



## Lipid Formula Optimization: Creating Innovative Products with Predictive Analytics and Artificial Intelligence

### Challenge organisation

**Alianza Team** is a multi-latinamerican organization, leader in the world of lipids, nutrition and frozen bakery, wishing to contribute with experience in the production of food products for a better tomorrow with value-added solutions, generating a positive impact on our customers and consumers as well as on the environment. We have 4 lines of business which help us meet the different needs of our consumers and consumers, always anticipating the market: BredenMaster, Team Solutions, Team Caribe and Team Foods.

### Full description

Alianza Team, a leading Colombian multinational company dedicated to the production of lipid products, is at a strategic crossroads to drive the evolution of its business. With increasing competition in the market and the demand for more innovative products, the corporation has decided to take a bold step towards the integration of digital technologies to improve its product creation process. In this context, the challenge is to develop new formulas by leveraging valuable historical information from previous products, using tools such as predictive analytics and artificial intelligence. This initiative seeks to optimize the decision-making process, evaluating more efficiently the various alternatives and possibilities of creation, which will undoubtedly contribute to the excellence and differentiation of Alianza Team's products in the market.

The central challenge faced by Alianza Team is focused on the development of new formulations for lipid products based on the historical information of its existing products. The strategy is oriented towards optimizing this process by taking advantage of the data accumulated over time.

Initiating the process, a technological solution must meticulously analyze Alianza Team's historical product data. This involves identifying ingredients, production conditions, and relevant variables pivotal to past product success or enhancement.

In the subsequent phase, predictive analytics takes center stage. Utilizing advanced algorithms, it seeks patterns and relationships within the formula elements, pinpointing effective combinations or adjustments from the past. This forms a robust foundation for crafting new formulas.

The integration of artificial intelligence becomes instrumental in formula development. AI swiftly processes historical data and identified patterns, generating enhanced formula proposals. Furthermore, AI facilitates dynamic adjustments, ensuring agility in meeting ideal time-to-market, optimizing efficiency, and enhancing the final product's quality.

The evaluation of alternatives will focus exclusively on the possibilities derived from historical information. Digital technology will allow a detailed comparison of the different options, ensuring that the final choice, which will be in the hands of the development team, is supported by concrete data and previous experience. In summary, the specific challenge for Alianza Team is focused on the creation of new formulations from the historical information of existing products, using technologies such as predictive analytics and artificial intelligence to optimize this process of innovation in lipid products.

The challenge posed by Alianza Team not only represents a significant technological advance in its product creation process, but also an opportunity to lead innovation in the lipid products industry in Colombia. The combination of historical data, predictive analytics and artificial intelligence will not only optimize operational efficiency, but will also allow the corporation to anticipate and meet changing market demands with class-leading products.

### **What we are looking for**

Alianza Team is looking for a technology partner to address the strategic challenge of developing new formulations for lipid products based on historical data. The ideal solver must meet the following requirements:

- **Experience in Predictive Analytics and Artificial Intelligence:** Strong experience in developing and implementing predictive analytics and artificial intelligence solutions, demonstrating skills in the use of advanced algorithms and machine learning models is a must.
- **Ability to Integrate Complex Data:** The candidate company must demonstrate skills in complex data integration and analysis, with the ability to work with data sets from a variety of sources and formats.
- **Custom Model Development:** The solver is expected to be able to develop custom models that are tailored to Alianza Team's specific needs, demonstrating the ability to adjust algorithms and approaches to address the unique challenges associated with creating lipid product formulations.
- **Agility and Flexibility:** The candidate company must be agile and able to adapt to real-time changes, considering the innovative and dynamic nature of the formula development process.
- **Collaborative Approach:** A collaborative approach is valued, with a willingness to work closely with the Alianza Team. Understanding of specific business objectives, values and requirements will be essential to the success of the collaboration.
- **Focus on Security and Data Protection:** Information security and data protection are critical. The solver must ensure that robust measures are in place to protect the integrity and confidentiality of formula data and information.

By meeting these requirements, the candidate company will demonstrate its ability to be an effective technology partner in the evolution of Alianza Team's lipid product creation process.

### **What we offer**

Alianza Team can offer the solver a strategic partnership in which both parties benefit mutually. Below are some of the offerings Alianza Team could provide to the solver:

- **Access to Detailed Historical Data:** Alianza Team will provide access to its extensive historical database related to the creation of lipid products. This information will include details on ingredients used, production processes, market conditions and past performance.
- **Expert Lipid Product Knowledge:** Alianza Team will share its deep knowledge in lipid product production, including information on market trends, regulatory requirements and industry standards. This collaboration will enable the solver to better contextualize its technology solutions.
- **Expert in open innovation processes:** An expert in open innovation collaborations will be made available to the project which will facilitate the continuity of the project and the win-win scenario in the collaboration.
- **Continuous Feedback and Joint Evaluation:** The Alianza Team will be committed to providing continuous feedback during the development of the project. This will include joint evaluation of the proposed formulas and feedback on the practical applicability of the proposed solutions.
- **Active Participation in the Development Process:** Alianza Team is committed to actively participate in the development process, sharing additional information as needed and collaborating closely in the implementation of proposed solutions.
- **Collaboration in Practical Validation:** Alianza Team will provide the opportunity to practically validate the proposed solutions in real production environments. This collaboration will allow formulas and processes to be adjusted and refined as they are implemented.
- **Recognition as a Strategic Partner:** The solver will be recognized as a strategic partner of Alianza Team, with the ability to highlight their contribution in press releases, industry events and other visibility opportunities.
- **Potential for Long-Term Collaborations:** If the collaboration is successful, Alianza Team may explore opportunities for long-term collaborations, such as ongoing implementation of technology solutions, joint product development, and exploration of new areas of innovation.

By offering these elements, Alianza Team seeks to establish a strong collaborative relationship with the solver, where both parties can effectively achieve their goals and contribute to the mutual advancement of innovative lipid products.

### Other

<b>Opportunity area</b>	Smart production
<b>Looking for partners in</b>	Europe; Caribbean
<b>Specific Areas</b>	Food & Beverage; Chemistry
<b>Technologies</b>	Big Data Analytics; IoT; Artificial Intelligence

This is a challenge identified by the EU-LAC Digital Accelerator team in the frame of the Call for Challenges. The mission is to connect challenges from corporates with solutions from startups to boost digital transformation in Europe, Latin America and the Caribbean. If you are interested to learn more about us, visit our [website](#).

If you are a startup with a digital solution willing to explore collaboration opportunities with this corporate, [join our matching platform](#) and let the open innovation game start!

If you are called by this challenge but have questions, do not hesitate to [contact us](#).

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