



Allianz
Trade



Effective Risk Management Strategies: Using Artificial Intelligence in the Brave New World of Credit

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Euler Hermes North America Insurance Company and its affiliated debt collection



What is Trade Credit Insurance?

Trade credit insurance, sometimes referred to as accounts receivable insurance, protects businesses when a customer fails to pay a trade debt.

This often occurs when a customer becomes insolvent or is unable to pay within the contracted terms. Credit insurance indemnifies a proportion of the debt owed.

Trade credit insurance is purchased by clients to insure their accounts receivable from loss due to the insolvency of the debtors

How Does Credit Insurance Work?



Meet Allianz Trade



Allianz Trade tracks companies in markets representing 92% of global GDP



Incorporated in the U.S. in 1891



One of the world's largest insurance companies



85 million+ companies in 200+ countries monitored daily and locally within the Allianz Trade proprietary risk database



Nearly \$1 trillion covered trade transactions globally



20,000 credit requests processed per day

Financial ratings

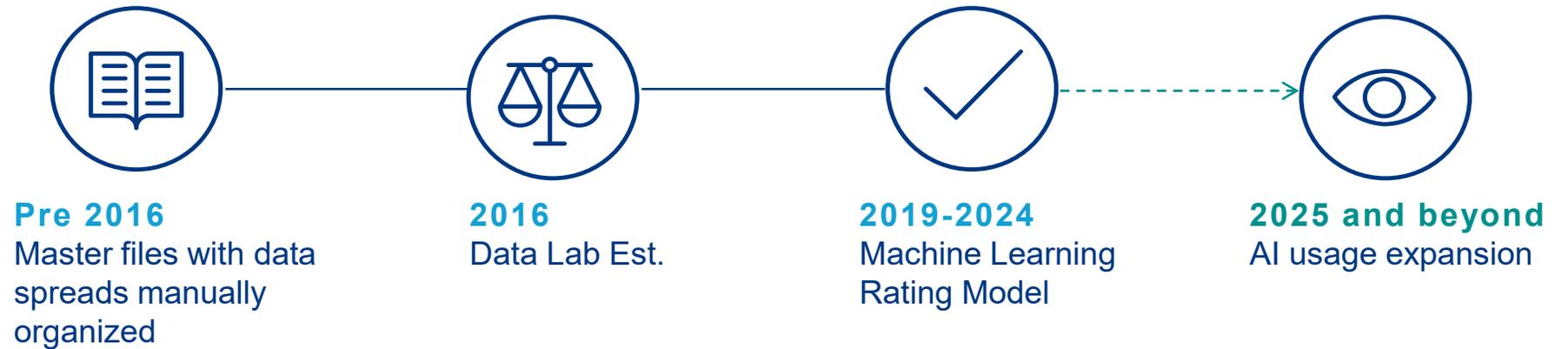
AA
Standard & Poor's

A+
A.M. Best Company

Traditional Risk Management Approach

Main Principles – A portfolio management strategy both broad-based and specific

TIMELINE OF EVOLUTION



Traditional Risk Management Approach

Main Principles – A portfolio management strategy both broad-based and specific



Pre 2016
Master files with data spreads manually organized

Macroeconomics view sets a tone > Consider Industry Risk > Segment by exposure level & sensitivities > Dynamic Analyst and Underwriter teams with Sector/Sub-Sector Expertise >

Assign “grades” 1-10 to individual companies and define approach based on Sensitivity

- Automatically graded buyers (smallest exposures)
- Manually graded buyers (medium and large exposures)
- High-risk buyers assigned to a specific analyst (largest exposures)
- Credit Committee buyers (largest and most sensitive exposures)

Frequency of position updates is then determined by level of exposure and grade.

Grading Scale	Description
1 – Exceptional	Large and exceptional companies
2 – Strong	Large and strong companies Exceptionally, might also be open to smaller companies (2) demonstrating exceptional credit quality and fulfilling all the necessary requirements
3 – Good	Good companies of any size Adverse information may exist, but only to a very limited degree
4 – Above Average	Above average companies of any size, showing positive outlook and resilience Adverse information may exist, but only to a limited degree
5 – Average	Average companies of any size
6 – Below Average	Substandard performance and/or financial flexibility
7 – Weak	Companies of any size showing the first signs of distress
8 – Distressed	Companies of any size that are in distress
9 – Uninsurable	Very high risk of default
10 – Failed	Failed companies

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Data Sourcing

Public:

- Credit Agencies
- SBFE
- Ratings Agencies

Allianz Proprietary:

- Past Due Reporting
- Claims/Collection Activity

Confidential Information:

- Private Financials
- Company Visits and dialogue

Strategic Information and Portfolio Management

Having organized our portfolio and categorized by Sector and Sub-Sector, we can precisely monitor specific areas of concern

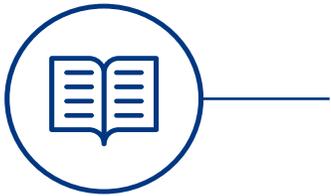
- Leading Indicators (Past Due reports, expected Loss) > Proactive Monitoring
- Lagging Indicators (Claims Data, Loss Ratio) > Reactive Monitoring

We actively ensure that our risk appetite is matched by the reality of our exposure and aim for a surgical approach

This all very MANUAL and labor intensive...

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Strategic Information and Portfolio Management

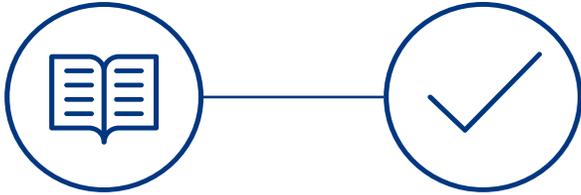
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Earliest efforts into AI > Machine Learning



Pre 2016

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2019-2024

Machine Learning Rating Model

AI is a computer science where computers are taught to mimic human intelligence

Machine Learning is a specific application within AI whereby the machine learns from historical data

Allianz Trade created a Data Lab in 2016 to study the impact of using ML

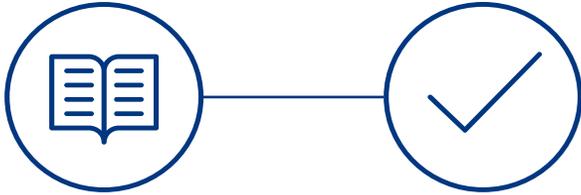
Key Inputs identified to form the basis of this analysis

- Years in Business
- Payments
- SBFE scores
- Industry
- High Credits

We can then model this data from the past to make predictions about the future

- The model determines the relevant features and business rules from structured data
- 3 years worth of historical data are considered to calibrate the model
- Models can learn predictive characteristics of defaults 1 year before they happen

Earliest efforts into AI > Machine Learning



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Machine Learning Rating Model

Resulted in significant reduction in manual workload

Much of our portfolio can be handled by this model, therefore freeing up Analysts and Underwriters to work on more sensitive and relational risks

Model allows for manual calibration to enable more supportive or restrictive views dependent on our current level of risk tolerance

Added benefit is the increase in confidential information that can be more exhaustively sourced by trained analysts and info hunters, thereby enhancing our data pool

Evolving Along with AI



2025 and beyond
AI usage expansion

Structured Data versus Unstructured Data – taking the next step

OCR (Optical Character Recognition) and FS – famously incongruent, different words used to describe the same financial variable, PDF vs Word Doc, vs Excel spreadsheets – a world of complication

In 2024 we launched an application that can spread financial results for our analyst team, huge time savings

How can we further leverage AI – develop a recommendation powered by AI to support our Analysts and Underwriters while sourcing from a large data pool to bring together all relevant details about a particular company.

Reimagining the role of a Credit Analyst/Underwriter – working in partnership with a semi-autonomous AI system that adapts to variations in risk and can infer different decisions based on any combination of data

Evolving Along with AI



2025 and beyond
AI usage expansion

Find and Develop additional data sources to create more applications:

- Propensity to Buy
- Propensity to Collect

Respecting limitations of AI – this is not a perfect solution, and it is still a work in progress and “sanity checks” are still necessary

Preserving the human touch – Effective credit management begins with a credit expert conveying this message to clients

Thank you!

