OBJECT COMPUTING
RE!MAGINE TOGETHER

WEBINAR

# Your Transition to Microservices
*It's easier than you may think.*
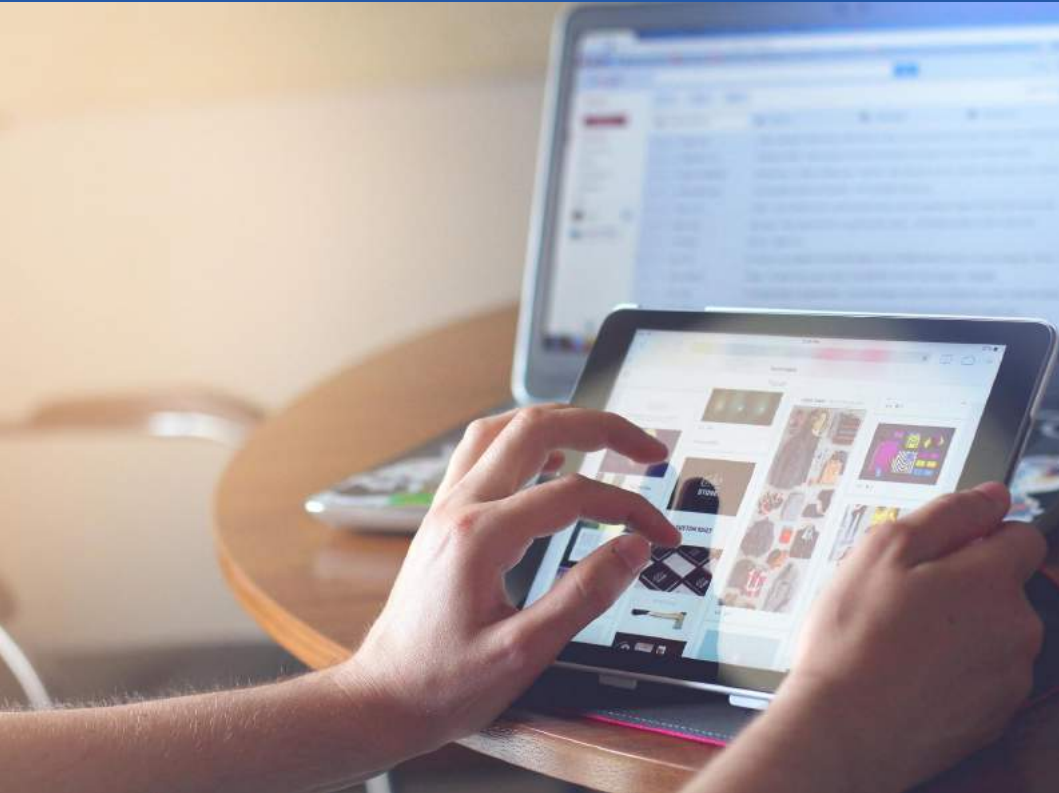
Joe Epplin
Wednesday, March 13, 2019

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# "Disruption is always good for someone."

— *David Smith*

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# Myths We Are Exploding

1. Any change is a disruption
   - Decomposing the problem

2. Disruption is only a technology issue
   - Connecting business and tech

3. Disruption is only for digital *giants*
   - This process works for all businesses

# Agenda

1. Starting Point

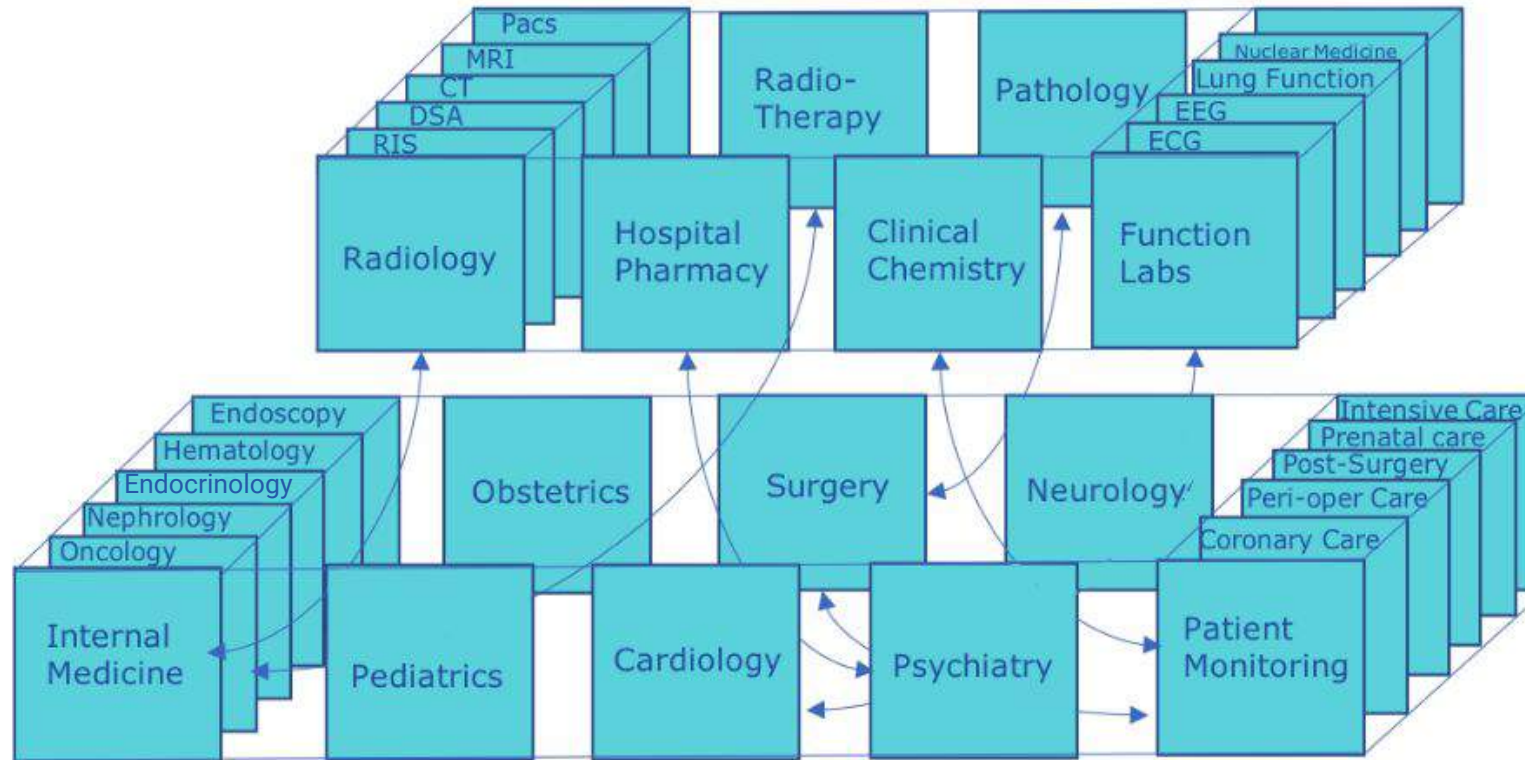2. Not All That Bad

3. Transitioning

4. Recipe

OBJECT COMPUTING

# Monolithic Legacy Systems

# Example Monolithic System
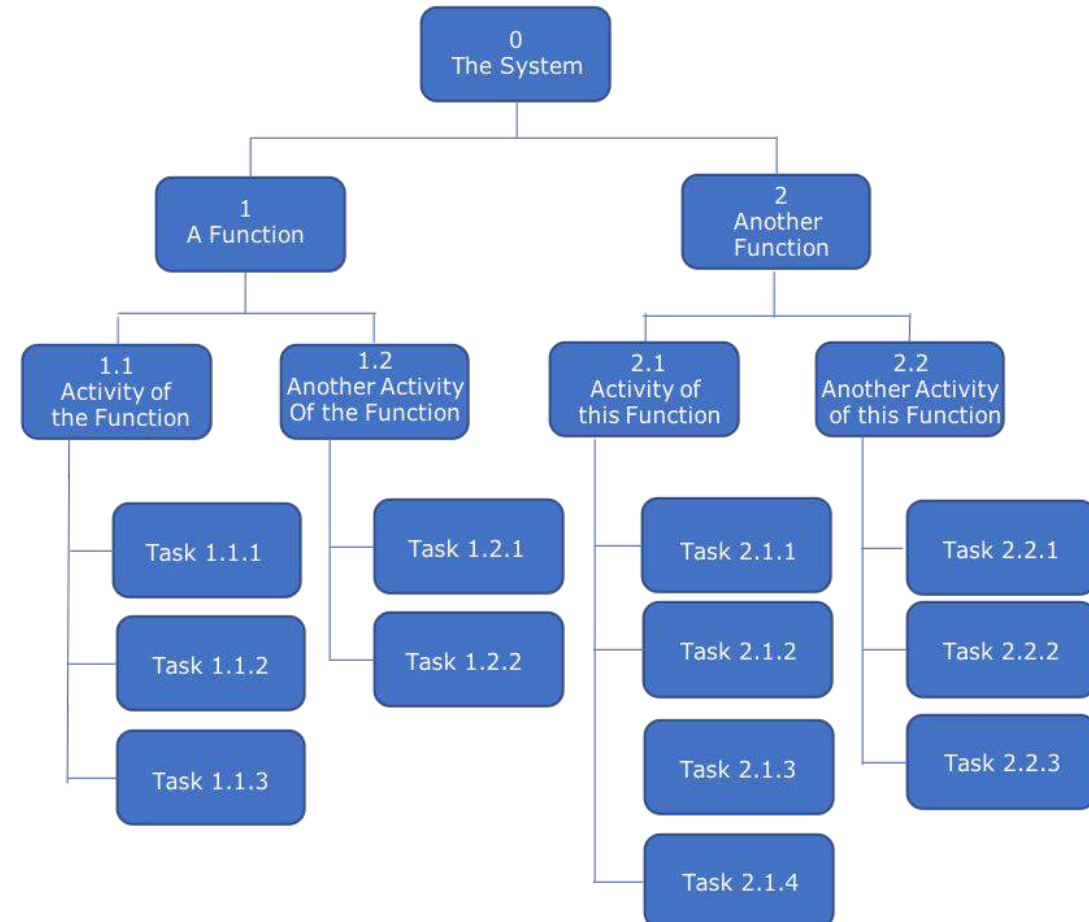


Clinical Support Systems

Clinical Departmental Systems

# These Systems Support Business Processes
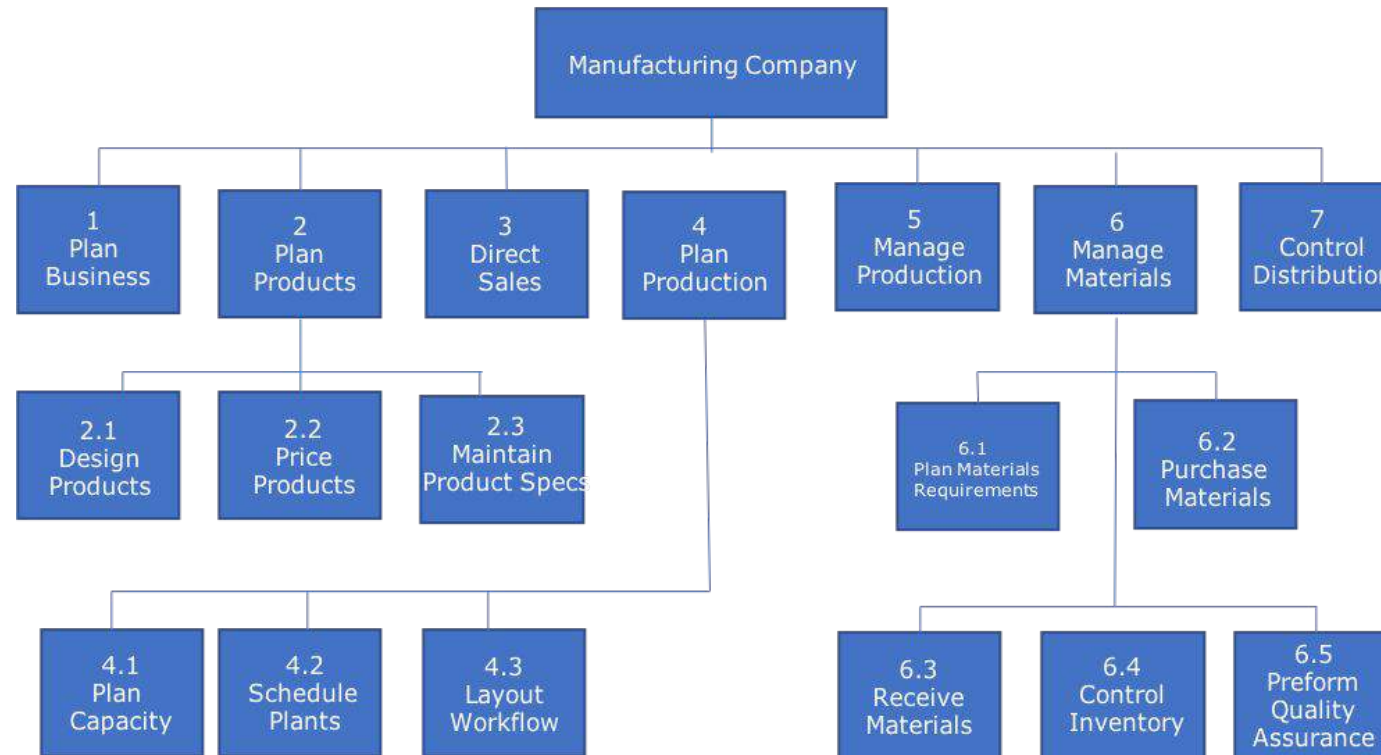
There is a taxonomy for these processes.

## Decomposition Diagram (Hierarchy Chart)
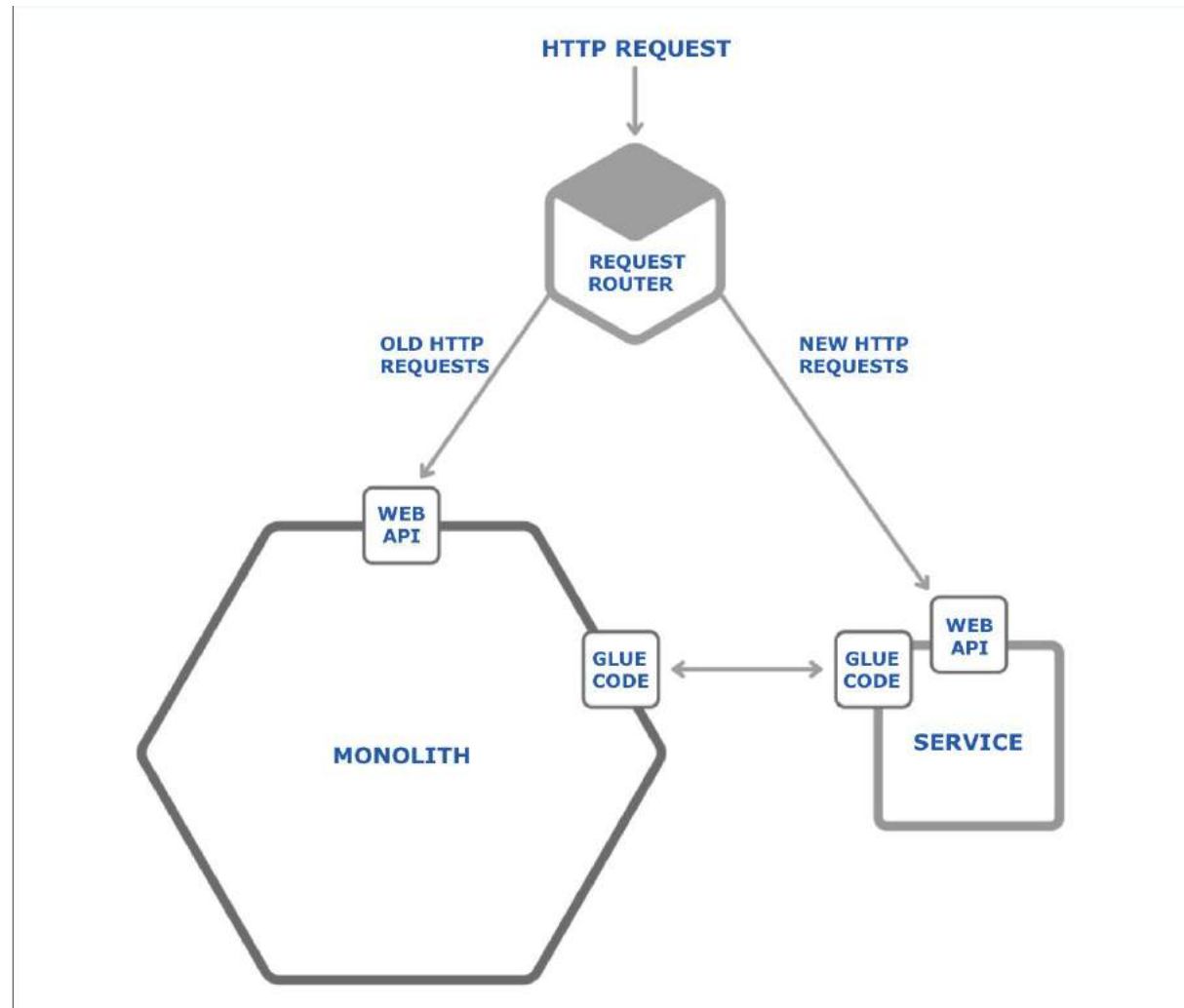
# Sample Decomposition

There is a taxonomy for these processes

## Enterprise Level Function Chart



Note Conway's Law

# Monoliths and Microservices Can Coexist



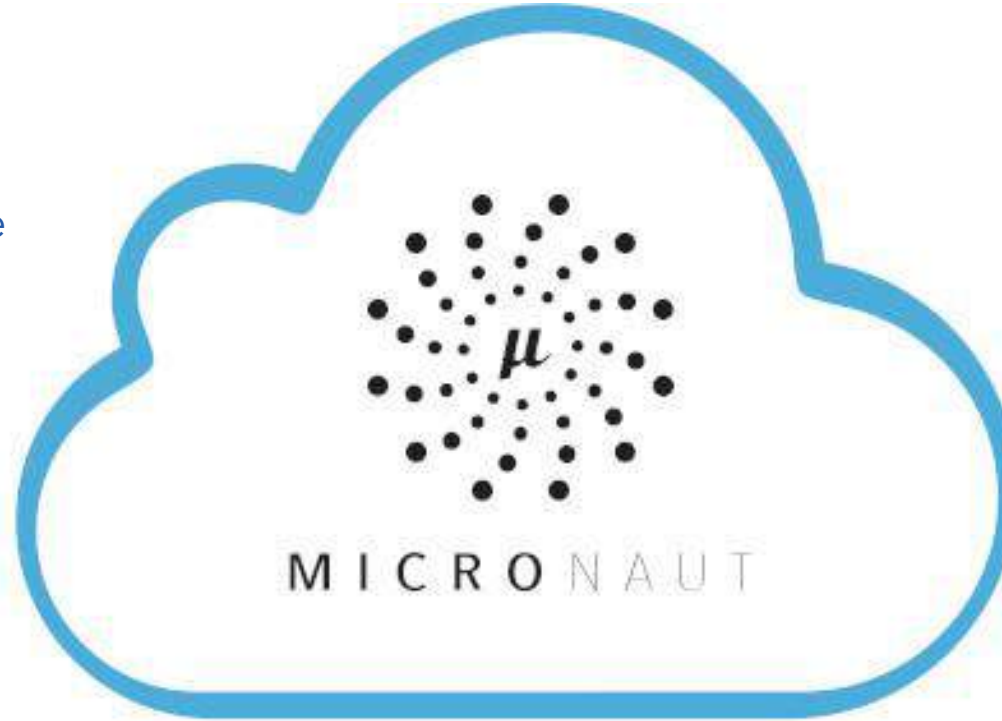Strangler pattern

# Recipe

## Technical Aspects

Declarative, reactive, compile-time HTTP client

Non-blocking HTTP server built on Netty

Fast and easy testing

Efficient compile-time dependency injection and AOP (not reflection)
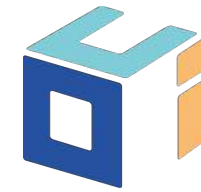
Fully reactive and non-blocking apps

Built in cloud support (common discovery services, distributed tracing tools, and cloud runtimes)

MICRONAUT

ZIPKIN

aws

NETFLIX EUREKA

# Recipe

## Business Process Decomposition / Refactoring

1. Model systems with highest business value first
2. Do something concrete with the model as quickly as possible
3. Grow from there
4. Highlighting business process inefficiencies will inform the microservice architecture
5. Diagrams should fit on one page
6. Manage  different versions of the diagram for different stakeholders
7. BPD depicts information flows in business processes, not data flow (Conway's Law)

# How We Can Help

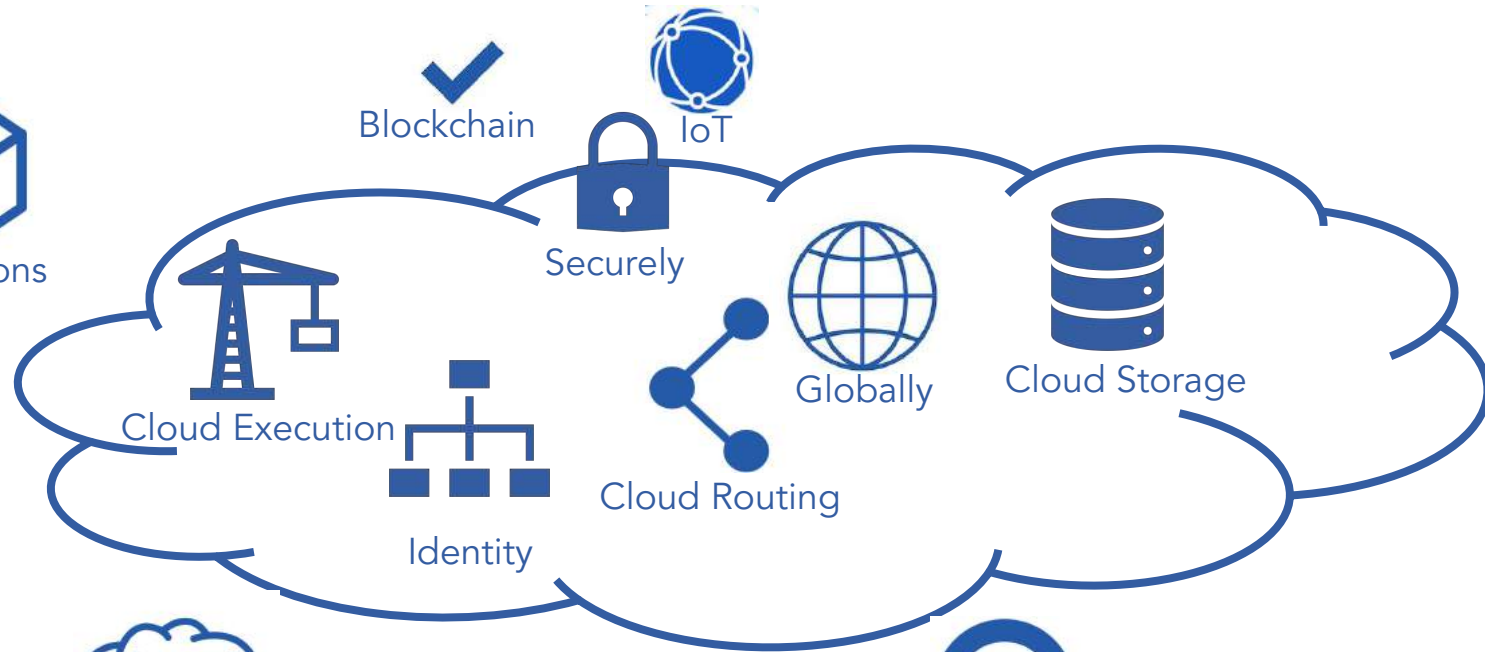# How We Can Help
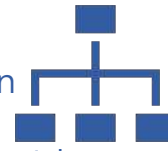
**OBJECT COMPUTING**
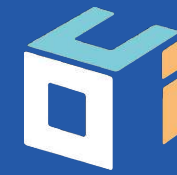RE!MAGINE TOGETHER

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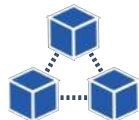
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