

Process-as-a-Service: Unifying Elastic and Stateful Clouds with Serverless Processes

M. Copik, A. Calotoiu, G. Rethy, R. Böhringer, R. Bruno, T. Hoefler

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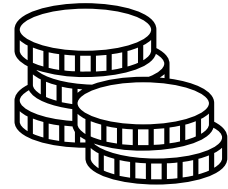
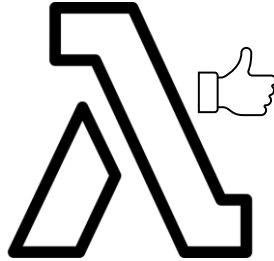
Introduction



<https://aws.amazon.com/lambda/>

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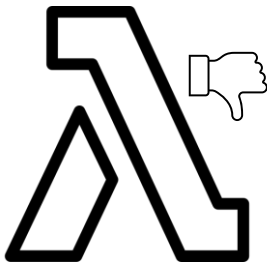
Serverless Computing



<https://aws.amazon.com/lambda/>

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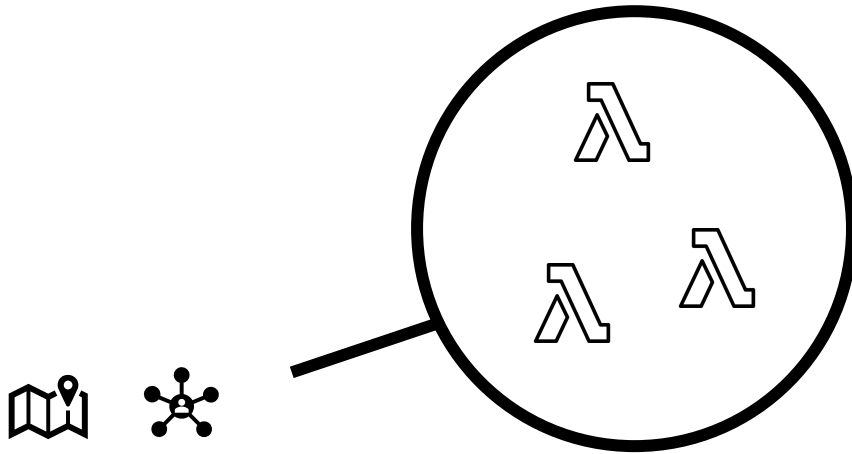
Serverless Computing



<https://aws.amazon.com/lambda/>

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Serverless Computing

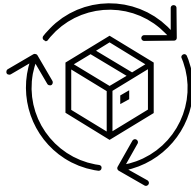
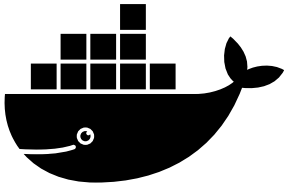


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PaaS: Process as a Service

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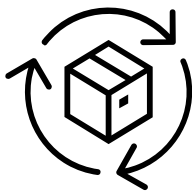
PaaS



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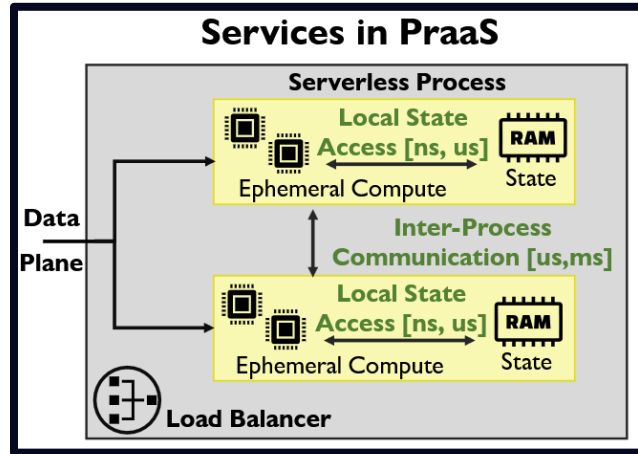
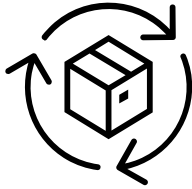
PaaS



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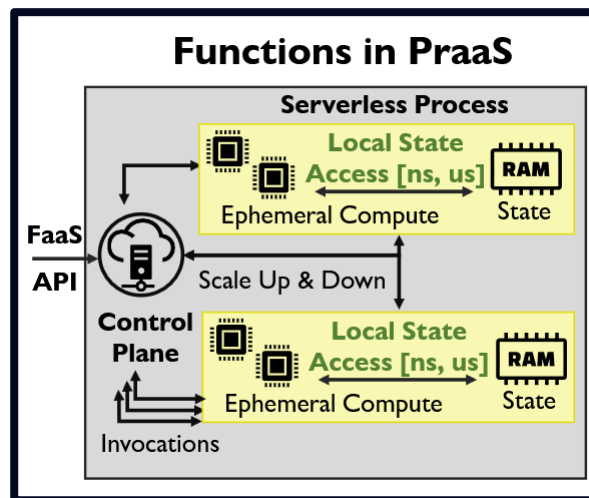
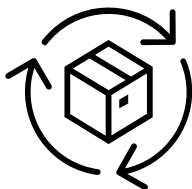
PraaS



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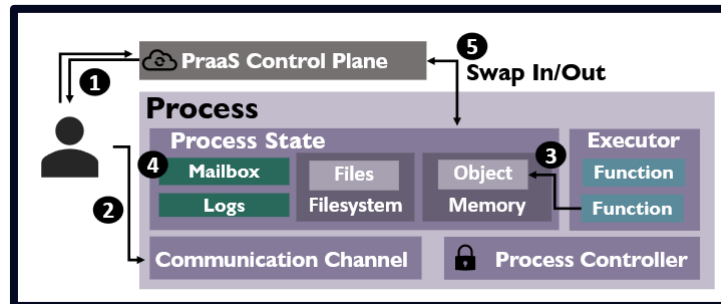
PraaS



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PraaS

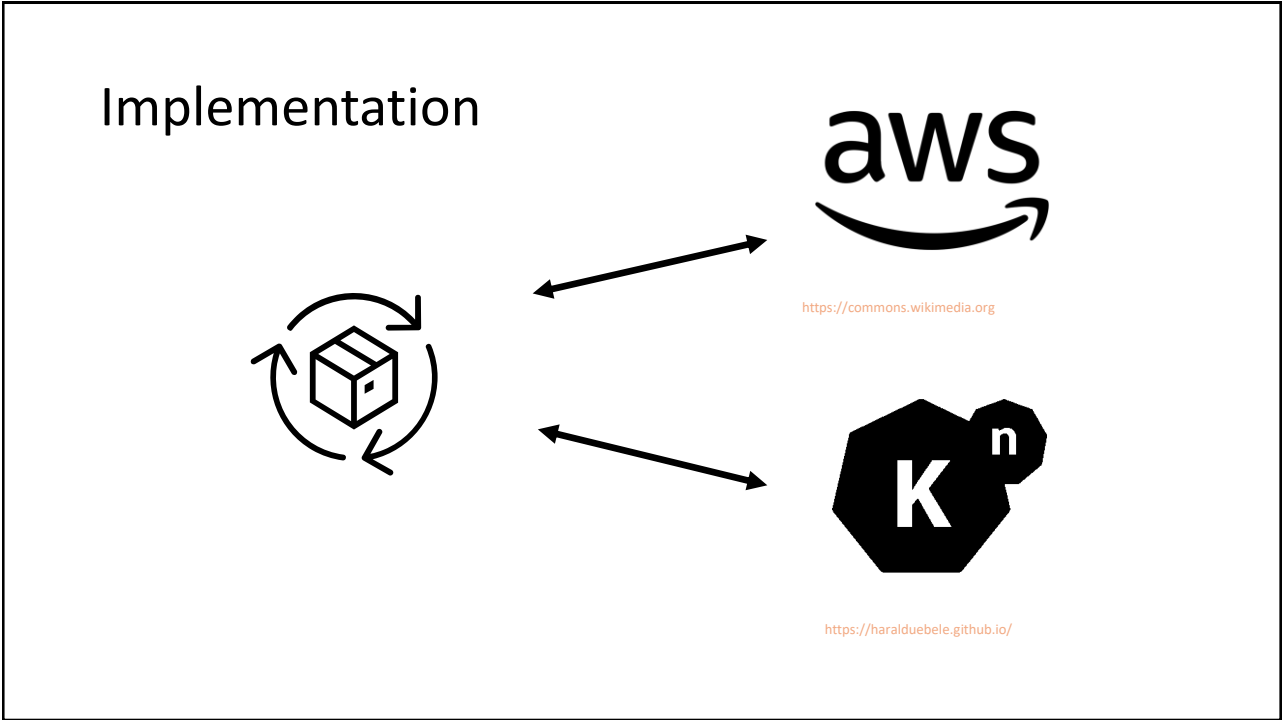


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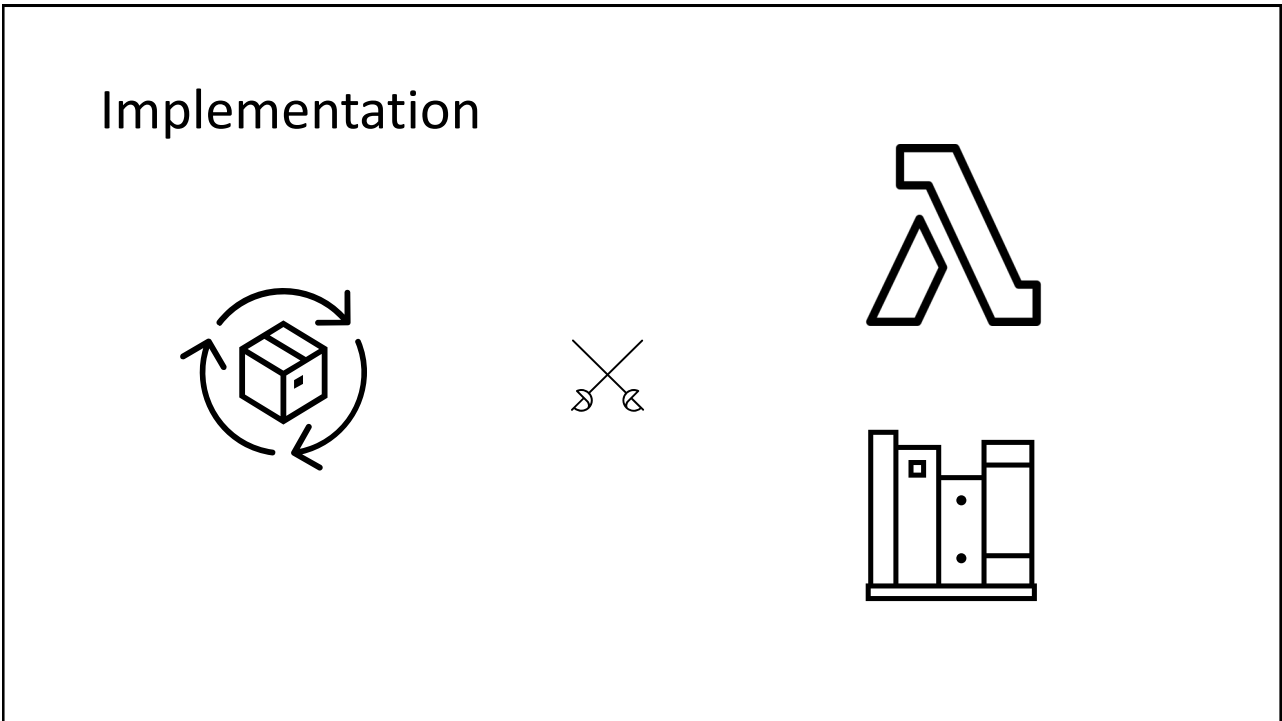
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Evaluation

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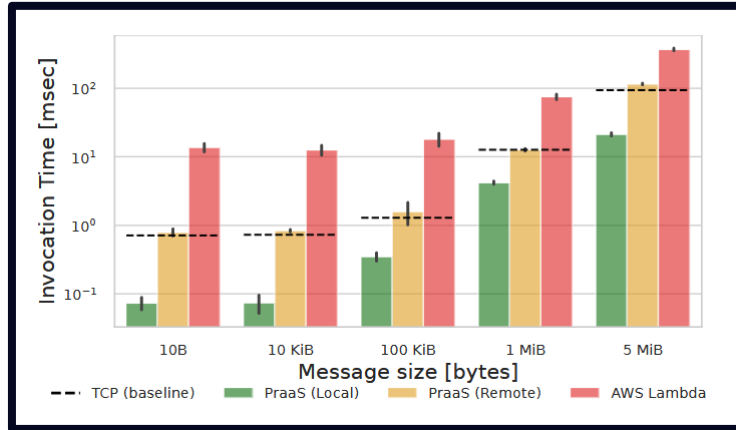


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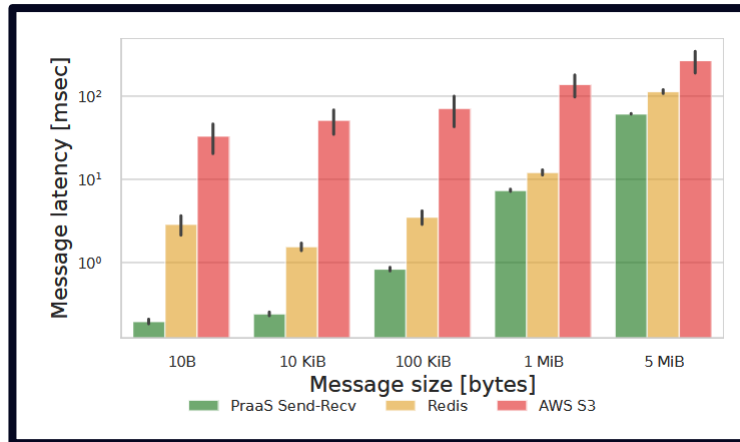
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Results: No-op



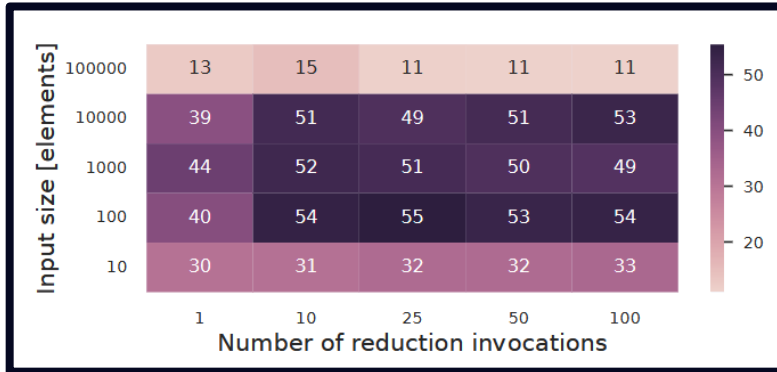
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Results: Communication



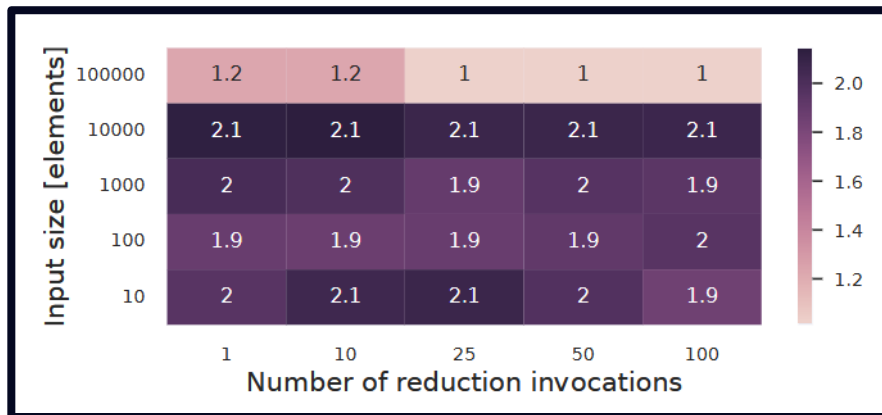
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Results: Reduction Benchmark (S3)



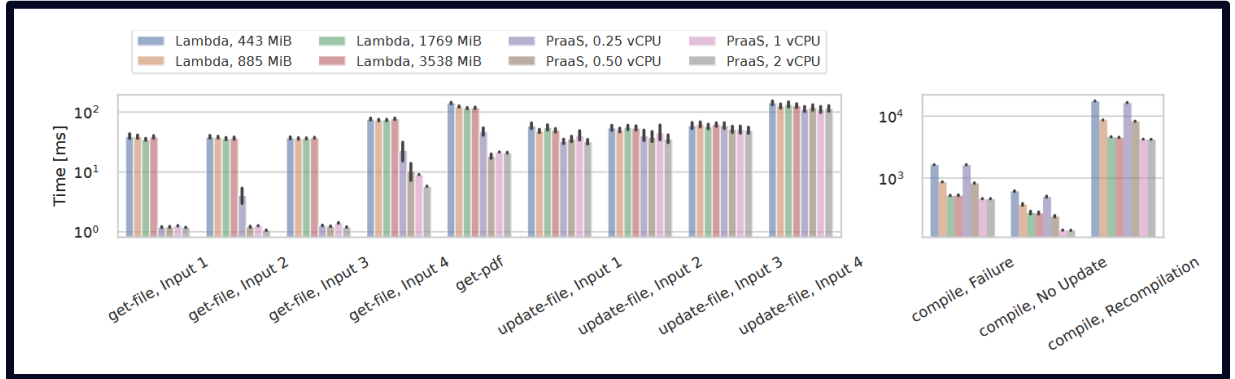
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Results: Reduction Benchmark (Redis)



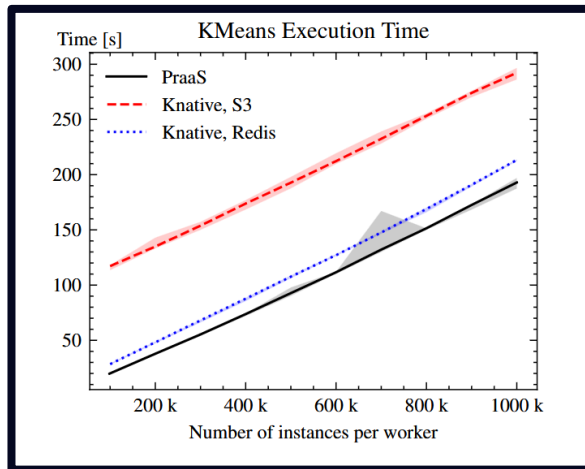
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Case Study: Editor



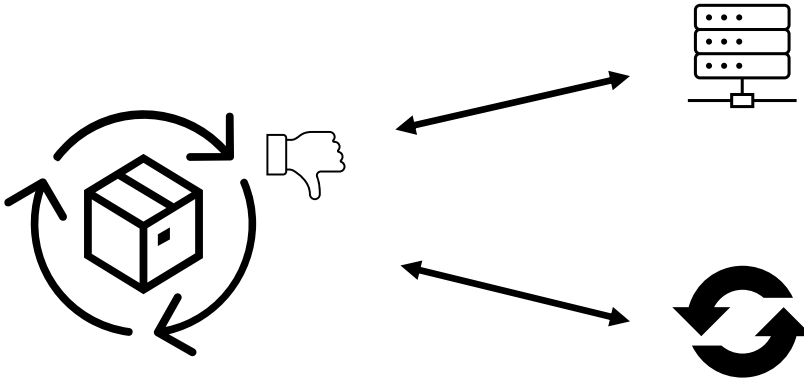
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Case Study: KMeans



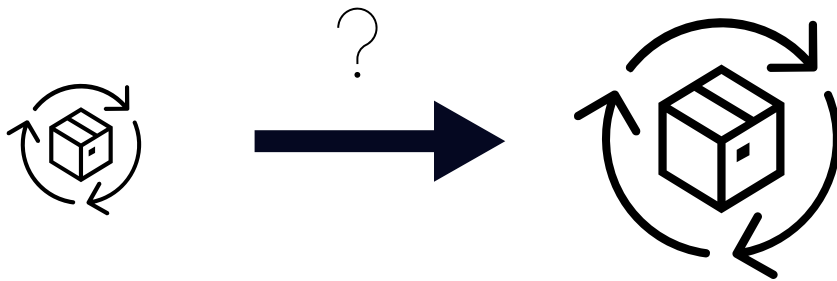
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Tradeoffs



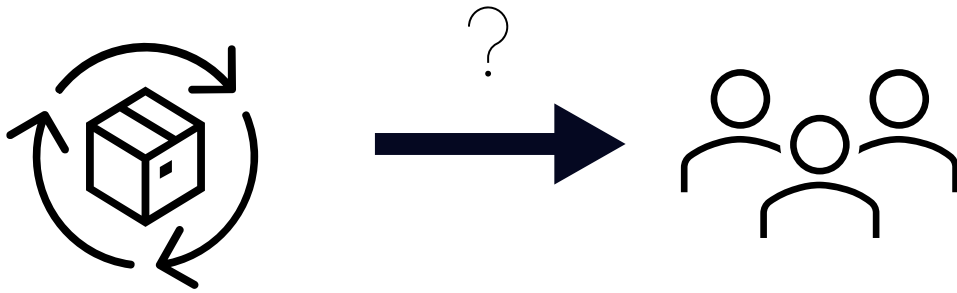
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Tradeoffs



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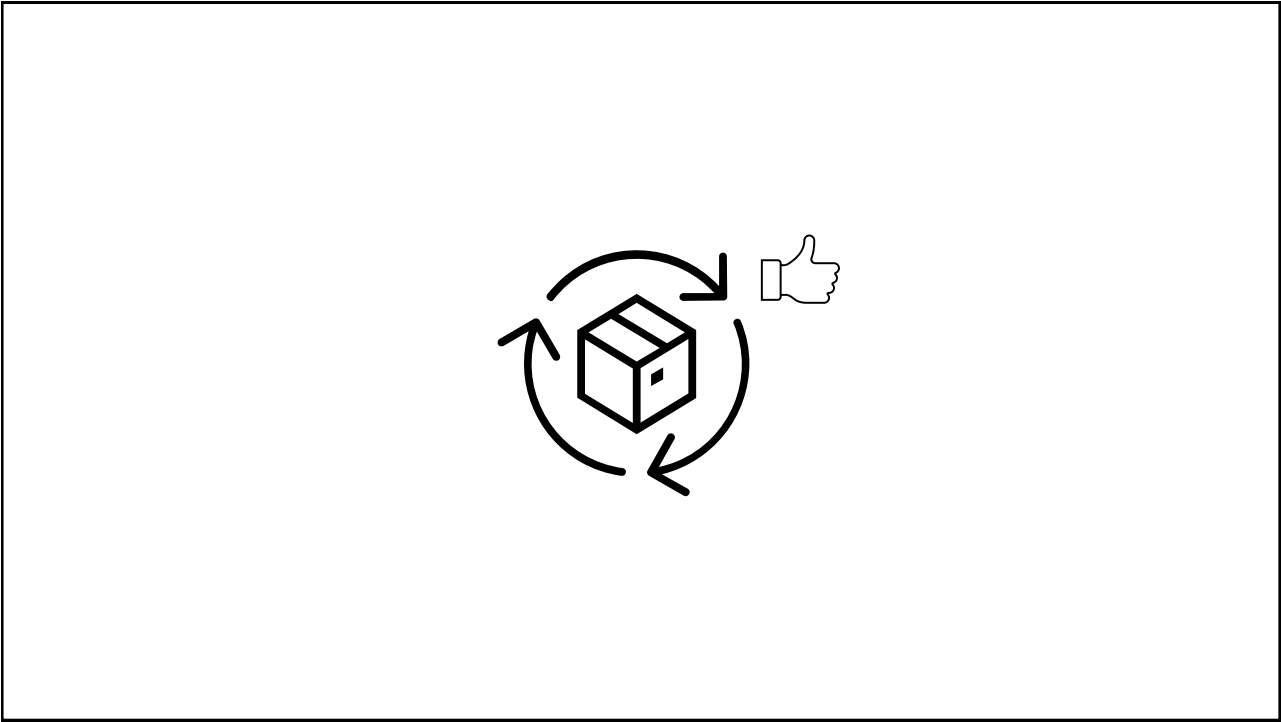
Tradeoffs



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Conclusion

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