Ericsson 0NE Challenge #2—Smart Logistics

Deadline to submit idea on Idea Drop:
Friday, September 27, 2019

How might we enable adaptive logistics solutions that use resources efficiently to give customers access to goods?

Do you have ideas that can make the movement and delivery of goods safer, cleaner, and more reliable? This is the complex world of logistics – using resources as efficiently as possible to transport goods from producers to consumers. It's a long and sometimes winding journey, with many parts and players. Your idea can be in any area of this chain of partners and processes.

The digital transformation of logistics is estimated to unlock $4 Trillion

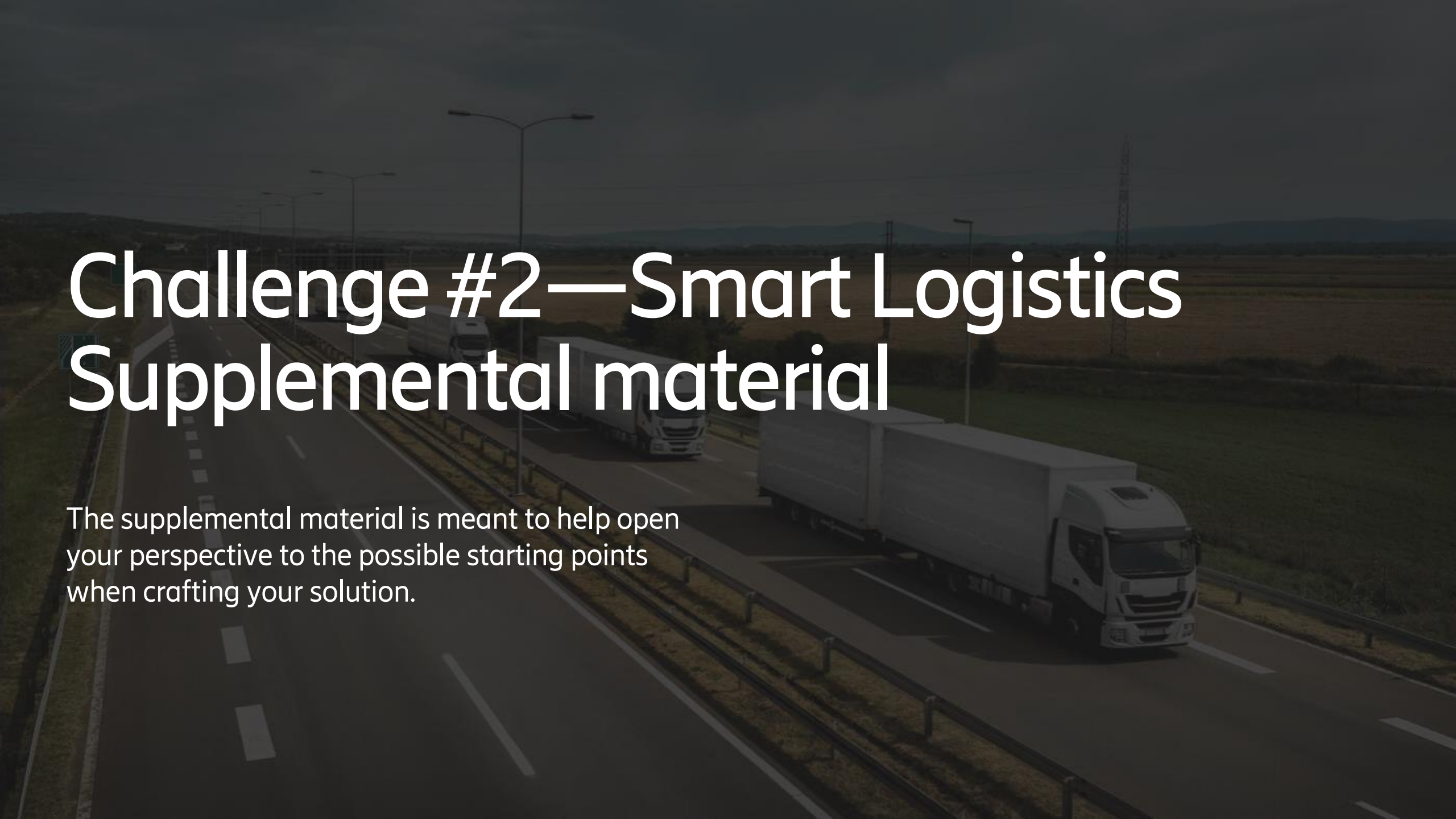
We all know about lost packages or getting the wrong items sent to us. And the logistics industry certainly needs better data and coordination to ensure that goods arrive on time and in pristine condition. Industry 4.0 efforts are also changing the nature of production to be more on-demand driven.

However, below the surface there is a need for major systemic changes in how we transport goods around the world to significantly decrease emissions and reduce unnecessary movements. The digital transformation of logistics is estimated to unlock $4 trillion of value for the industry and wider society. We'd like to hear your ideas about how Ericsson can make all parts of the logistics system better and more sustainable.

It can be about getting the goods from producers and warehouses – the "first mile" – to the long journey across the city, country or world with as little environmental impact as possible. It can be about the final delivery to a customer – the "last mile" – with the necessary agility driven by the increase in e-commerce.

Or it can be about enabling new forms of sharing and recycling products for more circular and localized supply chains. There are many different areas to use your experience and imagination to create a new business for Ericsson! Identify the biggest problems in the logistics space that you are passionate about and think need to be resolved. If you're the winner, Ericsson ONE will help you refine your idea through the innovation process -- you can make it a reality with our support!

Deadline for the challenge is September 27th. Regional hub winners will be chosen, as well as a global winner. If you're a winner, you will be recognized in the next 0NEbyte newsletter, featured in IdeaDrop and the chance to potentially pitch your idea in Angel's Room for funding!



Challenge #2—Smart Logistics Supplemental material

The supplemental material is meant to help open your perspective to the possible starting points when crafting your solution.

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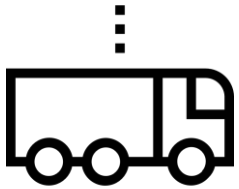

The logistics industry struggles with massive greenhouse gas emissions and pollution problems. If the shipping industry was a country its greenhouse gas emissions would be the sixth largest emitter. The typical consumer company's supply chain accounts for more than 80 % of its greenhouse-gas emissions and more than 90 % of the impact on air, land, and water. Transport-related greenhouse gas emissions represents 21% of the global total, with a significant part of this coming from short journeys in and around cities.

Read more about logistics and sustainability

There are significant inefficiencies in the supply chain, with trucks not being filled up to capacity and in 50% of the cases running empty on their return journeys. The lack of data and end-to-end visibility means little control over the whole logistics chain and limited coordination at consolidation centers. This can be a big problem for perishable products like food that are time sensitive and require specific conditions, contributing to 30% of it being wasted. The poor understanding of demands also results in over-ordering and over-transportation, with large stocks of items like clothing never being sold or used.

Read more about the trends that drive change in logistics

E-commerce and near-home deliveries are growing strongly by 15% every year. Both personal and business consumers expect quality and flexibility with goods delivery the next day at any time and location of choice, and also with bulk delivery options across industries. This adds new levels of complexity to the logistic flows as individuals more often orders from specific producers anywhere in the world. Digital platforms are already becoming increasingly important, allowing small companies to have a global reach and compete with the sector's established giants.

Read more about the digital transformation in logistics

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Society's deepening environmental concerns impacts the logistics industry that must find more sustainable operations. More and more companies are adopting a circular economy model in their business operations and supply chains. It is obvious that there is a need for major systemic changes in how we transport goods around the world to significantly decrease emissions, use resources much more efficient, and reduce unnecessary movements.

While digitalization threatens to fundamentally disrupt logistics, it could also open up major opportunities for innovation to transform logistics towards an adaptive, de-carbonized and resource-efficient future. The digital transformation of logistics is estimated to unlock $4 trillion of value for the industry and wider society.

One of the key components is that information is available to all stakeholders for end to end real time visibility and control of all shipments. Shared data will be at the heart of any logistics businesses to make informed decisions about assets and ensure the cargo arrives on time and in pristine condition.

It will be needed for more proactive planning of resources and more agility to align with the changing demands. Transparent data will provide customers with the information about materials, production, and recycling that they are increasingly demanding. Trusted data will be needed as tighter custom regulations are enforced to be able to control the origin of the goods.

Read more about how Ericsson is connecting the logistics industry

To help Ericsson power logistics towards an adaptive, de-carbonized and resource-efficient future, we are for example looking for ideas within the following areas:

Reducing greenhouse gas emissions. Improved routing and better load management could cut annual emissions significantly. Ultimately the sector must also electrify to cut greenhouse gas emissions by half until 2050, with reloading goods to from heavy long-distance vehicles to sustainable means of local urban transportation being an important part. Platforms for shared warehouse and shared transport capabilities could fully utilize logistics network and assets, and also address expected near-future regulations on minimum fill rates.

Adapting to e-commerce. Local, lightweight, dynamic, and electrified last-mile (and maybe even last ten meters) transportation such as digital trucks and semiautonomous vehicles might provide flexible options for when, where and how goods are delivered to customers. Distributed storage spaces and local delivery hubs could provide access to goods in ways that do not require people to make unnecessary short small journeys by car or other means.

Enabling a circular economy. New ways to share products and new retail models based on local production could really have an impact on waste and use of resources. The reuse and upcycling of products might be enabled by more localized logistics flows and new structures for the redistribution. New forms of packaging could further reduce waste and make different forms of recycling possible. Local manufacturing and replacement of parts or products on the spot might reduce the need for goods to be shipped.

What ideas have already been proposed in Idea Drop?

Here are some of the ideas that have already been proposed in Idea Drop for Logistics. Have a look at the ones below – some may prompt your thinking. We're obviously looking for new ideas, above and beyond what is already proposed.

Incubation:
- Connected Logistics Chain (CLC)
- FindIT
  - Although there's no information here – refers to "only need to know basis"

Ideation:
- Enterprise Asset Tracking
- Indoor Positioning
- Robotics DevOps
- Automated Vehicle Transport
- Make your grocery selection environmental friendly

Learnings:
- Insight Factory
- Smart Point-of-Sale (POS)

What is a good idea to Ericsson 0NE?

Desirable:

The solution is addressing a real problem that is owned by an identified group.

Feasible:

It is likely that Ericsson could make the solution work.

Viable:

Is it likely that a potential market for the solution is, or can become, big enough for Ericsson?

Presented nicely:

Title: [Give your idea a descriptive name.]

Problem statement: [What problem are you addressing? Who has that pain point? Can you justify that statement?]

Idea: [In one or two sentences, explain the core concept of your idea.]

Justification: [What makes Ericsson the right player to develop this idea? Link back to the pain point or opportunity that this idea is addressing. Explain why it adds value.]

Visualization: [A picture says more than a thousand words.]

Don't forget to @tag your team, #relevant areas, and categorize the hub you geographically belong to.

/the Ericsson 0NE Team