

# **10X**

## **DATA ANALYST**

### **WITH AI PROGRAM**

---

6 MONTH PROGRAM



Our innovative approach and dedicated instructors ensure that students gain the skills needed to excel in the field of data analysis

# Table of Contents

---

↗	About 10x Data Analyst	3
↗	Key Features	4
↗	Who can join this course ?	6
↗	What is Data Analysis ?	8
↗	Why companies are in need of Data Analysts ?	10
↗	How it works ?	16
↗	Your Journey to success in Data Analysis.	17
↗	Why 10x Data Analyst ?	19
↗	Curriculum	22
↗	Projects	36

# About 10x Data Analyst

---

Over the past decade, data analysis techniques have transformed the business landscape, becoming essential for any forward-thinking organization. Companies that resist embracing this Data Revolution risk falling behind.

In today's fast-paced world, the demand for skilled data professionals is surging, creating a significant gap between abundant job opportunities and the insufficient talent pool struggling to keep up.

The challenge is further complicated by the rapid evolution of the data analysis field, which often outpaces traditional education systems, leaving them unable to provide the most current skills.

Modern Data Analysts need more than just theoretical knowledge; they require creativity, problem-solving abilities, and a genuine passion for data interpretation. Unfortunately, most traditional curriculums fail to address these contemporary needs.

## Now Imagine this

What if there was an innovative curriculum that went beyond conventional teaching methods ?

What if this course aimed not only to deliver knowledge but to ignite a profound passion for data analysis, fostering a relentless pursuit of learning and discovery?

This is exactly what 10xDataAnalyst strives to achieve.



*Ankit Maheshwari*  
**Ankit Maheshwari**  
CEO and Founder  
**1to10x**

# Key Features

---



## Industry Relevant Projects and Case Studies

---

The program focuses on practical, real-world learning through industry-relevant projects and detailed case studies. These experiences help learners bridge the gap between theory and practice, ensuring they are prepared for real challenges at work.

## Comprehensive Course Curriculum

---

The curriculum is designed to cover all essential areas step by step, making sure learners build a strong foundation before moving into advanced concepts. It offers a complete learning journey that equips students with the knowledge and skills required in today's job market.



## Strong Alumni Network

---

Learners become part of a strong alumni network that provides long-term value through guidance, mentorship, and professional connections. This network opens up career opportunities and offers support even after the program is completed.

## Soft Skills and Interview Preparation Training

In addition to technical skills, the program emphasizes the importance of communication, presentation, and problem-solving abilities. Special training sessions are included to prepare learners for interviews, helping them gain confidence and stand out to employers.



## Progress Monitoring



Regular progress monitoring ensures that learners stay on track throughout the course. Continuous feedback and performance tracking help identify strengths and areas of improvement, ensuring steady growth and successful completion.

# Master Most-In-Demand Tools



# Who can Join this Course ?

---

## IT/NON-IT GRADUATES

---

Our program is open to both IT and Non-IT graduates, making it a versatile choice for learners from diverse academic backgrounds.

Whether you hold a degree in **MBA, B.Com, B.Sc., BA, BCA, or B.Tech**, or any other professional qualification, this course is designed to equip you with the skills needed to excel in today's competitive job market.



## WORKING PROFESSIONALS

---

This program is ideal for working professionals from diverse sectors such as

**Finance, Banking, IT, Healthcare, Supply Chain, Manufacturing, Insurance, Retail, or any other industry.**

It is designed to help you upgrade your skills, stay competitive, and accelerate your career growth regardless of your current field.

# What to expect by the end of the course:



01

**Unlimited Job Opportunities**

Pay Range  
Spanning From  
**\$6,800 - \$13,610**



02



03

**Work for Big 500 Companies**

**Strong Analytical Ability** to solve Real World Problems

04



05

**Expertise In Data Analysis Tools**



# What is Data Analysis

## Data Analysis

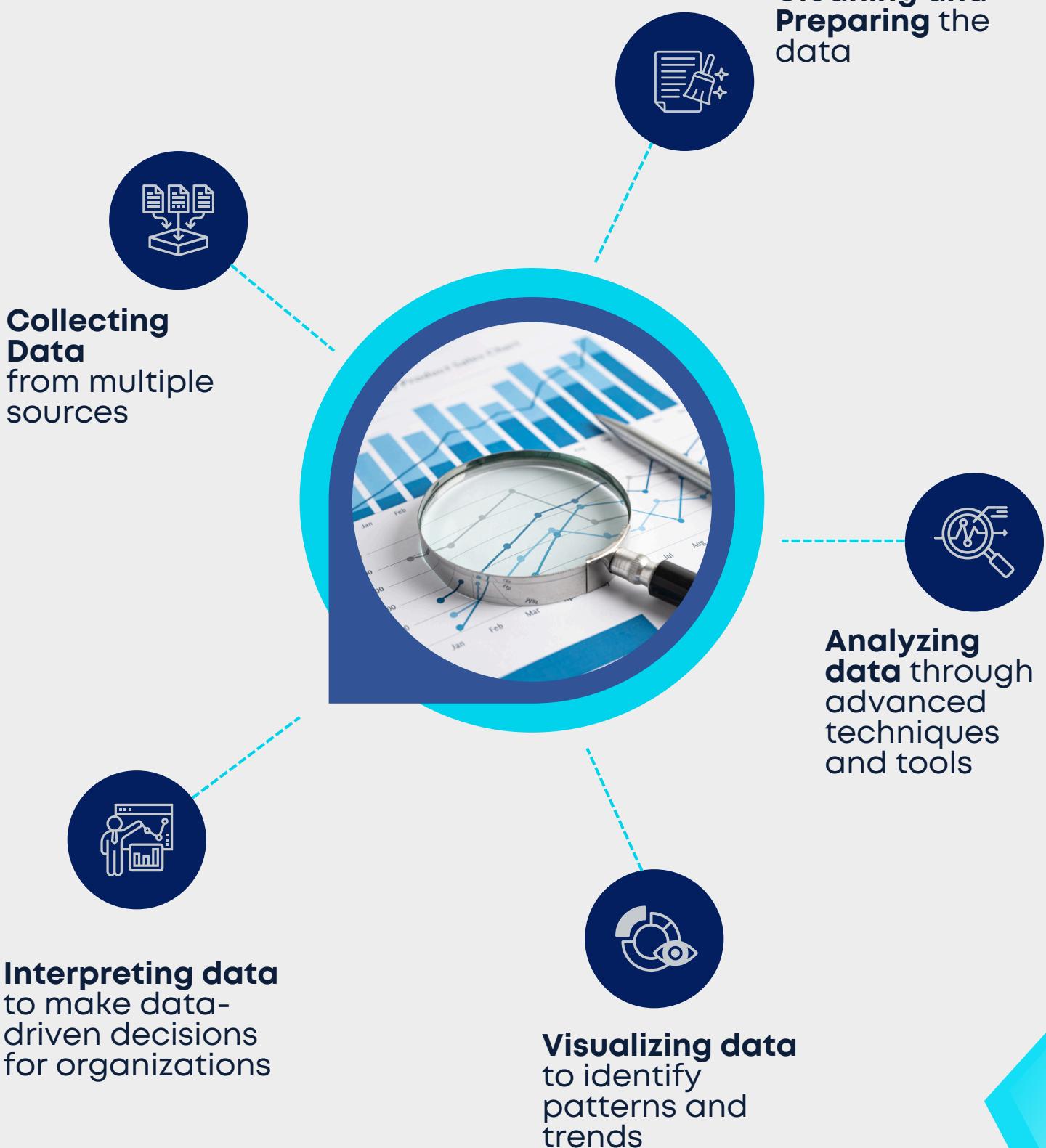
is not a technology. It is a field of study that uses multiple tools and technology to find meaningful information out of data.

**\$6.8k to \$20k per annum**

As per World Economic Forum Report , Data Analysis is considered , one of the most in demand job role with package ranging from \$6.8k to \$20k.

WORLD  
ECONOMIC  
FORUM

# STAGES IN DATA ANALYSIS



# Why companies are in need of Data Analysts ?

---

Let's talk about Big giants like **Samsung**, **Coca – Cola** or **Microsoft**.

**Are their all products extremely successful?**

While they have numerous successful products, they have also faced product failures



Why do these products failure happen?

## Bad Decisions

- Wrong Market Strategy
- Poor Market Research
- No competitor analysis
- Overpricing or Underpricing

**Data Analysts** not only eliminates these bad decisions but comes up with much more refined strategies to avoid setbacks , **contributing to Organization's overall growth.**

# Who holds the decision-making power in the organization?

## Main Overview

Decision-making power is usually held by top management, and the way decisions are made has changed over time. In the past, leaders often relied on a historical approach, using experience and intuition as their main guide. While this offered some value, it lacked accuracy and consistency. Today, the focus has shifted to a modern approach based on data-driven decisions. By relying on data and analytics, management can make smarter, evidence-based choices that improve efficiency, reduce risks, and deliver stronger results.

## Two Approaches to Decision Making

Historical Approach

Modern Approach



# Why Historical Approach Doesn't Work ?



Relying solely on experience **may lead companies to huge loss.**

## Limited Perspective



Nokia's failure to adapt to the Android and iOS shift, rooted in rigid perspective, led to losses and its eventual acquisition by Microsoft.

## Subjective Biasness



Kodak's decline resulted from a subjective bias favoring film-based photography, impeding a timely shift to digital imaging.

## Missed Opportunities



Yahoo, missed opportunities to dominate the search engine and online advertising market, with their rigid decision-making.



# Companies Leveraging Data analysis



Companies are using data **to make smarter decisions.**

## Personalized Recommendation



HSBC use data analytics for 39+ million customers, **driving customer-centric applications** such as personalization, recommendations, and **fraud detection**.

## Collects Real Time Data



DHL, a logistics company, uses Big Data analytics to collect **real time data in delivering packages** and providing real time solutions, reducing losses by 30%, **saving \$100 million**.

## Provides Prediction



IBM Watson processes over 500 million requests per minute, analyzing **more than 50 petabytes of data and trillions of data points daily** to deliver real-time AI-driven insights and predictions across various industries globally.

# Why Modern Approach Works?



No more Guesses! Data Driven Decisions allows businesses to make informed decisions based on concrete evidence rather than intuition.

## Benefits of Data Driven Decision Making

- ↗ Smarter Decision
- ↗ Predict Future trends
- ↗ Valuable Insights
- ↗ Optimized Operations
- ↗ Risk Management
- ↗ Cost Reduction

# Growth in Data analyst Job Roles

## Growth metrics

"A recent McKinsey survey found that companies that extensively use customer analytics are reporting 115% higher ROI and 93% higher profits."

**115%**

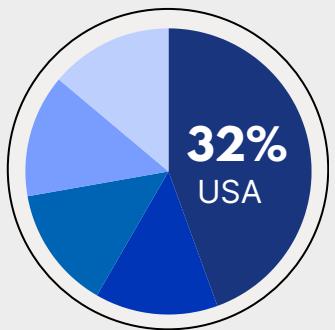
Higher ROI  
Return in  
Investment

**93%**

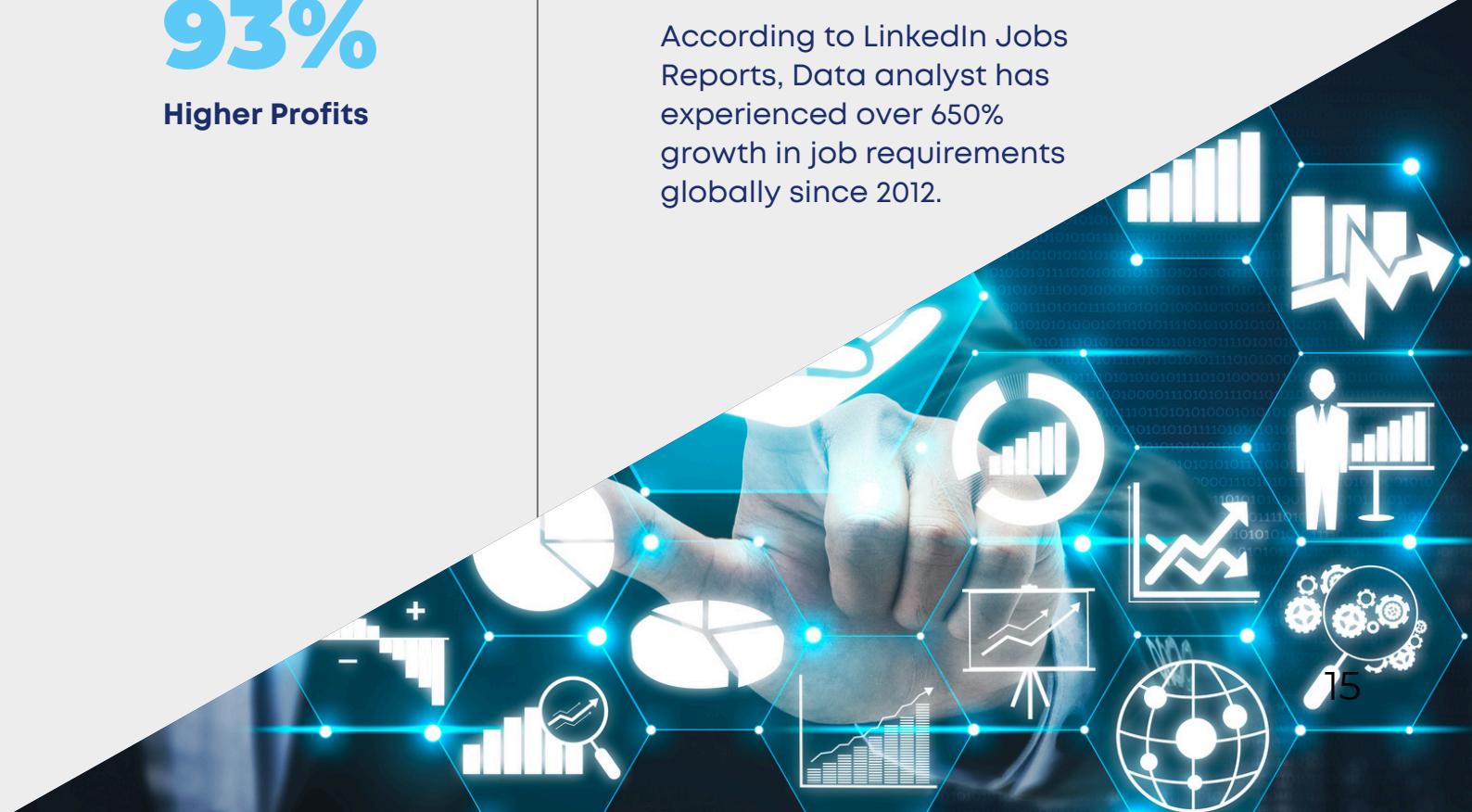
Higher Profits

## 32% Big Data Market

USA alone will capture 32% of the big data market worldwide, generating millions of job roles.



According to LinkedIn Jobs Reports, Data analyst has experienced over 650% growth in job requirements globally since 2012.



# How it Works



## Staging

It is the **process of collecting** data from various sources .



## Processing

**Preparing and analyzing** the data to find meaningful insights



## Publishing

The **processed data is stored** in a centralized system, easily accessible to top management



## Reporting

Generate **interactive dashboards** from the processed data to make decisions.



# Your Journey to Success In Data analysis

## GET SKILLED



### Career-Oriented Curriculum

- Curriculum designed to meet industry demands
- Learn everything from basics to advanced
- Flexibility to repeat any topic multiple times

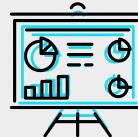


### Mentorship For Career Transition

- Meet our mentors in live sessions and ask all your queries.
- One on One Interview Guidance From Mentors
- Connect to Mentors anytime.

## INDUSTRIAL ANALYTICAL PROJECTS

- Solve the problems you will be solving as a Data Analyst.
- Real-life world problems faced by **Fortune 500 companies**.
- Domain Specific Projects to crack jobs in your own industry.



SUCCESS

KEEP ON DOING

DO

TRY

PLANNING

ANALYSIS

THINK



## PROGRESS MONITORING

- Seek constructive feedback from peers and mentors.
- Track your certifications and completed courses to maintain a record of your achievements.



## GET PLACED



### Resumes that gets shortlisted

- Build ATS Based Resume in accordance to the Different Job Description
- Mention right keywords that impresses Hiring managers

### Crack Toughest Interviews

- Learn the soft skills needed to crack interviews
- Master the most asked questions in most of companies

### Get Placed in Your dream Job

- Get Access to Interview Opportunities From Our Data analysis Community
- Continuous Support From Resume Creation to Placement

# Why 10x Data Analyst

Immediate value and Career Transformation



Career Transformation of Non-IT Professionals

Placement Support

Get Better Opportunities With Our Alumni Networks

Get hired in Top 500 Companies

# Why 10x Data Analyst

## Immediate value and Career Transformation



Take Practice Sessions on Weekdays, Live On Weekends

Personalized one-on-one sessions to resolve any doubts

Call your mentors, AnyDay, Anytime

2 Years access to all your course content

# What Our learners Said

## Hear Directly from Our Learners!

Our Mega Bootcamps have left a lasting impact on many, and our attendees are excited to share their experiences. Here's what they have to say

 **DEVANSHU THAKKAR** @devanshu12... · 3s ...  
I had an amazing experience with one to 10x team organized bootcamp for data analyst learning. The educators are well expertise and well known in the industry. Learn all the core concepts and some tricks to reach out to the problem solutions. [@1to10x](#)

 **Udayasri Utla** · You  
Certified Clinical SAS programmer  
now · 

Attended 2days of 10xDataAnalyst Bootcamp, got hands-on experience on 4 live projects using trending data analytical tools and AI. Easy to understand without any coding knowledge. Appreciate the team   

 Like  Comment  Repost  Send

 **Naragani Sai Kumar** · You  
Student at QISSET | AI ML Intern  
12m · 

I'm thrilled to share that I recently completed a 2-day bootcamp with One-to-10x focused on Data science and AI!

Day one starts with practical tools like Tableau creation dashboard and importing Data Excel and google sheets....And it was fascinating to see how GPT can be leveraged to apply formulas and streamline calculations

The second day was just as enriching! we delved into the scatter plot concept with Mr.Ankit Maheshwari, and also learned about web scraping using the Octoparse tool, guided by Mr.Akshay. These insights have significantly broadened my understanding and capabilities in the field Data science.....

Thank you giving this opportunity  
#Datascience#Tableau#Ai#Data Analysis #1to10x

 Like  Comment  Repost  Send

 **Vivaan Dassani** (He/Him) · You  
Student at Johnston Heights Secondary  
now · 

10x hosted an exceptional workshop over the weekend, focusing on data analysis and the integration of AI into spreadsheets. The session highlighted how AI-driven tools can significantly streamline the data analysis process, making it more efficient and accessible for both beginners and seasoned professionals alike.

The instructors were knowledgeable and engaging, breaking down complex concepts into easily digestible segments. Hands-on activities ensured that participants could immediately apply what they learned, reinforcing the practical value of the workshop. Overall, 10x delivered a top-notch experience that left participants feeling empowered and equipped to leverage AI in their data analysis tasks.

 Like  Comment  Repost  Send

 **Tonja O.** · 3rd+  
College Instructor developing creative teaching strategies th...  
1d · 

This 2-day webinar was very informative. The information was very logical and simple to understand. I was surprised by the 4 projects but happy for them. I will take the next steps to learn more after this webinar.

# Course Curriculum



⋮⋮



## Module 01

Building the Data Mindset



## Module 02

Data Visualisation and Dashboards with Tableau



## Module 03

Mastering Data Cleaning , Preparation and Analysis with AI Tools and Spreadsheets



## Module 04

Data Warehousing, ETL Pipelines using SQL and BigQuery



## Module 05

AI Driven Data Analytics with Python



## Module 06

Statistical Modeling and Machine Learning for Data Analytics

# Module 01

## AI-Driven Business Intelligence



Embark on a transformative journey to develop a data mindset, essential for making informed business decisions. Learn to think critically about data and its applications in business.

### Learning Outcomes:

- Design and build business intelligence dashboards with AI assistance and clear KPI frameworks
- Master calculated fields, parameters, and LOD expressions for complex business metrics
- Use AI tools to generate optimal chart types, color schemes, and dashboard narratives
- Transform from traditional reporting to AI-ready analysis mindset
- Create production-ready SQL queries using AI optimization and documentation
- Build smart dashboards with automated anomaly detection and predictive insights

## Topics Covered :

- BI tool fundamentals (Tableau/Power BI)
- KPI framework design and business metrics architecture
- Calculated fields, parameters, LOD expressions
- AI-assisted dashboard design and optimization
- Advanced SQL patterns (window functions, CTEs)
- Hex.tech for AI-augmented SQL development
- Leveraging LLMs for query generation and documentation
- AI-powered anomaly detection and reporting
- Predictive insights integration with BI tools



**5x**

**70%**

**90%**

Faster insights with  
AI-assisted  
analysis

Reduction in  
manual SQL  
writing time

Improvement in  
dashboard  
creation speed

Organizations implementing AI-driven business intelligence report transformative results. Companies using modern BI tools with AI assistance achieve 5x faster decision-making capabilities. The integration of AI in SQL development reduces query writing time by 70%, while automated anomaly detection helps identify critical business issues 90% faster than traditional methods. Real-world examples include Netflix saving \$1 billion annually through AI-powered predictive analytics, and Fortune 500 companies reducing reporting errors by 60% after adopting AI-assisted data preparation techniques.

# Module 02

## AI-Powered Data Analysis with Vibe Coding



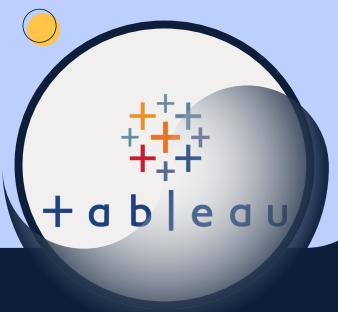
Learn to create interactive and informative dashboards using Tableau, and effectively communicate insights through data visualization. Develop skills in storytelling with data to drive business action.

### Learning Outcomes:

- Master vibe coding principles for rapid data analysis and transformation
- Use natural language prompts to generate Python scripts for complex analysis
- Build interactive Streamlit dashboards using AI-generated code
- Transform static analysis into dynamic web applications
- Implement the "describe, generate, refine" loop for code development
- Create reusable, AI-optimized code libraries and toolkits

## Topics Covered :

- Python fundamentals (pandas, numpy)
- Vibe coding principles and methodology
- "Describe, generate, refine" development loop
- AI-powered exploratory data analysis (EDA)
- Natural language to code transformation
- Building Streamlit and Plotly Dash applications
- Git for project collaboration and version control
- Human-in-the-loop code validation
- Creating interactive visualizations with AI assistance



**80%**

Reduction in  
manual coding  
time

**10x**

Faster app  
prototype  
development

**60%**

Less debugging  
with AI validation

Vibe coding revolutionizes how analysts approach data problems. By using natural language prompts to generate code, analysts report 80% reduction in time spent writing boilerplate code. Teams using AI-assisted development create functional prototypes 10x faster than traditional methods. The approach particularly shines in exploratory data analysis, where AI can instantly generate comprehensive analysis scripts that would traditionally take hours to write. Companies adopting vibe coding methodologies report that junior analysts can now produce senior-level code quality within weeks of training.

# Module 03

## Natural Language & Conversational Analytics



Learn to prepare and clean datasets for analysis, and use AI-powered tools to analyze and visualize data. Develop skills in using spreadsheets for data analysis and extract insights from datasets.

### Learning Outcomes:

- Build conversational platforms that understand natural language queries
- Implement SQL Database and Pandas DataFrame agents
- Design intuitive conversational interfaces with streaming responses
- Create multi-user platforms with memory systems
- Evaluate and integrate third-party AI analytics tools
- Enable non-technical users to access data insights instantly

## Topics Covered :

- LangChain fundamentals (chains, prompts, parsers)
- Building SQL Database and Pandas DataFrame agents
- Conversational interface design principles
- Chat interfaces with streaming responses
- AI platform comparative analysis (Julius.ai, NAO)
- Memory systems implementation (Redis, ChromaDB)
- Multi-user platform architecture
- API integration and security
- Advanced Streamlit for production systems



**95%**

Reduction in time  
to insights

**3x**

More users  
accessing  
analytics

**85%**

Query accuracy  
with LLM agents

Conversational analytics democratizes data access across organizations. Companies implementing natural language interfaces report 95% reduction in time from question to insight. Non-technical stakeholders can now directly query databases without SQL knowledge, leading to 3x more employees actively using analytics. LangChain-powered agents achieve 85% accuracy in translating business questions to technical queries. Organizations like Salesforce and ThoughtSpot are investing heavily in conversational BI, recognizing it as the future of business intelligence.

# Module 04

## Data Pipelines & MLOps for Analytics



Learn to design and implement efficient ETL processes and manage large datasets, ensuring data integrity and accessibility. By the end of this module, participants will be proficient in building scalable data warehouses and maintaining robust data pipelines.

### Learning Outcomes:

- Build modern data stacks using dbt for transformation
- Create governed data products for AI agent consumption
- Implement automated data quality checks with Great Expectations
- Design intelligent Python pipelines with incremental processing
- Orchestrate complex workflows using Apache Airflow
- Develop self-optimizing data pipelines with memory systems

## Topics Covered :

- Modern data stack architecture with dbt
- dbt Core/Cloud fundamentals and model testing
- Creating governed data products for AI agents
- Python pipeline development with pandas
- Great Expectations for automated quality checks
- Incremental processing patterns
- Apache Airflow orchestration and DAG design
- AI-assisted DAG generation
- LangGraph for complex agent workflows



**60%**

Less time on data preparation

**99.9%**

Data quality with automation

**24/7**

Automated pipeline operation

Modern data pipelines transform how organizations handle data at scale. Companies using dbt and orchestration tools report 60% reduction in time spent on data preparation. Automated quality checks with Great Expectations ensure 99.9% data reliability, preventing costly downstream errors. Organizations like Airbnb, Uber, and Spotify rely on these technologies to process billions of data points daily. The combination of dbt for transformation, Airflow for orchestration, and AI for optimization creates self-managing pipelines that run 24/7 with minimal human intervention.

# Module 05

## Multi-Agent Systems & Automation



Learn to apply Python programming skills to data science and analytics tasks, and use AI-powered libraries for data analysis and machine learning. Develop predictive models to inform business decisions.

### Learning Outcomes:

- Design and build multi-agent systems for complex analytics
- Implement inter-agent communication protocols
- Create reusable, parameterized analysis templates
- Build agent orchestras with specialized capabilities
- Develop Human-in-the-Loop (HITL) checkpoints
- Scale analytics capacity by 10x through automation

## Topics Covered :

- LangGraph for complex multi-agent workflows
- Graph-based agent architectures
- Designing specialized agents (Planner, SQL, Explainer)
- Inter-agent communication protocols
- Building reusable analysis templates
- Parameterized workflow design
- Human-in-the-Loop implementation
- Agent performance monitoring and optimization
- Audit logging and transparency features



**10x**

**75%**

**5** Minute

Analytics capacity increase

Automation of routine analysis

Complex reports generation

Multi-agent systems represent the cutting edge of analytics automation. Organizations implementing agent orchestras report 10x increase in analytics capacity without additional headcount. These systems automate 75% of routine analytical tasks, from data retrieval to report generation. Complex analyses that previously took days now complete in minutes. Companies like Databricks and OpenAI are pioneering these approaches, creating self-improving analytics systems that learn from each interaction. The ability to coordinate specialized agents creates unprecedented analytical capabilities.

# Module 06

## Enterprise Deployment & Production Systems



Learn about the principles and applications of statistical modeling and machine learning techniques within the realm of data analytics with this module. Its goal is to equip learners with the skills needed to build, evaluate, and deploy predictive models, enabling them to derive insights from complex datasets.

### Learning Outcomes:

- Build enterprise-grade analytics platforms with multi-tenancy
- Implement Role-Based Access Control (RBAC) and audit trails
- Containerize applications using Docker
- Automate deployments with CI/CD pipelines
- Integrate with business tools (Slack, Teams)
- Create professional portfolio showcasing production systems

## Topics Covered :

- Enterprise platform architecture and design
- Multi-tenant systems and RBAC implementation
- Audit trails and compliance features
- FastAPI for building production APIs
- Docker containerization fundamentals
- CI/CD with GitHub Actions
- Business tool integration (Slack API)
- Production deployment strategies
- Portfolio development and career advancement



**100%**

Less time on data preparation

**6**

Data quality with automation

Enterprise deployment skills differentiate professional analysts from beginners. Graduates of this program deploy 6 production-ready projects, demonstrating capabilities that mirror systems at J.P. Morgan, Shopify, and Meta. The ability to build secure, scalable platforms with proper authentication, audit trails, and CI/CD pipelines is essential for modern data roles. Companies increasingly expect analysts to deliver not just insights but production systems. With containerization and automated deployment, your analytics solutions can scale from proof-of-concept to enterprise deployment seamlessly.

# 6 Production- Ready Projects

20+

Applications built

10,000+

Lines of Python  
code

5+

Production  
deployments

## Portfolio Sprint Overview

### Sprint 1

**Executive KPI Command Board:**  
AI-powered executive dashboard with  
automated narratives and anomaly  
detection

### Sprint 2

**Vibe-Coded EDA Workshop App:**  
Streamlit application for instant data  
cleaning and visualization

### Sprint 3

**NL↔SQL Business Copilot:**  
Conversational analytics assistant  
converting English to SQL

### Sprint 4

**Retail Analytics Lakehouse:**  
Modern data pipeline with dbt, Airflow,  
and Great Expectations

### Sprint 5

**Analytics Agent Orchestra:**  
Multi-agent system for automated  
complex analysis

### Sprint 6

**AI-Native Analytics Command Center:**  
Enterprise platform with RBAC, Docker,  
and CI/CD

# Projects

We don't just teach concepts — we make you apply them to real-world projects across industries. From building predictive models for customer acquisition, to creating healthcare diagnostic dashboards, to designing recommendation systems like Amazon, every project is modeled on how businesses actually use AI and analytics today. This hands-on approach ensures that by the end of the program, you have a portfolio of industry-ready solutions that showcase your ability to solve real problems with data.

## Uber Eats

Develop a predictive model to estimate accurate delivery times considering factors like traffic, order complexity, and restaurant preparation times, while also providing personalized restaurant recommendations based on user preferences and order history.



## Coca-Cola

Analyze purchase patterns, demographic data, and social media interactions to identify key consumer segments, optimize product placement, and develop targeted marketing campaigns to increase market share and customer loyalty.



## United Airlines



Examine flight data, booking patterns, and customer feedback to assess route profitability, optimize pricing strategies, and identify factors influencing customer satisfaction across different travel segments.



## Zillow

Examine property listings, sales data, and regional economic indicators to forecast housing market trends, optimize property valuations, and provide insights for buyers, sellers, and real estate professionals.

# Projects

## BBC

Examine viewership data, social media interactions, and user feedback to assess content performance across different platforms, identify audience preferences, and inform future content creation and scheduling decisions.



## Fitbit

Analyze user activity data, sleep patterns, and heart rate information to identify health trends, optimize device features, and develop personalized fitness recommendations for users.



## Amazon

Set the standard for personalized product recommendations to customers based on their browsing and purchasing history and achieving unbeatable customer experience through predictive analytics to reduce shipping costs, and improve delivery times.

## Adidas

Examine sales data, customer reviews, and social media mentions to evaluate product performance across different sports categories, identify emerging athletic trends, and inform future product development strategies.

# Projects

## American Express

Examine transaction data, credit scores, and demographic information to identify spending patterns, assess creditworthiness, and optimize credit limits for different customer segments, improving risk management and customer satisfaction.



## Airbnb

Develop a comprehensive dashboard to analyze pricing trends, occupancy rates, and guest reviews across different locations and property types, providing insights to hosts for optimizing their listing prices and improving overall performance.

# Course Fee and Financing

## 3 Easy Step to Enrol

The admission fee for this Professional Data Analyst certification Program with 360° Placement Assistance is **\$1,499**. This fee covers all the applicable program charges including the mentorship calls with industry experts.

### → **Career Counselling**

The Data Analysis career counselor will reach out to understand the eligibility. If a student is eligible for the program. The Student will be shared an acceptance letter.

### → **Easy Registration**

After receiving an acceptance letter students can book their seats by paying the booking amount.

### → **Start Upskilling**

Start your learning journey with 10xDataAnalyst and unlock your potential of reaching greater heights in the field of Data Analyst.



# Certification



# THANK YOU

---

NEED MORE ASSISTANCE ?

Speak with our counselor and get all  
your questions and queries answered

**+1 76029 22122**

[www.10xdataanalyst.com](http://www.10xdataanalyst.com)

Address: 166 Geary St STE 1500 Suite #442, San Francisco, California  
94108, United States