UX for Hyperlocal Maps in Southeast Asia

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Grab is a leading superapp in Southeast Asia
Guided by the Grab Way with a mission to drive Southeast Asia forward by creating economic empowerment for everyone
Grab Maps powers everyday services for millions of people across over 480 cities in Southeast Asia
Places
30M places collected for service search, suggestions & destination selection

Roads
Roads data supports driver allocations, distance, traffic & ETA calculations

Navigation
Our maps power turn by turn guidance for drivers with a ‘made for SEA’ experience

Nearby
We provide location intelligence to all Grab verticals
We operate in an interesting region

Where people need help navigating the last mile

I went with my mom and since we both are unfamiliar with the road so we do the usual, just ask people on the streets. I was told beforehand that it's nearby Borang Cemetery so once I get there, then I ask around. I think asking people is accurate and saves time.

Palembang ID: F, student, non map user
Current digital maps experience does not provide a complete experience for the locals to navigate and explore the neighborhood.

Designing hyperlocal maps starts with understanding the users in their day-to-day journey.

Translate insights of local people in tier 2 cities into mobile app designs and prototypes.

Get feedback from users and iterate, while feeding product roadmaps.
We get up close and personal

- Focus groups
- Grab a drink session
- Usability testing
We understand what really matters

**Places & access**
Smaller roads are often closed by locals without notice - either permanently, during certain hours or temporarily due to events.

**Road conditions**
E.g. too narrow / unpaved / steep gradient / lots of turns, etc that causes the drive to be unpleasant and/or unsafe.

**Activity hubs along routes**
E.g. schools, markets - places that may suddenly become busy and cause disruption.

**Environmental factors**
E.g. Avoiding driving on roads that are dusty / little-to-no shade / lots of heavy vehicles (especially for motorcycle drivers).

**Illumination & safety**
At night, many prefer travelling through well-lit streets for safety reasons - especially women.
We apply a set of user-centric principles:

- **Automate where possible**: Add quality to our experiences by making them effortless.
- **Present with clarity**: Translate complex information into simple experiences.
- **Weave in the context**: Focus on the nuances that matter in our region for our users.
- **Focus on utility over aesthetic**: Employ functional visual elements over embellishment & style.
Engage deeply with the community to build and maintain maps

**Missing roads**
A quarter of the SEA edits on OSM are by the Grab data team

**StreetComplete**
StreetComplete campaigns in Thailand have contributed to ~15K missing data points

**KartaView**
100,000+ UKM, 61M images publicly available, and used by the OSM community worldwide.

**Driver partner feedback**
Every Grab booking and User feedback = Better OSM

**GeoStars**
Virtual program in 9 universities that enables the younger generation to explore the world of maps
Translate research insights into design

Crowdsourcing
Hyperlocal data from users in tier 2 city

Safe route
Create trust in the platform & communicate with detail maps
**Hyperlocal map updates**
- Wedding/events
- Footpath condition
- Street illumination
- Quality of environment such as dust and heavy vehicle

**Short video**
Immersive view of the environment

**Accessibility icons**
- Overhead bridge
- Entry of tunnel
- Entrance of building
- Steep road
- Cross road

**Detailed walking route**
Snap to footpath instead of on the road if available

**Trust**
Encourage user to rate the quality of route after every trip
Key learnings designing for Southeast Asia Grab navigation driver app

Concerns from the driver
- Low data plan
- 2G / 3G network environment
- Small display
- Low performance phone
- Large map space is more important than turn by turn instructions

Clarity of direction with large arrow
Relevant to local as there are missing road names which is apparent in SEA maps

Auto tolls integration to driver app
Tolls auto added to receipt to help user do 1 less step

Clear visual route
Thicker & vivid route

Information & control at your fingertips
Reduce friction by displaying destination & other capability not possible with 3rd party nav
Thank You

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