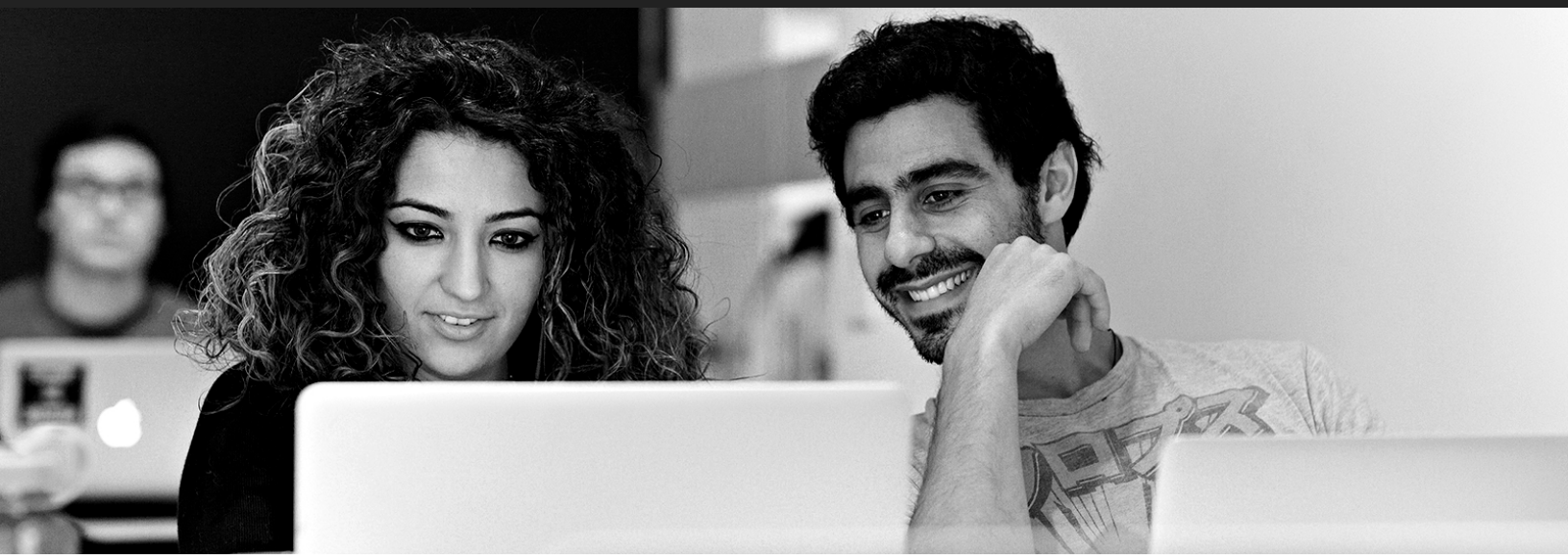

ANALYZING THE FUTURE OF FINANCE:

General Assembly's Data Analyst Training & Hiring Solutions Fill Knowledge Gaps in 2024

The finance industry naturally attracts savvy talent — people with analytical minds who want to demonstrate value and make a difference to the company's bottom line. However, the precise type of talent financial companies need to thrive is evolving. Today, data is the key to decision-making, modernization, and competitive customer experiences — but without the right people to make sense of it all, this data can become increasingly fragmented and inaccessible — while valuable opportunities slip into the rearview mirror.

"Data is one of the most important assets a company has — and, within banking, the amount of data is exponentially growing," explains Angela Brennan, Global Lead Solutions Architect at General Assembly.

"However, it's only an asset — until you have the right people in place who know how to use the data and democratize it across the business. That's where we see opportunity meet impact within a variety of roles."

On the one hand, we're seeing traditional data roles — like recordkeeper, data entry clerk, underwriter, compliance officer, and auditor — serving redundant functions due to increasingly sophisticated data analysis technology. Yet, as the tech talent squeeze continues, it's clear: solutions are needed to retain, rather than lose, valuable team members. By upskilling and reskilling some of these employees to in-demand data analysis and data-adjacent roles, financial institutions can preserve their internal wellspring of knowledge, capabilities, and morale.

Furthermore, to remain highly competitive as new data roles emerge, companies will need dependable pipelines for net-new talent that meets the evolving skill sets — and use case requirements — of the high-tech tasks at hand.

In this piece, we cover:

- The evolving market for data analysts in finance — and the technical skills they need.
- A three-pronged approach to filling data skills gaps and talent shortages.
- How General Assembly helps financial institutions solve these challenges.

DATA ANALYSIS IN FINANCE: CHALLENGES & OPPORTUNITIES

To an extent, “best practice data analysis” is still largely uncharted territory. Financial institutions have historically faced unique challenges that encumber forward momentum and data innovation:

- **Legacy Systems and Infrastructure** – Many financial institutions operate on legacy systems that weren’t designed to handle the volume and complexity of modern data. Integrating new data technologies requires significant time and investment.
- **Data Silos** – Financial institutions often have data scattered across various departments and systems, creating data silos. This fragmentation makes it difficult to have a unified view of data — hindering the ability to derive comprehensive and strategic insights.
- **Regulatory Compliance** – The finance industry is highly regulated, with strict compliance requirements limiting the ability to freely use and share data. Robust governance practices are necessary for upholding privacy and security.
- **Talent Shortages** – Recruiting and retaining individuals with the necessary science and analytics skills can be challenging, limiting the industry’s capacity to maximize data.
- **Cultural Resistance to Change** – Traditional approaches and a lack of awareness about the benefits of data analytics can impede the adoption of new technologies.

Overcoming these challenges requires a comprehensive approach that involves updating technology infrastructure, breaking down data silos, addressing regulatory concerns, investing in talent development, and fostering a culture that values and embraces data-driven insights.

Though it sounds like a tall order, most financial institutions have no choice but to sink or swim at this point. Banks, credit unions, insurance companies, and other financial service providers are beginning to see that business-as-usual leads to inefficiencies impossible to ignore.

Data promises to solve many of the challenges ahead, though it's not simply a matter of hiring a few data analysts or data scientists and calling it a day. Sure, you've got data practitioners by role — like data analysts or data scientists — but, particularly in finance, there's also a growing demand for these skill sets in data-adjacent roles:

- **Risk Managers** – Proficiency in data analysis — understanding statistical models, probability, and data visualization — allows these managers to more accurately analyze different scenarios and make informed decisions.
- **Fraud Analysts** – Data skills enable analysts to monitor transactions, detect anomalies, and implement machine learning models to identify and combat fraudulent activity.
- **Sales Analysts** – Frontline sales teams can leverage data analytics to understand customer behavior, optimize sales strategies, manage existing customer relationships, and identify new opportunities.
- **Compliance Analysts** – Data skills help compliance analysts explore vast amounts of data to ensure the organization is in compliance with relevant laws and regulations.
- **Customer Relationship Managers** – With data skills, CRMs analyze consumer data, segment audiences, and personalize interactions for more engagement and retention.
- **Investment Analysts** – Data skills enhance the ability of investment analysts to interpret market trends and asset performance to make informed investment recommendations.
- **Product Managers** – Financial product managers can make better decisions about product development, enhancements, and marketing positioning by leveraging data.
- **Operations Analysts** – Data skills allow operations analysts to optimize processes, streamline workflows, and identify areas for cost savings.
- **Treasury Analysts** – When managing financial assets, the ability to analyze market trends, interest rates, and financial performance leads treasury analysts to make informed decisions regarding cash management, investments, and risk mitigation.
- **Business Intelligence Analysts** – Professionals in business intelligence can use data to create dashboards, reports, and visualizations that provide key metrics and insights.

With all these roles, incorporating data skills leads to better decision-making, efficiency improvements, risk management, and strategic, competitive advantages.

FINANCE INDUSTRY DATA SKILLS TO FUTURE-PROOF YOUR INSTITUTION

Given the rapidly evolving financial landscape, staying updated on data analytics tools and techniques is essential for professionals in both data and data-adjacent roles.

The most highly sought-after data skills in 2024 (and beyond) include:

- **Data Wrangling** (SQL)
- **Data Visualization** (Tableau)
- **Programming Languages** (Python and R)
- **Machine Learning** (Excel, pandas, Dataiku)
- **AI & Large Language Models** (BERT, ChatGPT, XLNet)
- **Cloud Services** (Google Cloud Platform, Microsoft Azure, Amazon Web Services)
- **Data Engineering Skills** (extract/transform/load, pipeline building, database design)

Based on these needs, General Assembly's Data Analytics program takes learners (at all different levels of tech competency) through a "T-shaped" curriculum that covers an expansive breadth of subject matter, while Advanced Analytics courses allow for deep drill-downs into areas of core specialization that suit a particular use case.

Over the span of 40 hours, GA's data analysis courses explore how to:

- Frame the right questions and obtain the right data.
- Prepare and evaluate the data.
- Effectively communicate the results.

Through onsite or remote instructor-led sessions, GA teaches essential data analytics tools, techniques, approaches, and methodologies — all designed by experienced subject matter experts. Through case studies, assignments, and projects that mimic real-world tasks and workflows, your employees gain practical knowledge and experience as they work through the materials, as well as regular feedback from instructors to ensure they're meeting their learning goals.

3 DATA TRAINING & TALENT SOLUTIONS FOR THE FINANCE INDUSTRY

For financial institutions ready to drive innovation, employee engagement, and profits, General Assembly delivers a number of innovative employee skill development solutions.

Most financial institutions use all three approaches to fill their ranks with data-knowledgeable employees:

1. We Upskill Your Current Data Analysts And Data Practitioners

- Deliver deeper analytics literacy in line with modern best practices.
- Fill skills gaps as you evolve your tech stacks.
- Increase the confidence and leadership of your data teams.

2. We Reskill Employees To Move Into Data Roles

- Identify high-potential employees with an untapped aptitude for data roles.
- Train existing talent to use data more effectively or transition into a data role.
- Increase data knowledge, skills, and confidence of data-adjacent employees.

3. We Recruit GA Program Grads for Your Hard-to-Fill Data Roles

- Tap a vast, diverse pipeline of GA data analyst bootcamp graduates.
- Add net-new data analysts and data practitioners to scale your data proficiency.
- Use train-to-spec programs that can increase project teams locally and abroad.

See some of the many financial institutions we've helped already:

RESKILLING

OUR IMPACT: A NOT-FOR-PROFIT CREDIT UNION SERVING US VETERANS

To build a data-driven culture enterprise-wide, a credit union serving veterans across 30 U.S. states partnered with GA to evaluate 310 associates and ultimately reskill the 72 most promising candidates into new cross-functional data roles.

Through 13 data literacy courses, associates learned SQL, visualization, and Python skills. From preliminary evaluations to post-reskilling assessments, associates increased their performance by 64%.

"We're empowering employees to own their own opportunities and their own careers. It's a massive culture shift for our organization," explained the Assistant VP of Learning and Talent Development.

■ UPSKILLING

OUR IMPACT:
A LEADING GLOBAL INVESTMENT BANKING COMPANY

To stay on the leading edge of technology, a leading global investment banking company asked GA to develop a Data Science Academy to upskill 30 of their top data professionals.

Our partner's Global Asset Manager and Head of Analytics/Trading Operations explained, "We think of investing in data science training like private equity investing... we only need to uncover a handful of rockstars to return our whole training investment."

The 10-week immersive started with defining modern data science workflows and tools, then moved through advanced Python training, data modeling, and machine learning.

The group was composed of five experienced, eight intermediate, and 17 novice data professionals who were placed on individualized tracks based on pre-training assessments.

The program exceeded benchmark success metrics in Net Promoter Score, Value for Time Spent, and Completion rates. In fact, the Net Promoter Score of 55 puts satisfaction with GA courses on par with household brands like Netflix, which share a similar score.

One program participant shared, "The instructional team is extremely good — both in terms of theoretical and practical knowledge."

Another participant added, "I could keep going for another four weeks to dive into more topics and more in-depth!"

■ RESKILLING + UPSKILLING

OUR IMPACT: GUARDIAN INSURANCE

Build new data capabilities from within — this was the key digital transformation objective for one of America's largest mutual insurance companies. Guardian partnered with GA to reskill 150 actuaries as data scientists.

In addition, we also upskilled leaders to understand how to take full advantage of their expanding data capabilities and talent pool.

The program included:

- 110+ hours of robust data curriculum, tailored for company-specific use cases.
- Capstone projects that leveraged real data to solve real business challenges.
- Data-driven decision-making training for an emerging leadership group.

Program participants increased their data skill competency by 45% from preliminary evaluations through post-reskilling assessments. The data science team is now integrated with other data professionals throughout the organization, using predictive analytics to capitalize on business opportunities as they arise.

"Now we have a core set of data scientists that have industry and institutional knowledge, and they work with our business partners to identify opportunities where they can drive business value," said the Chief Information Officer.

■ RESKILLING + UPSKILLING

OUR IMPACT: BLOOMBERG

Bloomberg needed to evolve their data knowledge and skills in order to gather and analyze unprecedented amounts of data at market speed. GA created a multi-tier training program to reskill and upskill employees, confidently training groups in Excel, SQL, Qlik Sense, and Python.

Offering projects related to real day-to-day work and expert instructor support, the program:

- Reskilled 350+ leaders across three continents into data analytics roles.
- Upskilled 1,500 Global Data team members on the latest tools and skills.
- Improved participants' analytics assessment scores by 44%.

"I've seen business initiatives that were prototyped during the class put into production," said the Chief Data Officer. "The program has led to tangible business results, as well as creating a common foundational skill set that we all must have going forward."

Estimated ROI from the data training is somewhere in the millions of dollars.

■ RESKILLING + TALENT PIPELINE

OUR IMPACT: M&T BANK

GA partnered with M&T Bank to offer a 12-week immersive data analytics program. By cultivating foundational skills, filling knowledge gaps, and reskilling talent, GA helped propel a tech-forward region that was destined to become a federal "tech hub."

The initial pilot program boasted a 100% retention rate in which:

- 19 candidates were reskilled for data analyst roles.
- 33% of the graduates identified as female.
- 66% of the graduates came from underrepresented groups.
- 60% of the graduates were hired into data analytic roles within three weeks of graduating.

"We're trying to reskill, upskill, and retrain a massive workforce that, frankly, is ready for this — and hasn't had an opportunity to push toward data and technology," explained the bank's Chief Diversity Officer.

The bank aims to add another 1,000 tech workers over a three-year period, with GA's program serving as part of the strategy to reach that goal.

READY TO SCALE YOUR FINANCIAL INSTITUTION'S DATA? START HERE.

Demand for data skills in the financial sector will continue to scale, as the volume of financial data increases, advancements in technology arrive, and data-driven decision-making continues to distinguish the most profitable institutions from the pack.

There will always be an imperative for financial companies to enhance risk management, improve customer experience, and streamline internal processes to remain competitive. The ability to extract valuable insights from complex datasets will remain a crucial skill set, driving the ongoing demand for data expertise across the industry.

From leveraging data for personalized customer engagement to adopting cutting-edge technology stacks and agile operating models, financial institutions face a pressing need to fill data skills gaps and become future-ready. As demonstrated, General Assembly offers a robust approach to upskill, reskill, and recruit the most talented data professionals.

Let's get started.