Rethinking the way logistics IoT data syncs with the cloud

Executive coach and Maddyness columnist Victor Snyder spoke with Janne Juhala, cofounder and CEO of Logmore, about disrupting supply chain analytics.

Together with fellow Helsinki residents Antti Tapio and Niko Polvinen, Janne Juhala founded <u>Logmore</u> about three years ago. The company, which offers a solution for monitoring and logging data related to shipping conditions, closed a €4.5M seed round this past summer.

When it comes to quality assurance and transparency in logistics, there's much to be gained by having the ability to monitor package conditions throughout the supply chain. Where did your package go in between leaving the factory and reaching your facility? What was its temperature along the way, and was it subjected to any shocks or tilting, which may have damaged it?

Supply chain condition analytics has been a major market force since well before the internet of things (IoT) went mainstream over a decade ago, when the number of connected devices first exceeded the world's human population.

Early incarnations of shipping data logger devices used radio waves to transmit data to information systems, using RFID protocols, and when that proved problematic, loggers that worked with USB cables or Bluetooth connections were developed. But all of these solutions had serious drawbacks grounded in data transmission flaws, device longevity limitations and prohibitive cost of ownership for proprietary systems.

Logmore is disrupting the industry by relying instead on dynamic QR codes for data transmission. The company's loggers are outfitted with small screens that display updated codes, which anyone with a smartphone can use to transmit the latest condition data to Logmore's database. This information can then be retrieved by credentialed stakeholders via the platform's dedicated app, or via API, allowing customers to integrate logs into their own data systems and apps.

I recently spoke with Juhala about his company's solution, his experiences leading a startup, and the state of logistics analytics.

What makes your solution so different from others in the supply chain analytics niche? Why is the use of QR codes so novel?

By now, pretty much everyone knows what QR codes are and how to use them. The fit to logistics operations is maximised, since barcodes and QR codes are already everywhere.

We have basically taken a common, familiar element of supply chains and made it smart. Our solution can be used for almost any use case in almost any industry.

You don't need to build any sort of infrastructure to use the service. You read the QR code with a smartphone or a barcode scanner, and the data is uploaded securely to a cloud databank in a flash.

Since you founded Logmore in 2017, what have been your biggest surprises as an executive?

I don't feel there was a single big surprise, but a lot of smaller ones everywhere. I already had an understanding of concepts like resourcing and time management – frankly, everything that goes into running a company – and I knew that it would require a lot of effort.

Maybe from the perspective of a Finnish engineer, the importance of establishing a working marketing and sales engine was a bit eye-opening.

We often think that a good product sells itself, but it's quite clear now that you

What are some of the most exciting uses of your API that you've seen? How are your customers creating interesting new digital interfaces by aggregating data logged on your devices?

The basic use of integrating our service to customer ERP (enterprise resource planning) systems is quite exciting already, in my opinion. In its simplicity, it makes reporting and analysis so much more efficient for companies that have strong processes established within their own systems.

For really exciting use cases, I often think about how often common food items have static QR codes on their labels. These QR codes contain data on where the product comes from and other basic, preset information. With the use of our service, the API, and cross-referencing customer systems, that data can be effectively connected to what our loggers collect.

For instance, you could have a bunch of static QR codes in a pallet full of products and a Logmore logger in the pallet. With some creative work, you can connect the dynamic condition data to those static QR codes.

As an end result, the customer could have extensive transparency of what happens to shipments, down to a single specific item.

Helsinki is known as a hotbed of European innovation. What are some of the startups in your local ecosystem that you see as especially noteworthy rising stars and why?

The Helsinki-based VC <u>Icebreaker</u> has a lot of especially promising startups in their portfolio.

The people at Icebreaker are great at spotting potential and coaching that potential to rise up as real stars.

If I were to name just some of the ones already growing rapidly: Flowhaven, Kodit.io and Lumoa.me are excellent examples of how the combination of continuous learning and hard work can pay off.

What industries do you think have the least awareness of the need for logistics transparency, and why are they so laggardly in this regard?

The least awareness is obviously in the industries that don't "need" monitoring. Probably somewhere where there are no regulatory repercussions associated with not monitoring, even if there would be benefit to monitoring.

In cases like that, the companies likely see monitoring as an additional expense. Perhaps they would be quicker to adopt solutions for logistics transparency, if they knew the concrete payoff?

The first industry that comes to mind is fragile electronics – they've been worried about fake products for quite some time now, so extending the quality monitoring to shipment conditions could be a natural next step.

For a quick comparison, it's clear and obvious to most why the pharma and food industries need to monitor their operations and be monitored by external authorities as well. If things aren't right, people can outright die as a consequence. The amount of regulations shows how seriously people take data collection of those industries.

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