

# NEWSLETTER

NESI INTELLIGENCE FOR BUSINESS

EDITION 01

## Transforming Data into Artificial Intelligence Models



Many companies want to start developing AI models, but don't know how to take the first step.

This process can be simplified if it is integrated with existing operations, using the available data as a basis.

When starting out, avoid hiring specialist systems, which are often very expensive.

Prioritize the definition of "what" can be developed.

### Identifying Opportunities

Implement collaborative sessions involving cross-functional teams discussing topics to increase productivity, maximize results and improve decision-making processes.

Conduct the sessions in the form of questions: "What impacts our profitability?", "What economic variables influence our sales?", "What are the best criteria for reducing defaults?"

In the profitability example, you could come up with the idea of having a model that simulates the impact of raw material costs for more effective price positioning. All of this automatically and reliably, avoiding the need for days of analysis and simulations carried out by the company's cost department.

### Statistics: The Basis of Artificial Intelligence

It is crucial to understand that, behind the sophisticated algorithms, the essence of AI is statistics.

In this context, the presence of a statistics expert is invaluable in building robust and reliable AI models. This professional not only understands the nuances of advanced statistical techniques, but also plays a crucial role in choosing models appropriately, validating results and interpreting the insights generated.

# 80%

of the movies watched on Netflix are selected by users based on the recommendation of the platform's AI algorithm

### IA Probability of Sale

Few realize it, but lost sales represent extremely valuable data for a sales probability model.

Together with successful sales, we can identify patterns that lead to successful or unsuccessful transactions. By identifying the variables through a cause and effect diagram, we incorporate them into logistic regression models or neural networks.

By modeling with variables such as "price level" or "discount level", this AI model makes it possible to identify what price would be suggested to achieve a high probability of the customer closing the sale. This enables a more precise approach to defining pricing strategies and improving the hit-rate.

### IA Predictive Maintenance

The downtime of machinery and equipment in some companies can represent a loss of revenue that can no longer be recovered.

Moving towards an IoT model for sensing this equipment is the ideal way forward.

However, we can take a first step towards Predictive Maintenance, using the company's database of maintenance already carried out.

In the AI model, we can add more criteria to define maintenance windows, not just using the traditional "hours in operation" or "number of parts produced". Does reducing machine downtime by 20% justify investing in an AI model?

Transform your data into meaningful decisions with the combination of statistics and Artificial Intelligence, regardless of the segment and size of the company. NESI Intelligence for Business is available to be your partner in this revolution. Schedule a conversation!