malt

Malt Trends report

Independent talent: the secret sauce to AI innovation

Summary

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Executive Summary

AI, beyond the hype

Claire Lebarz
Chief Data & AI Officer,
Malt

“What are we doing with AI?”
has been on the mind of every business leader since the explosion of ChatGPT in November 2022. While AI is all over conferences, the news and our Linkedin feeds, few companies have seen real success in the last few months from their AI projects beyond proofs of concept, and some leaders are starting to go through a phase of disillusionment (as illustrated by the Gartner Hype Cycle diagram).

At Malt, we’ve had the privilege of observing thousands of AI projects of companies of all sizes, across industries in Europe, with their pitfalls and successes. We’ve also had the internal experience of building AI features since 2019. **Three areas make all the difference to ensure impactful AI:**

1. Focusing on real problems: Strategic Use Cases over Toy Applications
We’ve seen many companies seeking to develop ChatGPT like chatbots on their websites last year. Without fully thinking through the user journey and experience of these bots, these often resulted in low adoption - at best - or poor answers impacting their brand, in the worst cases. The teams did not have a clear understanding of why they needed it and what they hoped to achieve. This led to projects neither supporting business goals nor solving real problems. The most successful companies have taken the time to think through what their AI strategy should be, typically with the help of AI-expert consultants, and have been able to identify, either top down or bottom up, the most adequate use cases for AI, with a strong focus on measuring ROI and integration with their existing processes and systems.

The most impactful use cases we’ve observed to date have been around contact center automation, programmatic SEO and customer acquisition, more broadly, personalization, internal knowledge, and sales.

2. Setting up an adequate infrastructure
The quality of AI solutions are heavily dependent on the underlying data and technical infrastructure. Many companies are underestimating the importance of having a robust data infrastructure and lack the volume or quality of data. Like any other technical feature, AI requires continuous monitoring, maintenance, and updates.

Failing to plan for the scalability and ongoing support of AI systems can lead to performance issues and prevent teams from going from proof of concept to impactful business solutions. There, technical expertise makes all the difference across companies, which leads us to the third area: skills and talents.

3. Developing an AI talent strategy
Building AI systems is a relatively new and rare skill in companies, even more so when it comes to GenAI applications with LLM (Large Language Models) or multimodal models (applications combining image, text, voice, video). Trainings are booming and we observe a correlation between the deployment of internal upskilling programs and the level of AI maturity of organizations.

Many companies also seek to recruit the competencies they lack, in a market that is highly competitive for such talents. Freelancers with AI expertise are in high demand, not only for their technical competencies on a given initiative but also to help accelerate the organization’s upskilling and AI acculturation. This report focuses on shedding light into such freelancers and how their competencies are best leveraged by companies seeking to develop impactful AI.

Looking Ahead
In most AI-mature organizations, the challenges around ethical AI and limiting algorithmic biases are rising. AI systems can inadvertently perpetuate or even exacerbate human biases if not carefully designed and monitored. Neglecting the ethical implications and bias potentials of AI models can lead to public backlash and legal issues. We’re observing a new demand for competencies around the safe and ethical aspects of AI systems. To navigate AI beyond the hype, organizations should focus on strategic problems, infrastructure robustness, and their AI talent strategy.

Independent talents can play a pivotal role for these businesses from consulting at the strategic level, to bringing critical skills to AI projects and diffusing their technical expertise to teams internally.

2

Methodology

Methodology

The focus of this analysis has been on the skills, job titles, and job categories on the Malt platform from 2021 to 2024. We started the analysis by building a list of AI keywords and extracting all the projects and freelancer profiles where at least one of the keywords appear in the skills or job titles over all European Malt markets.

This report focuses on supply and demand for only the technical expertise in AI, so we further reduced the data set to the projects and profiles where the main job category falls under a predetermined list of technical AI projects.

For this report, we've decided to distinguish between two aspects of AI:

1. Science: focuses on training, evaluating, selecting and using AI models.
   With recent advancements in the field, all kinds of data such as text, images and videos are now widely used. This also includes emergence of new models and their improvement.

2. Engineering: involves building and maintaining the data and architecture necessary for training and deploying AI models.
   This has become central to AI projects as models now use larger datasets (e.g. text, images, videos, etc.) making it crucial for the architecture to be scalable.

Additionally, because the models are called in real-time, it's important for the computation to be as fast as possible.

Lastly, we also used AI for the composition of this report. For efficiently writing certain parts of the content, our team relied on tools such as ChatGPT-4 and Claude 3 Sonnet. We believe that a collaborative effort between humans and AI is the way forward, alongside a strong human involvement throughout the whole process.

3

Report

Driving AI success in business: why companies need to act beyond the FOMO effect

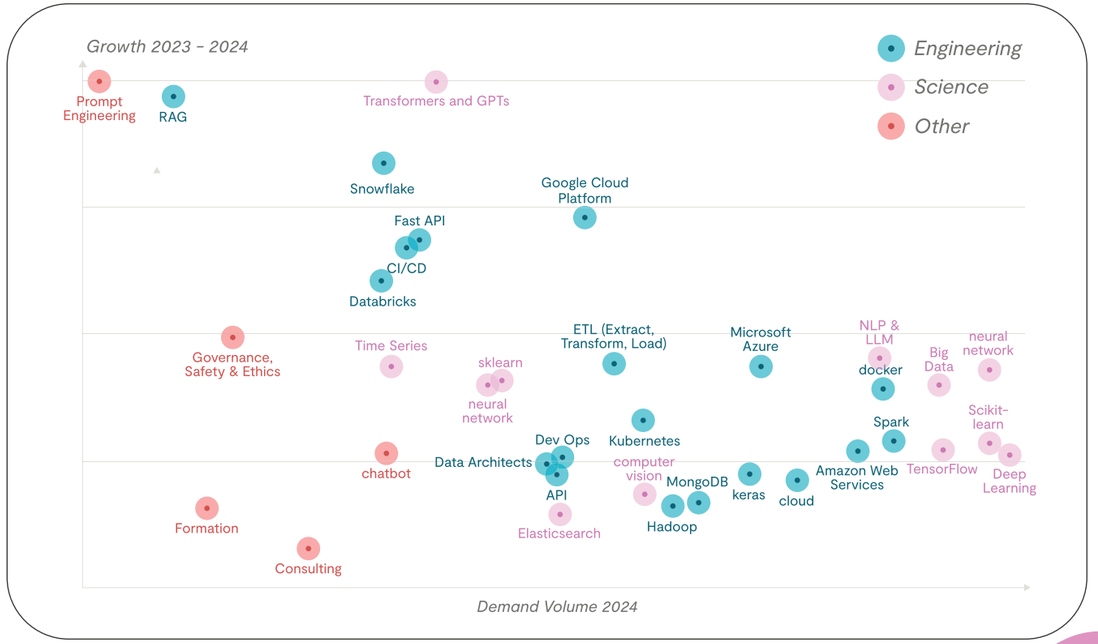
Companies in 2024 are experiencing a classic case of FOMO (Fear of Missing Out) when it comes to AI. Driven by a rapidly changing market, as Emmanuel Vignon, CEO of Sicara, Data & AI by Theodo, points out, “The market is changing too quickly for it not to result in disruptions of equilibrium and an overall instability.” This pressure to embrace AI is colliding with a harsh reality – a lack of internal skills, legal frameworks, potential high costs and even a lack of clear understanding of the technology itself.

Adding to the confusion is the lingering misconception between AI and automation technologies as many companies mistakenly equate them. This focus on automation projects dominates current AI adoption efforts, neglecting the broader strategic potential of true artificial intelligence, particularly GenAI, available since 2022. Successful AI implementation goes beyond the latest gadgets and trends; it demands a comprehensive strategy. Think of AI as a race car. Even with the best engine (AI technology), if your company lacks a sturdy road (infrastructure), quality fuel (data), skilled drivers (workforce skills), and sufficient funds for gas (budget), the car won’t reach its full potential.

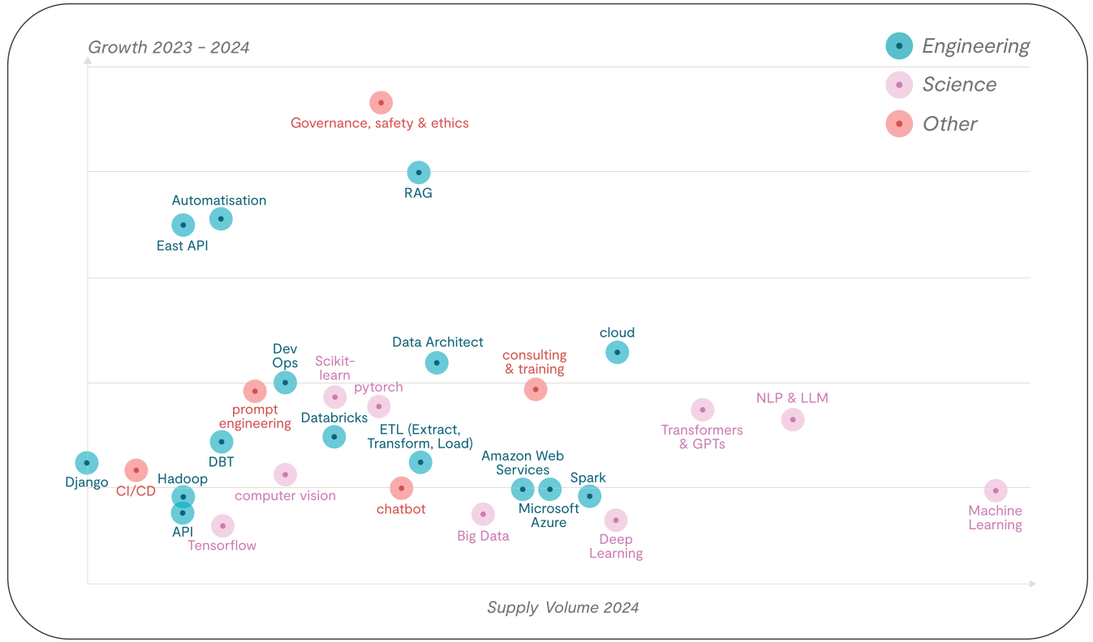
> “Companies are navigating the AI curve cautiously; it’s a marathon, not a sprint!

Bertrand Jouvenot
Consultant

Demand - quadrant



Supply - quadrant



AI skill quadrant: current state and trends

AI Science

2 specialized branches of GenAI with significant innovation recently are: **Natural Language Processing** and **Computer Vision**.

Important skills in 2024:

NLP (particularly large language models): High and growing demand (+66%); Already a large supply, increasing faster than demand (+90%).

Transformers and GPTs: High and growing demand (+75%); Moderate supply but with a spectacular growth (+1200%).

Limited importance in 2024:

Computer vision: Moderate demand and supply, and moderate growth (+14% and +37% respectively).

AI skill quadrant: current state and trends

AI Engineering

The freelancing market for cloud skills has already been large as companies rely on freelancers for modernizing their infrastructure. However, the rise of AI likely drives, at least partially, the recent boost in demand.

Important skills in 2024:

Cloud and associated solutions like AWS, GCP, or Microsoft Azure and multicloud platforms such as Kubernetes: Demand is growing fast (+128%); Already large supply is growing steadily (+42%)

GenAI: Fast growth of demand (+300%) and supply (+200%) of Retrieval-Augmented Generation (RAG)

AI Others

Important skills in 2024:

Governance, Safety, and Ethics (likely fueled by new EU regulations): An already large demand is growing fast (+366%); Expertise on these topics is still scarce but has doubled (+100%)

Consulting and Training: Already high demand growing quickly (+88%); Supply growing steadily (+32%)

Limited importance in 2024:

Chatbot: Though it is now a commonly demanded keyword but despite the attention it received with the rise of GenAI in 2023, demand has plateaued (+1.7%)

The freelance spark: igniting business AI adoption

Skilled freelancers can be the spark that enables and fosters AI adoption for businesses. And make it last. While companies may be navigating the AI curve cautiously, independent talents have often embraced it more rapidly. As Arnaud Vidal, Head of Geospatial at TotalEnergies, highlights, companies leverage freelancers for both speed and specialized skills: “We train our own people, but when we need to accelerate and identify specific needs, we use external support.” Emmanuel Vignon, CEO of Sicara, Data & AI by Theodo, echoes this sentiment: “Expertise in data and AI favors freelancers due to the skill shortage.” This access to specialized talent allows businesses to bridge the gap between their in-house capabilities and the full potential of AI.

Market trends in AI

Driving efficiency across industries: the surge in AI projects focused on automation

Companies are increasingly turning to AI, with project demand for tech & data 70% between 2022 and 2024. However, as Thomas Lenormand, Tech Lead Cloud at TotalEnergies, points out, “most AI projects that companies deal with are actually around automation and not creation”. Currently, most companies focus on automation to streamline processes. This focus on efficiency is reflected in the top three requested industries: software (11%), education (10%), and high tech (9%).

In the Tech & Data segment, the talent pool is expanding rapidly, with the percentage of freelancers on the platform growing from 8.9% in 2022 to 10.4% in 2024. The focus on automation mentioned above aligns with the rising demand for Data Scientists (39%), Data Engineers (23%), and Backend Developers (15%) on platforms such as Malt. This echoes with freelancer Mohamed Kadiri “automation, driven by the goal of production optimization and reducing human intervention, has become the cornerstone of client requests in my field and represents 80% of my current workload.” This shift from digitization to automation exemplifies how AI is transforming industries and workflows, often by optimizing existing processes rather than replacing human roles entirely.

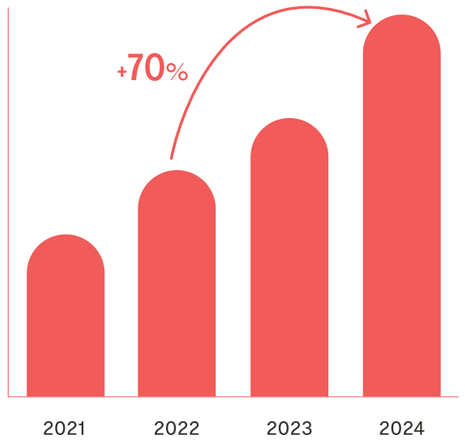
> “AI goes beyond new capabilities for companies. It empowers us to finally tackle neglected tasks and improve existing ones.

Rodolphe Marinier
Bizdi Digital Founder, Interim Manager

Sharp rise in AI projects enabled by increasing demand and supply

Demand (clients)

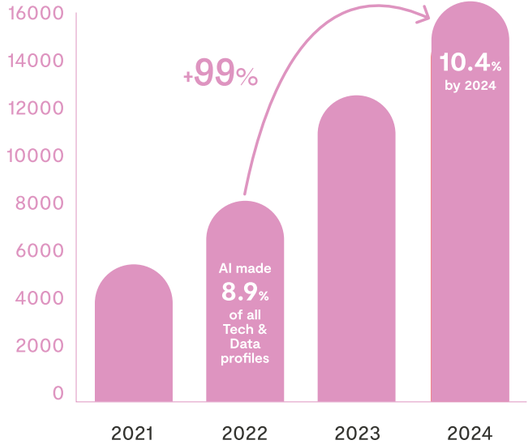
Average number of AI opportunities per quarter



Increasing **number of opportunities** are demanding AI projects to better leverage this advanced tech.

Supply (freelancers)

Number of AI profiles

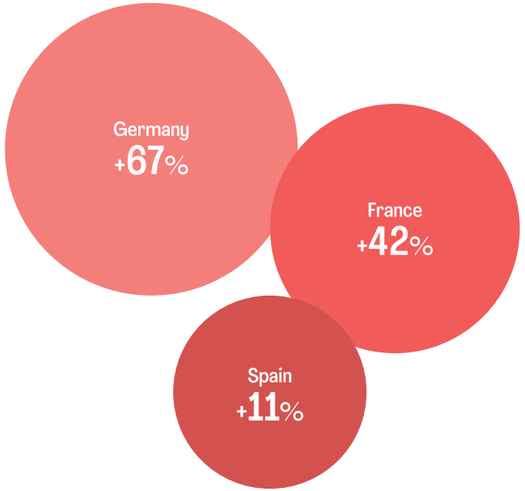


More and more **AI freelancer profiles** are signing up on the platform.

France, Spain, and Germany fastest growing markets:

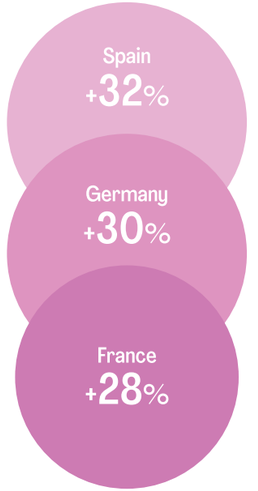
Highest share of AI project opportunities and number of AI freelancers

Demand (clients)



Top 3 markets by growth rate in **number of opportunities** in 2023-2024.

Supply (freelancers)

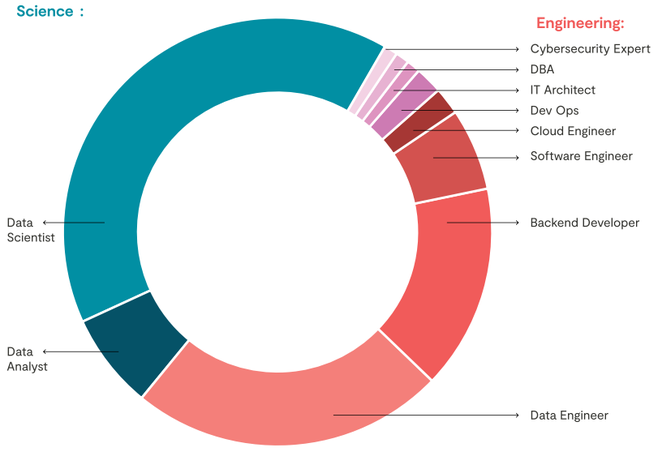


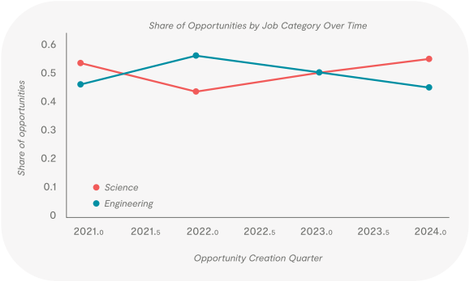
Top 3 markets by growth rate in **AI freelancer profiles** in 2023-2024.

AI demand is split equally between Engineering and Science, a ratio that has remained stable over time

AI Demand (2024)

Job categories included in the **two types** of projects:

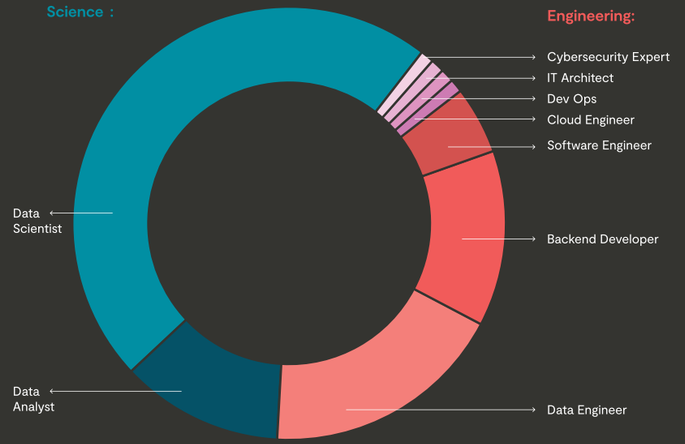


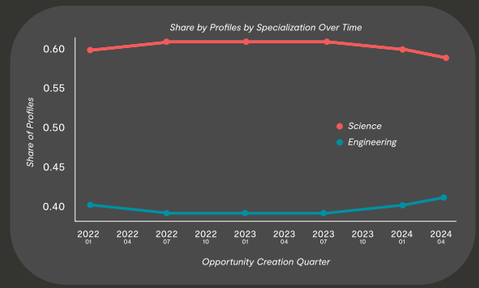


AI supply is split 60-40 between Science and Engineering profiles, a ratio that has remained stable over time

AI Supply (2024)

Distribution of job categories among freelancers with AI expertise, broken down by specialization (Science and Engineering)

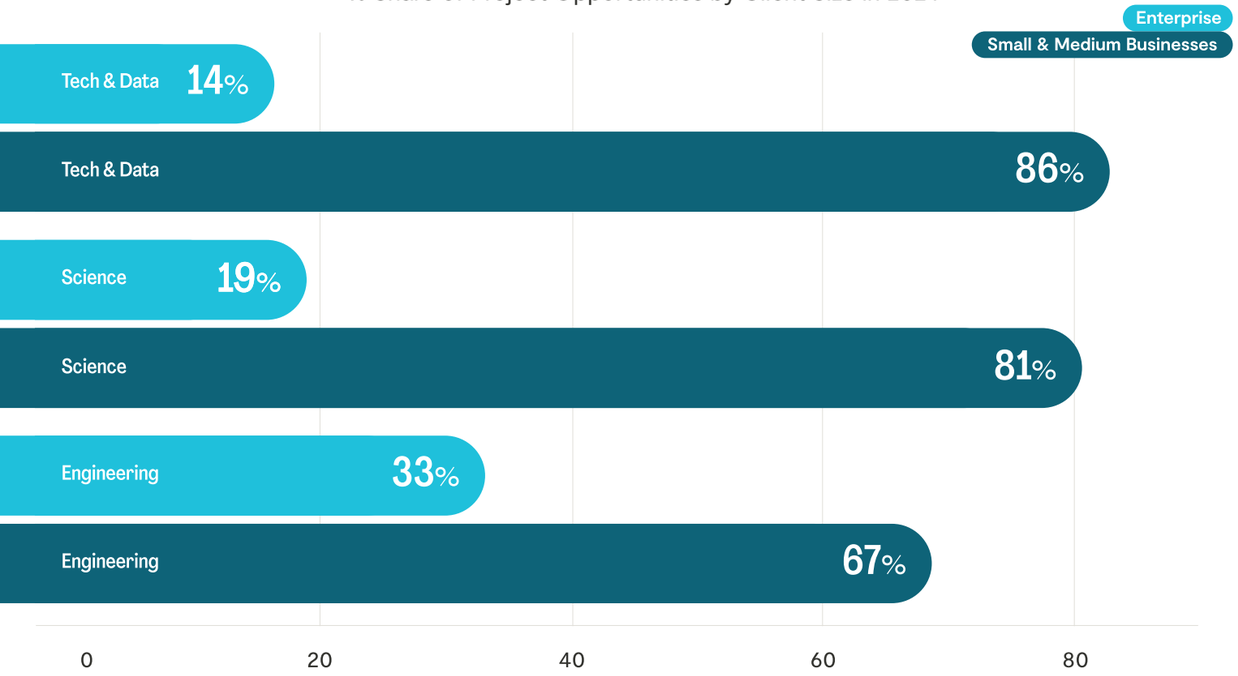




40% of AI profiles are “multi-specialists”, i.e. they list both data science and engineering job categories on their profiles.

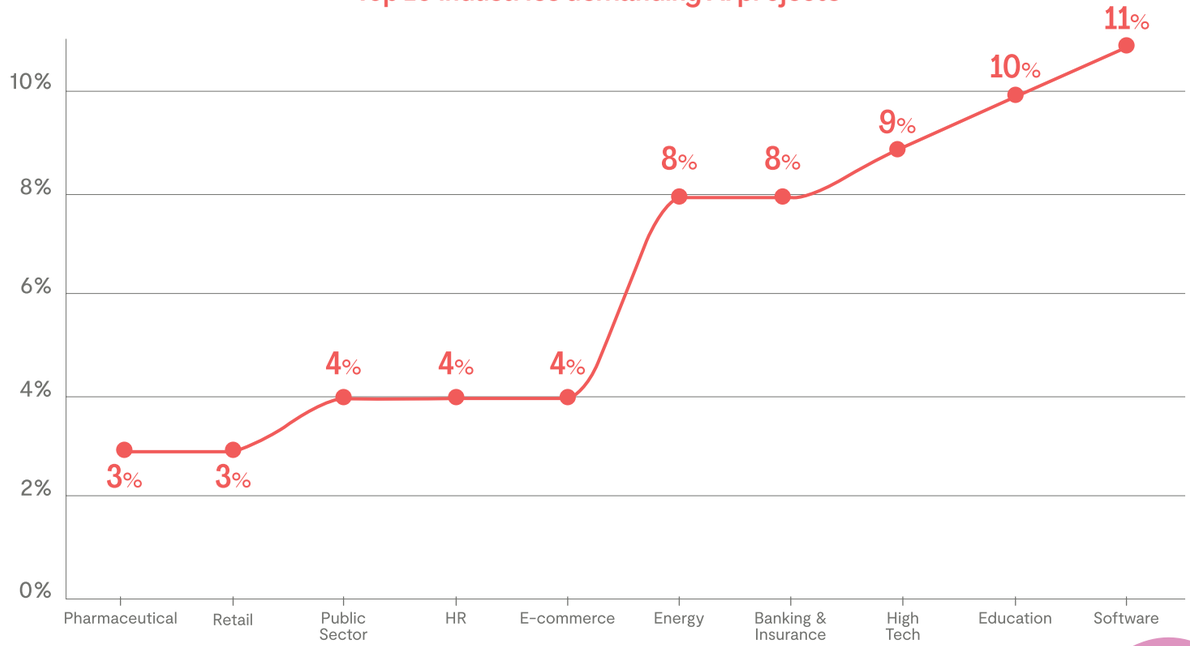
Enterprise businesses are pursuing digital transformation requiring modern stack expertise which they tend to outsource

% Share of Project Opportunities by Client Size in 2024



Industries leading the AI charge

Top 10 industries demanding AI projects



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AI portraits: freelancers & projects

Beyond coding: the rise of multidisciplinary AI experts

The rise of AI is driving a significant shift in the talent landscape within corporations. Despite cost management pressures, companies are actively building their internal AI teams, recognizing its potential to transform businesses.

However, managing costs while competing for a limited pool of AI talent is a challenge. As Darwin X points out, companies are increasingly looking to a balance between core in-house AI competencies and scalable external support. This past year, all industries within their study saw internal AI talent pools grow, with some sectors like Banking experiencing a surge of 44%.

This rapid growth reflects a growing demand for specialists in Data Science, Engineering, and Analytics, putting pressure on the labor market.

In the AI era, success demands a multidisciplinary approach beyond just technical skills. As Laura Sibony, author of “Fantasia, tales around AI” notes, there’s a need for “multidisciplinary profiles” that can grasp data’s deeper implications.

Mastering programming languages is insufficient; weaving connections across disciplines and critical thinking become crucial. While specialized hard skills face rapid obsolescence, soft skills like adaptability, creativity, and critical thinking retain lasting value.

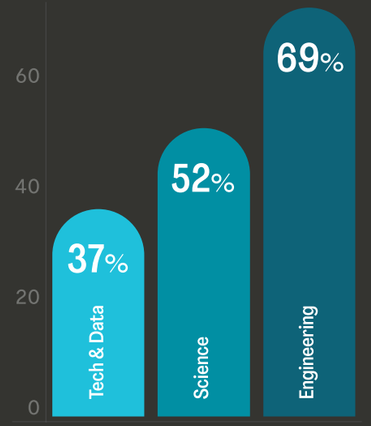
Navigating AI’s complexities requires a blend of technical expertise, interdisciplinary thinking, and a commitment to continuous learning. Embracing this multidimensional skill set unlocks AI’s true potential.

This focus on continuous learning resonates with freelancers like Mohamed Kadiri. He views AI as a “game-changer for professions, not a job eliminator,” emphasizing its potential to “amplify performance and productivity.”

His own experience reflects this ongoing learning process: “AI projects are always a little new in their own way so the best way for me to stay up-to-date is actually to keep on working on new ones.”

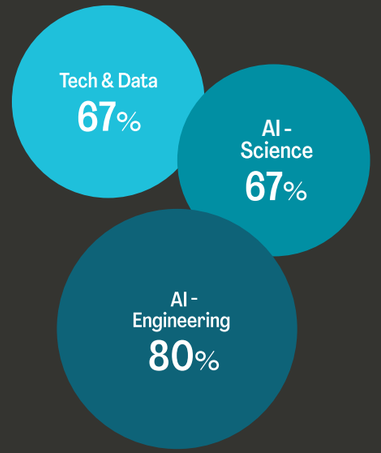
Portrait of an AI project

AI projects, especially Engineering, are more complex than most Tech & Data projects.



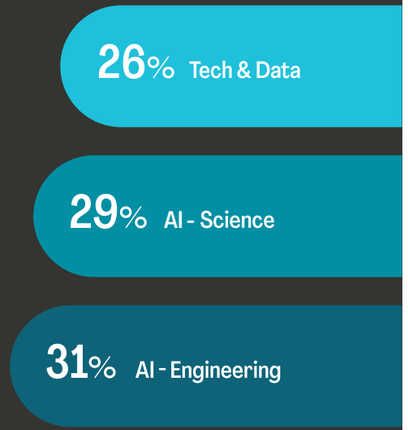
% Share of long projects (>1 month) by category

AI projects are generally full-time engagements



% Share of full-time projects by category

They require higher expertise than Tech & Data



% Share of projects demanding skill level “Expert” by category

Use cases: how freelancers cover every dimension of an AI project

Develop Strategy

“As a CEO, I want to integrate new AI tools into my activity so as not miss the transformation brought by AI” **- SMB client, one-off project**

“We are a startup building a platform to digitize insurance. We are looking for advice concerning the organization of data, storage and cost” **- SMB client, one-off project**

Build Solution

“We are looking for a versatile and autonomous profile for: Automatic extraction of data from photos (Computer Vision) and detecting the origin of ingredients from packaging photos (NLP)” **- Enterprise client, 5 months long project**

“Develop AI systems capable of automatically detecting and characterizing cancer lesions from CT scanner images” **- Enterprise client, 6 months long project**

Deploy & Evaluate

“Design software tools to deploy and monitor the different Machine/ Deep Learning models” **- Enterprise client, 12 months long project**

“We are a startup. We are looking for one-off external and senior support to provide advice on the architecture of our solution and its optimization” **- Enterprise client, 15 days long project**

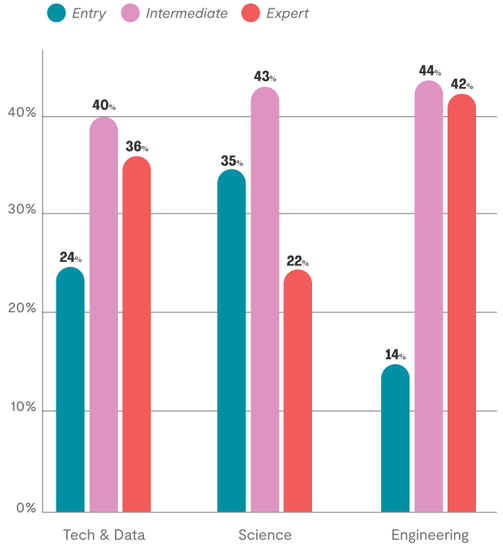
Maintain & Iterate

“We have developed an internal tool but with the large increase in the size of the user base, it starts to be very slow and difficult to maintain” **- SMB client, 4 months long project**

“Expected deliverables: updated technical documentation for Airflow DAGs, establishment of a data quality monitoring system with periodic reports, documentation about the use and maintenance of the data sources for dashboards” **- Enterprise client, 3 months long project**

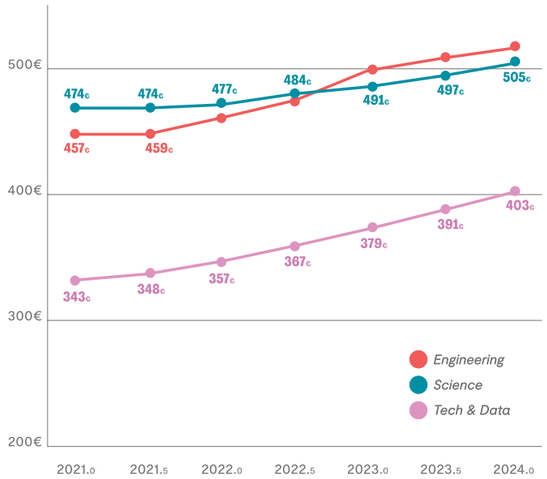
Portrait of an AI freelancer

Engineering is a more mature field than AI overall, while Science is a more novel field



AI engineers and AI scientists have similar daily rates, though daily rates for AI engineers have increased faster

Freelancer daily rates at intermediate experience level



AI Freelancers on the whole have an intermediate level of experience, whereas AI Science sees more freelancers with entry level expertise. We see a lot more expert professionals in Engineering as compared to Science (+20pp).

5

Conclusions

What about tomorrow? Facing the rise of Generative AI

While current AI projects heavily emphasize automation, 2024 marks a pivotal shift as companies increasingly turn their attention to the challenges and opportunities presented by AI, especially Generative AI (GenAI) and deploying GenAI assets to end customers. A recent BCG study reveals that 85% of C-suite executives plan to increase spending on AI and GenAI this year, reflecting a blend of caution and a desire to experiment. This translates into action, particularly in the retail and services sectors, with companies like Walmart, Cdiscount, and Carrefour actively exploring GenAI with internal teams and their hyperscaler partners.

These companies seek to maintain control and aim to be early adopters, leveraging GenAI's potential for high-value. However, it's not a race to be first, but rather a long run to achieve tangible results and making "wonders" for users. Companies with smaller, "gadget" actions won't cross the finish line first; only those with a strong, dedicated plan will succeed in leveraging value. Several hurdles persist, including the need for organizations to invest in developing their Robotic Quotient (RQ) – their ability to adapt and thrive with intelligent automation – and foster more agile organizational structures. Ethical considerations, compliance, and effective employee onboarding are also crucial factors. As Rodolphe Marinier emphasizes, "it's important to gauge 'when' it is appropriate to move from a Test & Learn phase to massive investment." This evolving landscape presents a significant opportunity for freelancers. Companies are actively seeking professionals with diverse experiences and a commitment to continuous learning – traits that freelancers often possess by design. As showcased in Malt's Freelancing in Europe 2024 study, freelancers from the Tech & Data category spend an average of 5 hours per week training. By showcasing their market vision and diverse skill sets, freelancers can become valuable assets for companies navigating the exciting and complex world of GenAI.

> "I have never experienced such a technological (r)evolution in my professional life.

Rodolphe Marinier
Bizdi Digital Founder, Interim Manager

Vincent Huguet
Co-Founder & Co-CEO, Malt

As far as my childhood memories go, I have always had easy access to computers. My father graduated in computer science and worked as a developer on flight simulators or on the first PCs. I have witnessed many technological disruptions since the 80s, but I would say that two, in particular, were for me "aha" moments. The first was as a young student testing a Mac connecting with Netscape to the "World Wide Web" in 1994 in a computer shop in Paris, La Défense. The second was to test ChatGPT at its launch in 2022, which allowed most of us to understand for the first time as an end user what Artificial Intelligence was really about.

I have since made many connections and envisioned many similarities between these two moments. We are probably in a "hype" phase of AI, and everyone understands they must prepare for it, test it, and launch projects or companies. In the short term, many of these AI projects may not materialize, leading some to believe that AI was overhyped, much like e-commerce and the Internet after the 2000's dot-com crash. However, in the long run, the impact of AI will be profound. Those who invest in the right talent and resources will emerge winners in this new era of technological disruption.

On that topic, we at Malt are investing heavily to improve our internal operations and, moreover, our matching between offer and demand. Matching is the core of any marketplace, but what is relatively easy for products is way more complicated when it comes to talents.

AI, more specifically GenAI in that case, enables us to optimize a search based on a complex search or prompt, allowing us to envision an even better service for our customers. With the significant quantity of data on freelancers and searches we have, we are also at the forefront of observing what skills and expertise clients and freelancers are positioned on. After the first hype of talking about "prompt engineers" like we had in the late 1990s, "webmasters" now see how much the AI talent environment is already becoming more complex and specialized, which is a sign of growing maturity.

We will keep monitoring and sharing these emerging trends with our community of freelancers and clients, which will enable all of them to hire, train, or find external freelance talents on the right technologies to become the winners of this new world. AI will definitely reinforce the figure of the "10x developers" or, in general, the concept of "software craftsmanship" or "artisans" of the digital world.

As always, with the birth of disruptive technology, those who will make the most of it are not the ones with the most money, servers, and technologies but, first and foremost, the ones with the right talents. After the "digital transformation," Malt will be the go-to place in the years to come to find the great entrepreneurial talents of the "AI transformation."

6

Glossary

Glossary

AI: Artificial Intelligence, the simulation of human intelligence in machines.

Deep Learning: A subset of machine learning where algorithms learn from large amounts of data to make complex decisions.

Enterprise: Malt defines Enterprise as companies that typically have more than 1000 employees.

GenAI: General Artificial Intelligence, referring to AI systems designed to perform a wide range of tasks intelligently.

GPT: Generative Pre-trained Transformer, a type of language model developed by OpenAI.

LLM: Large Language Model, an AI model capable of understanding and generating human-like text.

Machine Learning: The use of algorithms and statistical models to enable computers to learn from data and make decisions without explicit programming.

NLP: Natural Language Processing, a field of AI focused on enabling computers to understand, interpret, and generate human language.

SMB: SMBs are defined by Malt as companies that have between 0 and 999 employees. This category is further divided into:

- **Small:** Companies with 0 to 100 employees.
- **Medium:** Companies with 101 to 999 employees.

Transformers: A type of deep learning model architecture that has revolutionized natural language processing tasks.

7

Meet the Experts

We wish to thank deeply all the experts having participated in this report, adding great value to the data insights through their points of view and market experiences.

Thomas Lenormand - Tech Lead Cloud at TotalEnergies

Arnaud Vidal - Head of Geospatial at TotalEnergies

Mohamed Kadiri - Freelancer project manager Data/SIG/Teledetection/Monitoring

Bertrand Jouvenot - Consultant, author, speaker

Rodolphe Marinier - Bizdi Digital founder & interim manager

Laura Sibony - Author of “FantasIA” ed. Grasset, 2024, teacher, speaker, founder of L’École de la Parole

Emmanuel Vignon - CEO of Sicara, Data & AI by Theodo

Darwin X
Darwin X is an innovative C-Level consulting boutique, focused on assisting companies with the major transformation challenges of the 21st century. In addition to its core consulting activity, Darwin X has developed a series of transformation maturity indices to help decision-makers steer large-scale transformations. Its flagship index measures the performance of market players in Data & AI transformations.

Millefeuile.ai
Millefeuille.ai, the media for getting to grips with AI. You’ll find a collection of news, real-world applications, expert analysis, tools & training.

About Malt

Founded in 2013 by Vincent Huguet (Co-CEO), later joined by Alexandre Fretti as co-CEO, Malt is the leading freelance marketplace in Europe. Over 70,000 companies of all sizes find the external talent they need in Malt's community of more than 700,000 freelancers. With the 2022 acquisition of Comatch, a marketplace specializing in independent consultants, Malt is now present in 9 countries and regions (Belgium, France, Germany, the Netherlands, the Nordics, Spain, Switzerland, the UAE, and the UK). Investments from Eurazeo, Goldman Sachs Asset Management, Serena, Isai and BPI Large Ventures highlight the support for and confidence in Malt's vision.

At Malt, we've placed AI at the heart of our strategy, guided by a long-term vision to help organizations effortlessly find the perfect independent talents for their projects. The first step in this vision is the AI Brief Builder in Malt's platform, which helps busy hiring managers to save time by generating a detailed brief from their project description within seconds.

As we evolve our AI capabilities, our aim is to provide an increasingly intuitive and guided experience, empowering users to focus on their core business while we handle the complexities of finding the perfect freelance talent. Malt's mission is to create a world where everyone, whether freelancers or companies, is free to choose the best people to work with—a world where success is powered by the unique combination of the right people, the right team, and the right projects.


malt