

Phone Tracking Product

For Communities in South Africa, Tanzania & Similar Regions

1. The Idea

We wanted to build something that helps people find their stolen phones, even when the thief removes the SIM card and there's no internet.

Who is this for: People in South Africa, Tanzania, and similar places where phone theft happens often.

2. Can We Build This?

No - not with an app alone.

Here's why:

Your phone uses GPS to know where it is. GPS works like a radio - it can listen to satellites, but it cannot talk back to them. So your phone knows its location, but it has no way to send that information to you without internet or phone signal.

Think of it like this: if someone steals your phone and takes out the SIM card, the phone is like a person who knows exactly where they are, but has no way to call or message anyone.

3. What We CAN Build Instead

The original idea won't work, but here are things that actually can help:

A. SMS Location Finder

What it does:

If your phone is stolen but the thief keeps the SIM card in, you can send a secret text message to your phone. The phone will automatically reply with its location.

Good: Works even without internet - just needs basic phone signal

Limitation: Only works if the SIM card is still in the phone

B. Community Safety Network

What it does:

An app where community members can alert each other about crime. Like a digital neighborhood watch.

- Send alerts: 'Phone stolen at the market - thief went towards the bus stop'
- Share your location with family so they know you're safe
- Panic button that sends your location to family if you're in danger
- See which areas have more crime to stay alert

C. Small Tracking Devices

What it is:

A small device (size of a coin) that you hide inside your phone case. It works separately from your phone, so even if the thief removes your SIM card or turns off your phone, you can still track where it is.

Popular options:

| Device | Price | How It Works |
|------------------|-------|--|
| Apple AirTag | ~R550 | Uses nearby iPhones to tell you where it is |
| Samsung SmartTag | ~R600 | Uses nearby Samsung phones to tell you where it is |
| Tile | ~R650 | Uses nearby phones with Tile app |

Tip: Hide it inside your phone case. Thieves usually don't check there.

4. What We Recommend

You can't track a stolen phone that has no signal with software alone. But you can still help your community by building:

1. An SMS location finder (works when SIM is still inside)
2. A community safety app (help each other stay safe)

3. Encourage people to use small tracking devices like AirTag

The key message: This is a technological barrier that cannot be solved with software. Your time and resources would be better spent on projects where technology can create real impact.