

LMET IVR Interviews Research Report

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Purpose

This document summarizes the findings from the exploratory interviews conducted by the WWOSTech UX team for the Last Mile Emergency Team (LMET) Interactive Voice Response (IVR) system.

Background

The Last Mile Emergency Team (LMET) provides 24/7 call support and escalation to mitigate security and operational risks that may impact driver, customer delivery, and community experience in relation to Last Mile operations. An IVR system is being proposed for LMET to reduce the number of call transfers by routing the caller to the correct team the first time by eliminating the caller's judgement from the decision-making process and implementing logic defined by program teams to the call flow. Currently, callers must listen to a long menu of options and select the correct option to be routed to the correct response team, leading to a problem of incorrect selections based on user judgement, increased out-of-scope calls, and long call wait times for LMET. The proposed project is to remake the LMET call workflow away from a menu listing options [1] to an IVR system which directs callers based on voice inputs [2].

Objective

This user research effort focuses on evaluating the proposed IVR call workflow and prompts with Amazon delivery associates (DA) and delivery partners (DP). We want to understand users' experiences using the existing call menu selection pattern, and their mental models during emergencies or delivery issues, on or off the road. We recorded each participant's feedback and reactions to the proposed workflow, identifying any friction or potential concerns, as well as their comparison between the current and proposed call interaction patterns.

- Evaluate which LMET call service interaction pattern is a better user experience; current menu listing pattern or proposed voice input pattern
- Evaluate viability of voice prompts in proposed IVR workflow



- Identify potential concerns with the proposed IVR workflow
- Understand transporter users' experiences and preferences with language/accents in LMET/SDS call service
- Understand users' mental models and vocabulary in reference to the LMET/SDS call service
- Understand transporters' experiences with the current LMET/SDS call service

Executive Summary

The WWOSTech UX team conducted interviews with 6 Amazon delivery associates and dispatchers to evaluate a proposed Interactive Voice Response (IVR) system for the Last Mile Emergency Team (LMET) in-person at DTU8 and DAZ2 delivery stations in Phoenix, AZ, on September 4-5, 2024. The goal was to understand drivers' experiences with the current call menu selection process, their mental models during emergencies or delivery issues, and their reactions to the proposed voice-based IVR workflow. Participants responded eagerly, anticipating that it would be faster and easier to use than the current numerical list of call menu options.

We identified that participants had a low awareness of the emergency hotline button, a desire for a clear distinction between LMET and SDS (Shipping and Delivery Support) departments, concerns about the IVR system understanding diverse speech patterns, and a need for more efficient information sharing between drivers, dispatchers, and support agents during incidents. Overall, the research established the existing user experience and identified opportunities to improve the call workflow for LMET services.

Findings

The following findings are separated into four emergent themes, with summaries of findings and anecdotes for each theme.



Entry points

Emergency button

A majority of driver participants interviewed had little to no awareness of the Emergency Help button located at the bottom of the side panel in the Rabbit/Flex app [3]. Participants were more familiar with the “?” delivery help button statically located in the top right corner of the app [4], because of its frequency of use and visibility in the app. Drivers and dispatchers interviewed have rarely experienced major accidents or injuries that require a call to LMET, so they don’t have a learned memory of where the Emergency Hotline button is. Instead, drivers that have experienced these incidents tend to call their dispatcher as a first point of contact, and the dispatcher will either give the driver the LMET phone number to call, or call LMET themselves on the driver’s behalf.

“So dispatcher gave me an incident report phone number. So it's not even in the app. It would be nice if it was in the app but it's not even the app. I had to call my dispatcher.” - Delivery Associate

“In the app it's just driver support and then you have to dial the number for LMET, which is another thing- I have like four different numbers for them and they answer some of them, but sometimes it goes through with one and not the other.” - Dispatcher

Further targeted research on the visibility and awareness of the Emergency Help button would help inform a re-design to improve the usage rates by drivers, which in turn reduces the possibility of drivers contacting an incorrect number. We can also review the driver onboarding training to ensure drivers are adequately trained on the location and proper usage of the emergency button. Dispatchers and drivers will also need to have access to the manual phone number as a fallback option in case they encounter app issues.

One driver suggested having an emergency button available in the Rivian van itself, on the main screen [5]. This would be a useful option in situations where the driver’s phone is not usable, or if an injured driver is struggling to navigate their phone.

“If I had flicked it and then it gave me critical emergency or something. I noticed that and then it goes to my dispatcher. It determines like what needs to be done at that point. So I don't have to pick up the phone and try to call anyone. Like, imagine if I'm in a heatstroke and then I see that red thing on the screen, because there's a huge screen on the car.” - Delivery Associate



Categorization

Participants appreciate the current SDS Help menu experience in the Rabbit/Flex app, where drivers select through a tree of delivery issue categories [6] in order to find self-help or get connected with an agent. We can consider a similar pattern for drivers to contact LMET, having an option for users to select a category describing their situation before the call is made, and sharing that with the receiving agent for more efficient communication of their issue. This could be an additional option from the voice input system to provide an alternative form of input, easing some of the issues that come with verbal communication.

LMET vs SDS

The broader opportunity to connect drivers with the correct department is to have a clearer distinction between which situations should be under each department's jurisdiction, and have a user-friendly single entry point for drivers to connect with help based on their situation. Currently, drivers do not have a clear understanding of the different departments they can connect with, and which departments should be called for which situations, especially for vehicle accidents. Participants noted the mental burden they feel during accident or injury incidents to independently decide who to call, in what order, on top of the pressure for time and emotional trauma during the incident. In the future, we should collaborate more closely with the SDS team with the north star goal of enabling a simple entry point to guide drivers in who to call and what to do in both delivery support and emergency situations.

"I definitely think like that if that one button routed the call, either way, like to support or LMET, it would be very helpful for the drivers." - Dispatcher

Contact points

Dispatch

Throughout the interviews, drivers consistently recounted that during the few times they experienced incidents like accidents or injuries, their first call after any necessary law enforcement contact is to their dispatch. The dispatcher then guides the driver through handling the situation and instructs them to call LMET. Dispatchers work from the delivery station to coordinate the drivers in their respective Delivery Service Provider (DSP) roster during the day. Drivers tend to reach out to their dispatcher first because of their comfortable working relationship, and because dispatchers need to be promptly informed of every driver situation that could impact delivery schedules for that day.



"I'll be honest, I tell all of my drivers to call me before calling support for like anything support really. It doesn't help that much. That's the last-ditch effort." - Dispatcher

LMET

In the mental models of both driver and dispatcher participants, a call to LMET is considered more of a reporting mechanism rather than for immediate assistance, with the central goal of receiving the corresponding EMT case ID for future reference. A dispatcher participant explained that for some incidents, they will wait until the driver is back to the station to call LMET and report it, as long as it's within the 24 hr. SLA. Based on this understanding, we can explore an alternate solution for drivers to report non-emergency incidents without having to call the LMET phone line, in order to reduce call volume and enable more immediate incident reporting.

"I never call for LMET. All the time, I had the incidents and everything, I call first dispatch. I never call [LMET]." - Delivery Associate

SDS

A majority of participants interviewed have a negative perception of calling driver support, citing strong accents of agents that are hard to understand, and the low ability of agents to help solve driver problems. More tenured drivers have found ways to troubleshoot and solve issues themselves, in order to not have to contact SDS. As an alternative, drivers find that the SDS chat-based support option is more useful, because it's easier to type long ID numbers, and there is less misunderstanding from verbal accents.

Data sharing

Between parties

When asked what their top wish would be to improve their experience during delivery support or emergency incidents, drivers pointed to more efficient information sharing and communication. Since both their dispatcher and LMET/SDS need to be informed during these events, drivers wish that once call or action would send a notification to all concerned parties. This would reduce the burden of the driver to independently decide who to inform and when, and accelerate the speed at which information is shared and help is provided. If drivers need to be transferred between LMET and SDS, they would also like any information logged by the first agent to be shared with the second agent, to eliminate the time-consuming frustration of drivers needing to repeat their answers to common questions.



"I wish there was a system where I slide of something like iPhones like swipe and if it's like injured and I swipe that, in my ideal world, it would notify multiple people at once and my job would be paused or something at least." -

Delivery Associate

"Do they not write notes down, like for the next representative?" - *Delivery Associate*

Driver information

Participants appreciated the increasing ability for LMET to automatically pull in driver information to agents when they call, and want that functionality to expand to SDS and include more information. This helps to alleviate a major pain point of drivers needing to answer a long sequence of basic questions when an agent answers their call. This is especially difficult for drivers that are injured or have difficulty clearly communicating with the agent. One participant described a future idea if it would be possible to pull in camera feeds from a delivery van to share with the LMET agent, so the agent can visually assess the driver's condition.

"It was a hot day. I injured myself. I was being confused. I didn't even know what to do. Plus all the questions, like everything adds up." - *Delivery Associate*

Verbal communication

Speech recognition

When reviewing the proposed voice recognition system, participants brought up mild concerns on how well the system would successfully understand drivers with heavy accents or speech impediments. We need to continually test and track the performance of the IVR system using diverse speech patterns, including language accents, talking speed, speech impediments, regional terminology, and filler words like "uh", "hm", etc. Participants referenced how the heavy accents of some SDS responders have been a pain point that impedes communication and understanding.

"But if you take English, you don't get an English English person. Their first language is not English. I've called numerous times to driver support and it's hard to understand them." - *Delivery Associate*



Reception

We found that cell phone reception is a common issue that drivers make while making deliveries, even in the large city of Phoenix where the participants were located. This issue would be even more frequent in rural areas. The only viable solution for drivers is to drive their vehicle to a different location until reception improves.

"Sometimes we don't have a connection. The connection is really bad. Last night I didn't have a connection, like, about 15 minutes in the area. They said no service. If we have an emergency, how can we work with that?" - Delivery Associate

Text option

A few participants were curious about a text-based option, referencing how helpful it has been for communicating long ID numbers to SDS. We can explore this option in the future, to provide an alternative means of input, especially for deaf/hard of hearing drivers, or those that aren't able to speak.

Appendix

Methodology

For this study, we conducted 30min 1:1 and group semi-structured interviews with a total of 6 drivers and dispatchers in-person at DTU8 and DAZ2 delivery stations in Phoenix, AZ, USA. We began with exploratory questions to understand the baseline driver experience during delivery support and incident scenarios, then asked for feedback on the proposed IVR solution.

We worked with the Last Mile User Experience team to recruit delivery partners/Flex drivers for a wider diversity of participants, but did not receive responses due to the short lead time and low DP engagement.

Participants

Site	Name	Alias	Role	Tenure
DTU8 (09/04/2024)	Roy [REDACTED]	[REDACTED]	Dispatch	2 years
	Joyce [REDACTED]	[REDACTED]	Delivery Associate (DA)	2 years
	Aleea [REDACTED]	[REDACTED]	Delivery Associate (DA)	1 year





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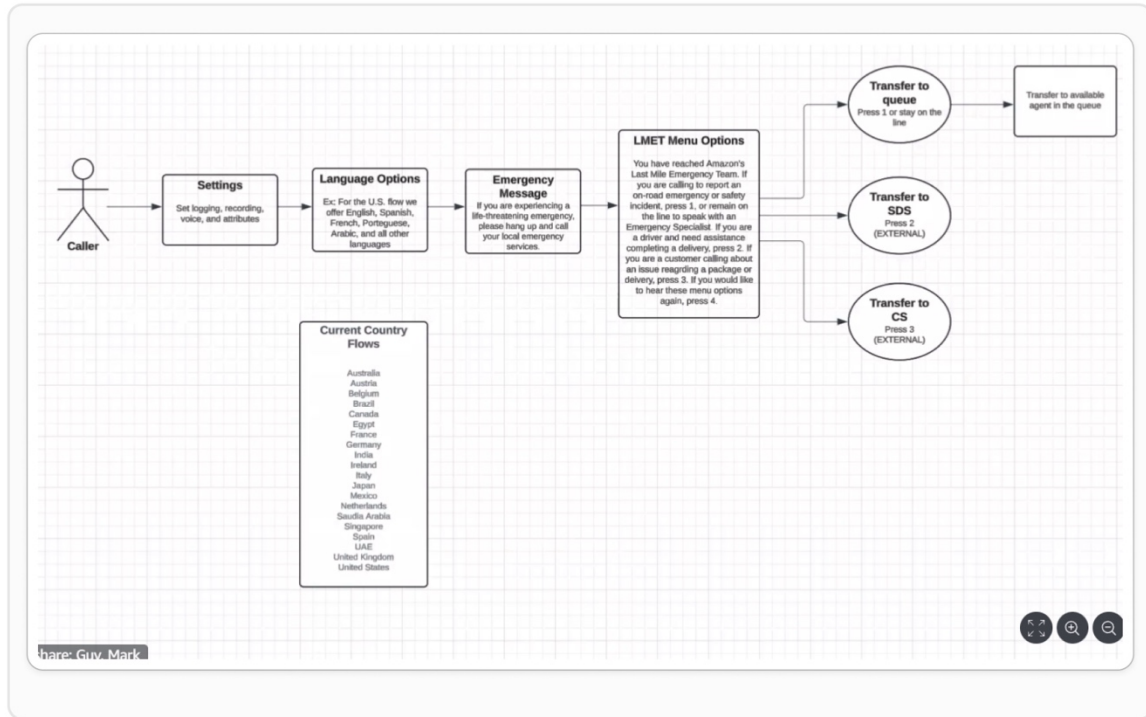
	Patrick [REDACTED]	[REDACTED]	Dispatch	2 years
DAZ2 (09/05/2024)	Julio [REDACTED]	[REDACTED]	Delivery Associate (DA)	1.5 years
	Tebarek [REDACTED]	[REDACTED]	Delivery Associate (DA)	1 year



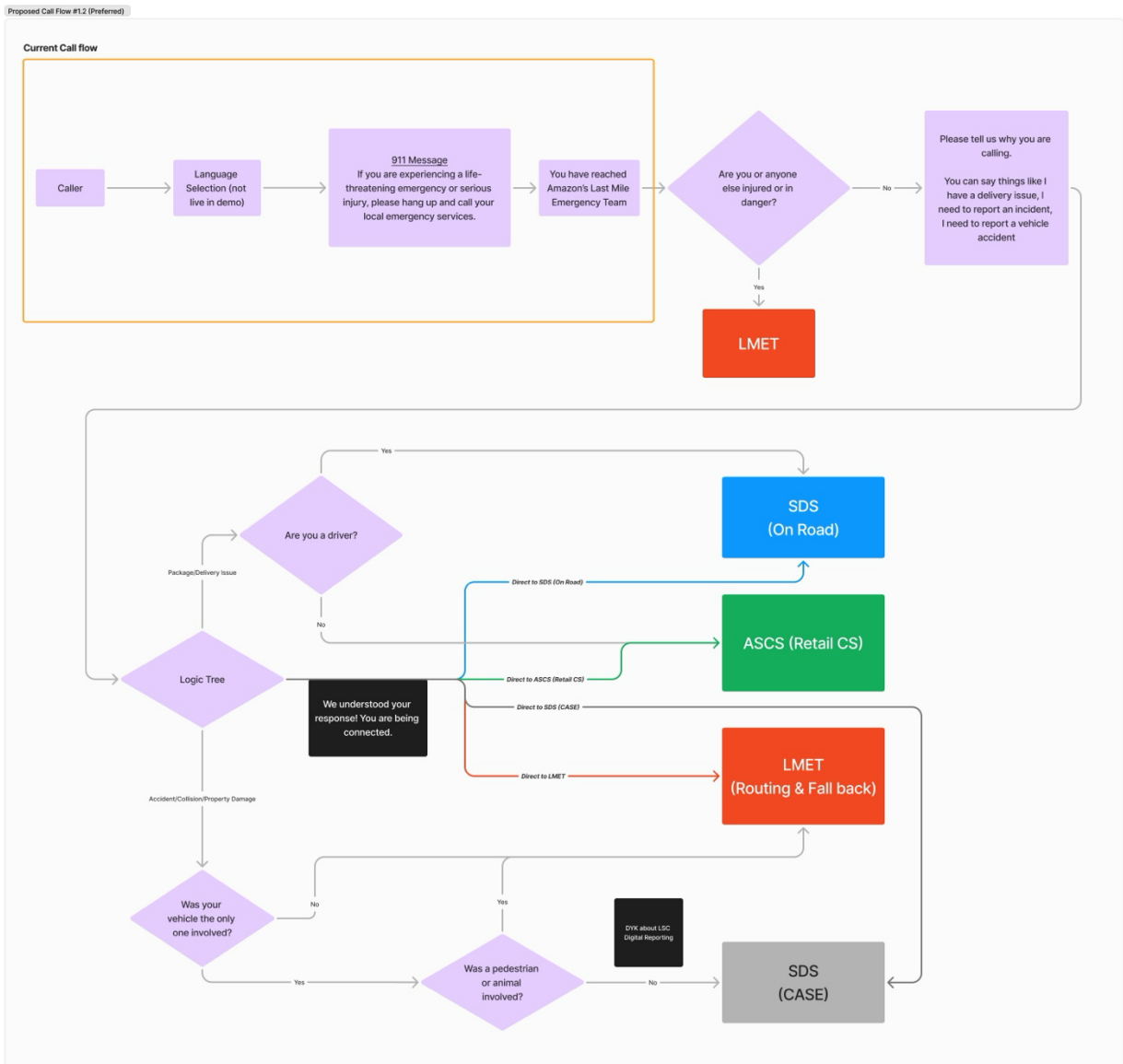
Images

[1]

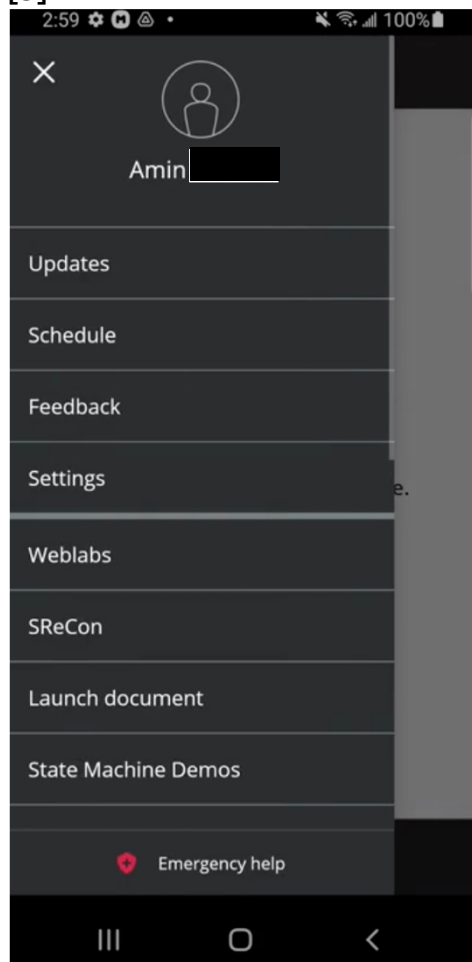
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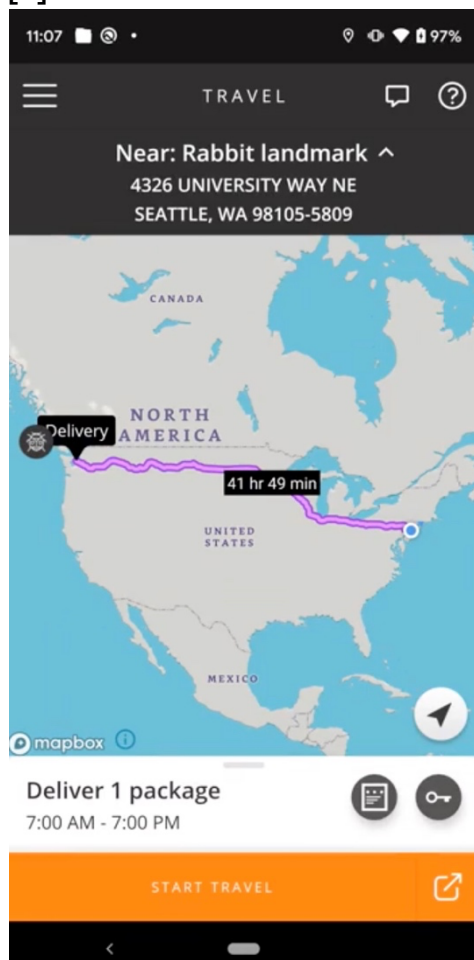
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[3]



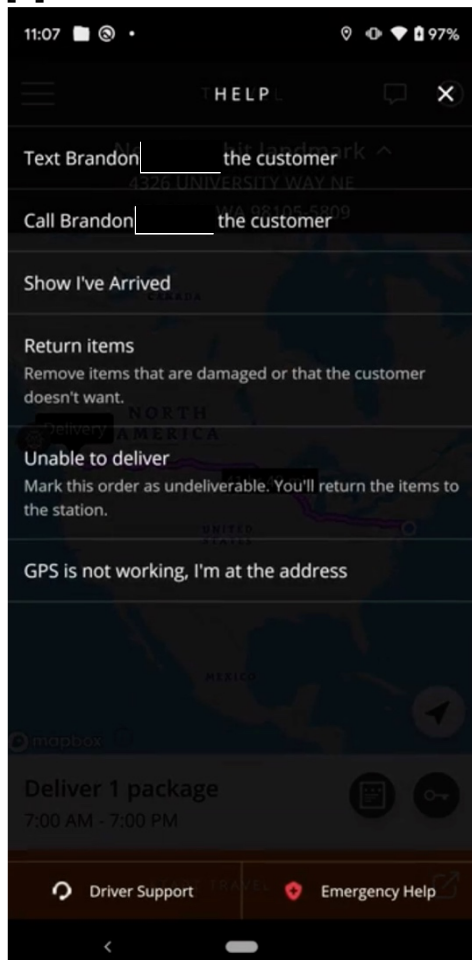
[4]



[5]



[6]



Glossary

Term	Definition
DA	Delivery Associate
DP	Delivery Partner
DSP	Delivery Service Provider
IVR	Interactive Voice Response
LMET	Last Mile Emergency Team
SDS	Shipping and Delivery Support
UX	User Experience
WWOSTech	Worldwide Operations Security Technology





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Links

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Research Plan: [LMET IVR Interviews - Research Plan](#)

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Figma: [LMET IVR Proposed Workflow](#)

