Analysis of different cooling methods for last mile deliveries of food

Question
No one has missed the growth seen in E-commerce the last couple of years, and with that a rising need of good logistics systems. One segment that has grown aggressively during this time is the last mile delivery for refrigerated goods. Already back in 2015 Gordon Delivery saw this as an opportunity to create a value proposition for customers, building on delivering industry leading solutions within last mile logistics. Gordon Delivery stands out among logistics players with its world-class tech platform and by taking full responsibility for the customers’ experience.

To ensure a chilled delivery system, there are two major tracks, active refrigeration, for example refrigerated trucks, and passive cooling methods, for instance ice or cooling blocks. Gordon Delivery uses refrigerated trucks, however other countries and businesses use other types of cooling systems. There is no clear mapping, looking at economics, environmental impact and customer service, of how the different methods measure against each other.

Purpose
The aim is to, in collaboration with Gordon Delivery, map the different methods used to refrigerate goods in last mile delivery. When done, a comparison and evaluation of the methods will be executed. The intention is to give Gordon Delivery an understanding of the different methods and their pros and cons in the perspective of economics, environmental impact and customer service.

Method
The alternatives will be analyzed with both quantitative, possibly LCAs, and qualitative methods. Data will be collected by literature studies and empirical data collection in form of interviews, company data and internet searches.

Pre-selected Members
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Note: The thesis will be written in English.