



The user interface is fully customizable as shown here at Lantmännen Cerealia.

# CodeIT

## Talks to whatever you've got

IT systems are becoming more and more important as a competitive asset at companies that see the benefits of having a totally integrated, smooth workflow that starts with sales forecasts and ends with delivery of finished products. With their unique CodeIT Enterprise software, the Scandinavian company CodeIT has created a new international niche for itself by showing just how smoothly and effectively they can integrate customers' existing equipment with critical production and business processes for better results.

Original Swedish text and photos: Marcus Pettersson, [marcus.petterson@mentoronline.se](mailto:marcus.petterson@mentoronline.se)

CodeIT opened its offices in Sweden over a year ago. The Swedish operations are headed by Christian Öhrn, a man with an extensive track record in the labeling and coding industry. CodeIT itself was founded in Norway four years prior to that by Bjørnar Torsnes in 2011. Since its inception CodeIT has received ovations from a wide range of industries in numerous countries.

In Sweden, a major CodeIT Enterprise installation was recently completed at Lantmännen Cerealia in Järna. This factory is the biggest of Lantmännen Cerealia's consumer product factories.

The factory makes pasta and breakfast products on 14 different production lines for markets in Sweden and Norway. Famous brands in Sweden are Kungsörnen and AXA. The highly beneficial cooperation between CodeIT and Lantmännen started in 2011 with a pilot project at the Lantmännen Cerealia factory in Vejle, Denmark. The factory in Vejle was the first in the Group to start

using CodeIT's innovative software. Lantmännen Cerealia's objective has always been to end up having the same labeling and coding integration system at all of its 12 factories in the Nordic Region.

### ONE OF THE BIGGEST

The Lantmännen Group is one of Europe's biggest food manufacturers with operations in 20 countries and a turnover of SEK 37 billion. The company is an agricultural cooperative owned by 29,000 Swedish farmers. The Group has a total of 10,500 employees.

Lantmännen's different factories use a lot of different production systems and marking equipment. Each does things in different ways, or speaks its own language you might say. Getting all Lantmännen Cerealia's factories' different production systems to talk to a single platform was long considered to be completely impossible given the time and resources it would take to complete. But that was before CodeIT presented their solution. One that has now become regarded as

the holy grail of labeling, coding and integration.

CodeIT Enterprise is a platform that Lantmännen uses to handle the integration and distribution of data between its various business, ingredients management, production and inventory systems at its factories. The installation in Järna has been configured and customized to meet Lantmännen's local specifications and global needs. It joins all the data sources and the factories' labelling and coding equipment together, presenting everything on screen through an elegant graphical user interface. Although Lantmännen's different factories use different labeling and coding equipment, everything is controlled by CodeIT Enterprise irrespective of the equipment's brand, technology or age. And the entire system has been implemented without the need for any reprogramming as everything is interfaced through CodeIT Enterprise which has all the necessary drivers and functions.

## SMART FACTORY

According to Christian Öhrn, with CodeIT Enterprise Lantmännen has taken a step towards becoming a Smart Factory and part of Industry 4.0, the fourth industrial revolution. As CodeIT Enterprise is scalable it easily handles future configuration changes, and now that they have it at Lantmännen, the Järna factory can easily replace or add any equipment from a wider selection of vendors and systems than before. In addition, there are also large gains in efficiency because of the flexibility CodeIT Enterprise provides.

Lantmännen uses the same business system (ERP) at all its production units, with the M3 business system acting as the master for all product and order data. All master data is created and maintained in M3 and the ingredient system IDA. The information required for marking is sent to CodeIT Enterprise. At the plant CodeIT manages the business, ingredients and WMS systems distributing data to and from the CodeIT Enterprise software.

## TALKS TO WHATEVER YOU'VE GOT

“The strength of CodeIT Enterprise is that it is a standard application that can be configured to meet different customer’s needs. We create a customized user interface for operators, whilst behind this shell there are configuration tools to link together all the customer’s data sources and devices. With CodeIT Enterprise its possible for all the layers in a system infrastructure to interact irrespective of which peripheral systems and equipment are used. As an example, the Lantmännen Cerealia factory in Järna has not had to replace any system or hardware in order to implement CodeIT Enterprise. With our integrated system, all connected hardware uses master data created in their M3 and IDA systems.” adds Christian Öhrn.

Lars Y. Olsson at Lantmännen’s central IT department confirms “CodeIT Enterprise’s unique features add more value to the interactions between our factories in the Nordic Region.”

When it’s time for a new order to be packaged and labeled at the Järna factory, all the operator has to do is press the START button! CodeIT Enterprise marks all product packaging with a code that enables the product to be traced back to when it was manufactured, right down to the very minute. That means that if a complaint should ever arise, production data can be easily checked to find the cause.



Mattias Thyni, Production Manager at the Pasta Factory, feels safe with the integrated new system as “Without labeling, we have no product, so it must work 100 percent.”



Anna Molin, Production Manager at the Breakfast Products factory, has worked closely with CodeIT to integrate labelling at all the Breakfast Products factory’s nine production lines.

## FREEDOM OF CHOICE FOR NEW EQUIPMENT

“In addition to the productivity gains that come from connecting production-critical data with the ERP system, another major benefit of CodeIT Enterprise for the Järna factory is that it has been able to keep all its existing marking equipment. This is possible with CodeIT software because it is not tied to any particular brand of equipment, so when new equipment is needed CodeIT customers can set different vendors’ quotes up against each other. And if a customer does need new equipment, CodeIT would be pleased to supply it as the company also sells some of the best labeling and coding equipment available” adds Christian Öhrn, who goes on to say:

“Naturally we take full responsibility to ensure everything works at our installations. At Lantmännen Cerealia in Järna all their existing equipment was connected to CodeIT Enterprise. Some of it did, however, need to be networked for the first time, so we did that too. Com-

munication with the PLC systems in the factory is also part of the integration so that sequential events can be built up according to those conditions and events that determine when and in what order things should happen.

At the factory in Järna there are two production departments; Pasta and Breakfast Products. Labelling and coding is done on the consumer packaging, distribution packaging and pallets. There is also a big-bag line and two shrink wrappers. In total there are 35 printers, 4 different technologies and 5 different brands being used. Not only that, but the Plant Control System (PLC) and the Warehouse Management System (WMS) are from different suppliers, but these now also get data from CodeIT Enterprise after the integration.”

Mattias Thyni, Production Manager at the Pasta Factory relates that “Apart from a few challenges we had during the running-in period, CodeIT Enterprise has worked very well. With the new codes we are now able to apply to our products,

we have increased the traceability of our primary packaging. It’s something we in Järna were the first to introduce, and it is going to be implemented at other factories in the group.”

On a final note, Christian Öhrn says that the installation at Lantmännen Cerealia in the Nordic countries is not the only one they can be proud of as CodeIT Enterprise is also used by a number of other renown companies such as Marine Harvest, TINE and Boliden for both national and global “multi-site” applications. In fact, CodeIT Enterprise can be used wherever there is a need to integrate production and business processes.



Christian Öhrn CEO of CodeIT's operations in Sweden and has led the implementation of the company's unique software at Lantmännen Cerealia in Järna.



A new code was developed for implementation with CodeIT Enterprise and improves traceability to the minute in the packaging factory.



Label applicators receive all necessary product data from the M3 business system via CodeIT Enterprise. Shown here are labelled distribution packages for popular Norwegian Soppas Pasta.



Pallet label for Kungsörnen Ideal Macaroni with three different barcodes.



The last stop is warehousing. The WMS also gets it data from CodeIT Enterprise.