

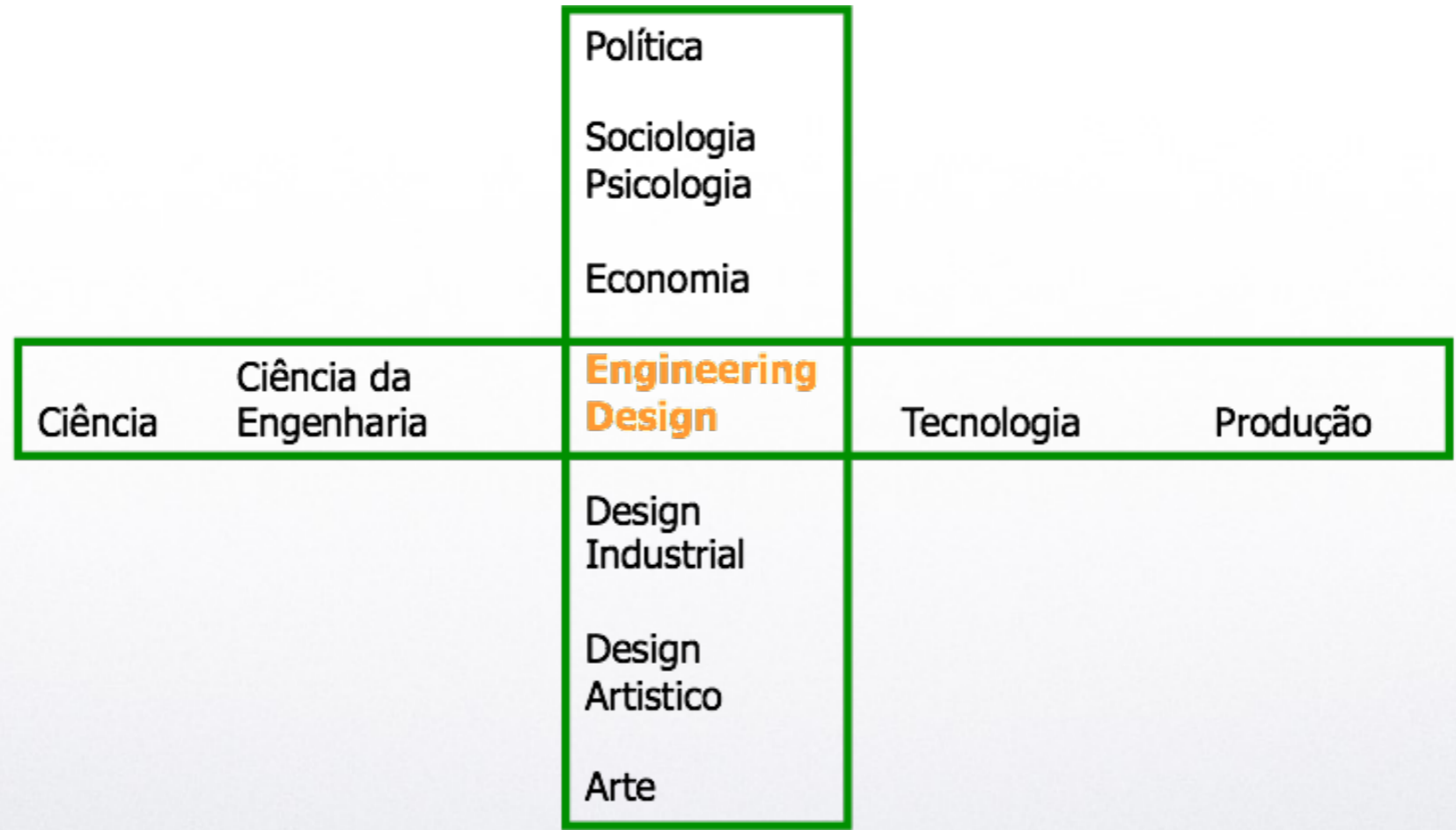
# ***PMR 3100***

## Nosso primeiro projeto: “mirando” uma *startup*

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# Projetando artefatos em Engenharia



Pahl, G., Beitz, W., Feldhusen, J., Grote, K-H., Projeto na Engenharia, Edgar Blucher, 2005



# Projetos e mega-projetos

## Classificação heurística dos projetos:

- Projetos de pequeno porte
- Projetos de porte moderado
- Projetos de porte médio
- Projetos de grande porte
- Projetos muito grandes
- mega-projetos

Qual é a métrica?

## ISO/IEC 29100

	Small project	Medium project	Large project
Duration of project	Less than 2 months	Between 2 and 8 months	More than 8 months
Size of team	Up to 4 people	Between 4 and 8 people	More than 8 people
Number of engineering specialties involved	One	More than one	Many
Engineering fees	Between \$5,000 and \$70,000	Between \$50,000 and \$350,000	Over \$350,000

Complexidade  
Impacto Ambiental  
Risco e impacto social

# Motivação financeira

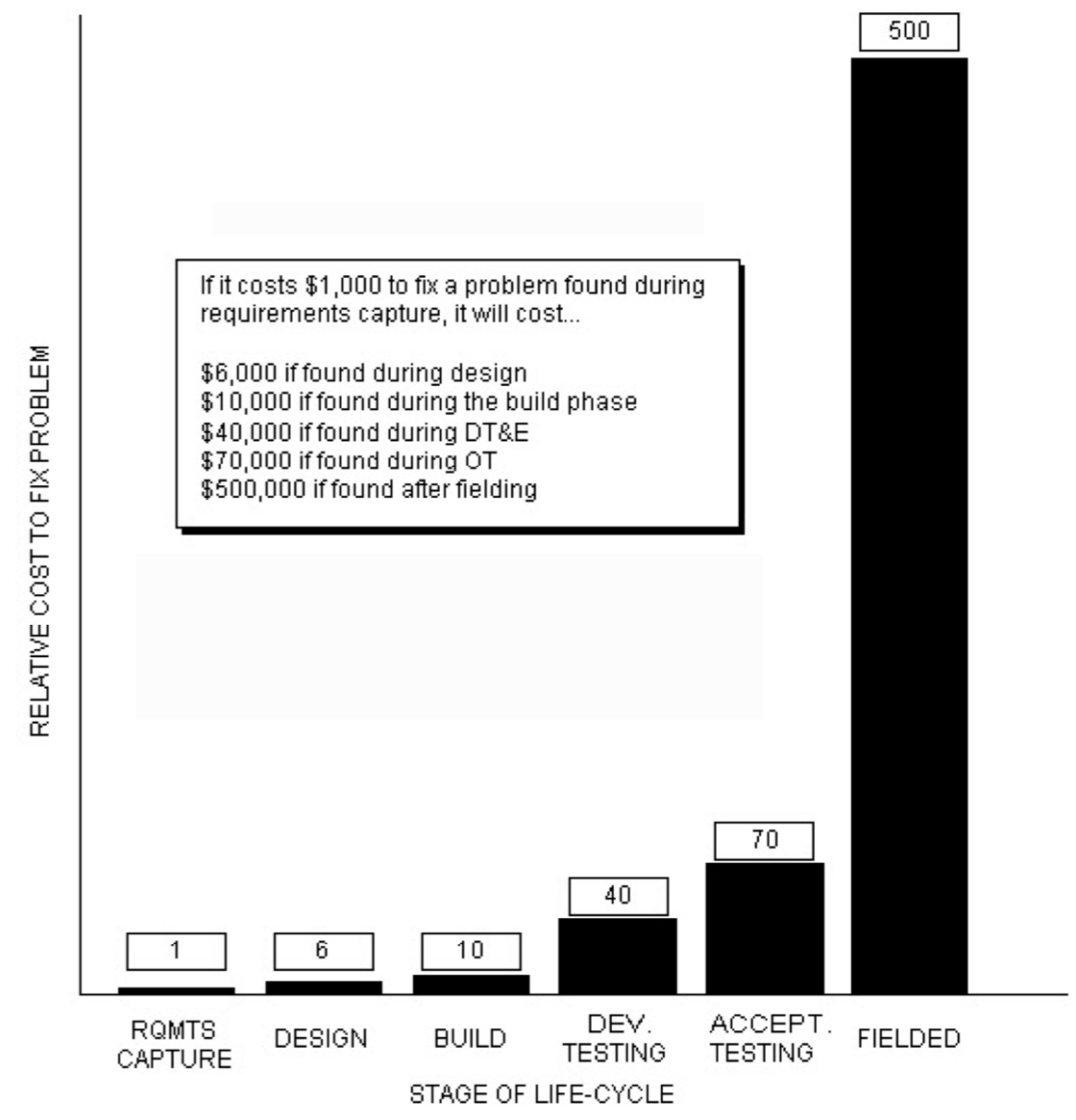
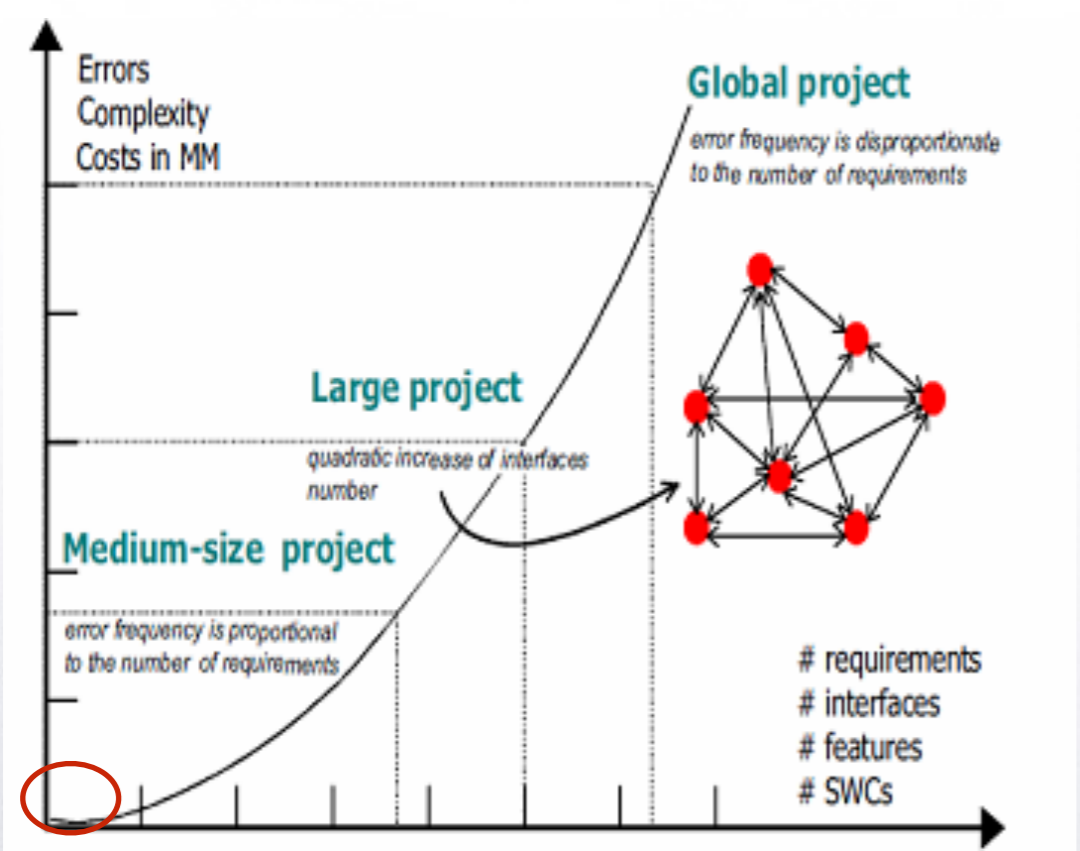
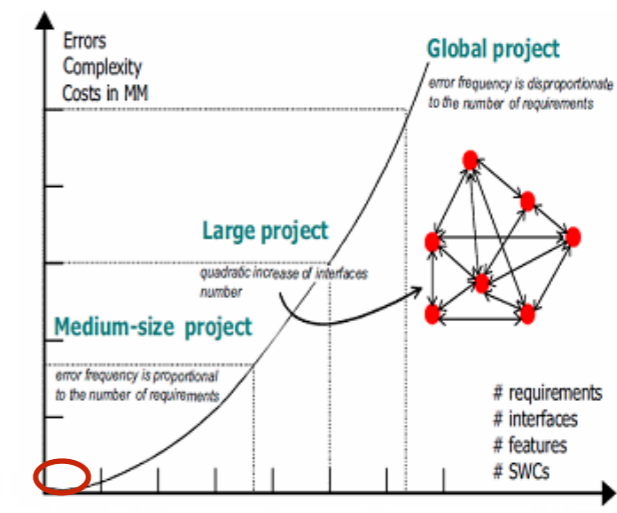
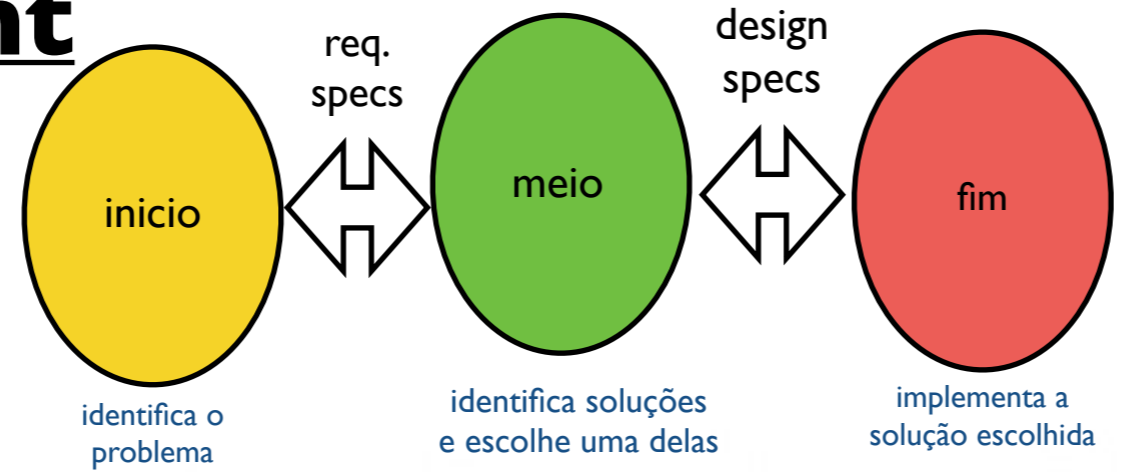


Figura 1: Custo para correção de erros no desenvolvimento de sistemas



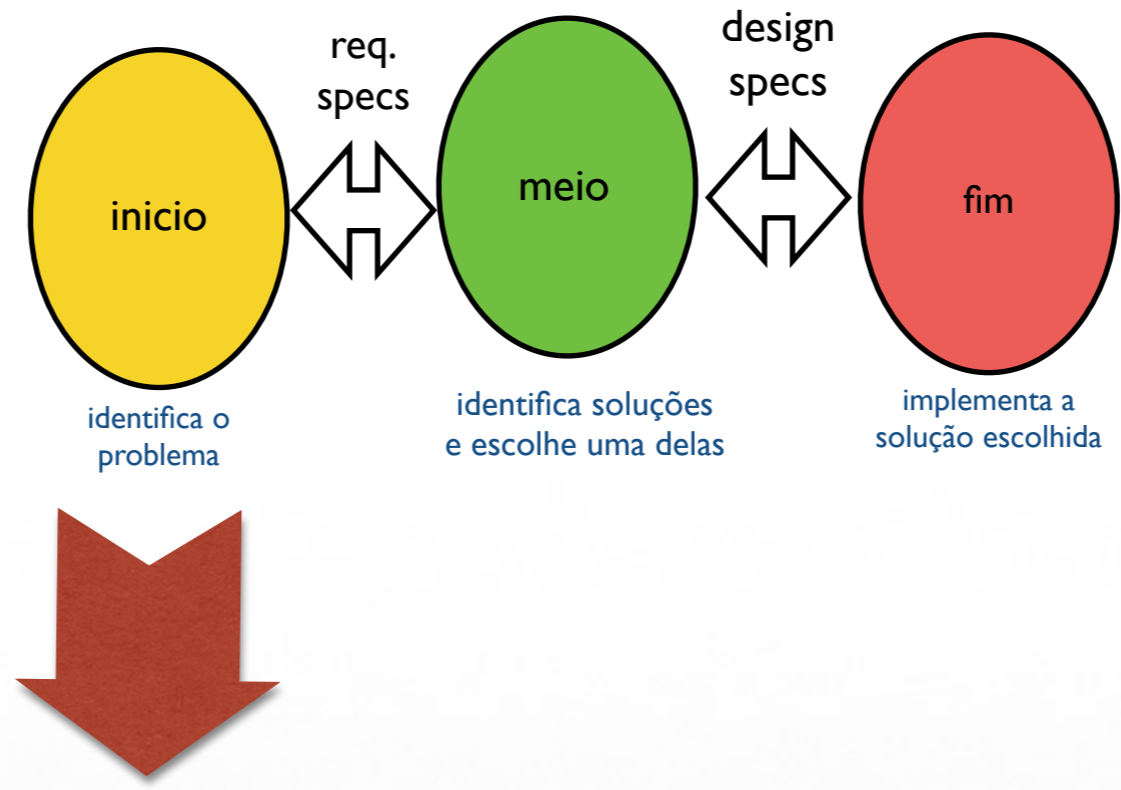
# Design Sprint



O Design Sprint foi criado em 2010 por Jack Knapp e refinado com o time da Google (Chrome, etc) até se tornar o que é hoje, que foi lançado em 2012 no Google Ventures.

<https://www.thesprintbook.com/the-design-sprint>



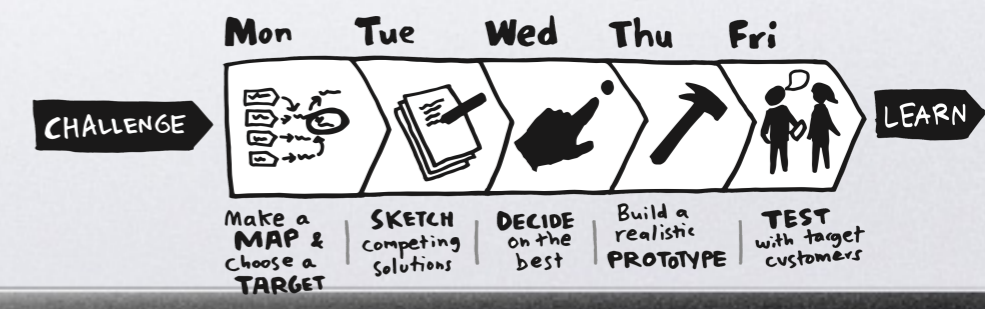


# Escopo



Identificação do problema  
 Público alvo - modelo  
 Tecnologia disponível  
 Concorrentes e coadjuvantes

Requisitos detalhados  
 Jornada do usuário



# HOW TO START A START-UP

by Anna Vital



inspired by eponymous essay by Paul Graham

F&F Funders and Founders

Prof. José Reinaldo Silva





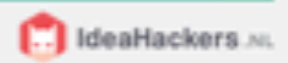
# Problem-Solution Fit canvas

Purpose / Vision

Version:

Define CS, fit into CL	<b>1. CUSTOMER SEGMENT(S)</b> <span style="float: right;">CS</span>	<b>6. CUSTOMER LIMITATIONS</b> E.G. BUDGET, DEVICES <span style="float: right;">CL</span>	<b>5. AVAILABLE SOLUTIONS</b> PROS & CONS <span style="float: right;">AS</span>	Explore AS, differentiate
Focus on PR, tap into BE, understand RC	<b>2. PROBLEMS / PAINS</b> + ITS FREQUENCY <span style="float: right;">PR</span>	<b>9. PROBLEM ROOT / CAUSE</b> <span style="float: right;">RC</span>	<b>7. BEHAVIOR</b> + ITS INTENSITY <span style="float: right;">BE</span>	Focus on PR, tap into BE, understand RC
Identify strong TR & EM	<b>3. TRIGGERS TO ACT</b> <span style="float: right;">TR</span>	<b>10. YOUR SOLUTION</b> <span style="float: right;">SL</span>	<b>8. CHANNELS of BEHAVIOR</b> <span style="float: right;">CH</span> ONLINE  OFFLINE	Extract online & offline CH of BE
	<b>4. EMOTIONS</b> BEFORE / AFTER <span style="float: right;">EM</span>			

Problem-Solution fit canvas is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. Designed by Garia Neprikhina / [IdeaHackers.nl](http://IdeaHackers.nl) - we tailor ideas to customer behaviour and increase solution adoption probability.



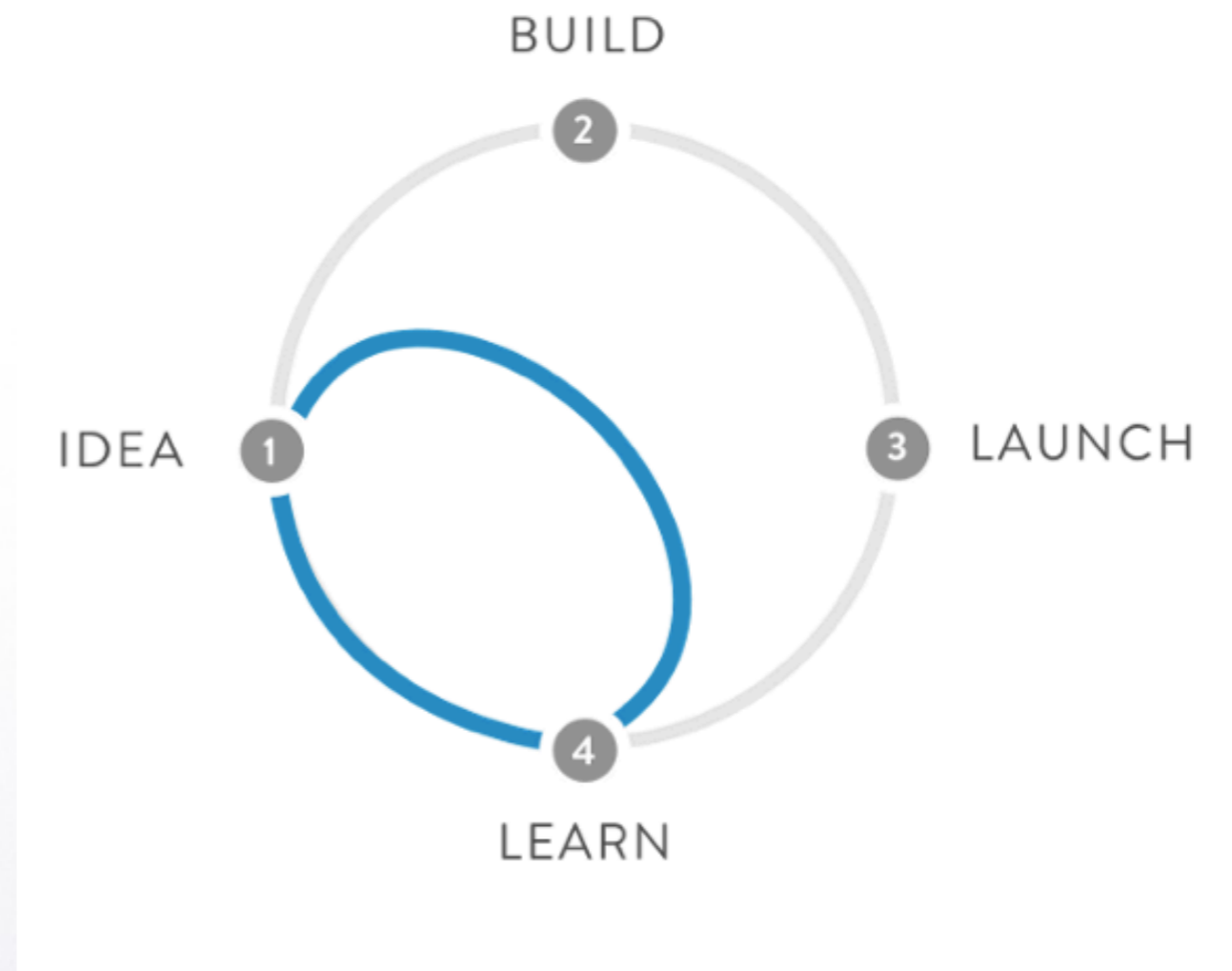




**Fabricio Teixeira**

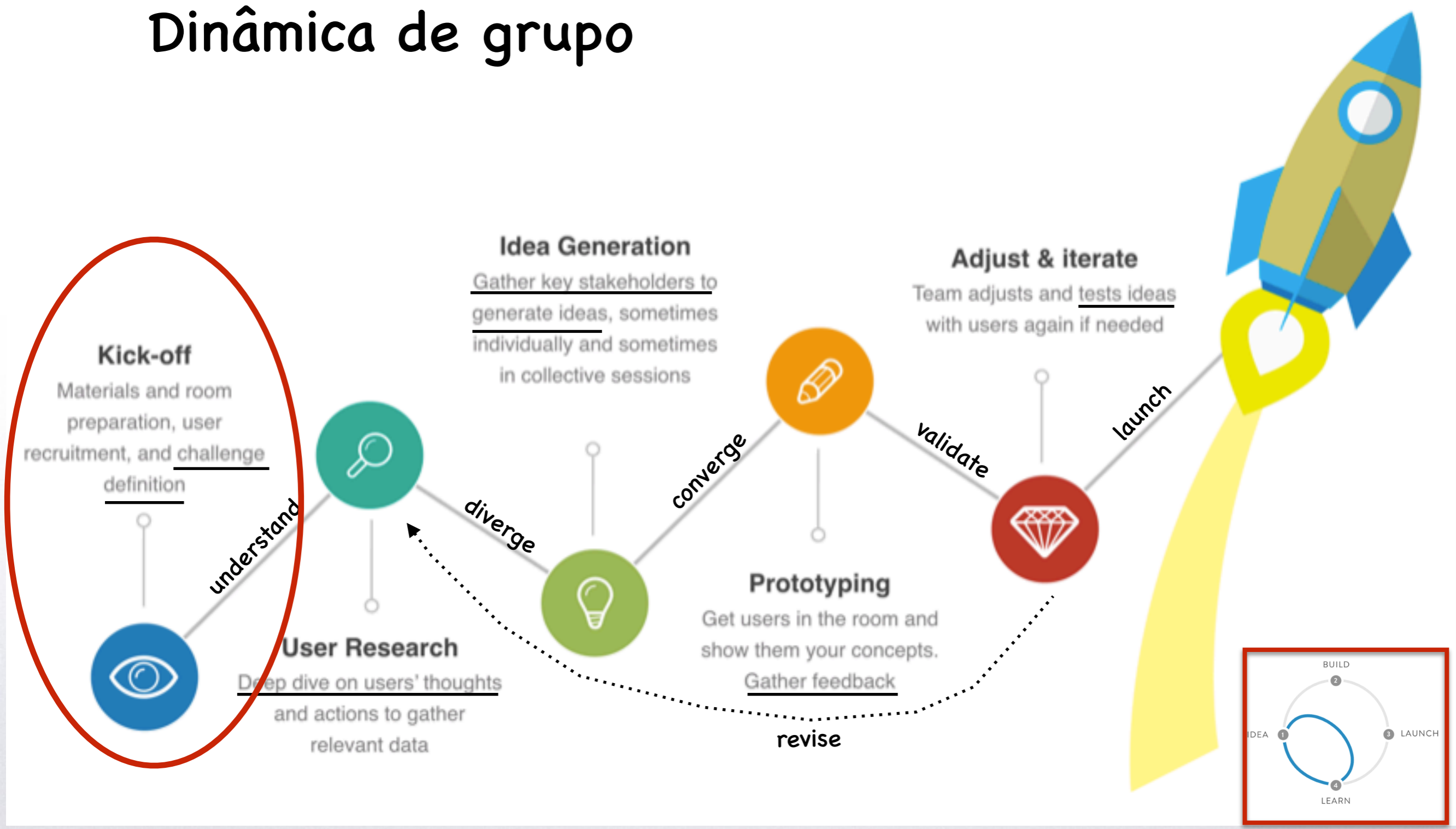
Designer at Work & Co,  
Founder of UX Collective —  
<http://twitter.com/fabriciot>

A principal vantagem desse processo de 5 dias em relação a tantas outras metodologias que existem por aí é que ele pega um atalho bastante vantajoso: ao invés de esperar para lançar um MVP (Minimum Viable Product) para descobrir se a ideia é boa ou não, processo esse que pode tomar vários meses, o Design Sprint foca especificamente na validação da ideia com usuários e encurta o processo para 40 horas de trabalho.



<https://brasil.uxdesign.cc/google-design-sprint-como-funciona-e-como-aplicar-no-seu-projeto-279107363659>

# Dinâmica de grupo







Vamos às equipes de projeto