Credit Evaluation Grids for Microlenders:

A Tool for Enhancing Scale and Efficiency

by Julie A. Gerschick

On behalf of ACCION USA

Microenterprise Fund for Innovation, Effectiveness, Learning and Dissemination

FIELD

The Aspen Institute

The Microenterprise Fund for Innovation, Effectiveness, Learning and Dissemination (FIELD) is a research and development organization dedicated to the expansion and sustainability of microenterprise development efforts, particularly those aimed at poor Americans. Its mission is to identify, develop and disseminate best practices, and to broadly educate policy makers, funders and others about microenterprise as an antipoverty intervention.

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FOREWORD

The guiding premise underlying the creation of FIELD was that microenterprise practitioners – in pursuit of higher performance for their programs and better outcomes for their clients – were the best source of innovations that could propel the microenterprise industry forward. FIELD's experience with its Business Finance Products for the Poor grant cluster bore out this hypothesis; the efforts of the five grantees in this cluster have focused on some of the key challenges facing the industry: marketing and outreach, streamlining efficiency of the lending process, and developing finance products that better meet the demands of low-income entrepreneurs.

This paper presents results from the work of ACCION USA, one of the grantees in this cluster. In its efforts under this grant to dramatically increase the scale of its lending efforts, ACCION USA focused on two key issues: market research and streamlining underwriting efficiency. Toward the latter end, ACCION undertook two initiatives. The first was the development and implementation of CEGs, or Credit Evaluation Grids.

ACCION USA's experience, CEGs have proven highly effective in systematizing and streamlining the underwriting process. As a result, staff has been able to significantly reduce the time dedicated to each loan application. The organization as a whole has also been able to implement technology that has allowed for additional efficiencies. Because we believe this tool offers promise for microlenders across the U.S. – as well as for those in poor countries – this publication lays out, based on ACCION USA's experience, the concept, purpose and benefits of CEGs, and the process by which they can be developed and implemented by microlending organizations.

We at FIELD believe that CEGs are an important innovation for the microlending in this country. But further innovations in lending methodologies will also be needed to tap the demand for microloans that exists in this country. The second initiative undertaken by ACCION USA to streamline underwriting efficiency was the investigation of a formal credit-scoring model for microenterprises. As this publication notes, developing such a model will require collaborative action on the part of microlenders across the U.S. FIELD is currently working to create a collaborative effort to build the database required to develop such a model, and we look forward to bringing this work to the industry in the future.

We would like to thank Livy Parsons, Julie Gerschick and Bill Burrus of ACCION USA, as well as the many staff in the ACCION affiliate organizations, for their work on this project. It has been a true pleasure to work with an organization of their caliber. We would also like to invite you, our readers, to provide us with feedback on this publication: how you have used it, what steps you have taken toward implementing CEGs at your organization, and how you believe the industry might continue to move towards greater performance and efficiency in lending. As always, you can reach us via email at fieldus@aspeninstitute.org, or visit our Web site at www.fieldus.org.

Joyce Klein
Senior Consultant

THE UNDERWRITING CHALLENGES OF MICROLENDING

Traditional lending – whether residential, consumer or business – relies heavily on quantitative information for purposes of making credit decisions. This quantitative information – including employment information, credit report data, financial statements, tax returns, and in the case of businesses, data such as Dun and Bradstreet analysis – is the basis for the credit scores rendered by credit bureaus like Equifax, Experian, and TransUnion. These credit scores, while not always the sole underwriting determinant, are nonetheless the backbone of underwriting in developed countries. Importantly, in most credit-scoring models, personal and business lending are treated independently of each other.

Many small business owners, particularly those who are poor, self-employed, without access to traditional credit sources, and lacking formal financial statements or tax returns, are often not included in the credit bureau databases. In poor countries, such credit bureaus may not even exist. Complicating matters, the line between the personal and business are frequently blurred for the microentrepreneur. As a result, microlenders rely more heavily on non-traditional, often subjective criteria, to determine credit-worthiness. Microlenders speak of using their "gut" or relying upon a "sixth sense" in their evaluation process. Yet this sixth sense is difficult to replicate from one loan officer[1] to another. This complicates the implementation of consistent underwriting standards within a microlending organization. It also reduces an organization's ability to achieve scale, by making it harder to create a pool of loan officers that can achieve acceptable levels of credit quality.

What tool, then, is available to microlenders when traditional credit-scoring is not a viable option? This paper describes how the use of Credit Evaluation Grids (CEGs) can aid microlenders with four challenges they frequently encounter, particularly as they seek to increase the scale of their lending activities:

- The need to develop low-cost, consistent credit analysis methods to assess the risk of loss in the underwriting process;
- The need to develop and continuously refine underwriting criteria and methodologies for a market sector that is often not adequately captured in standardized credit reporting systems;
- The need to standardize and systemize non-traditional underwriting criteria in order to achieve broader outreach and impact; and
- The need to maintain a consistent performance level on the part of loan officers and/or underwriters over time.

CREDIT SCORING DEFINED

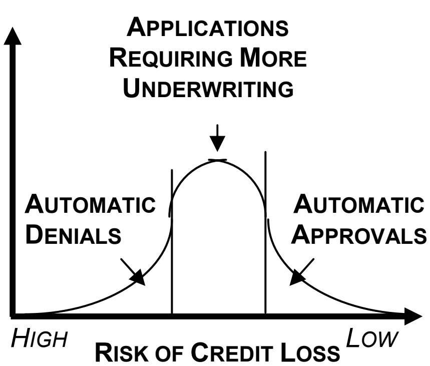
Prior to describing the Credit Evaluation Grids, it is important to understand the basis for and use of credit-scoring models. Credit scoring refers to statistical models that attempt to predict the behavior of a potential borrower based upon the performance of past borrowers. Typically, credit-scoring programs use complex algorithms to compare an applicant's information with factors that, over time, have been determined to be predictive of loan performance, whether

[1] Some microlenders involve underwriters heavily in the application process, freeing the loan officer to generate further microloans. The use of "loan officer" in this document is intended to include any individual significantly involved in the evaluation and decisioning process.

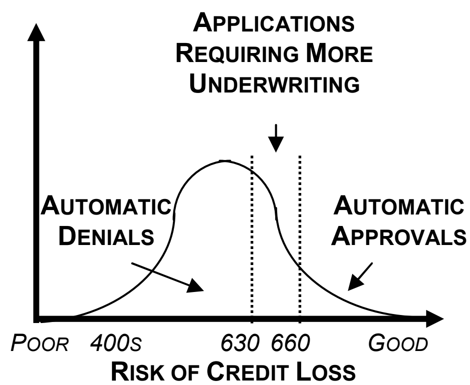
positive or negative.[2] To develop these predictive factors, thousands of loans, including a large subset of loans with negative performance and losses, are typically reviewed in complex computer programs. For each loan considered, the information on a myriad of factors (such as housing expense as a percentage of gross or net income, age, marital status, income levels, employment stability, bankruptcy status, delinquency history and gender) are analyzed both singly and then in various combinations vis-à-vis loan performance. When a high degree of correlation is identified between various factors and loan performance, these traits are considered to be predictive. Mathematical scores are assigned to these factors with the weight of the mathematical scores dependent upon the degree of correlation.

Credit-scoring models result in the development of a bell-curve of scores. (See the pictorial to the left below.) Theoretically, the outer edges of the bell curve represent scores that are either so low or so high (i.e., predicative factors so strong) that poor or outstanding loan performance

THEORETICAL[3]



TRADITIONAL BANKING



is virtually guaranteed (i.e., a very high percentage of the loans made in these categories will result in loss, or in zero delinquency.) Organizations relying on a credit-scoring model would spend little or no time underwriting these credits, either approving or denying them accordingly.

The middle section of the bell curve represents loans for which loan performance, either positive or negative, is not immediately identifiable from the credit information provided. Thus, additional underwriting is required before a final lending decision is reached. Over time, lenders seek to narrow this middle band as much as possible in order to automate the underwriting for the greatest number of loans possible within pre-determined, acceptable thresholds of credit risk. The pictorial to the right above shows a typical curve for traditional lending institutions, highlighting the fact that in their emphasis on the quantitative composition of credit-scoring (vs. more subjective character assessments), these lenders have shifted the entire denial, additional review and approval sections to the right, toward higher credit scores, in order to reduce risk of loss to acceptable thresholds.

[2] Credit-scoring models do not typically include issues such as loan term, loan amount, etc. as part of the evaluation. These issues are determined post-evaluation.
[3] Brand and Gerschick, page 131.

Credit Scoring – Its Applicability and Availability

While credit-scoring tools cannot replace loan officers or underwriters, credit-scoring models can significantly reduce the time spent in underwriting and decisioning. Three factors are of central importance:

- Credit-scoring is an evaluative tool used at the *initiation* of the underwriting process, with the purpose of significantly reducing the time and expense incurred in underwriting.
- To be applicable, the loans that served as the basis for building the credit-scoring model must be representative of the loans to which the credit-scoring model is applied. For example, a credit-scoring model built on the lending and loss experience on high-income individuals would not provide an appropriate credit-scoring basis for low-income individuals. Similarly, a credit-scoring model built upon the loan and loss experience of medium to large businesses (e.g., with Dun & Bradstreet reports, corporate tax returns, etc.) would have little, if any, utility for the evaluation of microenterprises.
- The information upon which credit-scoring models perform must be readily available.

Cross-Applicability of Credit-Scoring Models

Cross-applicability – the degree to which a credit-scoring model developed for one lending purpose and/or upon one population segment is applicable to a different type of lending or a different population segment – is of intense debate in the industry. Over time, credit-scoring models developed for consumer lending (e.g., auto loans, credit cards, etc.) have been demonstrated to be applicable to residential lending. In these cross-applications, however, while the loan type is inconsistent, the client base is comparable.[4] The loan types are consistent with the target population encompassed in the model. William M. Makuch suggests that there is strong evidence that this is not the case between high- and low-income populations, i.e., borrowers with low loan-to-value (LTV) ratios perform differently than borrowers with high loan-to-value ratios.[5] In fact, Makuch argues that "high and low LTV populations deserve different treatments when developing scoring models."[6]

Microloans are typically made to low-income applicants. Often, while the loan purpose may be business-based, the cashflow analysis frequently commingles personal and business cashflows. Credit-scoring models are typically personal (i.e., consumer) or business driven but not both.[7] In addition, most credit-scoring models are not built specifically upon the payment performance of low-income populations. Thus, even when quantitative information is available for a microloan applicant, the predictive power of an existing credit-scoring model may not be applicable if it was developed based upon a target population with different payment patterns.

[4] Credit-scoring models should be continuously reevaluated to determine the applicability of a credit-scoring model to a new loan type, geographic base, or population.
[5] Makuch, pages 62-63.
[6] Ibid., page 64.
[7] Fair Isaac's SBSS Model assesses the loan performance probability of small businesses with average loan sizes as low as $35,000, relying predominantly upon the applicant's business information, with reliance upon consumer information secondary.

Availability of Credit-Scoring Models

The availability of appropriate credit-scoring models is a significant challenge to the microlending industry. In the United States, while formalized credit bureau tracking is widely available, the low-income population is generally not well represented in these models. This is, in part, a result of the high cash orientation of low-income individuals and the fact that many non-banking credit relationships (e.g., familial, money lenders, pawn shops, etc.) do not report activity to credit bureaus. In other countries, there is no national system of credit information collection, no credit-rating agencies to which lenders can turn to procure information about potential candidates. And while there have been attempts made to develop certain credit-scoring models, their availability is generally limited to the financial institutions for whom they were developed

Credit-Scoring Models and the Use of Credit Evaluation Grids

The following table sets forth general assumptions regarding the degree of reliance upon credit-scoring models in various forms of lending and the correlation that this implementation of a systematic analysis has on key factors in the underwriting process, such as the subjectivity of credit decisioning, the extent of information available and the extent of policy documentation typically found. While some microlenders have developed very concise, regimented means of evaluating credits and transmitting the organization's credit culture and policies to new loan officers, many microlenders lack concise, systematic, documented underwriting policies upon which loans are consistently evaluated and that are easily transmitted from loan officer to loan officer.

	Microlending	Business Lending	Residential/ Consumer Lending	Credit Card Lending
Reliance on Credit-Scoring	Low or none	Moderate	Moderate	High
Subjectivity	High	Moderate	Low	Low
Information: **Amount** **Availability**	 Low High dependence upon Loan Officer to obtain	 High Readily Available	 High Readily Available	 High Readily Available
Consistency	Variable	High	High	High
Principles: **Specificity** **Documentation**	 Low to moderate Low to moderate	 High High	 High High	 High High
Underwriting Cost per Loan	High	High to Moderate	Moderate to Low	Low

While credit scoring is unavailable at this time for most microlenders, the implementation of Credit Evaluation Grids can provide many of the benefits that a consistent credit analysis process provides. These include

- **Systemization** through the codification and ranking of lending criteria, thereby eliminating some of the unnecessary subjectivity.
- Enhanced **documentation** in that the grids serve as proxies (but never replacements) for lending policies.
- A tool for **Loan Officer Training** in that the CEGs provide an invaluable base for communicating lending policies and procedures.

- A tool for **Loan Officer Monitoring and Oversight** to ensure that the basis for decision-making remains constant over time.
- Increased **efficiency** by allowing for the refinement of information gathering processes and documentation, a reduction in time spent on credit-decisioning, the development or enhancement of pre-screening opportunities, and the opportunity for increased use of automation.

These advantages and opportunities are described in CREDIT EVALUATION GRIDS – THE BENEFITS below. Prior to describing the CEGs in detail, however, a review of basic underwriting principles is helpful.

CREDIT UNDERWRITING PRINCIPLES

Credit underwriting involves the evaluation of several key criteria (i.e., the application of the microlender's credit policies) to determine the credit-worthiness, and risk of loss, of a potential borrower. Character – the degree to which a borrower is believed to be committed to repaying the loan within the prescribed terms of the loan – is an absolute for any loan. Cash flow and the stability of the borrower to generate that cash flow (often measured in terms of longevity of employment and/or business acumen) are considered the backbone of underwriting. The availability of collateral and/or co-signers represent insurance to the lender against the potential risk of default.

Traditional consumer, business and residential lending are typically based upon analysis of a significant amount of readily available, quantitative information that assists underwriters in analyzing both character and cash flow. This information can include credit reports from national credit bureaus (e.g., Equifax, Experian, and TransUnion in the United States) that serve as a proxy for character assessments. Tax returns, audited financial statements, and decisions and verification of employment terms and compensation levels aid the underwriter in determining the amount, the availability and predictability of cash flows for purposes of loan repayment. Third-party information regarding the valuation of loan collateral (e.g., automobiles, real estate, equipment, etc.) assists the microlender in determining the extent to which collateral provides compensatory coverage for the loan.

Microlenders typically lack ready access to much of this information. Applicants who have borrowed from family members, pawnshops, or moneylenders often lack a credit bureau rating or report. Some borrowers have never completed a cashflow statement for their household or their business. In some instances, borrowers are not even fully aware of total household costs given various cultural arrangements regarding the sharing of household expenses. As a result, while traditional lenders place their greatest reliance on the applicant's cash flow capacity, with character as a strong underlying base, microlenders often find themselves relying heavily on character due to the difficulty in obtaining verifiable cash flow information. To minimize the risk of loss that exists with a lack of cashflow information, microlenders often bolster the character assessment with a strong emphasis on collateral and/or co-signers. The figure on the following page highlights the difference in emphasis made possible by the ready availability of quantifiable information.

TRADITIONAL LENDING	IMPORTANT	ESSENTIAL	COMPENSATORY ONLY
	CHARACTER	CASH FLOW	COLLATERAL CO-SIGNER
MICROLENDING	ESSENTIAL	IMPORTANT TO ESSENTIAL	COMPENSATORY ONLY

DIFFICULTIES IN STANDARDIZING UNDERWRITING EVALUATIONS AND ACHIEVING SCALE

CHARACTER

The heavy reliance upon character as a primary underwriting basis has forced microlenders to develop innovative ways to assess character and develop cashflow information not readily available. In the United States, traditional lenders rely heavily upon formal credit scores readily available from credit bureaus to assess a borrower's repayment integrity (i.e., character). Microlenders, however, often lack this useful information and thus, have created surrogates to assess a borrower's attitude toward debt management and general character. In some countries, character assessments are predicated upon interviews with village contemporaries. In some locations, lenders talk with suppliers and customers of the borrower to analyze the borrower's character and degree of business acumen.

Other lenders, like ACCION New York, assess which expenses a potential borrower is likely to care about most. They then make inquiries about these payments in order to assess the borrower's potential payment performance. For example, the cost of living is very high in New York. As ACCION New York assessed utility and phone bills for borrowers, they found a recurrent theme – there was widespread delinquency for these services. As they investigated further, they realized that borrowers stretched for cash possessed sophisticated knowledge about the consumer protection laws. They knew that there were less significant protections for housing evictions, relative to laws governing the turn-off of gas and electricity service. The lending officers in ACCION's New York offices soon realized that the expense that borrowers typically cared most about was their housing payment. The rate of delinquency on this payment was far, far less than the delinquency rate on utility and phone services. Rent expense, then, became one of the primary tests of character assessment. If a borrower had a negative track record on rent payments, the borrower's attitude toward repayment (i.e., character) was in question.

CHALLENGES IN OBTAINING ASSET AND CASHFLOW INFORMATION

Some microentrepreneurs have cashflow information readily available, even going so far as to have useful business plans available. Often, however, microentrepreneurs lack a high degree of financial sophistication the result of which is that loan officers find themselves preparing financial statements and cashflow information from information obtained through lengthy interviews with potential borrowers. Furthermore, depending upon the type of individual the microlender considers most appropriate for the organization[8], microlenders may lack even basic knowledge of financial statements and cashflows. Without clear-cut guidance, lenders may lack

[8] Microlenders vary in what they believe to be the loan officer skill sets most essential to microlending. Some find street smarts and sales skills to be the most important job requirements. Other organizations place a high degree of importance on a strong business or finance background.

a consistent methodology to follow in obtaining and analyzing the financial situation and prospects of an applicant.

THE SUBJECTIVITY OF UNDERWRITING ASSESSMENTS

More importantly, however, is the belief prevalent within the microlending community that character assessment is a "gut-based" assessment, an assessment that is somehow innate to an individual and thus, very difficult to document and transmit to new loan officers. Systematizing underwriting criteria is considered difficult, if not impossible, because the underlying analysis is too varied and particular to be readily transmitted to other loan officers. As a result, the ability to increase a program's lending activity, (through the training of new loan officers by experienced loan officers) is often a lengthy, time-consuming process.

SPLIT OF RESPONSIBILITIES

The fact that in some organizations components of the underwriting process may be performed by individuals other than the loan officer – individuals who lack previous contact with the applicant and the applicant's place of business – also complicates the applicant assessment process. In these situations, assessment may become more difficult unless a standard assessment methodology that conveys key data is in place.

CREDIT EVALUATION GRIDS

CREDIT EVALUATION GRIDS DEFINED

Remedying the above challenges requires a tool that specifies the type of information to be captured, and then analyzes that information in a consistent manner. Credit Evaluation Grids are straightforward tools that allow loan officers and underwriters to evaluate a specific set of pre-determined criteria for purposes of making credit decisions. These grids are typically broken down into categories of underwriting criteria, for example, character, cash flow capacity, cash flow predictability, collateral and co-signer evaluation.[9] Then, for each primary underwriting category, grids are created that list the key underwriting criteria down the left of the grid and rankings across the top of the grid. The following example sets forth the typical Credit Evaluation Grid format for one category, for example, Character.

CHARACTER EVALUATION GRID

	STRONG	AVERAGE	WEAK	NA
CRITERION 1	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	
CRITERION 2	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	
CRITERION 3	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	
CRITERION 4	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	
CRITERION 5	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	
CRITERION 6	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	EVALUATIVE INFORMATION	

The rows in the Credit Evaluation Grid reflect the evaluation criteria. The criteria selected are those that the microlender finds most pertinent to the type of clients being served and loans

[9] Many lending institutions have adopted catchy phrases, such as "the Five P's" (e.g., Person/People, Purpose, Payment, Protection, and Profitability) or "the Five C's" listed above to assist loan officers in focusing their underwriting analysis.

being made. The rows reflect the grading options for each criterion. The number of rating columns may vary in size from three to five columns depending upon the sophistication and degree of differentiation available. The above example uses three columns, reflecting ratings of Strong, Average and Weak. Within each evaluation square, the microlender provides information that describes a strong, moderate, and weak example of a particular criterion. A microlender may include the name of a well-known client in each evaluative square against which lenders and underwriters can compare current applicants for purposes of consistency.

In evaluating a specific applicant, the lender or underwriter reviews each criterion and selects the grading option for each specific criterion that most represents the applicant. Upon completion, a pattern generally emerges suggesting an overall rating for that particular underwriting category (e.g., character). The following excerpt from a Character CEG provides an example of the criteria that could be used to evaluate a borrower's character. The shaded areas reflect the loan officer's assessment of each criterion.

CHARACTER	STRONG	AVERAGE	WEAK	NA
BUSINESS REFERENCES (BASED UPON A STANDARDIZED REFERENCE EVALUATION THAT ASSIGNS A GRADE OF 1 TO 5.)	References give ratings of 4 or 5. If pay by cash, never experienced problems with cash payments (e.g., NSF checks, tardiness, etc.) If pay by credit, customer never delinquent.	References give a rating of 3. If pay by cash, never experienced problems with cash payments (e.g., NSF checks, tardiness, etc.) If pay by credit, customer never delinquent in last year. Some minor, corrected delinquencies in the last three years.	References give a rating of 1 or 2. If pay by cash, some problems with cash payments in last year (e.g., NSF checks, tardiness, etc.) If pay by credit, customer may have been delinquent one or more times in last year.	
COMMENTS				
PERSONAL CREDIT PAYMENT STATUS	All active accounts current.	One to three past due accounts.	Three or more accounts past due more than 90 days.	
	No delinquent mortgage, child support or enforcement accounts.	Some past due mortgage payments of 1 to 30 days.	Mortgage payments past due more than 60 days. Child support and other legal accounts past due.	
	Limited or no history of delinquent accounts.	No accounts in collection or collections paid in full.	One or more accounts in collection or collections not paid pursuant to conditions.	
BANKRUPTCY PROCEEDINGS	No bankruptcy proceedings.	No bankruptcy proceedings within last three years or discharged bankruptcy within last three years.	Active bankruptcy.	
COMMENTS				
BORROWER INTEGRITY	Enthusiastic, honest, well-developed ideas, strong sense of ownership, organized and knowledgeable. Excellent follow through on appointments, commitments, visits, etc.	Honest, good sense of ownership and commitment to business. Client somewhat slow with follow through on appointments, commitments to call, remit documents, present at site visit, etc.	Evasive, untruthful, inconsistent answers or financial information. Client does not follow through on appointments, calls, document requests, present at meetings, etc.	
COMMENTS	*Excellent follow-through on application process. No inconsistency in answers to questions noted. Although business documentation not as high as desired, applicant is very knowledgeable about business details, cash flows, customer base, etc.*			

Credit Evaluation Grids – The Benefits

Grids have several benefits of significance to any microfinance organization.

Systemization/Consistency

First and foremost, the use of Credit Evaluation Grids results in the systemization of a microlender's underwriting criteria (i.e., the lending policies). All too often, loan officers argue that the intellectual and analytical processes that they apply in evaluating an applicant vary too greatly or are too subjective to allow for systemization. However, it its efforts to create CEGs, ACCION USA found that although there is a degree of subjectivity in the process, each loan officer typically applies his or her own analytical process in a fairly standardized manner. The CEGs seek to identify that process and compare it to the processes of other loan officers and the general lending policies of the microlending institution. Through this comparison (and the hours of healthy discussion that evolves), a common CEG can be developed for testing against past and proposed credits.

Documentation

Credit Evaluation Grids document a microlender's lending and underwriting criteria in detail and in a manner that is constantly in front of the individual lender or underwriter. Thus, CEGs are often a better resource than policy manuals that rarely leave the office, are often outdated, and frequently are not considered a source of real guidance. Because they are a frequently-used tool, Credit Evaluation Grids are less likely to be static. They can and should be amended as additional underwriting insight is gained and as the microlender enters new market sectors with different characteristics

Loan Officer Training

The benefit of increased systemization also helps significantly in conveying lending policies to new loan officers. Although loan officers will still frequently have lengthy education periods as they learn lending for the first time, become familiar with the peculiarities of a particular microlenders market and practices, or adjust their lending expectations upon transferring from larger credit-granting institutions, the CEGs provide a clear road map of the logic used to assess applicants when traditional credit markers are minimal or nonexistent. Loan officers can be trained more rapidly, thereby aiding a microlender's efforts to expand rapidly.

Loan Officer Monitoring

Some lending institutions worry that as the size of loan officers' portfolios increase, the attention that loan officers give to the loan evaluation process weakens. The Credit Evaluation Grids, while unable to completely eliminate this concern, do require that loan officers complete all components. This helps to strengthen loan officers' performances and their consistency of evaluation over time.

Increased Efficiency

The Credit Evaluation Grids offer the opportunity to increase efficiency in several key ways.

Information Gathering. Credit Evaluation Grids provide a strong tool for the loan officer interview and site visit. This helps to minimize the number of follow-up calls for inquiries not made at the time of the interviews and visits. Loan officers are more productive, and the hours spent in information gathering and evaluation can be reduced.

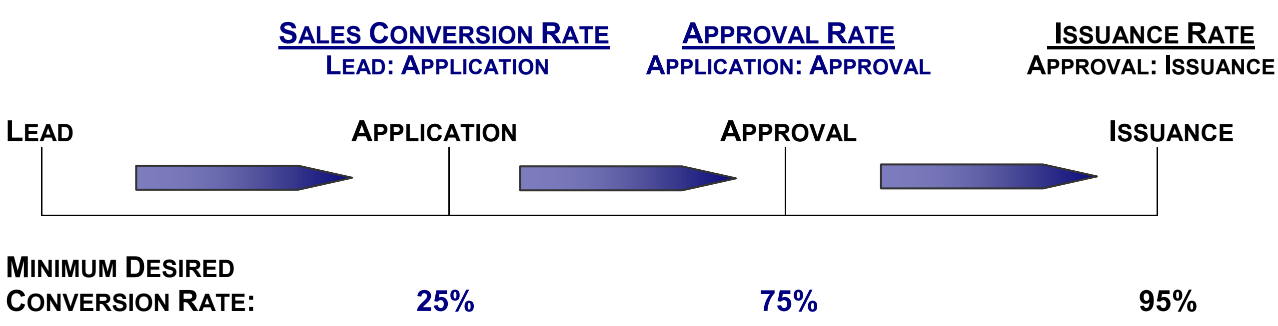
Documentation. The Credit Evaluation Grids provide an excellent form for documenting in loan files the information gathered and analysis performed. Most loan officers find that, when first introduced, the creation of the Credit Evaluation Grid takes more time than their present evaluation methodology. This additional time, however, is largely a result of applying criteria not considered previously, or providing it in an unfamiliar format. As loan officers become more familiar with the CEGs, the time spent completing the forms is typically lower (often by significant amounts). This is largely a result of increased familiarity with the forms, and the use of checks or shading to highlight the applicable judgment, rather than lengthy write-ups.

Credit Decisioning. The standardized format also significantly reduces the amount of time spent reviewing loan file documentation prior to rendering loan decisions. Information is included in the same location for every loan, thus eliminating the frequent hunt for information. Because completion of the CEG requires collection of all relevant documents, it reduces instances in which loans are delayed proceeding to credit committee because forms are not complete. Furthermore, standardization of the criteria upon which decisions are based reduces second-guessing and creation of a new thought process for every loan applicant. This is particularly true when the CEG is accompanied by a summary sheet that includes

- Key information about the loan request at hand (e.g., loan amount, term requested, financial condition and income flows of the business, etc.);
- A summary of the final rating, primary strengths and weaknesses from each CEG (e.g., Character, Business Assessment, Collateral, Co-Signer, etc.);
- Mitigating factors for weaknesses noted; and
- Decision recommendation and logic.

Loan summary sheets are described in greater detail in the section on Credit Evaluation Summaries.

Pre-Screening and the Reduction in the Declined Applications. The fewer the number of declined applications that a microlender processes, the lower the overall cost of underwriting and the more efficient the microlender. Traditional lenders measure this efficiency, in part through the use of conversion rates. The following graph depicts the conversion points in the typical lending process.



For example, mortgage originators seek a minimum 25% success rate on each cold call they make, i.e., for every four cold calls they make, they wish to generate a minimum of one good application. Similarly, residential lenders seek a minimum approval rate of 75%, i.e., for each application underwritten, the institution will approve a minimum of 75% of applications. To the extent that the approval rate can be increased beyond 75%, wasted underwriting costs are eliminated. It is important to note, that the basis for improving the approval rate is not through a relaxation of a lender's underwriting standards but rather, through precluding applications with a low level of possible approval into the underwriting process in the first place. (The Issuance Rate measures how many loans are actually funded after approval.)

The use of Credit Evaluation Grids can aid an organization in increasing both the Sales Conversion Rate and the Approval Rate. With the systemization and documentation of underwriting criteria, lenders can then move to a second evaluation stage – the establishment of three to five of the underwriting criteria that they believe to be so essential that any borrower and application that cannot meet these criteria will never receive a loan from the organization. These criteria are converted into three to five (but no more than ten) essential questions that are asked almost immediately – prior to the scheduling of an interview or the taking of an application. Sales prospects that do not meet these essential criteria are thereby kept out of the system, reducing wasted sales efforts and increasing underwriting efficiency. For example, a microlender might establish the following factors as immediate disqualifiers: an applicant in active bankruptcy, any application for a pawnshop or money lender, an applicant lacking appropriate residency status and an application for a business not deemed acceptable to the microlender (e.g., betting operations, dry cleaning operations because of the high risk of legal risk around ground contamination).

AUTOMATION. Completion of the grids using personal computers or hand-held devices can also significantly enhance automation, and reduce the time involved in the documentation of data and its transmission to a local or home office. Automation can go even one step further by generating initial loan decisions to approve or deny an applicant based upon a computerized comparison of information gathered and analysis performed to the microlender's loan policies and requirements. Computer based lending applications and credit evaluation grids may significantly reduce the processing and analysis time for each loan application.

CREDIT EVALUATION GRID AND SUMMARY DEVELOPMENT

THE GENERAL FORMAT AND DEVELOPMENT PROCESS

The Credit Evaluation Form is typically set forth on letter paper (e.g., 8.5 x 11 or A-4), printed in landscape (i.e., horizontal) rather than portrait (i.e., vertical) mode. The primary components of a Credit Evaluation Form, described below, include the Credit Evaluation Summary and the Credit Evaluation Grids. The required steps involved in developing these forms include the

- Establishment of Underwriting Categories;
- Establishment of a Criteria Evaluation System;
- Establishment of the Underwriting Criteria;
- Development of the Detailed Assessment Data;
- Refinement of the Credit Evaluation Grids;
- Creation of the Credit Evaluation Summary;
- Scoring, if desired, of the Credit Evaluation Grids; and
- Refinement of Policies, Information Requirements, Documents, Processes, and Responsibility Splits as may be required.

ESTABLISH UNDERWRITING CATEGORIES

The first step in implementing Credit Evaluation Grids is to determine the broad underwriting categories within which the institution's specific lending criteria fall. As stated previously, these might include

- Character (an assessment of the borrower's character);
- Business Acumen (an assessment of the borrower's business acumen);
- Business Performance (an assessment of the business' performance to date and the reasonableness of the business to achieve projected growth);
- Cashflow (an assessment of the business' ability to generate adequate cash flow to repay the proposed loan);
- Collateral (an assessment of the amount, value, ability to obtain and salability of collateral supporting the loan); and/or
- Guarantor (an assessment of a guarantor's character, cashflow and ability to repay the loan if called upon to do so).

Each category represents a section of the overall Credit Evaluation Grid. The number of categories should be kept within a reasonable limit; however, they should be broad enough to capture the majority of industries and geographic areas in which a microlender lends. For example, a microlender with offices in New York City and Texas could encounter very different types of borrowers. Borrowers in Texas might have sufficient business assets, perhaps even homes, which could serve as collateral for loans made. As a result, guarantors may be unnecessary for most borrowers. In contrast, borrowers in New York City may have less available collateral requiring that the microlender place greater reliance upon guarantors rather than collateral. To encompass the needs of both organizations, the national office might develop one set of Credit Evaluation Grids; however, a particular category of underwriting criteria (e.g., collateral or guarantor) may be inapplicable for a particular region. As another example, group loans would require that certain categories (e.g., character) be completed for each member of the group. In such a case, a group of three borrowers coming together to purchase a taxi would require three character assessments but only one business analysis, one collateral analysis (assuming that the taxi is the primary collateral) and no guarantor assessment.

ESTABLISH THE CREDIT GRADING SYSTEM

The organization must then decide upon the range of criteria evaluation that best meets the needs of the organization, balancing between the risk of being overly complex and detailed and providing too little differentiation and information to properly assess each criterion. In highly sophisticated lending, the range of evaluative categories may be as high as five; however, in microlending, a range of three grades is typically adequate. (See the first row in the example to the right.) Terminology for these grades might include: Good, Fair, Poor; Strong, Average, Weak; or High, Medium, Low.

	STRONG	AVERAGE	WEAK	NA
CRITERION 1	ASSESSMENT INFO	ASSESSMENT INFO	ASSESSMENT INFO	
CRITERION 2	ASSESSMENT INFO	ASSESSMENT INFO	ASSESSMENT INFO	
CRITERION 3	ASSESSMENT INFO	ASSESSMENT INFO	ASSESSMENT INFO	
CRITERION 4	ASSESSMENT INFO	ASSESSMENT INFO	ASSESSMENT INFO	

Establish the Underwriting Criteria

Once the broad underwriting criteria and grading system are identified, the individual criteria (the leftmost column in the example to the right) must be developed. Frequently, loan officers struggle to identify key criteria when confronted with a blank Credit Evaluation Grid. Yet individuals who may have difficulty creating something from scratch are often naturals at critiquing something that already exists – especially if they are "at risk" for having to apply it to their loan prospects. Sources of criteria for discussion and review with loan officers can include the institution's lending policies, lending documentation, observations from credit committee meetings, and documentation of prior loan approvals and denials. It is important to note that the criteria should be detailed enough to capture the most frequent assessment bases for the majority of loans considered by the microlender. However, CEGs should not be designed to encompass every possible credit that might potentially be considered by the lender.

	Strong	Average	Weak	NA
Criterion 1	Assessment Info	Assessment Info	Assessment Info	
Criterion 2	Assessment Info	Assessment Info	Assessment Info	
Criterion 3	Assessment Info	Assessment Info	Assessment Info	
Criterion 4	Assessment Info	Assessment Info	Assessment Info	

Develop the Detailed Assessment Data for Each Criterion

Once each Credit Evaluation Grid is complete with initial criteria and evaluation categories, the detailed work of completing the assessment information begins. The process for the completion of the detailed assessment is identical to the process enumerated above under Establish the Underwriting Criteria. In developing the assessment information, it is often helpful to ask loan officers to cite specific loans or applications that they believe represent a strong, average or weak example for each criterion. The individual developing the Credit Evaluation Grid can cull information from these applications to complete the various assessment gradations. Some institutions find it beneficial, especially in the beginning stages of CEG implementation, to include the names of widely recognized credits at the end of the individual assessment boxes to aid lenders and underwriters in properly assessing individual criterion.

	Strong	Average	Weak	NA
Criterion 1	Assessment Info	Assessment Info	Assessment Info	
Criterion 2	Assessment Info	Info	Info	
Criterion 3	Assessment Info	Assessment Info	Assessment Info	
Criterion 4	Assessment Info	Assessment Info	Assessment Info	

Refine the Credit Evaluation Grids

After the initial Credit Evaluation Grids are completed, they should be completed for several applications for which loan decisions have already been rendered. The use of declined applications is as important, if not more important, to the validation of the CEGs as the use of approved applications. The grids should also be employed in the evaluation of existing applications in order to refine the content of the form. (If the form is automated in a computerized spreadsheet such as Microsoft Excel or on a PDA, this testing also affords an opportunity to further test the automation process, and in particular, the transmission process.) There is no specific number of applications against which the draft Credit Evaluation Grids should be tested; however, it is imperative that the Credit Evaluation Grid test process encompass all types of borrowers (e.g., individual vs. group), all industries (e.g., food vendors, dressmakers, taxicab drivers, manufacturing companies, cosmetic salespersons, etc,) and all regions where the organization operates to ensure that the CEGs adequately capture the pertinent criteria and assessment gradations.

CREATE THE CREDIT EVALUATION SUMMARY

The final step in completing the Credit Evaluation Form is creating the Credit Evaluation Summary. This sheet should encompass at least three sections, as illustrated in the chart below:

SUMMARY OF:	INCLUDING, BUT NOT LIMITED TO:
KEY INFORMATION	▪ Loan Purpose ▪ Loan Terms Requested ▪ Key Borrower Information ▪ Prior Loan History with Microlender ▪ Nature of Business ▪ Key Financial Business Information

CREDIT EVALUATION	▪ For *each* CEG:
	    ▪ The major strengths of the credit application
	    ▪ The major weaknesses of the credit application
	    ▪ Mitigating factors for major weaknesses
	▪ Overall Credit Recommendation

CREDIT DECISION, CONDITIONS	▪ Decision, date and determining individual or group at each level of decisioning (e.g., loan officer, internal Credit Committee, External Credit Committee, etc.) ▪ Loan Terms Approved ▪ Conditions ▪ Reason for Denial ▪ Date Applicant Notified

"SCORING" THE CREDIT EVALUATION GRIDS

Some institutions, like ACCION USA, have chosen to assign scores[10] to the Credit Evaluation Grids as an additional evaluative tool, as well as a possible data source for later development of credit-scoring models. The use of these scores can assist the microlender in

- Evaluating the composite score (i.e., the total for all sections) vis-à-vis the total scores for other applicants;
- Evaluating the individual scores for each Credit Evaluation Grid (e.g., the Character grid score versus the Business Acumen score) against each other; and
- Evaluating the lending recommendation (e.g., approve, deny, approve with conditions, etc.) with the score for each underwriting category.

Scoring methodologies can vary greatly in complexity. At its most simplistic, each individual criterion being evaluated is assumed to be of equal weight and is assigned a numerical score (e.g. 1 point, 2 points, …). These values are then reviewed or totaled to create an assessment

[10] These scores should, in no way, be confused with formal credit-scores as provided by credit bureaus such as Equifax, Experian, or TransUnion.

number or "score" that corresponds to the Credit Grading System developed by the microlender. At its most complex, "scoring" can include a system where the individual criterion are weighted as to their relative importance in the credit decision evaluation and in comparison to the other criterion. Then a weighted assessment number or "score" can be calculated where those criterion that are indicative of positive loan repayment have a higher weight in the final evaluation or "score." It is important to note that while weighting a criterion may increase the overall category score, it is the comparative value of the category score to other loan applicants that is the important factor.

OTHER CONSIDERATIONS

The development of the Credit Evaluation Form often results in or necessitates a reassessment of key components of or the entire underwriting process.

RELATIONSHIP BETWEEN LENDING POLICIES AND CREDIT EVALUATION GRIDS

It is imperative that once the Credit Evaluation Grids are finalized, the lending policies be revisited to ensure conformity between the CEGs and the policies. For example, in developing the CEGs, an organization might find that its policies do not reflect actual practice for the organization or that practice has changed and requires changes in the lending policies or processes.

REASSESSMENT OF INFORMATION REQUIREMENTS, DOCUMENTS AND PROCESSES

The process of developing the Credit Evaluation Grids often results in a reassessment of the inherent worth of the documentation required and the specific process by which applicants are identified, information gathered and credit-worthiness assessed.

INFORMATION REQUIREMENTS. Information and/or documentation previously required as part of the lending process may be eliminated. For example, if the loan is to be based solely on the cash flow of the business, and business assets are adequate to collateralize the loan, the capture of personal asset information may be abandoned. Information that may have been a standard document requirement may be eliminated if the development of the underwriting criteria does not identify that information or document as a valuable assessment tool.

CHANGES IN STANDARD DOCUMENTS. Similarly, application forms often change as a result of the implementation grid. For example, if the underwriting criteria have evolved to include key financial statement ratios, application forms may be adjusted to include these calculations. Likewise, if personal assets are considered important to capture as psychological leverage but in actuality represent little collateral coverage on the loan, collateral riders may be included as part of the loan documents signed by the borrower; however, the microlender may no longer consider it cost beneficial to file liens against the collateral under the Uniform Commercial Code.

CHANGES IN PROCESSES. The CEG process may trigger changes in the lending processes of a microfinance organization. These might include, but not be limited to

- The development and implementation of pre-screening criteria to fine tune application generation activities and reduce the number of declined applications;
- The standardization of the lending processes, including the creation of new or streamlined forms;
- The standardization of the collateral verification and valuation process, including the creation of a standard evaluation forms;

- The elimination or modification of pre-application requirements;
- The elimination of steps in the process;
- The order of underwriting and credit decisioning procedures.

CHANGES IN THE SPLIT OF RESPONSIBILITIES. In many microfinance organizations, the lender performs virtually all tasks associated with the procurement and analysis of a loan application. Often the justification of this one-person process is based upon arguments that only the loan officer knows what he or she needs, only they have information about the credit, only they have contact with the applicant, and so forth. The systemization of the grids, especially if available to others electronically, affords the microfinancier an opportunity to reconsider the split of responsibilities in an attempt to increase the efficiency of the loan officers. For example, teams may be developed in which loan officers are supported by various clerical staff who perform some of the more routine inquiries and analysis such as credit report retrieval, reference verifications, and third-party collateral valuation verifications. In such cases, sections of the CEGs can be color coded to indicate who is responsible for obtaining what information.

CREDIT EVALUATION FORM IMPLEMENTATION

LOAN OFFICER INVOLVEMENT

In new lending environments, the implementation of the Credit Evaluation Forms presents no unusual challenges. It is the primary tool from which the lending organization's underwriting policies are taught. However, in offices where the introduction of the Credit Evaluation Form represents a significant change in lending practice, several actions should be considered to increase the success of implementation. This is particularly true in those environments in which lending practices have remained unchanged for long periods of time, where loan officers have been in place for a long period of time, and/or when staff is especially resistant to change. To overcome the normal resistance to change encountered and perhaps more importantly, to ensure that the Credit Evaluation Grids are predicated upon the best information available, loan officer involvement throughout the development process is key.

TRAINING

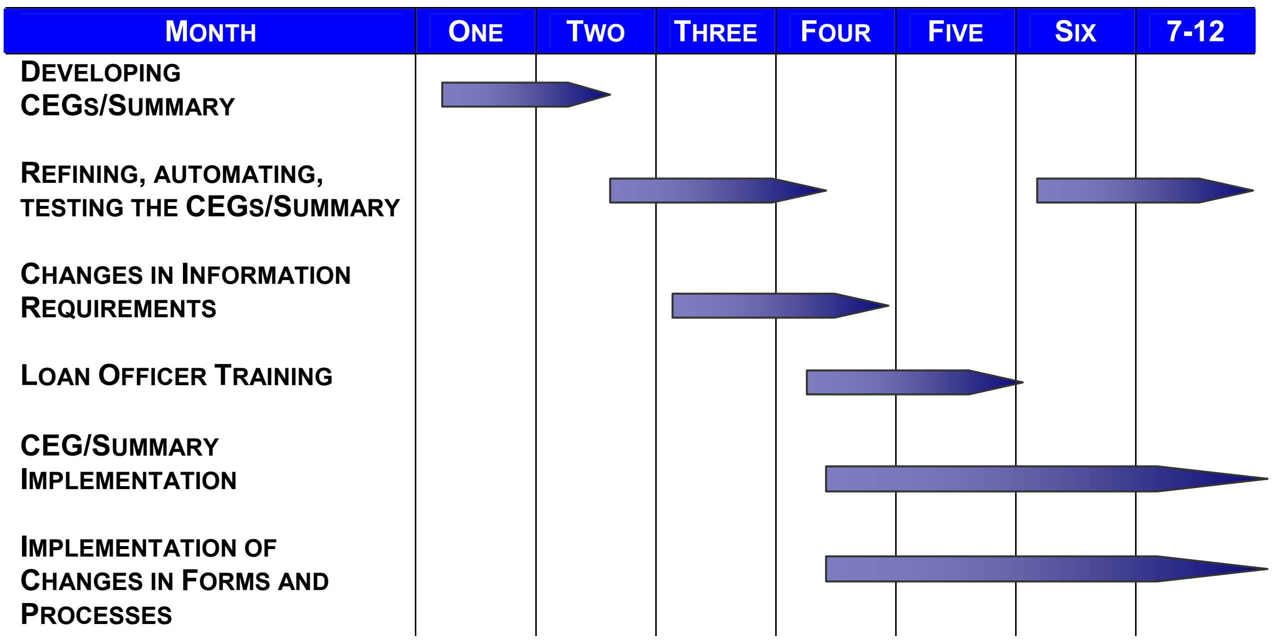
Training should encompass a minimum of two to three separate sessions. First, initial Implementation of the CEGs must be preceded by loan officer training on the form structure, development of criterion, and objectives for final use of the grids. After the Credit Evaluation Form has been in use for approximately two to three months, a second training should be held to address loan officer questions and provide retraining on usage issues that appear problematic as identified through the underwriting and decisioning process. This follow-up training session is also an important setting for the discussion of needed revisions to the Credit Evaluation Form. To the extent that loan officers continue to struggle with the applicability or assessment of the underwriting criteria, additional training should be scheduled on an as needed basis.

TIMING

In order to keep momentum strong, implementation of the CEGs should occur as soon as the test phase is complete. The pace of change, however, must be considered in light of the extent of change in other underwriting areas, such as documentation and lending processes. Some lenders prefer a staged process in which lenders and underwriters deal with change incrementally (e.g., first the Credit Evaluation Forms, followed by changes in forms and processes.) Typically, a phased installation results in some inconsistencies between the Credit Evaluation Grids and various forms and/or processes that have not yet been updated. For some lenders, these inconsistencies are easily managed. For other lenders however, this inconsistency creates added frustration and may result in frustration with the Credit Evaluation Forms.

The alternative – the introduction of the Credit Evaluation Forms in conjunction with the introduction of any revisions to forms and processes – may represent too much change for existing staff to manage. Thus, the magnitude of change that the staff can handle is paramount in determining the pace of implementation.

ACCION USA spent approximately one year developing and implementing the Credit Evaluation Forms in two of its offices. Time was spent as follows:



CHALLENGES

Challenges are often encountered as an organization implements the Credit Evaluation Forms. Loan officers often complain that the CEGs increase rather than decrease the amount of time spent in the underwriting process. This is often true at initiation of the CEGs, but rapidly dissipates as loan officer become accustomed to the forms and as the CEGs are fine-tuned to meet the needs of the organization. Second, the time required to effectively develop and implement the Credit Evaluation Form is significant. Generally, the organization is best served if one individual is dedicated solely to this task (e.g., an outside advisor to the office or a lending person relieved of most lending responsibilities). Without this commitment of human resources, a program’s lending activity may drop significantly and/or the evaluation and implementation period may take an excessively long time. Third, the development of a weighting system for scoring purposes requires careful consideration given its highly subjective nature and the frequent lack of empirical data to suggest weighting one criterion higher than another.

CONCLUSIONS AND RECOMMENDATIONS FOR FURTHER STUDY

As this paper has suggested, Credit Evaluation Grids can be an important tool for microlenders who are seeking to increase the efficiency and scale of their lending activities. In essence, they make explicit the "black box" of the microloan underwriting process, by providing a tool that makes the process more streamlined, replicable and consistent. They also provide the basis for loan officer training that can assist microlenders to expand or replace staff with fewer interruptions in lending quality or volume. CEGs can even be used, over time, to establish criteria for pre-screening purposes and reduce the number of declined applications

Although CEGs can provide microlending organizations with some of the benefits that credit scoring affords to traditional lenders, there are important differences as well. CEGs must be completed fully in order to assess the risk inherent in a particular loan. Credit-scoring models, on the other hand, predict behavior before a significant investment is made in underwriting. Therefore, the development of a credit-scoring model based upon the payment behaviors of microlending's targeted population would offer even greater advances in risk measurement and management and underwriting efficiency.

As noted previously, the development of a credit-scoring model requires large numbers of loans, and in particular, high volumes of failed loans. Such volumes exceed the present experience of any one United States microlender. To develop the information pool necessary to support model development, it is recommended that a group of microlending leaders be formed to determine

- The types of data required for statistical analysis;
- Precise definitions for that data (e.g., the precise definition of delinquent loan categories);
- The data form required (e.g., electronic, file formats, etc.) to facilitate later analysis; and
- Any other information considered necessary by credit-scoring statisticians for purposes of developing a microlending credit-scoring model.

Such discussions would allow microlenders to move towards pooling loan data for purposes of developing a credit-scoring model for the industry.

DEFINITIONS

Numerous definitions are used throughout this paper. They are set forth below to aid the reader.

CREDIT EVALUATION FORM	The entire evaluation package including individual Credit Evaluation Grids.
CREDIT EVALUATION SUMMARY	The summary page of the Credit Evaluation Form that highlights key information about the proposed loan; the applicant; the primary strengths, weaknesses, and ratings from each Credit Evaluation Grid; mitigating factors, if any, for weaknesses noted; and the ultimate credit decision rendered.
CREDIT EVALUATION GRIDS (CEGS)	Individual worksheets—one for each underwriting category—that detail the loan officer's or underwriter's assessment of individual criteria.
UNDERWRITING CATEGORIES	The broad underwriting categories of underwriting analysis (e.g., character, cashflow, collateral, etc.)
UNDERWRITING CRITERIA (CRITERION)	The specific, detailed information within a category that is assessed in the underwriting process (e.g., number of loans delinquent, strength of landlord references, collateral coverage ratio, etc.)
CREDIT GRADING SYSTEM	The range of possible assessments for a criterion (e.g., strong, average, weak or High, Medium, Low, etc.)
CREDIT-SCORING	Any statistically valid model that assigns scores to an individual business designed to predict future repayment behavior. Developed based upon analysis of prior loans, borrower characteristics, and ultimate repayment experience.
CREDIT BUREAU(S)	An organization that provides standardized credit scores and credit information (e.g., Equifax, Experian, TransUnion, etc.)
NA	Not applicable.

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Additional copies of this report can be ordered or
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Users of this publication may also find several other FIELD products, publications and Web site postings of interest, including:

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FIELD forum Issue 2, Financing Products, which takes an in-depth look at the issue of business capital for low-income entrepreneurs, and describes the five grantees participating in the Financing Products for the Poor Learning Cluster, as well as their proposed innovation. The forum can be downloaded for free as a PDF file at www.fieldus.org/li/financing_news.html.

In addition, a section of the FIELD Web site (www.fieldus.org/li/financing.html) is devoted to the Financing Products for the Poor Learning Cluster.

FIELD forum Issue 13, which explores how eight organizations have used various innovative marketing strategies to achieve breakthroughs in outreach, delivery methods, financing and institutional alliances. This forum can be downloaded for free as a PDF at www.fieldus.org/li/scale_news.html.

FIELD forum Issue 5, which examines the issue of scale – why increasing scale matters and how eight FIELD grantees proposed to expand their reach. Included are descriptions of the eight organizations and details about their proposed strategies. This publication can be downloaded for free as a PDF at www.fieldus.org/li/scale_news.html.

FIELD also has devoted a portion of its Web site to the issue of scale-up, www.fieldus.org/li/scale.html.

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