

360 Degree Real Time Risk Assessment of Business for Reliable Supply Chain Operations - Business Credibility Product

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Abstract

Review Article

Currently, small and medium-sized businesses often rely on outdated financial data and anecdotal information to assess their business risk. Large organizations may use historical financial statements and ratings provided by rating agencies, which are paid by these institutions, leading to a lack of efficiency and accuracy in assessing business credibility. This can prevent SMBs from becoming suppliers to large companies, accessing working capital credit, and increase the risk of fraud or delinquency in transactions with large corporations. To address this issue, I have developed a Business Credibility Product that uses real-time data feeds from various sources, including banking, eCommerce, payroll, payments, commercial real estate, telecom, utilities, insurance, tax filing, and firmographic data. The product includes a comprehensive 360 degree evaluation of a company's credibility, as well as a deep dive into each of the contributing factors to identify significant deviations and trends. This allows for real-time portfolio monitoring and improved lending, verification, and supply chain operations.

Keywords: businesses, financial data, SMBs, banking, tax filing.

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Field of Invention:

In the current market, small and medium-sized businesses often face challenges in obtaining working capital credit and becoming suppliers to larger companies due to a lack of accuracy and efficiency in assessing their business credibility. Traditional methods of assessment, such as relying on financial statements and ratings provided by rating agencies paid by the institutions themselves, can result in a distorted view of a company's risk profile.

To address this issue, we have developed a Business Credibility Product that provides a comprehensive evaluation of a company's credibility based on real-time data feeds from various sources. These sources include banking, eCommerce, payroll, payments, commercial real estate, telecom, utilities, insurance, tax filing, and firmographic data. Our product goes beyond simply aggregating this data, however, by also performing a deep dive into each of the contributing factors to identify significant deviations and trends. This allows for a more accurate assessment of risk and enables us to provide risk-weighted lending to small and medium-sized businesses as well as

conduct real-time portfolio monitoring of large corporate debt positions.

The analytics behind our Business Credibility Product are based on neuro-decision models that are able to account for the varying scales and update frequencies of the different parameters. This allows us to provide a more accurate and reliable assessment of a company's credibility, enabling SMBs to access the financial resources they need to grow and succeed while also helping to mitigate the risk of fraud or delinquency in corporate transactions.

Background of Invention:

In today's small and medium business world, trust, guarantors, and hearsay reputation are the main factors considered when making verification decisions or partnering with third parties. Lenders base their lending decisions on lagging financial statements, on-site verification of the business location, and, in some cases, the personal guarantee of the director.

For larger businesses, lenders use the previous three years' audited financial statements and business ratings provided by rating agencies, which are paid for

by the companies themselves, as the foundation for making lending decisions.

There have been numerous instances of fraud and delinquency in large business lending, and at the same time, small and medium-sized businesses have difficulty accessing capital due to these inefficient decision-making processes.

To solve this problem, it is important to consider businesses and their real-time leading indicators, which accurately reflect the current health and future prospects of the company. In order to assess a business's credibility comprehensively, these leading indicators should be drawn from a variety of activities that the business engages in.

As a result, we have developed a product that generates a holistic decision product known as the "Business Credibility Product" which evaluates a BCP score based on real-time data. This score takes into account a wide range of business activities, including eCommerce, payroll, payments, commercial real estate, telecommunications, utilities, insurance, tax filing, and firmographics. By considering these data points, which are critical to the actual operations of the business, we are able to get a 360-degree evaluation of the business credibility. In addition, this product can help us analyze patterns and trends in specific parameters, such as payments and eCommerce, to detect and prevent synthetic fraud or identify opportunities for prospecting, if necessary.

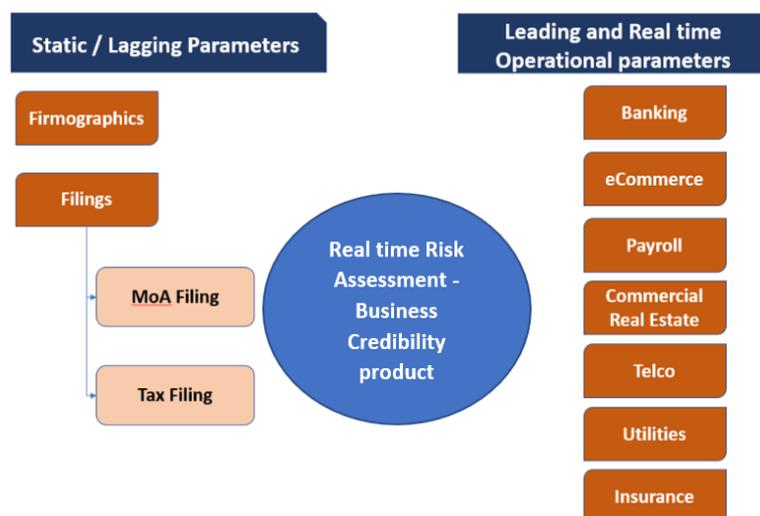
Description of Invention:

- The health of a company is determined by its business activity, which is influenced by various macro and micro factors. Therefore, relying on a year's worth of business data alone

is not sufficient for accurately assessing the health of a company.

- To get a more accurate and up-to-date picture of a company's health, it is important to consider real-time indicators such as transactions conducted through banking activities, loans taken for business investment, insurance premiums paid for employees, and payments received through payment processors for e-commerce transactions.
- These indicators are used to calculate a business credit score, which is determined by standardizing the variables for each parameter and evaluating them using a neuro decision model.
- The resulting score is then compared to known parameters for delinquent and very good businesses to determine cut-off points for decision-making.
- The decision-making model used to generate the business credibility score is fine-tuned for each business, sector, or geography based on the data fed into the model, making it highly adaptable and tailored to different business environments.
- If the resulting score is too high or too low, it may be necessary to investigate the specific trends of individual variables to determine the root cause of the deviation. For example, if the insurance-weighted variable appears low and the overall score is too low, it may be necessary to assess whether changes in claims, payments, or the number of employees for the insurance parameter are contributing to the deviation.
- With this information, decision-makers can make informed choices in the supplier onboarding, working capital lending or other partnership decision-making process.

360 degree real time Leading Indicators for the Business Risk Assessment - Business Credibility Product



Key real time indicators feeding the 360 degree real time decision making

Static / Lagging Parameters	
Firmographics	<ol style="list-style-type: none"> 1. Business Name 2. Address - Pin Code 3. Tax ID 4. Industry / Sector Code 5. The number of Employees 6. Size by declared Gross Revenue 7. Years in Business 8. Web and Social presence - URL
Filing	<ol style="list-style-type: none"> 1. Tax Filing 2. MoA Filing
Leading and Real time Operational Parameters	
Banking	<ol style="list-style-type: none"> 1. Term Loan - Number and Amount in currency 2. Short-term loan and Accounts Payable 3. Loan provision and Payments
eCommerce	<ol style="list-style-type: none"> 1. The number of active Customers 2. The number of Orders 3. Revenue by e-commerce transactions
Payroll	<ol style="list-style-type: none"> 1. Headcount 2. Payroll obligation by currency 3. Seasonality / Trends
Payments	<ol style="list-style-type: none"> 1. Payments Schedule 2. Terms 3. Credit period 4. Payment processor level balance of trade estimation
Commercial Real Estate	<ol style="list-style-type: none"> 1. Rental contracts (Size of Obligation, Length of contract) 2. Rental payment history 3. Valuation of the real estate (if owned) - Area in square footage and circle rate in currency
Telco	<ol style="list-style-type: none"> 1. The number of lines and growth month on month 2. Type of lines - Broadbands, Phone, Mobile 3. Monthly Billing history 4. Monthly Payment history 5. Length of the contract - How old is the contract
Utilities	<ol style="list-style-type: none"> 1. Electricity, Water, and Garbage - separate Billing and payment amount 2. Growth in Usage number by both Units and currency amount
Insurance	<ol style="list-style-type: none"> 1. Insured coverage value - Payments & Claims 2. Health Insurance coverage - # of employees and Business size 3. Lines, Premiums, and Payments

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