Top 5 Wi-Fi Problems

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#wifitrek

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Intro

- I'm Ben Miller

- Wi-Fi networks sometimes have issues

- Here are my Top 5 issues

  - AirMagnet WiFi Analyzer can really help identify/solve these issues
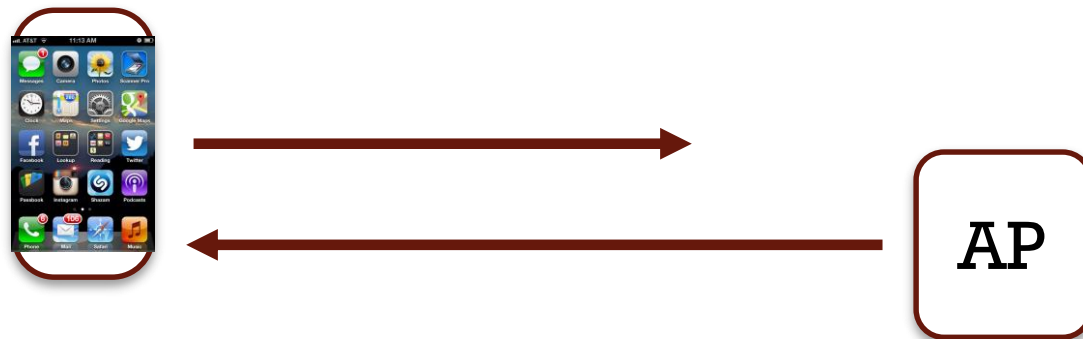
Top 5

- Transmit power mismatch

- Traffic congestion

- Unconnected guests

- Dead zones

- Roaming drops

V

Transmit Power Mismatch
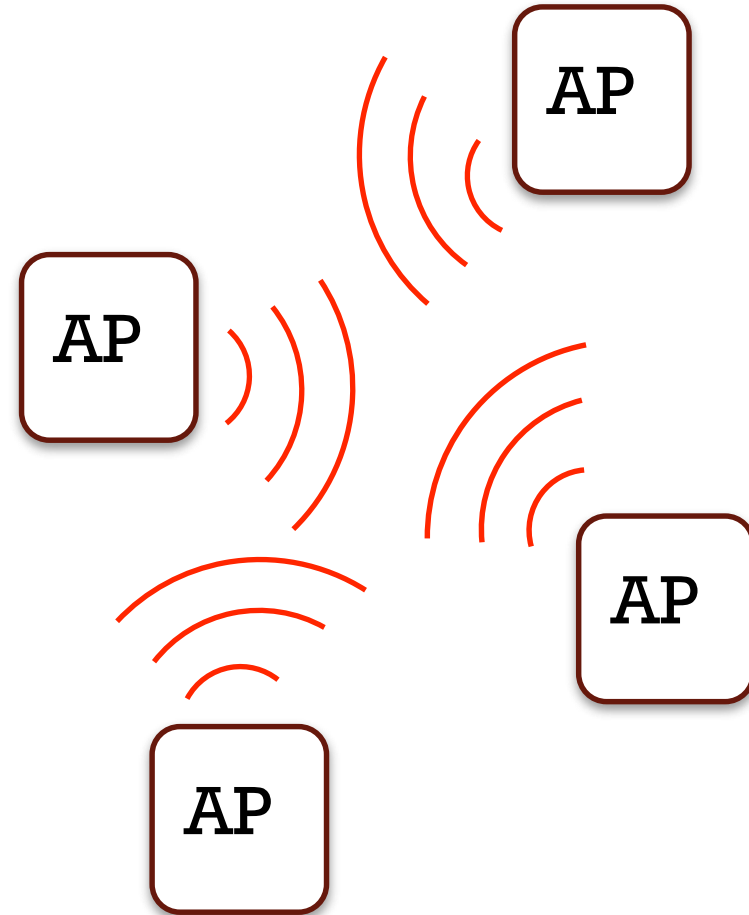
AP Tx power too high: inconsistent data

AP Tx power too low: Wi-Fi suffers when lots of users arrive

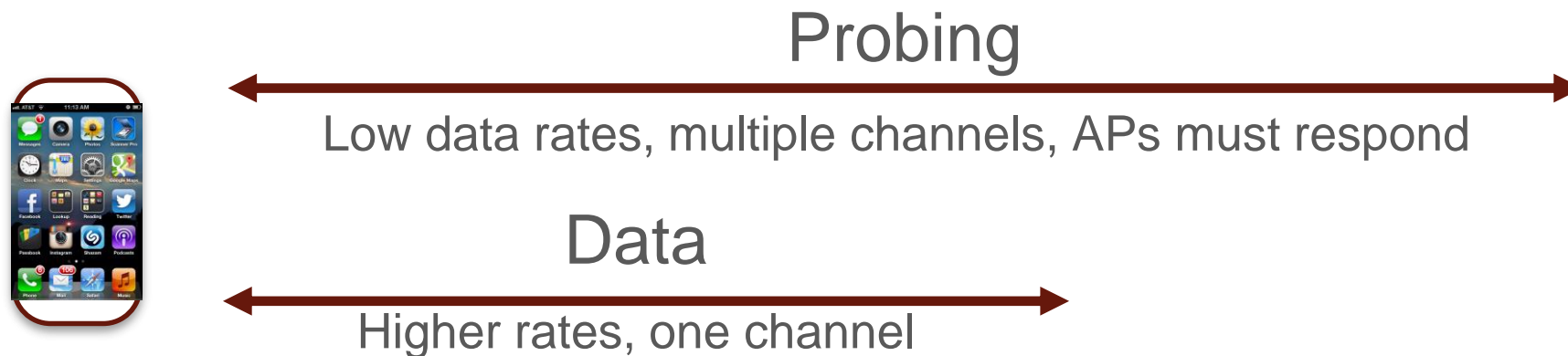The Fix: Compare Tx Retry% to Rx Retry%

Traffic Congestion

When a device sees more than one AP on a channel, that's bad

AP

AP

AP

AP

· The Fix: Verify auto-selected channels

Unconnected guests
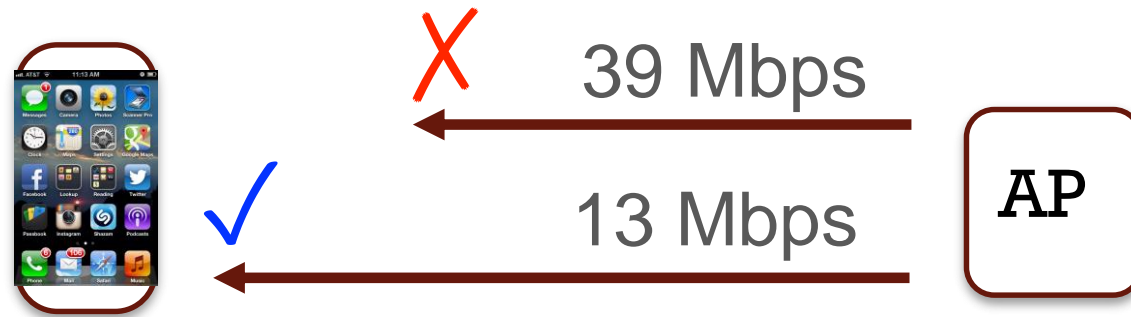
- Unconnected smartphones use MORE Wi-Fi than connected
  - Unconnected devices send lots of Probe Requests, which eat up bandwidth

Probing

Low data rates, multiple channels, APs must respond

Data

Higher rates, one channel

The Fix: Look for excess Probe request/response frames
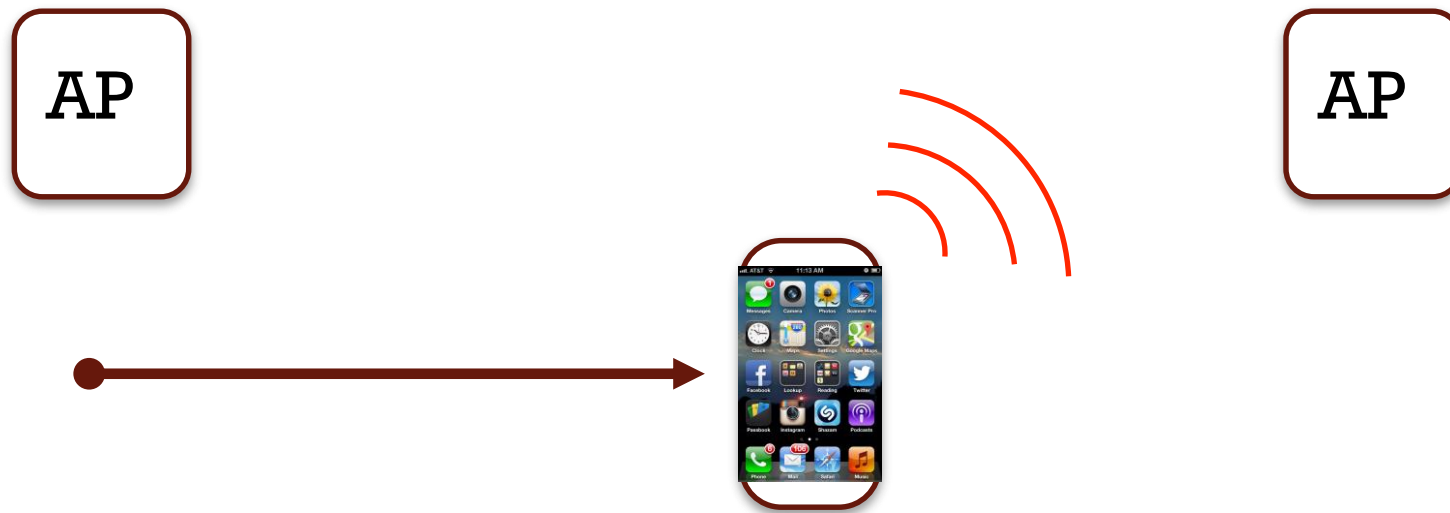
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Dead Zones

- Connecting without getting access is ANNOYING
  - Devices are getting better, but some stick on APs that are too far

X **39 Mbps**

✓ **13 Mbps**

AP

- The Fix: Check the AP's supported rates

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Roaming Drops

Devices send Probe Requests when they're ready for a new AP

- The Fix: Check device's signal when it begins probing

Summary

Your Wi-Fi may have problems

(47%* of all Wi-Fi user complaints go unreported)

Network analyzers help identify & resolve common problems

*we made up that number

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Q & A