

Market Research, Damn Parking

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Sprint: Sprint 1

Findings

During Sprint 1, our team explored five candidate ideas: Small-Business Cash Flow Forecaster, Small-Business Tax Helper, Autopilot personal financial management, AI Bike Fit, and Free Parking Handshake & Live Parking Intelligence. The research helped us move from several problem areas to Damn Parking, a project focused on reducing uncertainty about parking availability.

Across the interviews, a common pattern emerged: participants used manual workarounds when information was fragmented or difficult to interpret. Small-business participants relied on receipts, bank statements, spreadsheets, and experience to manage finances. Personal-finance participants checked accounts and adjusted spending around upcoming bills. Cyclists experimented with their bike setup or sought advice online, from other riders, or from professionals. Drivers searched for parking by circling, arriving early, asking others, or choosing more distant spaces. These approaches could work, but often required extra effort and still left uncertainty.

The severity of these problems varied. Some participants managed adequately with their existing methods, while others described recurring disruption. Parking interviews likewise included drivers who rarely struggled because they accepted farther spaces, alongside drivers who experienced delays while searching for convenient parking. This variation helped distinguish the need for availability information from a universal inability to find any space.

The parking research showed a recurring information gap. One Phase 1 participant reported spending about 40 minutes finding campus parking and arriving late to work. When a lot was full, the participant drove around or asked students walking toward their cars whether they were leaving (Phase 1, p. 60). In Phase 2, participants wanted information about nearby parking, available space, and crowding (pp. 3, 6, 13). Together, these accounts suggested that parking capacity and location mattered, but drivers also lacked timely information to guide their search.

Our team selected Damn Parking, developed from the Free Parking Handshake & Live Parking Intelligence concept. The selected direction addresses uncertainty about existing parking through a limited prototype that presents availability information.

Strongest Finding

The strongest finding was that knowing where parking is located does not necessarily tell a driver whether a useful space will be available on arrival. Participants already used maps, circled parking areas, watched for departing vehicles, and contacted other people. These behaviors show how drivers try to fill the information gap themselves.

One Phase 2 participant described waiting behind someone who was not actually leaving, then having to search another lot. The participant wanted to know when a nearby space would open (p. 22). Another usually bypassed closer lots because they assumed those lots were full, accepting a longer walk instead (p. 24). A participant who rarely struggled still wanted to know which lots were completely full so they could avoid them (pp. 31–32). Availability information could therefore support different parking strategies, even when the level of frustration differs.

Why Damn Parking Rose to the Top

Repeatability. Multiple interviews described searching, crowding, or uncertainty about available spaces. The problem appeared across participants, although its frequency and severity varied.

Observable impact. Reported consequences included time spent circling or waiting, longer walks, frustration, and lateness. These accounts connected the problem to actual behavior and outcomes.

Information gap. Participants asked for information about proximity, occupancy, or expected departures. Those requests gave the team a concrete direction for the software: make existing parking information easier to obtain and use.

Project Direction Resulting from the Research

The research informed a prototype centered on live parking intelligence. As defined in the Project Charter, the website will display parking availability in selected locations, include a basic parking map, accept updates when users leave a space, and demonstrate camera-based occupancy detection on a limited scale. These are proposed mechanisms for supplying information; the interviews establish the user need, rather than proving the accuracy of the technology.

The goal is to reduce uncertainty when choosing where to search. The prototype does not guarantee a space or complete real-time coverage. Its scope excludes city-wide camera installation, a complete parking network, payment processing, and commercial deployment.

What Didn't Work / What We Pivoted From

The research narrowed the team's work from several candidate ideas to one project and refined the parking concept. The other ideas revealed real problems, but the team did not carry them forward into the selected project.

Other Candidate Ideas

The finance concepts addressed different forms of financial uncertainty. Cash Flow Forecaster focused on variable business income and expenses; Tax Helper focused on scattered receipts and records; Autopilot focused on personal spending decisions across accounts, bills, and subscriptions. For example, the Tax Helper interviews described searching physical receipts, emails, and bank transactions to prepare tax information, even when an accountant handled filing (Phase 1, pp. 22–24). Existing workarounds reduced some difficulties but did not eliminate the organizational effort.

AI Bike Fit also revealed a recurring problem. Cyclists adjusted their setup through trial and error and were uncertain about the relationship between comfort, riding position, and performance. One Phase 1 participant lowered a saddle to feel safer at stops and later questioned whether the adjustment related to knee discomfort (pp. 69–70). Phase 2 continued to document riders who changed their setup but were unsure whether an adjustment was correct (pp. 40–41).

The team selected parking after comparing these directions. The resulting focus was a specific information problem: helping drivers decide where to search using availability information. The alternative ideas were set aside for this project; their interview findings do not show that their underlying problems disappeared or that their markets lacked value.

Pivot Within the Parking Concept

The initial Parking Handshake concept emphasized registering a free parking space that a user was leaving and receiving a token to redeem for another registered space (Phase 1, p. 1). Further research pointed to a broader need than exchanging individual spaces: drivers wanted to know where parking was available, whether a lot was filling, and how crowded an area was.

The project therefore broadened its emphasis toward Live Parking Intelligence. User departure updates remained a possible source of availability data, while camera-assisted occupancy detection became another proposed mechanism. The shift addressed the information drivers sought without making an individual space exchange the sole way to obtain it. The charter also limited the broader concept to a manageable prototype with selected locations.