

expo IQA 25

MADRID
May 20th,
21st & 22nd
2025

The AI Revolution in QA

- > José-Urbano González
- > Pablo Pisa

expoqa.eu

Track 4, Test Management & Strategy.

Your track talk speakers



José Urbano González

QA Manager at Hiberus

jugonzalez@hiberus.com

Their daily work revolves around the implementation and development of technical testing projects, including performance, automation and mobility.



Pablo Pisa

AI Strategy Director at Hiberus

ppisa@hiberus.com

Engineer passionate about technology and its transformative impact on people, businesses, and society. Currently leading the Artificial Intelligence strategy at Hiberus Technology

AI disrupting software development industry



“AI has made modern engineering exciting”

Thomas Domke, CEO of GitHub



“**You no longer have to type everything yourself.** That's what's changed. So, I think people with taste, clarity of thought, and problem-solving skills will really shine in this new era.”

Aravind Srinivas, CEO of Perplexity



“Each software engineer will just do much, much more for a while. And then at some point, yeah, **maybe we do need less software engineers.**”

Sam Altman, CEO of OpenAI



“Right now, the developer’s role is shifting from code writer to **code reviewer** (...) Large language models (LLMs) are a big help, but they still make mistakes. But as these models evolve, and trust in the resulting code improves, the developer’s role will be more akin to that of an **orchestrator** and **acceptance tester of AI-generated outputs.**”

Rodrigo Coutinho, Co-founder and AI Project Manager at OutSystems.

> **orchestrator**

> **code reviewer**

trust

> **acceptant tester**

Agenda



The direct impact of AI on QA



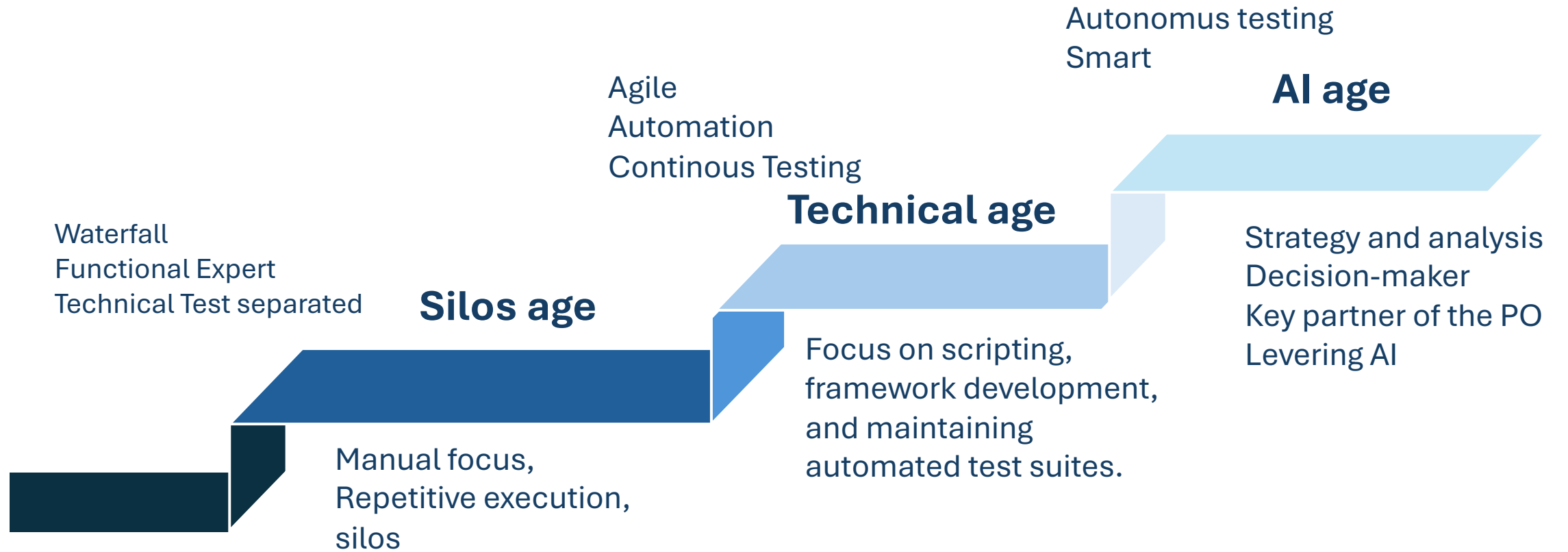
QA transformation with AI in a real project

The direct impact of

AI on QA



Tester rol evolution



AI in QA

Benefits

- Increased test coverage.
- Early defect detection.
- Reduction in time and costs.
- Resource optimization.
- Improved software quality.

Challenges

- Focus on Automation vs. Relevance
- Bias in Models
- Data to train AI models
- Learning curve
- Resistance to change

Redefining develop teams in the AI age

1 DEVELOP TEAM CONFIGURATION

Multidisciplinarity is no longer optional.
Everyone should understand the AI models

2 GREATER INTEGRATION ROLES

Traditional role boundaries blur in AI-powered environments.
Quality is everyone's job – more than ever.

3 AI – Adapted Workflow

Testing is iterative, data-driven based, and model-aware.
QA workflows evolve software logic and learned behavior.

4 Human-in-the-Loop

Testing is iterative, data-driven, and model-aware.
The human remains the ethical, strategic and contextual filter.

AI reshapes not just how we test, but how we collaborate, how we learn and how we define value as a team

Redefining develop teams in the AI age



Critical and Analytical Thinking

Before: Tests design, analyze bugs
Now: Evaluate AI decisions, identify biases



Communication and Collaboration Skills

Before: Collaborate with Devs and Product, report bugs clearly
Now: Coordinate with Data Scientists, negotiate when to trust in AI.



Business Domain Knowledge

Before: Prioritize testing based on business
Now: Evaluate whether model predictions make business sense.



Testing and automation Fundamentals

Before: Design regression suites, scripts, pipelines.
Now: Apply classic automation + AI tools to generate tests, analyze logs, and detect patterns.



Excellence in QA **STILL** starts with human judgment, curiosity, and collaboration

QA Engineer Skills in AI Age



Great power, great responsibility

Understanding of AI and Machine Learning Fundamentals

Ability to Train, Supervise, and Validate AI-based Testing

Data analysis skills to Interpret AI Outputs

Ensuring end-to-end quality: data quality & model behavior,

Guardian of AI Quality – the last defense line!!!.

AI Assets in QA



AI assisted
**test cases
definition**

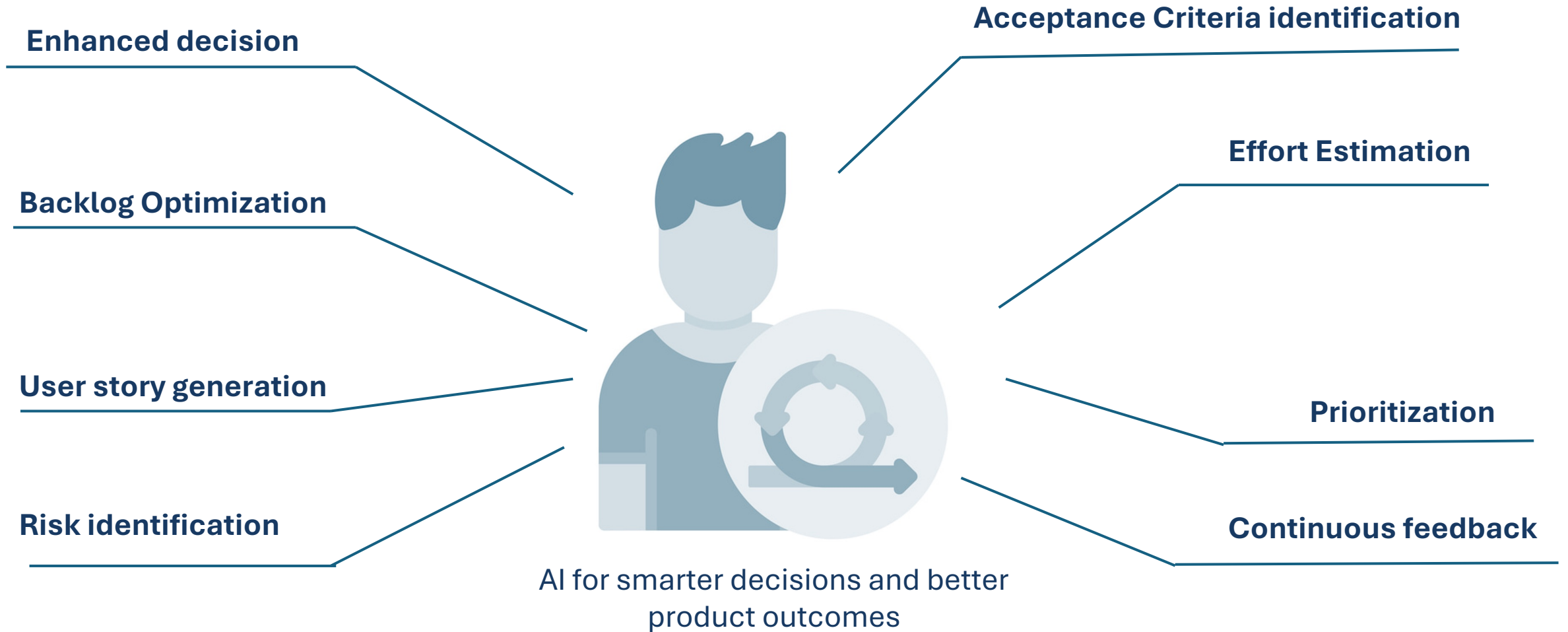


AI assisted
**user story
creation**



AI augmented
code review

The product owner – How can AI help?



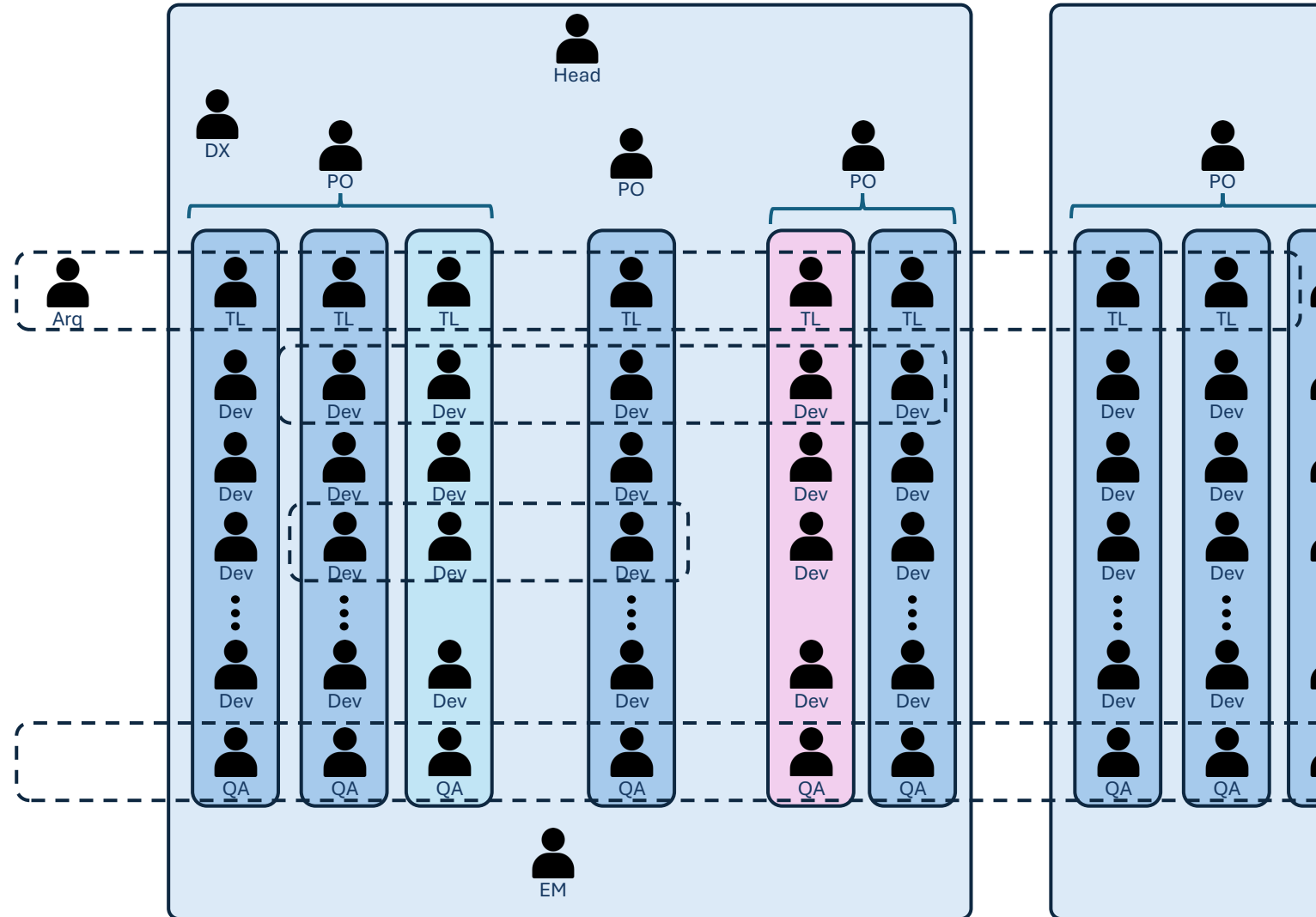
QA transformation with AI in a

real project



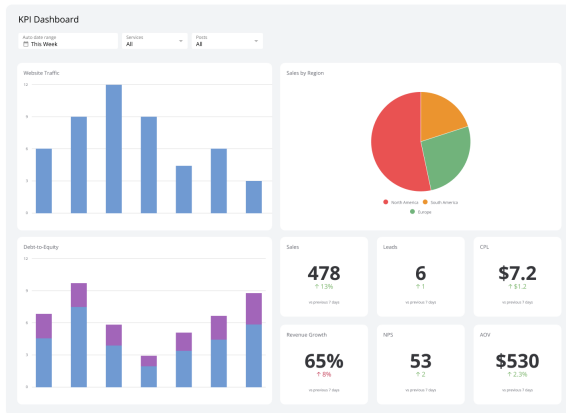
The project

- **Client:** Large international company, leader in its sector.
- **Challenge:** Complete overhaul of its Product Lifecycle Management (PLM) software
- **Scale:** 500+ professionals from more than 20 different companies.
- **Budget:** over 100.000.000 €
- **Methodology:** Agile, Squads, Chapters, Domain-Driven Design (DDD).
- **Role Ecosystem:** Product Owners, QA Engineers, Developers (Back, Front, or Fullstack), Tech Leads, Architects, Engineering Managers...
- **Our team:** 14 squads, more than 100 professionals

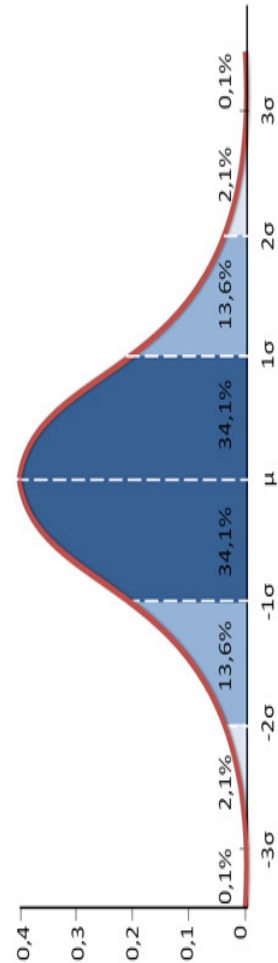


Performance evaluation

Performance metrics



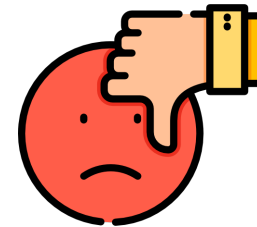
- **Quality:** Errors in production, Errors in integration, static quality, coverage...
- **Delivery:** Velocity, Lead time
- **Business:** Value delivered, adoption, service usage
- ...



New squad assigned



Penalties



You are fired!

Seeking performance



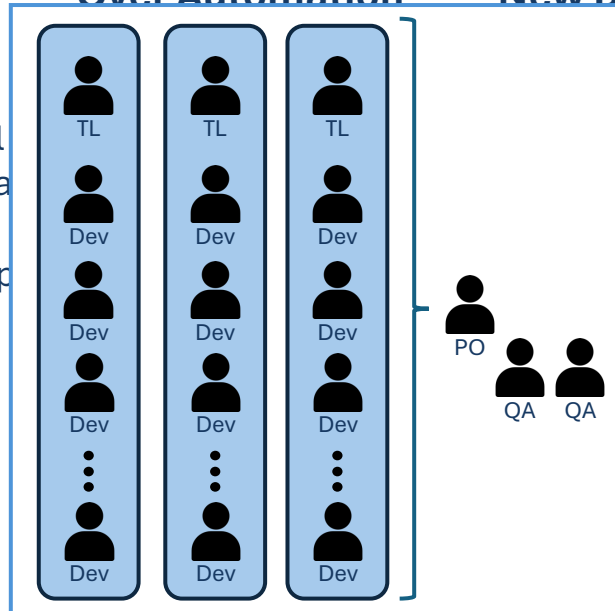
Developer Productivity Soars

Development teams start using AI tools (e.g., copilots) and significantly increase their productivity.

QA Becomes a Bottleneck

The QA engineer, focused on manual tasks and traditional automation, struggles to keep up

Developers Take Over Automation



PO Becomes the New Bottleneck

The PO struggles to manage detailed requirements, acceptance criteria, and development cycles as development increases.

Reinventing the QA Role

The QA Engineer stops automating tests. Becomes a strategic partner to the PO:

- Ensures detailed requirements and acceptance criteria so development meets specifications.
- Ensures adherence to the testing methodology.
- Verifies that tests and acceptance criteria genuinely prove the software meets its purpose.

Quality and Speed Skyrockets

- 98% meaningful coverage
- Over 3 months passed before the first production error was detected.
- Thanks to CI/CD quality, that error was resolved in under 24 hours from detection.

When AI is used without strategy and supervision

Lessons learned

(Inheriting other team's products)

Bloated Code

Excessive lines of code. The easier it is to code, the more lines of code are generated, often unnecessarily. The more lines of code the more difficult to read, to maintain...

Duplicated code

Easier duplicate with AI than structure and reuse

Incomplete and Excessive Test Coverage

Simultaneously incomplete and excessive test coverage

A "brute force" approach was applied to AI in development and testing, lacking the necessary strategic guidance and domain knowledge to ensure relevance and efficiency.

AI as a tool is not enough; it requires human intelligence to direct it.

Take away...

AI does not replace QA, it transforms and enhances it.

New skills and mindset are crucial.

Specific assets needed.

Human-machine collaboration is the future.

Adaptation is essential to maintain relevance and effectiveness.



José Urbano González

QA Manager at Hiberus

jugonzalez@hiberus.com

<https://www.linkedin.com/in/joseurbanogonzalez/>



Pablo Pisa

AI Strategy Director at Hiberus

ppisa@hiberus.com

<https://www.linkedin.com/in/pablopisa/>

expo **QQA** 25

MADRID
May 20th,
21st & 22nd
2025

Thank you for attending

expoqqa.eu