

# The Democratization of Technological Development: AI and its Impact on Business Processes

Medium

Pedro Aldea Mas

October 6, 2023

In the digital age we live in, it's undeniable that technology has revolutionized the way we operate, communicate, and conduct business. From the emergence of the first computers to smartphones, we have witnessed changes that have shaped our reality. Currently, an emerging innovation, generative Artificial Intelligence, promises transformative change comparable to its predecessors.

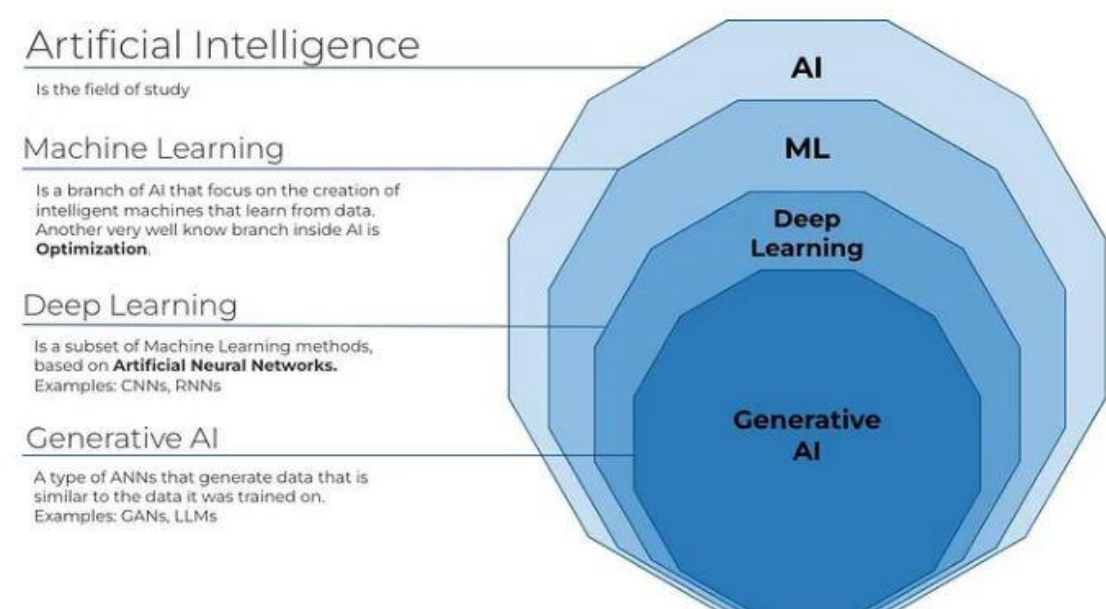
## Generative AI: What is it and why is it relevant?

In the broad spectrum of Artificial Intelligence, generative AI has emerged as a particularly promising subcategory. But what exactly is it? Simply put, we can define generative AI as a subset of AI, designed to generate new and original content, based on learning acquired from vast volumes of data. These models don't just replicate information; they have the ability to "create" autonomously, be it text, images, music, or any other kind of content.

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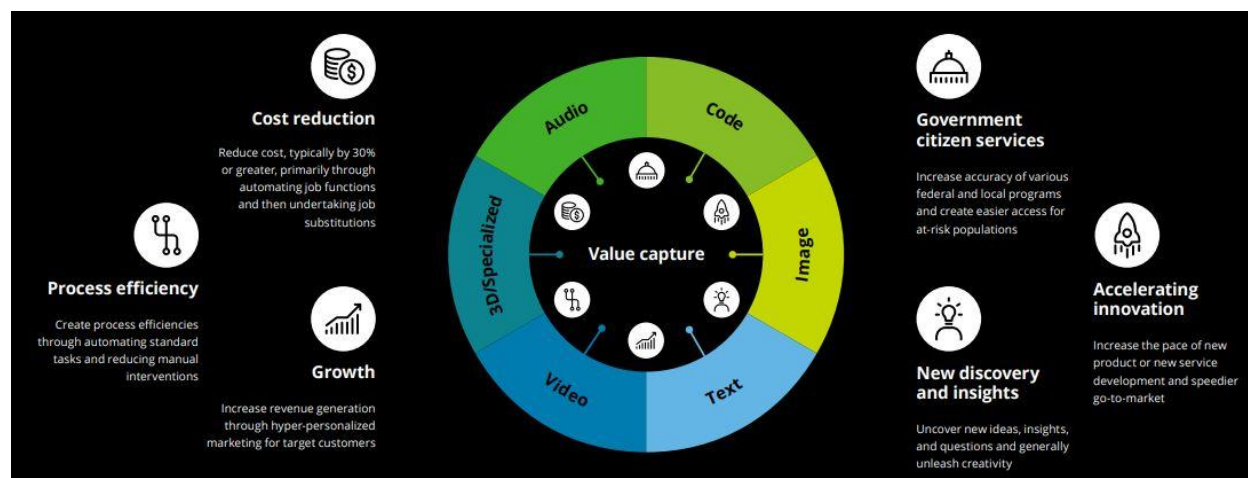
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One of the most notable examples in this field is the GPT-3/4 model, developed by OpenAI, which has showcased remarkable abilities in generating coherent and contextual text. Beyond the textual realm, generative AI impacts various areas: from graphic design, where images can be generated from verbal descriptions (DALLE 1/2/3), to music, where algorithms are composing pieces indistinguishable from those created by humans. This extends to the cloning and creation of completely realistic voices on the fly.

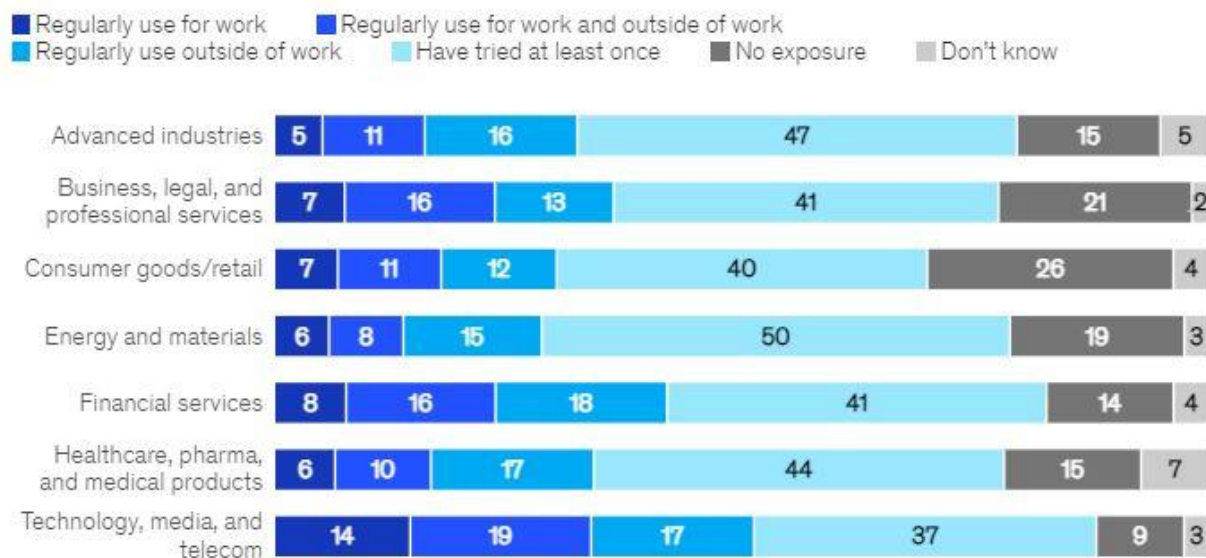
This revolution is not just a technical novelty. Its significance lies in its potential to democratize creation and design, allowing businesses and individuals access to tailored solutions without the need for experts specialized in each area (For most common use cases). In the business context, this translates into an unparalleled ability to adapt, innovate, and respond to market demands with unmatched speed and precision.

The following diagram from the Deloitte AI Institute report “[The Generative AI Dossier: A selection of high-impact use cases across six major industries](#)” identifies the main value-creation levers identified in the use cases for generative AI.



Main genAI use cases

The promise of this technology goes beyond mere automations or the creation of virtual assistants. What's at stake is a **true democratization of technological development**. Imagine a world where not only technical experts but also professionals with deep business knowledge can design and implement precise solutions without facing the barrier of programming language. This is not a dystopian or utopian vision; it's a reality that's already beginning to take shape.



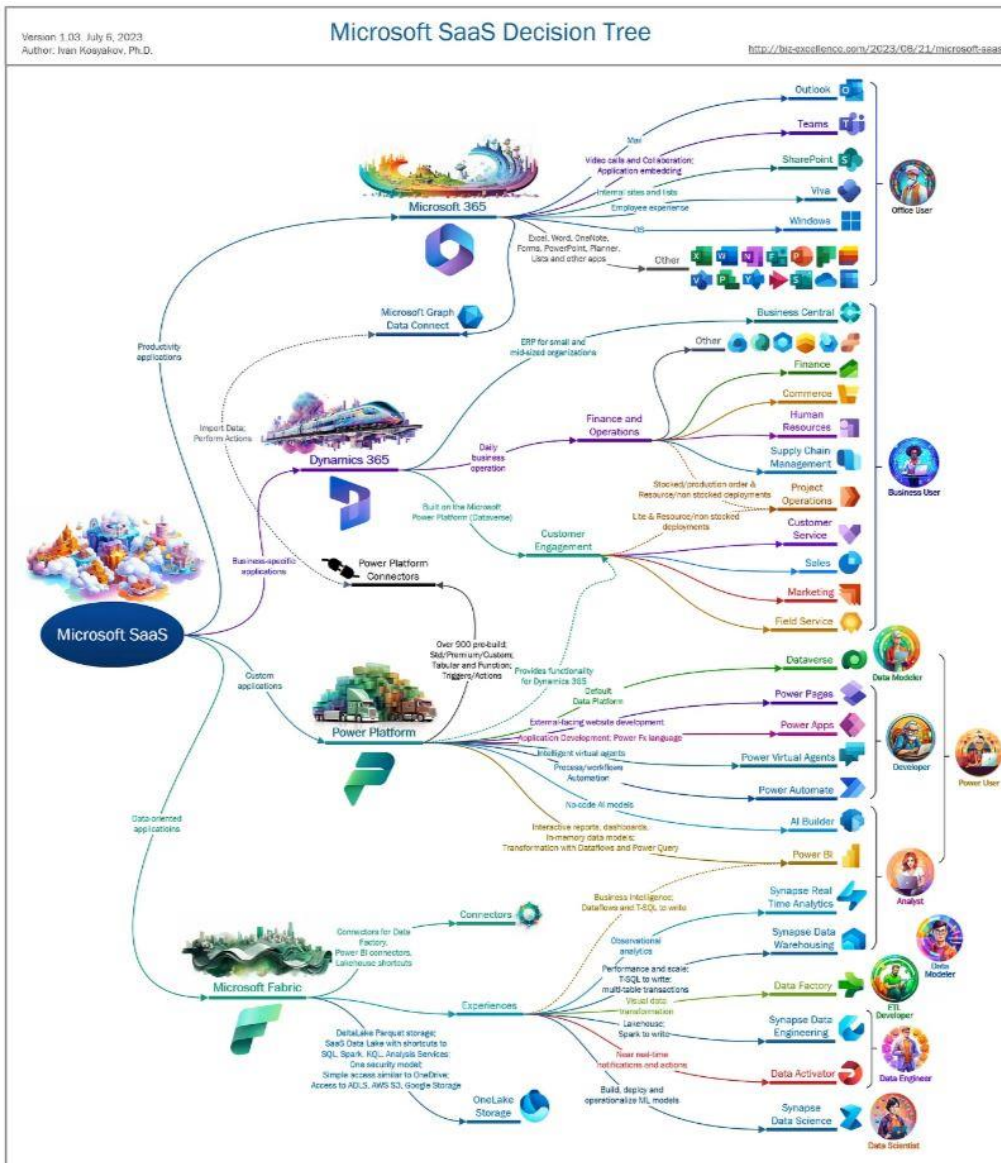
McKinsey & Company: Respondents across industries say they are already using generative AI tools.

In the survey “The state of AI in 2023: Generative AI’s breakout year” conducted by McKinsey, we can see that 34% of people in major industries regularly use this technology. Bear in mind that this figure only refers to generative AI, with the number for AI in general being much higher.

This figure not only showcases the rapid adoption of this technology but also highlights the importance of **understanding and adapting to this revolution**.

With this in mind, we have an obligation to understand what generative AI is, how it's democratizing technological development, and what impact it has on business and society as a whole.

### Empowering Business Experts: The Democratization of Tech Development



The technological revolution we're experiencing isn't just measured by the sophistication or reach of the tools at our disposal, but also by **who has access to them** and how they're used. The democratization of development, driven by generative AI, is radically changing the traditional dynamics of the tech world.

Historically, the creation and implementation of technological solutions have been the territory of technicians: programmers, developers, and **IT** experts who translated business needs into a language machines could understand. However, with the rise of generative AI and, more specifically, **No-code and Low-code AI-driven tools**, we're witnessing a paradigm shift in this dynamic.

These AI-based tools are designed to **enable non-technically trained individuals to create customized digital solutions for their businesses and daily operations**. **No-code platforms** allow for the construction of apps, websites, and digital solutions using graphical interfaces, eliminating the need to write code. Meanwhile, **Low-code tools** streamline and expedite the development process by offering predefined code blocks that can be customized with minimal manual coding.

One of the companies championing the implementation of these types of solutions and leading the way in this new race is **Microsoft, presenting one of the most comprehensive ecosystems for managing business operations**. Above is a map of all available solutions we can find on this platform.

This democratization of development means that **solutions are no longer limited by the technical capability of the team but rather by the vision and deep understanding of the business**.

Business experts now have the power to directly transform their operations, backed by the precision and capability of AI.

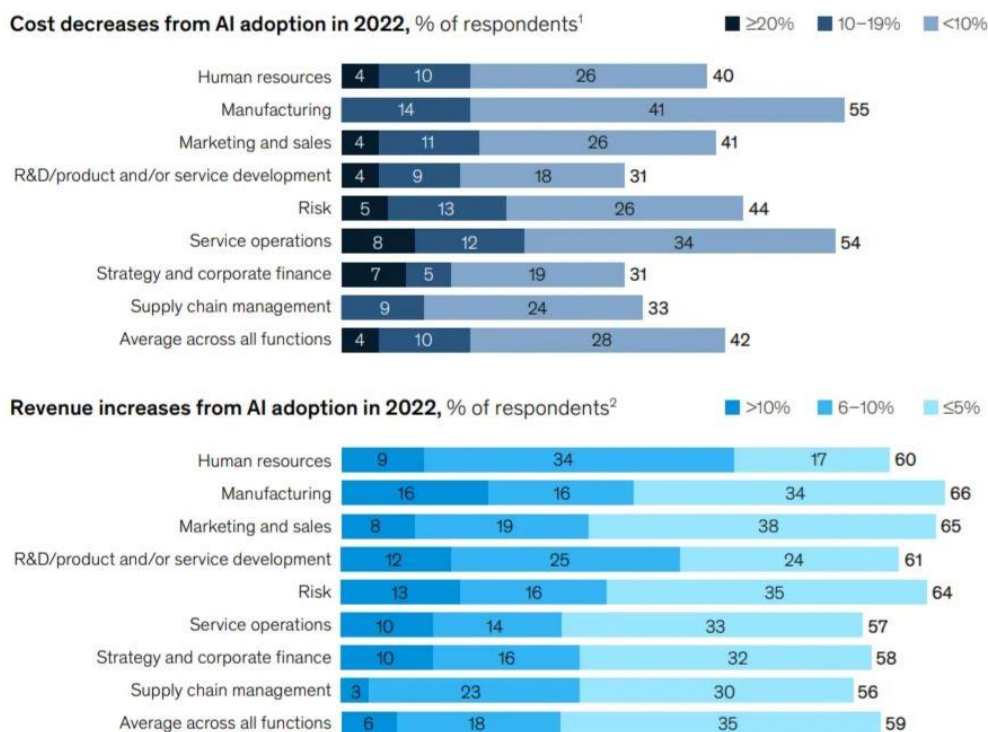
### Direct Benefits: Clear Communication and Agile Processes

One of the most common challenges in traditional tech development has been the **communication gap between technical teams and business experts**. Specifications might be misinterpreted, priorities could clash, and in many cases, **the delivered solutions might not fully align with the initial needs**. AI, especially in conjunction with No-code and Low-code tools, offers a promising solution to these challenges.

By allowing business-knowledge professionals to directly create digital solutions, the traditional “broken telephone” game associated with translating needs into technical specifications is eliminated. **Decisions are made in real-time, iterations are faster, and alignment with business goals is more direct.**

Moreover, AI’s predictive and analytical capabilities enable **proactive identification of areas for improvement**, potential challenges, or misunderstandings, facilitating clearer communication and more informed decisions.

Two other graphs from the same McKinsey report provide figures that reflect the impact of AI adoption on costs and revenue:



The majority of companies report **revenue improvements thanks to AI**. Teams can quickly adapt to changes, test solutions in real-time, and swiftly respond to market demands. In this new paradigm, efficiency and innovation don’t conflict; they go hand in hand.

### Impact on Business Processes

Today’s business environment is immensely dynamic, with changing demands and a constant need for adaptability. In this context, the ability to swiftly implement tech solutions addressing specific challenges is an invaluable asset.

**Faster implementation:** Instead of going through long development, testing, and review cycles, AI-driven tools enable businesses to adapt and respond to market needs in real time. Solutions can be prototyped, tested, and adjusted with unprecedented speed, drastically reducing Time to Market.

**Enhanced Precision:** Thanks to its analytical and predictive abilities, it’s ensured that the created solutions are optimized for the task at hand. Not only that, but the constant adaptation based on real-time feedback means that solutions evolve and continuously refine themselves, staying aligned with the business’s needs.

The impact of AI on business processes isn't just about efficiency but also about **precision and adaptability**. Companies that adopt these tools are well-positioned to lead in their respective markets, rapidly adapting to changing demands, and ensuring solutions that are at the forefront of innovation.

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*We are living in a historic moment where technology and innovation intertwine in astonishing ways. Generative AI stands at the forefront of this revolution, offering a world where barriers between technical and non-technical are dissolving. However, with every innovation arises an inevitable question: What is the right balance?*

*While technological democratization opens doors for more people to actively participate in development and implementation of solutions, there still remains a tangible need for technical experts. These experts are crucial to ensuring tools are used responsibly, safely, and efficiently. Their deep knowledge ensures that, even though solutions are more accessible, their quality or integrity is not compromised.*

*The real challenge is to balance the rise of technological democratization with the ongoing importance of technical experts, ensuring they complement each other. A world where business experts can transform their operations, backed not only by AI but also by the wisdom and technical knowledge of those in the field.*

*Ultimately, although we stand on the cusp of monumental changes, **our capacity for adaptation and collaboration will determine whether this new technological horizon is a boon or a challenge. The decision, as always, is in our hands.***