

[Get in touch](#)

Denmark

=



31/10/2023 Blog

Scooping success with IoT and machine learning

In today's digitally driven world, the behind-the-scenes magic of technology often goes unnoticed. But from the moment we unlock our smartphones with FaceID to the



[Get in touch](#)

Denmark



business.

By Jade Haayen, Ivar Cashin Eriksson and
Aneja Orlic

The ice cream project: a recipe for success

Our journey began with a collaboration between Valcon, a machine manufacturer for ice cream production and one of their key clients – an ice cream producer. The goal was simple yet ambitious: achieve enhanced Overall Equipment Effectiveness (OEE) through machine learning.



1. Gather ingredients (collect data):

The first step is collecting data, much like gathering plausible ingredients for ice cream

2. Choose ingredients (variable identification):

Next, we carefully select the right variables to create the end product, just as a master ice cream maker selects the finest ingredients

3. Formulate recipe (feature engineering):

With the right variables in place, data preparation begins—a process similar to crafting the perfect ice cream recipe

4. Iterate recipe (model training and productionisation):

Just as a chef fine-tunes an ice cream recipe through iterations and adjustments, ML models undergo refinement after being put to the test



As simple as it sounds, the process can be time-consuming due to the abstract nature of the problem. Often, you are searching for ingredients among a pile of not-so-edible rocks or trying to use a cow not realising that it is milk you need instead. This introduces additional complexity, and you may encounter unexpected results along the way or experience unexpected “factory alarms”.

Our approach to creating the ultimate ice cream production

In pursuit of the perfect recipe (machine learning model), our team started by collecting data and creating interactive data visualisations as a prototype, highlighting essential variables like power consumption, production speed and yield. These visuals gave the client a taste of effective

[Get in touch](#)

Denmark



...we uncovered efficiency improvements, providing valuable recommendations for how to enhance ice cream production. Clustering is a versatile tool that can be applied not only for personalising customer experiences but also for gaining insights into the variables that affect production KPIs.

Through outstanding collaboration and strong supplier relationships, the project delivered remarkable results, including a substantial OEE increase.

Let's craft success together

Our journey through this ice cream-inspired machine learning project leaves us with valuable lessons: the importance of data accessibility, improving overall stakeholder data literacy level, and language barriers

[Get in touch](#)

Denmark



With over 10 years in business, we understand how to guide you in your future digitalisation projects. Start your digital journey with quick, accessible achievements that inspire and energise your organisation. At Valcon, we've proven that by blending the precision of machine learning with the sweetness of innovation, you can truly transform your business, one scoop at a time.

Jade Haayenjade.haayen@valcon.com

+45 2194 1588

Ivar Cashin Erikssonivar.cashin.eriksson@valcon.com

+45 4412 1806

Aneja Orlicaneja.orlic@valcon.com

Get in touch

Denmark



sales@valcon.com
+31657798083

Insights



[Get in touch](#)

Denmark



essential characteristics

Region – DA

Denmark

[Sitemap](#)[Services](#)[Industries](#)[Careers](#)[Home](#)[Consulting](#)[Financial services](#)[Early careers](#)[About us](#)[Data](#)[Infrastructure](#)[Experienced](#)[Insights](#)[Technology](#)[Public](#)[View all](#)[Events](#)[View all](#)[Retail](#)

Get in touch

Denmark



© 2023 • Valcon [Privacy policy](#) [Cookie policy](#) [Modern Slavery policy](#) [Carbon Reduction Plan](#)