Origination for SME Lending - Management of high volume, low ticket value lending

Nigel Rusby & Stephen Gildert,
Global Consulting Team

An Experian Decision Analytics White Paper

Executive Summary

A major concern of lenders providing financial services to the smaller end of the small and medium sized enterprises (SMEs) sector is the operational cost of servicing these accounts and the generally perceived difficulty of controlling and forecasting bad debt. Caused by the lack of reliable data and the inherently higher risk of unsecured lending to SMEs, lenders have traditionally relied upon manual decisions and skilled underwriting to control risk. However the costs of this can be out of proportion to the high volume, low ticket lending which characterises the majority of the SME portfolio.

As a result, lenders have started to overhaul the way they provide services to SMEs, drawing on experience from the consumer sector of using objective credit scoring and automating decisions.

This document serves as an introductory guide to the opportunities and challenges faced when lending to small and medium sized enterprises (SMEs), particularly for non-complex unsecured lending. It describes the approaches that can be used in seeking to automate and better control the lending process to this important segment and how this can benefit financial organisations in terms of:

- Reduced operational costs
- Better bad debt management
- Enhanced risk control
- Better customer service
- Improved Regulatory compliance including Basel II

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1. Introduction to SME Lending

The small and medium sized enterprise (SME) market, a traditional market for retail banks, offers good levels of return on capital and bad debt volatility far less than the average for the corporate sector. It also offers a huge opportunity with SMEs forming a significant part of most economies, producing economic growth, innovation and employment and requiring funds for investment, operation and growth.

Lending to small businesses usually takes the form of overdraft (ie short term revolving credit), business credit card, short-term loans (secured and unsecured), and long-term loans (always secured). The majority of lending is large volume, small ticket unsecured lending, very similar to lending for personal customers, but generally for higher amounts.

Small businesses are a fundamental source of economic growth in developed nations, where SMEs make up a third of the economy and particularly in emerging economies such as Brazil, China and many Asian countries.   In market economies, formal and informal SMEs, including farms, account for over 90 percent of all firms. Typically, well over half of the working population, particularly poorer people, draw its income from employment in SMEs; with the majority of businesses defined as 'micro' (less than 10 employees).

Such is the recognised importance of SMEs to an economy, the International Finance Corporation, the private finance arm of the World Bank, has a programme of support for SMEs as a means of developing economies and creating growth. Today's small business is potentially tomorrow's major corporation.

1.2 What is an SME?

The term 'small and medium sized enterprise' is one that has no universally accepted definition within the financial sector. Most organisations base their definition on the data they have and their financial interest, therefore using annual turnover and financial exposure. Other definitions use size, value and complexity of business or group.

The European Union defines SMEs by various measures including assets, turnover and number of employees, although this latter dimension is only occasionally used to segment business portfolios in European banks. The most common definition used by European banks is based on annual turnover. Typically, businesses with an annual turnover under €3 million are managed together and classified as 'small'. This is broadly consistent with Basel II capital adequacy accord that allows commercial exposures under €1 million to be defined as "other retail" lending.

A clear definition as to what constitutes a SME is likely to vary from one credit provider to another. The following definitions are provided as an example:

- Business with Turnover of < €50m (part of EU definition)

- Businesses with Annual Turnover of < £2m and borrowing of <£1m (Bank operational definition)

- Businesses whose total lending facilities are between AUD $250K and AUD $500K [sourced from Reserve Bank of Australia Bulletin and experience of customised scorecard developments in Australia]

- Businesses with < 500 staff (US government definition)

It is worth noting that the majority of SMEs in most countries fall into the Micro segment typically with Turnover < €2m and less than 10 employees.

1.3　The challenges of SME Lending

Small businesses are more complex entities than personal customers. There are two key challenges when lending to SMEs; the operational cost of the lending decision, and the generally perceived difficulty of controlling and forecasting bad debt.

Unlike corporate or larger commercial entities, the majority of small businesses are not required to file annual accounts. Therefore, traditional data for commercial lending, such as financial ratios, including assets, liabilities, net worth and trading profitability, are not readily available for small businesses. Requesting such information of a small business is a burden on the proprietor and, at best, is likely to be out of date.

The financial behaviour of the SME is also less easy to identify than personal customers as businesses can vary substantially. In addition the added dimensions of different entity types such as sole trader, partnership and limited company create complexity in tax and financial accounting treatment. There are also distinct behavioural differences between the different entity types which affects the design of the treatment solutions

Some businesses require minimal investment and outgoings to generate revenue (e.g. consultancy), whereas others require an initial capital investment to generate revenue (e.g. manufacturing). Similarly, this diversity of operation requires quite different interpretation of the cash flow and balance sheet positions

Such diversity leads to different lending requirements and requires different approaches to assess the credit application. The lack of reliable data and the inherently higher risk associated with business unsecured lending, when compared to consumer lending, means that the traditional approach to small business lending decisions uses local expertise in underwriting. This approach uses mainly qualitative information for a subjective decision by skilled business managers, relying on personal knowledge from hours of investigation which often includes site visits and interviews with the proprietors. A lending decision for a relatively modest amount can take several days to complete.

1.3 The challenges of SME Lending *continued*

In summary the traditional approach to SME lending adopts a management
style similar to that used for corporate lending. However the sector has
volumes and loan sizes more similar to the consumer finance segment than
the corporate one. The drawback of the traditional approach, due to the
large volumes and individual small margins of a SME portfolio, is that it often
generates operational costs higher than the potential return on the account. It
is not uncommon to find that many financial institutions do not encourage lower
valued SME lending because the time and effort is out of all proportion with
the revenues generated when compared to consumer lending for similar sized
deals.

2.0　A new approach to SME lending

It is well accepted throughout the Finance industry that personal customers can successfully be handled by a prescriptive approach, namely where experts are excluded from the majority of decisions and only quantitative data is considered. Quantitative data is objective information either supplied by the applicant at the point of application or accessed automatically from internal and external sources. Business economics have forced this approach: large volumes of customers requiring small amounts of credit can not justify an expensive origination process.

This is where traditional consumer credit scoring statistical models have been shown to particularly outperform expert assessment when considering just the data gathered for consumer credit decisions, with ancillary benefits such as speed and consistency of decision making.

For commercial customers it is also well accepted that qualitative (e.g. quality of the management, current health of the sector, strength of competition) are important factors for understanding credit risk. Such data requires experts to accurately derive it and to weight it appropriately. The debate in many organisations is whether small businesses should be handled by the personal customer approach or the commercial customer approach.

However, changes in the lending environment, particularly with the increasing competition in the banking market are driving evolution in SME lending. Margins are under pressure as new entrants and increasing regulation reduce prices, forcing lenders to review how the high cost of servicing a small business portfolio can be reduced and risk management improved. The biggest trend in SME lending is to use centralised decision support solutions to automate many credit risk decisions for SME accounts.

2.1   Enhancing decisioning with predictive scoring

The lack of data for SMEs means the traditional emphasis is on the qualitative information available about the business in order to make a lending decision. However, this subjective approach means that the quality of the decision depends on the skill and experience of the business manager albeit the assessment can be facilitated through the use of standardised data capture and expert system automation to assist in such analysis. Fundamentally however the lack of quickly available data makes cost effective risk and bad debt hard to control across an organisation as there is no ability to implement a consistent enterprise wide lending policy. Such skilled resources are expensive and are a major factor in the operational costs of SME lending.

A key part of a centralised decision support solution is the ability to automate this risk assessment, creating an objective measurement of each customer. Credit scoring uses previous behaviour to predict potential future behaviour and therefore create an objective measurement of the risk of default and potential customer value. The lack of data in the SME sector has previously inhibited adoption of this approach, widespread in the consumer sector, making the key to implementation an increase in the amount and quality of predictive data available on a business.

When developing credit scoring models for SME lending, it is important to utilise data from multiple sources that cover different dimensions of the customer. One valuable source is quantitative consumer information available on the principals or directors of the business to create a truly holistic picture of the SME.

2.2 A prescriptive approach to decisions

The systems infrastructure and much of the data and risk tools being used to automate SME lending are similar in nature to those used in consumer decision support, thus reducing the barriers to adopting this new approach.

However, one technique does not fit all business scenarios. SMEs are very diverse with size, industry sector, complexity, management team, assets, cash flow and the health of the sector or trading economy all contributing to very different financial situations and behaviours.

Combined with the lack of available data, it can be harder to apply the prescriptive approach that works so well for consumer portfolios. The diversity of operation and information requires quite different interpretation of the cash flow and balance sheet positions, meaning that the prescriptive approach requires a complex rule base.

The response has been to segment accounts based on sector, size, value and strength of relationship, applying decision automation where it works best and using a more manual approach for larger, complex or high value business.

3. Data in SME decisions

3.1 Commercial Information

The key data sources of commercial data for use in SME decisioning can be broken up into four major categories:
- Business Demographics
- Credit or Public Record Information
- Financial Data
- Data on the Principals of Business

However, obtaining commercial information on newly established small businesses is usually very difficult.

One means of tackling this is to use consumer information that is available on the principals or directors of the business. This information may consist of internal credit performance information or external consumer credit bureau information. Research has shown that in very small businesses, where the principals of the business are the only employees or where the business is newly established, the future credit performance of the business is strongly reflected by the past credit performance of the principals of that business.

Where a business has been established for a number of years and performance information (either internally or externally) exists, then combining both the consumer information on the principals with the commercial data on the business can add significantly to the performance of a scoring model. However, for commercial entities that are classified as medium to large, have been established for a number of years and have a strong performance track record, the significance of the consumer data on the principals adds little additional predictive power.

By consolidating commercial and proprietor personal data for the entire business across all product types (e.g., loans, revolving products, money transmission and investment accounts) with credit bureau data, stability and economic factors, the lender can build a comprehensive picture of the health
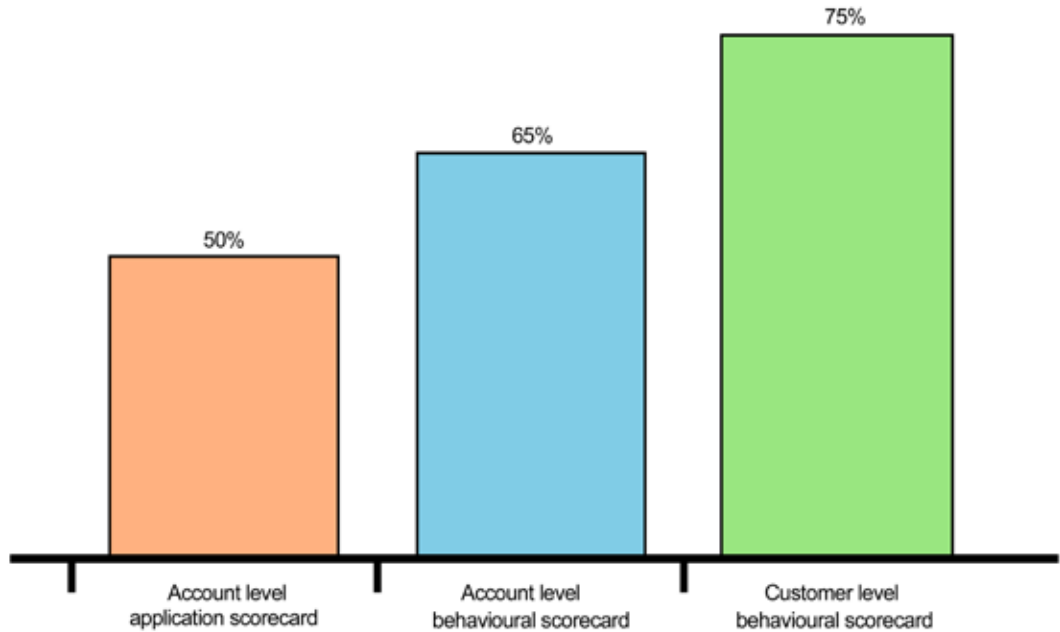
Using behavioural data across multiple products enables credit grantors to significantly enhance the power of scorecards as measured by the Gini Co-efficient. (The Gini value measures the ability of a scorecard to discriminate between good and bad customers – a large Gini indicates strong discrimination)

	Established business switching accounts	Existing customer – weak relationship	Existing customer – strong relationship
Small business behavioural		++	+++
Key personal bureau data	++	++	+
Key personal behavioural data	++	++	+
Commercial bureau data	++	++	+
Previous bank statements	++		
Application form details – financial	++	++	+
Application form details – other	++	+	+

The importance and relevance of different sources of data depending on the bank's relationship with the SME

Key: +: somewhat predictive; ++: moderately predictive; +++: strongly predictive.

3.1 Commercial information *continued*

Business Demographics

Data pertaining to the operations of a business are often of great value to credit models, and more importantly are sourced quite easily at the point of application.

This information may include:
- Industry Group
- Age of Business
- Number of Employees
- Legal Structure
- Turnover
- Directors' Experience (years on board)
- Number of Directors
- Location (Urban or Rural)

Credit or Public Record Information

When historical credit data is available, it is often the most powerful and predictive piece of information. If the applicant is an existing customer, then this information can be obtained from internal performance history.

The financial institution must bear in mind that it does not always see the true borrowing position of a small business. SME customers have multiple credit facilities with different lending organisations or sources of trade credit. Often, payment patterns exhibited to financial institutions are quite different from payment patterns exhibited with other businesses the applicant may trade with. Accessing public record data available from third party commercial credit bureaux can add significant value to the SME decisioning process by determining other credit commitments and total exposures across other lenders.

Recent advances at the cutting edge of commercial bureaux have increased both the coverage and predictive power of the SME information and scores. The use of more dynamic data from sources other than annual statutory filings have resulted in more robust and predictive coverage of small and medium sized enterprises, including sole traders and partnerships and previously excluded start-up organisations.

This allows the external payment performance of the credit applicant to be included in the credit assessment. Deterioration in these external payment patterns can sometimes be an early warning indicator of future delinquent payment performance to the financial institution.

Financial Data

Key financial details are effectively mandatory pieces of information to be provided at the time of application.

From the elements listed below a variety of different key financial ratios measuring the business' liquidity and profitability can be derived and included in a credit scoring model. From a modelling perspective, ratios fields are preferable as they are less sensitive to population shifts.

- Current Assets
- Current Liabilities
- Total Assets
- Total Liabilities
- Working Capital
- Revenue
- Profit
- Net Worth
- Accounts Receivables
- Accounts Payable

It is important to note that at the small business end of the commercial spectrum, financial details provided are often unreliable.

Data on the Principals of the Business

The data that is used on the principal (ie owners/directors) of a business is generally the same data that would be used to assess that individual as a consumer credit borrower.

Some of these non-performance characteristics can be sourced at the point of application, whilst performance data can be sourced either internally, if the principal of the business is an existing customer, or from an external commercial credit bureau.

This information would include:
- Age of Principal
- Age of Director
- Length of experience in this type of business
- Time at current address
- Residential Status
- Payment History
- Previous Bankruptcies
- Court Actions

Some of this information may include data that previously would have been considered qualitative. However, advances in scoring mean that information such as length of experience, skills and business track record can be used in a more quantitative, predictive manner for risk assessment.
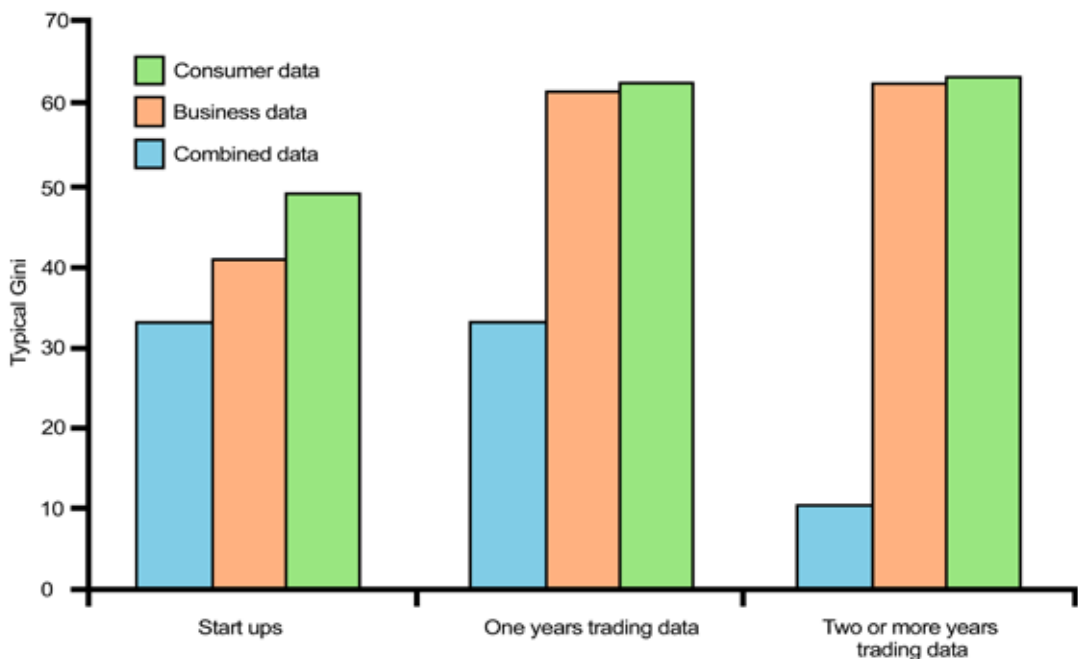
3.2   Consumer data

Many small business proprietors, particularly sole proprietor organisations, use personal financial products for business use. The degree to which this occurs is difficult to measure accurately. However, estimates vary between 20% and 40% of businesses use personal financial products.

Data protection or confidentiality legislation often limits the extent to which a bank may consider personal data when making a decision about a different legal entity such as a company. In the UK the use of relevant personal information is permitted in many situations such as sole trader (same legal entity as the person), small partnerships and companies with up to three directors. This covers the vast majority of a typical small business portfolio.

Personal data on the proprietors of a business is predictive of credit risk and helps to create a more comprehensive picture of the entity's total exposure and financial history. In particular, personal data adds significantly to business data for new relationships such as start-ups or weak relationships, such as secondary banking, due to the lack of predictive business data. It has less impact on established, primary relationships, due to the abundance of predictive business data. In addition consumer data also proves predictive when looking at predicting company failure.
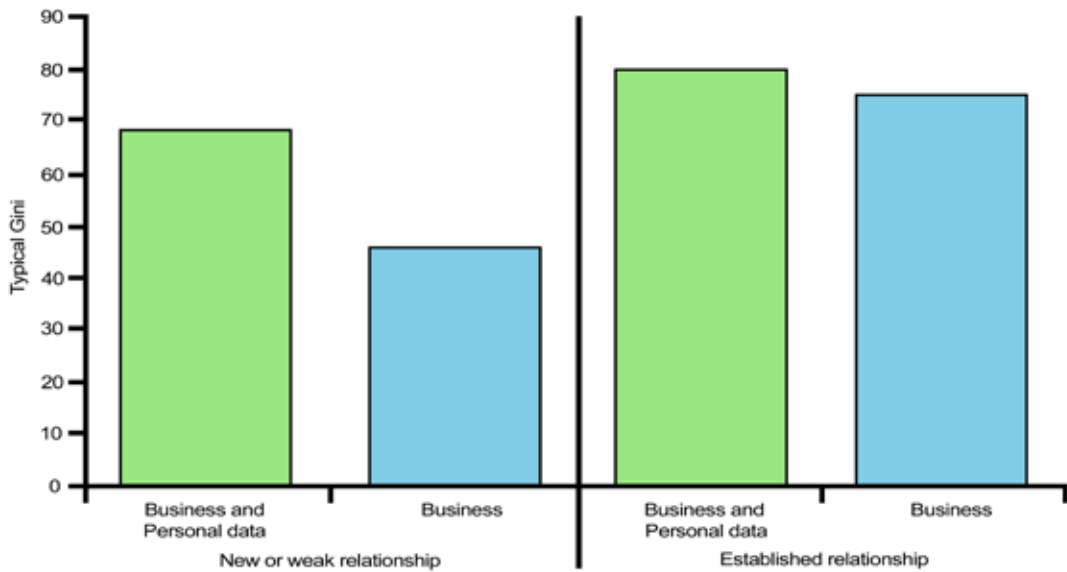
Combining data from business and proprietor sources adds considerably to the predictive power of the data, for new or weak relationships, demonstrating how much the data on the person running the business increases knowledge about the likely performance of the business itself.


The impact of consumer data on predicting company failure. Consumer data has most impact for start-up companies.

Generally speaking, the business entity provides the leading indicator for the financial health of its proprietor(s) if the business is the main source of personal income. Interestingly, in this scenario, the combined business and personal view provides the stronger indication of future financial performance for both the business and personal finances.

Incorporating current account data

The current account is primarily a money transmission product, providing debit and credit facilities, although in many countries it can also provide a short term credit facility. Since it is not a typical long term credit facility, it has often been overlooked as a source of predictive data in credit risk models for lending products such as credit cards or loans. In the UK, an overdraft facility is often associated with a current account (around 50% of accounts operate in this way).

Analysing the current account transaction data and incorporating it with a product based performance indicator to create a customer risk grade, enables significant enhancement of granularity and discrimination to SME credit risk tools for new lending and customer management events.
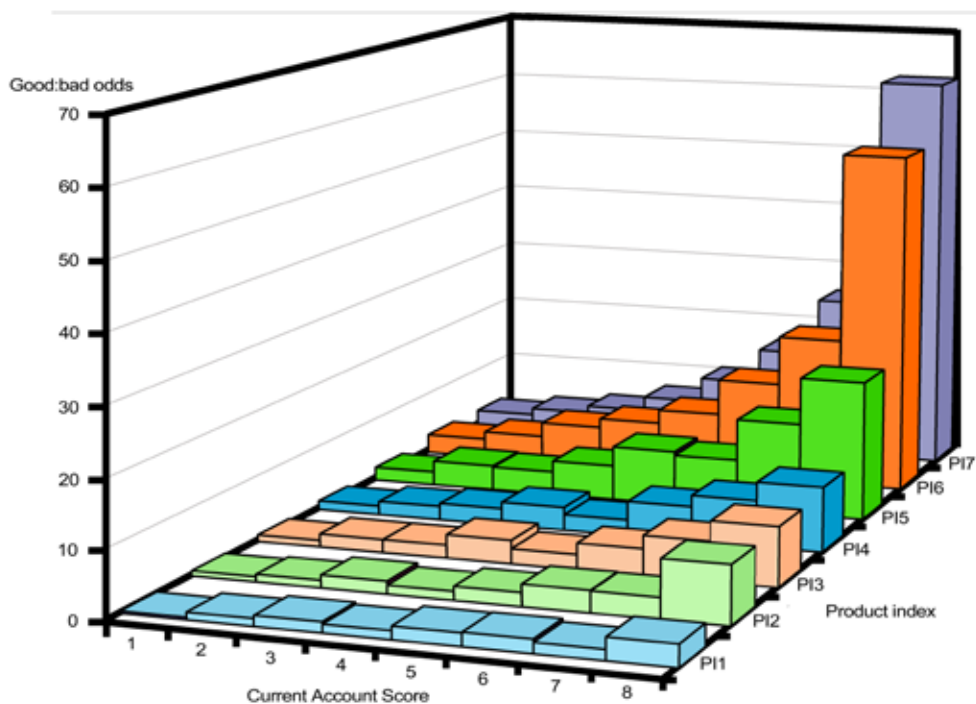
Discrimination and granularity are increased when a current account score is added to a standalone product performance indicator (PI) (instalment loan in this example). The range of good/bad odds for the PI 7 set of product scores is 62:1 to 3:1 (average is around 20: 1). PI ranges from 1 (bad) to 7 (good).

Incorporating cash-flow data

In this context, the term 'cash flow' is used in its widest sense to describe whether short-term financial commitments can be met, i.e., an assessment of immediate solvency. Cash flow is often described as the lifeblood of a business, so negative cash flow without a swing back into net credit when expected can prompt serious questions to be asked about the viability of a business and can lead to its ultimate collapse.

The current account (ie money transmission account) provides very useful and up-to-date insight into the health of a business' cash flow. When combined with other information such as cash deposits and loan commitments, it provides valuable additional data for use in risk and marketing models. However, cash flow information behaves differently across segments.

For example, industry sectors have very different expected cash flow patterns: a general grocery store would expect regular credits and debits whereas wheat farming or tax accountants would have a more seasonal pattern.

Figure 6 shows a different cause of interaction between cash flow data and credit risk segments. The difference in future bad rate across a cash flow variable is much more noticeable for a currently high average bad debt population than for either of the two lower bad debt populations.

This indicates that cash flow information adds more strongly to the prediction of bad debt for the currently high average bad debt segment. In this example, the cash flow variable has been derived from readily available current account information and is not dependent on manually acquired information from the proprietor or filed annual accounts.

3.2. Incorporating cash-flow data *continued*
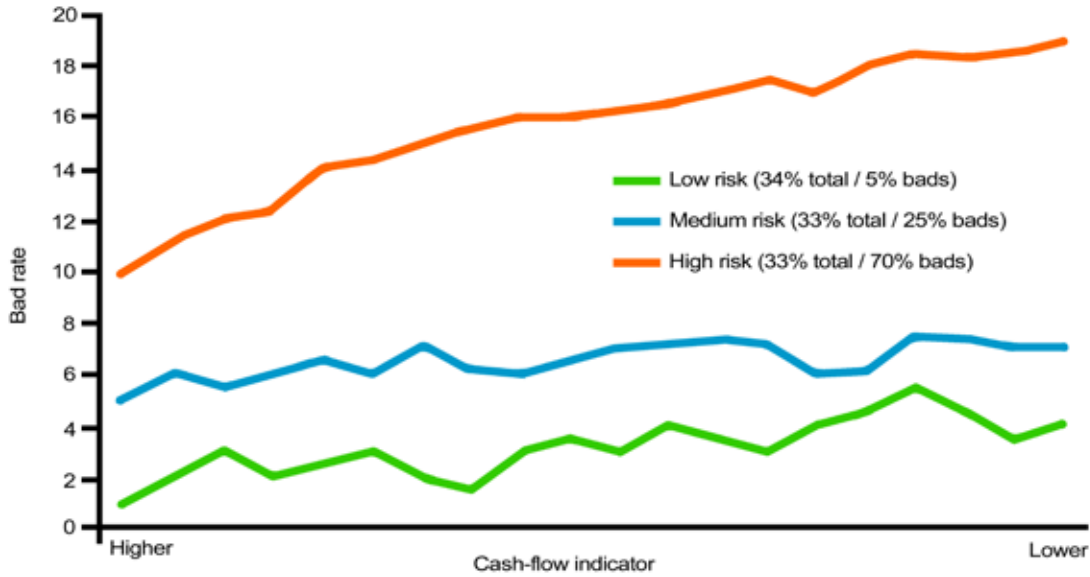
Unsecured new loan lending segmented into three populations of equal volumes of bad debt accrued over an outcome period. Cash flow indicators are highly predictive for the highest risk population with a strong correlation between cash flow and future bad rate. Cash flow data on its own is less predictive of future bad debt for the lower two risk segments.

4. Prescriptive SME decisions

The holistic credit risk picture created from the consolidated business and relevant personal and bureau information create a comprehensive and balanced view of SME entities, enabling a high level of automation to be achieved through segmented strategies. This approach has helped to overcome many of the data, operational cost and bad debt control challenges associated with servicing SME financial needs.

However, the diversity of SME operations means that the prescriptive approach is not always appropriate and the response has been to segment accounts based on key characteristics to determine which SME decisions can be handled prescriptively and which others require expert intervention.

The rules for defining exactly which decision is handled where are still evolving. There are some obvious distinctions that many organisations would agree on, but there are subtleties (eg. health of a particular market sector) which have yet to be fully considered.

This all suggests that small businesses and commercial customers are best tackled by an integrated approach with a common set of rules for defining which applications are suitable for scoring and which require complete expert intervention.

Once these rules have been established, SME credit scoring models (subject to data availability) can be built and implemented in an automated risk assessment and decision-making system.

4.1 Portfolio segmentation

Small businesses in a portfolio may be segmented in various ways. Past experience has shown that the most appropriate segments are driven by factors such as:

- New or existing relationship,
- Strength of relationship.
- Size of exposure
- Turnover,

New relationships also encompass businesses transferring their banking relationship from one organisation to another, referred to as 'switchers'. At the highest level, these segments will be a direct consequence of the SME definition adopted by the financial institution.

The following diagram suggests segments where SME scoring is appropriate.
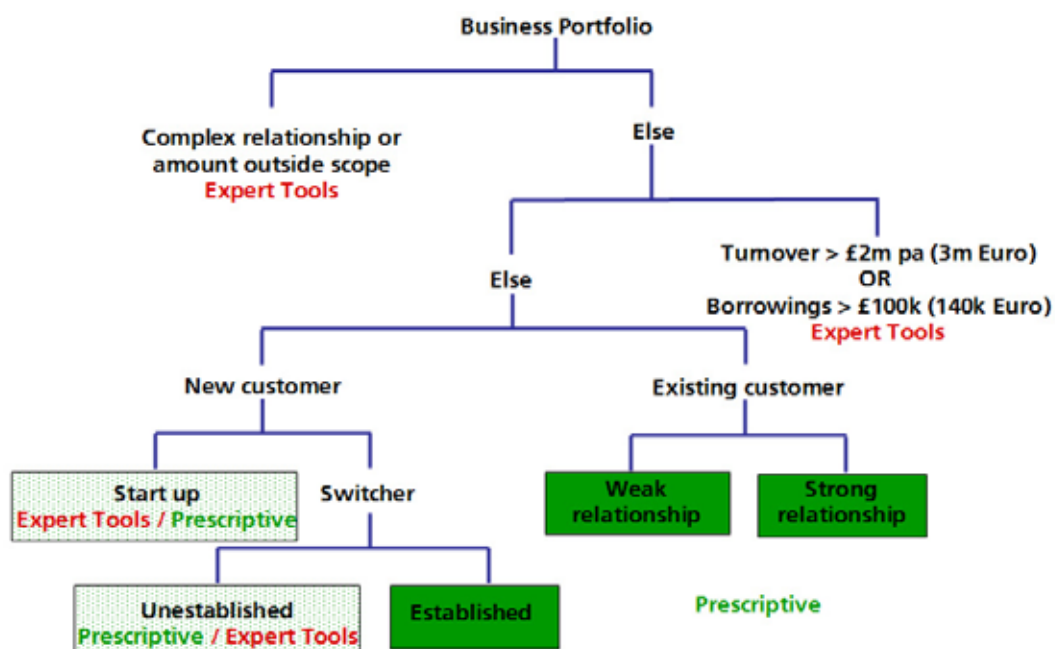
Complex relationships, usually part of corporate or commercial divisions, should not be included in the SME universe. The complexity arises due to the fact that the true financial position is spread across many company entities owned by a parent company.

Large total borrowings, up to a pre-determined boundary value, are considered outside the scope of this process because the high exposure easily justifies expert intervention, and there are usually insufficient volumes to adopt the statistical approach.

A key factor in risk segmentation is the strength of the existing relationship. Strong or weak relationship can be defined in a number of ways. A strong relationship may be one where a primary banking relationship exists for more than 15months. This allows for at least an initial estimate at assessing whether the business is subject to seasonal trading.'

Primary means the main transaction account for the business, exhibiting large volumes of credits and debits. Where a primary banking relationship exists, strongly predictive scorecards and prescriptive lending strategies can be designed. The degree of prescriptive decision making is typically less for weak relationships.

A further key area of segmentation is through consideration of the lifetime value of the relationship to the Bank from an income and ultimately profitability perspective not only from the business relationship but also the associated personal account relationships

The most difficult scenario is the 'start-up' where the business has yet to start trading and where the only information available to be assessed is the business plan, cash flow projections and personal information of the business principals. It is difficult for organisations to use a wholly prescriptive approach on this segment. However, the reject rate can be high for this segment and therefore the use of models and rules to identify 'super fails' (i.e. those cases that are extremely poor lending prospects) can deliver business benefit - leaving just the non-super fails to be handled by experts.

Other characteristics that may be considered in possible segmentation include:
•   number of employees,
•   nature of the SME entity [sole trader etc],
•   nature of lending facility required [revolving or non-revolving],
•   time since established, or
•   a combination of these or other characteristics.

4.1 Portfolio segmentation *continued*

Secondary segmentation is very important in deciding whether or not a prescriptive approach is appropriate. This helps to identify potentially high-risk segments that need to be referred for expert intervention rather than relying exclusively on a scorecard.

For example, a large amount being requested can indicate that a fundamental change is occurring to the business such as diversification or expansion. Other rules that point to expert intervention may be based on high-risk sectors in combination with the amount requested.

4.2. Availability of historical information

A major issue in developing SME scorecards is the availability of historical information, in particular bureau data.

Many financial institutions have either not consistently collected the appropriate data or do not have it in electronic format. Collecting and storing historical information is a value added component of developing and implementing a well designed lending system.

One approach to resolve this data issue is to have a two-phase implementation of a SME decision system. Phase 1 would include the development of a decision system, which utilises scorecards developed from the available data (given that it is of predictive nature). Alternatively if no data is available the use of "generic" or "pooled" scorecards can be adopted as a first step

During this period, a process can be put into place to collect other relevant data (including bureau data) which can be used as part of the policy rules in the decision system, but not the scorecards.

Once there is sufficient historical information collected, Phase 2 would see the scorecards redeveloped to include the additional predictive historical information. Alternatively, a generic bureau score may be used in the decision system whilst historical data is collected for the development of customised scorecards.

This phased approach is consistent with previous SME scorecard development experience, where the first scorecard is almost always seen as a stepping stone to collecting and storing better quality data, leading to development of a more robust and predictive second-generation scorecard.

5. The impact of the new approach

Switching from a traditional environment to scoring based processes can be hard. Top management must inspire confidence in the system among credit managers and relationship managers, otherwise a good system, if not used, will not make any difference.

The benefits achievable in the implementation of an automated small business lending system are proportional to the distance between the previous approach and the quality of the new solution. For example, where current processes are already automated and the only missing element is the predictive credit scoring, reductions in losses in the range of 15-30 % have been seen. Where the current processes are mostly manual and the processes, technology and lending policy are overhauled, the benefits can be significantly higher.

The key areas of improvement are:
• reduced time and cost of the application assessment process,
• reduction in bad debt, and
• objective and consistent decision making.

The benefit is derived from making consistent decisions that are based on the complete relationship and overall exposure with the lender and accurately reflect the bank's policies. This also creates the foundation for compliance with the advanced IRB approach of the first pillar of the Basel II Capital Accord.

Lenders implementing decision support for SME financial services have seen a similar uplift in operational efficiency as enjoyed by consumer portfolios when they migrated from underwriter to automated decision making. For example, the effort required to make new lending decisions has decreased from a typical 12 hours to less than 30 minutes, and for established customers pre-determined lending limits (shadow limits) are being used allowing decisions in seconds. Customer management events such as debit authorisation and renewals of terms and conditions have also witnessed similar improvements in efficiency. These same credit risk tools have also been used to drive the early stages of debt control and collections, producing significant reductions in bad debt.

In markets where there is strong micro lending activity, the benefits of automated, accurate decisioning for SME accounts become even more significant. With the large number of small borrowers, automation reduces operational costs and reduces the need for skilled underwriters, reducing the cost of resource. Similarly the time saved by relationship managers can be redirected to increased sales and service activity helping to drive up business performance. With no filed accounts or track record, consolidating personal and credit bureau data gives highly predictive information for accurate credit risk management.

With these elements in place, banks can lend to these micro-borrowers, cautiously at first, and then, as the behavioural data builds up, this can be used to increase the discrimination and granularity of lending decisions to create better identification of risk and increase lending to enable growth for lower risk, sustainable businesses. This not only increases revenues for banks but also ensures small businesses have access to the financial services they need to continue to play a fundamental role in the economy and development of a country's wealth.
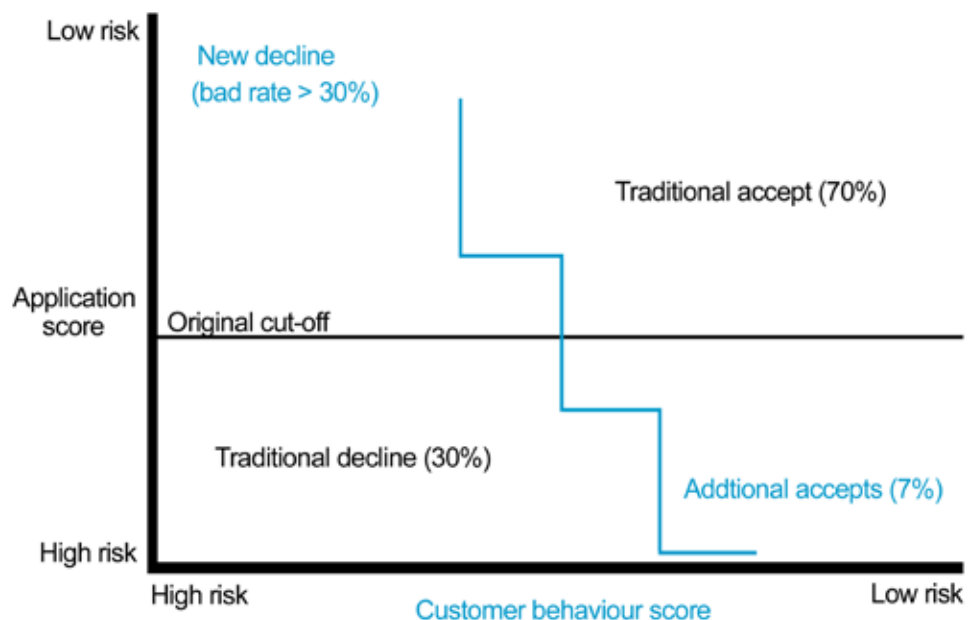
A simplified example of how the application score can be enhanced with customer behavioural data

5.1 The new approach in action

The holistic SME view, applied through automation, supports the development of automated origination risk strategies for cross-sell, accept/decline decision and maximum terms such as recommended exposure.

A further key area is pricing. Negotiation with customers over pricing is a long established practice. However, it is often the customer with the highest cost of service that demands the lowest pricing. Risk based pricing – or, preferably, profitability based pricing by including other factors such as expected cost of providing a service - and risk and revenue predictions can be used to objectively set 'price' or additional terms such as the need for collateral.

Some lenders have gone one step further and created pre-determined maximum recommended short term borrowing needs (revolving credit product shadow limits for overdraft or business credit card) and maximum recommended loan instalment amounts based on affordability measures. This is particularly pertinent in financial environments where economies are expected to slow down.

These recommended 'cash flow' and 'capital expenditure' shadow limits can be made part of a two-stage application process. Appropriate lending requests within the shadow limit facility are granted immediately with minimal further process requirements. Requests in excess of the shadow limit are either declined outright or passed through to a second stage of additional data capture, automated re-decision and potential underwriter review.

The table below shows the typical split of applicants, acceptance rates and default rates achieved in SME portfolios

	Percentage of Applicants	Automated accept rate	Automated decline rate	Refer to second stage rate	Typical Default Rate
Low Risk	60%	more than 85%	~0%	~15%	less than 2%
Medium Risk	25%	40%	20%	40%	circa 10%
High Risk	15%	less than 5%	more than 80%	15%	greater than 20%

The typical levels of automation that can be achieved
Many leading edge customers have built on this foundation to develop customer value estimation models which are used to drive both Risk and Marketing strategies

6. The Experian Decision Analytics solution

Experian Decision Analytics have worked with SME lending organisations worldwide and use this experience to deliver a solution specifically designed to address the key business challenges of this sector. The solution has been built to deliver the functionality needed today and meet the needs of the business tomorrow, creating benefits to the organisation at every stage of its growth, from building the origination infrastructure to optimising performance.

The proven solution enables organisations to deploy predictive decision tools and controlled automated processes across the SME origination operation. The organisation can implement high quality rapid decisions and reduce operational costs, improve customer service and enhance risk management leading to a reduction in bad debt and increasing margins. The solution also supports Basel II objectives with integrated modelling supporting use test requirements, data management and reporting.

• Consulting
Consulting is at the heart of every solution delivered by Experian Decision Analytics. Experian Decision Analytics creates a partnership with clients to deliver a solution that addresses their business challenges for today, and in the future. Bringing a fresh approach and independent viewpoint to the business, it delivers practical solutions that deliver measurable results.

• Application processing and decisioning technology
The scalable and robust system receives, validates and processes applications from multiple sources, with user controlled task orchestration and workflow driving operational and business procedures for both automated and manual decisioning. Lending strategies are controlled by the business users on the desktop and then deployed across the organisation. The business user has complete control to define, test and manage business strategies without the need for programming resource, placing operational and strategic control in the hands of the user.

• Application fraud detection
Using proven detection rules the fraud detection tool screens for, and highlights potentially fraudulent applications, enabling fraudsters to be stopped before the organisation suffers losses.

6. The Experian Decision Analytics solution *continued*

• Predictive analytics

Application scorecards to turn the data into customer intelligence and give insights into risk and future behaviour. Scorecards can also measure potential lifetime value, profitability and objectives such as propensity to drive cross-sell strategies.

• Basel II requirements

Integrated with the solution are the requirements to meet Basel II compliance. The solution implements the models for probability of default, loss given default and exposure at default to satisfy the 'use test' requirements of the Accord. The integrated reporting contains the key management reports and Basel II measures and in combination with the analytical simulation capability, enables stress-testing requirements to be met.

• Business intelligence

The integrated reporting tool enables operational reporting and strategic monitoring to support both day-to-day management control and longer-term business improvement.

• Data connectivity

The proven solution offers links to commercial and consumer credit and fraud bureaux throughout worldwide. Using an established, ready-to-use and secure environment, data is retrieved, merged and standardised from multiple sources for the deepest customer intelligence.

7. About the authors

Nigel Rusby is a Principal Consultant in the Global Consultancy Practice of Experian Decisions Analytics and has worked in the Credit Industry for over 17 years. He has worked in software development, scorecard building and credit policy in several vertical markets including: retail credit, mail order, telecoms, and has specialised in retail banking for several years. Nigel has a wide and in depth knowledge of all aspects of credit risk management throughout the credit life cycle for both consumer and SME banking portfolios.

Stephen Gildert is a Senior Consultant within Experian Scorex's Global Consultancy function focusing on solutions and services for the SME sector and on Basel II consulting worldwide. Stephen has over 20 years experience in the Financial Services Industry and in particular in the Commercial and Business Banking market. His portfolio of roles has covered the whole customer life cycle from origination/business development and customer management through to collections and recoveries.

8. About Experian Decision Analytics

Experian Decision Analytics' enterprise-wide solutions combine data intelligence, predictive analytics, decision-enabling technologies, strategy optimisation and consulting services to enrich client data and allow organisations to maximise profitability and performance from their customer relationships. Its fraud and identity solutions enable clients to prevent fraud at all stages of the customer lifecycle – from authentication and application fraud through to transactional and open account fraud.

Experian Decision Analytics works closely with clients in more than 60 countries across diverse industries, including financial services, telecommunications, retail, leasing, automotive, insurance, government agencies and utilities, enabling them to make billions of customer-focused decisions annually.

With over 20 years experience in fraud and identity solutions, the company has clients worldwide and collaborates with organisations, associations and trade bodies to further develop data sharing schemes and support new fraud prevention initiatives.

As part of the global Experian Group, Experian Decision Analytics has more than 30 years experience of managing bureau data, adding intelligence to that data and delivering analytical solutions. It maintains connectivity with more than 70 credit bureaus around the world and, with offices worldwide, is uniquely qualified to support local, national, regional and global businesses.

For more information, visit the company´s website on www.experian-da.com.

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