

Web data insights for SMEs

Optimising non-traditional data to improve credit risk decisioning

Assessing the credit risk of enterprises, especially small and medium sized enterprises (SMEs) can create significant challenges for organisations.

Limited business intelligence, resulting from incomplete data sources or companies without previous credit history (thin files), means many providers of credit struggle to be able to make an informed decision. This can be particularly difficult regarding newly established enterprises.

Even in situations where powerful databases are available, the need of constantly improve risk model performance often creates real challenges for lenders.

To try to overcome these challenges, some providers rely on information contained within the SME's own website. However, this can be dangerous as this type of data alone will often create a distorted position.

For this reason, Experian has developed a ground breaking new approach to ensure that a more informed and better-balanced view of SAME credit risk can be obtained.

We do this by which using web technology, artificial intelligence and machine learning to acquire, categorise and analyse multiple sources of web data to create new predictive credit risk management models that go far beyond 'traditional' scoring based on established internal and external data sets.

How it works – combining speed, scale and innovation

Experian's web data insights solution combines ground breaking technology and advanced analytics into a single easily deployable API that can be transform SME decisioning processes across the lifecycle.

It automatically selects, acquires and analyses relevant public web data to provide more detailed information about the SME business, and convert this insight into a web data risk score that can be used to accelerate decisioning and reduce the need for referral to underwriters.



Applicant company



Where it is located



How it can be reached



What people are saying about it



On which sites it is mentioned



What is the level of credit risk?

Web data insights for SMEs



Innovation: The creation of new attributes based on public web data

Experian's web data insights tool collects and draws together unstructured information on the business across the web. This information takes three forms.

Firstly, it collects existing known factual data regarding the business' name, location, date of establishment. Secondly it collects data on observed behaviours of the business which will act as good or bad behavioural flags. Finally, it collects wide ranging data that is highly tailored to reflect potential future behaviours.

All this unstructured information is then categorised into usable data using sophisticated text mining and sentiment analysis algorithms to create preliminary "clusters" based around variables such as the business' presence within business directories, its presence within on line media and social networking, membership of trade or industry associations or professional bodies, and links with academic institutions and government agencies.



Speed: Transforming web data attributes into real time decisioning

The clusters are then used to create a variety of risk indicators which we call web scores. We then create and train new predictive analytical models using machine learning that can identify the correlation between each of these scores and different degrees of credit risk.

These scores can then be used on either a (a) stand-alone or (b) combined basis - where existing scores and models (including bureau scores in markets where bureau operate) are combined to improve overall accuracy. Score generation and score combination all happens in just one second.



Scale: Accelerated deployment across markets and international borders

Once the model has been fully trained using machine learning to recognise and categorise the web data attributes, it can be rapidly implemented through using an Application Programme Interface (API).

This API is deployed into the clients decisioning environment and captures the name and address of the SME. This is sent to us via the cloud and the client then will receives back in near real time through an API call a web data score for the SME.

Web data insights for SMEs

What Web Data Insights will mean for your business

Our web data analytics technology has taken over five years and the combination of speed, innovation and scale enables organisations to transform their SME acceptance and rejection processes.

These processes will become more accurate and faster – helping to ensure that you can approve good-quality customers more quickly, and keep them out of the competitions' hands.

SME customer strategies can be both enhanced and optimised by using the additional insights generated. These insights will help uncover the root causes of high-risk events and provide early warning indicators of the customer's future propensity to buy, churn or default.

This will help increase overall SME lending revenues and ongoing profitability.

Gaining a deeper view of credit risk will help reduce levels of bad debt and financial provisioning and all of this can be done without the need for the client to vary their overall credit risk appetite.

Our credentials and the value we can create for clients

Experian has extensive knowledge and an established a track record in delivering big data, advanced analytics and smart credit solutions in numerous countries across the globe. The value that is created by our web data insights for SMEs can be seen in three areas.

- 1**
Reduced "No Hit" rates for underwriters
By acquiring data in each of the three categories referred to above, we can find 90% of businesses.

This is a far higher level than underwriters would normally be able to achieve through basic web search alone.
- 2**
Enhanced predictive accuracy improves overall portfolio risk
The additional insight provided by web data typically improves the accuracy of the distinction (Gini) between "good" (less likely to default) and "bad" (more likely to default) applications. both on a stand-alone basis as well as when combining web data insight scores with an organisations traditional scores.
- 3**
Real time response accelerated decisioning and reduces cost
After developing and training a new model, it will then be deployed within the organization's live decisioning systems. All the web data processing and score calculation will be performed in near real time and the increased insight created will result in reduced underwriting referral rates thereby reducing overall costs.

These benefits are being realised by organisations across the world, as shown in the following case studies

Web data insights for SMEs

A leading Italian commercial lender

Objective

This organization Financial House wanted to improve origination score for credit risk assessment of their SME market segment

Results

- 15% improvement internal score accuracy compared to traditional score
- 33% GINI of web data insights analytics when used on a stand-alone basis

Outcome

- Deployment into live originations and decisioning environment

Major French bank

Objective

Leverage big data to enrich insights in France and Netherlands

Results

- 90% of companies found on the web in Netherlands
- 30% improvement internal score accuracy with Time Stability
- 35% uplift in the "bad rate" within the highest risk segment as predicted using the combination of web data insights with existing scoring

Outcome

- Machine Learning model Implementation in client system using API connectivity
- Extension of the approach into other countries outside France

Spanish investment bank

Objective

Removing the constraints on portfolio optimisation created by limited access to structured SME business intelligence data

Results

- Data relating to 75% of the bank's SME portfolio was found on the Web
- 42% GINI of Web Data Insights Analytics stand alone
- 100% improvement in accuracy for the highest risk part of the overall portfolio

Outcome

- Deployed into strategic decisioning capabilities
- Optimised SME risk assessment through specific focus on correlation of risk with geographical location to reveal markets where the bank is underweight

Web data insights for SMEs

Initiating a proof of concept

If you recognise some of these challenges and opportunities within your SME customer strategies then let us show you the potential value that Web Data Insights could bring to your organisation.

We can run a proof of concept using your historic credit applications from SMEs.

We just need details on at least 20,000 SME credit applications within a pre-defined sample.

In only a few weeks we can build a custom model to analyse each account and reveal how they would have been assessed if our web data insights capabilities had been applied.

The results will reveal the strengths of the model, both on a standalone basis and when combining it with existing scores.

Then should you wish to purchase a licence the API can be up and running within your SME decisioning processes within weeks.

Proof of concept methodology

1. Analysis of existing SME portfolio data
2. Web crawling accesses specially targeted information from internet
3. Develop and train new model using Artificial Intelligence and Machine Learning
4. Apply model to existing portfolio to create web data insight scores
5. Combine Web Data Insights scores with existing client scoring and apply to existing portfolio
6. Assess impact of two approaches on Gini and on the financial benefits

To find out more, get in touch

If you would like to find out more about how Web Data Insights can change the way you work with SMEs contact your local Experian office.

Registered office address:

**The Sir John Peace Building, Experian Way,
NG2 Business Park, Nottingham, NG80 1ZZ**

www.experian.co.uk

© Experian 2019.

Experian Ltd is authorised and regulated by the Financial Conduct Authority. Experian Ltd is registered in England and Wales under company registration number 653331.

The word "EXPERIAN" and the graphical device are trade marks of Experian and/or its associated companies and may be registered in the EU, USA and other countries. The graphical device is a registered Community design in the EU.

All rights reserved.

C-00068 Web Data Insights PS