

HELLO



iad²³



I'm Michele Brissoni
a SW craftsmanship coach

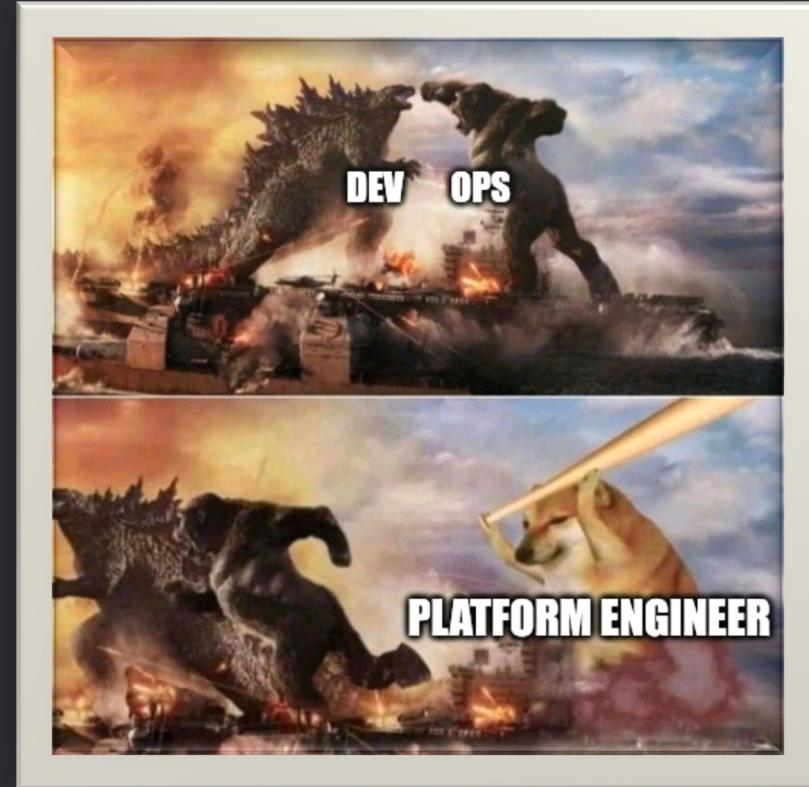


Building a Culture of SW Craftsmanship

Unmasking Internal Development Platforms' Quality Conundrum



Some Time Ago a New Role Started To Emerge





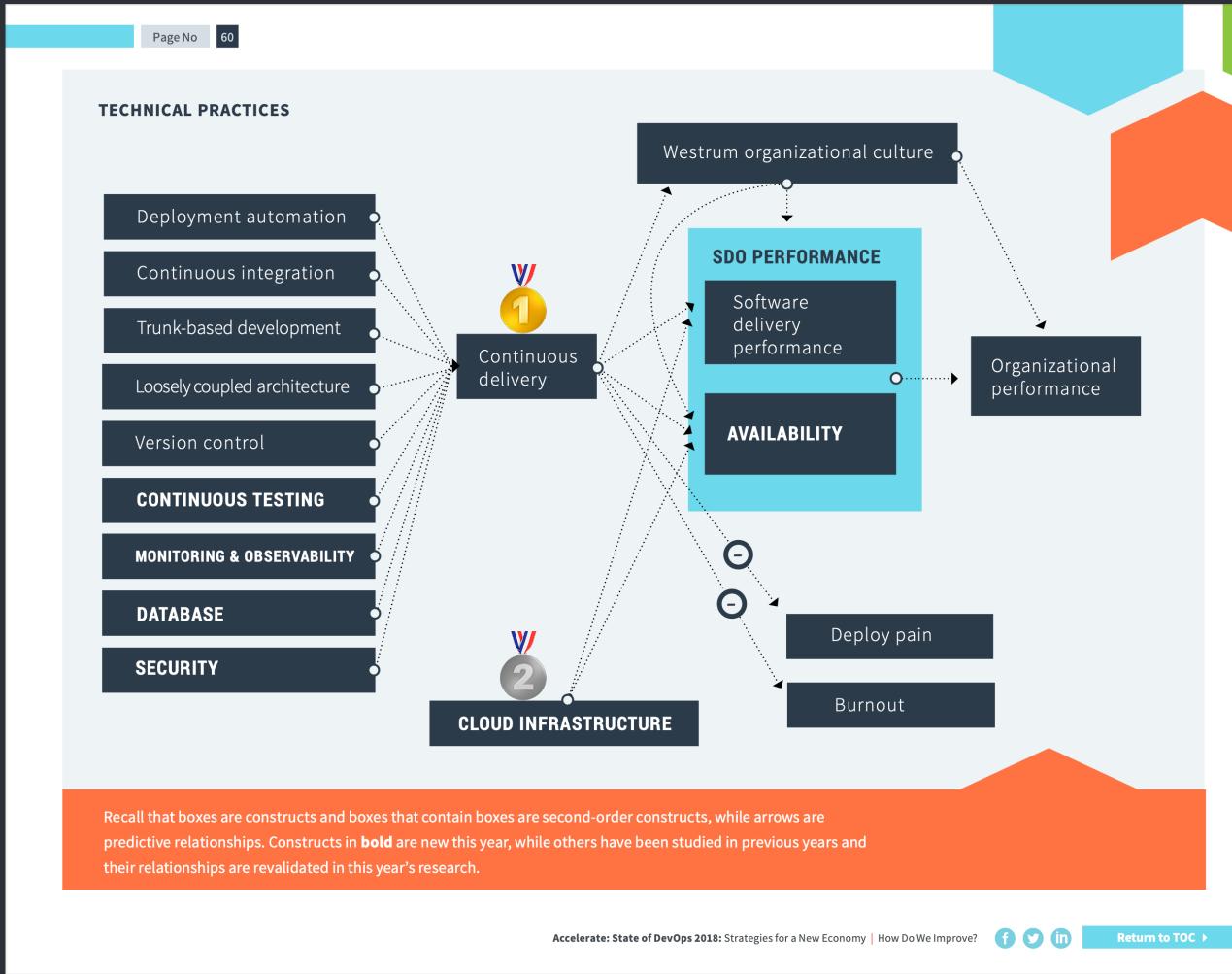
Why Did It Happen?

Let's Explore How We Got Here



Houston, We Have A Problem!

1 2018



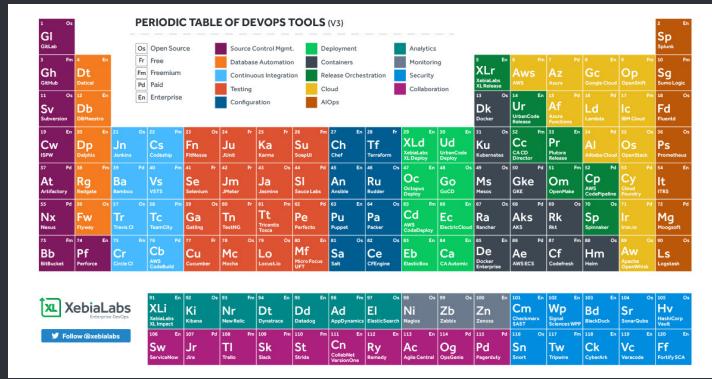
At a first distract
reading



Thus, The Market “*Productized*” DevOps

with new tools

and DevOps cloud offering





Did It Work?

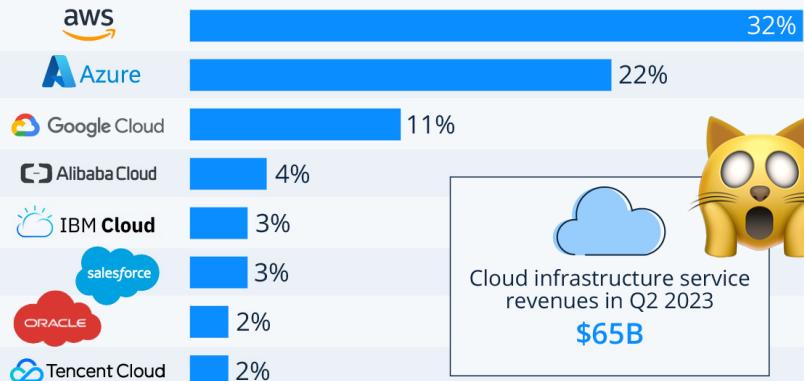


Perspectives Matter



Amazon Maintains Lead in the Cloud Market

Worldwide market share of leading cloud infrastructure service providers in Q2 2023*



* Includes platform as a service (PaaS) and infrastructure as a service (IaaS) as well as hosted private cloud services
Source: Synergy Research Group



statista



Analyzing the **Critical Failures** in DevOps as a “**Product**”

“ Note that **continuous delivery** for the sake of continuous delivery is not enough if you want your organization to succeed.”

DORA State of DevOps 2018 - pg. 52



2 JULY 2019

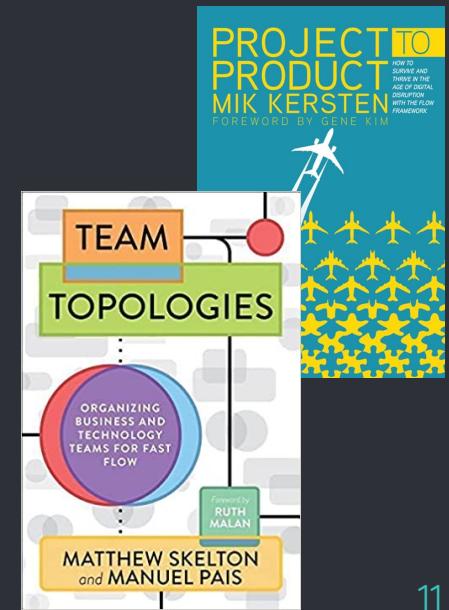


Project to Product Team Topology

Martin Fowler praises about it:

“A crucial insight of Team Topologies is that the primary benefit of a platform is to reduce the cognitive load on stream-aligned teams

[Blog Team Topologies – 25 July 2023](#)





Why Enterprises Need An Internal Developer Platform (IDP)



[Forbes – April 16, 2021](#)



Executive Summary



IDPs are built and used by elite organizations like Google & AWS



IDPs have a tremendous impact on teams' happiness



IDPs support teams in the establishment of continuous delivery



We Are in the IDP Era



What Is an Internal Developer Platform (IDP)?

“An Internal Developer Platform (IDP) is 🏗️ **built by a platform team** to build 🏆 **golden paths** and enable 🤖 **developer self-service**.

An IDP consists of many different techs and tools, glued together in a way that 🧠 **lowers cognitive load on developers** without abstracting away context and underlying technologies.

Platform teams treat their 📦 **platform as a product** and build it based on 🔎 **user research**, maintain and continuously improve it.”

source internaldeveloperplatform.org



IDP Product Box Dilemma

To Build or Not To Build?



Why Build and Use an Internal Developer Platform (IDP)?

“IDPs have a tremendously positive impact on the 🚀 **velocity** and 😊 **happiness** of teams.

They enable developer 🤖 **self-service** while keeping 🧠 **cognitive load low**.

They reduce 💰 **manual ops**, lower **costs** and **maintenance overhead**.”

source internaldeveloperplatform.org



Navigating the Numbers

Insights Into IDP Adoption and Impact



Data Since 2020

- 📅 2020 - Puppet & CircleCI's State of DevOps Report: highlights the **correlation** between IDP adoption and the **DevOps evolution model**
- 📅 2021 - Puppet's State of DevOps Report: **97%** of respondents experienced an **improvement** in the **quality of their work**
- 📅 2023 - Puppet's State of DevOps Report: **68%** reported an **increase** in development **velocity**, with **42%** indicating a **substantial improvement** in development **speed**



Beyond Velocity

Unveiling the Missing Piece: Code Quality

The DORA model is based on improving **AT THE SAME TIME**
🏍 speed **AND** 💎 quality



Unveiling Code Quality Insights: Data Dive Into IDP Impact

📅 2020 - CodeCov's OSS Coverage Report: 70,000 open-source projects.

13.54% of them had test coverage of 100%.

📅 2021 - CodeCov's OSS Coverage Report: 📈 from 13.54% to 21.92%. 80% on GitHub and GitLab CI/CD. Code quality **seems unrelated** from IDP.

📅 2023 - Puppet's State of DevOps Report: **ONLY 32%** of respondents reported using the IDP for **testing their products**, indicating a **lack of correlation** between IDP adoption and code quality enhancement.

ⓘ Attempt to correlate code quality of open-source code bases created without IDP with the code bases created leveraging IDPs.



Unexpected And Alarming Stats

IDP Testing Engages Only **32%** of Respondents



Inside the IDP: A Closer Look at the 5 Key Components

1 Application configuration management

2 Infrastructure orchestration

3 Environment management

4 Deployment management

5 Role-based access control

🤔 Where is the necessary emphasis on **continuous test & integration?**

😢 When Standards Fall Short: Reflecting on the Quest for Consistency





Embarking on Real Cases: Unveiling Insights Through IDP Adoption Stories



Recurring Patterns

The *Ugly* IDP 🙄

✗ Team topology

💰 IDPs as a project

🤮 Dev aversion

👎 Code quality

The *NO* IDP 🐚

✓ SAFe

💰 Serverless

🥳 Dev approval

👎 Code quality

The *Right* IDP ✅

✓ Team topology

เหรียญ IDP as a **product**

🤝 Inner-source triumph

📈 Code quality



Behind the Scenes

Unraveling the Whys Behind Common **Failures** ⚡



Cracking the IDP Code: The Main Challenges

- 1 IDP is a product: Strategic and tactical product management
- 2 Challenging users: Facilitation and hands-on collaboration
- 3 Ops juggling act: Polyglot development in a too small team space
- 4 Mindset rift: From 'test later' to TDD
- 5 Feedback vacuum: Silence in the dev-to-user loop



Unlocking Success

The Key Ingredients in the Winning Recipe for IDP Development

● 🏆 Speed & Shine: Unveiling the Key Differentiator in IDP

1 Modern Leadership



2 Product Culture



3 SW Craftsmanship





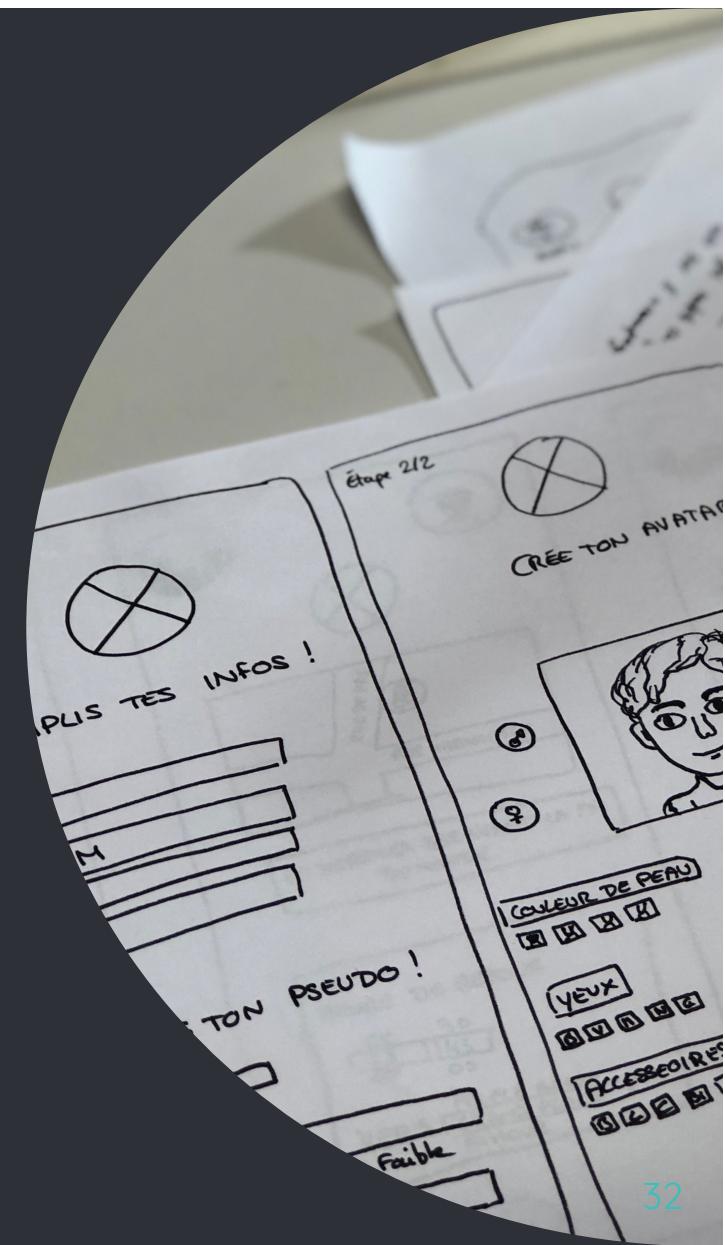
1 Modern Leadership

1. Coaching for performance
2. Neuroscience for coaching
3. Behavioral psychology
4. OKR (Radical focus)



2 Product Culture

1. LeanUX
2. User centricity (🎯 developers)
3. Collaborative design (event storming)
4. Coaching based on engaging RPG



● 3 SW Craftsmanship: The Modern Artistry Unveiled

1. Technical coaching (Samman)

2. SW Craftsmanship Dojo
Developer EVOLUTION {  }





What Is the SW Craftsmanship Dojo?

A marriage of martial arts and XP + 💡

A revolution from learning to continuous mastery

Wait a Moment!



Martial Arts? Hold Your Horses! 😮

I forgot to mention a tiny detail...

I'm a martial art instructor with six  black belts.



Undeadgrishnack by ☀ day
IronMike by 🌙 night

grishnack

Michele



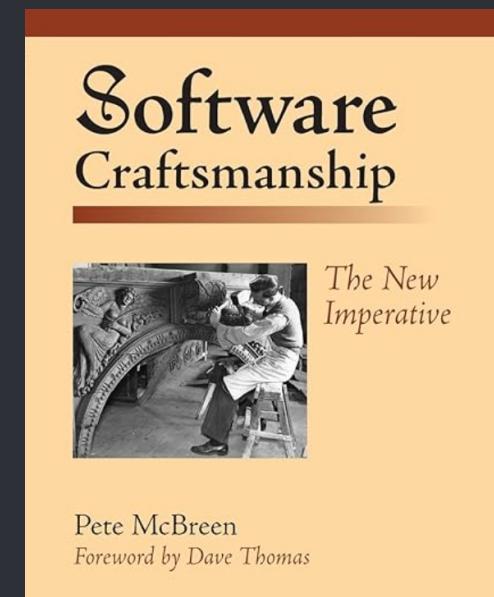
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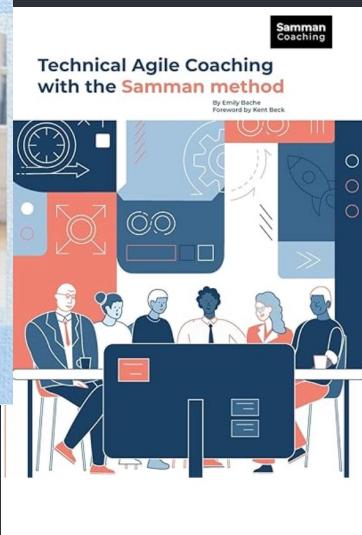
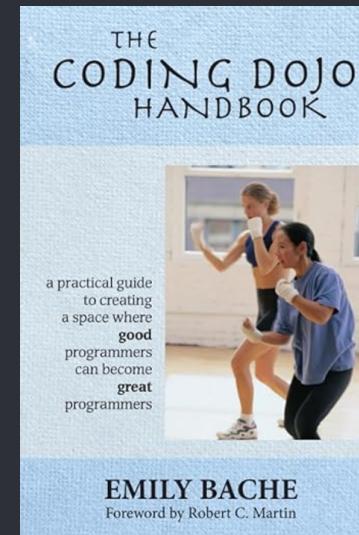
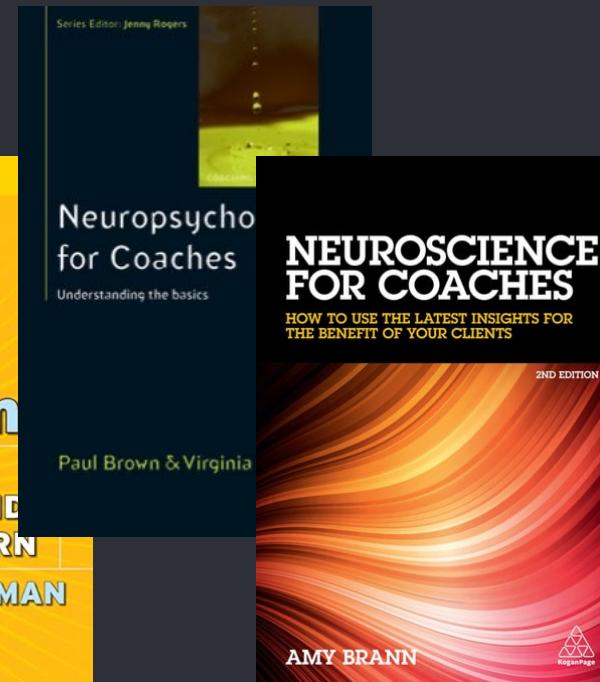
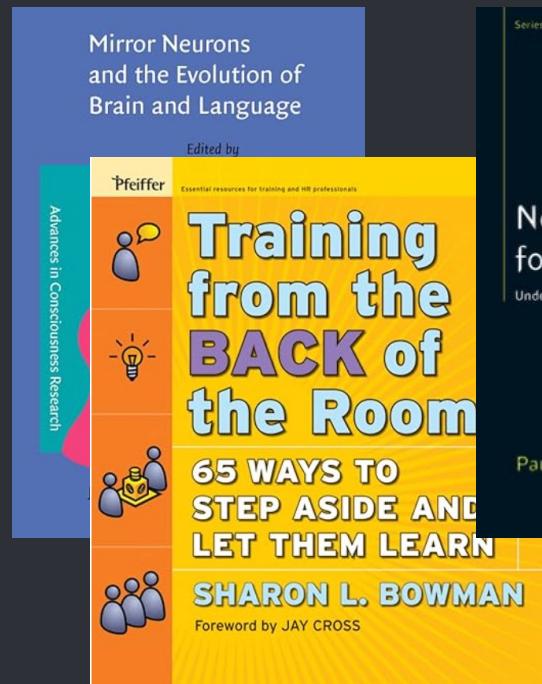


Since 2003, My XP Training Has Been “Unconventional”

It all started with an enlightening encounter with a COBOL developer and his provocative book.



- Martial Arts Meets 🤟💻 IT: The Convergence of Disciplines
- Neuroscience
- Behavioral psychology
- Coding dojo
- Technical coaching



United in Mastery



🥋 Martial arts,

🤝 Coaching, and the



SW Craftsmanship Manifesto

Manifesto for Software Craftsmanship

Raising the bar.

As aspiring Software Craftsmen we are raising the bar of professional software development by practicing it and helping others learn the craft. Through this work we have come to value:

- Not only working software,
but also **well-crafted software**
- Not only responding to change,
but also **steadily adding value**
- Not only individuals and interactions,
but also **a community of professionals**
- Not only customer collaboration,
but also **productive partnerships**

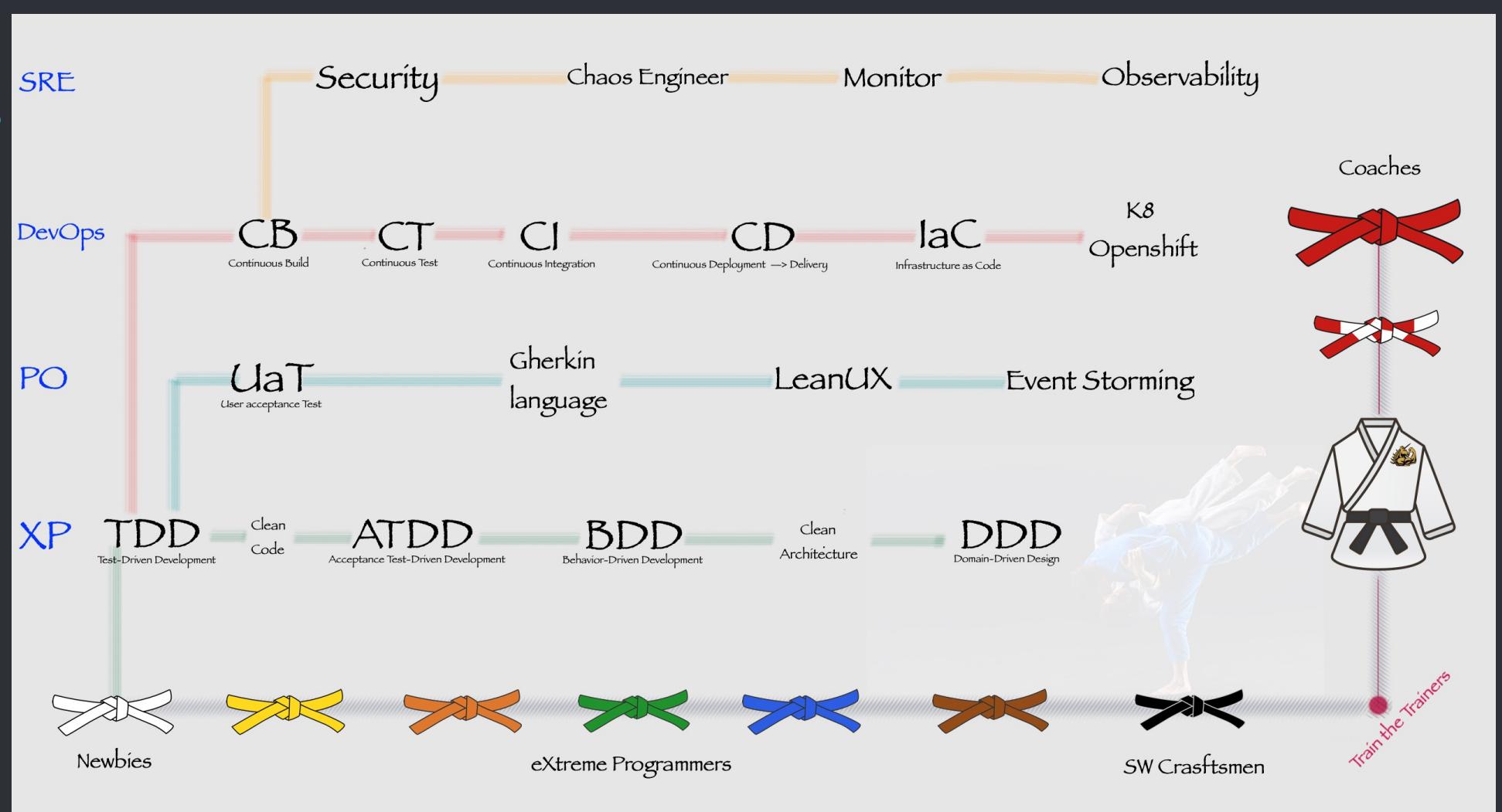
That is, in pursuit of the items on the left we have found the items on the right to be indispensable.

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this statement may be freely copied in any form.



From vision to Reality: 2016 The SW Craftsmanship Dojo MVP

A Curriculum That Goes Beyond the Initial XP  A small green icon of a seedling with three leaves.



Unveiling the SW Craftsmanship Dojo's Blueprint



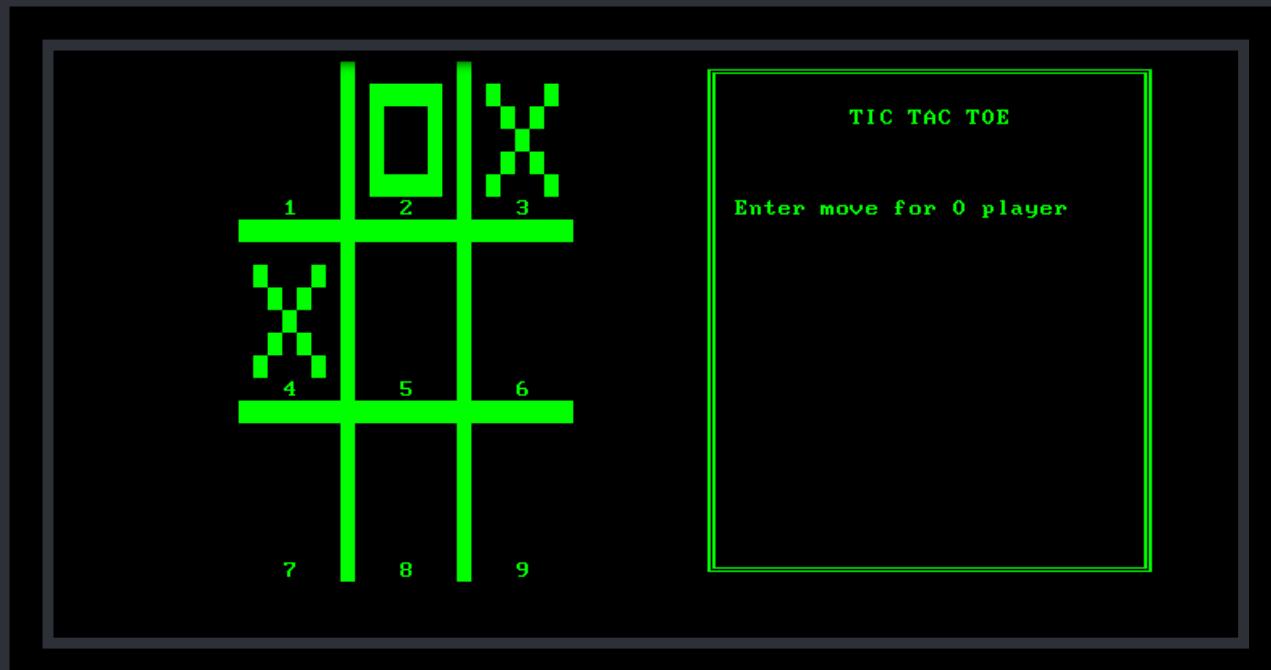
Unlocking the Dojo

A New Student's Journey Unveiled.



Mastery Assessment: Gamify Measuring and Tracking

Where discipline meets the fun of the Tic Tac Toe Kata



-  Seasonal Weekly Classes: Nurturing Developer Evolution 
-  Neuroscience-driven lessons
-  Guided by a sensei
-  Behavioral transformation (seek & re-wire)
-  Pair/mob programming in  cycles
-  Practice leveraging kata and gamification
-  Dysfunctional simulation via RPG

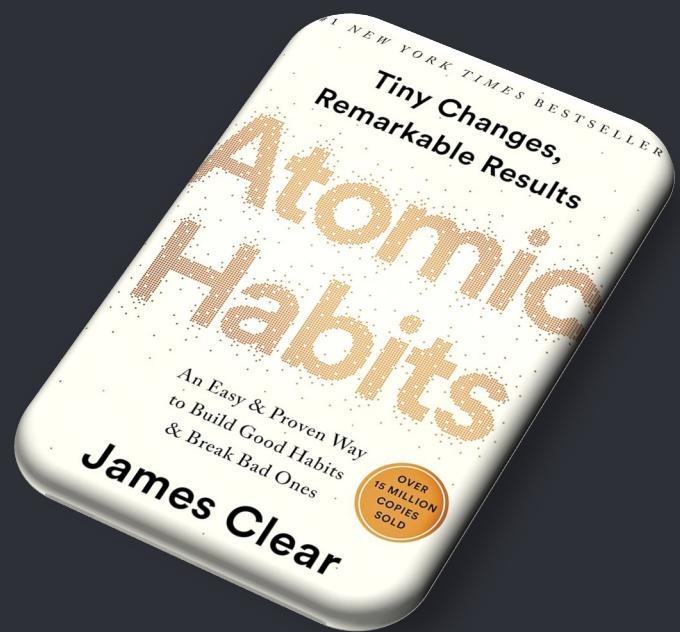
• Daily Kata: Cultivating Mastery One Pomodoro at a Time 🍅



⌚ Kick off your day conquering your daily kata



Build **Atomic Habits**



-  Graduation Test: One Step Closer to the Black Belt 

- At the end of the season
- A gamified challenge
- ✓ Evaluates the student's mastery
- Measuring impact through DORA & DASA metrics
- Certificate with the pass for the new belt

- 🔎 Inside the SW Craftsmanship Dojo: A Blueprint for Mastery

- 🧪 Mastery assessment (test)

- ▢ 🧑 Seasonal weekly classes (dojo)

- ▢ 🤸 Daily practice (kata)

- ▢ 🎓 Graduation with code assessments (exam)

- ▢ 🧑 Continuous coaching, mentoring, tutoring

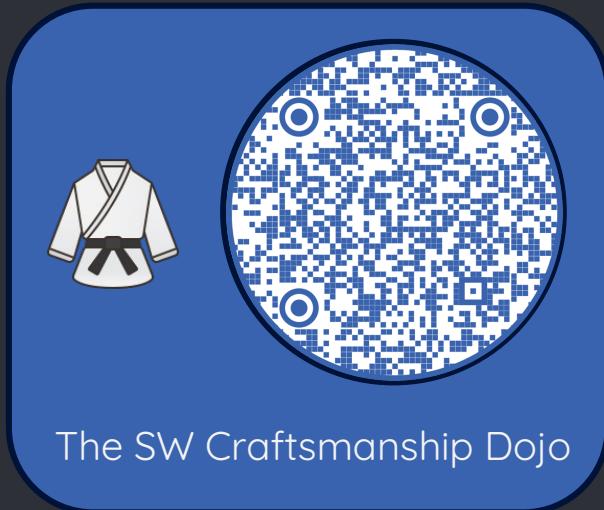
- ▢ 📅 Monthly 📖 book club & 🏷️ randori



**A Black Belt Is A White Belt Who
Refused To Give Up**

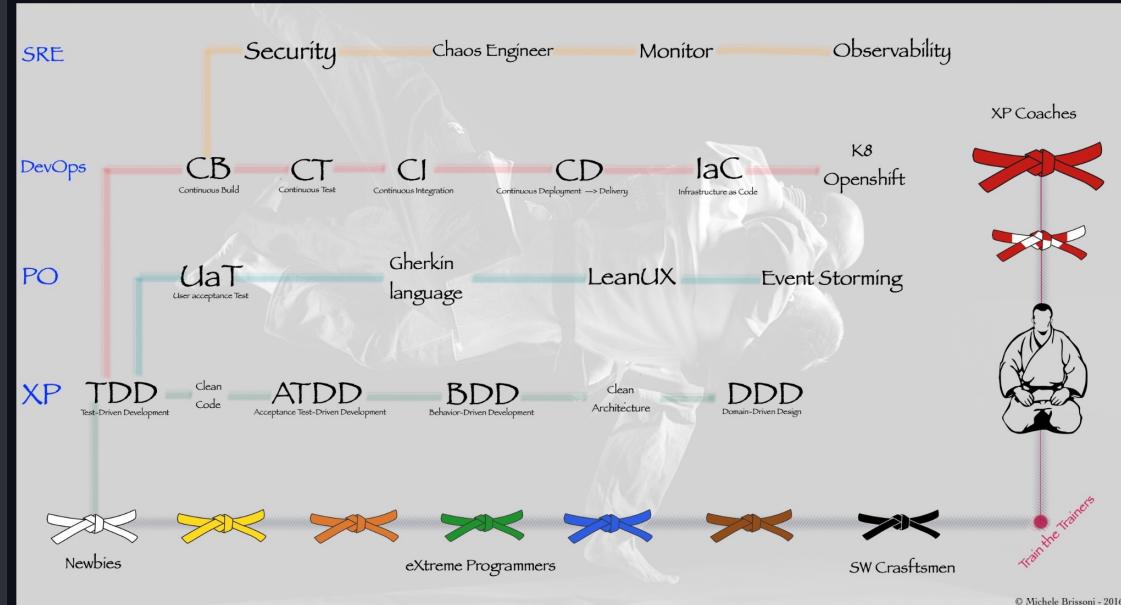
Explore Our Dojo!

The SW Craftsmanship Dojo offers an open source program of the **white** and **yellow** belts.



Belts in a nutshell ☀

The SW Craftsmanship Dojo® ☀ divides the learning experience into levels (belts) like in judo.



Belt	Main focus
<u>White</u>	(✓ OpenSource) TDD (Test Driven Development) & Clean Code
<u>Yellow</u>	(✓ OpenSource) ATDD (Acceptance Test Driven Development) + CI Pipeline
<u>Orange</u>	(⚠ Summary only) CD Pipeline + BDD (Behavior Driven Development)
<u>Green</u>	(⚠ Summary only) Gherkin & Advanced BDD (lean UX), ELK
<u>Blue</u>	(⚠ Summary only) CQRS, HEX, Even Driven Architectures
<u>Brown</u>	(⚠ Summary only) DDD + Containerization + Cloud
<u>Black</u>	(⚠ Summary only) IaC (Infrastructure as Code) + Code in production

Katas ☀

The SW Craftsmanship Dojo® ☀ follows the coding dojo movement and the [Samman coaching](#) community. We try to stay connected with it by leveraging ["Emily Bache's job"](#).



AMA Unleashed: Let the Questions Roll In!





Michele
Brissoni



👉 Contact me 👈



Thank YOU

and

See you soon