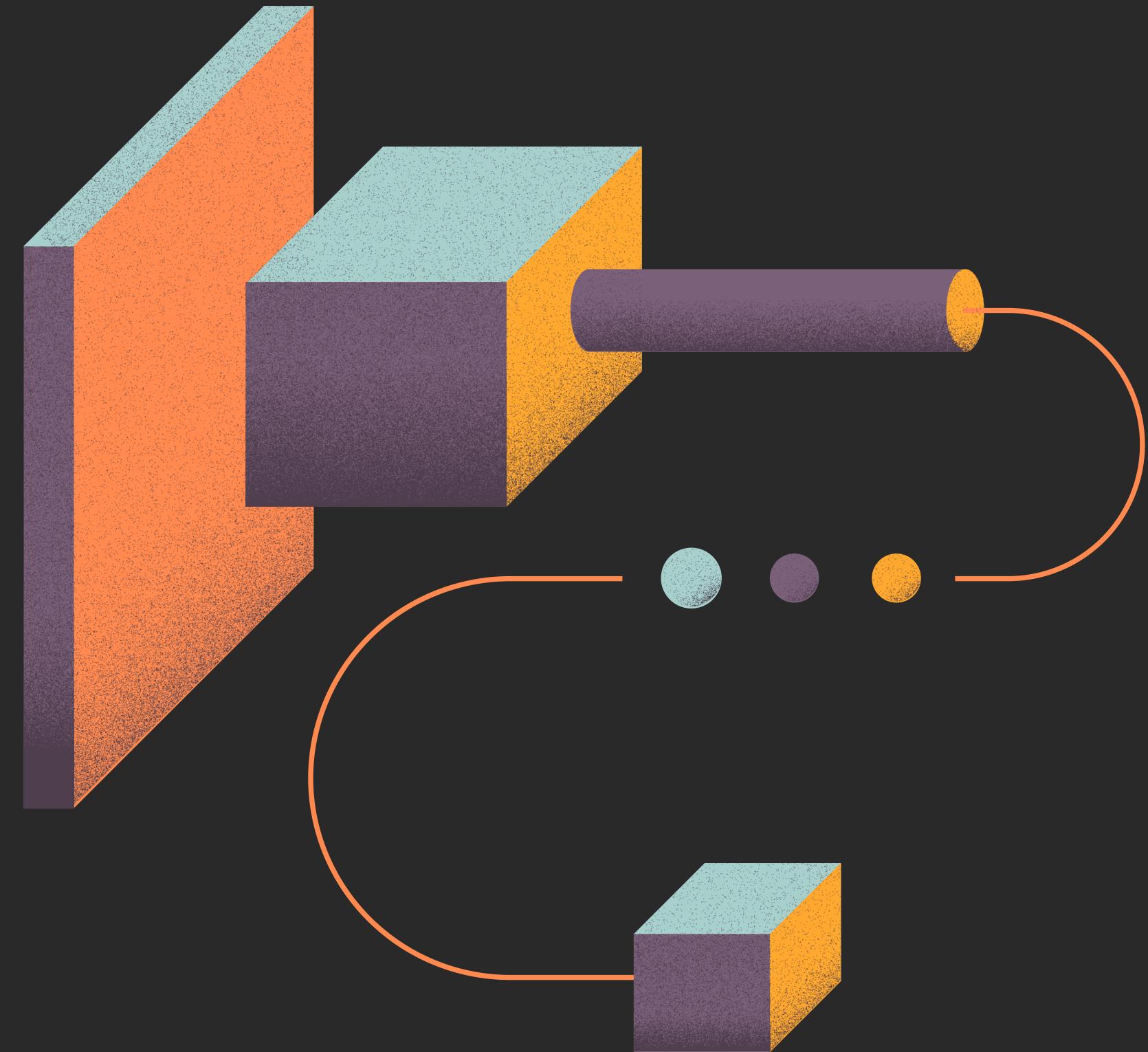


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# 4 CONCEITOS DE ARQUITETURA PARA SE TORNAR UM DESENVOLVEDOR EFICAZ

e crescer na sua carreira!

**Yugo Sakamoto**



O QUE É  
ARQUITETURA DE  
SOFTWARE?

# O QUE É ARQUITETURA DE SOFTWARE?

design

Editor: Martin Fowler ■ ThoughtWorks ■ [fowler@acm.org](mailto:fowler@acm.org)

## Who Needs an Architect?

Martin Fowler

**W**andering down our corridor a while ago, I saw my colleague Dave Rice in a particularly grumpy mood. My brief question caused a violent statement, "We shouldn't interview anyone who has 'architect' on his resume." At first blush, this was an odd turn of phrase, because we usually introduce Dave as one of our leading architects.

The reason for his title schizophrenia is the fact that, even by our industry's standards, "architect" and "architecture" are terribly overloaded words. For many, the term "software architect" fits perfectly with the smug controlling image at the end of *Matrix Reloaded*. Yet even in firms that have the greatest contempt for that image, there's a vital role for the technical leadership that an architect such as Dave plays.

**What is architecture?**

When I was fretting over the title for *Patterns of Enterprise Application Architecture*

chitect.) However, as so often occurs, inside the blighted cynicism is a pinch of truth. Understanding came to me after reading a posting from Ralph Johnson on the Extreme Programming mailing list. It's so good I'll quote it all.

A previous posting said

The RUP, working off the IEEE definition, defines architecture as "the highest level concept of a system in its environment. The architecture of a software system (at a given point in time) is its organization or structure of significant components interacting through interfaces, those components being composed of successively smaller components and interfaces."

Johnson responded:

I was a reviewer on the IEEE standard that used that, and I argued uselessly that this was clearly a completely bogus definition. There is no highest level concept of a system. Customers have a different concept than developers. Customers do not care at all about the structure of significant components. So, perhaps an architecture is the

<https://martinfowler.com/ieeeSoftware/whoNeedsArchitect.pdf>

# O QUE É ARQUITETURA DE SOFTWARE?

**A compreensão compartilhada  
sobre o design do sistema, com  
os componentes e interfaces  
que são conhecidos por todos os  
desenvolvedores**

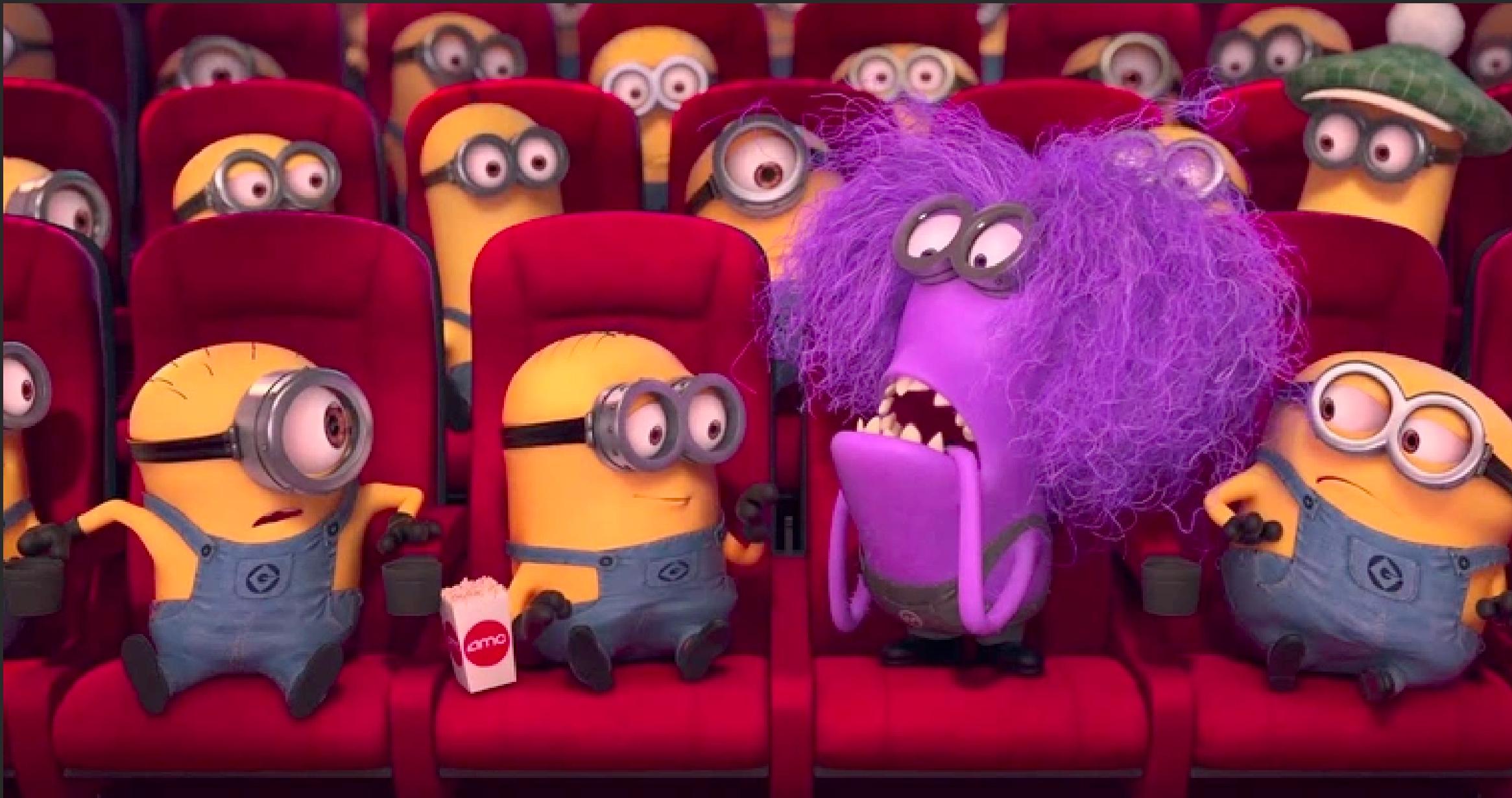
**ALTA COESÃO,  
BAIXO ACOPLAGAMENTO**

**COESÃO**

**O grau de relacionamento entre os conteúdos internos de um módulo.**

**Larry Constantine**  
**(tradução livre)**

# COESÃO



# ACOPLAMENTO

O grau de dependência de um módulo em relação a outros módulos.

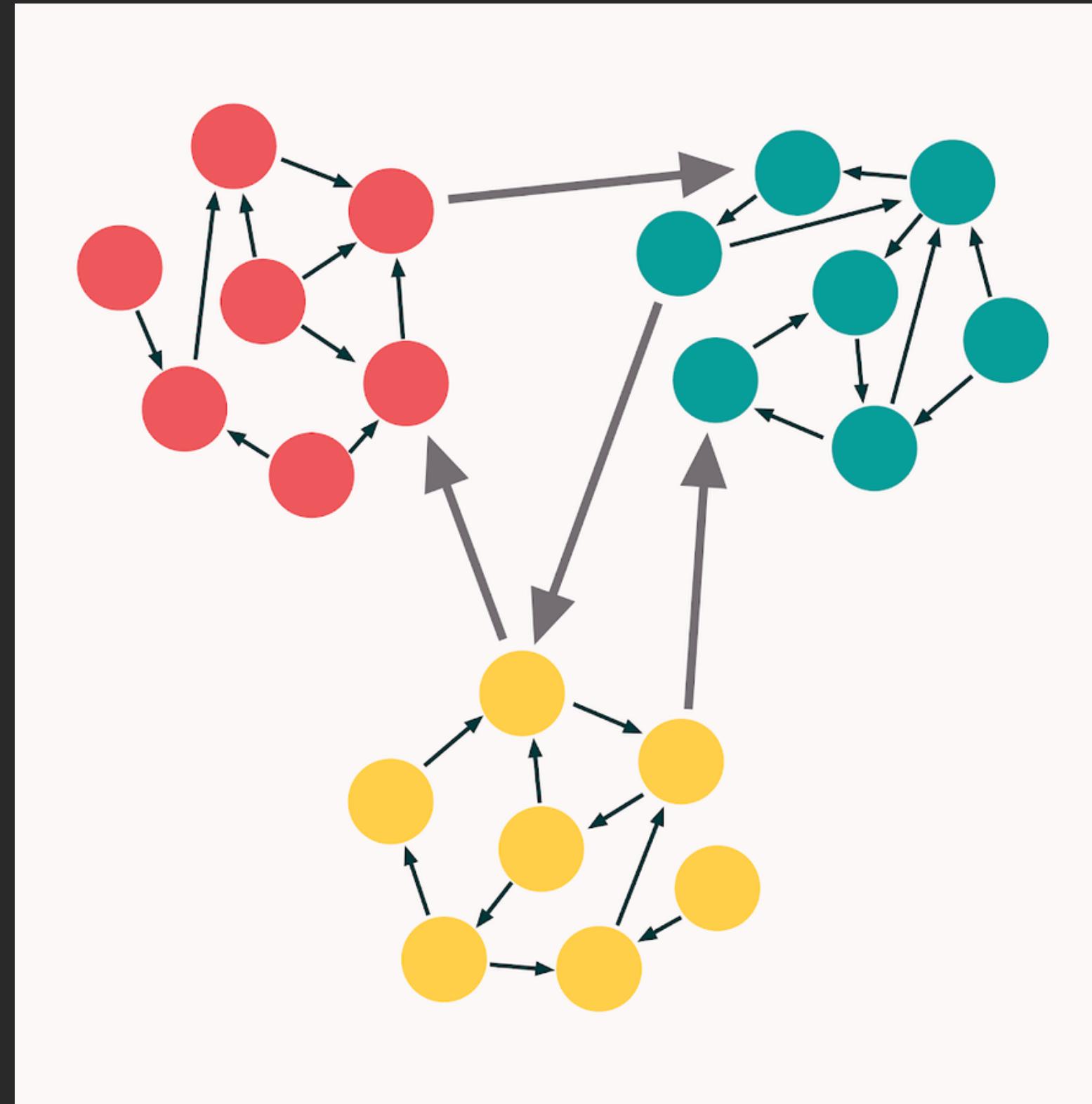
Larry Constantine

(tradução livre)

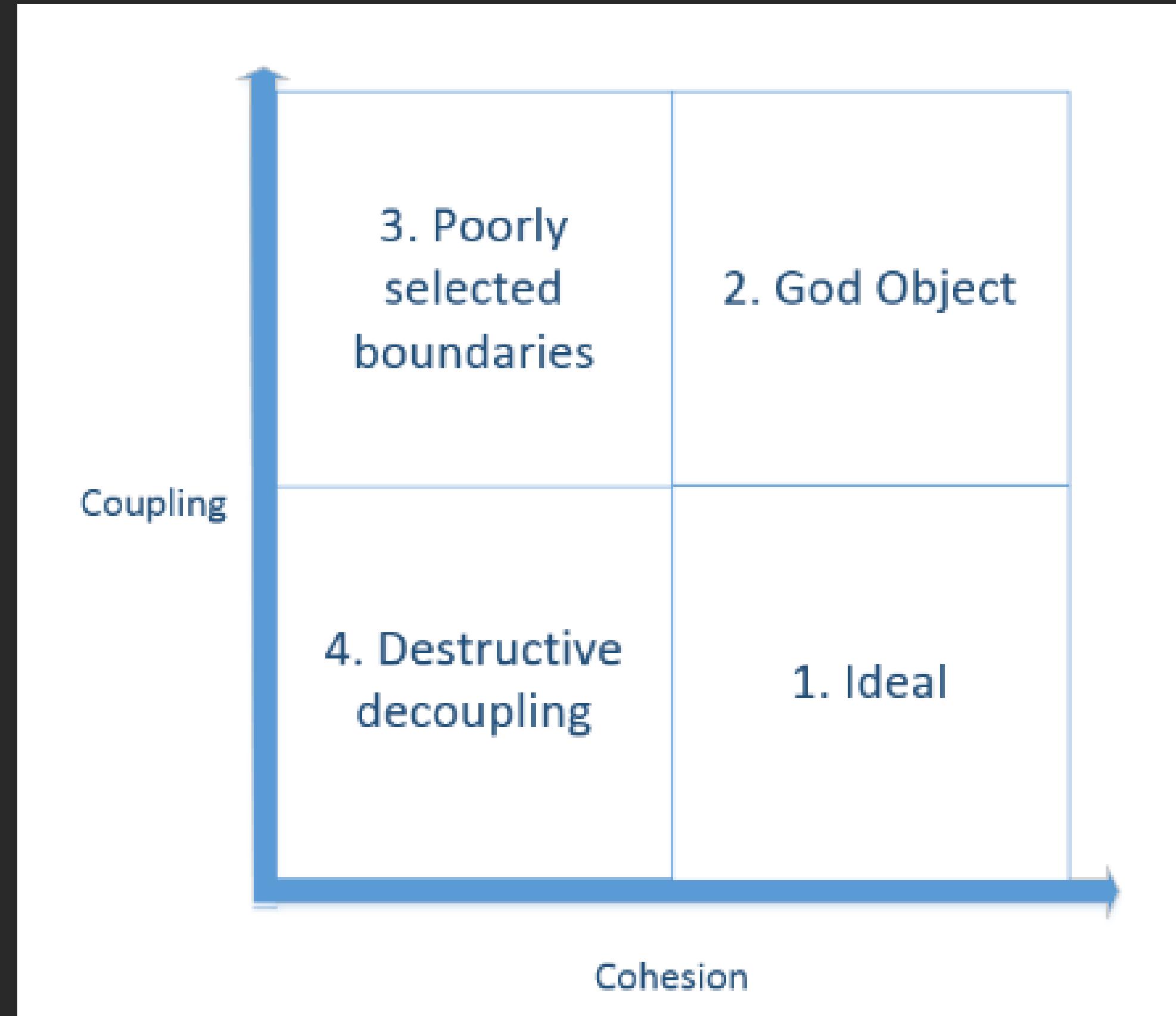
# ACOPLAMENTO



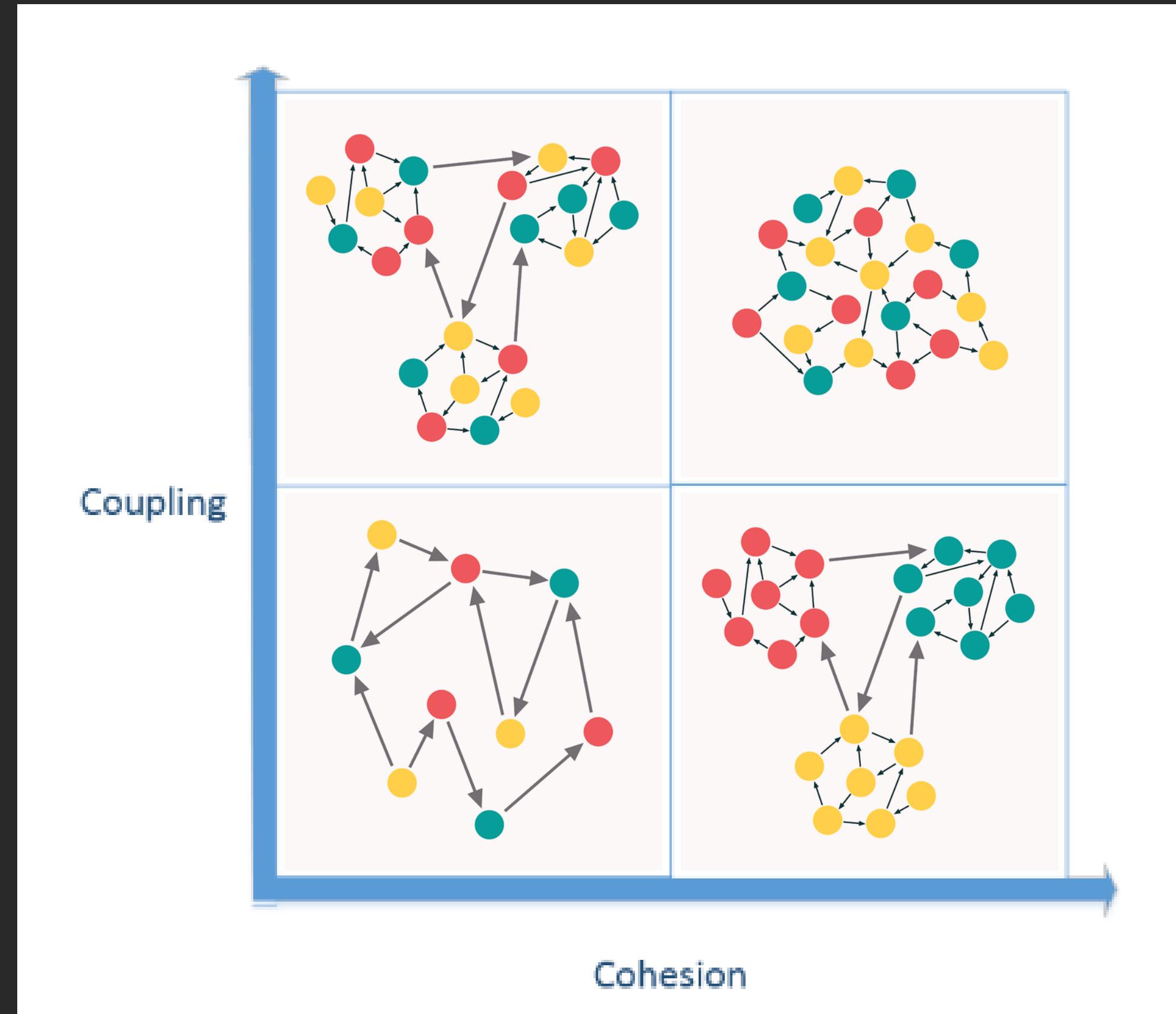
# ALTA COESÃO, BAIXO ACOPLAGEMTO



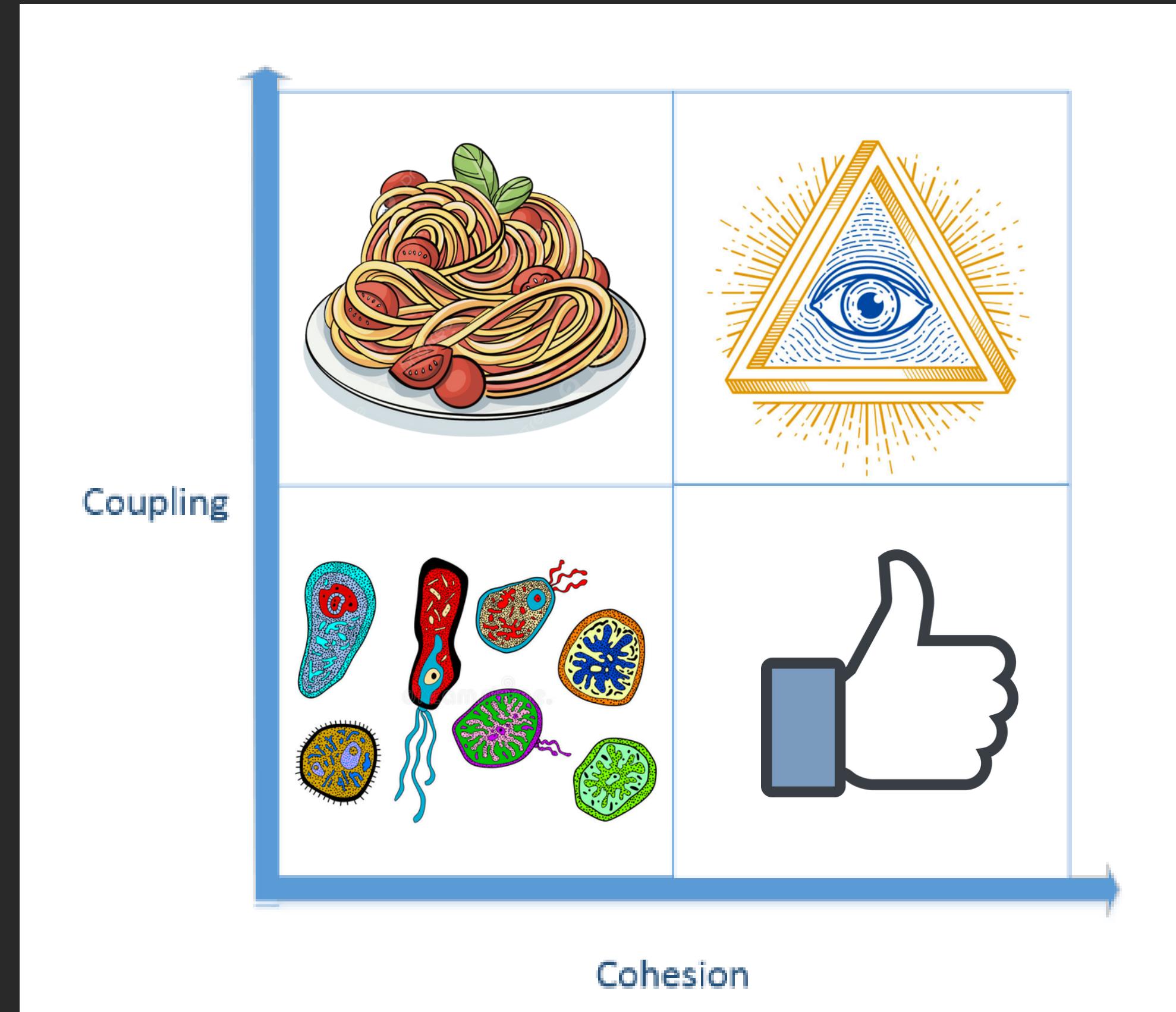
# ALTA COESÃO, BAIXO ACOPLAMENTO



# ALTA COESÃO, BAIXO ACOPLAGEMTO



# ALTA COESÃO, BAIXO ACOPLAGEMTO



NÃO EXISTE  
BALA DE PRATA

# NÃO EXISTE BALA DE PRATA



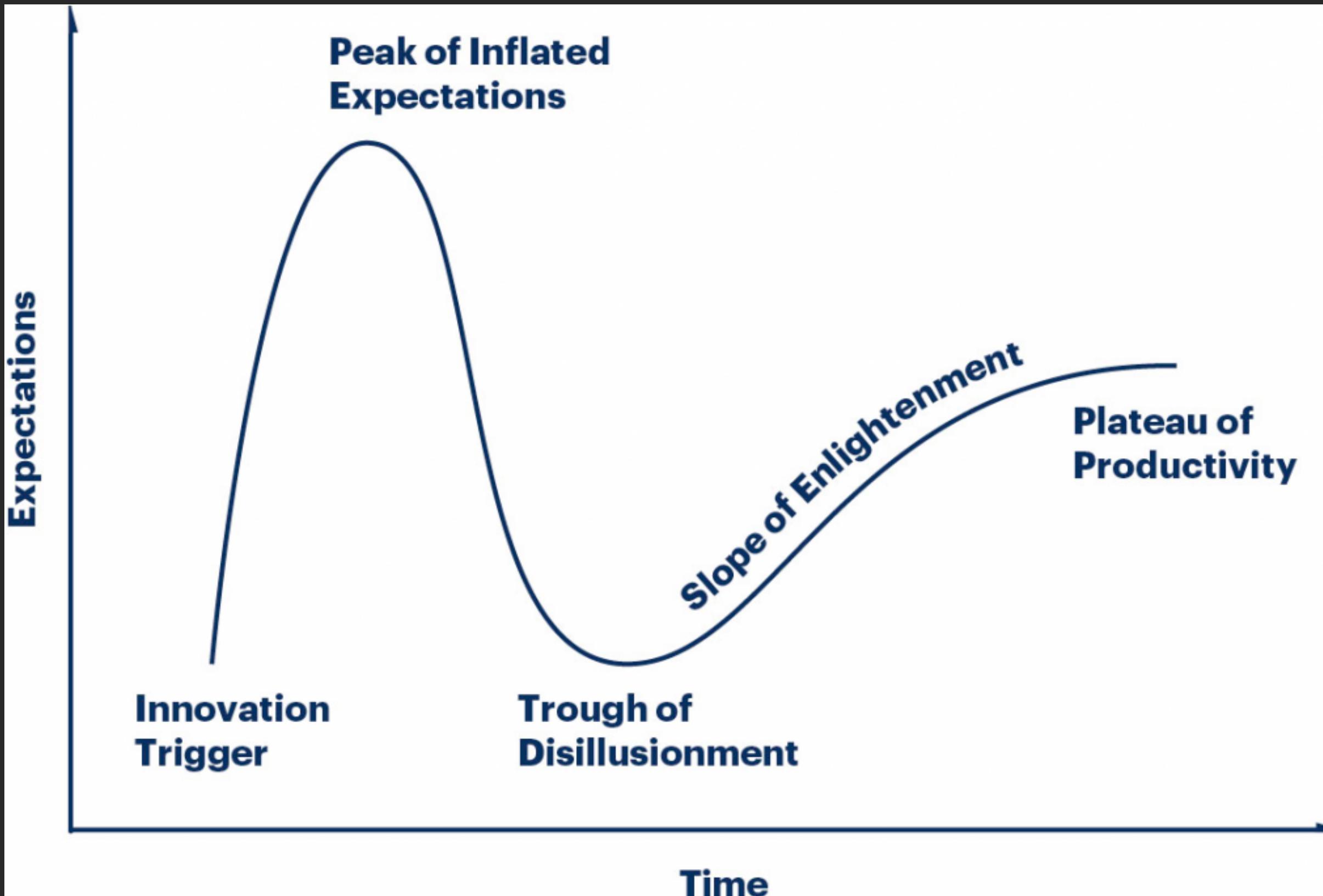
# NÃO EXISTE BALA DE PRATA

**Não existe um único avanço [...] que por si só prometa uma melhoria de uma ordem de grandeza na produtividade, na confiabilidade, na simplicidade.**

**Frederick P. Brooks**

(tradução livre)

# NÃO EXISTE BALA DE PRATA



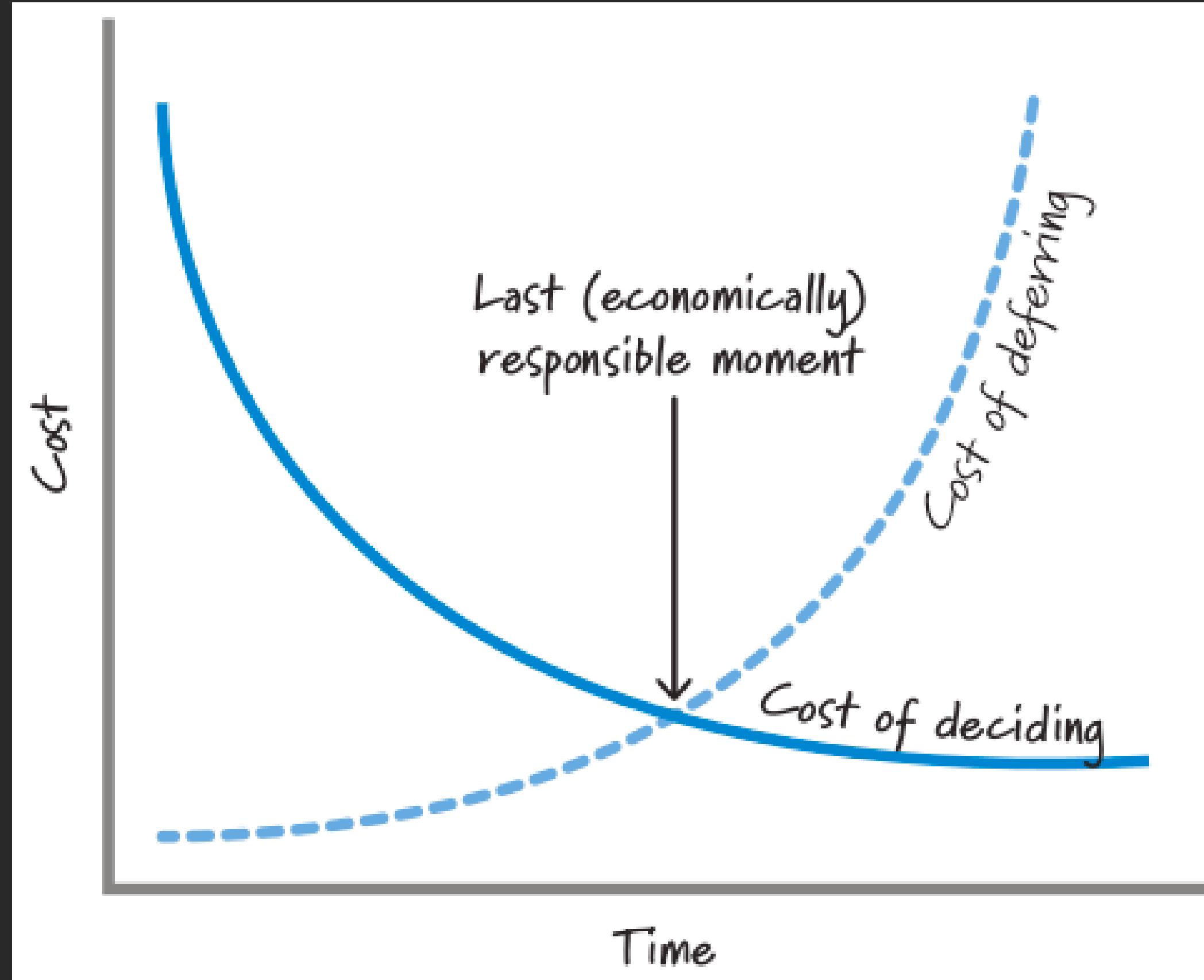
**ÚLTIMO MOMENTO DE  
RESPONSABILIDADE**

# ÚLTIMO MOMENTO DE RESPONSABILIDADE

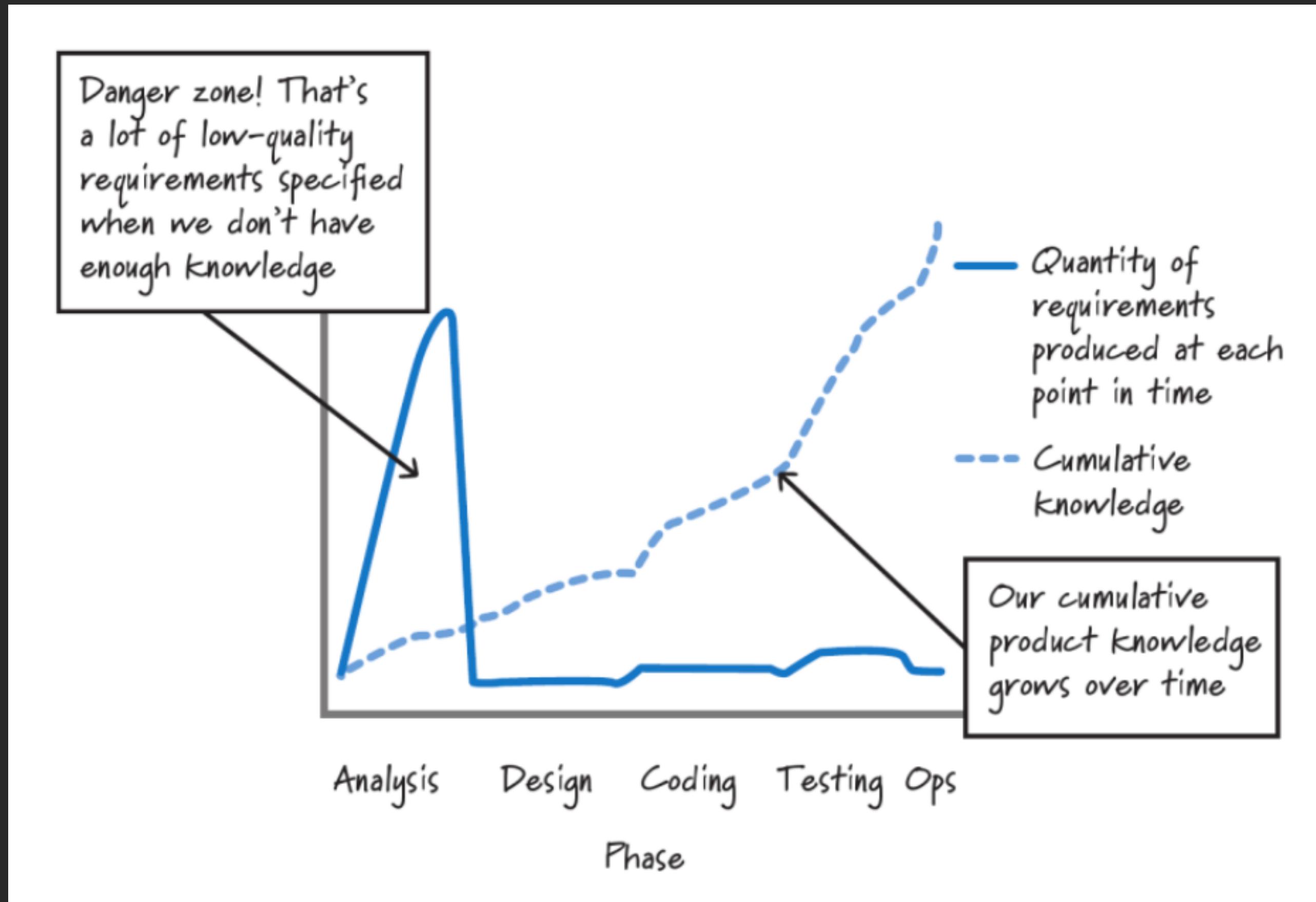
O instante em que o custo do atraso de  
uma decisão ultrapassa o benefício de  
postergar.

**leanconstruction.org**  
(tradução livre)

# ÚLTIMO MOMENTO DE RESPONSABILIDADE



# ÚLTIMO MOMENTO DE RESPONSABILIDADE



# A LEI DE CONWAY

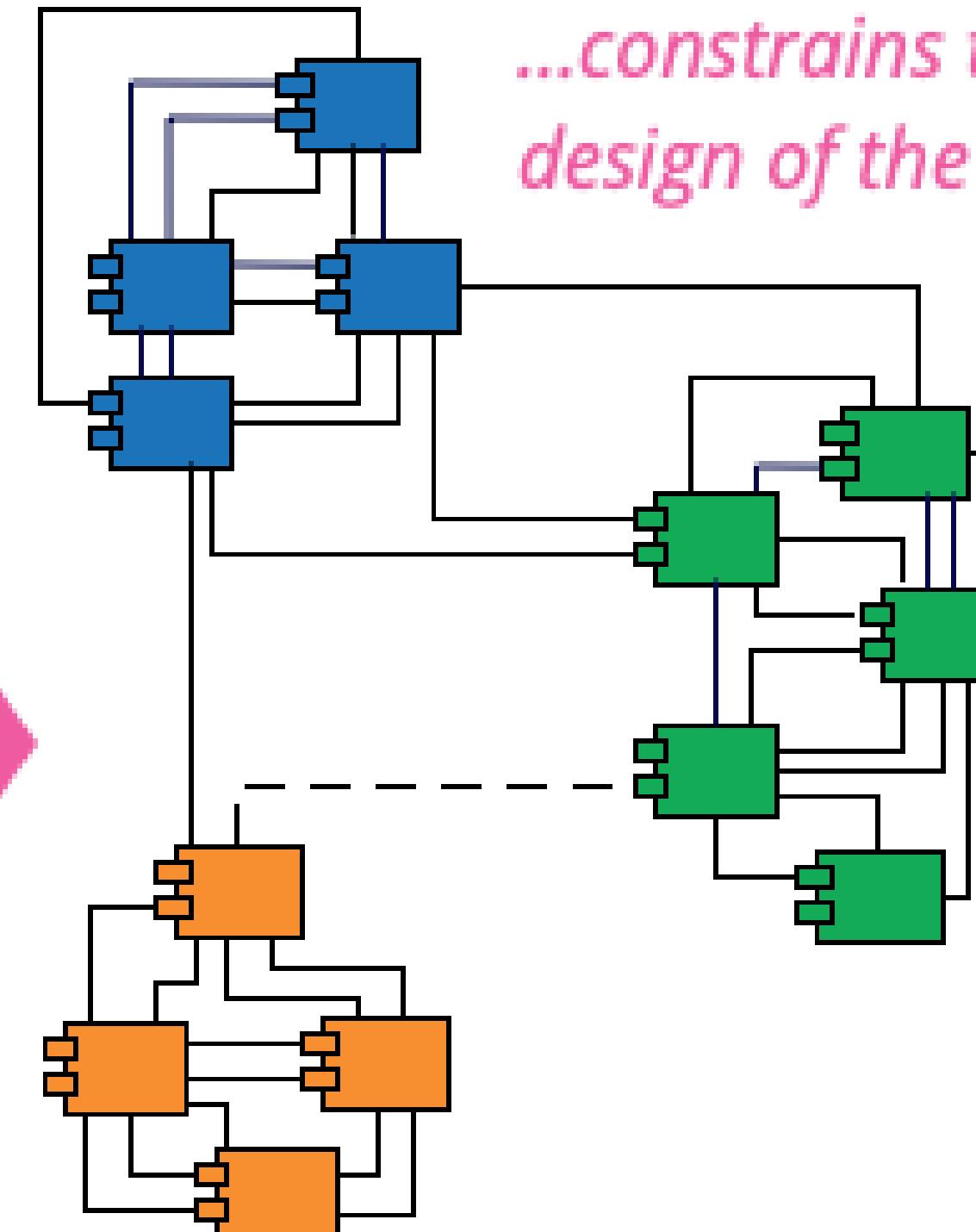
# A LEI DE CONWAY

**Qualquer organização que projeta um sistema,  
produzirá um design cuja estrutura é uma cópia  
da estrutura de comunicação da própria  
organização.**

**Melvin Conway**  
**(tradução livre)**

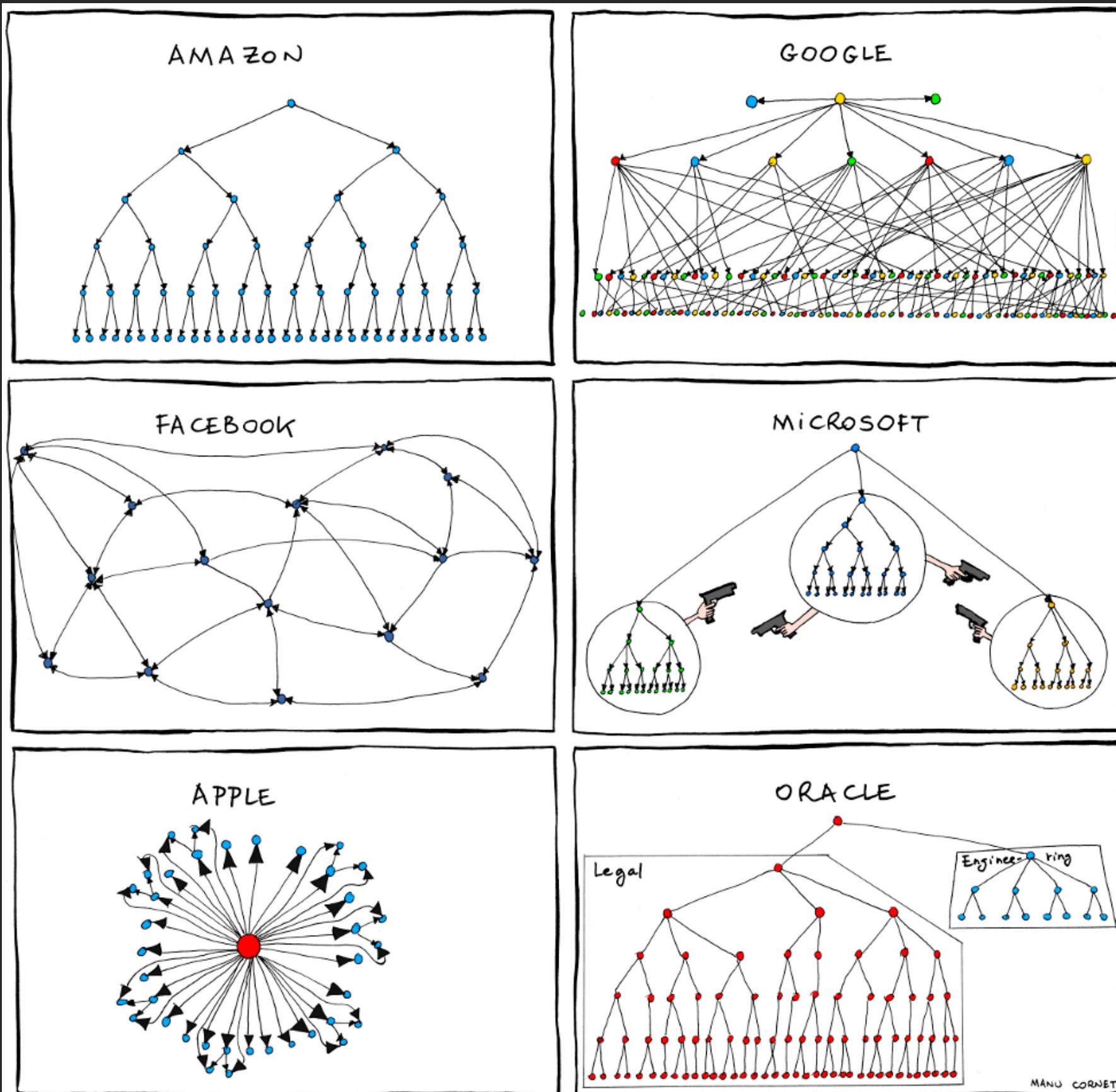
# A LEI DE CONWAY

*How the designers  
communicate...*



*...constrains the  
design of the system*

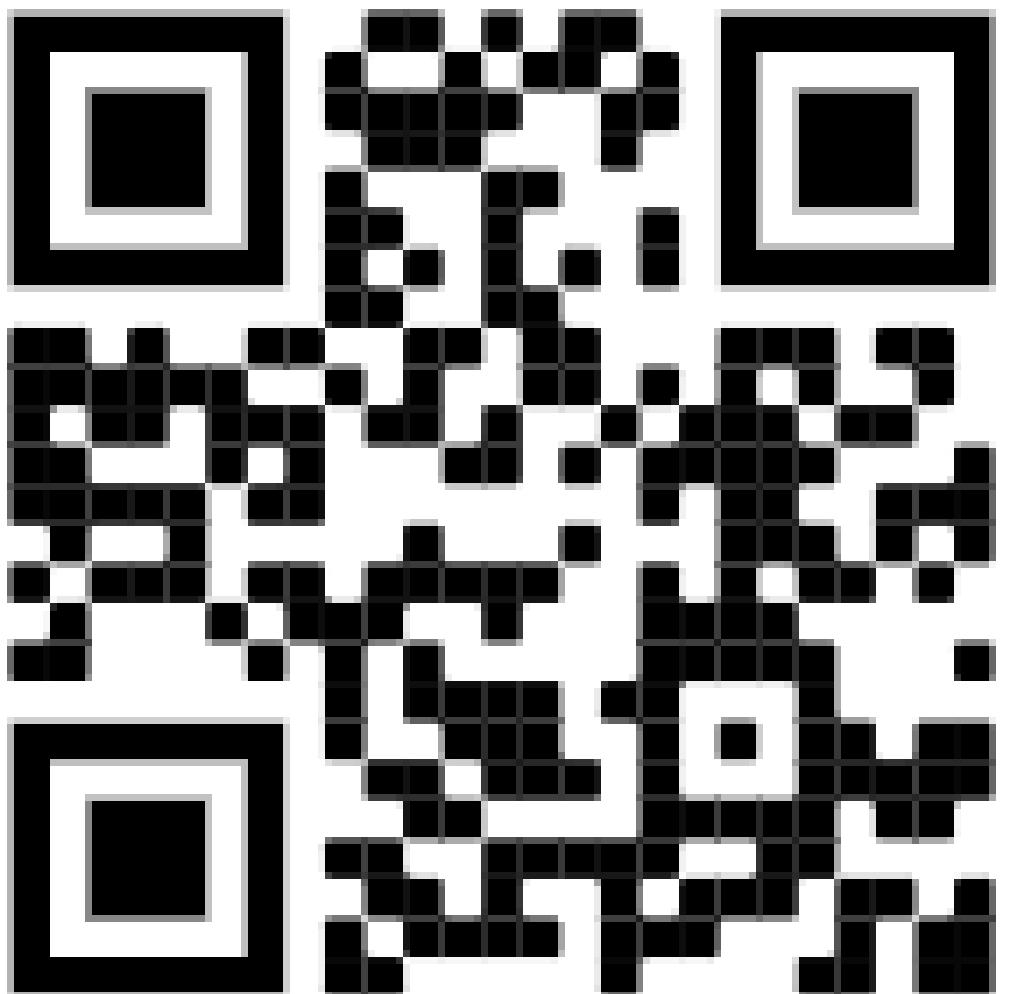
# A LEI DE CONWAY



# OBRIGADO!

**Quer saber mais sobre Arquitetura de Software?**

**Baixe meu E-book:**



<https://sendfox.com/yugoccp>

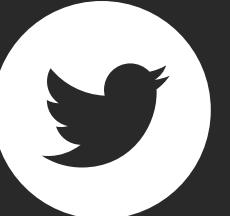


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