Machine Learning in the Enterprise:

Why It’s Now a Top Business Priority

mesh-ai.com

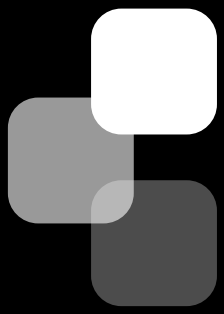
Seb Bulpin

CEO
Mesh-AI

“Companies will adopt AI — not just because they can, but because they must”

Ritu Jyoti
VP, Artificial Intelligence
IDC

Table of Contents



Machine learning is a hard one to get a handle on:

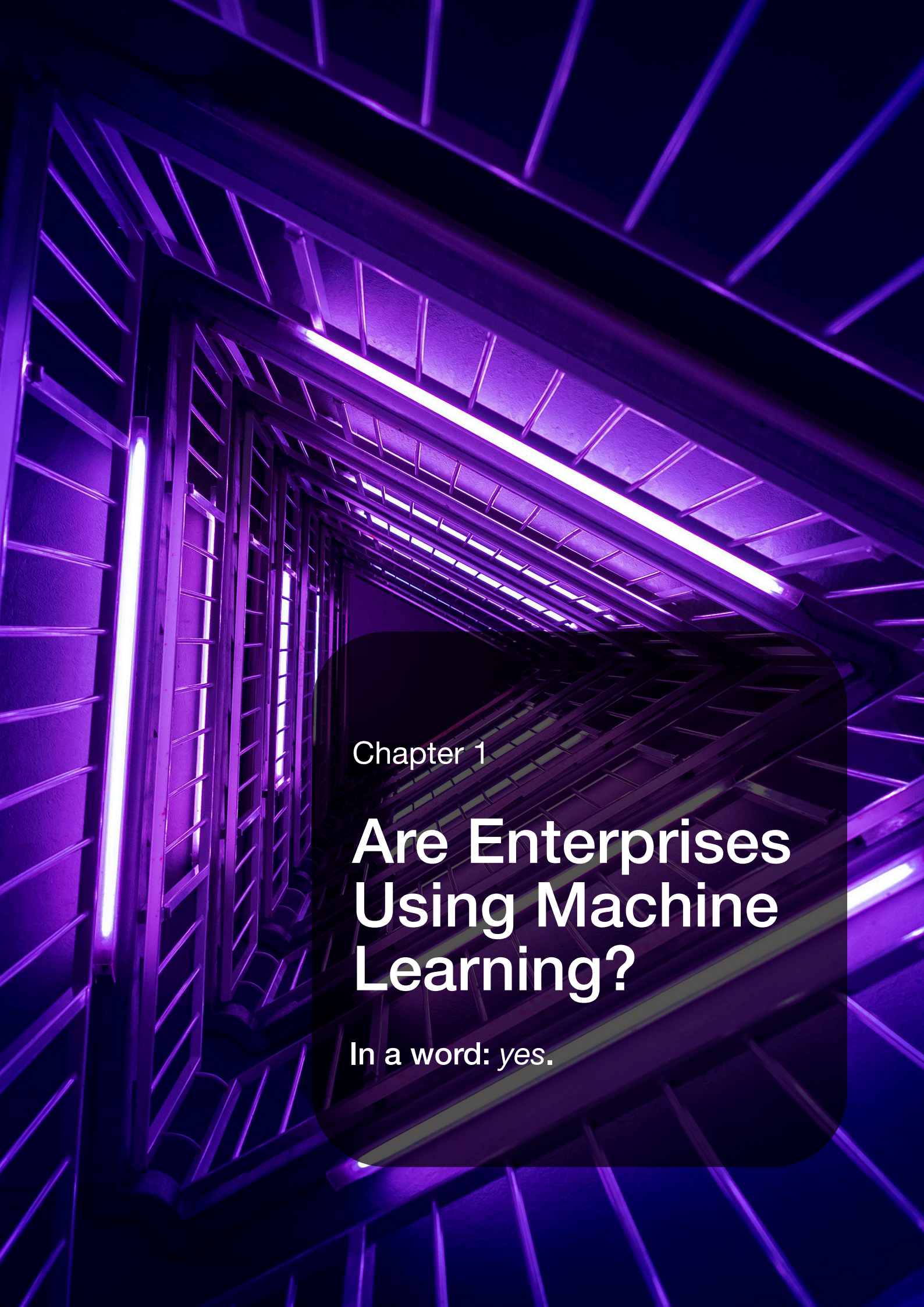
Is it a bloated bag of hype or an indispensable engine of business transformation?

Amongst all the tireless predictions and hype-cycles and roundtables it's tricky to get a clear view.

But we can look at what's happening in the industry, who is trying it out and what results they're getting.

That's what I'm going to do here: looking at ML uptake in the enterprise, determining the business benefits and then looking at some public case studies:

- Are Enterprises Using Machine Learning?
- Are Enterprises Succeeding with Machine Learning?
- How Are Enterprises Using Machine Learning?
- Machine Learning Case Studies
- Why Machine Learning Is a Top Business Priority



Chapter 1

Are Enterprises Using Machine Learning?

In a word: *yes*.

Not only have most enterprises dipped their toes into some kind of ML project, budgets are rapidly expanding, it's climbing up the investment priority list and demand for people with the right skills is going through the roof.

Usage: 87% of 950 organizations surveyed have deployed AI pilots or launched limited use cases into production

Budgets: spending on AI and ML is going to double by 2024, compared to 2020 and 50% of enterprises are going to spend more this year

Priorities: 76% of enterprises are prioritising AI and machine learning over other IT initiatives in 2021

Skills: demand for AI/ML skills is growing at a 71% compound annual growth rate through to 2025, with 197,810 open positions today

In fact, many enterprise executives are wishing that they had realised the importance of AI/ML sooner:

Nearly half (43%) of enterprises say their AI and ML initiatives matter *"way more than we thought"* and one in four say that AI and ML should have been their top priority sooner.

Chapter 2

Are Enterprises Succeeding with Machine Learning?

Machine learning is zooming up strategic priority lists.

The question is: is said strategic zooming justified?

In a nutshell, those that are executing with skill and panache are almost universally reaping the fruits of what they have sown.

Meanwhile, those that are somewhat behind the curve are still finding benefits, but not to the same degree.

Are businesses seeing quantifiable benefits?

Among those companies that have successfully deployed several use cases to production—the AI elite—almost all of them (97%) have seen quantifiable benefits (including increased sales, improved security, fewer customer complaints and improved efficiencies). 94% of these found these benefits to meet or exceed their initial expectations for the project!

Among those with only pilot projects in place—the AI stragglers—two-thirds (64%) still see quantifiable benefits, with 59% finding them to meet or exceed their expectations.

And what about machine learning's business-transforming capacity?

According to a Salesforce report, 83% of IT leaders say AI/ML is transforming customer engagement and 69% say it is transforming their business.

Similarly, 76% of decision makers and tech leaders in an MemSQL survey considered ML to be a "game-changer", with the potential to transform their industry.

Chapter 3

How Are Enterprises Using Machine Learning?

But where are these benefits coming from? How is ML being used? Knowing how businesses are trying to implement ML is critical in understanding it's value.

Algorithmia's 2021 report on enterprise trends in machine learning is an interesting read in this context. They found that the twenty most popular enterprise use cases for ML are:

1. Improving customer experience to drive greater revenue growth
2. Generating customer insights and intelligence
3. Automating processes to reduce costs
4. Interacting with customers
5. Detecting fraud
6. Managing logistics
7. Increasing long-term customer engagement
8. Supply chain optimisation
9. Increasing customer loyalty
10. Managing inventory
11. Reducing costs
12. Acquiring new customers
13. Back office automation
14. Financial planning
15. Generating financial insights
16. Retaining customers
17. Building brand awareness
18. Recommender systems
19. Reducing customer churn
20. Other

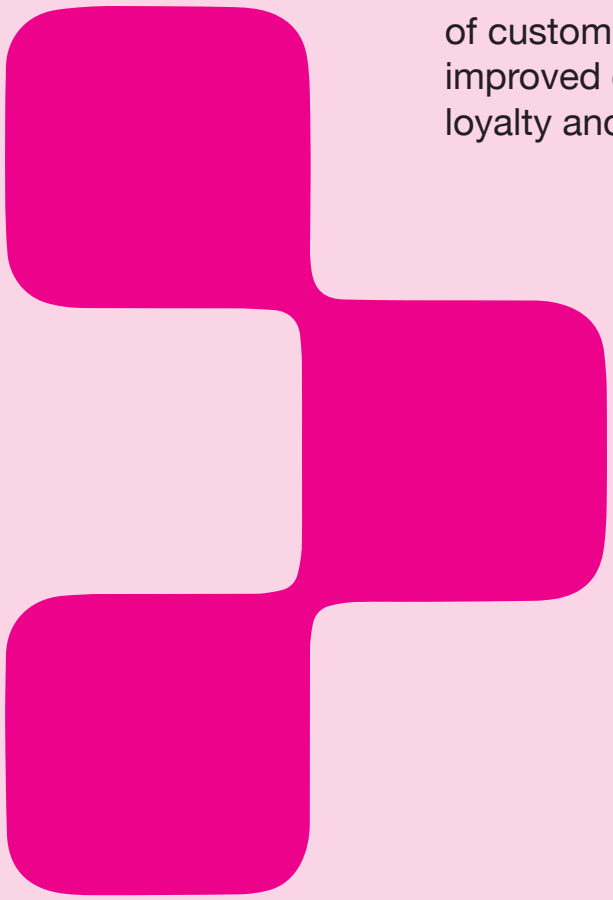
Note that, out of the top 20 use cases, seven are customer-centric and four are centred on automation, processes and reducing costs.

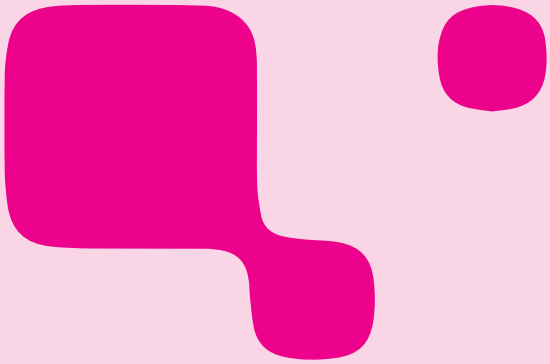
They also found that *half* of the companies they surveyed are planning on diving deeper into almost every single use case going forward.

We can see that machine learning is transforming several core areas of the businesses that use it.

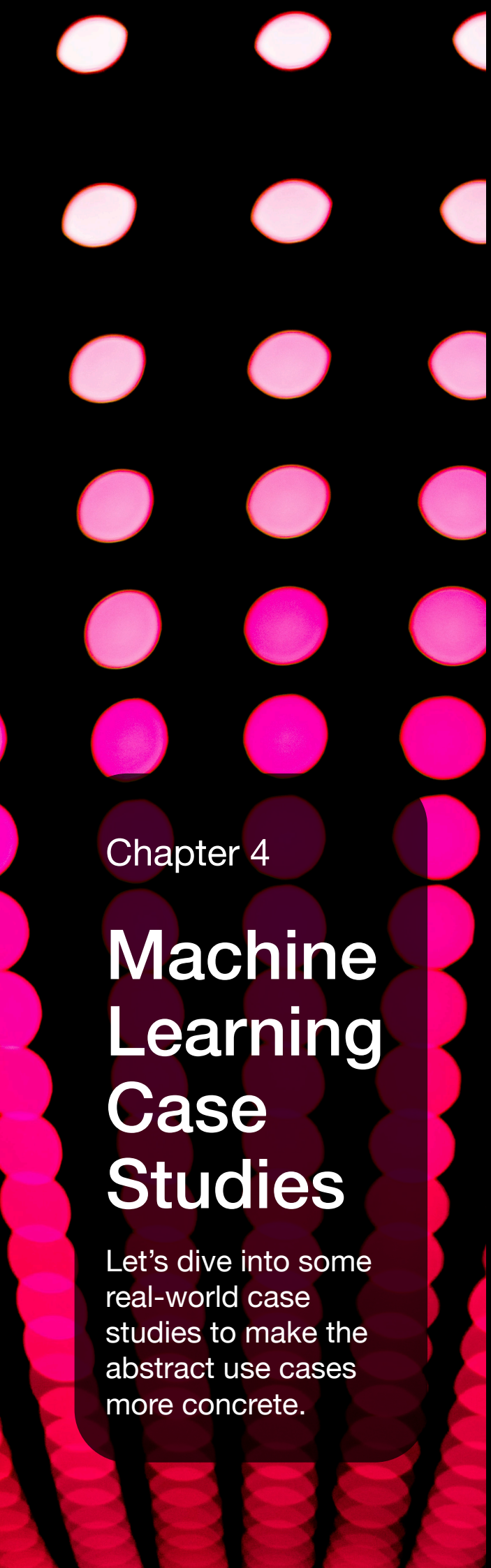
The bottom line is given a boost, by driving massive efficiencies through process automation and optimisation. This generates short-term savings that free up time and resources.

Most importantly, it impacts the top line: enabling a deeper understanding of customers that opens avenues for improved customer experiences, enhanced loyalty and better interactions.





This is where the real potential for ROI is, by creating virtuous circles whereby companies get to know their customers better, then can serve them better, which allows them to get even closer to them, and so on.



Chapter 4

Machine Learning Case Studies

Let's dive into some real-world case studies to make the abstract use cases more concrete.

Dell Uses ML to Massively Uplift Outbound Marketing

Dell used machine learning to generate super-sharp marketing copy across their outbound marketing channels: emails, Facebook ads, display banners, direct mail and even radio.

The results were impressive:

50%
uplift in click-through-rate (emails)

77%
uplift in add-to-cart (Facebook ads)

22%
uplift in page visits (display banners)

Harley Davidson Uses ML to Target the Juiciest Customers

The famous motorcycle company dipped into machine learning to get to know their customers better. They analysed customer data to determine the behaviour of those customers that spend the most money and used this information to create targeted marketing campaigns.

The results speak for themselves:

Increased sales by
40%

2,930%
increase in leads

Danske Bank Uses ML to Enhance Fraud Detection

Danske Bank was getting too many false positives from their fraud detection setup, which wasted a lot of resources following up. They used a machine learning platform to build better models and more accurately detect anomalies.

The results:

Reduced false positives by
60%

Increased detection of real fraud by
50%

Reallocate time and resources from false positives to actual fraud

Chapter 5

Why Machine Learning Is A Top Business Priority

Clearly, Machine Learning has massive potential.

But ML isn't *inherently* a waste of time or a free lunch to business success. *It's a weapon that carries deadly potential but requires considerable skill to wield.*

And this is why it must be a top business priority.

As we've seen above, those companies that take ML most seriously are the ones that reap the game-changing benefits.

Simply put, it needs to be top of your list or not on there at all. Because you have to commit to executing it thoroughly and, most importantly, laying the groundwork beforehand: modern infrastructure and operating models.

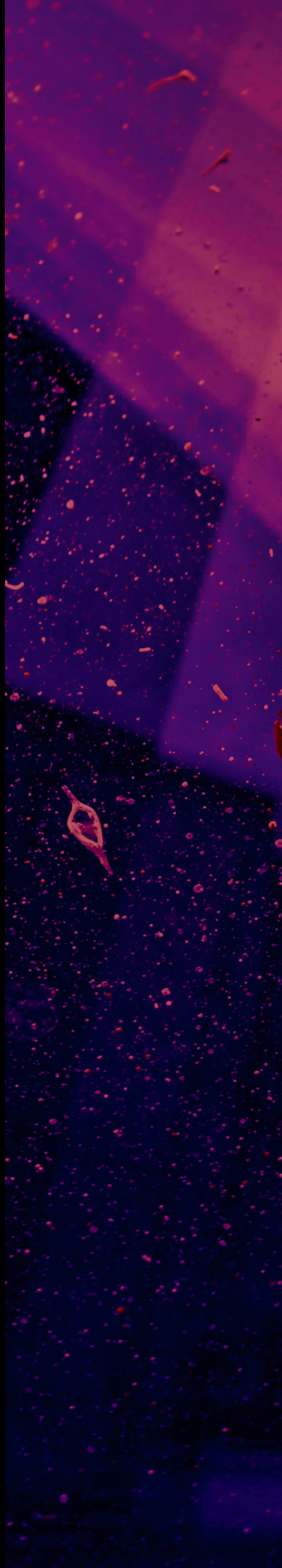
As Dat Tran, Head of AI at Axel Spring AI states:

"I've seen companies who don't have the basis for even the simplest machine learning algorithm — let alone the right people and culture — but they believe if they pour in enough money, they will get their AI transformation. They spend millions on tools, and yet they don't have an infrastructure that can handle complex algorithms or deploy changes to it in a fast, iterative manner."

If your business thinks it has the nous and know-how to pull it off, then ML can be revolutionary, driving revenues and cutting costs in many areas of your business.

But if you don't invest in the right skills, infrastructure, operating model and culture to wield this particular weapon, you might find that it backfires!

Mesh-AI is a global consultancy that uses data, machine learning and artificial intelligence to deliver transformative outcomes for enterprise organisations.



Our Services

Advisory & Consulting

Data is your competitive advantage. We work with you to understand your strategic business objectives, quickly understand your current state and define an actionable strategy that turns data into measurable business value.

Data Engineering

Make your data work for you. We partner with you to solve complex business problems with data, through modern engineering tools and practices at scale.

BI & Analytics

Turn your data into valuable business insights. We help you to build out a powerful analytics engine so you can transform information into business-critical intelligence.

AI & ML

Go further with your data and discover the benefits from advanced AI. We collaborate with you to build upon your data foundations to point AI and ML capabilities at your most pressing business opportunities.

AI Enabled Applications

Smart applications can improve both the customer experience and the performance of your company. We create, construct, and run AI enabled smart applications that transform your machine learning insights into actionable results.

Data Mesh

Unlock enterprise data agility at scale with data mesh - a new approach to designing and developing a highly decentralised data architecture, allowing you to streamline existing centralised practices to access the data you need, when you need it at scale.

Mesh-AI

mesh-ai.com | hello@mesh-ai.com