

# ENTREPRENEURSHIP





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# LEARNING JOURNAL UNIT 2

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*BUS 3303-01 ENTREPRENEURSHIP - AY2024-T5*



JULY 1, 2024

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# ADDRESSING ENVIRONMENTAL CHALLENGES IN THE DELIVERY INDUSTRY

## INTRODUCTION:

As a student who often engages with delivery services, I have decided to examine the Swedish logistics business Budbee and the wider last-mile delivery sector. This industry is of utmost importance in our everyday existence, nevertheless, it is abundant with obstacles. I will examine two prominent challenges that consumers encounter, thoroughly investigate one of these difficulties, and suggest inventive remedies.

## PROBLEM IDENTIFICATION:

The first major frustration in the last-mile delivery industry is unpredictable delivery times. Customers often receive vague time windows, forcing them to wait at home for hours. This uncertainty disrupts daily schedules and creates anxiety. As Joerss et al. (2016) note, Customers increasingly anticipate same-day delivery and exact delivery timeframes. Budbee attempts to address this with 1-hour delivery windows, but even this can be inconvenient for busy individuals.

The second problem is the environmental impact of deliveries. The proliferation of e-commerce has led to a significant surge in the presence of delivery cars on roadways, hence exacerbating carbon emissions. A significant number of consumers have feelings of guilt over their online buying habits because of the associated environmental impact. Gevaers et al. (2014) found that last-mile delivery is responsible for 28% of the overall delivery cost and a large amount of its carbon impact.

#### FOCUSED PROBLEM ANALYSIS:

I'll focus on the environmental impact problem. Some companies are addressing this issue, but their solutions have limitations. For example, several delivery firms provide "eco-friendly" choices that combine deliveries or use electric trucks. However, these solutions often come at a premium cost or are only available in limited areas.

Companies such as Budbee have implemented the use of bicycle messengers for urban deliveries, which is a positive move. However, this solution is limited to dense urban areas and small packages. The challenge lies in finding a scalable, cost-effective solution that can handle various package sizes and delivery locations.

Companies may be struggling to address this problem comprehensively due to the significant investment required to overhaul existing delivery fleets and infrastructure. There's also a difficult balance between environmental sustainability and satisfying client expectations for speedy, affordable delivery.

#### POTENTIAL SOLUTIONS:

**CROWDSOURCED GREEN DELIVERIES:** Develop an app that connects eco-conscious individuals with deliveries along their regular routes. This could utilize existing trips to reduce additional vehicle usage.

**MODULAR ELECTRIC DELIVERY PODS:** Design small, autonomous electric pods that can combine for longer trips and separate for individual deliveries in neighborhoods.

**DRONE-GROUND HYBRID SYSTEM:** Combine long-distance drone delivery with ground-based autonomous robots for last-mile delivery in urban areas.

The most promising solution is the *Modular Electric Delivery Pods*. This idea addresses both environmental concerns and efficiency. The customer segments that would benefit most include:

**URBAN AND SUBURBAN RESIDENTS:** These pods can navigate both city streets and suburban areas efficiently.

**ENVIRONMENTALLY CONCERNED CONSUMERS:** Those prepared to prefer eco-friendly delivery choices.

**RETAILERS:** Businesses trying to lower their carbon impact and appeal to eco-conscious shoppers.

**LOCAL GOVERNMENTS:** Cities striving to minimize traffic congestion and pollution.

The greatest value would be experienced by urban residents who frequently shop online and are concerned about their environmental impact. As noted by McKinnon (2016), Innovative last-mile solutions can simultaneously reduce costs, improve service quality, and minimize environmental impact. This solution aligns perfectly with this multi-faceted approach to improving last-mile delivery.

## CONCLUSION:

The last-mile delivery industry, exemplified by companies like Budbee, faces significant challenges in meeting customer expectations while minimizing environmental impact. By focusing on innovative solutions like Modular Electric Delivery Pods, we can address these

issues head-on. This research emphasizes the necessity of addressing both client wants and larger social consequences when creating new company concepts. As the e-commerce industry continues to develop, such forward-thinking solutions will become more vital in establishing a sustainable and efficient future for last-mile deliveries.

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Wordcount: 625