

R E S T
O **M**
A P **I**
C A L M
R
D E V O P S S
D **S** M A
C D **E** A M A Z O N
R L S E
V L T
C **I** F
D **C** L O U D L
G O O G L **E** X
C
K
E
R

Fabrice Clement

When the architect is waterfalling...

➤ *Just enough architecture*

➤ *Emergent architecture*

➤ *Sacrificial Architecture*

➤ *Who needs an architect ?*

➤ *Nobody at Google has the title of Architect*



devops

Terme de recherche

microservices

Terme de recherche

docker

Terme de recherche

+ Ajouter un terme

Évolution de l'intérêt pour cette recherche



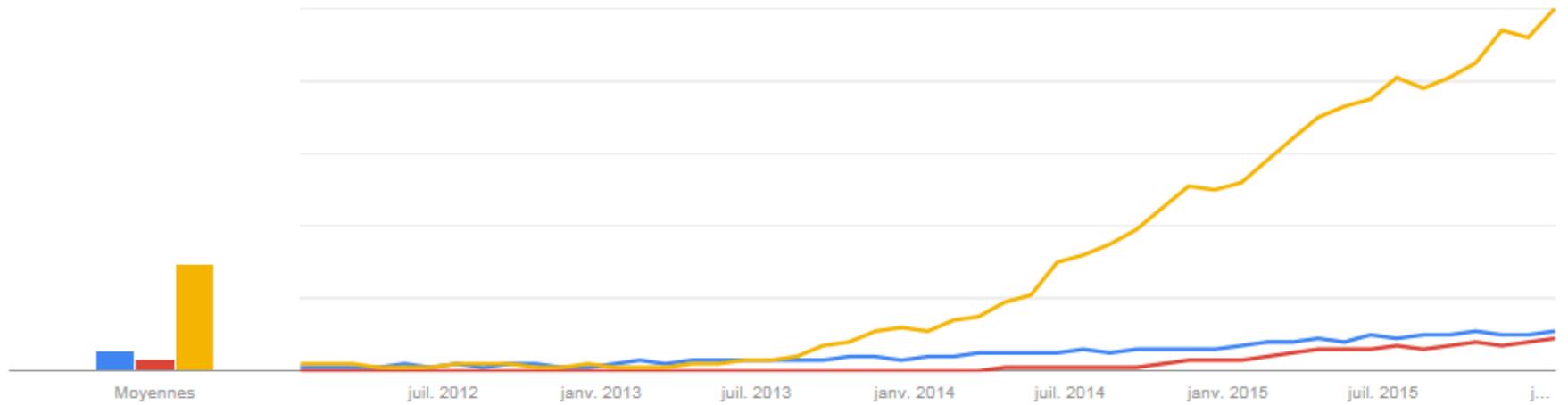
Comparer à la catégorie



Titres des actualités



Prévisions



“Systems tend to expand to fill the known universe” (1)



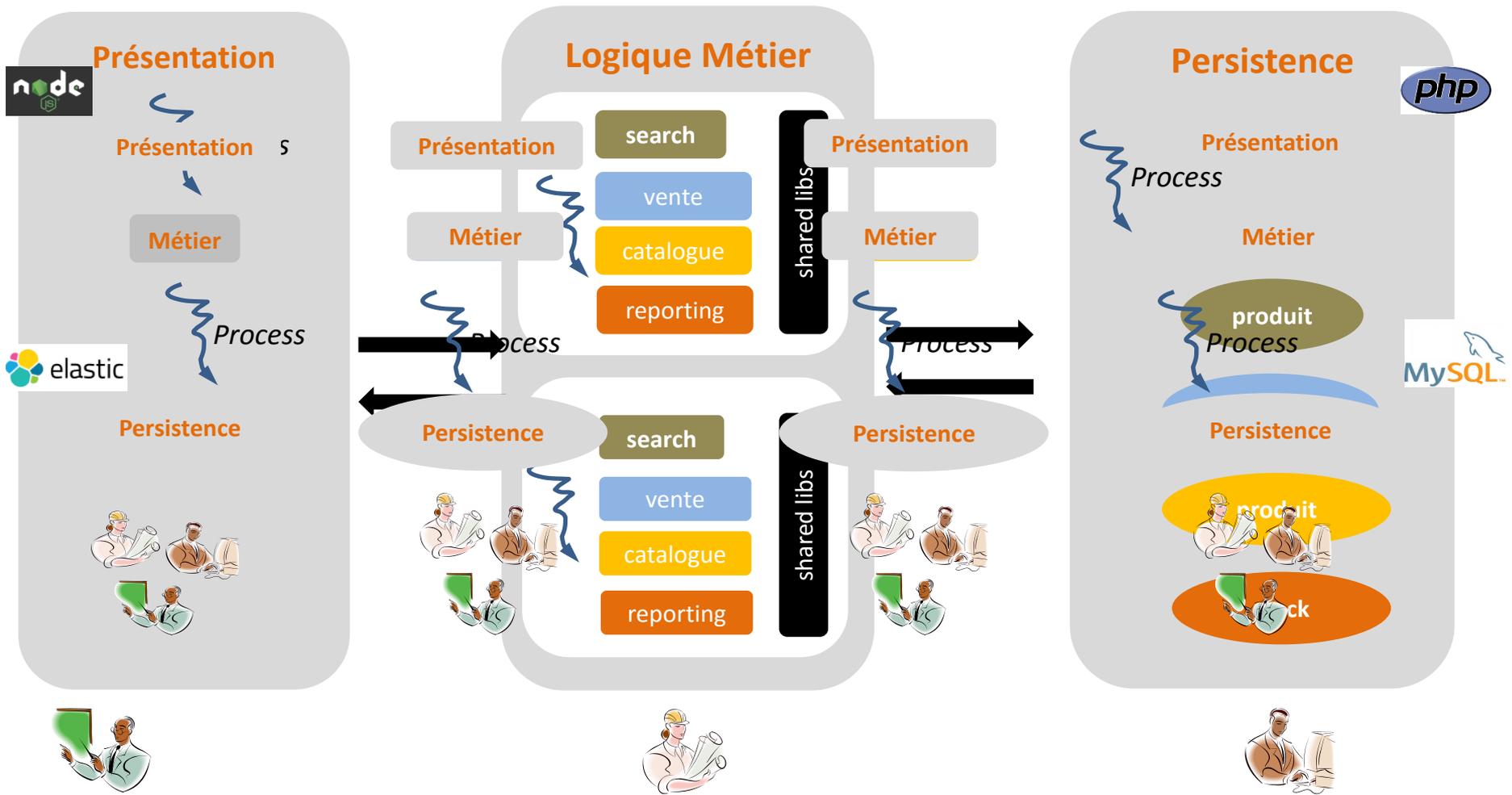
hello-world.tgz 200 Go

« Tout logiciel gagne des fonctionnalités

jusqu'à être capable de lire des mails.

***Ceux qui n'en sont pas capables sont remplacés par
d'autres qui le sont »(2)***

Architecture Microservices itérioritéaux Métier/ibusiness



Modèle (Granularité)	Drivers	Prérequis	Conséquences
<p>Monolithe (mono grained)</p>	<p>Performance Vision produit v1</p>	<p>Mono techno Charge compatible</p>	<p>Intégration simple Résilience = Robustesse Simplicité opérationnelle Concurrence simple</p>
SOA (coarse grained)			
<p>Microservices (Fine Grained)</p>	<p>PolyTechnos Evolutions autonomes Vision service Scaling (online) users</p>	<p>Maitrise des systèmes distribués Modularité fonctionnelle</p>	<p>Complexité opérationnelle Intégration / Test plus complexe Résilience = Anti-Fragile</p>

DDD is SOLID

sens de la dépendance

Dependency Inversion

Open

Closed

concepts profonds, spécificités

bounded context

détails

RH

Personne (employé), salaires, service...

Règles, invariants

```
Employé  
payer() { } // virtuel  
verserSalaire() { payer() }
```

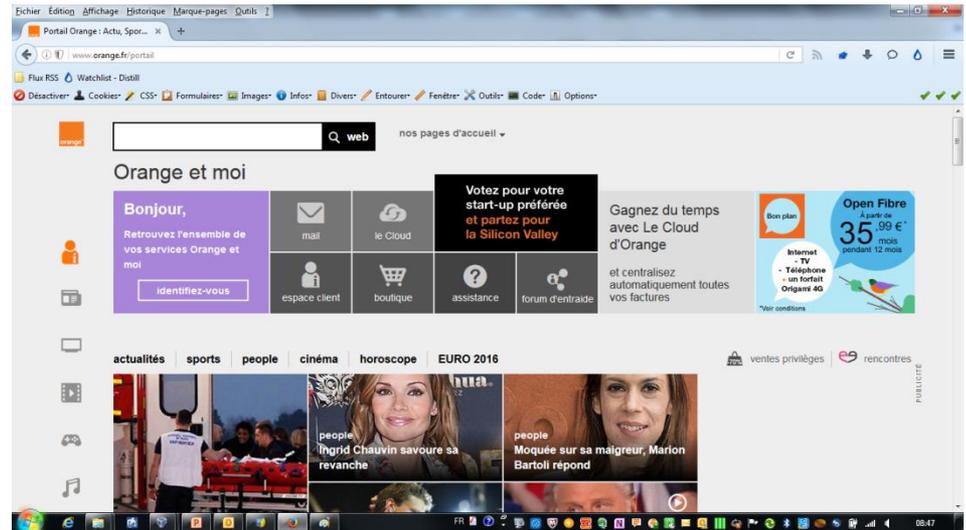
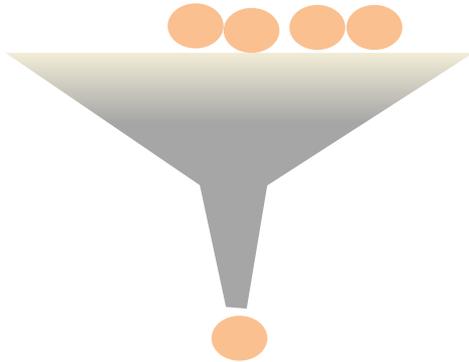
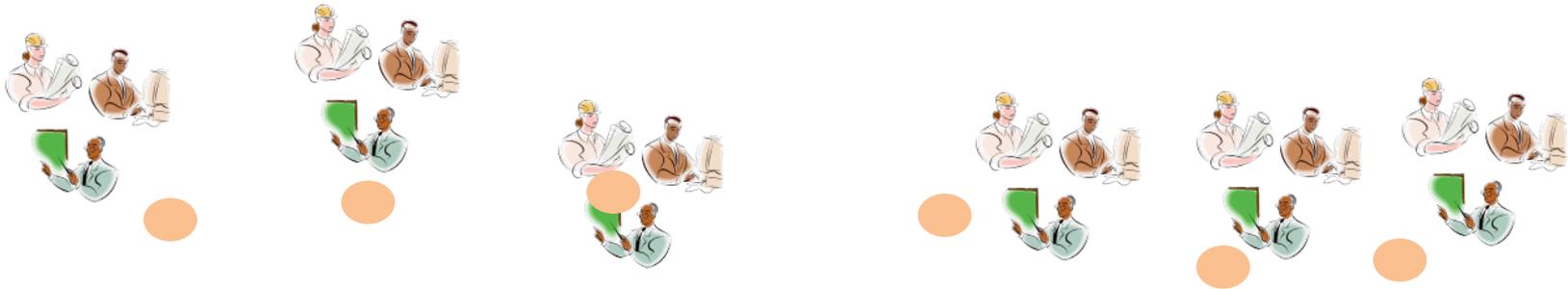
```
Manager  
payer() { virementAmex() }
```

```
DevOps  
payer() { virementBitCoin() }
```

```
jean.verserSalaire()  
pierre.verserSalaire()
```

Vente
Personne (client)
service

Parallèle « changes »



Consistency Analysis in Bloom: a CALM and Collected Approach

Peter Alvaro

Neil Conway
William R. Marczak

Joseph M. Hellerstein

ABSTRACT

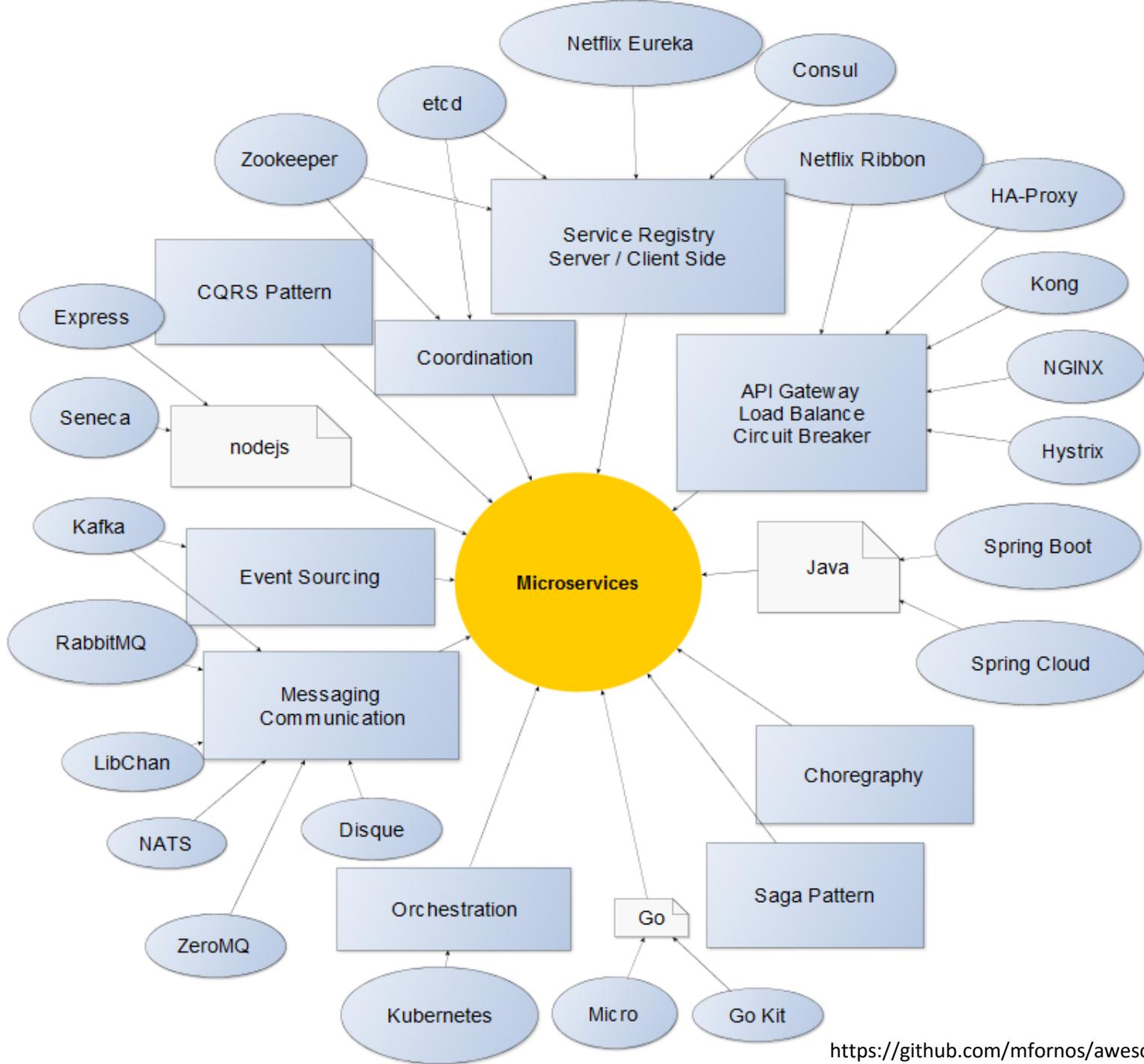
Distributed programming has become a topic of widespread interest, and many programmers now wrestle with tradeoffs between data

shield programmers from much of the complexity of distributed programming. However, there is a widespread belief that the costs of these mechanisms are too high in many important scenarios where

2. CONSISTENCY AND LOGICAL MONOTONICITY (CALM)

In this section we present a strong connection between distributed consistency and logical monotonicity. This discussion informs the language and analysis tools we develop in subsequent sections.

A key problem in distributed programming is reasoning about con-



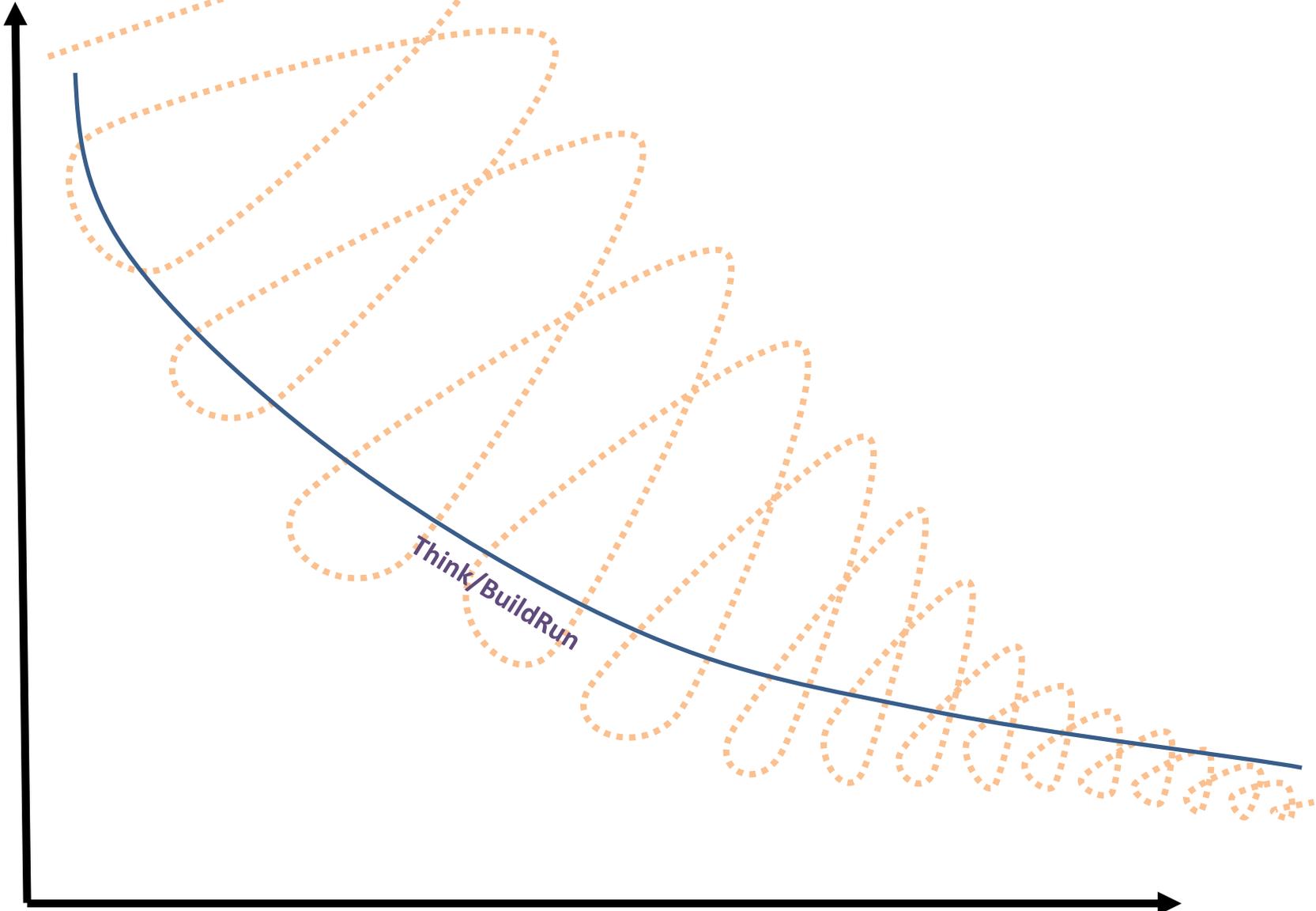
```
package main
```

```
import (  
    "fmt"  
    "net/http"  
)
```

```
func handler(w http.ResponseWriter, r *http.Request) {  
    fmt.Printf(w, « Go microservice online »)  
}
```

```
func main() {  
    http.HandleFunc("/", handler)  
    http.ListenAndServe(":8080", nil)  
}
```

hard to change



incertitude

déterminisme

Think/BuildRun

