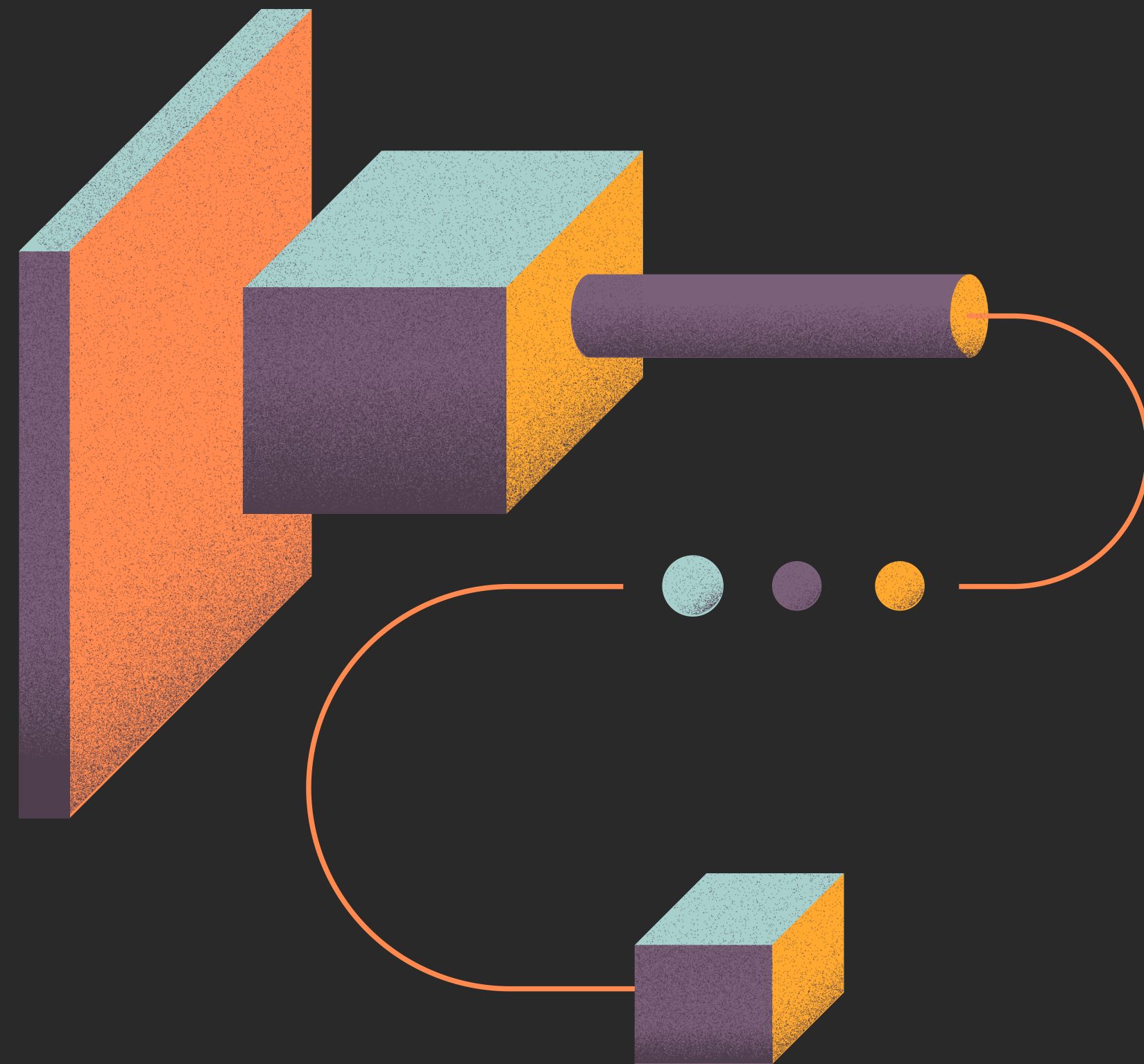




4 CONCEITOS DE ARQUITETURA PARA SE TORNAR UM DESENVOLVEDOR EFICAZ

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

Who Needs an Architect?

Martin Fowler

Wandering 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

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 ACOPLAMENTO

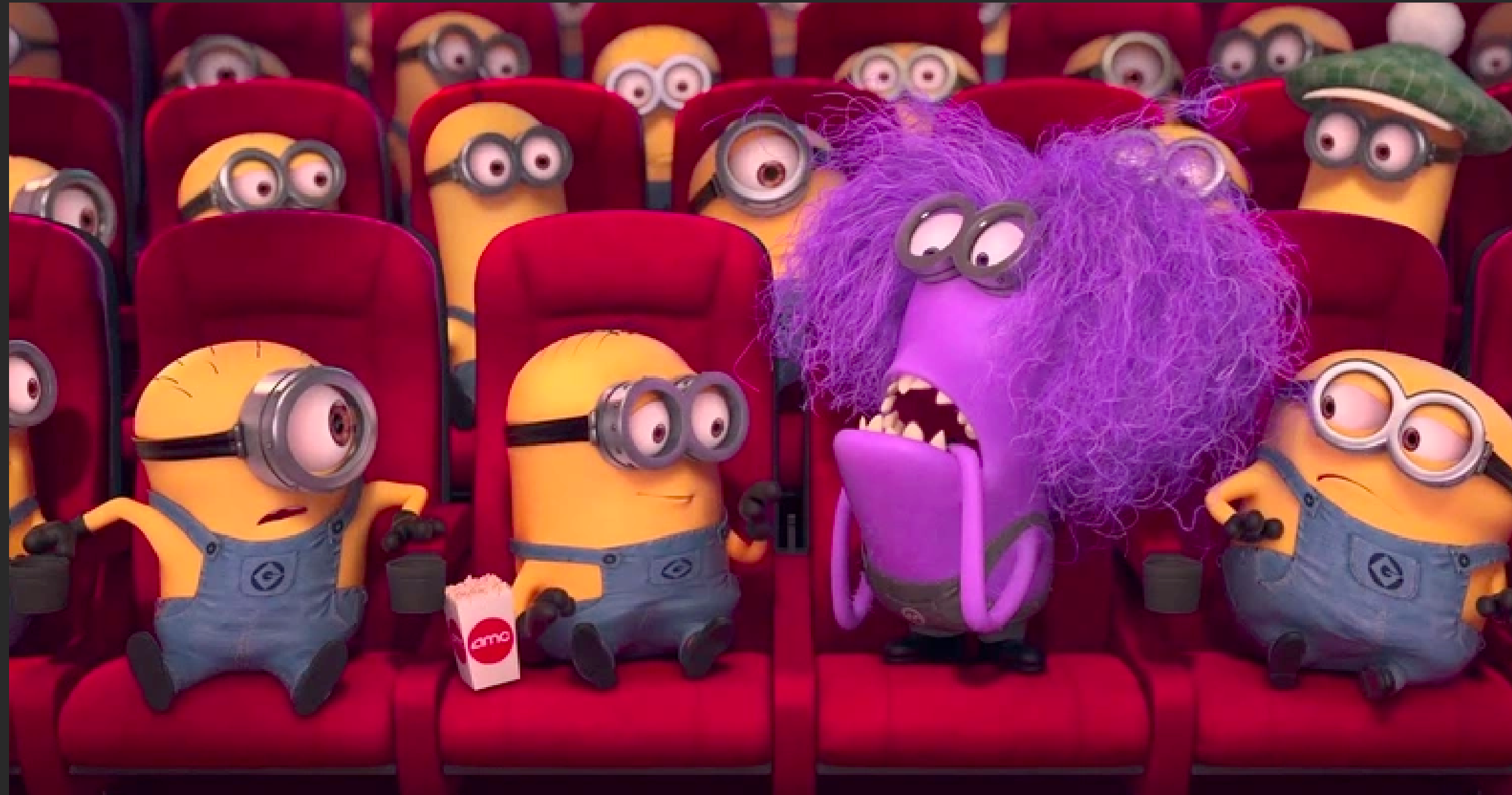
COESÃO

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.

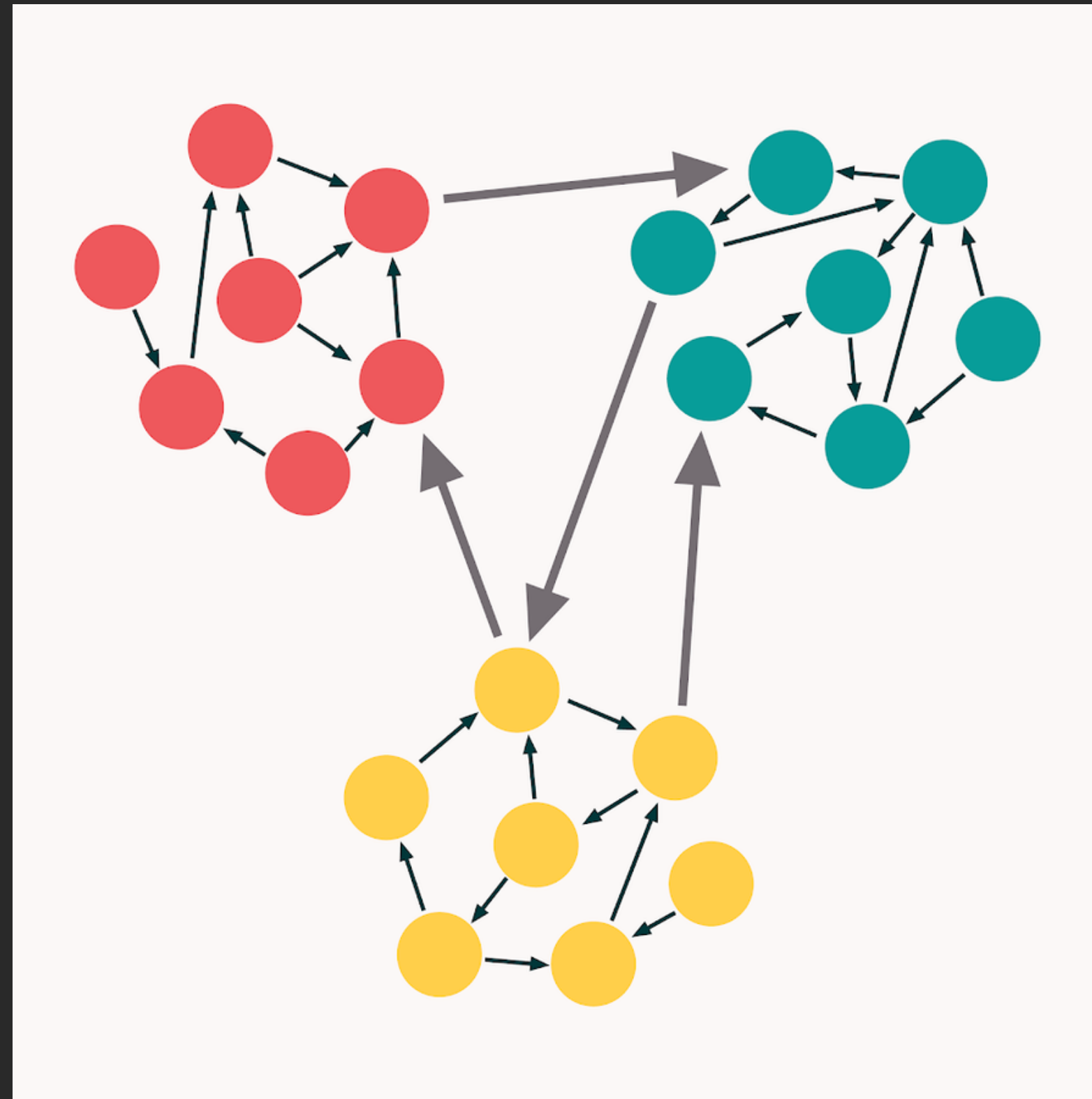
Larry Constantine

(tradução livre)

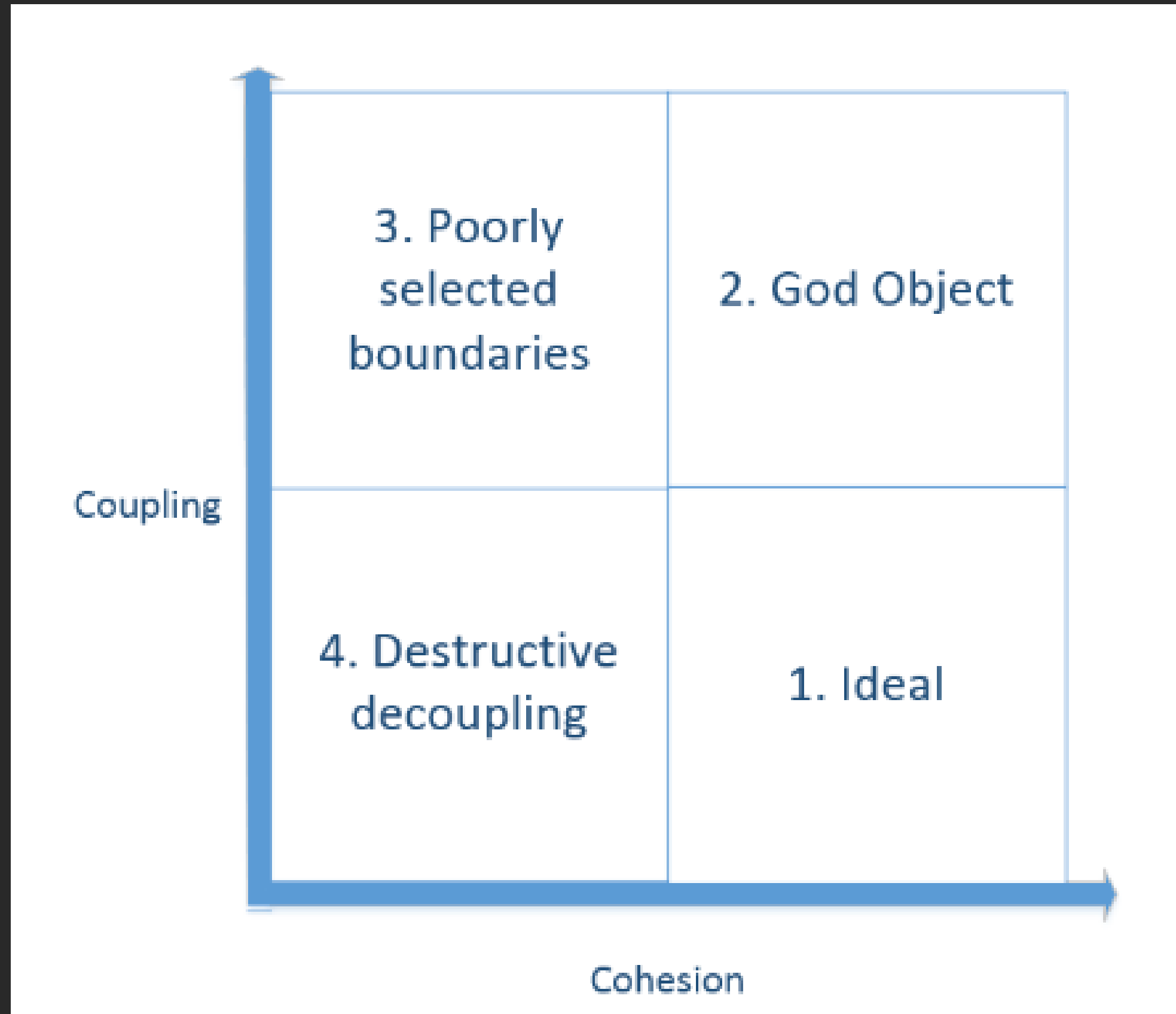
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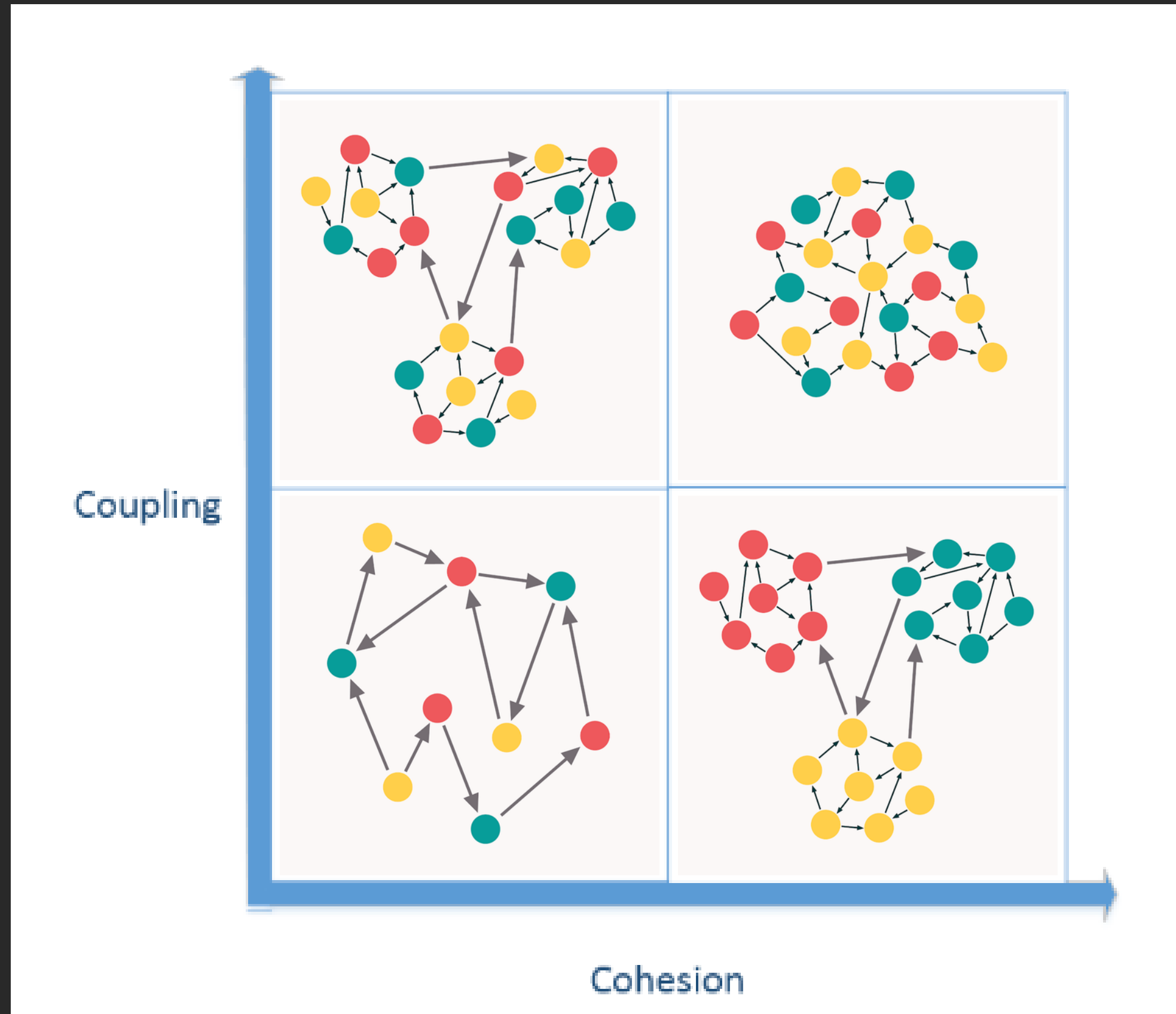
ALTA COESÃO, BAIXO ACOPLAMENTO



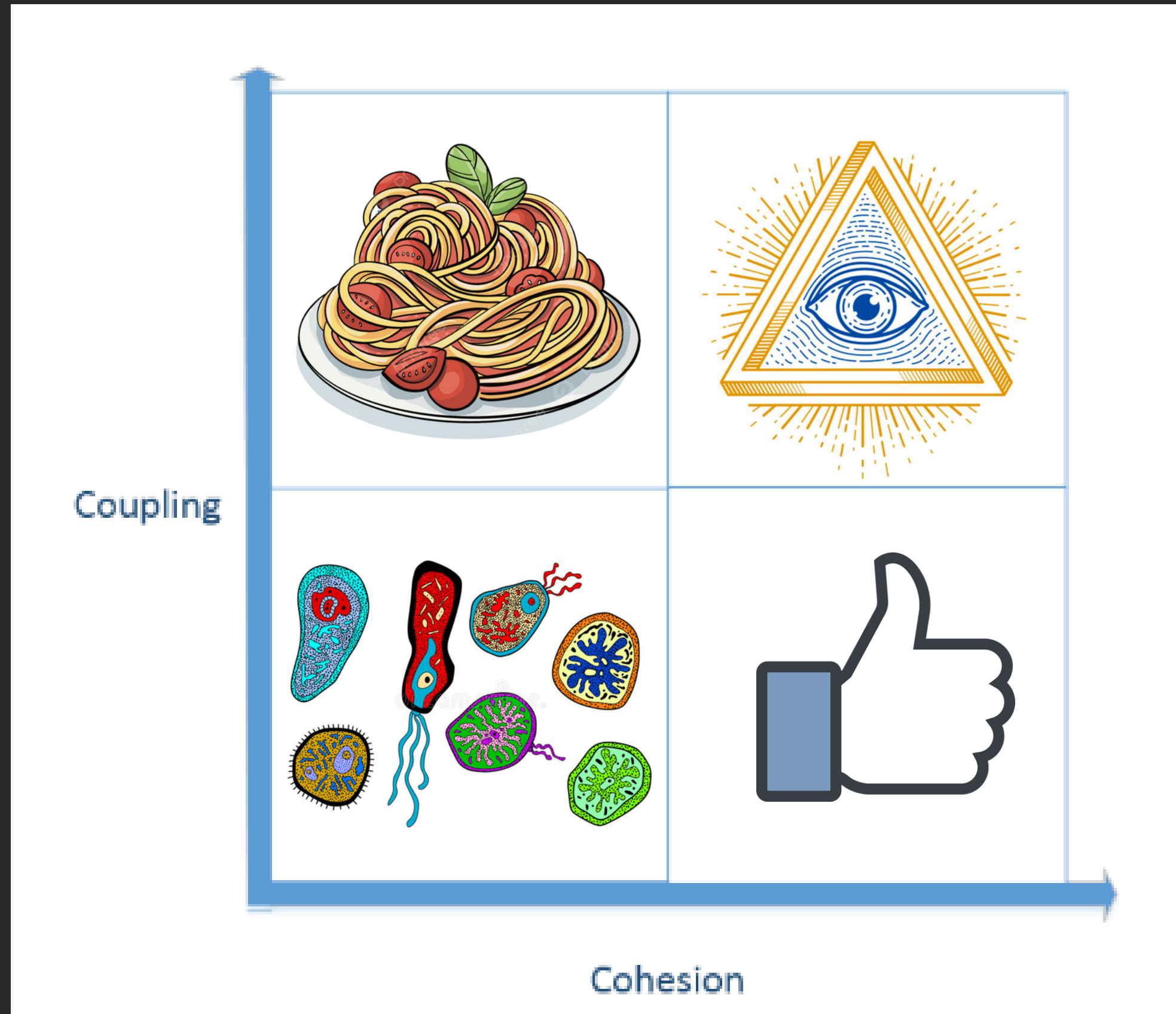
ALTA COESÃO, BAIXO ACOPLAMENTO



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ALTA COESÃO, BAIXO ACOPLAMENTO



NÃO EXISTE

BALA DE PRATA

NÃO EXISTE BALA DE PRATA



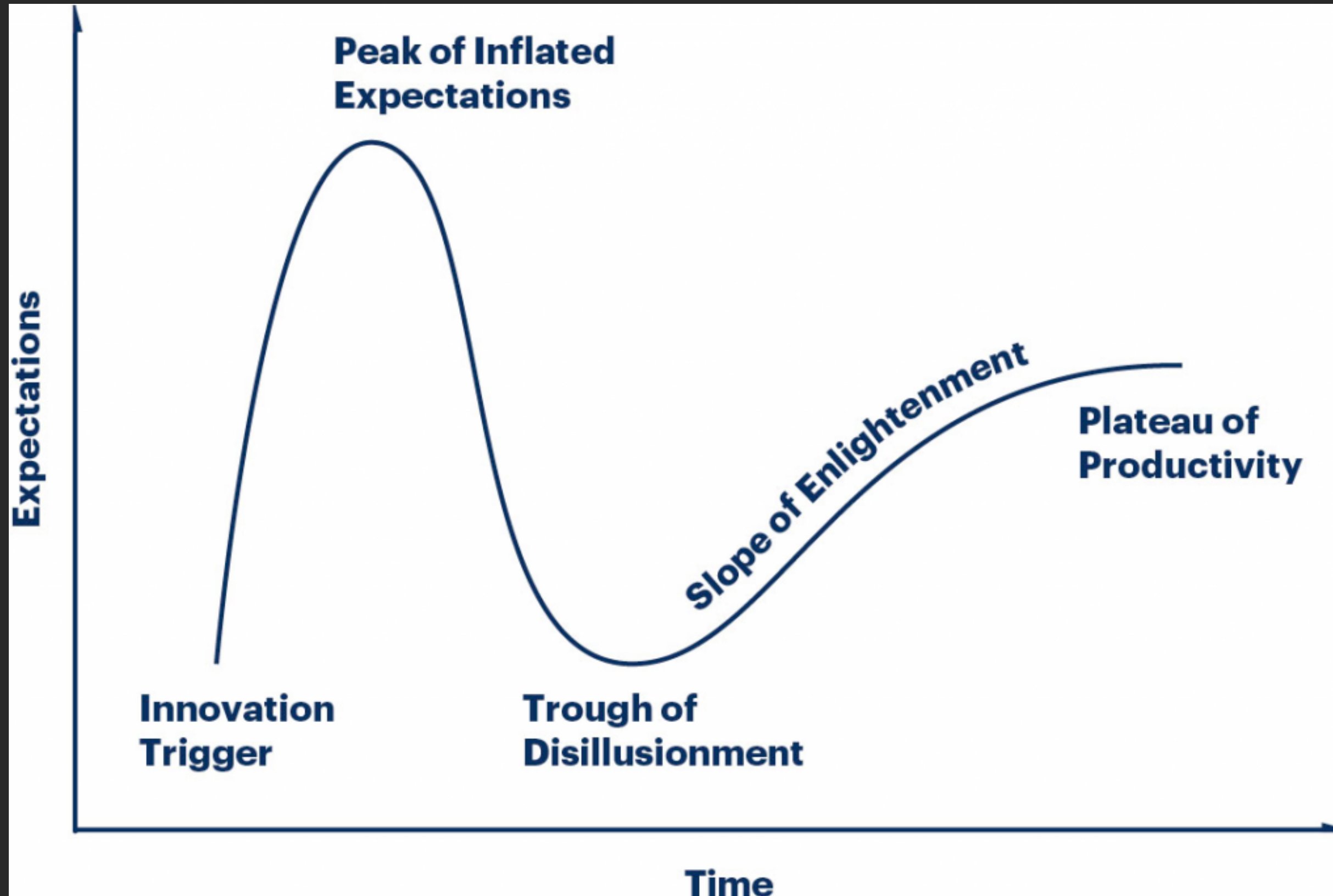
NÃO EXISTE BALA DE PRATA

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
RESPONSABILIDAD**

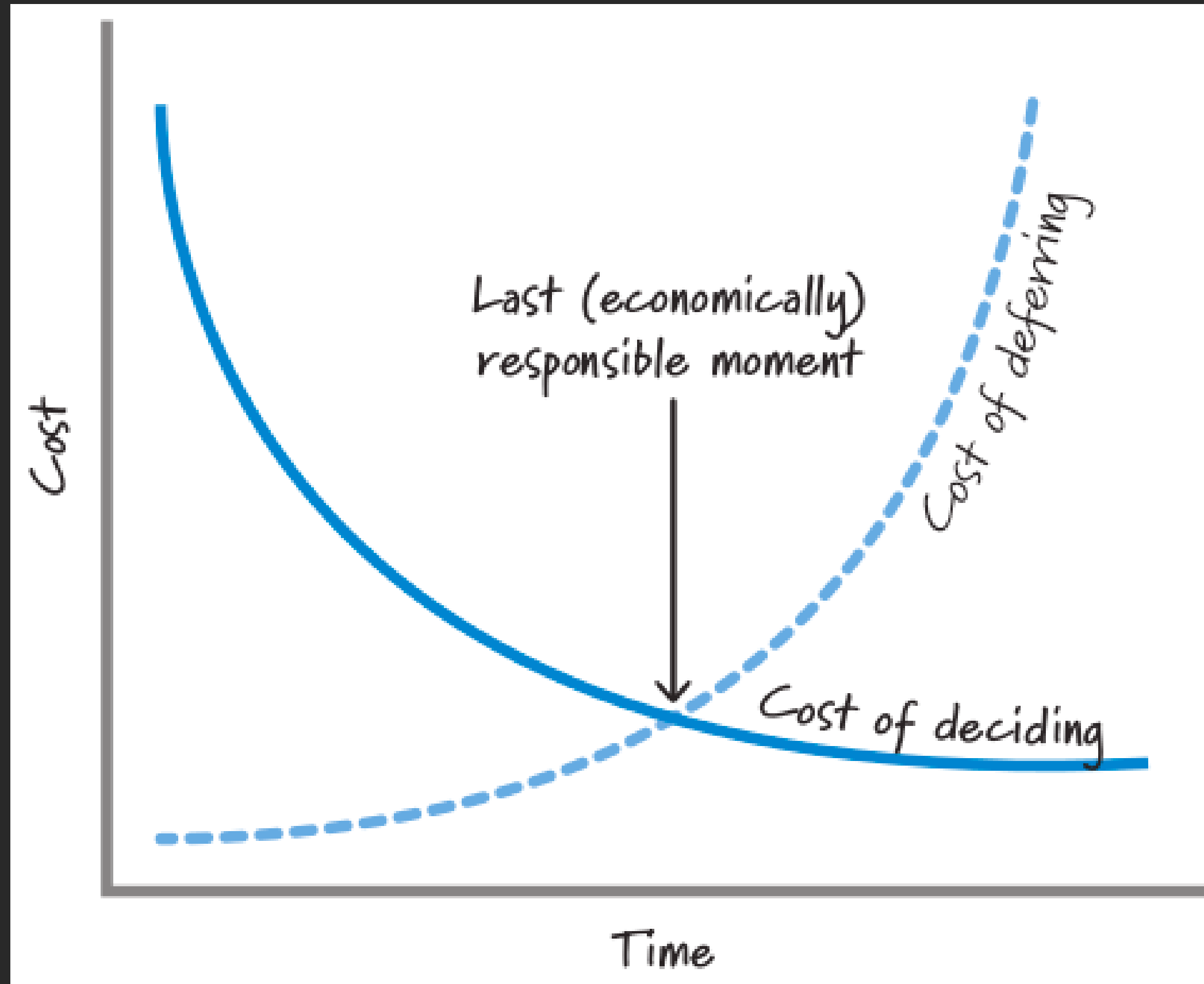
ÚLTIMO MOMENTO DE RESPONSABILIDADE

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

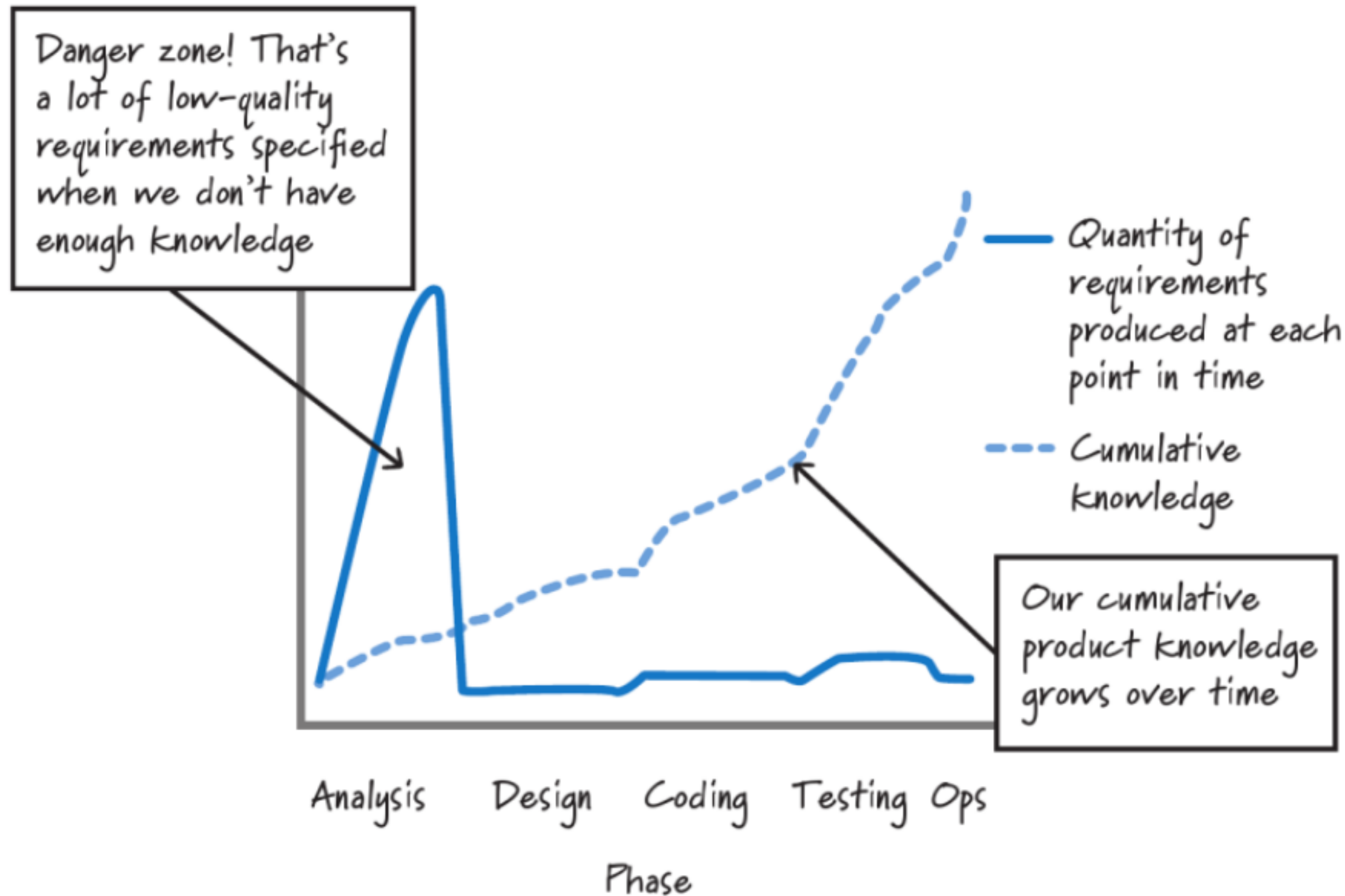
leanconstruction.org

(tradução livre)

ÚLTIMO MOMENTO DE RESPONSABILIDADE



ÚLTIMO MOMENTO DE RESPONSABILIDADE



A LEI DE CONWAY

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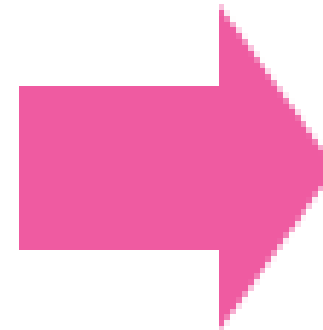
Qualquer organização que projeta um sistema, produzirá um design cuja estrutura é uma cópia da estrutura de comunicação da própria organização.

Melvin Conway

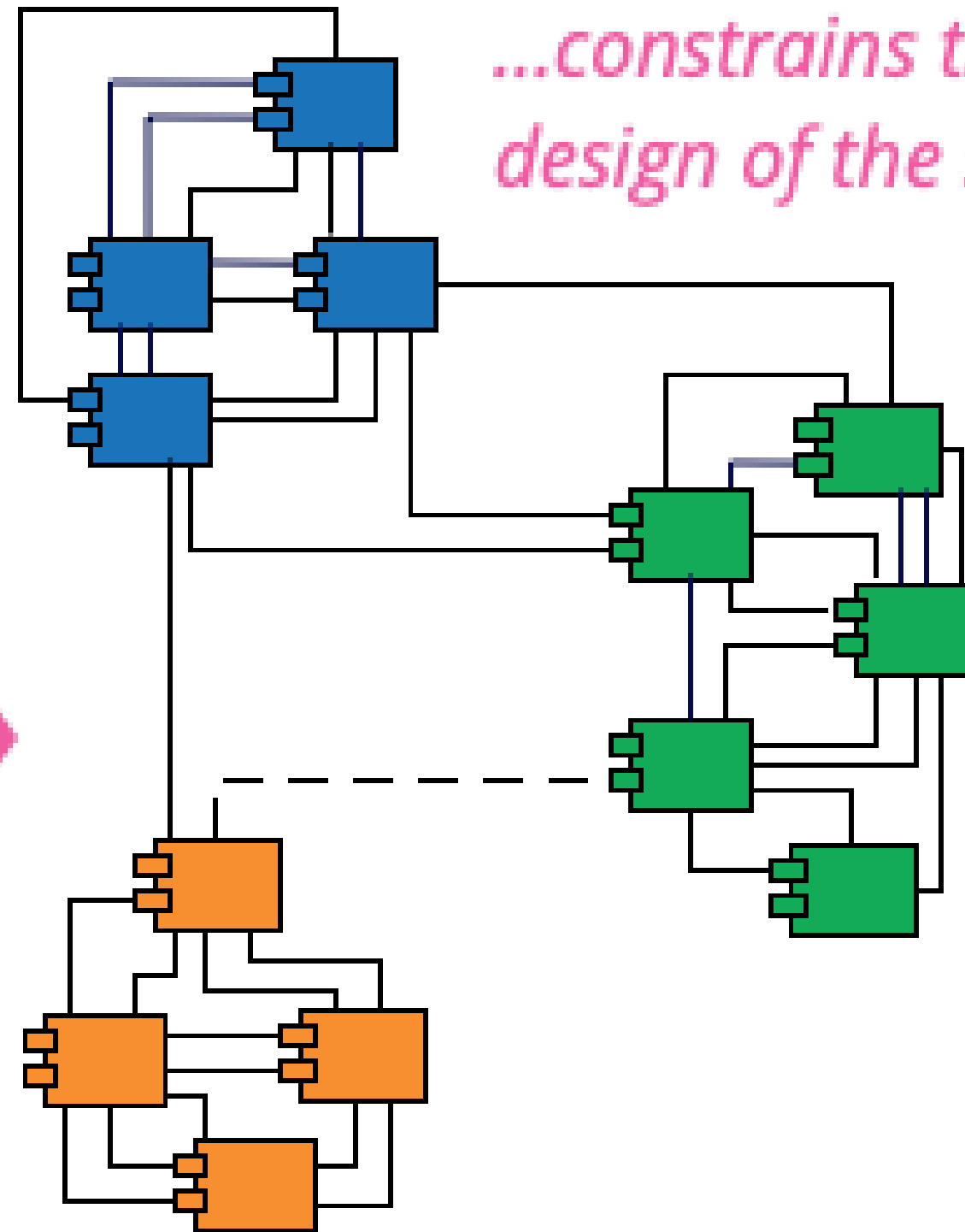
(tradução livre)

A LEI DE CONWAY

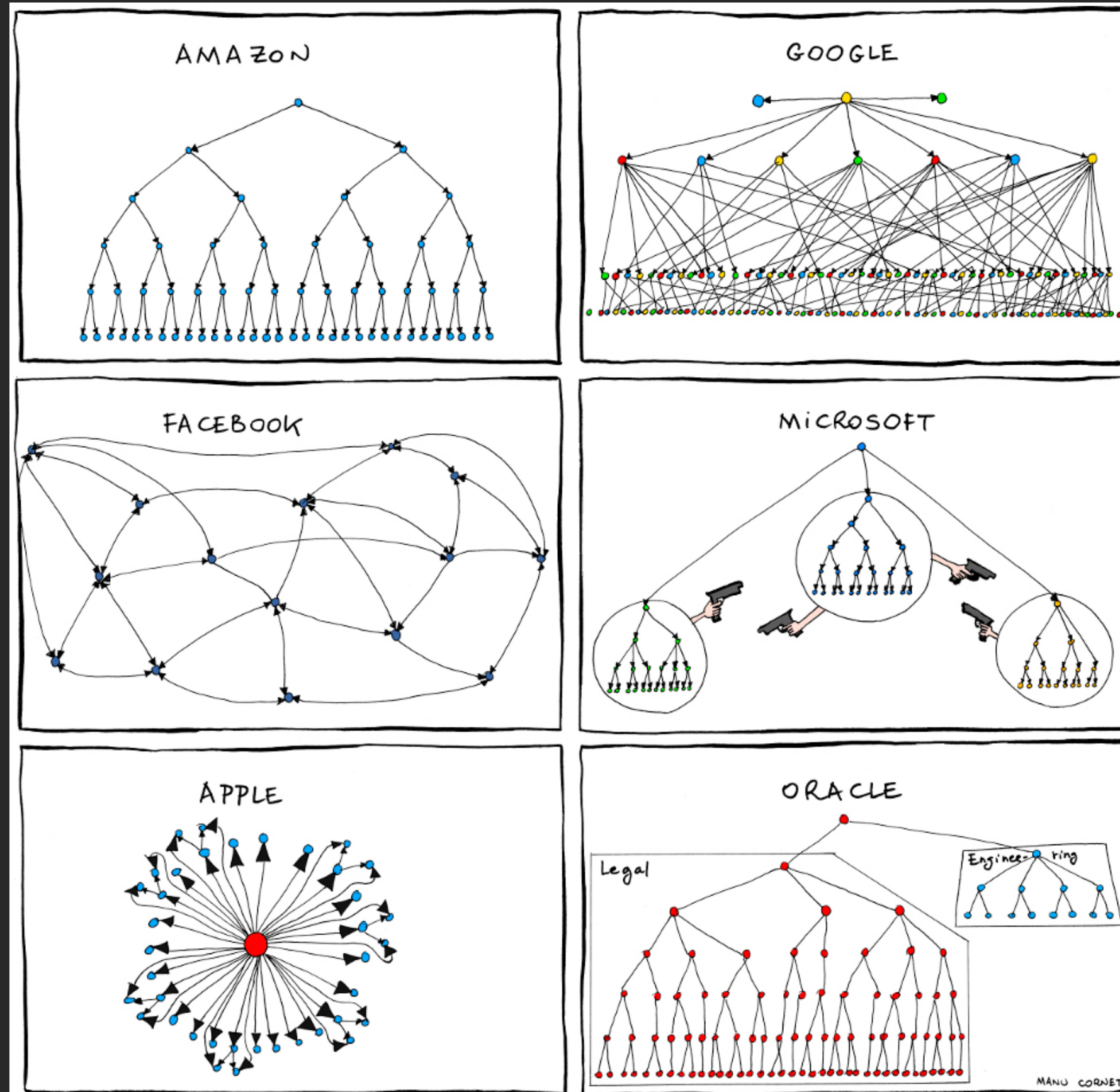
*How the designers
communicate...*



*...constrains the
design of the system*



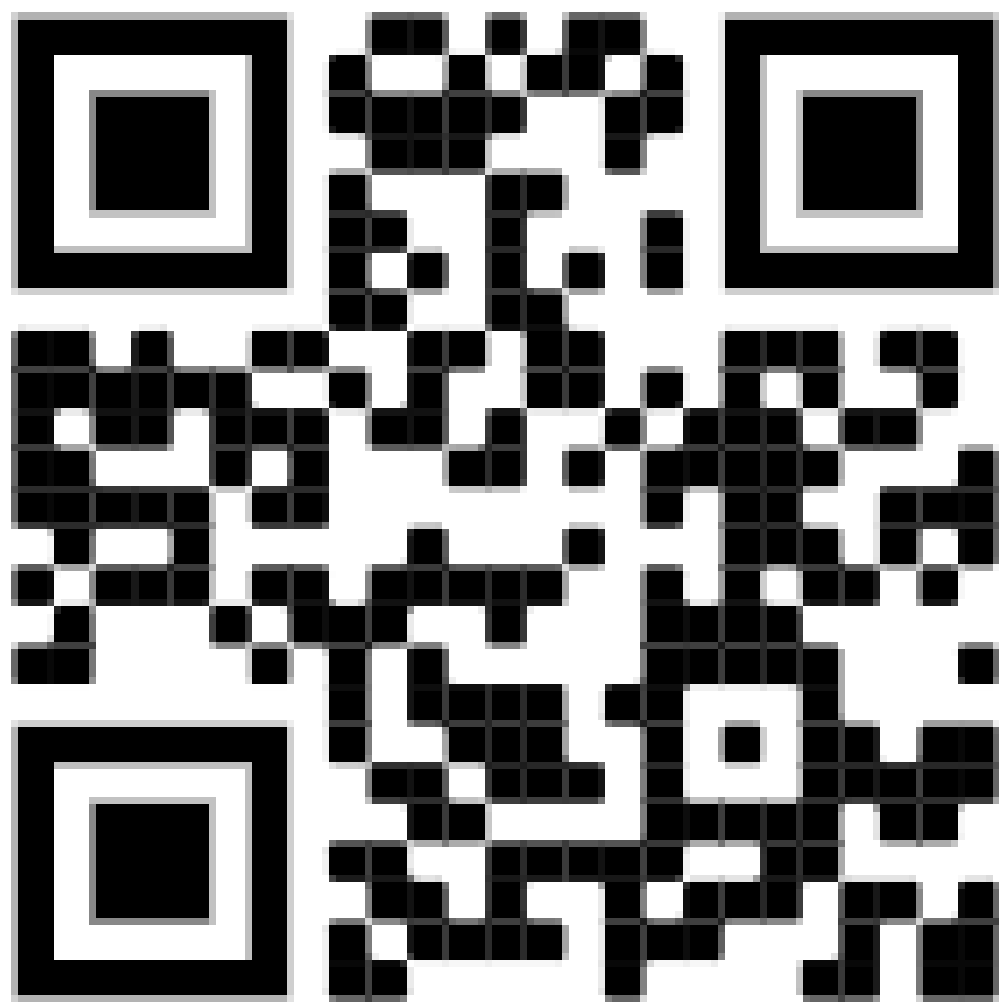
A LEI DE CONWAY



OBRIGADO!

Quer saber mais sobre Arquitetura de Software?

Baixe meu E-book:



<https://sendfox.com/yugoccp>



Yugo Sakamoto

Arquiteto de Software, Tech Lead e Data Science Manager na Accenture



yugo-sakamoto



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