

Description of the talk/panel discussion:

Title: Bootstrapping Data Science in an Emerging Industry: finding use cases that built trust and open doors

Abstract of the talk proposal or round table proposal:

Today, the logistics and transportation industry is an late-adopting however rapidly evolving sector in terms of data usage, digitization, and machine learning. Working in an emerging industry presents unique challenges when developing ML products. A nascent industry is often coupled with a market hesitant to consume ML products, as well as organizations that are also learning how to adopt and build products high-value products that users will be willing to adopt. While there is a high level of immaturity, there is also high potential for growth and innovation. Our challenge is how to achieve this potential with limited resources and capacity.

The transportation and logistics industry at the early stages of adopting best practices when it comes to digitization and automation. The result of this has been observed in brittleness of supply chains highlighted by various logistics crisis over the past several years from the COVID-19 pandemic, sea port congestion delays in the US, the Ever Given Suez Canal blockage, to the Russian-Ukraine conflict. Transportation service providers are also faced with pressure from new ESG initiatives requiring shippers to optimize routing, load management, and improve resource use efficiency.

Early digital adoption and skepticism to new technology is also reflected in products and software that support this industry, and likewise the organizations that produce these products. With lack of digital adoption or interest, the market is also slow in maturing to support the resources needed to bring the industry into the digital now. While there is an understanding for potential connecting the dots can remain to be a struggle for data teams and businesses.

To overcome these challenges we needed to find the sweet spot between a C-level message and a bottom-up approach to finding and developing use cases. By targeting use cases with broad applications, that utilized internal data advantages, known technology, and would be quick to test, to be a winning strategy. The result was creating a ML based data product that will create both revenue and further opportunities to develop our data group and future products.

Potential discussion points:

- Mitigating risks by choosing projects broad applications, and high feasibility that can deliver value
- Creating data opportunities in an emerging business sectors
- Creating larger opportunities from smaller initiatives to build a long-term data product strategy
- Working with analyst/data scientist to create these opportunities via POCs and validation with key stakeholders

Relevance of this talk/panel discussion to the workshop:

Working with limited resources and in a business sector with emerging needs and slow adoption, creates a unique challenge and opportunity for data product development. These combined set of challenges forced us to think carefully about how, when and what project to target to create value, with trying to keep any eye on gaining adoption and buy-in that goes beyond the typical marketing or leadership level discussions on the value of data. Working with a lean and agile group we were able to move from a strategy of bottom-up POC development to developing a data product that can be delivered as a standalone product or be integrated into the company's product suite. The course of action that was taken can be applied to any business that is either in an emerging sector, or a company that is starting to adopt ML practices into their software development lifecycles.

Info about the presenter:

- A short bio of the main presenters (~100 words)
 - o Italo Sayan – a 2019 Rochester Institute of Technology alum, excels in crafting data-driven solutions for global supply chains, including Walmart and Glovo. At Alpega Group, he is designing pivotal projects to reduce logistical inefficiencies significantly. His tenure at Glovo resulted in innovative product recommendation systems impacting over 300,000 users. Italo integrates machine learning to transform complex data into actionable business insights
 - o Gardiner von Trapp - completed his PhD at New York University and a Fellowship at Insight Data Science NYC before moving to Vienna, Austria. He has since worked as a data scientist in large enterprise software companies, and has filed several patents. In 2022, Gardiner transitioned to a Product Manager role, overseeing data science and

analytics product development working in the transportation and logistics sector.

- A brief company or project portrait (~60 words)

Alpega Group, named a challenger in the 2024 Gartner Magic Quadrant™, is a leading provider of transport management software for both spot and contract freight. We specialize in supporting shippers and carriers to manage their short- and long-term load requirements, while fostering strong partnerships between companies in the logistics sector. Our mission is to empower our customers through efficient digitalization to meet today's logistics challenges, driving smarter logistics for a greener tomorrow.