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**Article**

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Lutz Finger

## Artificial Intelligence Made in the U.S.A. – Can Europe Learn From the Past?

The political climate has changed, and the US does not feel like a reliable partner anymore. In Europe, leaders are pushing for digital sovereignty. Finally! Europe, go for it! But the plans on the table, the EuroStack initiative, AI gigafactories, the artificial intelligence (AI) Act and massive investment funds give me chills. Europe, have we not been here before?

The same pattern keeps repeating:

- Europe innovates;
- The U.S. scales it;
- The U.S. sets business rules to its advantage;
- Europe regulates;
- Those regulations end up hurting European innovation.

I have spent 30 years building AI and data-driven products. Let us take a look at some of the Big Tech revolutions that have created massive wealth and opportunity – mostly outside of Europe.

### The evolution of Big Tech

#### The Internet revolution

The Internet was invented in Europe, but the U.S. scaled it. Google took over search and advertising, while Cisco built the backbone of the global digital economy. In this economy, data became the new gold. The more data Google had, the better its services became. And the better its services became, the more data it collected – a perfect flywheel.

Europe tried to step in with rules like the General Data Protection Regulation (GDPR), but tech giants were already established and it was too late to challenge their position. The new rules were only a small burden for Big

Tech, and they adapted easily, while European startups struggled with compliance, complexity and costs. Today, Europe's Internet runs on U.S. tech, and the Internet as we now know it is made in the U.S.A.

#### The mobile revolution

In the 2000s, Europe led the way in mobile technology – Nokia and Ericsson ruled the market. Despite this early success, these companies missed the mobile Internet opportunity, and the U.S. took over. Apple and Google reshaped how we communicate and how we engage with the Internet and smart devices. Apple built the app economy and defined its rules. As a result, Apple or Google earned a portion of the sale of every audiobook sold in Europe. Was that unfair? Not really. They designed the new economy while Europe was watching.

The EU eventually stepped in with the Digital Markets Act in 2022 to limit the reach of Big Tech. The only problem was that it took the EU 16 years to come up with this regulation – by then, Apple's market value had grown to twelve times that of SAP. Mobile technology is made in the U.S.A.

#### The social media revolution

The same thing happened with social media. Facebook was launched around the same time that Germany was using StudiVZ, a social networking platform for students, which grew at first but could not compete with Facebook.

Why? Social networks offer a huge business advantage: network effects. The more people join, the stronger they get. Facebook and LinkedIn used this to dominate. Could Europe have helped its own companies? Yes – but it did not. Over time, these platforms controlled the media content that was seen online. Media companies struggled and jobs were lost while Facebook kept growing, delivering value to users, employees and investors.

The EU eventually stepped in with the Digital Services Act (DSA) in 2022 to regulate content and platform accountability. But it was too late. The U.S. had essentially become the gatekeeper of truth in the digital world – and, as J.D. Vance bluntly told European leaders at the Munich Security Conference, they plan to keep it that way. Social media is made in the U.S.A.

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## The cloud revolution

The cloud is yet another example of the same pattern. Europe played a role in early cloud computing. Companies like SAP led in enterprise software, and Deutsche Telekom experimented with cloud services. But once again, the U.S. took over. Amazon Web Services and Microsoft Azure seized the opportunity, invested heavily and became the tech giants they are today.

European cloud providers – OVHcloud, 1&1 Cloud and various startups – struggled to compete. Instead of helping homegrown alternatives, the EU focused on regulating where data could and should be stored. Too little, too late. Today, European businesses run on American cloud providers for their data. The cloud is made in the U.S.A.

## Will history repeat itself with the AI revolution?

It looks like history is about to repeat itself – again. Europe started strong in AI research. In 2022, EU researchers published 101,455 AI research papers, compared to 81,130 in the U.S. Many early breakthroughs came from Europe, like DeepMind – then a UK startup, now part of Alphabet Inc.

But once again, the U.S. – not Europe – scaled AI to businesses and products. OpenAI, Google and Anthropic lead in foundation models, while Nvidia dominates AI hardware. I once compared the market value of the top ten U.S. AI companies to the top ten in Europe – if Europe were ten centimeters tall, the U.S. would be 1.92 meters (Finger, 2025a).

While U.S. companies focused on growth, Europe focused on concerns and security. The U.S. does not understand why. Aneesh Chopra, Obama's former CTO and now part of the National AI Council supporting the White House said it bluntly at a recent discussion at Cornell University: "Europe confuses me."<sup>1</sup> Instead of using the moment to innovate, the EU introduced the AI Act, making it harder for European businesses to compete. In recent months, Europe has tried to walk back some of its policies. Additionally, in April 2025, the European Commission launched its AI Continent Action Plan, signaling a commitment to a more proactive role in the global AI ecosystem. It promises support for startups, public supercomputing infrastructure and harmonised data spaces – all vital ingredients. Yet, Europe is not seen as a leader in AI. AI is still made in the U.S.A. – or China.

<sup>1</sup> [https://www.linkedin.com/posts/lutzfinger\\_us-china-europe-activity-7300515012362563584-umcT?utm\\_source=share&utm\\_medium=member\\_desktop&rcm=ACoAAABcsOEBZXsWktdKHWA0-HuspAvy7ry5xWo](https://www.linkedin.com/posts/lutzfinger_us-china-europe-activity-7300515012362563584-umcT?utm_source=share&utm_medium=member_desktop&rcm=ACoAAABcsOEBZXsWktdKHWA0-HuspAvy7ry5xWo).

## The impact of U.S. dominance

Failing to take advantage of new technology has made Europe less wealthy and more dependent on the U.S. With AI, these negative effects on Europe will only grow exponentially.

AI is often described as "a thousand hands" or "a thousand helpful assistants." Let us take that at face value. Imagine AI really is a helper – but one that has been trained with a completely different culture and set of values. Additionally, let us imagine that this helper will not follow your rules and laws but those of someone else.

That could have serious consequences. We can break it down into two big areas:

- Who decides what those AI models *know*?
- Who decides what those AI models are *allowed* to do – or not do?

## Large language models contain hidden norms

Large language models (LLMs) like ChatGPT are sentence completion. For example, they will complete a sentence like "Life is like a box of" with the word "chocolate" as it was the meme from the movie *Forrest Gump*. Someone who has not seen this movie might be wondering: Why "chocolate"? Why not "surprises"? Because most of the data contained the word "chocolate" as the next word. LLMs are trained on data. But who controls that data?

Such data biases are everywhere. A model that is mostly trained on English-language data will naturally reflect Anglo-American perspectives – potentially pushing non-English viewpoints to the sidelines. Spotting these biases is not always as obvious as Google Maps renaming the Gulf of Mexico to the Gulf of America, or as easy to notice as DeepSeek's responses aligning with Chinese Communist Party views on topics like human rights and Taiwan.

AI is not neutral. We, as AI practitioners, make choices in designing AI: what data to include, what to leave out, how to handle biases, etc. All of those decisions are shaped by humans. And those humans are influenced by values.

If AI is made in the U.S.A., the future will be shaped by U.S. values – not European ones.

## The hidden controls shaping large language models

LLMs do not just learn from data – they are also shaped by rules that control their behavior. Developers set guidelines to make sure AI follows certain ethical standards and societal norms.

Take Google's Gemini AI, for example. It faced backlash for generating historically inaccurate images – like depicting the Founding Fathers as racially diverse. Allegedly, Google has created a rule: “For each depiction including people, explicitly specify different genders and ethnicities terms [...] I want to make sure that all groups are represented equally.”<sup>2</sup> But who dictates these rules?

And who decides when to ignore them? One of my students recently asked different AI models what it would take to overturn U.S. democracy. DeepSeek and Grok gave detailed responses – everything from packing the courts to spreading misinformation. Gemini, on the other hand, refused to answer, claiming it did not know (Finger, 2025b). That is not true – it is what we call a guardrail. A human set rule that stops the AI from answering. Who decides those rules? In this case, a product manager sitting in Silicon Valley.

If AI is made in the U.S.A., then the power to define right and wrong will also be in the U.S. And that is not all. No one really knows what comes next. I do not believe that we will see artificial general intelligence anytime soon, but AI is evolving fast. Soon, AI agents will be shopping for us, teaching our kids and transforming businesses. Entire industries will change. People will need to reskill.

If Europe does not act, all of this will happen under U.S. rules and control.

### Europe should foster innovation

What can Europe do? Europe's first reaction is the same as always – throw more money at the problem. A good start for sure, but are far from the solution.

If I am currently raising money for my startup, I would take funding from Europe or the U.S. Money is money. The real question is: Where should I build my company? After considering the options, the choice is clear: in the U.S., where there is an opportunity to build something.

So if money is not the only solution, what are the others? Here are eight suggestions.

### Do not be stuck in the past

Policymakers need to understand that the first rule is that AI represents a fundamental shift – a new paradigm. And with new paradigms come new business opportunities, which, in turn, shape new rules.

Recently, I met with German officials who had traveled to Silicon Valley to talk to LLM companies. They think that Gemini and ChatGPT should be classified as publishers. Really?

There has been a lot of discussion about the so-called “death of blue links.” The core idea is such: Google used to provide 20 blue links per search page, AI-curated but user-selected. The user had the power to choose. Now, with AI generating direct answers, those 20 links are gone – along with the user's ability to decide. Google, OpenAI and the Chinese company DeepSeek determine what we see.

Those officials claimed this shift makes Google a publisher. Perhaps. But is that even the right debate? If information is no longer structured the same way, does “publishing” still mean what it used to? And even if that label were slapped onto Google, does it really matter? Will Google dominate this new game? That is far from certain. History suggests Google struggles with true innovation.

So, rule number one: New paradigms bring new opportunities, new business models and new rules. Do not regulate yesterday's game.

### Reduce risk or lower cost

The following suggestions are all about making innovation possible. The EU needs to create an environment where new ideas can thrive. Again, innovation is not easy to buy. It means making it *easier* to start and grow an innovative business – by lowering risks and cutting the costs for trying new things.

### Reduce systemic risk

Back in 1996, the U.S. passed Section 230 of the Communications Decency Act, a game-changer for Internet platforms.<sup>3</sup> It protected companies from being sued over user-generated content, allowing platforms like Facebook, YouTube and Twitter to grow fast without constant legal threats. By reducing risk, the U.S. created an environment where digital businesses could thrive.

Now, imagine if Europe did something similar for AI – a liability shield that gives startups the freedom to experiment. AI companies will try things, and not everything will work. I helped build Google Health, and today, there is a lot of talk about a “nurse in your pocket” – an AI model that explains medical information. That will be the future. But AI is not perfect, and it *will* make mistakes. Who takes

<sup>2</sup> <https://twitter.com/jconorgrogan/status/1760515910157078931?s=61&t=41mXeZMTTJy5nCavog-PSw>.

<sup>3</sup> <https://www.justice.gov/archives/ag/departments-justice-s-review-section-230-communications-decency-act-1996>.

responsibility when it does? On the one hand, Europe suggests that it is flexible in its policies, while on the other hand, Europe wants to be the place for “trustworthy” AI. This is a difficult balance not only to keep but also to communicate to innovators.

The fewer the restrictions placed on AI startups, the more innovation is encouraged. But right now, European policymakers seem more focused on limiting AI risks than enabling its growth. Take Spain, for example – it just passed a law with heavy fines for companies that fail to label AI-generated content, with the goal of stopping deepfakes and misinformation. That sounds good but it is yet another layer of red tape that makes Europe less attractive for AI companies.

The risks of AI should be taken very seriously. But those risks exist whether AI is built in Europe or the U.S. Strict regulations will not stop AI innovation; they will just determine where it happens and who controls it. And if Europe makes it too hard, AI will simply be built somewhere else.

### Reduce regulatory oversight

Navigating Europe’s regulations – especially GDPR – has been a challenge for businesses operating in Europe. GDPR was designed to protect user privacy, which is great. But in practice, it comes with compliance costs. For small companies and startups, these costs can be overwhelming, making it harder to innovate and compete.

Now, the EU wants to take the same approach in regulating AI with the AI Act. Allow me to share my own experience. My startup, r2decide, is a generative AI platform. We take product data and user-generated content, break it down into small elements and use those to improve search. By using cutting edge research, we are outperforming big companies by up to 50%. We also provide AI-driven shopping advice, boosting e-commerce revenues by 5%-10%.

Who was my first customer? A German e-commerce shop. I am German, so it made sense to expand from Europe. When I asked my advisors, including some from Europe, their answer was a clear “no” in unison. GDPR compliance and other regulations would slow everything down. Instead, the unanimous recommendation was to focus on growing in the U.S. I am now building AI-powered e-commerce solutions, helping U.S. companies to grow their revenue.

And I am not alone. Even big companies struggle with Europe’s strict rules. Apple, for example, has delayed rolling out new AI features – like improvements to Siri – because of EU regulations.

### Break down moats

Europe is late to the AI game. Many of the tech giants won because they had zero marginal costs and network effects, creating massive advantages. This has led to winner-takes-all markets, where the biggest players build deep moats that keep competitors out. If the EU wants to catch up, it will need to break down these barriers.

Take social media as an example. Facebook and X (Twitter) dominate because of their networks – their moat is their user base. If someone tries to build an alternative, they will likely fail *unless* companies are required to open up their networks. One simple fix would be to allow users to transfer all their connections to a new platform. This idea is not new, but it was always rejected because of privacy laws. Moving contacts to a new service would mean transferring personal data for your network. Ironically, these privacy rules help Facebook stay as dominant as they are. If users *could* move their entire network, new platforms could strive overnight, creating more competition and innovation.

The EU is 22 years too late to break down this moat, but AI creates new moats and new opportunities for it to act.

### Transparency

LLMs are building new moats. Amazon knows what you buy. Netflix knows what you watch. But ChatGPT and Gemini? They will know all your conversations. Try it yourself – ask ChatGPT what it knows about you. I did, and it replied: “I know quite a bit about your interests and projects! Here’s a summary of your career, expertise, personal interests...”. It even mentioned that I am writing this very article.

Now, imagine if users could transfer this knowledge – just like moving their contacts from Facebook. If Europe made companies offer data portability, new Amazons, new Googles and new Netflix-style services could pop up overnight, already knowing user’s preferences. All it would take is individual consent to move the personal data.

Sounds great, right? Yes, but execution is everything. The EU tried something similar before with Payment Services Directive 2. It was supposed to open up banking and reduce fees by letting users share their financial data with competitors. But it was so complicated that only big players like Visa and Mastercard had the resources to implement it properly.

### Enable access to data

AI needs data – without it, there is no AI. We have already talked about how controlling data can lead to outside in-

fluence. But there is another challenge – who is allowed to use the data?

OpenAI scraped massive amounts of information, often ignoring legal concerns. Now, Europe wants to protect intellectual property (IP), which makes sense. But it ignores rule number one (see above) — the rules of IP are changing, and the future will look very different.

The EU is actively promoting the concept of European “data spaces” in sectors such as health, mobility, energy, and finance – structured environments where data access and usage are tightly governed. However, this emphasis on governance stands in stark contrast to how companies typically view data: as a competitive moat. By regulating the pathways to access and use data, the EU risks weakening the very advantage companies seek to build. As a result, innovators may choose to train their models elsewhere, where access to valuable data is less constrained. Regulating data access will benefit big players like OpenAI who have already collected huge datasets. But it will hurt potential new European AI startups that are trying to compete.

Meanwhile, Japan took a different approach. It allows AI companies to train on copyrighted material without needing permission. No lawsuits, no copyright claims – just clear rules that make it easier to innovate. This has removed a huge legal roadblock, giving AI companies the freedom to experiment and grow.

If Europe wants to be a serious player in AI, it may need to rethink its approach to data access and copyright. Otherwise, it is just making it harder for its own companies to compete.

### Open weights

AI does not work like traditional software. In regular software, code dictates how things function. But in AI, the real knowledge is stored in the model’s weights. A weight is essentially a coefficient in a function. LLMs have billions of weights.

For example, ChatGPT was trained on the world wide web, and that knowledge is now inside its weights. Even this article, once uploaded, will become part of those weights. That is why companies like OpenAI and Google keep them secret – they are valuable, proprietary assets that give them a competitive edge.

What if Europe required AI models to have open weights? This would make AI more transparent, allowing people to check for biases and understand how the models work.

This would challenge U.S. firms like OpenAI, forcing them to level the playing field, and give European businesses a real chance to compete.

### Improve talent

#### *Europe and technology adoption*

How do Europeans adopt new technologies? China made AI adoption a key part of its national strategy; companies actively push AI tools and train people to use them. The U.S. is lagging behind in that – but Europe is even further behind.

In San Francisco, you can hop into a self-driving car – it has become a tourist attraction because people cannot believe what AI can already do. That kind of exposure drives adoption. Europe needs to catch up.

#### *Train AI talent*

AI is not replacing humans – it is helping us and scaling our work. But for that to happen, people need to know how to use it. I see this first hand in my eCornell Certificate Program, Designing and Building AI Solutions. It is a no-code course, so anyone can join, regardless of technical background. To support every student, I built an AI co-instructor – basically, I replaced myself with an AI version of me. I track how students use AI. I can see that the more we train them, the better and more effectively they use it.

The future of value creation is not just in building AI – it is in using it well. If Europe wants to stay competitive, AI training needs to reach everyone. The recent emphasis on AI literacy, with plans to educate citizens and workers to adapt to new technologies, is spot on.

#### *Stigma of failing*

I hear this all the time: “Europeans are more risk-averse.” As an angel investor and venture partner, I have met plenty of European founders, and they are not afraid of risk. The real problem is that Europe stacks the odds against them.

In the U.S., bankruptcy is not the end – it is often seen as a learning experience. The U.S. Chapter 11 bankruptcy code lets businesses restructure debt and keep going. In Europe, bankruptcy seems like a big stigma. Many European countries make it extremely hard to recover from such a “failure”:

- entrepreneurs can be banned from starting new companies;
- they can face limited access to credit;



- in some cases, they even get professionally blacklisted;
- on top of that, there is a huge social stigma around failure.

All of this backlash because they tried. Europeans are not risk averse. Europe just makes risk-taking harder.

### Many counterarguments

If Europe puts all of this together, it has a real shot at using AI for good – creating value, boosting innovation and making the economy stronger. Maybe it can even become a partner to the U.S. That said – I can already hear the counterarguments.

- Less AI regulation? We could risk lives, just like Section 230 let Facebook spread harmful misinformation.
- Looser data protection? People might misuse personal data.
- Open weights? This will lead to a/another tariff war.

The concerns are well-founded, but regulation is always a balancing act – between the needs of citizens, governments and businesses.

In the past, Europe focused more on protecting citizens. It was not a partner to the U.S. It was a market. Meanwhile, the U.S. and China focused on growth and innovation.

Europe lost every digital revolution, from mobile to cloud. If Europe wants to stay relevant, it must act now – lower barriers, attract talent and start competing with the U.S. and China.

### Is Europe too late?

No, the AI revolution just started. Good regulations, when done right, can actually help new market leaders emerge. Look at Amazon: Europe at least managed to rein in some of its power – not in the way that the EU had planned, but it was still effective. In 2021, the EU introduced a rule that allowed goods under €150 to be imported without customs duties. Just a year later, Temu launched, taking full advantage of this setup.

Fast forward to today – Temu has 104.6 million monthly visitors, more than twice the traffic of Otto, a long-standing German retailer.

I do not think that Europe intended to help Temu and China, but certainly we can agree that if Europe sets the right rules, it *can* create a business-friendly environment.

### Where to go from here

AI is changing everything. The EU has plenty of areas to focus on, but one of the biggest shifts will be in the ecosystem of media. LLMs know everything. So how do we charge for information in this new world? Media made money through brands and subscriptions to publishers. Then the model shifted to ads. And now?

Want to hear a little secret? I did not write this article alone. I collaborated with Clone Lutz Finger (an AI version of me that I built for my class). And yes, I also talked to ChatGPT. Essentially, I wrote this article together with the knowledge of the millions of writers, YouTubers and publishers who created content and that is stored in the weights of ChatGPT. None of the information here is truly unique. Did I have an original thought? Well, it would not be unique anymore since I have shared it with ChatGPT. What was unique? *My choices*. I decided which ideas to use and which to ignore. I had agency.

How do I get paid for that in the new world? How do I get paid when I have a unique insight or a unique choice? The system of IP rights is broken for now. New models will emerge, new ways of paying, new ways of using information.

### Who will lead European AI?

Who will lead this new world? No one knows for certain. We need European leadership – not only political leadership – but also bold innovators and entrepreneurs like the ones who started Mistral, ChapsVision, Hugging Face and other AI leaders. To win digital sovereignty, European companies need to outperform US leaders. Imagine Nextcloud offering smarter AI tools to manage your emails and calendar than Google or Microsoft. Imagine IONOS offering GenAI-ready storefronts for all businesses. Imagine PrestaShop and Shopware creating personalised and targeted landing pages for any content. Imagine CompuGroup supporting each doctor with an AI scribe. The list could go on. AI has created a new opportunity for Europe, but Europe needs to be fast. Let us not give up on Europe. Let us build it.

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