# PARK-TACULAR

SOLVING NAIROBI'S PARKING CHALLENGES

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### URBANIZATION

Nairobi's parking system is heavily strained, particularly in key areas like the CBD, leading to significant traffic congestion and inefficiencies.

#### WHY?

This problem impacts daily commuters, exacerbating traffic congestion and reducing productivity. Optimizing parking resources is essential for improving the flow of traffic and enhancing the quality of urban life in Nairobi.

### VICTIM ...

**Emmanuel** faces daily stress finding secure parking in Nairobi's CBD, often relying on parking boys or spending 5-10 minutes searching for a spot. His preference for garages stems from safety concerns, and he's frustrated by Uber vehicles occupying potential spots. A real-time, user-friendly parking app could alleviate these issues, improving his daily commute.



### PARKING OCCUPANCY RATES

• Central Business District (CBD): 95% average occupancy rate during peak hours.

• Westlands: 85% average occupancy rate during peak hours.

• Industrial Area: 75% average occupancy rate during peak hours.

The high occupancy rates, especially in the CBD, indicate a severe shortage of parking spaces, contributing to congestion and inefficiency.



Source: Nairobi City Council's Annual Parking Report (2023)

### USER DEMOGRAPHICS

Parking users

○ 40% - daily commuters from residential areas.

○ 30% - business owners/employees in the CBD.

○ 20% - visitors or shoppers.

○ **10% - long-term parkers** 

A significant portion of parking demand comes from daily commuters, suggesting that alternatives such as park-and-ride facilities could reduce pressure on CBD parking spaces.



Source: KNBS Urban Demographics Survey (2022)

### **REVENUE DATA**

• Total revenue from parking fees in 2023: KES 2.5 billion.

• Total revenue from parking fines in 2023: KES 300 million.

While parking fees generate substantial revenue, the relatively low revenue from fines may indicate challenges in enforcement or compliance

> Source: Nairobi City Council's Annual Parking Report (2023)



### PAIN POINTS

#### Need for Secure Parking

Users, like Emmanuel, prefer garages over street parking due to safety concerns. They often face challenges finding secure spots, especially in busy areas.

Frustration with Waiting Times

Users are frustrated by the time spent searching for parking, typically 5-10 minutes, and dealing with Uber vehicles occupying potential spots.



### PROPOSED SOLUTION ....

A user-friendly mobile app integrated with Google Maps that helps users find and reserve available parking spots in real-time.

### WHY THIS SOLUTION?

We chose this solution because it directly addresses users' needs for secure, easily accessible parking. By providing real-time updates and an intuitive interface, the app reduces the stress and time spent searching for parking, making the process more efficient and user-friendly.

### SOLUTION

## PARK-TACULAR Solving Nairobi's Parking Challenges



### WHAT NEXT....

If we do receive funding, we expect to:

**Expand Coverage** 

Implement the app across all major cities in Kenya, ensuring comprehensive real-time parking lutions nationwide.

**User Support & Security** 

Develop a robust user support system and introduce security features like in-app alerts for safe parking and insurance options for parked vehicles.

Nairobi's parking challenges cause stress, inefficiencies, and congestion, affecting daily commutes and productivity.

### IMPACT!!

Our app addresses these issues by providing real-time parking information and secure booking options. This improves the efficiency of finding parking, reduces stress, and enhances overall urban mobility. By streamlining the parking process, we make a significant difference in users' daily lives and contribute to alleviating traffic congestion in Nairobi.

### APPENDIX.

ParkMobile (USA) provides real-time parking information and has reduced parking search times by 20%.

Technology Upgrades: Exploring advancements in AI and machine learning to enhance parking predictions and user experience.