IMPACT SCORE
METHODOLOGY

SUMMARY

Multi-award winning mnAi uses proprietary data and technology to supply unique research, analytics, insight and due diligence on all UK companies, with a particular focus on ESG.

With 12bn+ data points, mnAi's core product is a data asset encompassing 9m+ UK companies and 37m+ people that is updated and refreshed in real-time. Our unique insight on hard-to-find data points including emissions, diversity, gender, productivity, investment, debt, grants, financials and more, helps improve decision making, increases efficiency and removes complexity.

We are trusted by Government, Financial & Professional Services and Investors to enhance their understanding of markets, sectors, supply chains, investments and clients.

Our proprietary technology enables clients to:

- Generate real time macro and micro economic insight
- Build bespoke industry, sectoral, regional or demographic market maps
- Understand growth
- Quantify risk
- Enhance decision making

IMPACT SCORE OVERVIEW

Investor, customer and supply chain pressures are changing the way that companies need to think about their ESG credentials. Despite this, there remains a clear lack of data, insight and analysis on the impact that an organisation has, making it challenging for corporates to meet targets.

The mnAi 'Impact Score' has been developed in conjunction with the policy team from the Scottish National Investment Bank to combat this. Using a combination of public and proprietary data, we have created an impact engine which assigns an impact score to all UK companies regardless of size

METHODOLOGY

When building the algorithms and technology to generate our proprietary impact scores, the mnAi data science team used recognised modelling techniques to support their hypothesis that reported data can be used to train sophisticated data engines to produce highly accurate results.

The model uses data from the following variables:

- Emissions
- Gender
- Ethnicity
- Sector
- Risk
- Governance

Each company's score is unique and is based on a combination of the variables that takes their specific circumstances into account to indicate their ESG impact.

All companies have a maximum of 600 points available in the assessment with the highest scoring companies deemed to be those having the greatest ESG impact.

WEIGHTING

Each variable is given an equal weighting to ensure that smaller, newer companies are not disadvantaged when comparing against larger, more established organisations.

CALCULATIONS

The following calculations have been used to determine the score allocated per variable. An example is provided for reference.

Example company: ABC Example Limited

ABC Example Limited is a nine year old, established manufacturer in a high polluting sector. It has three directors, all of whom are non-ethnic and only one of whom is female. Whilst the company makes a profit, the company has three registered charges against it, all of which are outstanding and for £750.00, £1,200.00 and £48,000.00 respectively. The directors of the company are also connected to another company in a similar industry, which in this instance, is loss making. ABC Example Limited also took several Covid loans during the pandemic.

ABC Example Limited would therefore score 315/600.

Data Variable	Score
Emissions	45
Gender	93
Ethnicity	90
Sector	33
Risk	0
Governance	50
Total	**315/600**

Data field	Rule	Score
Emissions	To calculate a company's carbon score, we need to first convert their carbon rating into numerical value. There are seven carbon states - ultra-low, low, medium-low, medium, medium-high, high and ultra high. If we assume that ultra-low is the best score, then we would say that they would be 100/100 with the others as low = 80/100, medium-low = 60/100, medium = 45/100, medium-high = 30/100, high = 15/100 and ultra-high = 0/100. Nb. A newly incorporated entity under 1yr old would be classified as a medium emitter until such time as their financial statement was received and they could be fully assessed = 45	**ABC Example Limited -** Scores 45 as it is a medium emitter.
Gender	To calculate the gender value, we will assign a value to a director as follows: - Female: 100 points - Male: 90 points - Corporate: 90 points We would look to create an overall value which is then divided by the number of directors to create a unique score per company. The benefit of doing so this was would be that a mixed led company will score higher than a male led, but a female led company will score highest of all. It will also recognise companies who have single female directors amongst male led boards.	**ABC Example Limited -** Scores 93 as it had two male directors and one female director.

Data field	Rule	Score
Ethnicity	To calculate the ethnicity value, we will assign a value to a company as follows: - Ethnic-led = 100 - Non-ethnic led = 90	**ABC Example Limited -** Scores 90 as it is a non-ethnic led company.
Sector	A score can be applied to a sector in recognition of its overall impact to the environment or innovation sectors that it operates within, with the following used as part of the classification: - Level 1 - 33 - Level 2 - 66 - Level 3 - 100 A copy of the sector taxonomy has been provided for your consideration as a separate document.	**ABC Example Limited -** Scores 33 as it has a low sector score.

Data field	Rule	Score
Risk	We will use our credit score matrix to assess risk. The rules for this are as follows: • A company starts with 30 points • For each year of trading, they get a +5 score, up to 6 years • If they took furlough/covid aid, they get -10 for that year only • If they raised capital, they get +5 for that year only • If they receive Innovate UK, they get +5, for that year only • If they have 1+ charges, they get -10, for each charge for that year only • If they have 1+ CCJs with a value under £1000, they get -25 for that year only • If they have 1+ CCJs with a value over £1000, they get -50 for that year only • If they have any outstanding CCJS, they are set to 0 in their latest year only • If they are currently dormant/non-trading, they are set to 0 in their latest year only • If there's a compulsory strike-off event, they are set to 0 in their latest year only • If the company is not "active", they are set to 0 in their latest year only The maximum score is 100 and minimum score is 0.	**ABC Example Limited -** would score 20 given the number of CCJ's recorded against it by suppliers.
Governance	By making use of mnAi's director credit score, the concept would be to aggregate the credit score of all directors to create an overall value. Ie: High credit score: 75 – 100 = 100 points Medium credit score: 50 - 74 = 75 points Low credit score: 25 – 49 = 50 points Very low credit score: 0 – 24 = 25 points	**ABC Example Limited -** Scores 50 as the director profiles show a low credit score across their profiles.

Industrial insight
National, regional and local macro and micro economic insight by Impact
Sectoral and industrial macro and micro economic insight by Impact
Growth and investment macro and micro economic insight by Impact
Employment numbers by Impact
Demographics by Impact
Autonomous supply chain benchmarking including Impact

Company Profile
Radial chart based on impact
Comparison chart – company v's industry
Comparison table – company v's industry (actual)
Comparison table – company v's industry (% per GHGe)
Reported Carbon KiloTonnage table

Person Profile
Comparison table of all corporate involvement by summary and detailed Impact analysis
Comparison chart at summary level of all involvement ranked by Impact
Individual radial charts for all corporate involvement

CONCLUSION

Our solution combines proprietary data and powerful technology to create new, clear actionable insights that will reduce risk, decrease operational expenditure and provide the benefits of comparability to increase the chances of fairer, more equitable society.

The data produced by mnAi's technology covers all active UK companies. It it the first of its kind and is truly unique, enabling the identification of the following:

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