

# The power of integrated software solutions for feed production and trading

By Barna Ugróczy, Senior consultant ERP

Producing high quality products – both standard and tailor made – at lowest costs and servicing your customers in the best possible way is critical to financial profitability and growth. There is a wide range of business software designed to support these goals, but deploying these tools in an efficient and integrated way can be a bottle neck in your organization.

Companies often grow in an ad hoc way, piecing together software solutions in a tactical fashion to meet immediate needs. You need least cost formulation software. Some of you might also need ration calculation software to service your customers. You definitely need accounting, so you get a financial management package. You may also need a system to help manage your inventory, order processing and fulfillment, although some companies try to handle all of this with Excel. Many companies need online shopping functionality, so you roll out an e-commerce software solution. If you have a services organization, you are likely to have an application to handle project management and billing. Some customer data is stored in all of these places mentioned, but most growing companies also need a customer relationship management system to manage their leads and prospects. Eventually, this software hairball of unconnected systems with duplicate information leads to increased costs, inefficiencies, and errors.

## How integrated software solutions improve your customers' experience and boost your business

Choosing the right integrated system, one that is compatible with your business and is flexible and scalable enough to support your business as it grows, will help improve your customers' experience and your entire business success.

Software from Belgium-based Adifo is an example of integrated software for the feed and trading industry. Over the last 40 years, Adifo has developed business-critical software solutions for the feed industry. To live up to their mission: "Adding value to nutrition industries" all of their software products can be integrated with one another.



By combining the strength of their feed formulation and ration calculation software, quality management and ERP, Adifo's integrated software tools offer a unique vantage point, putting you ahead of the competition and allowing you to work efficiently.

Some examples of Adifo's integrated solutions

- Integration between feed formulation and quality data management
- Integration between feed formulation and ERP
- Integration between quality data management and ERP



## Why you should integrate your formulation and quality solution

To allow for more precise animal feeding, and thus more sustainable animal production, feed companies are constantly investigating and developing new technologies. Think, for example, of the improved knowledge of enzymes, probiotics, gut acidifiers and industry by-products. To get the most out of these new technologies and provide precise nutrition to your customers it is essential that your formulas are accurately calculated.

Unfortunately, many feed organisations are still struggling with the basics of feed formulation: managing the nutrient specs of raw materials. Obviously, formulating with inaccurate or outdated nutrient values is like driving blind. Formulators should know about the quality of the raw materials in stock or this will inevitably result in:

- Feed not matching the nutrients specs: animals not performing as expected and unhappy customers
- Inefficient use of the raw materials: spoilage and loss of money

Today, affordable technology (i.e. NIR instruments) is available to measure the quality of each raw material intake. However, transforming this sample information into matrix values to be used in your formulation is still not common practice. To simplify this process for day-to-day users, Adifo has developed an integration between its formulation and quality data software, called Update Matrix.



## Update matrix – How does it work?

The data from NIR instruments and NIR service providers, like enzyme and premix suppliers is captured in the BESTMIX LIMS database. Standard interfaces with all prominent instruments and service providers are available. Control charts are used to monitor the evolution of nutrient data, to compare origins and suppliers and to suggest the new values for formulation. The "Update matrix-dashboard" gives the formulator the ability to fine tune data, compare suggested new values with actual matrix values and to push the data into the raw material matrix. Derived nutrient matrix values are updated in the same update run.

Once updated, the formulator uses the formula checker to decide how to cope with the impacted formulas. From this point all new formulas will use the most recent nutrient values to guarantee precise formulation. Both tight integrations, the capturing of data from the NIR instruments and the update of raw material in formulation, allow feed manufacturers to be in control and to get the most out of new developments and technology in the industry.

## The advantages of integrating your formulation solution and ERP system

Adifo's ERP software MILAS AX (based on Microsoft Dynamics AX) is an industry-specific ERP solution for feed manufacturing and trading companies. In addition to providing standard future-proof ERP functionalities (which are ensured by Microsoft Dynamics AX), MILAS AX also supports the follow-up of procurement decisions, advanced sales management, commodity trade, storage and transshipment management, ...

### Automated order-to-cash flow

Through the integration with BESTMIX Feed formulation and MILAS AX, the entire process from order to cash can be automated. One of the many possible steps in this order-to-cash flow is bulkblending.

### Bulkblending

Customers can order a specific blend (for instance a mixture of two standard feed products) via your sales team or via a web portal. When the order is placed, MILAS AX automatically sends a request to BESTMIX Feed formulation to recalculate the nutritional content of this customer specific mixture. After the recalculation, the software also generates an updated declaration label for the new customer-specific feed. Once the process is completed, the recipe is sent to production (MES software) and the new declaration label is sent back to MILAS AX. Thanks to BESTMIX's integration with LISAM's ExESS the feed is accompanied by the correct labels and safety data sheets.

When the blend is created, MILAS AX takes care of finding the best delivery schedule and automatically contacts the customer with information about the price and expected delivery time. After the delivery is made, MILAS AX takes care of the invoices as negotiated in the contract with your customers.

### Efficiency boost

Automating the entire flow from order to cash gives your organisation a noticeable boost in efficiency. By bringing the manual input down

to a minimum, the margin of error decreases and customers are serviced more quickly. Through extensive reporting functionality, management gets a complete overview of the business and can improve their decision making.

## Integrating quality data management and ERP

One of the major challenges in any industry is consistently delivering quality products. This is particularly challenging in process industries dealing with raw materials that are yet to be refined. In the feed industry, the crops show high fluctuations in both availability and quality. In such a highly volatile market it is difficult but essential to keep track of the quality of your raw materials and their suppliers.

BESTMIX LIMS is such a solution that allows users to keep track of the quality of the raw materials during intake, during the production process and in the final product. The software also allows you to track different suppliers and to rank them according to their value and impact for your organization.

Collecting this data is, in itself, very valuable, but the real added value lies in integrating this data with your ERP solution.

## Accelerating production with a guaranteed quality

Thanks to the integration between quality data software and ERP, the entire processes from intake to production can be automated.

For example:

When a call-off or purchase order is issued to Adifo's ERP solution, MILAS AX, this also ensures:

- the expected intake is instantly available in MILAS AX
- MILAS AX automatically generates a sample within BESTMIX LIMS
- MILAS AX automatically generates an expected intake in the control system - which manages the inbound loading process

During intake, MILAS AX automatically receives the intake figures from the MES software and quality data from BESTMIX LIMS. Based on this information the contract is updated, quality adjustments are applied and the net weight is calculated. In case the quality is not acceptable, MILAS AX rejects the batch. Later in the process MILAS AX also takes care of managing all the financial settlements (invoicing, post payments, etc).

An integration between your quality software and ERP allows you to work more quickly and improves the quality of your products whilst paying the correct amount to your suppliers.

## Conclusion

Knowledge is power, especially when it comes to knowing your customers and your products. But if knowledge is siloed in different systems that are inaccessible or awkward to connect, you're limiting the power of your business to attract and serve more customers, increase profit and expand strategically. An integrated business software suite that aligns your feed formulation, ration calculation, accounting and quality management helps unleash the power and potential of your employees and your company.

More info on Adifo software: [www.adifo.com](http://www.adifo.com)