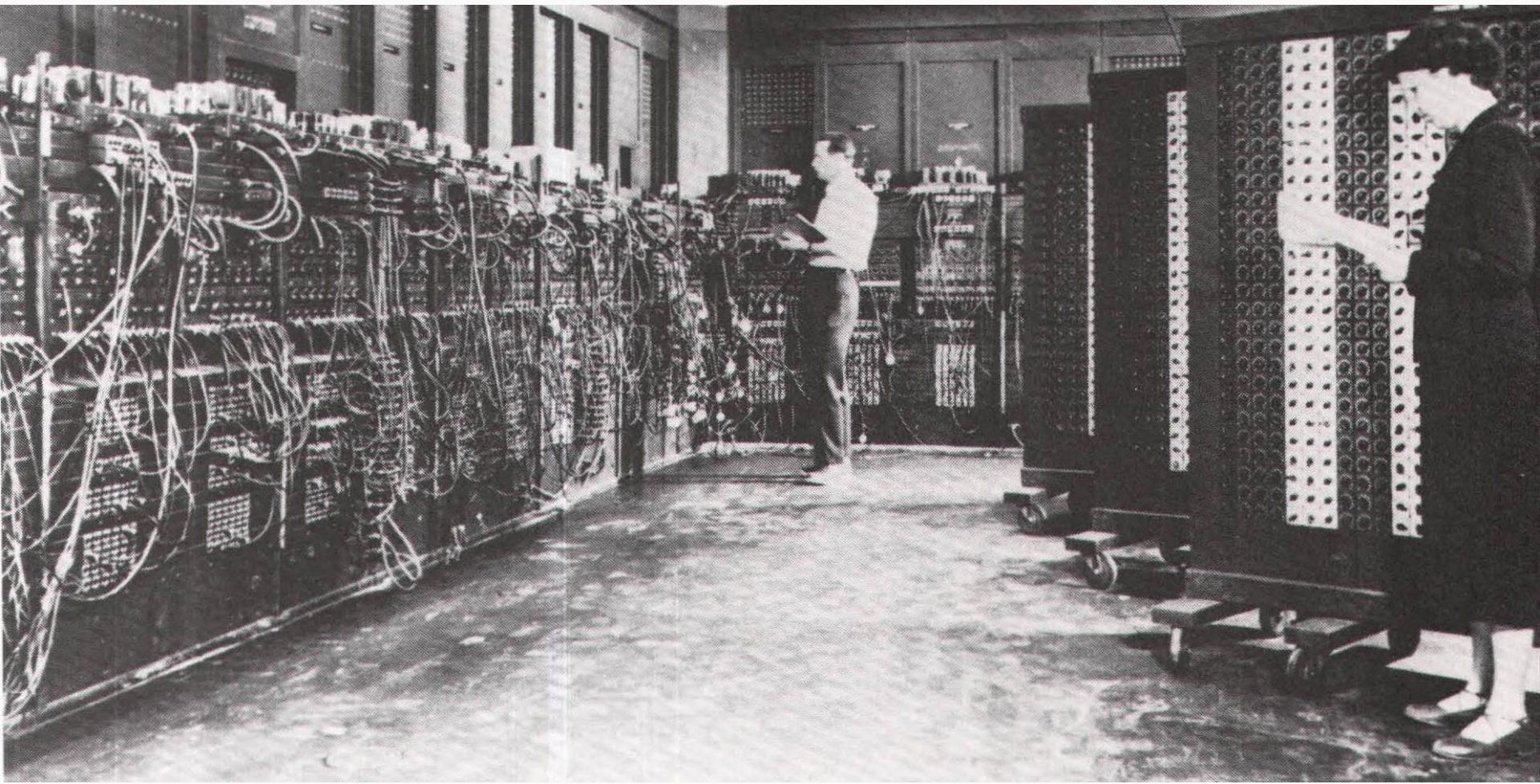
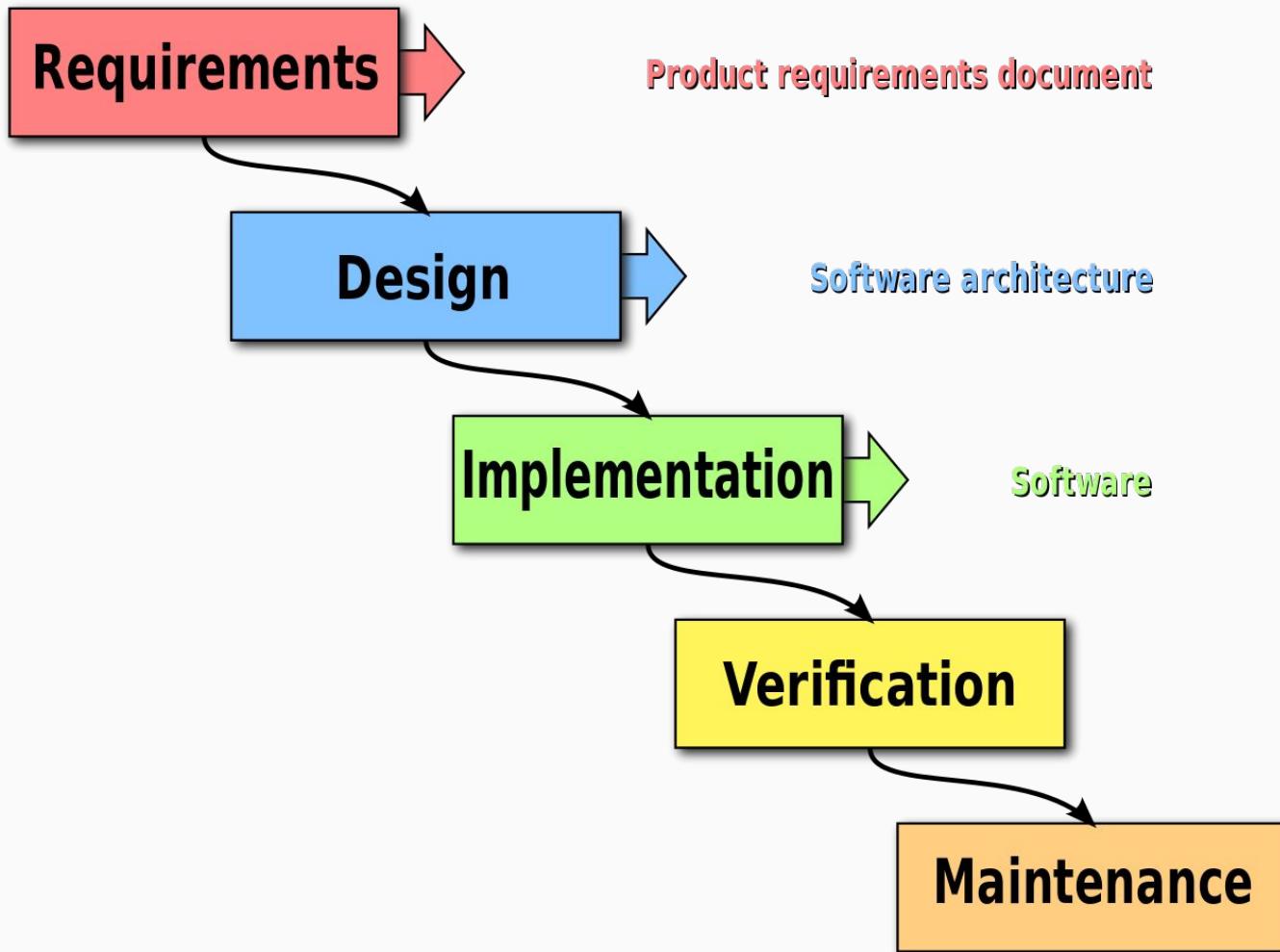


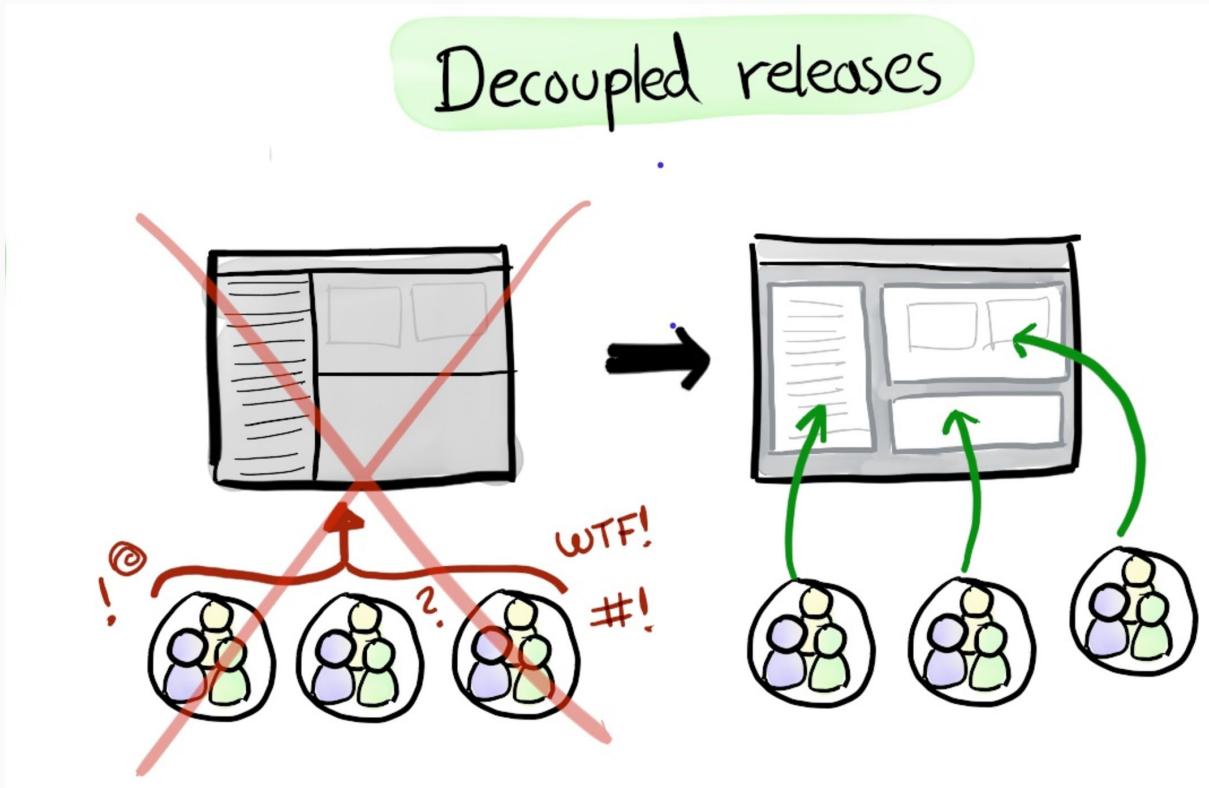


**Do Mainframe para o
futuro**

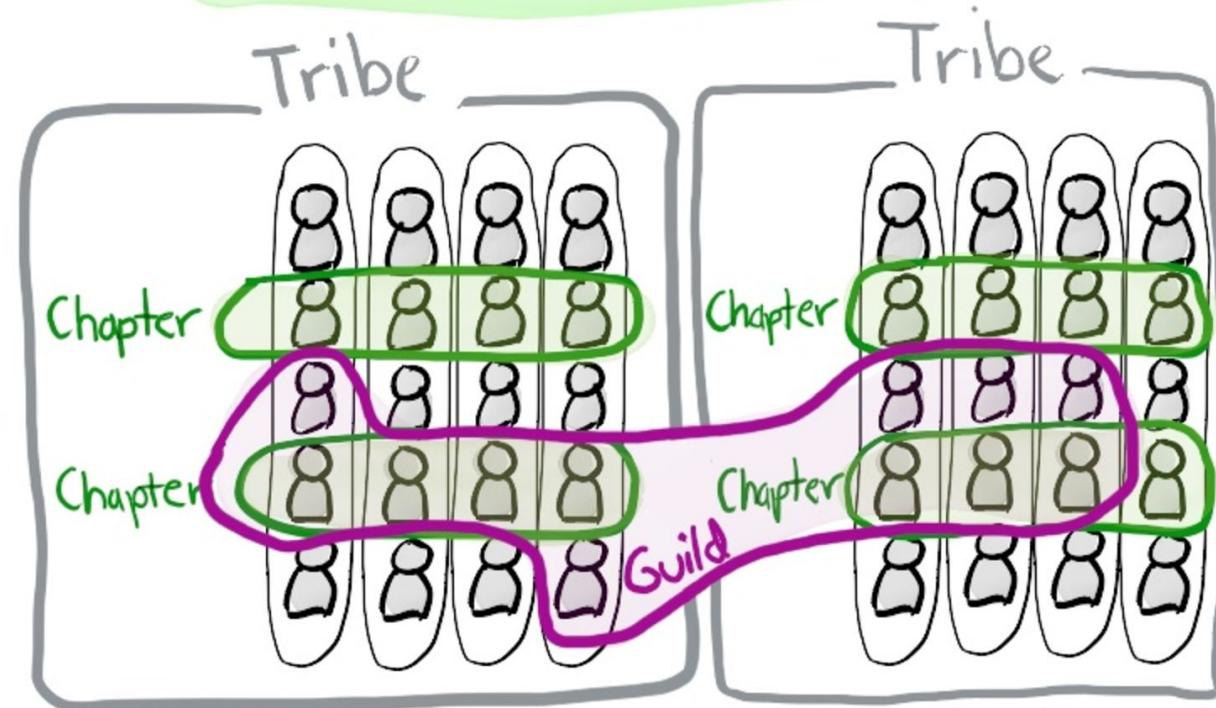
Mainframe → Futuro?







Community > Structure



7 décadas de evolução cultural



Sobre mim



Anderson Borges

Apixonado por

- Viagens
- Trilhas
- Caminhadas
- Desenvolvimento de Software

Sobre mim



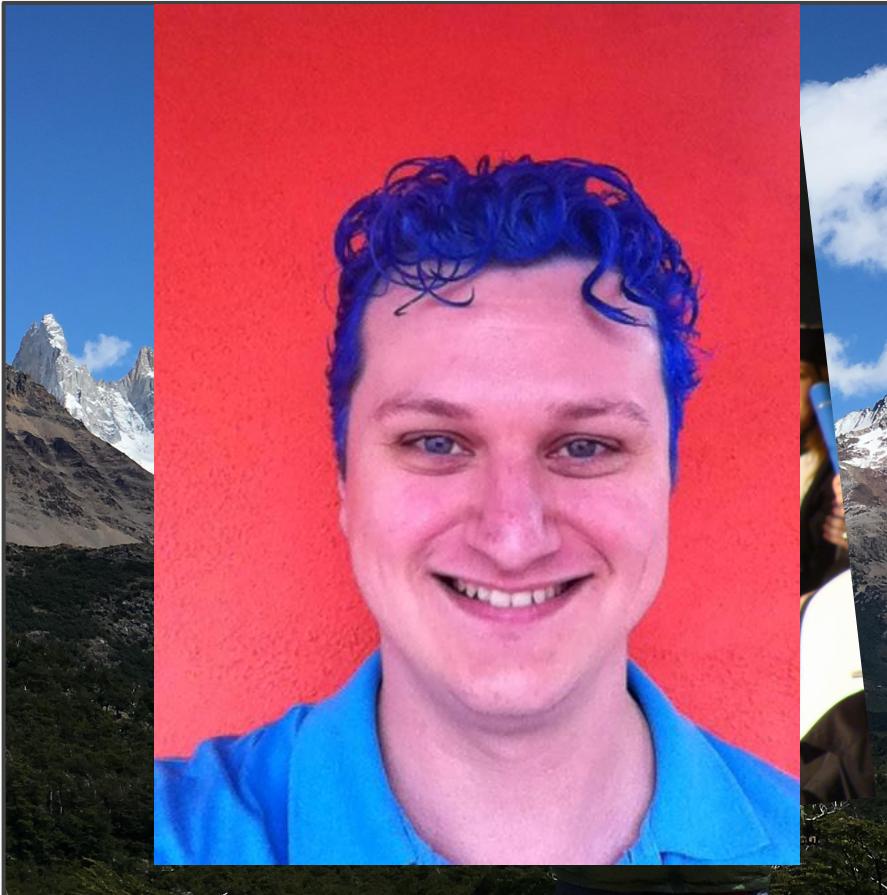
Anderson Borges

Apixonado por

- Viagens
- Trilhas
- Caminhadas
- Desenvolvimento de Software

Sistemas de Informação @ UDESC

Sobre mim



Anderson Borges

Apixonado por

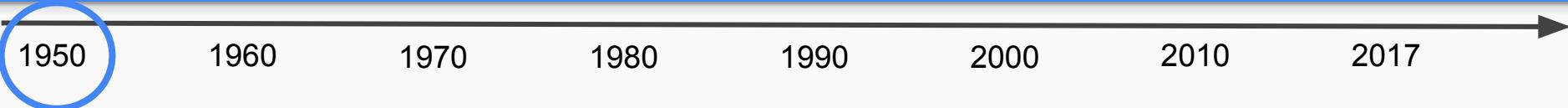
- Viagens
- Trilhas
- Caminhadas
- Desenvolvimento de Software

Sistemas de Informação @ UDESC

CTO @ ContaAzul

"Engenharia de Software"

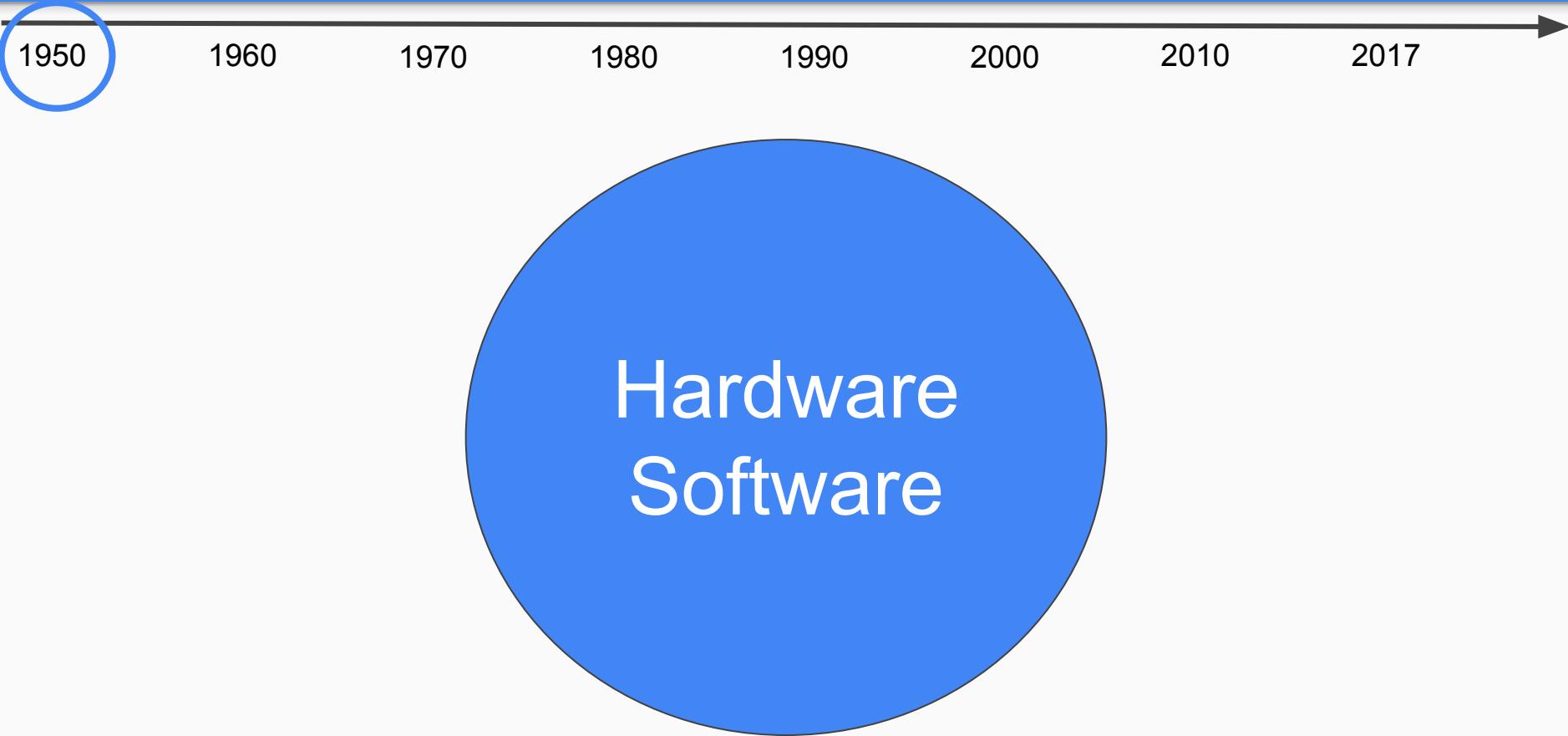
7 décadas de evolução cultural



Hardware = Software



7 décadas de evolução cultural



7 décadas de evolução cultural

1950

1960

1970

1980

1990

2000

2010

2017



Hardware != Software

7 décadas de evolução cultural

1950

1960

1970

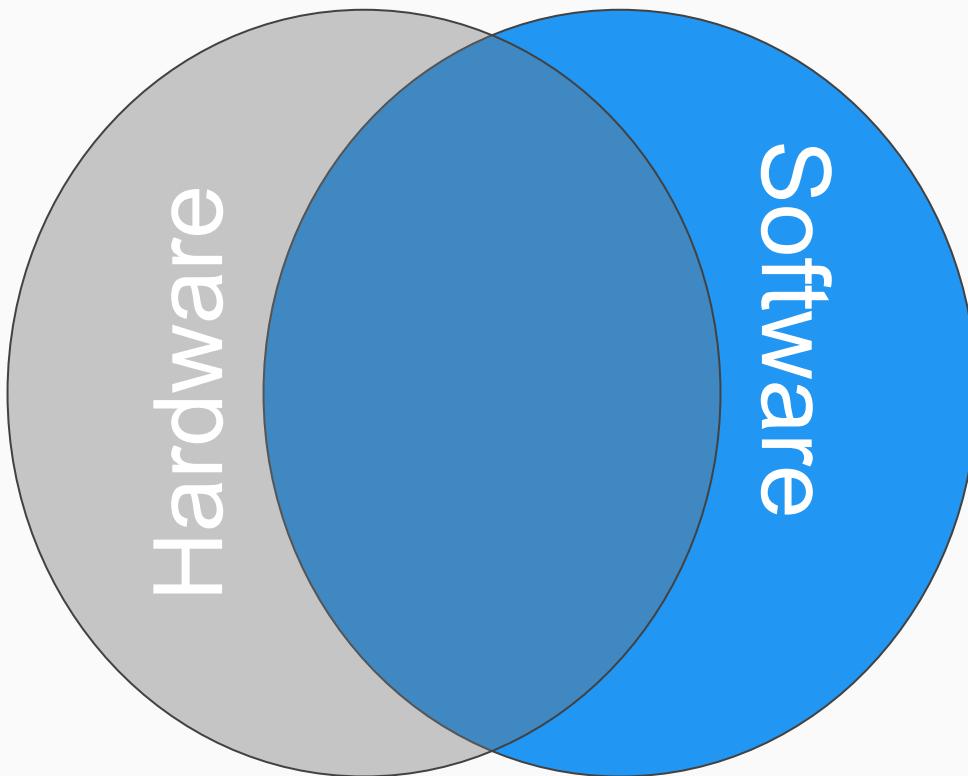
1980

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2017



7 décadas de evolução cultural

1950

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2000

2010

2017



7 décadas de evolução cultural

1950

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1970

1980

1990

2000

2010

2017

Software nunca
entregue
(Vaporware)

Código difícil de
manter e gerir

Software que não
atendia os
requisitos

Software de baixa
qualidade

Software
ineficiente

Projetos que
não cumprem
prazos

Projetos que
não cumprem
orçamentos



7 décadas de evolução cultural

1950 1960 1970 1980 1990 2000

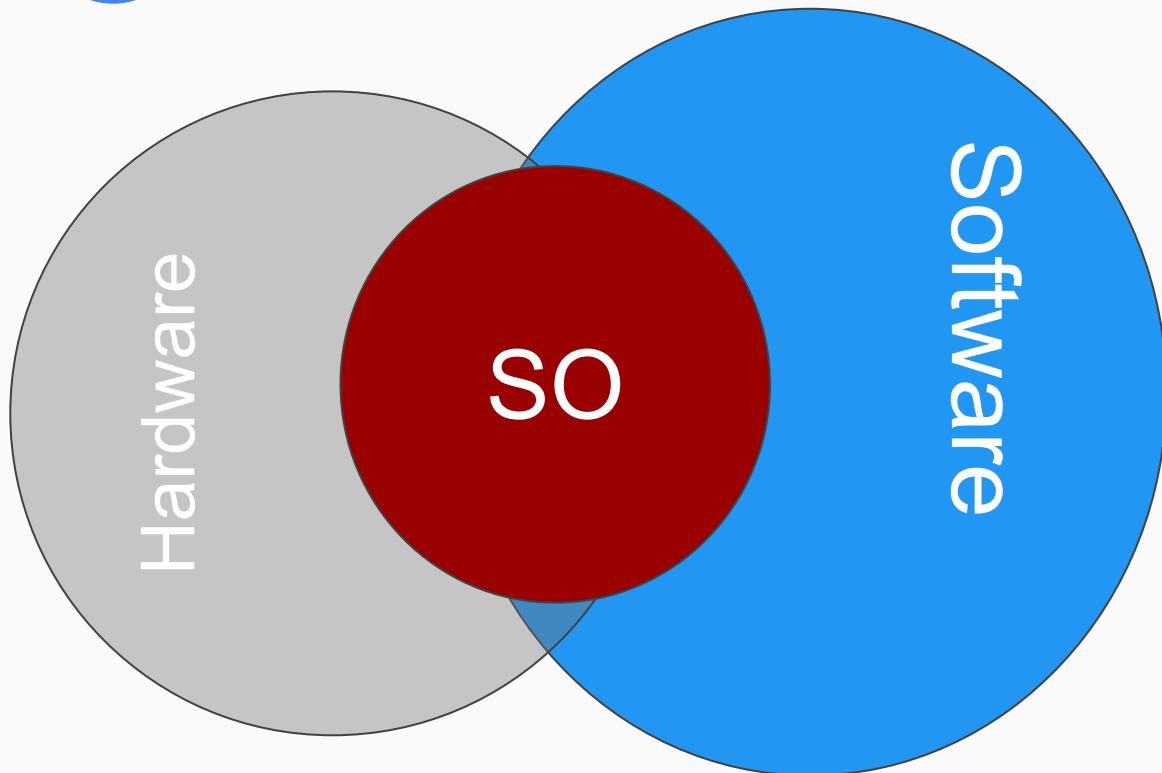
2010 2017

1970



7 décadas de evolução cultural

1950 1960 1970 1980 1990 2000 2010 2017



7 décadas de evolução cultural

1950

1960

1970

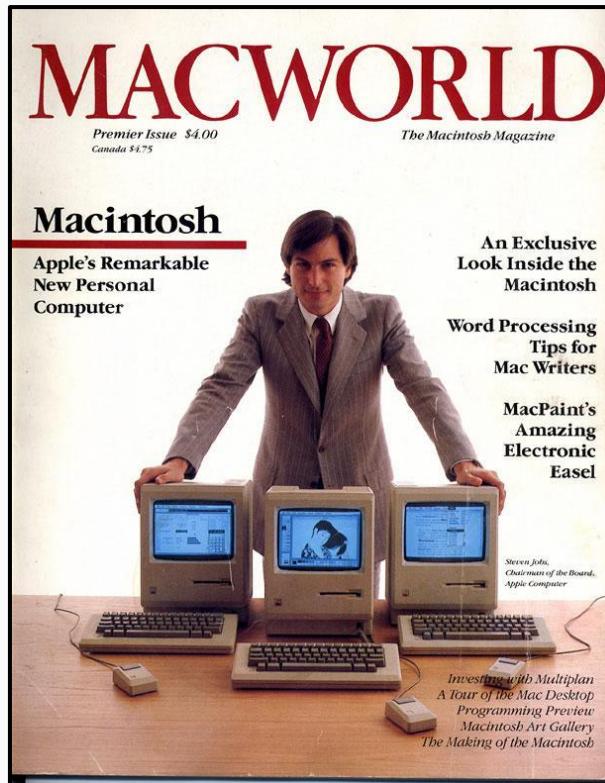
1980

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7 décadas de evolução cultural

1950

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1970

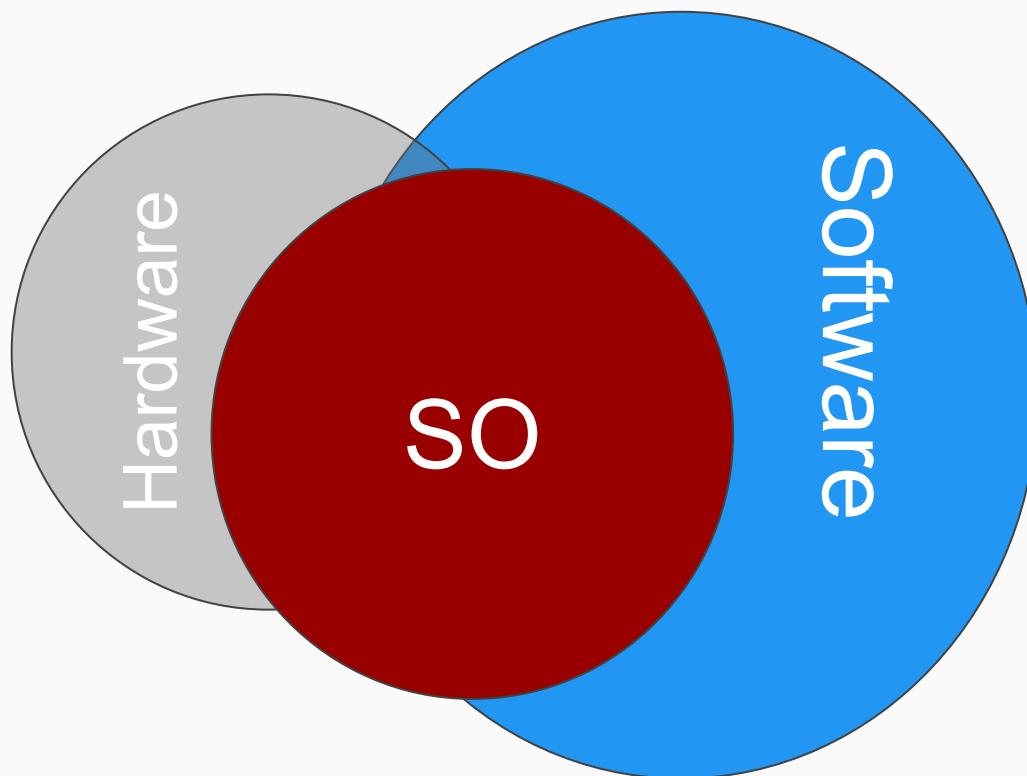
1980

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2017



7 décadas de evolução cultural





Windows

A fatal exception 0E has occurred at 0028:C562F1B7 in UXD ctpci9x(05)
+ 00001053. The current application will be terminated.

- * Press any key to terminate the current application.
- * Press CTRL+ALT+DEL again to restart your computer. You will lose any unsaved information in all applications.

Press any key to continue _

7 décadas de evolução cultural

1950

1960

1970

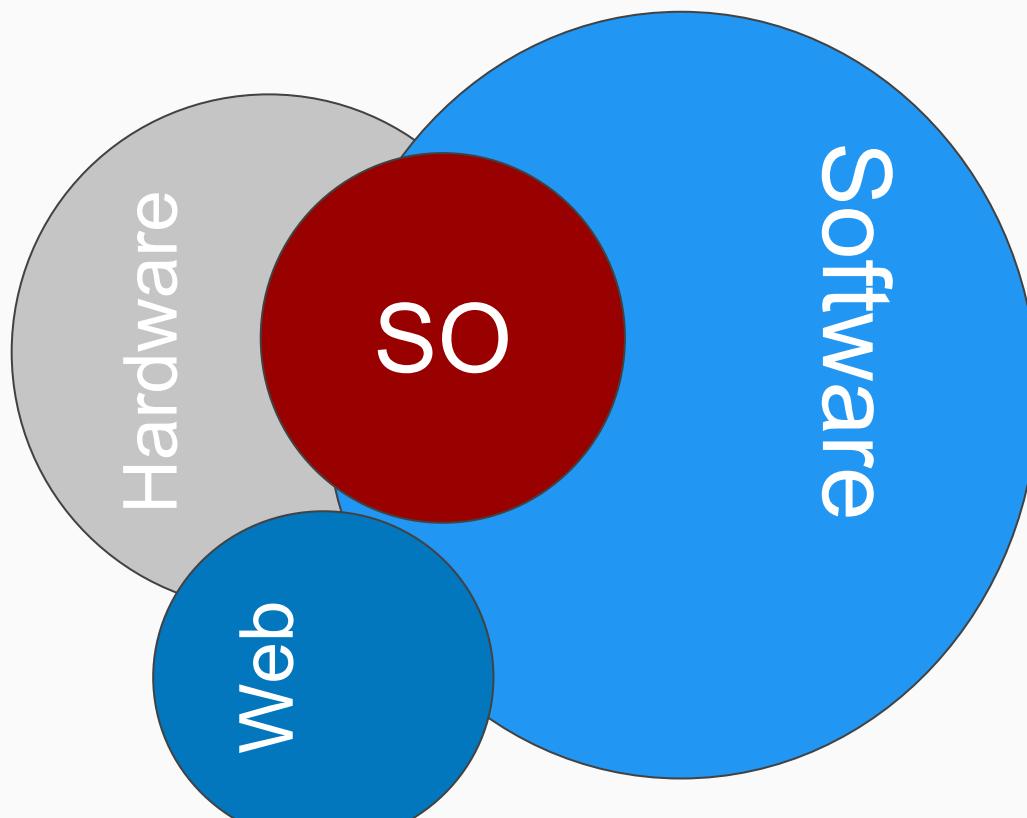
1980

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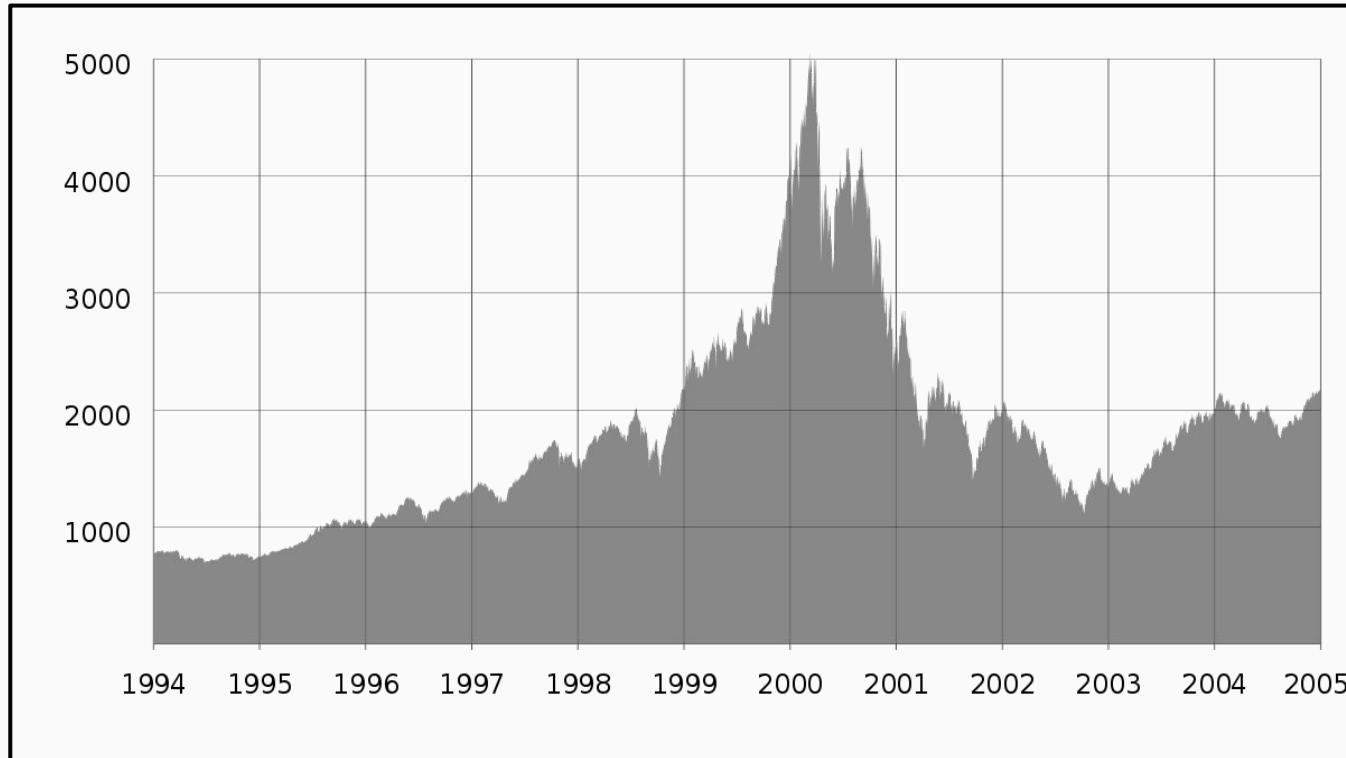
2010

2017



7 décadas de evolução cultural

1950 1960 1970 1980 1990 2000 2010 2017



7 décadas de evolução cultural

1950

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2017



7 décadas de evolução cultural

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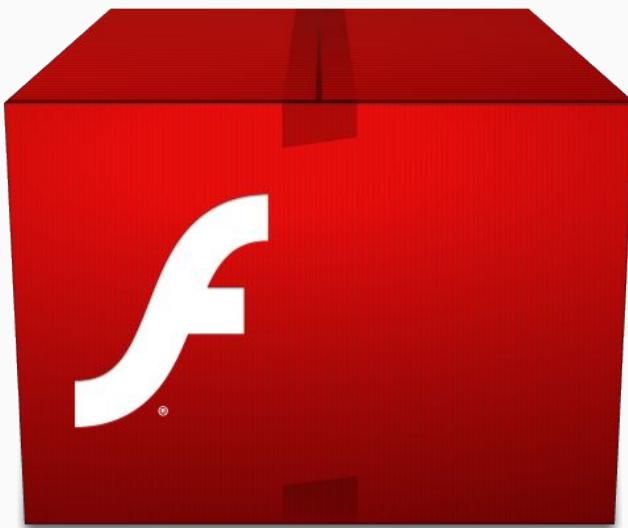
1980

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2017



7 décadas de evolução cultural

1950

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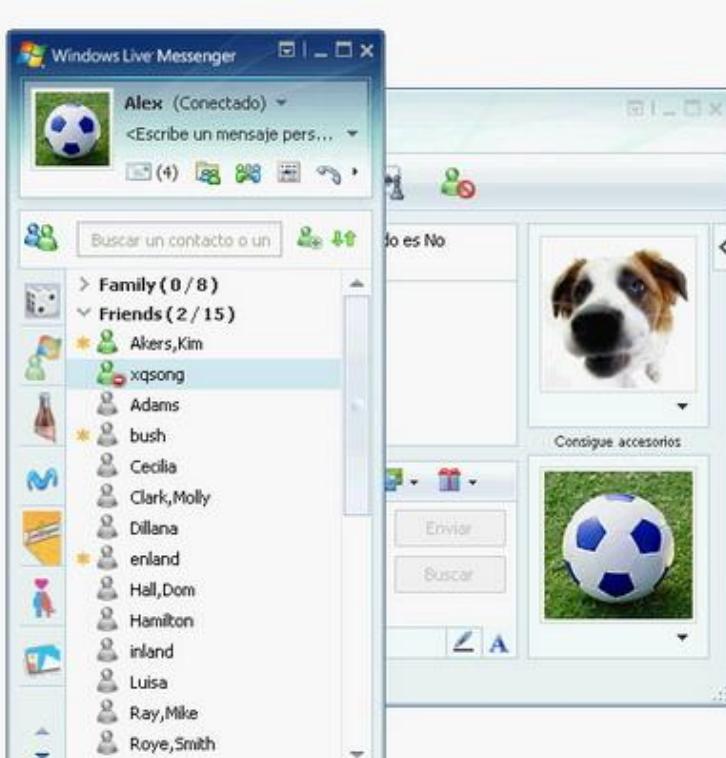
1980

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2017



7 décadas de evolução cultural

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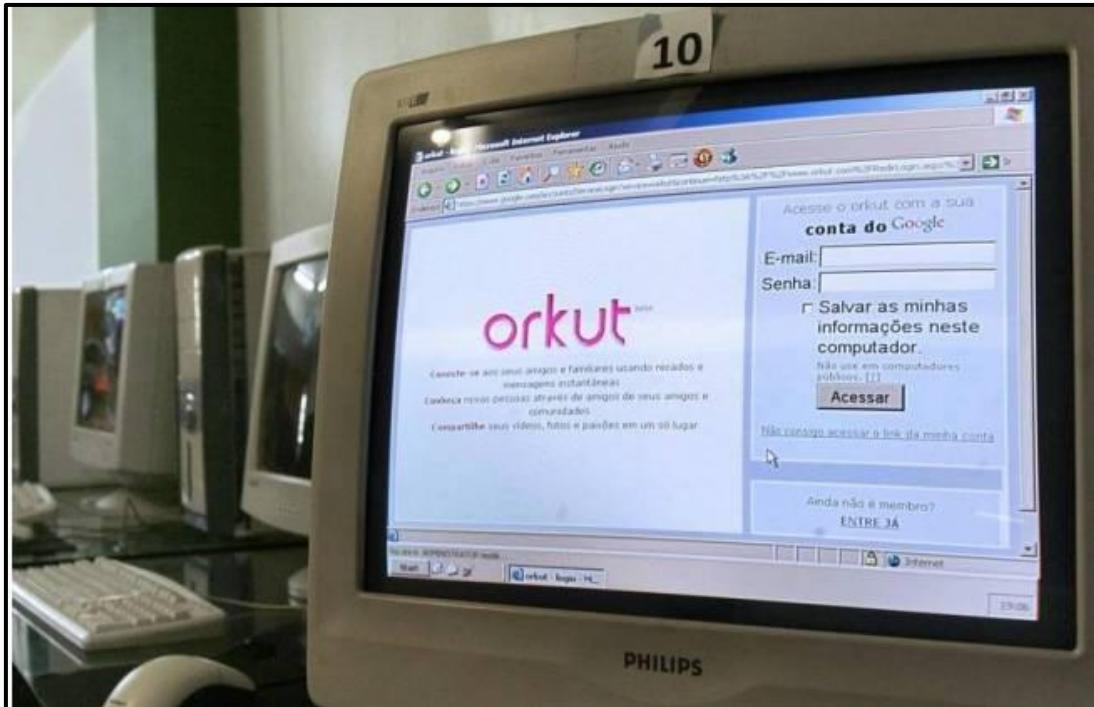
1980

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2017



7 décadas de evolução cultural

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7 décadas de evolução cultural

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2010

2017



7 décadas de evolução cultural

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2017



7 décadas de evolução cultural

1950

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2010

2017



Werner Vogels, CTO, amazon.com



You build it, You run it

Manifesto para Desenvolvimento Ágil de Software

Estamos descobrindo maneiras melhores de desenvolver software, fazendo-o nós mesmos e ajudando outros a fazerem o mesmo. Através deste trabalho, passamos a valorizar:

Indivíduos e interações mais que processos e ferramentas
Software em funcionamento mais que documentação abrangente
Colaboração com o cliente mais que negociação de contratos
Responder a mudanças mais que seguir um plano

Ou seja, mesmo havendo valor nos itens à direita, valorizamos mais os itens à esquerda.

7 décadas de evolução cultural

1950

1960

1970

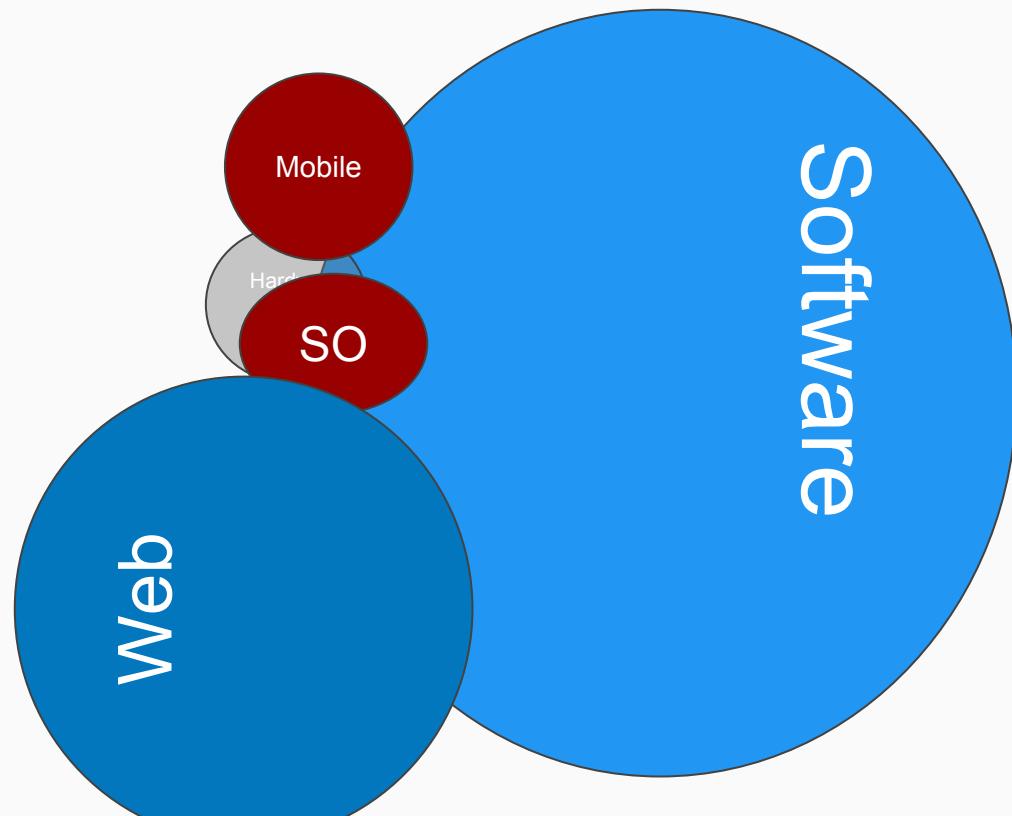
1980

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2017



7 décadas de evolução cultural

1950 1960 1970 1980 1990 2000

2010

2017

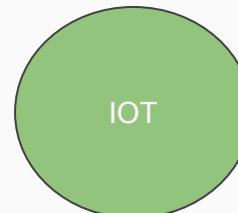
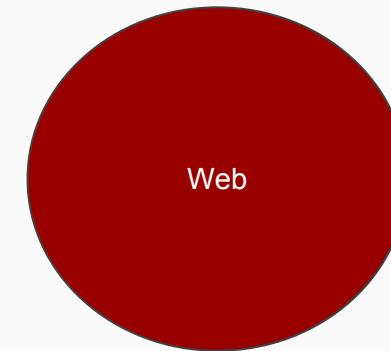
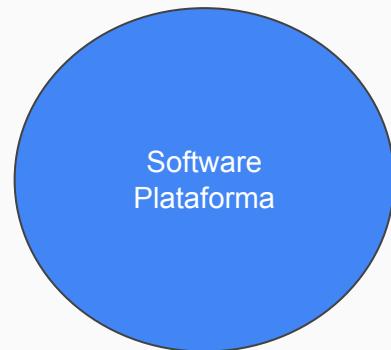
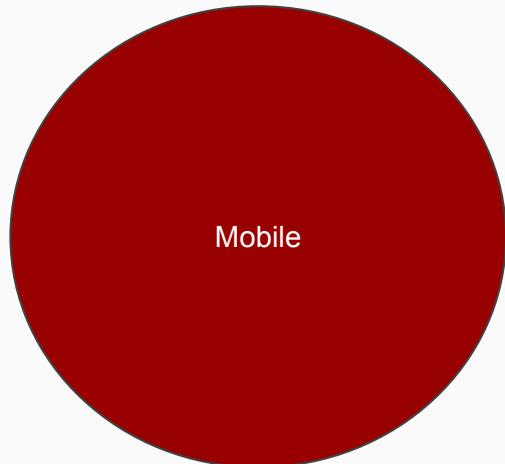


7 décadas de evolução cultural

1950 1960 1970 1980 1990 2000

2010

2017



7 décadas de evolução cultural

1950 1960 1970 1980 1990 2000 2010 2017

2010

Mobile

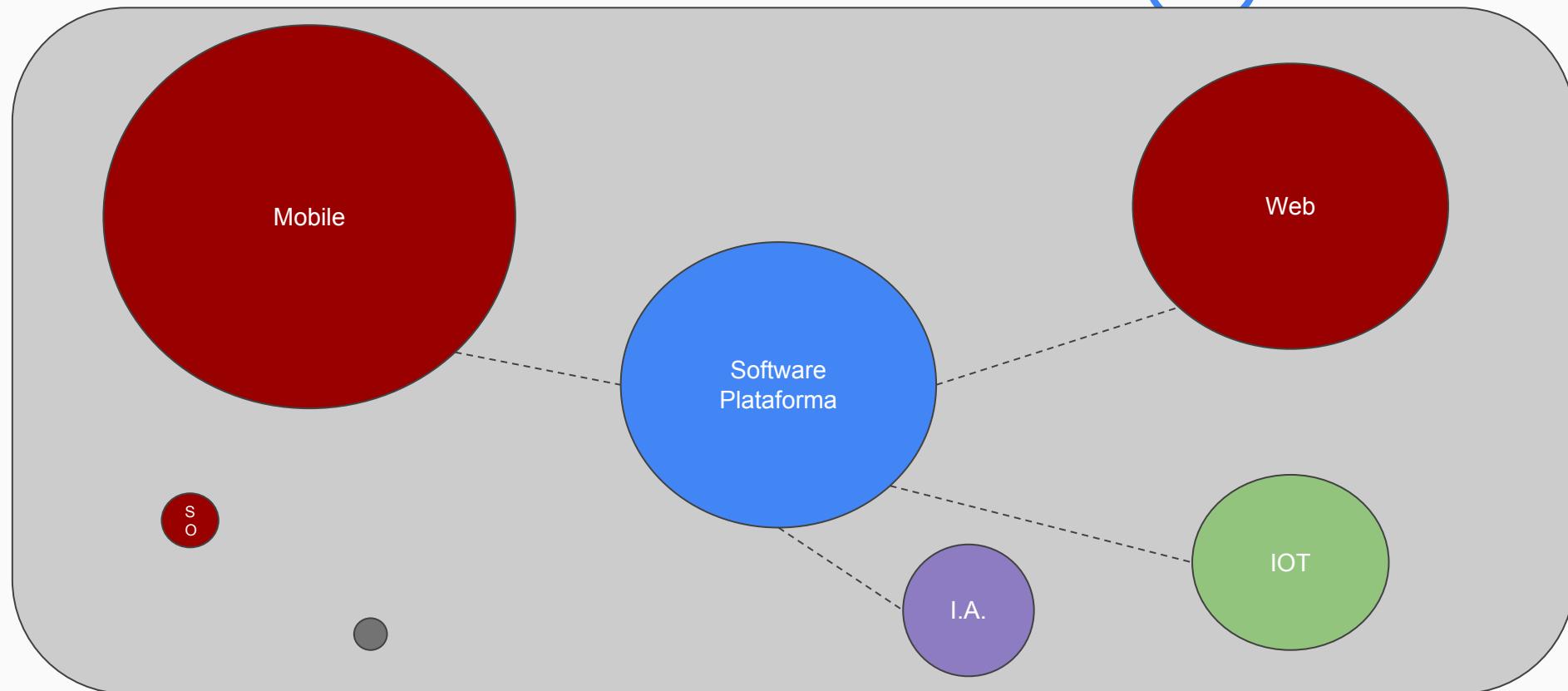
Web

Software
Plataforma

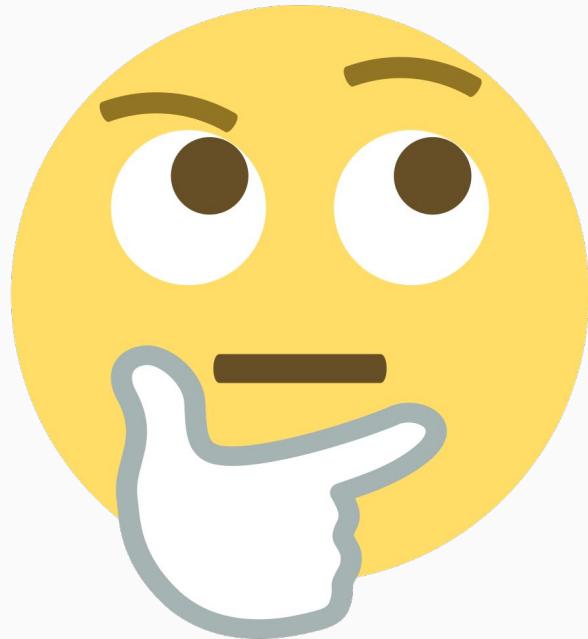
IOT

I.A.

s
o



E eu? E eu com isso?



7 décadas de evolução cultural

1950 1960 1970 1980 1990 2000

2010 2017



7 décadas de evolução cultural

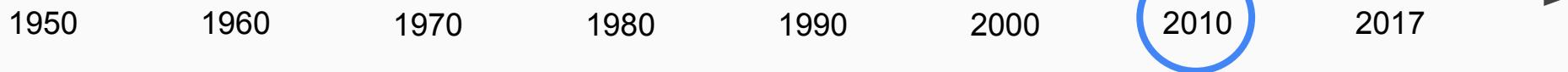
1950 1960 1970 1980 1990 2000

2010

2017



7 décadas de evolução cultural



1950 1960 1970 1980 1990 2000 2010 2017

API First

Best in Suite X Best in Class

7 décadas de evolução cultural - API First

1950

1960

1970

1980

1990

2000

2010

2017



7 décadas de evolução cultural - API First

1950 1960 1970 1980 1990 2000 2010 2017

Fale Conosco 0800 600 0920 Experimente Grátis Entrar

Automatize

Faça seu financeiro
trabalhar com o comercial:
mesmos dados e sem erros

Integração entre ContaAzul e Pipedrive
conecta dados de negociações e vendas com
faturamento e cobrança

Experimentar Grátis

Desconto de 30% por 3 meses para novas
assinaturas



7 décadas de evolução cultural - API First

1950

1960

1970

1980

1990

2000

2010

2017

pipedrive Support Center

Status: • All Systems Operational

Português do Brasil ▾



Central de Suporte

Pesquisa



[Central de Suporte](#) > [Recursos & Integrações](#) > [Interações com Terceiros](#) > [Integração ContaAzul](#)

Integração ContaAzul

7 décadas de evolução cultural - API First

1950

1960

1970

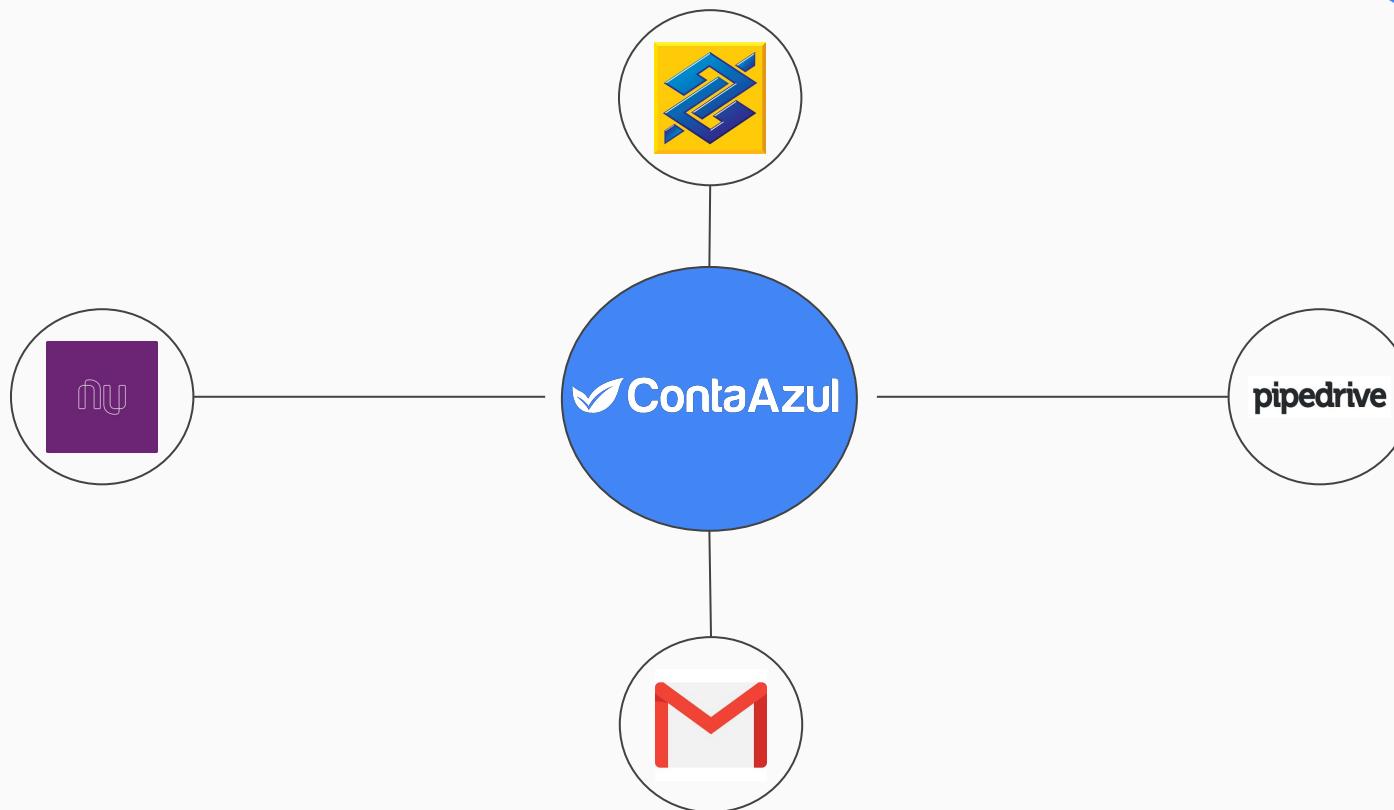
1980

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2017



7 décadas de evolução cultural - API First

1950

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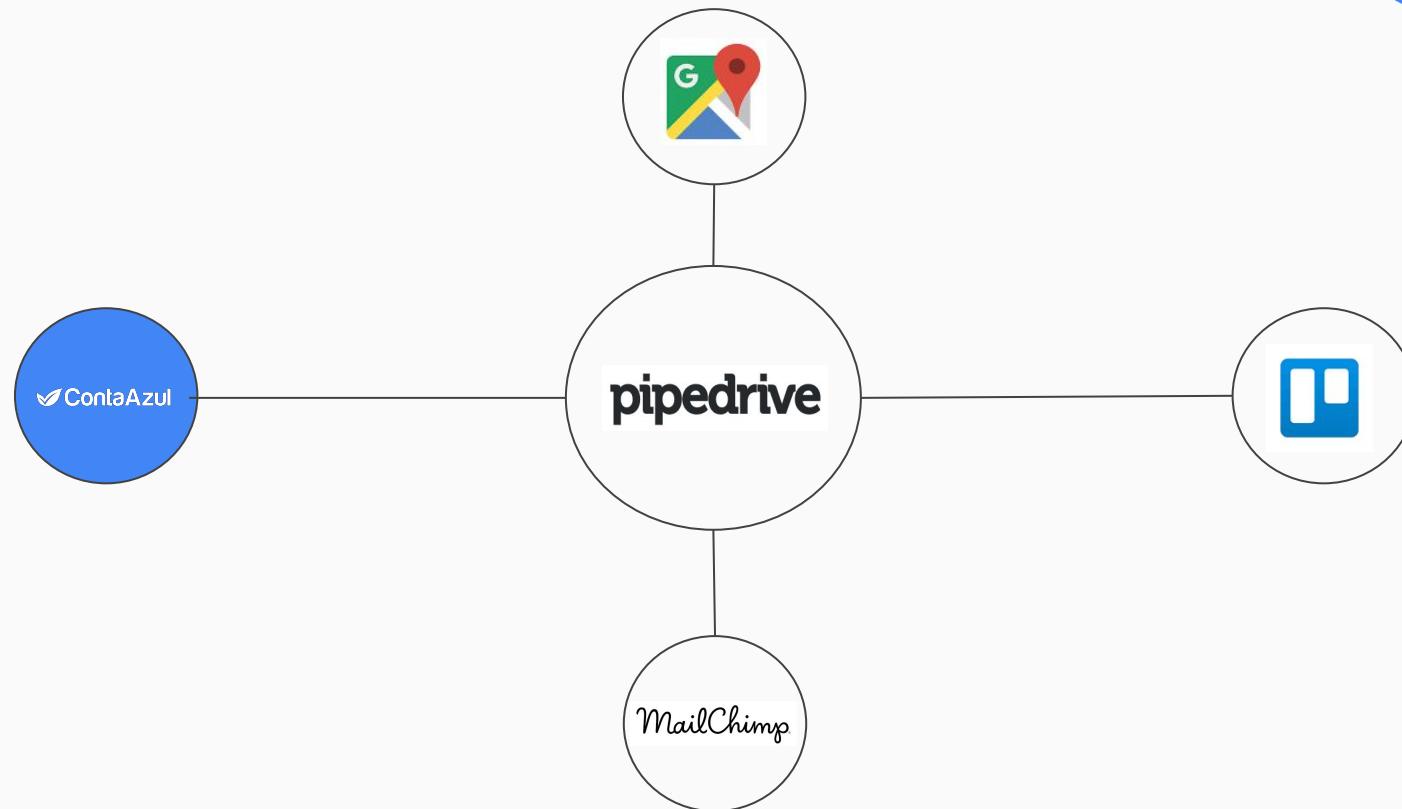
1980

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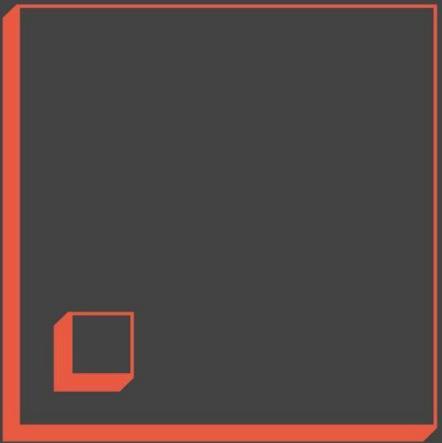
2017



E eu? E eu com isso?



Sangeet Paul Choudary



PLATFORM SCALE

How a new breed of startups
is building large empires
with minimum investment

7 décadas de evolução cultural

1950

1960

1970

1980

1990

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2017

Microservices

7 décadas de evolução cultural

1950

1960

1970

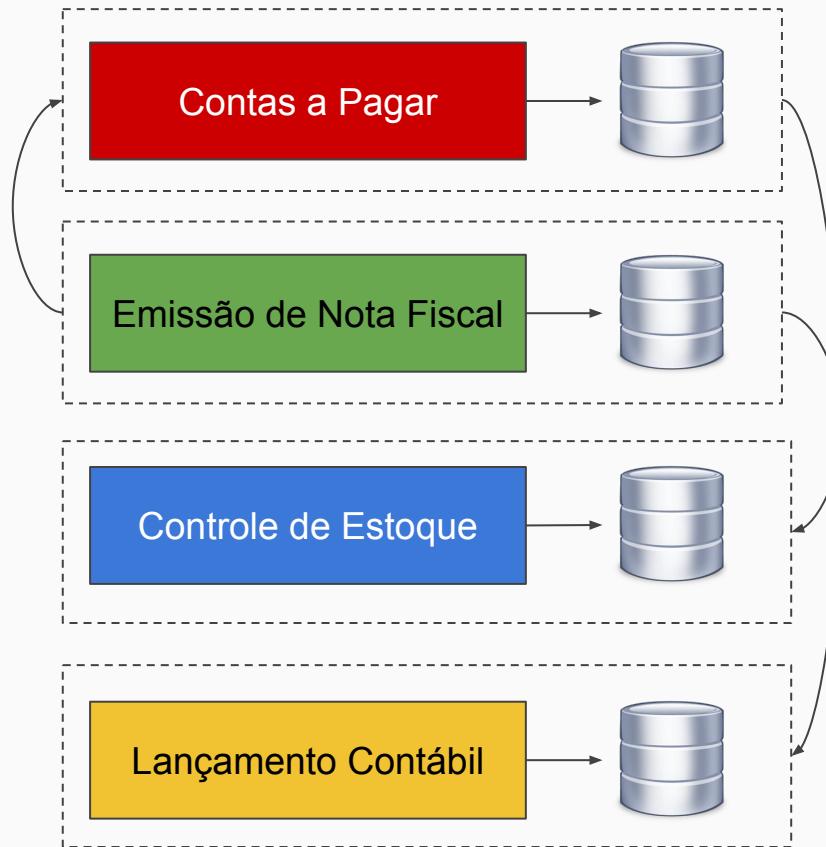
1980

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2017



7 décadas de evolução cultural

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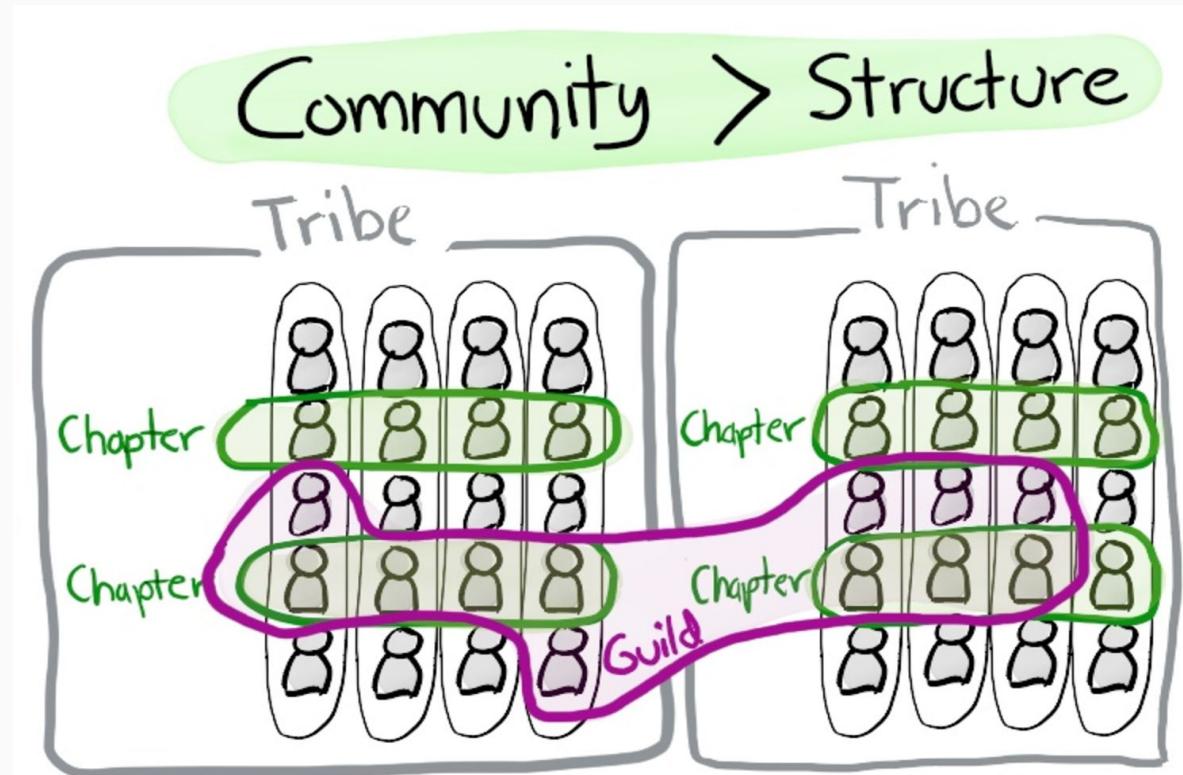
1980

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2017



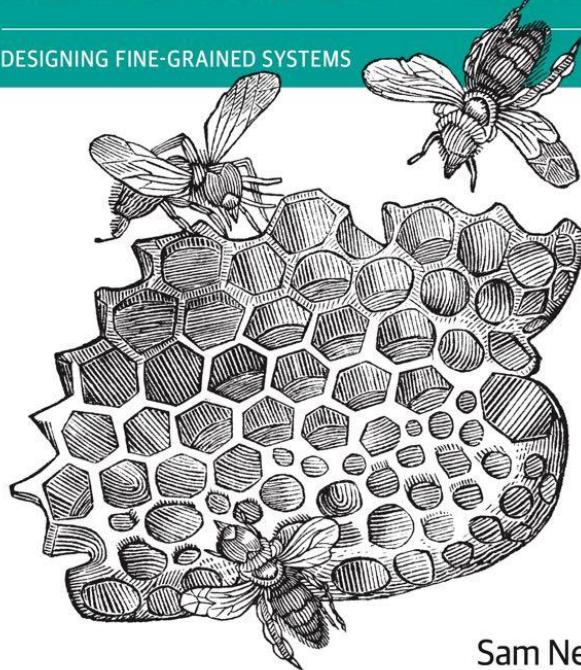
E eu? E eu com isso?



O'REILLY®

Building Microservices

DESIGNING FINE-GRAINED SYSTEMS



Sam Newman

7 décadas de evolução cultural

1950

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2017

Produtos > Projetos

7 décadas de evolução cultural

1950

1960

1970

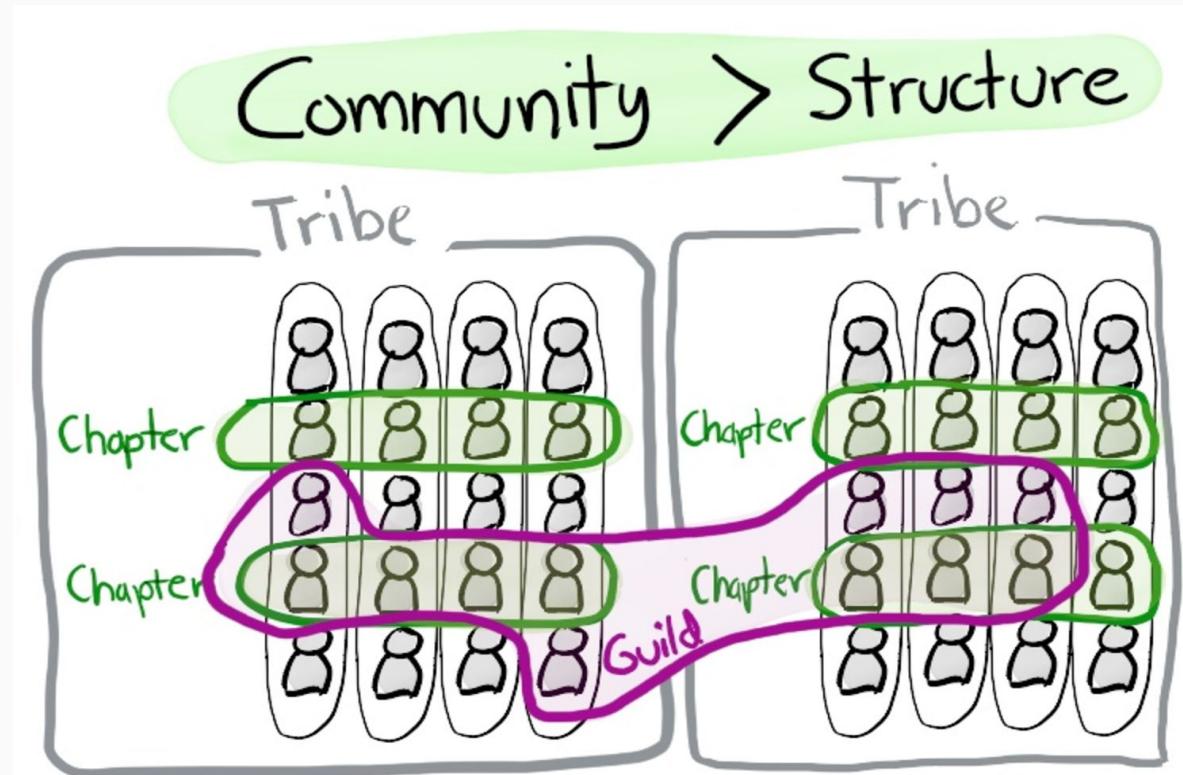
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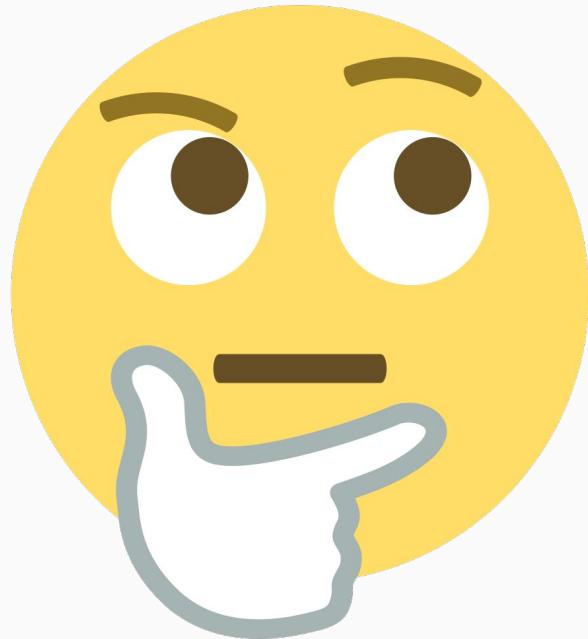
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2010

2017



E eu? E eu com isso?

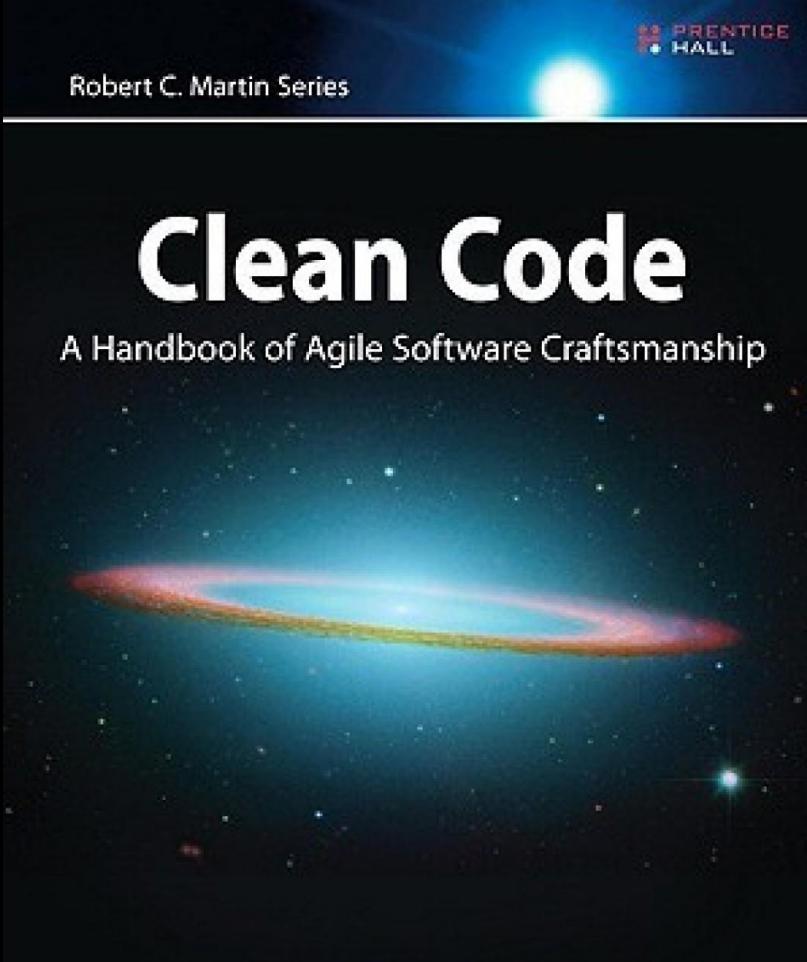


PRENTICE
HALL

Robert C. Martin Series

Clean Code

A Handbook of Agile Software Craftsmanship



Foreword by James O. Coplien

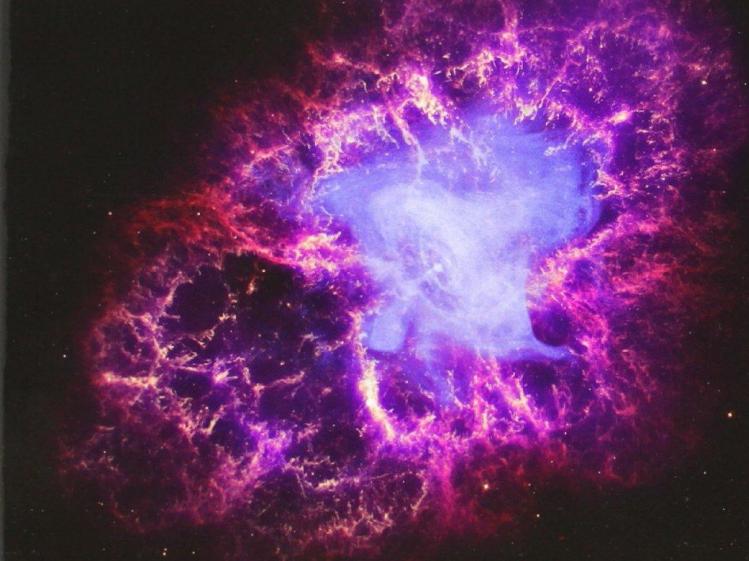
Robert C. Martin



Robert C. Martin Series

The Clean Coder

A Code of Conduct for Professional Programmers



Foreword by Matthew Heusser, Software Process Naturalist

Robert C. Martin

7 décadas de evolução cultural

1950

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1980

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2000

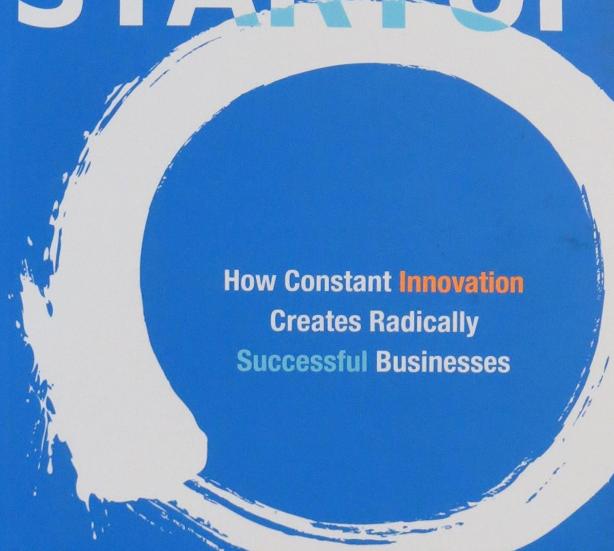
2010

2017

Agile > Scrum

INTERNATIONAL BESTSELLING SENSATION

THE LEAN STARTUP



How Constant **Innovation**
Creates Radically
Successful Businesses

ERIC RIES

'Mandatory reading for entrepreneurs' Dan Heath

7 décadas de evolução cultural

1950

1960

1970

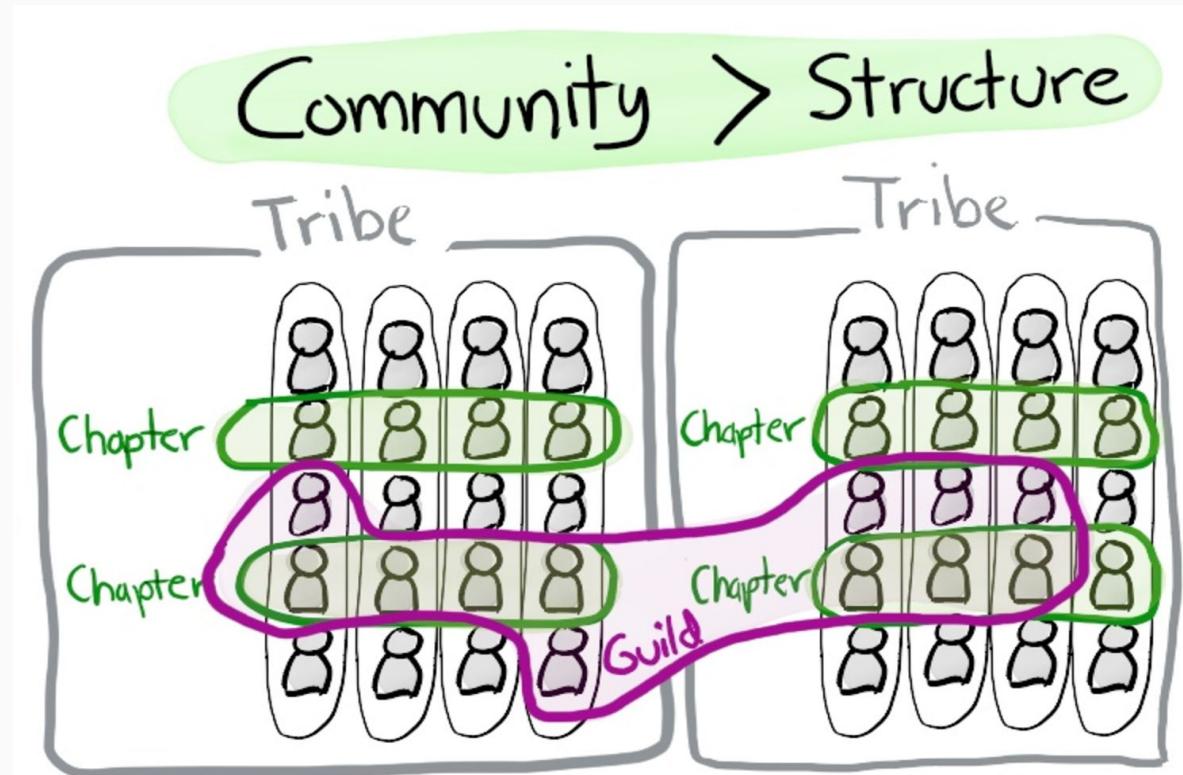
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2017

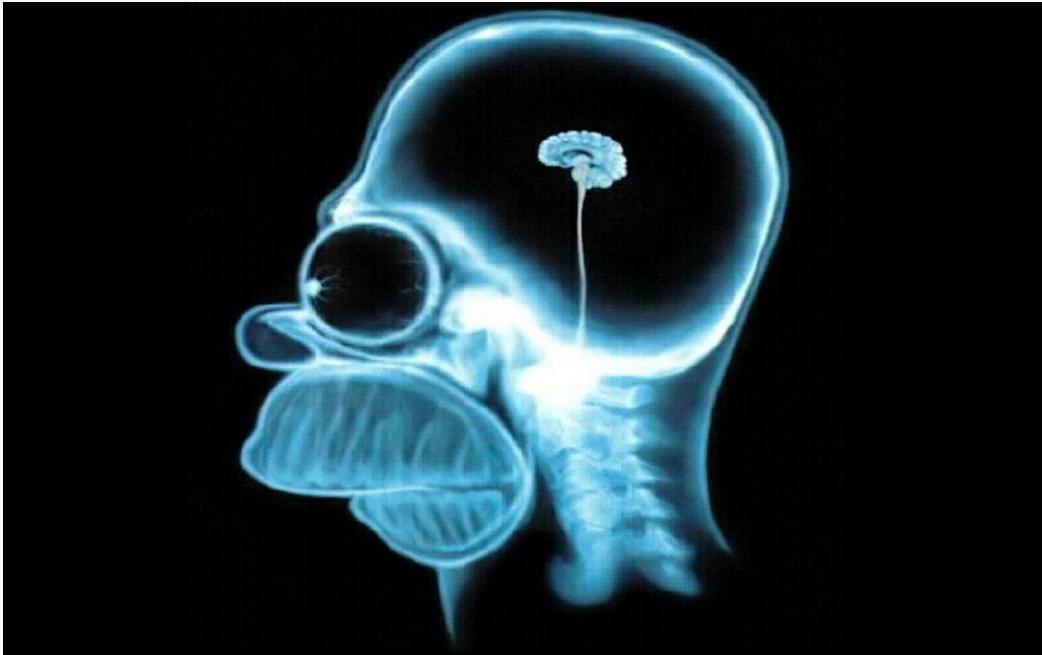


7 décadas de evolução cultural

1950 1960 1970 1980 1990 2000

2010

2017



A close-up photograph of Jeff Bezos, CEO of Amazon. He is a middle-aged man with short brown hair, wearing a white button-down shirt under a dark blue blazer. He is gesturing with his right hand, pointing his index finger upwards. His gaze is directed towards the camera. The background is dark and out of focus.

"Teams shouldn't be larger than what two pizzas can feed. More communication isn't necessarily the solution to communication problems. Compare the interactions at a small pizza party with a larger gathering like a wedding. As group size grows, you simply can't have as meaningful of a conversation with every person, which is why people start clumping off into smaller clusters to chat." - Jeff Bezos, CEO @ Amazon

7 décadas de evolução cultural

1950

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2017



7 décadas de evolução cultural

1950

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7 décadas de evolução cultural

1950

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2017

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E depois?

E o futuro?

1950

1960

1970

1980

1990

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2017

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E o futuro?

1950

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2017

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THE VERGE

TECH ▾

SCIENCE ▾

CULTURE ▾

CARS ▾

REVIEWS ▾

LONGFORM

VIDEO

MORE ▾



APPLE \ TECH \ ARTIFICIAL INTELLIGENCE \

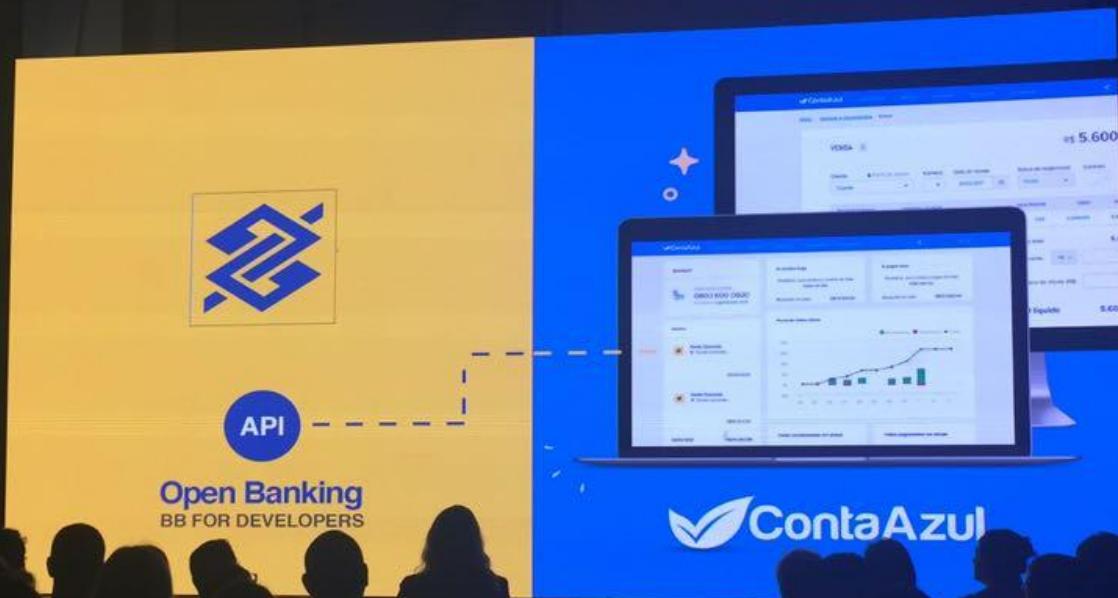
The iPhone X's new neural engine exemplifies Apple's approach to AI

Artificial intelligence in your hand, not in the cloud

by James Vincent | @jjvincent | Sep 13, 2017, 5:30am EDT

54

do Brasil



E o futuro?

1950 1960 1970 1980 1990 2000 2010 2017 ?

A horizontal timeline is shown with years from 1950 to 2017. The year 2017 is circled with a blue line and followed by a black arrow pointing to the right, indicating uncertainty or a question about the future.

2014 -> 2017

E o futuro?



```
@Stateless
@NoArgsConstructor
@AllArgsConstructor
@Log4j
public class ItauBot {

    private static final String ITAU_HOME = "https://www.itau.com.br/";

    private static final String SELENIUM_PROFILE_PATH = System.getProperty( "com.contaazul.selenium.profile" );

    private FirefoxDriver driver;

    @EJB
    private CryptoService cryptoService;

    @Inject
    private OFXPeriod ofxPeriod;

    @EJB
    private StepService stepService;

    @EJB
    private BankConfigurationService bankConfigurationService;
```

```
@TransactionAttribute(TransactionAttributeType.NOT_SUPPORTED)
public void download(BankConfiguration bankConfiguration) throws GenericBankIntegrationException,
        LoginBankIntegrationException {
    try {
        log( "Start", bankConfiguration );
        goToItauIndex();
        login( bankConfiguration );
        basicAccess();

        configurationSteps( bankConfiguration );

        goToExtractPage( bankConfiguration );
        downloadOFX( bankConfiguration );
        exit();
    } catch (LoginBankIntegrationException e) {
        throw e;
    } catch (Exception e) {
        throw new GenericBankIntegrationException( e );
    }
}
```

E o futuro?



```
protected void goToExtractPage(BankConfiguration bankConfiguration) {  
    selectEspecificAccount( bankConfiguration );  
    driver.switchTo().defaultContent();  
    driver.switchTo().frame( "CORPO" );  
    Select select = new Select(  
        driver.findElement( By  
            .xpath( "//*[@id=\"sldSaldo\"]//table[2]//tbody//tr[4]//td[1]//form//table//tbody//tr[1]" )  
        select.selectByVisibleText( "Extrato" );  
    driver.findElement(  
        By.xpath( "//*[@id=\"BOXcontainer01\"]//table//tbody//tr[2]//td//span[4]//a" )  
        .click();  
}
```

E o futuro?

1950

1960

1970

1980

1990

2000

2010

2017

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Emissão de Comprovante de Inscrição e de Situação Cadastral

Contribuinte,

Esta página tem como objetivo permitir a emissão do Comprovante de Inscrição e de Situação Cadastral de Pessoa Jurídica pela Internet em consonância com a [Instrução Normativa RFB nº 1.634, de 06 de maio de 2016.](#)

Digite o número de CNPJ da empresa e clique em "Consultar".

CNPJ :



E o futuro?

1950

1960

1970

1980

1990

2000

2010

2017

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A\TI

Home

Documentation

Register

Sign In



CAPTCHA solving service

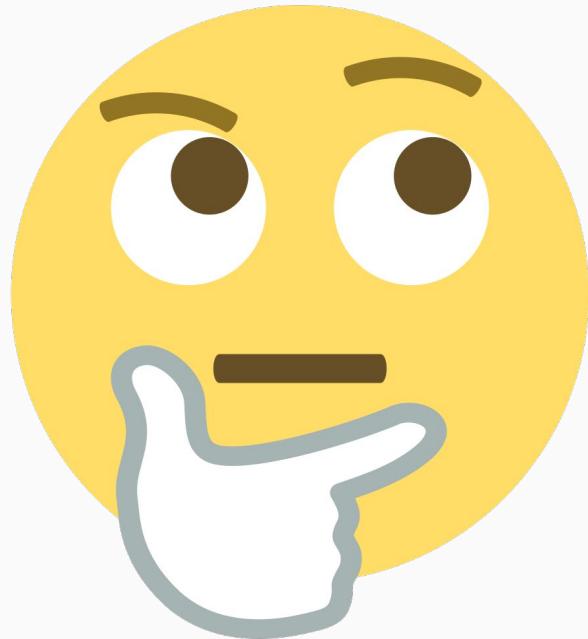
- ✓ Cheapest price on the market
Starting from 0.7USD per 1000 images,
depending on your daily upload volume
- ✓ Pay as you go
Pay-per-captcha payment basis. Minimum refill is
1 USD, no recurring charges
- ✓ 99.99% uptime since 2007
Vast amount of workers and premium
infrastructure allows us to provide highly reliable
24/7/365 service

registration



Client area

E eu? E eu com isso?



E o futuro?

1950 1960 1970 1980 1990 2000 2010 2017

?

- Machine Learning
- Blockchain
- Artificial Intelligence
- Microservices
- Bla bla bla

E o futuro?

1950 1960 1970 1980 1990 2000 2010 2017 ?

- O que devo estudar?
 - Não jubile
 - Inglês deve ser sua língua nativa

E o futuro?

1950 1960 1970 1980 1990 2000 2010 2017

?

- O que devo estudar?
 - Invista em você!
 - Participe de eventos
 - Semana da computação UDESC
 - Changelog
 - Startup Weekend

E o futuro?

1950 1960 1970 1980 1990 2000 2010 2017

?

- O que devo estudar?
 - Invista em você!
 - Participe de comunidades e meetups
 - Comunidade de Artesania de Software
 - Dev-JIle
 - Joinville Machine Learning
 - Joinville Blockchain
 - MUITO Mais em meetup.com
 - Contribua em um projeto Open Source

E o futuro?

1950 1960 1970 1980 1990 2000 2010 2017

?

- Vai empreender?
 - Invente algo novo
 - Melhore algo existente
 - Traga para o Brasil algo que já é comum lá fora, mas faça melhor!

E o futuro?

1950

1960

1970

1980

1990

2000

2010

2017

?

- Vai trabalhar para alguém?
 - Busque ganhar experiência
 - Trabalhe em empresas que estejam alinhadas a inovação

Perguntas?



Blog engenharia ContaAzul
engineering.contaazul.com

borges@contaazul.com