

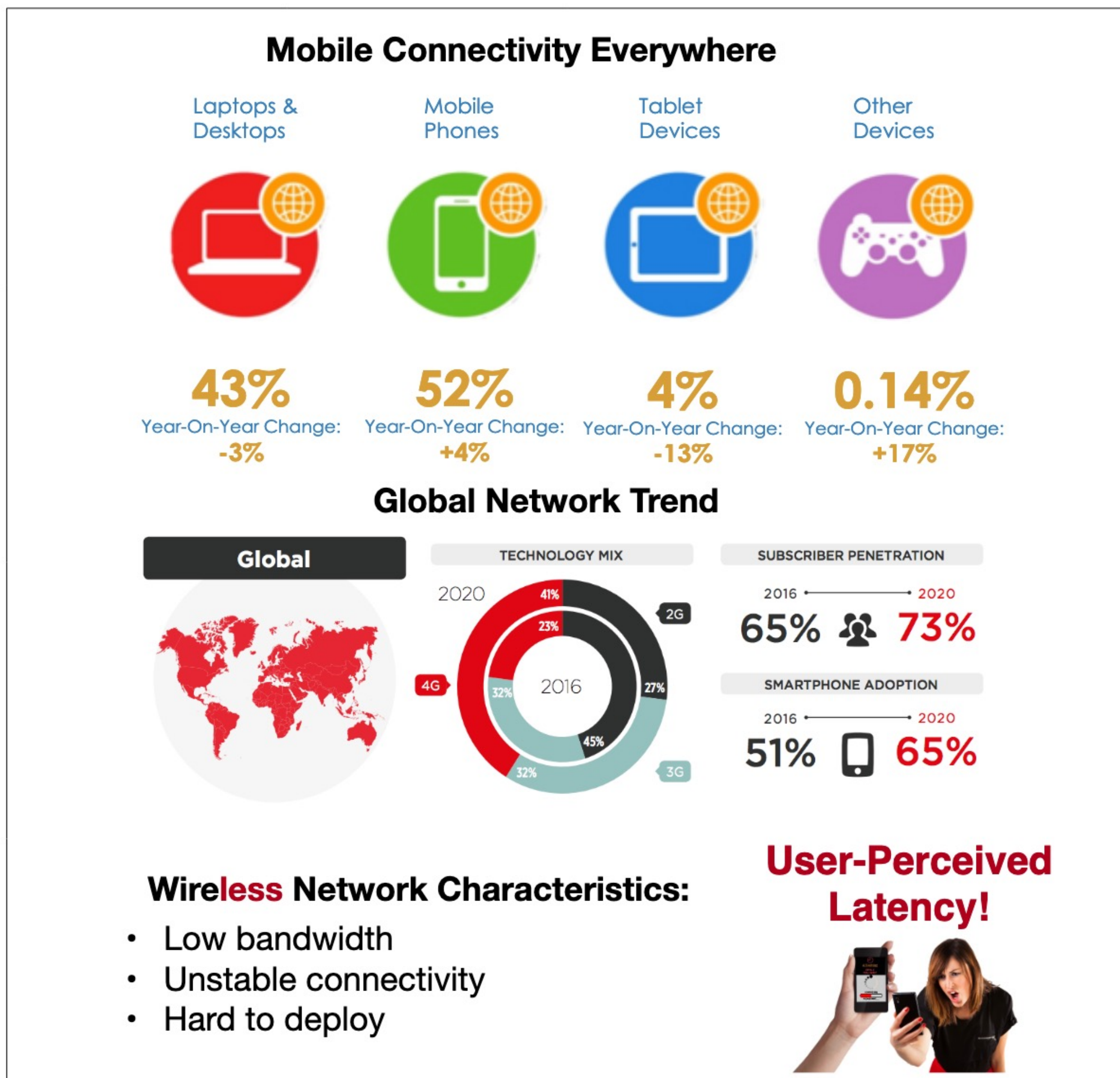
CIFellows 2020-2021

Computing Innovation Fellows

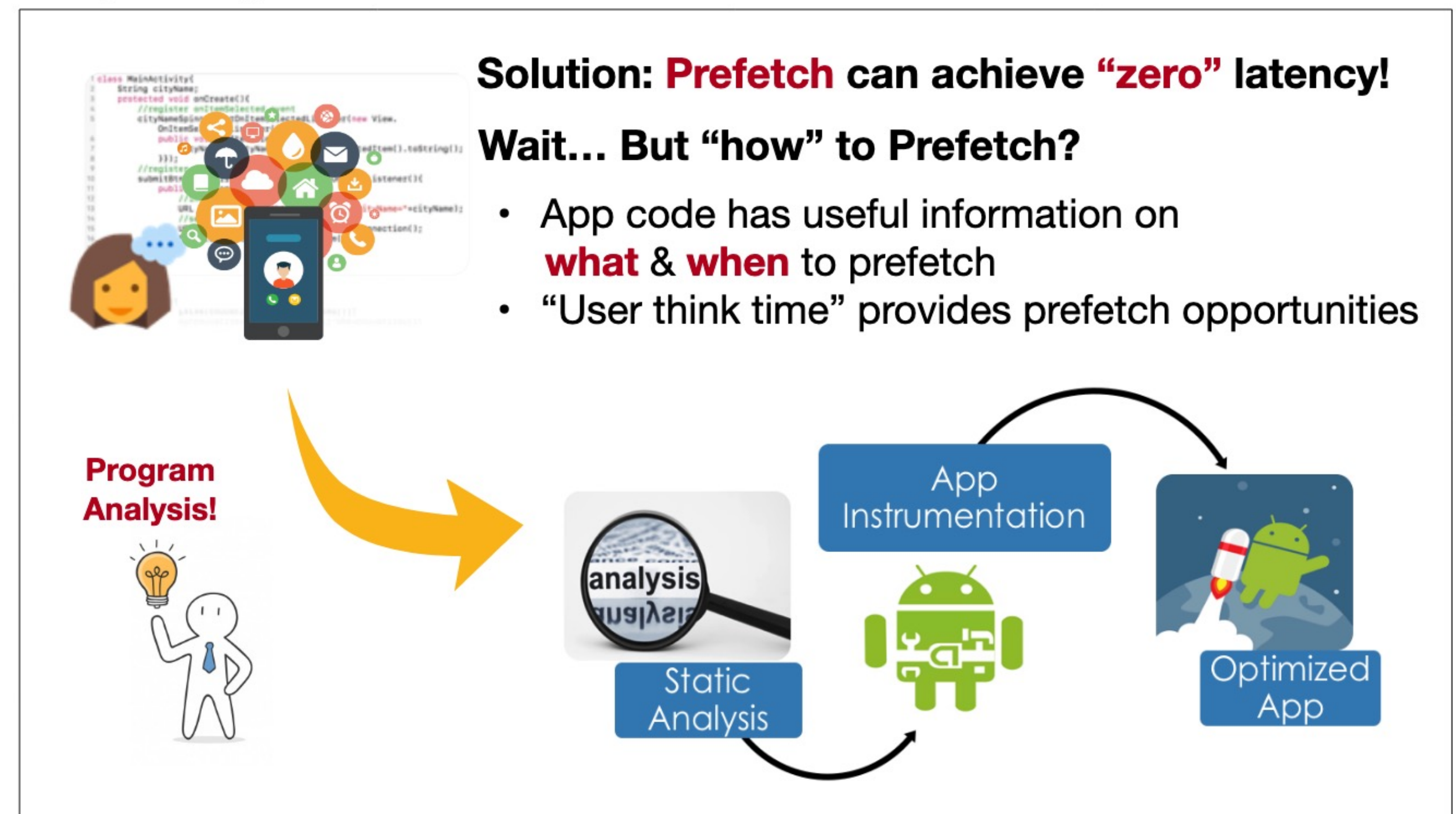
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Motivation



Key Insights



Current State of the Art

Existing Limitations:

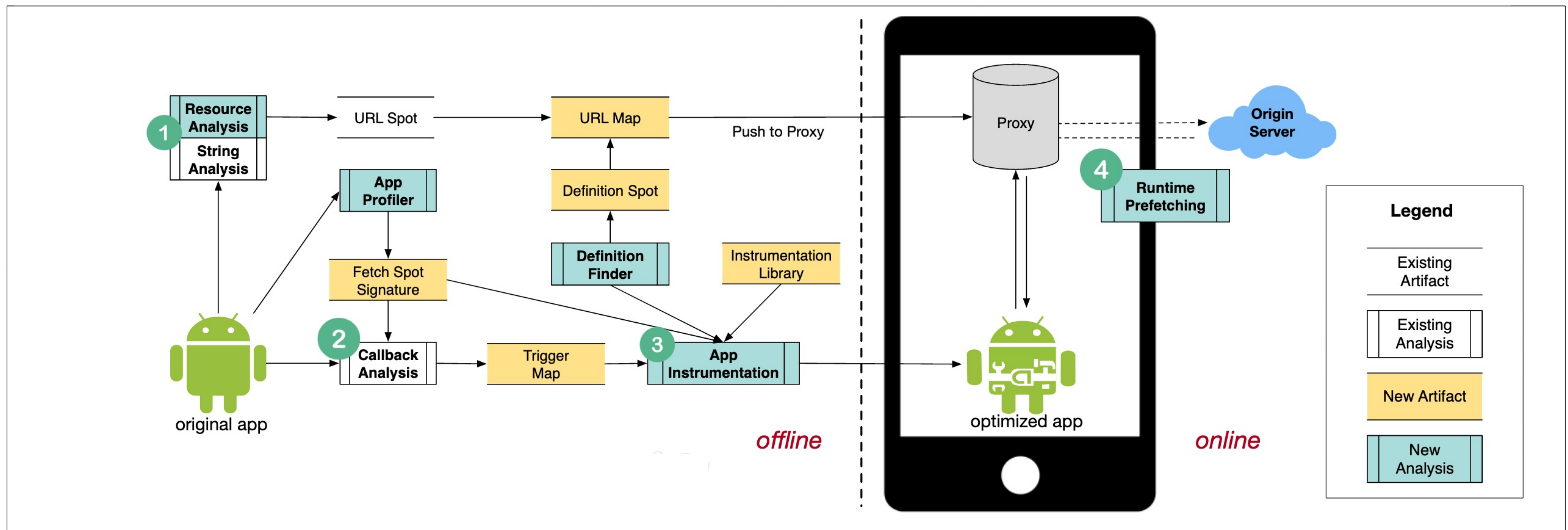
- Server-based
- Human-based
- History-based
- Domain-based

vs.

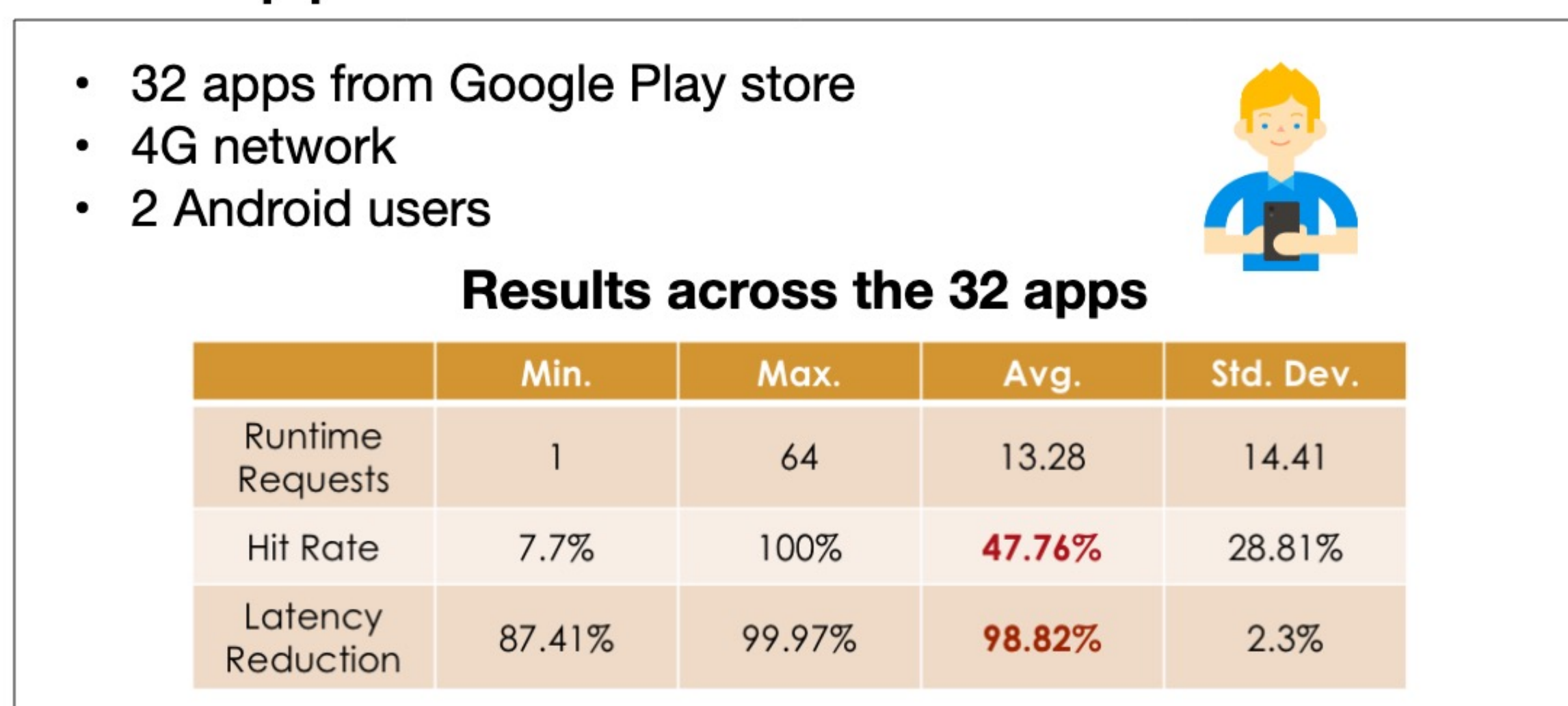
PALOMA:

- Client-only
- Automatic
- No historical information
- Domain-independent

PALOMA Overview (Program Analysis for Latency Optimization of Mobile Apps)



Real App Evaluation



Road Ahead

- Lay the foundations for program analysis-based prefetching techniques
 - Balance QoS trade-offs
 - Study user behaviors
 - Extend to other latency-hogging operations
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