When Not to Use Microservices

Memi Lavi
www.memilavi.com

When Not to Use Microservices

- Microservices are not one-size-fits-all
- There are cases where they shouldn’t be used
- Might even cause damage
- Need to evaluate on a case-by-case basis

Small Systems

- Small systems with low complexity should usually be a monolith
- Microservices add complexity
- If the service mapping results in 2-3 services – microservices are probably not the right option

Intermingled Functionality or Data

- One of the most important microservice's attributes is its autonomy
- When there is no way to separate logic or data – microservices will not help
- If almost all requests for data span more than one service – there's a problem

Performance Sensitive Systems

- Microservices systems have performance overhead
- Result of the network hops
- If the system is VERY performance sensitive – think twice
    - SLA is in the low-milliseconds or even microseconds

Quick-and-Dirty Systems

- Microservices design and implementation takes time
- If you need a small, quick system, and need it NOW – don't go with Microservices
- Usually has a short lifespan

No Planned Updates

- Some systems have almost no planned future updates
- For example – embedded systems
- Microservices' main strength is in the short update cycle
- No updates == No microservices