

FIRST EDITION

SOFTWARE DEVELOPMENT HYPER EFFICIENCY

CIST

GEN AI **PULSE**

AT THE HEART OF THE AI-FIRST
ENTERPRISE REVOLUTION

The PULSE of AI: Beyond talk. Shaping business reality.

PULSE is a quarterly paper written by our specialists at CI&T who are implementing AI solutions at the forefront with our clients.

Here, you will find real-world data, actionable insights, and the transformative impact of this ongoing revolution.

Gen AI takes center stage in software development

More and more companies are transitioning from testing to production in their Gen AI use cases.

According to a16z, **among dozens of Fortune 500 companies,**

53%

of Gen AI **use cases are in the software development** field.

[16 Changes to the Way Enterprises Are Building and Buying Generative AI](#) - a16z (2024)

According to a CI&T research:

57%

of the **leaders said they had very high expectations** about the power of generative **AI to boost efficiencies at their organisations***

[Accelerating Digital Efficiency With The AI Multiplier](#)
- CI&T and Global CxO Institute (2023)

42%

of respondents **ranked software development processes as an eight or higher** (from 0 to 10), while 10% ranked it as a ten, showing they **believe generative AI will be critical in this area ***

Learn more:

To help companies navigate the complex landscape of Gen AI adoption, [Box 1824](#) has created a [Gen AI Responsible Strategy Roadmap](#). The method predicts how the future will directly impact your business, what the aggregate risks and opportunities are, and how to make this knowledge tangible through a roadmap applied to your needs.



The disruptive force of Gen AI in practice

Generative AI has already shown signs of the potential to revolutionise every stage of software development.

We present some **practical examples of the outcomes we have achieved** with businesses from different industries and segments at different stages of software development.

Reducing lead time

By implementing Gen AI use in the processes and teams, we have seen a substantial reduction in lead time, while also **delivering quality gains of up to 2.5 times**.

Ranging from

20%

to

56%

gains in lead **time reduction**

IMPACT AMPLIFIED

With the time saved, teams can focus on testing new features, ensuring thorough testing, leading to a higher quality product. This, in turn, translates into a better user experience, as the software is more robust, reliable, and tailored to meet user needs.

The increased efficiency allows teams to iterate and release updates more frequently, enabling them to respond to user feedback and market faster.

* the numbers and informations presented includes combined approximate figures from multiple global projects across various clients and industries.

Speed and accuracy in story creation

Even technological careers like developers or UX designers face repetitive tasks on a daily basis. The process of creating technical specification and user stories are time-consuming, but automation can **dramatically expedite the generation of initial drafts for development ideas.**

25%

Reduced Effort in Hours for story development.

33%

Increased efficiency with automatic creation of chosen stories and detailed specification for development.

IMPACT AMPLIFIED

Reducing the time spent on story writing not only frees up valuable time for the planning team, but it also leads to improved consistency, innovation and quality.

This helps the team establish standards for story writing, making it easier for them to become highly efficient and elite performers.

* the numbers and informations presented includes combined approximate figures from multiple global projects across various clients and industries.

Helping improve user experiences

Accelerating the refinement of backlogs has led our teams to deliver more assertive products.

One of our clients in the banking sector has achieved an **80% success rate in the answering user queries**, which was previously a critical point in the user experience.

FROM

3606

Total of corrections

TO

1202

Corrections using AI
through CI&T/FLOW

7h30

WITHOUT AI



5h

WITH AI

6h30

WITHOUT AI



2h30

WITH AI

IMPACT AMPLIFIED

Improving product assertiveness directly impacts customer satisfaction.

Moreover, accelerating corrections with AI creates higher software standards and decreases manual processes.

Ultimately, **it leads to more secure and comprehensive digital products, systems, and software.**

* the numbers and informations presented includes combined approximate figures from multiple global projects across various clients and industries.

Testing faster and better

Assertiveness in software development phases, as well as the **reduction of effort in pre-development, has led us to scale software development production, without scaling** management roles.

In other words, it's not only a matter of speed, but also business efficiency.

50%

effort optimisation in
**automated test case
generation**

50% 70%

effort reduction in
pre-development
phases

of **assertiveness**
in user stories
generated

IMPACT AMPLIFIED

By reducing costs, software can be made available to customers more quickly.

Previously unthinkable outcomes become tangible as development teams achieve high elite performance rates at a faster pace.

* the numbers and informations presented includes combined approximate figures from multiple global projects across various clients and industries.

Backlog effectiveness

A 75% reduction in time means that the process of creating and managing the business backlog now takes only 25% of the original time, without compromising quality.

This indicates that backlog items are well-defined, aligned with business objectives, and provide value to stakeholders.

75%

reduction on time to generate business backlog, with good effectiveness

73%

reduction on development time for a sample of tasks

50%

Reduction on time to generate test cases

IMPACT AMPLIFIED

Faster backlog generation enables quicker response to changing market demands, customer feedback, or competitive pressures.

Teams can focus on delivering features and improvements faster, leading to shorter development cycles.

Reduced time spent on backlog management frees up resources for innovation, code quality, and addressing technical debt.

* the numbers and informations presented includes combined approximate figures from multiple global projects across various clients and industries.

Takeaway:

AI technology is driving process efficiency and enabling the transformation of business reality. The future of partnership brings new challenges and possibilities for applying AI in different areas.

Bruno Rocha
Head of Digital Technology, YDUQS

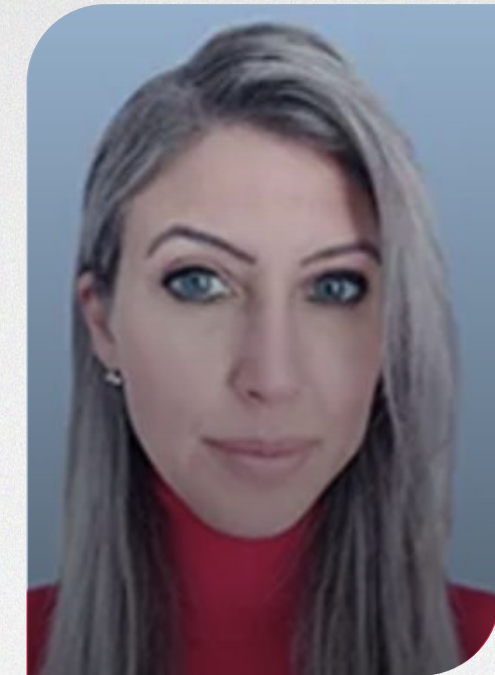


Quote from the EP 06 of the CI&T Humans Of Digital Podcast

Takeaway:

So my ask would be to empower yourself with education, empower others around you with education, and furthermore, get curious about AI, the big fear-stricken word that we're talking about here. Let's move away from the fear and start embracing this because it's not going away, and it can really make an impact.

Amy Zolotow
Director of Operations, Mercy Personal Physicians



Quote from the LinkedIn video from the event HIMSS 2024

Takeaway:

Our approach has been to train and empower people to use this technology. Because people who are not qualified to use these tools effectively may be left out of the job market. The big question here is not whether AI will take the place of humans, but whether humans will be able to apply AI to their own work and achieve a higher level.

Marcos Sirelli
CIO at Porto Seguro



Quote from the webinar "The role of a responsible governance"

Takeaway:

AI is here to stay. We are fortunate to have it. So, regardless of what you think about AI, the faster you become champions, the better we will be, and the faster we will start leveraging the technologies. That's my call to action: we need to become champions for AI, and if you have fear and apprehension, get over it.

Thanos Karras
Head of Digital Solutions – Americas,
Bayer



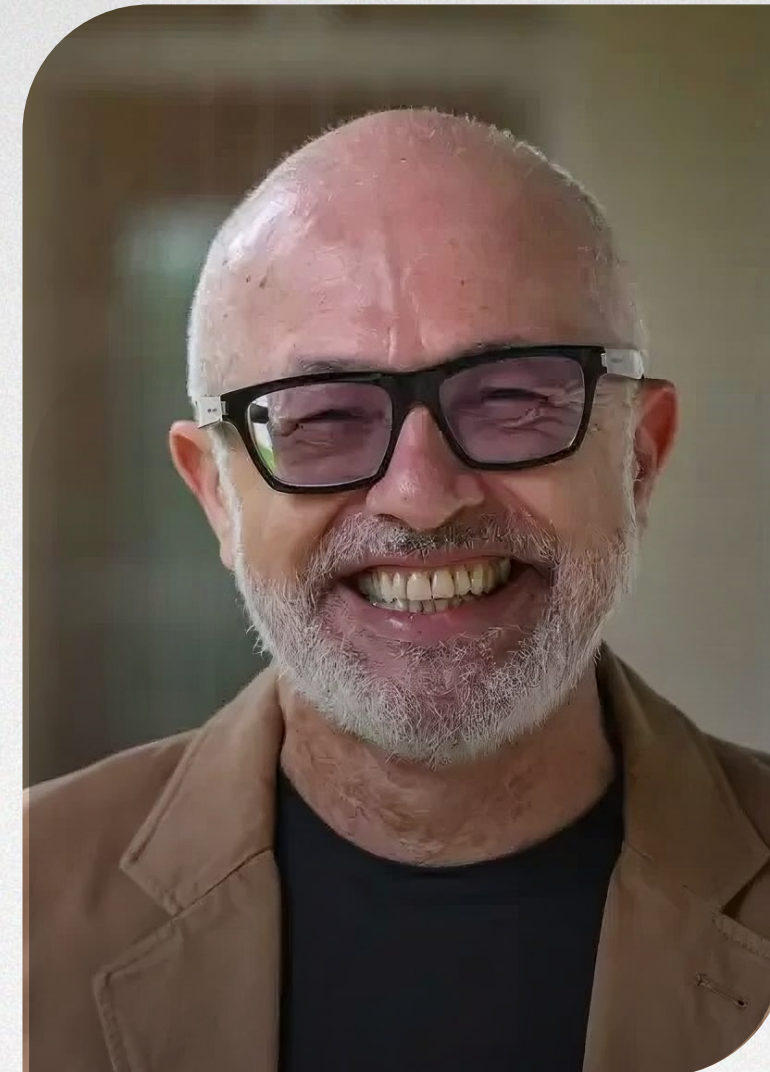
Quote from the LinkedIn video from the event HIMSS 2024

Takeaway:

This is something that was not expected to be happening now, and there is a surprise, even for people in the field who have known this subject for a long time. There's a 'holy crap' moment here.

Silvio Meira

Founder of Porto Digital, C.E.S.A.R, TDS,
CI&T's Board Member



Quote from the Brazil Journal: We are in the Stone Age of AI

Hyper efficiency is already here, and growing

As we move into the fast evolution of AI usage in software development, it's clear that hyper efficiency has yet to fully demonstrate its potential.

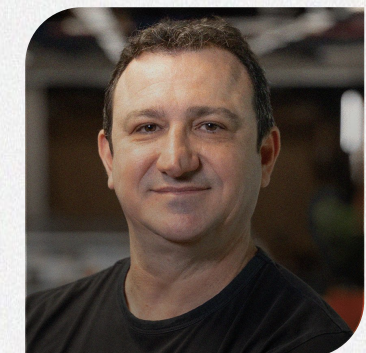
We are just witnessing the dawn of the fast and high-quality work that AI can provide to the development process of digital solutions as the technology continuously evolves.

"I believe that it's not the hype that's making things difficult, but rather the fact that AI is a general-purpose technology, with the potential to impact nearly every industry and aspect of human life. This leads to inflated expectations and misconceptions. It's an empirical fact: we tend to overestimate the change that will occur in the next two years and underestimate the change in the next ten. Therefore, **the trap here is inaction.**

For me, 2024 will be the year of disillusionment with AI, but leaders cannot fall into this trap.

We need to act now."

Cesar Gon
CEO CI&T



Resources

Recommended content for you
to dive deep into Gen AI learnings

BOOK

"AI 2041", Kai-Fu Lee

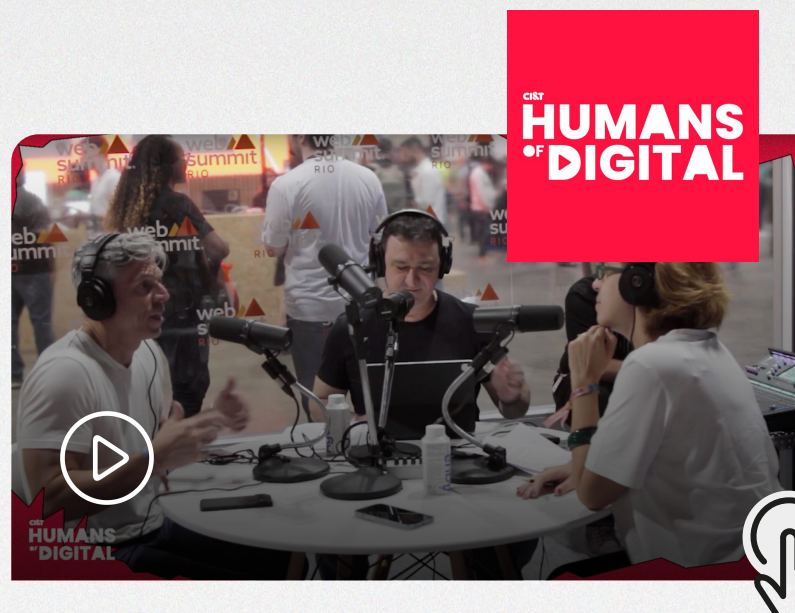
A great read on ethical explainability in AI, a crucial topic for us to keep learning, talking about and evolving.

Mikaeri Ohana,
ML and AI Lead, CI&T



PODCAST

How Will AI Impact the Corporate World?



ARTICLE

"AI will automate the basic and repetitive tasks that consume most of our time, **creating space for more human-centric activities.**"

Bob Wollheim,
Partner EVP,
CI&T



As we keep trailblazing with the power of AI, we will be back to share with you more of what we have learned in practice.

**Stay tuned
for the next
edition of the
GEN AI PULSE.**

Talk with our specialists:



Rodrigo Stefani

Director of Engineering

rodrigod@ciandt.com



Gabriel Marostegam

Head of Data & AI

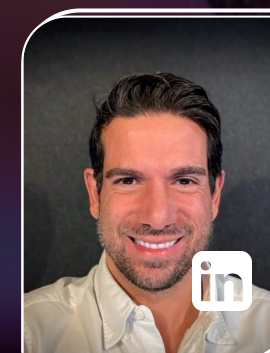
marostegam@ciandt.com



Felipe Rubim

VP, Asia Pacific

frubim@ciandt.com



Leo Abdala

Business Director

leonardo.abdala@ciandt.com



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