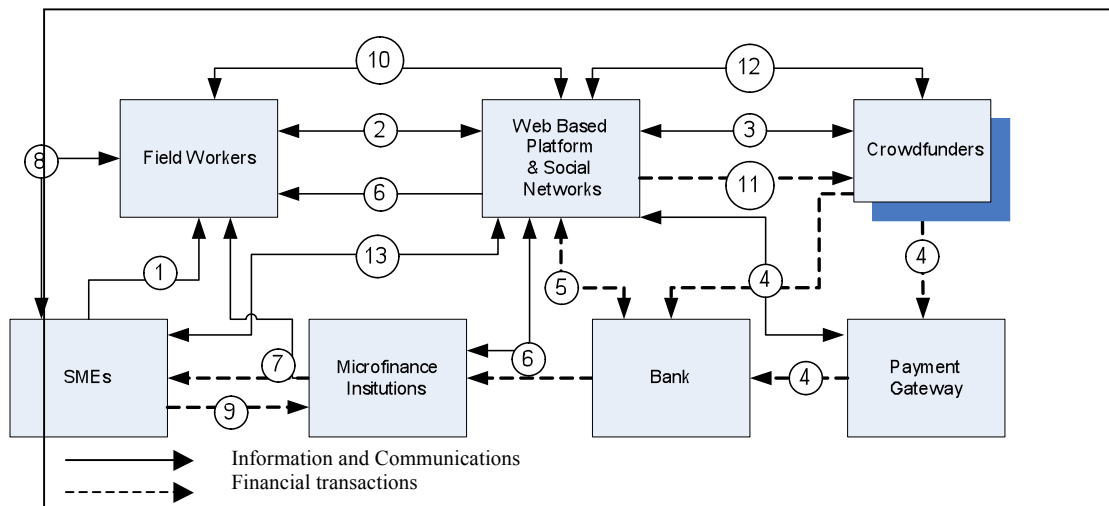


Fig 4: Typology of proposed crowdfunding projects

The following are the detailed explanation of Figure 4:

1. SMEs request and screened for funding to field workers  
The field workers are non-profit organizations such as local universities or social institutions. These field workers know their local area and potential SMEs and do all the screening process to get loans to crowdfunders.
2. Field workers submit SME proposals/stories to the system  
The field workers collect entrepreneur stories, pictures, loan details, and uploads them to the system.
3. Crowdfunders choose SMEs they want to support  
Crowdfunders browse the web to search loan requests and finally choose the SMEs they are willing to fund.
4. Crowdfunders transfer/send loans through banks/payment gateways
5. Our system updates the status of SME and fund records  
After receiving loans from crowdfunders, the system will update the status of SMEs and keep track of received fund until it is ready to be distributed.
6. Our system distributes the fund to microfinance institutions and notifies corresponding field workers  
Once the required fund is established, our system will distribute the loans and notify corresponding field workers to get ready managing and supervising the SMEs they proposed earlier.
7. Microfinance institutions distribute the loans and notify field workers  
Microfinance institutions will distribute the loans and update the status of loans through the system. The system then will notify field workers to ensure transparency of loans distribution.
8. Field workers manage and supervise SMEs  
Field workers must track the progress and regularly updates the system with stories, pictures, or anything that shows the progress of SMEs
9. SMEs repay the loan through microfinance institutions  
After some period of time, SMEs must repay the loan through microfinance institutions.
10. Field workers update SMEs progress to the system.  
This will ensure transparency between the borrowers and the crowdfunders.
11. The system repays the loan to crowdfunders
12. The system updates and reports progress to crowdfunders
13. The system communicates with SMEs for control and audit purposes through a simple communication media such as short message services (SMS)

#### *4.3. Strengths and Weaknesses of the Proposed Model*

The strengths of the proposed model can be described as following:

1. This model promotes transparency on the use of funds to the parties involved because it has an automatic reporting system for every process.
2. This model integrates many subsystems from different organizations that will ease the use and management of funds.
3. The use of both web based system and social networks will gather more internet users to be part of crowdfunders and field partners.

The weaknesses of the proposed model can be described as following:

1. This model relies on Internet literacy among its users so that it may limit the number of users especially field partners from remote areas.
2. Despite of many advantages in involving microfinance institutions in this model, it may also increase the operational cost of maintaining the running system.

## 5. Conclusion

From our study, it can be concluded that Indonesia's economy still relies heavily on SMEs. However, many SMEs encounter obstacles due to limited access to capital at financial institutions.

In this paper, we propose a business model that can be applied in Indonesia to promote the growth of SMEs. Through this business model, many institutions and individuals can collaborate in a systematic way that allows the regularity, transparency of funds activity, use of funds and progress report.

Furthermore, our business model will be implemented in the form of a web-based platform, which enables all institutions and individuals to interact directly without being limited by time and place.

After this successful model for SMEs is built, it is not impossible that the platform can also be applied to other social activities such as education sponsorship and donations for public health.

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