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Ultra Local Micro Lending

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ABSTRACT

An ultra-local micro-lending system is proposed that will provide a community, access to a common pool of funds available only to members of that community. Funds could be provided to the community pool based on the population size of the community. The funds are also generated through encouraging the community members to save. Savings add money to the community pool, which is available for borrowing by others in the community. The system and method encourages the borrower to repay loans through social pressure by informing the loan details to the local community, also incentivize against default through increased access to more funds by building a credit history. The system and method allows efficient management of credit within a community while maximizing access to funds, and further provides an effective method for aid agencies or organizations to provide targeted aid to the communities at need.

BACKGROUND

Many people around the world have limited access to banking or insufficient desire to access the banking system. Micro-lending allows such people access to funds to better themselves and their communities. Micro-financing is normally spread across the entire country, making it less social and more difficult to ensure that loans are paid back on time. Further, factors such as social pressure, neighborhood support and regional pride are not appropriately utilized to pay back the loan with micro-lending. Providing foreign aid funds is inefficient and sometimes difficult to target.

Foreign aid agencies and aid organizations often want to give directed aid to communities during an emergency (hurricane, storm, earthquake etc.). Such aid can take a lot of time to arrive and is difficult to apply. Micro-financing does not target just one community at a time, in case of need. It targets the entire country operations, which takes additional steps for spreading funds to communities. There is thus a need for an ultra-local micro-lending system that is efficient, self-sustaining and targeted.

DESCRIPTION

The disclosure proposes a system and method that will provide a community access to a common pool of funds from which members of the community can acquire loans. The community pool is available only to members of that community, and members must have registered legal identities to have access. New members must be sponsored by a predetermined number of existing members. Funds could be provided to the community pool (provided externally) based on the population size of the community, by the government or other agency with matching objectives as permitted by the government.

The system and method encourages residents to register themselves with the government, for which they could receive a bank account with a fixed amount $X as balance. Each newly registered member in the community could cause a fixed amount of funds $Y to be gifted to the pool, and could borrow or add his savings to the pool.

The system and method also encourages a borrower to repay loans through social pressure by informing the following details to the local community: (1) Who has borrowed what? (2) Who is behind in payments? (3) How much is left in community funds? Additionally, borrowers could be incentivized against default through increased access to more funds by building a credit history

The system and method also encourages residents to save, by providing for savings to earn interest. Savings add money to the community pool, which is available for borrowing by others in the community. The system and method allows aid agencies/organizations to provide targeted aid to the communities at need. For example, in the aftermath of an emergency, USAID wants to give every person in the region $100 to assist in rebuilding. Residents can fund community projects by explicitly withdrawing cash and applying it to the project, or by transferring it to the merchant individually.

A community is defined by the members it has. An initiator could create a community and invite people to join. Upon joining, each member brings their savings and community fund credit along with them. Multiple communities could overlap geographically and could be defined by the social circles of the people in the communities. New members can join depending on the rules of the community. These may include rules such as 1) anyone can join or 2) new members must be invited, and must be accepted by x% vote of the current members.

A community member can choose to apply their savings to the community pool that is lent out and will have interest paid on them by the borrower. This interest is applied to the lenders' balance savings that are not available to be borrowed and may earn a lower, risk-free rate.

Community members can choose to borrow funds from the community pool. The length of time that they can borrow funds is typically short, in the order of weeks and months, not years. The maximum amount that they are able to borrow is calculated based on their credit rating within the community. Factors included in borrowing are a web of trust score (i.e. Adam trusts Bob, and Bob trusts Chris, and Dave trusts Chris too, so Chris is mostly trusted), weighted by how much savings each trusting entity has at stake, length of time in the community, past saving history, past borrowing, and repayment history.

The interest rate for borrowed funds will be set at loan initiation for the life of the loan. Higher interest rates may be applied for longer and larger loans, (which is the opposite of what commercial banks do) to encourage liquidity in the community fund. This will minimize the cost of each transaction. Interest rates may not be modified by the credit rating of the individual and may be calculated based on supply and demand. For example, if there is not much money available to be borrowed in the community pool, then the interest rate may be relatively high. If there is a lot of money available, then the interest rate may be relatively low.

Agents could be appointed in geographic regions and can exchange physical cash for digital cash. These agents do not need to have a privileged status. Anyone could take physical cash and send digital cash to the depositor. The agents are in place only to provide the floor for the service cost, an alternative possibly less convenient. Agents need not charge for deposits, but they could charge some fee for withdrawals, probably a % of the amount withdrawn.