

# Parking Solution for Urban Areas Using Available Parking Spaces

## Abstract

In this modern time, we are facing serious traffic issues in urban areas, especially in Dhaka city. We are facing serious traffic jam, and losing our valuable time every day. One of the main reason for this hazard is illegal parking at roadside. In this poster we are presenting a business model which will reduce our traffic issue and also we can make benefit out of it.

## Introduction

Illegal parking on the road causes traffic chaos and even congestion, especially in a city like Dhaka, where road space is severely inadequate compared to the demand. Illegal parking on the road makes the traffic situation even worse as it reduces the road capacity even more [1]. But illegal parking is not necessarily fault of the vehicle owner, there is a huge shortage in public parking space in Dhaka. Parking in Dhaka poses a serious challenge to the vehicle owners for there is a huge lack of parking facilities across this concrete jungle.



Fig-1: Street of Dhaka

This only leads to illegal parking on the streets, intensifying thereby the already aggravated traffic gridlock on the city roads [2]. To find the solution for this problem we have come with a business model which uses information technology to overcome this issue.

## Methodology

There is a huge number of residential parking in the city, which are privately owned by the land owner, or flat owner. These parking places are mostly unused during the day time. In this model we intend to use these privately owned parking places to overcome the parking shortage.

We are using a set of mobile application. There are two types of applications, one is for user (those who needs parking), and another for the security guard (who will keep the system up to date).

## Materials

- Web app for user
- Web app for operators (security guards)
- A control server

## Process

- User will search for parking
- After finding a parking
- He/she will send request to the operator
- The operator will accept request
- The user will park
- The operator will update it to the server
- After the end of parking period
- The user will send leave request
- The operator will accept
- And the user is good to go
- Payment will be done automatically using fintech

## Conclusion

We are assuming that this model can decrease illegal parking up to a certain percentage, which can result less traffic issues. This business model can make profit for parking owners, security guards. From this project whole nation will be benefited.

## References

1. Quaum, R. (2018, September 16). The lingering problem of Dhaka's illegal parking. The Daily Star. <https://www.thedailystar.net/opinion/society/news/the-lingering-problem-dhakas-illegal-parking-1634632>
2. Chaos on road due to inadequate parking space. (n.d.). New Age | the Most Popular English Daily in Bangladesh. <https://www.newagebd.net/article/98843/chaos-on-road-due-to-inadequate-parking-space>