Analytics technology for your waste containers

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Credit: AI-generated image (disclaimer)

Finnish SME Enevo is taking over the European market with a technology able to reduce the cost and environmental impact of waste collection, providing a highly welcome solution that could go a long way towards keeping our cities cleaner and healthier.

No matter what type of business you are in, chances are that someone in your company or organization is struggling with a waste management conundrum. For that person, reducing waste costs whilst ensuring optimal recycling rates is, and will continue to be, a growing problem. And that's not even considering the grander scheme of things, with cities obstructed by hordes of waste collection trucks sent to pick up waste in often half-empty containers.

This is the context in which a company like Enevo was set to thrive. In 2016, the Finnish company was granted funding under Horizon 2020's SME Instrument phase 2, to prepare the ground for expansion of its services across Europe after it successfully took over the US market.

The reason for all this enthusiasm? A new technology able to analyze waste in containers and optimize collection time accordingly. Project coordinator Mika Uusitalo explains further:

What kind of services does your company propose exactly?

Mika Uusitalo: We have two offerings. The first is waste analytics: we offer technology to customers in the waste and recycling industry, which helps them monitor and analyze waste streams and optimize collection operations. This, in turn, lowers costs and improves the recycling rate and quality of service.

The second offering consists in a fully-blown waste service. We offer waste management as a full service, still using the aforementioned technology.

How can this technology help reduce waste cost whilst at the same time benefiting the environment?

A substantial part of waste collection costs is related to transport. Enevo can help by enabling companies to collect the same amount of waste or recyclables with a smaller truck capacity. It means less driving time spent to collect the same amount of waste, which ends up reducing cost, emissions, noise and traffic jams caused by the trucks.

Enevo also provides customers with an overview of waste accumulation across different streams in real time. This helps with the evaluation and implementation of new recycling activities that can increase recycling rates.

Can you provide a few concrete examples of clients who had the chance to witness these benefits?

For example, the city of Espoo in Finland started using Enevo's waste analytics offering and was able to move away from static scheduling of waste collections to a dynamic model where waste gets collected only when needed. Their waste management costs went down and they were able also to handle waste collection internally with fewer resources.

Another example is the McDonalds group which contracted with Enevo for its restaurants in Nottingham, UK. They handed over the management of their waste operations to Enevo and this helped decrease their costs by 12 % as well as increase their recycling rates by 50 %.

What's your market reach so far?

We are operating mainly in Europe and the United States, but we've also had small entries into the Japanese and Australian markets. Our biggest market is the US, and our primary goal is to keep growing both there and in Europe.

Why did you decide to seek EU funding?

We saw that there is a great complementarity between what Enevo is doing and the objectives of the Horizon 2020 programme. This is also true for many other EU initiatives such as the circular economy package.

What were the main challenges you faced in further establishing your company on the European market, and how did you overcome them?

European countries are very different from each other. When our offering was almost ready for one market, it was still not working in another for various reasons including technical, cultural and commercial aspects of the industry. So, we learned how to adapt to each market and we shifted our market entry model to a more local approach with the help of regional reseller partners.

Another big challenge was to learn how to work with public sector customers. Such customers can be very slow to adapt to new technology and change their way of operating. Usually it also takes a long public tendering process before a full commercial solution can be procured from any vendor. We knew this, but the process was even slower than we had imagined so we had to revise our market penetration plans accordingly.

What are the main outcomes of the SmartWASTE project so far?

We have learned so much on so many new markets in the EU, and we could obtain valuable feedback to develop our offering and address the needs of each of these markets. We have also sealed several valuable

partnerships with local resellers during the SmartWASTE project.

What are your follow-up plans?

We will pursue our commercialization plans for our technology in Europe as well as develop new ways to work with customers, in both the private and public sectors, to deliver the benefits of the solution in an optimal way in each market.

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