



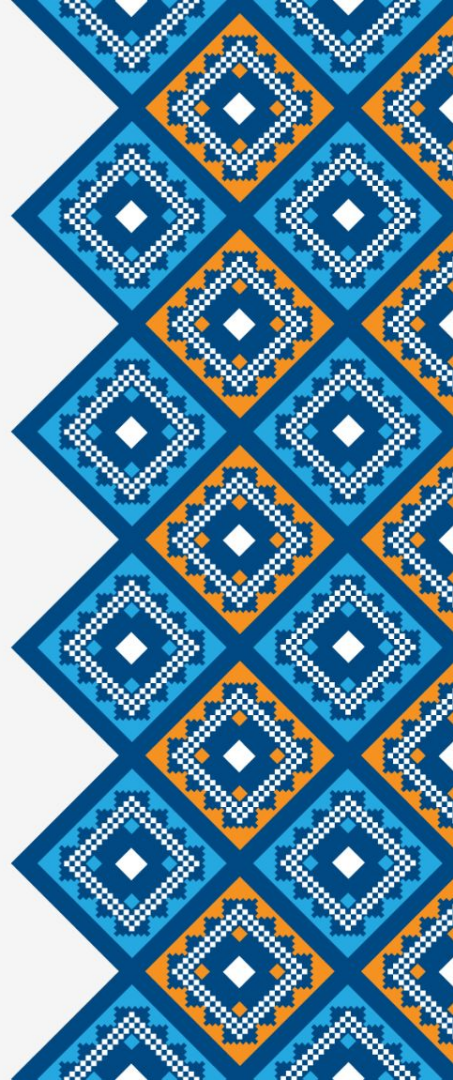
Future

The vital role of Microservices in Headless WordPress

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The Vital Role of Microservices in Headless WordPress



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Context

In headless WordPress, APIs enable flexibility. But how do we scale, isolate services, and avoid bottlenecks?



Hello!

I am **Dhanendran Rajagopal**

- Senior Web Engineer @ 10up
- Happy husband and father of 2 boys



What Are Microservices

Independent, modular services focused on specific functionalities.

Decoupled, Scalable, Technology-agnostic.



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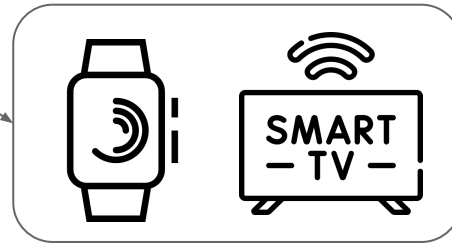
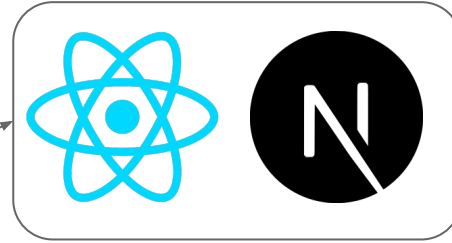


Benefits of Microservices in Headless WordPress

- **Scalability:** Scale individual services (e.g., caching, search, storage).
- **Resilience:** Faults in one service don't bring down the entire system.
- **Flexibility:** Use the best tool for each job.
- **Team Freedom:** Independent service development.



Publishing System





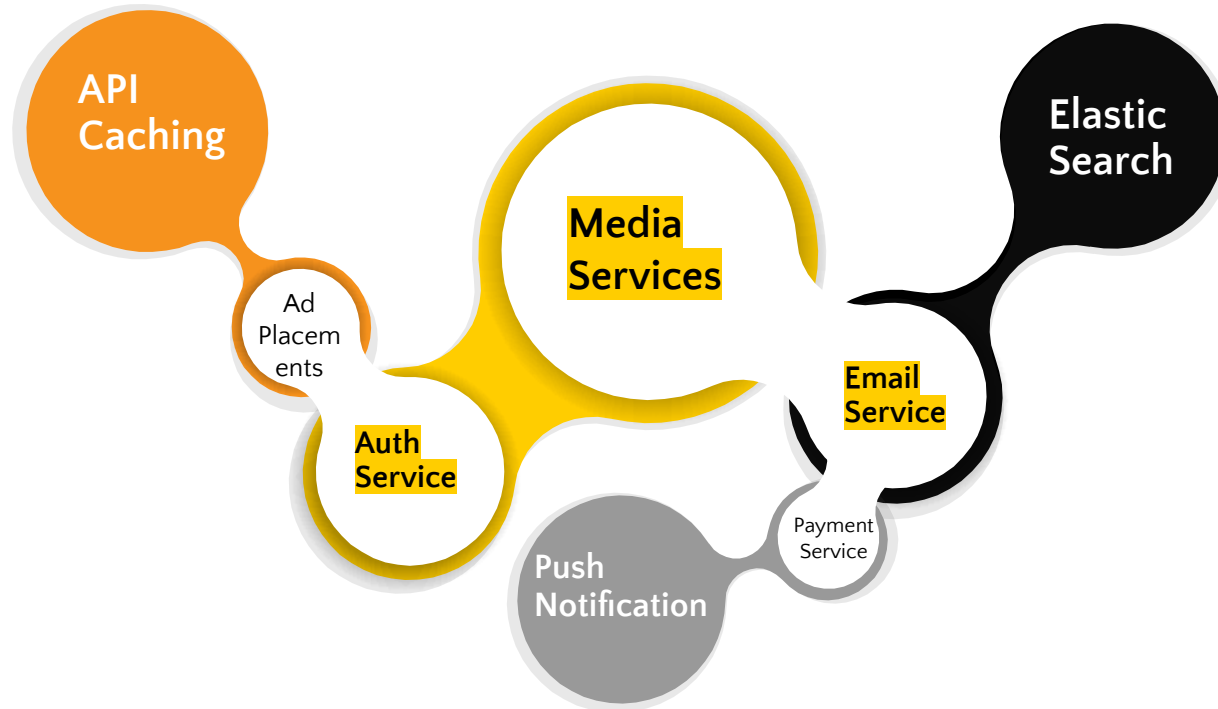
Use Case

Let's assume

- Upgrading a plugin and it caused an error and the API's are not accessible.
- Upgrading a Database and it locked the database access for few minutes.
- Election result day, Backend server couldn't handle the search/traffic.

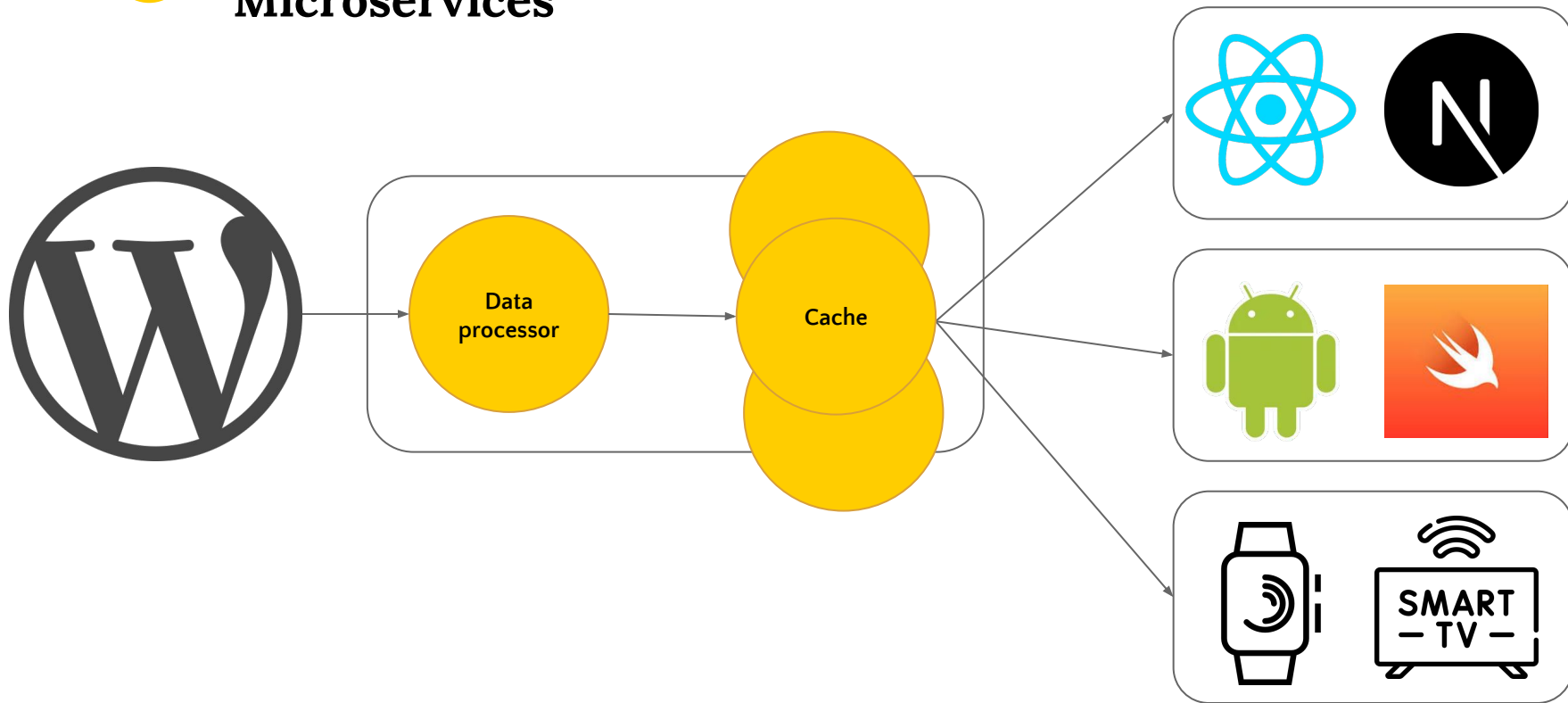


Microservices





Publishing System with Microservices





Challenges

- ❖ Complex setup and orchestration.
- ❖ Monitoring and debugging across services.
- ❖ Increased latency due to inter-service communication.



Considerations

- ❖ Use tools like Kubernetes for orchestration.
- ❖ Implement centralized logging with tools like Elasticsearch and Kibana.
- ❖ Optimize APIs to minimize latency.



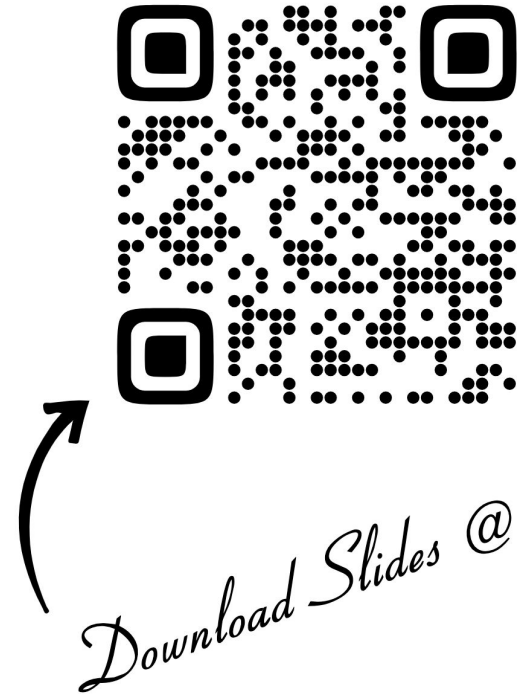
Key Takeaway

"Microservices empower headless WordPress to scale and adapt to modern web demands."

Start small—identify one functionality to migrate as a microservice and evolve.



Thank You!



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