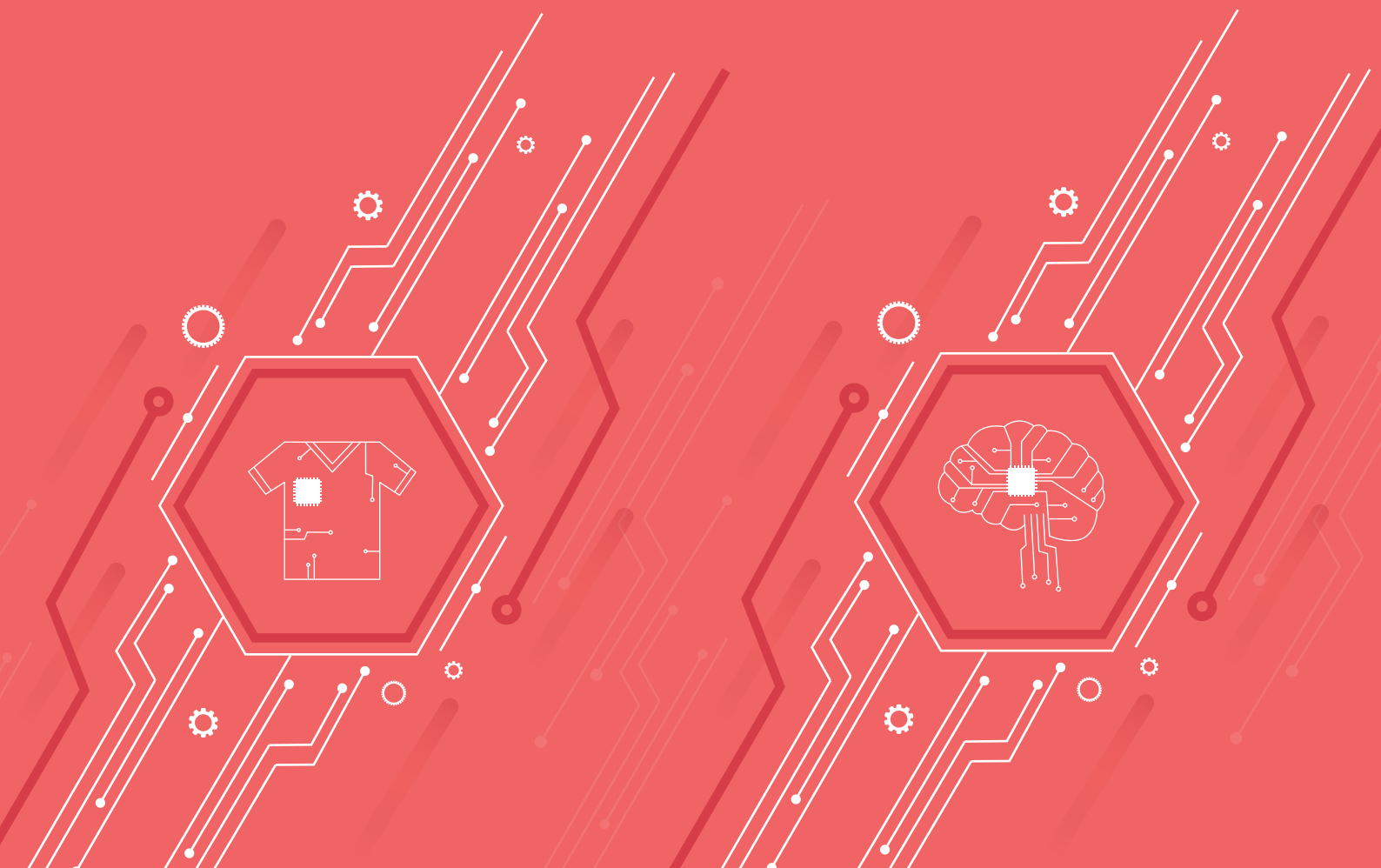# nextail

THE RETAIL DATA-FORWARDNESS INDEX 2021:

Data-driven fashion, full speed ahead

INTRODUCTION

An industry-wide imperative becomes clear: Brands embrace a data-driven future

Last year, the fashion industry faced a reckoning: long-held assumptions were challenged, operational inefficiencies became impossible to ignore, and customer demands shifted at dizzying speeds.

But that was 2020.

While the verdict is still out over how much longer the COVID-19 pandemic will continue, one thing is clear: **brands and retailers are taking the lessons they've learned over the last year and half and are moving forward.** The difference between those retailers who overcame the crisis rather than succumb to it was not one of survival of the *fittest* but rather of the *most prepared.*

Brands that were caught completely off-guard by the challenges of the pandemic were likely already suffering, likely as a result of internal resistance to change. On the other hand, those who embraced technology and innovation pre-2020 were best-positioned to absorb sudden shocks and are now planning their next steps.

And the winners are still winning: Retail tech investments reached an all-time high in Q2 of 2021, reaching US$ 31.5B[1] toward automation, streamlining operations, and bolstering omnichannel. Are their teams ready for such a degree of transformation?

The Retail Data-Forwardness Index measures the degree to which retailers are investing in specialized talent for working with data and advanced technology to bring about innovation and digital transformation in fashion companies. As you'll see in the report, fashion brands are **investing more than ever in talent to help them leverage data to future-proof their operations and improve the customer experience.**

But more profound than the purely financial read is the fact that the mentality is finally weighing more heavily on the side of an acceptance of change. The winners are embracing the transformation in fashion that was long overdue and strongly resisted.

THE RETAIL DATA-FORWARDNESS INDEX (RDI) 2021

"Retail Data-Forwardness" defined

We define "Retail Data-Forwardness" as the degree to which retailers dedicate portions of their budgets to employing specialized professionals in the areas such as **data science, data analysis, and artificial intelligence.**

These professionals empower brands to better interpret data and work with advanced tech across the organization to capture the full potential of retailer data and beyond, ultimately providing a better customer experience.

Thus, we argue that the more willing a retailer is to prioritize such talent acquisition, the more the organization is embracing an overall **culture of data-driven decision-making.**

What the RDI measures

By studying the number of these new profiles beginning to appear within fashion organizations and their relation to business metrics, we are able to track retailer progress in data-forwardness over time.

Retail data-forwardness (RD) is measured by the total number of data-related professionals divided by the revenue of each retailer, such that:

$$\text{Retail Data-Forwardness (RD)} = \frac{\text{Data-related employees (\#)}}{\text{Latest end-of-year revenue (US\$ Billion)}}$$

The RDI measures data professionals that are **currently and directly employed within fashion organizations,** though it does not account for outsourced professionals and solutions or reskilling initiatives of current staff.

That being said, we believe the RDI is able to capture the data-forward reality of fashion retailers, as the hiring of these professionals indicates a general tendency towards a culture operating under more innovative philosophies. Additionally, these types of investments generally occur after a first contact with data science and decision automation via third-party providers.
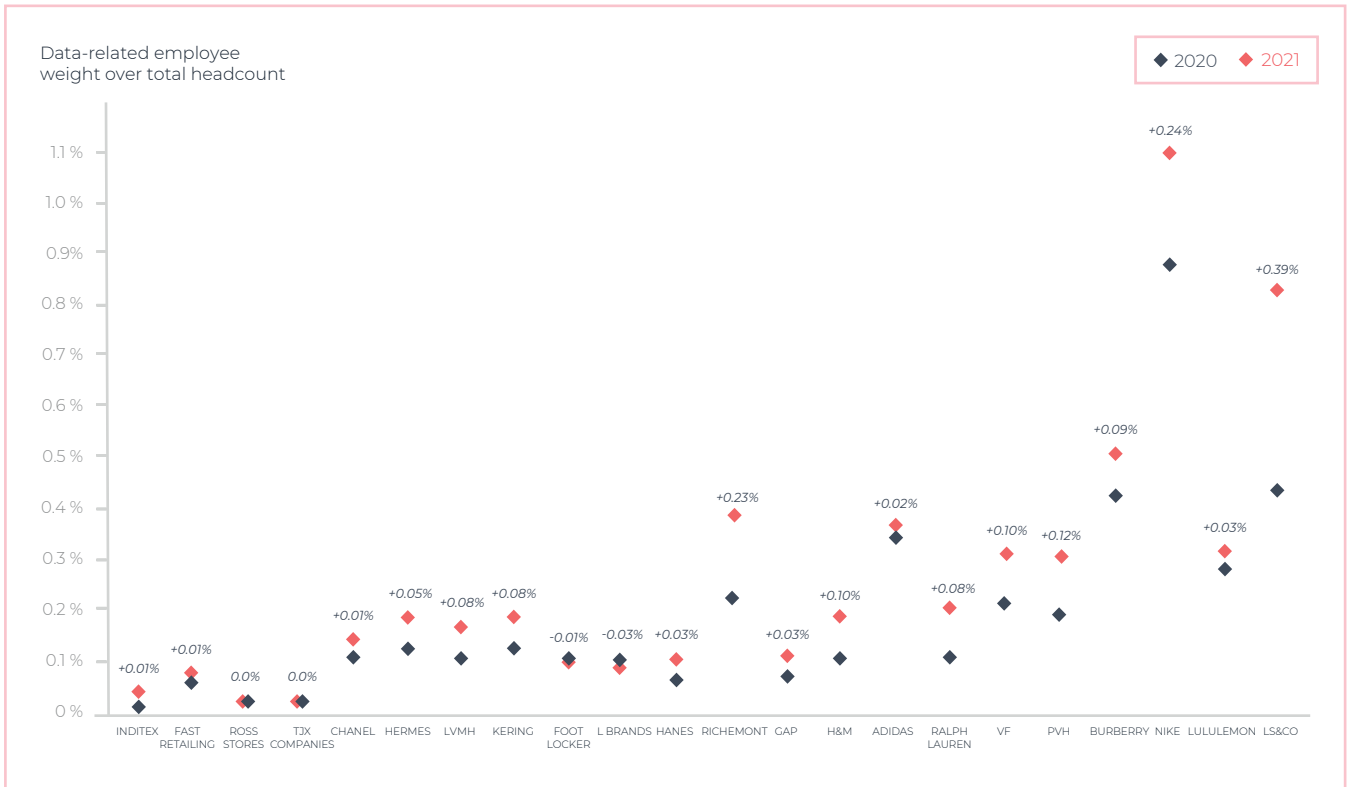
EXHIBIT 1

RETAIL DATA-FORWARDNESS INDEX (RDI), 2020 - 2021

RD (# of Data-related employees /
Annual revenue, US$ Billion)

Legend: 2020, 2021

Company	Value
INDITEX	+0.82
FAST RETAILING	+0.65
ROSS STORES	+0.67
TJX COMPANIES	+1.09
CHANEL	+0.81
HERMES	+1.13
LVMH	+2.35
KERING	+2.28
FOOT LOCKER	-0.27
L BRANDS	+2.02
HANES	+2.39
RICHEMONT	+4.18
GAP	+3.19
H&M	+4.34
ADIDAS	+1.69
RALPH LAUREN	+4.54
VF	+3.71
PVH	+6.71
BURBERRY	+2.05
NIKE	+0.85
LULULEMON	+4.58
LS&CO	+15.60

EXHIBIT 2

DATA-RELATED EMPLOYEE WEIGHT OVER TOTAL HEADCOUNT, 2020 - 2021

Data-related employee
weight over total headcount

Legend: 2020, 2021

Company	Value
INDITEX	+0.01%
FAST RETAILING	+0.01%
ROSS STORES	0.0%
TJX COMPANIES	0.0%
CHANEL	+0.01%
HERMES	+0.05%
LVMH	+0.08%
KERING	+0.08%
FOOT LOCKER	-0.01%
L BRANDS	-0.03%
HANES	+0.03%
RICHEMONT	+0.23%
GAP	+0.03%
H&M	+0.10%
ADIDAS	+0.02%
RALPH LAUREN	+0.08%
VF	+0.10%
PVH	+0.12%
BURBERRY	+0.09%
NIKE	+0.24%
LULULEMON	+0.03%
LS&CO	+0.39%

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4

Significant leaps in RD highlight a clear shift

Over the last year, indexed fashion retailers have made clear commitments toward increasing the number of data-related professionals on their staff. The **average RD of indexed retailers in 2021 is 8.2 data-related employees per US$1 Billion,** up from 5.8 in 2020 for a growth of 41.4%. In absolute terms, these **retailers employed 40.3% more data related professionals** than they did in 2020.

These 2,944 professionals are currently employed across the 22 indexed fashion companies, making up an average of 133.8 data-related employees per company (12 per 1,000 HQ employees), or 1.8 per 1,000 employees.

Making this increase even more significant is the fact that overall headcounts continued to climb in 2021. In other words, the proportional increase of data-related employees on fashion teams was not a result of overall reductions in headcounts. Thus, fashion retailers have made a demonstrative acceleration of these professionals onto their teams.

Sportswear category is reigning champion of retail data-forwardness, Luxury is stepping up its game

EXHIBIT 3

CHANGE IN AVERAGE RD BY AVERAGE PROFIT MARGIN BY CATEGORY, 2020 - 2021

Indexed retailers employed

40.3%

more data-related professionals in 2021

Sportswear scores again

In addition to Sportswear's ongoing overall success[2], the category continues to rank as the most retail data-forward category with an aggregated **RD of 14.5, a 13.8% growth over 2020,** and the highest weight of data-related professionals over total headcount at **0.6%.**

Sportswear is the winning category for RD with a score of

14.5

When ranked in terms of weight of data-related employees over total headcount, two of the top five indexed companies were sportswear retailers Nike and Adidas. In fact, in absolute numbers these two retailers employ 1,047 data-related employees.

EXHIBIT 4

NIKE & ADIDAS EVOLUTION OF RD, 2019-2021

RD (# of Data-related employees / Annual revenue, US$ Billion)
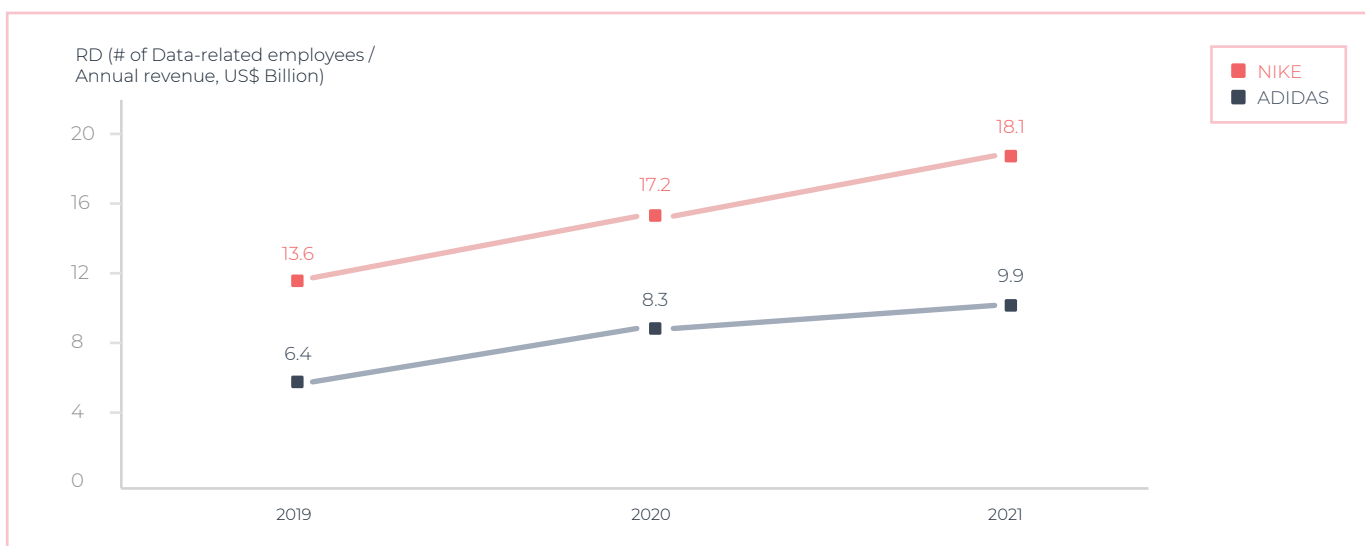
NIKE
ADIDAS

For the 3rd consecutive year[3], Nike has outranked other indexed companies as the brand with the **highest weight of data-related employees over total headcount at 1.10%,** up from 0.9% last year. For it's part, Adidas is gaining ground, landing a spot in the top five RD brands in 2021, with an **RD of 9.9,** a 20.8% YoY growth. To date, the RD of both brands has also coincided with steady stock market growth after reaching their lowest annual prices in March of 2020, with Nike (NKE) stock prices growing by roughly 170% and Adidas (ADDYY) by 90%.

It will be interesting to see if these advances continue in the next year as Adidas seems to be gaining ground on Nike[4] in other areas, or if Nike will be able to maintain its lead[5].
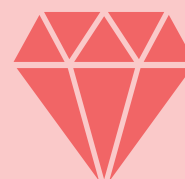
Keep your eyes on Luxury retailers

Luxury retailers have also made notable progress in 2021, with a 68.7% YoY increase of RD and 56.5% YoY growth in weight of data-related professionals over total headcount.

Indexed Luxury retailers made great gains, with a

56.5%
YoY growth in RD

These significant gains, among other digital tech advances[6], suggest that the category rooted in a philosophy and heritage naturally distanced from modernity is finally embracing transformation, likely as the pandemic has forced retailers of all categories to rethink their approaches. We expect Luxury to continue investing in data talent, especially as they move beyond a primarily ecommerce focus.

Levi Strauss & Co. beats out other brands by a landslide

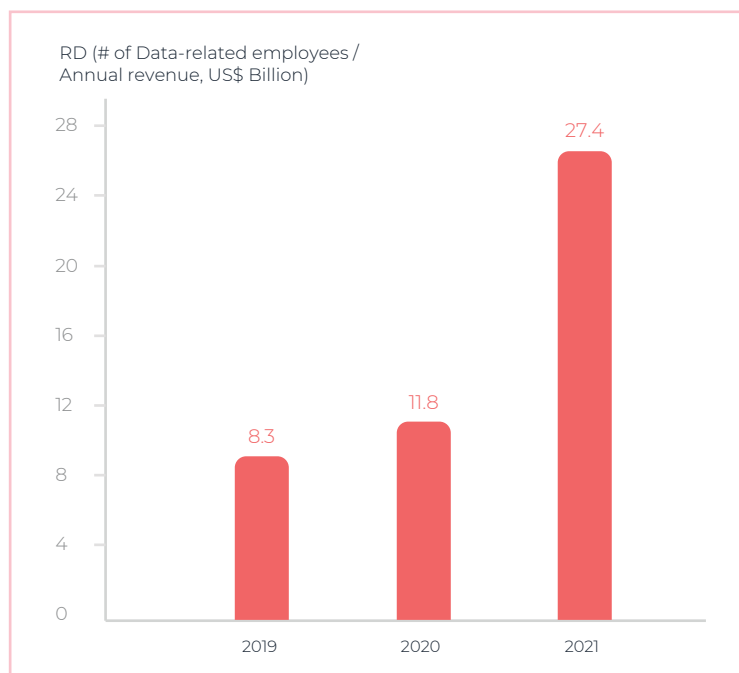### Topping the Index in RD & scoring high in weight over total headcount

US denim brand Levi Strauss & Co. has made significant investments in data-related talent over the last year, jumping from 4th to 1st position in overall retail data-forwardness, **nearly doubling last year's RD score with an RD of 27.4 - the highest RD score on record.** Furthermore, weight of data-related employees over total headcount grew by 91.5%, coming in second only to Nike. To date, stock prices for Levi's (LEVI) have grown by 186% since bottoming out in early April, 2020 at the peak of the COVID-19 pandemic.

While not accounted for in the RDI, Levi Strauss & Co. is also increasing retail data-forwardness through **internal reskilling and upskilling** by way of a Machine Learning Bootcamp[7], whose objective is to "transform the company into a data- and artificial intelligence-powered business" in which current employees receive training in **coding, machine learning, and agile ways of working.**

We expect more fashion retailers will follow suit and develop internal training programs like that of Levi Strauss & Co. as the entire industry begins shifting toward data-driven approaches.

LEVI STRAUSS & CO. EVOLUTION OF RD, 2019-2021

RD (# of Data-related employees / Annual revenue, US$ Billion)

2019: 8.3
2020: 11.8
2021: 27.4

CONCLUSIONS

The race is on as retailers speed toward a digital future

In the past, while the case for innovation and data-driven technology was becoming clear in other industries, the situation in fashion followed the old adage: "You can lead a horse to water, but you can't make it drink."

But over the last few years, we've seen this changing. What's more, the pandemic has clearly accelerated the need of retailers to rethink some long-held assumptions about how to approach even the basic operations of their businesses.

This year, many retailers, such as those included in the RDI, are thriving. Winners have moved beyond the challenges of the pandemic and once again have the bandwidth to strategize for the future. And these **retailers are increasing their focus and investments in technology, new data-related talent, and in helping their existing employees become schooled in a new data-driven approach.**

Demonstrative of this priority is the **strong overall 41.4% YoY growth of retail data-forwardness (RD)**, the 40.3% YoY growth of data-related talent in absolute numbers, as well as the gains weight of these professionals within overall headcounts. This is true at the industry, vertical, and company level with the exception of one.

We expect to see the level of **RD in fashion companies continue increasing across all verticals,** especially as they invest in technology that allows them to embed agility into their operations. At the company level, on the other hand, we also expect laggers to fall further behind unless they hustle to make necessary investments in advanced tech and relevant professionals in the short-term.

Nevertheless, the overall findings are positive as the industry trend points towards growing investments in cultivating a culture of innovation and data-driven decision-making across retail organizations.

METHODOLOGY

RDI 2021

Indexed retailer selection

The list of indexed retailers was originally inspired by the "Super Winners", or the top 20 players in 2018 by economic profit ($US million) identified by the Business of Fashion and McKinsey & Company "The State of Fashion 2020" Report[8].

Fashion retailers in bold represent those that were additions to the "Super Winners" list: Adidas, Burberry, **Chanel**, Fast Retailing, **Foot Locker**, GAP, H&M, Hanes, Hermès, Inditex, Kering, L Brands*, **Levi Strauss & Co**, Lululemon, LVMH, Nike, **PVH, Ralph Lauren**, Ross, TJX Companies, VF Corporation.

The following retailers from the "Super Winners" list were not included in our report: Pandora, Anta Sports, Next, and HLA Corporation.

Research of data-related roles

To produce our findings, we retrieved data using LinkedIn Recruiter to search the 22 major retailers and their brands for individuals currently employed with any of the following job titles as of August 2nd, 2021:

Artificial Intelligence: AI Consultant, AI Engineer, AI Intern, AI Researcher, AI Specialist, Head of AI, Manager of AI, VP of AI, Director of AI.

Data/Data Science: Big Data Developer, Business Data Analyst, Chief Data Officer, Data Analyst, Data Architect, Data Consultant, Data Engineer, Data Integrity Analyst, Data Management Analyst, Data Management Consultant, Data Management Coordinator, Data Management Specialist, Data Management Team Lead, Data Manager, Data Migration Analyst, Data Specialist, Data Quality Analyst, Data Reporting Analyst, Data Research Analyst, Data Technician, Director Data Management, Director Data Science, Enterprise Data Architect, Head of Data Management, Lead Data Analyst, Lead Data Architect, Manager Data Management, Master Data Analyst, Senior Data Analyst, Senior Data Architect, Senior Data Engineer, Senior Data Manager, Chief Data Scientist, Data Science Intern, Data Science Manager, Data Science Researcher, Data Science Specialist, Data Science VP, Data Scientist, Head of Data Science, Lead Data Scientist, Senior Data Scientist.

Machine Learning: Director of Machine Learning, Head of Machine Learning, Machine Learning Consultant, Machine Learning Engineer, Machine Learning Intern, Machine Learning Researcher, Machine Learning Specialist, Manager of Machine Learning, VP of Machine Learning.

Additional fashion retailer information

In addition to searching for the aforementioned professional titles, we also used publicly available information to compile the revenue and profit at the end of each retailer's FY 2020, as well as the official headcount of each retailer according to its last annual report. We used this information to calculate their profit margins, revenue/employee, and data-related employees weight over total headcount.

ENDNOTES

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https://sourcingjournal.com/footwear/footwear-trends/adidas-nike-popular-athletic-footwear-puma-morgan-stanley-alphawise-sneaker-282521/

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7 **"Employee Takeaways From Our Machine Learning Bootcamp",** May 24 2021,
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8 **"The State of Fashion 2020",** McKinsey & Co. and The Business of Fashion, November 21 2019,
https://www.businessoffashion.com/reports/news-analysis/the-state-of-fashion-2020-bof-mckinsey-report-release-download

*RDI data was collected just prior to Victoria's Secret official split from L Brands (now known as Bath & Body Works) on August 2nd, 2021.

ABOUT NEXTAIL

Nextail's aim is to make the retail world a better, more sustainable place. It helps retailers create better experiences while using fewer of the world's resources.

To fulfil this vision, Nextail has created a new-generation platform that delivers agile merchandising decisions for fashion retailers. Leveraging advanced analytics and AI, Nextail empowers brands and retailers to sell more with less stock through hyper-local demand forecasting and agile process automation.

Recognitions

WORLD ECONOMIC FORUM	RWRC DISCOVERY 50	BUSINESS INSIDER
Technology Pioneer	Top 50 Global Retail-Tech Startup	Top 15 European AI Startup

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