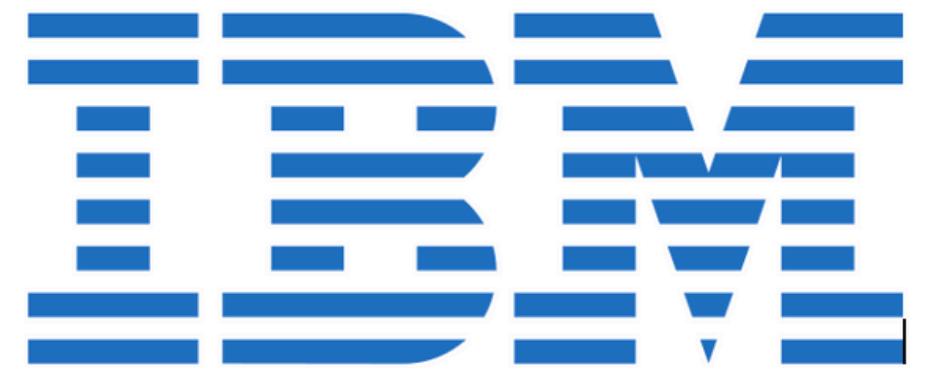


# **IBM Project 5**

## **Presentation**

**Presented by:** Khyati Thanvi, Nancy Johnson, Sadis Amani, Denis Smirnov, Maryam Zikria



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# What is IBM Skills Build?



IBM SkillsBuild is a free online learning platform that helps students gain career-relevant digital and professional skills.



## Why IBM Skills Build?

The platform offers learning paths and digital credentials across in-demand areas like AI, Cybersecurity, Data Science, Cloud Computing, and Sustainability—helping students get job-ready for the evolving workforce.



## Skills for the Future of Finance

As AI, ESG, and automation reshape the finance sector, students are looking for clear, practical learning paths that reflect these trends. This project was launched to help ensure IBM SkillsBuild stays relevant for finance-focused students by aligning its courses and digital credentials with emerging industry needs over the next five years.



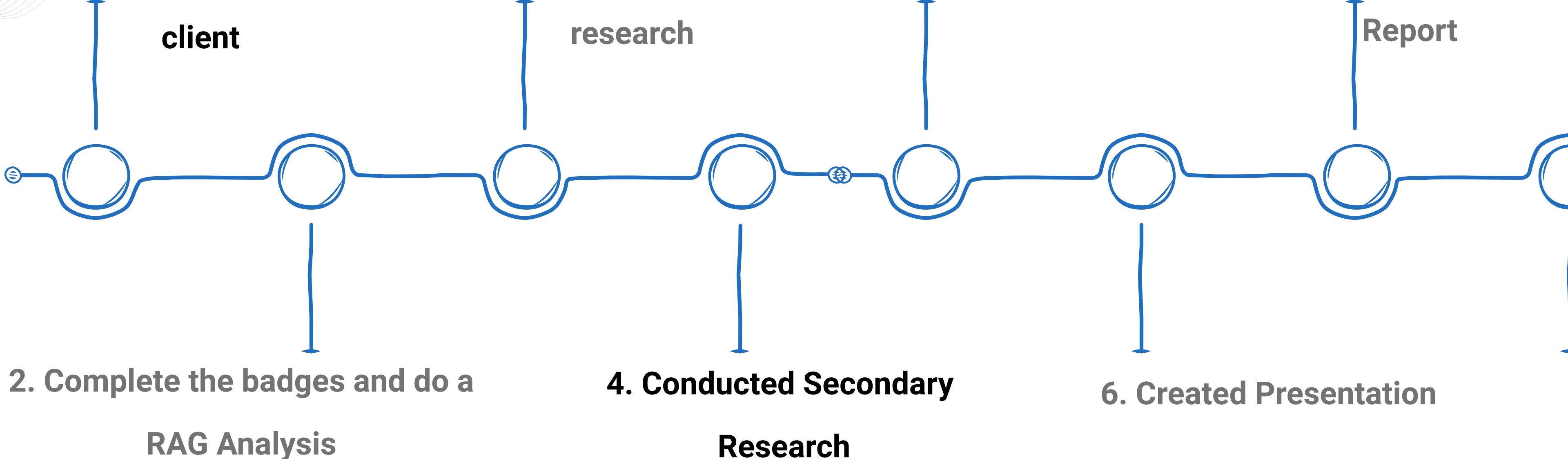
# Method:

1. Outline the challenges set by the client

3. Created & Distributed Survey for primary research

5. Developed Recommendations

7. Compiled Final Report



# Challenges Set Out by Our Client



The main challenge set by our client and brief, included reviewing the badges on IBM SkillsBuild. Allowing us to analyse what needed to be change, kept or removed. This provided a foundation into the research for finance-focussed needs.



Secondly, reviewing the technologies as per the brief was a big challenge for us. This was due to technical errors when trying to access them. Our solution to this was reviewing badges in relation to the technologies, allowing us to have a deeper understanding of how these technologies are integrated with the skills being taught.



Lastly, client feedback was a big challenge, due to confusion on the direction of the project. This was difficult as we had to navigate between the clients request and lecturers guidance. However, we resolved this by focussing on the brief and keeping a positive relation with our client.



# RAG Analysis Overview

- We reviewed 22 IBM SkillsBuild badges across key areas like AI, cybersecurity, data science, and cloud. Each badge was evaluated for relevance, interactivity, and value to finance students.

◆ Amber (9 badges):

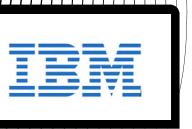
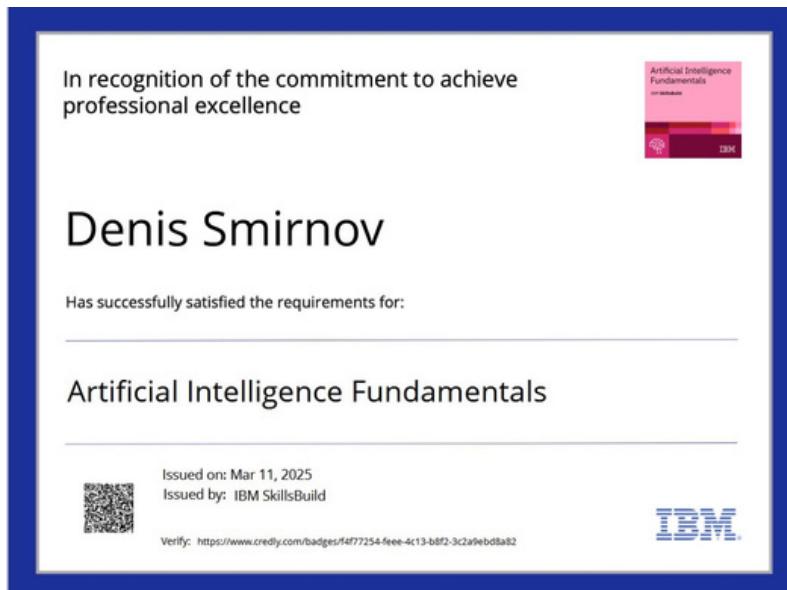
- These badges were partially relevant but need updates or stronger links to finance applications.

■ Green (13 badges):

- These were high-quality, well-aligned with finance needs, and require no major changes.
- This analysis directly informed our badge improvement recommendations, helping ensure IBM SkillsBuild remains ready for future finance-focused learners.

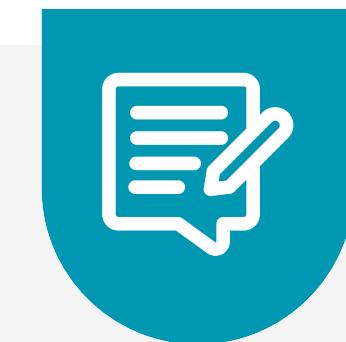
Name	Link	RAG	Comments	Whose assigned to this course?
Artificial Intelligence				
Getting Started with Artificial Intelligence	<a href="https://skills.yourlearning.ibm.com/activity/PLAN-F624C2604060?ngoid=0302">https://skills.yourlearning.ibm.com/activity/PLAN-F624C2604060?ngoid=0302</a>	<span style="background-color: yellow; color: black; padding: 2px;">Yellow</span>	<p>This course covers key AI concepts, including machine learning, data processing, and automation, while also introducing large language models (LLMs) and their role in human-AI interaction. Learners explore effective prompting techniques and practical uses like content creation and workflow automation, which can be valuable for finance professionals in areas such as data analysis, fintech, and AI-driven decision-making. However, for finance students pursuing degrees or qualifications, the course lacks direct making it less relevant for academic finance courses. Expanding on AI's role in financial services would enhance its applicability.</p>	Khyati
Build Your Own AI chatbot	<a href="https://ibm.biz/BuildAIassistant">https://ibm.biz/BuildAIassistant</a>	<span style="background-color: yellow; color: black; padding: 2px;">Yellow</span>	<p>The course introduces students to AI-driven chatbots focusing on NLP and machine learning. The content can aid in automating AI powered customer service in finance, however, its applicability to direct finance positions is quite minimal. The knowledge gained from the course may be helpful in fintech and other data centric positions, nevertheless, the focus is largely on the deployment of chatbots rather than financial analytic work.</p>	Sadis
Building AI Solutions Using Advanced Algorithms and Open Source Frameworks	<a href="https://skills.yourlearning.ibm.com/activity/MDL-434?planId=PLAN-3C28E1067B08&amp;sectionId=SECTION-B&amp;planIdFromParentTab=PLAN-3C28E1067B08&amp;section">https://skills.yourlearning.ibm.com/activity/MDL-434?planId=PLAN-3C28E1067B08&amp;sectionId=SECTION-B&amp;planIdFromParentTab=PLAN-3C28E1067B08&amp;section</a>	<span style="background-color: green; color: white; padding: 2px;">Green</span>	<p>This course delves into the field of artificial intelligence and the required skills such as machine learning algorithms, classification algorithms and clustering algorithms, emphasising how to build an AI model to make predictions and classifications. Within the finance sector, AI has an increasingly significant role through risks assessments where AI can analyse and evaluate data sets to ensure accuracy, investment strategies when observing market trends. The understanding of these advanced algorithms allow finance students to effectively utilise technological advances within the financial sector.</p>	Maryam
Data Classification and Summarization Using IBM Granite		<span style="background-color: green; color: white; padding: 2px;">Green</span>	<p>This course provides practical skills in utilising IBM's granite models for data classification through their understanding of constructing and evaluating prompts (text inputs) to classify and summarise data, adjusting model parameters for improved output quality for AI's performance in tasks to be managed effectively. For finance students, this course is essential as the finance sector involves large amounts of data in which students can interpret practically.</p>	Nancy
Artificial Intelligence Fundamentals	<a href="https://skills.yourlearning.ibm.com/activity/PLAN-7913EE1DB030?ngoid=0302">https://skills.yourlearning.ibm.com/activity/PLAN-7913EE1DB030?ngoid=0302</a>	<span style="background-color: green; color: white; padding: 2px;">Green</span>	<p>This course offers a foundational understanding of artificial intelligence, concentrating on machine learning, natural language processing and running AI models. These technologies, prevalent in contemporary applications, are directly applicable to the financial sector. Specifically, the course facilitates comprehension of how these AI tools enable advanced data analysis and trend prediction - capabilities increasingly employed by financial institutions. Consequently, for students pursuing careers in finance, this curriculum provides essential practical knowledge for data-driven decision making.</p>	Denis
Generative AI in Action	<a href="https://skills.yourlearning.ibm.com/credential/CREDLY-6ddb2ad-cc46-4b09-ae65-41001f8d62a5">https://skills.yourlearning.ibm.com/credential/CREDLY-6ddb2ad-cc46-4b09-ae65-41001f8d62a5</a>	<span style="background-color: green; color: white; padding: 2px;">Green</span>	<p>This course focuses on AI's technical aspects even more than the previous ones, and this is helpful for students in finance. It also provides them with important skills that makes them more marketable such as basic knowledge in coding like Python. at the same time this course covers the role of AI in financial forecasting, trading, and data analysis and shows the effect technology has on the field. This is important for finance students as it enables them to get a fuller picture of AI and its effects on the industry.</p>	Sadis

# Badge Analysis



# Primary Research

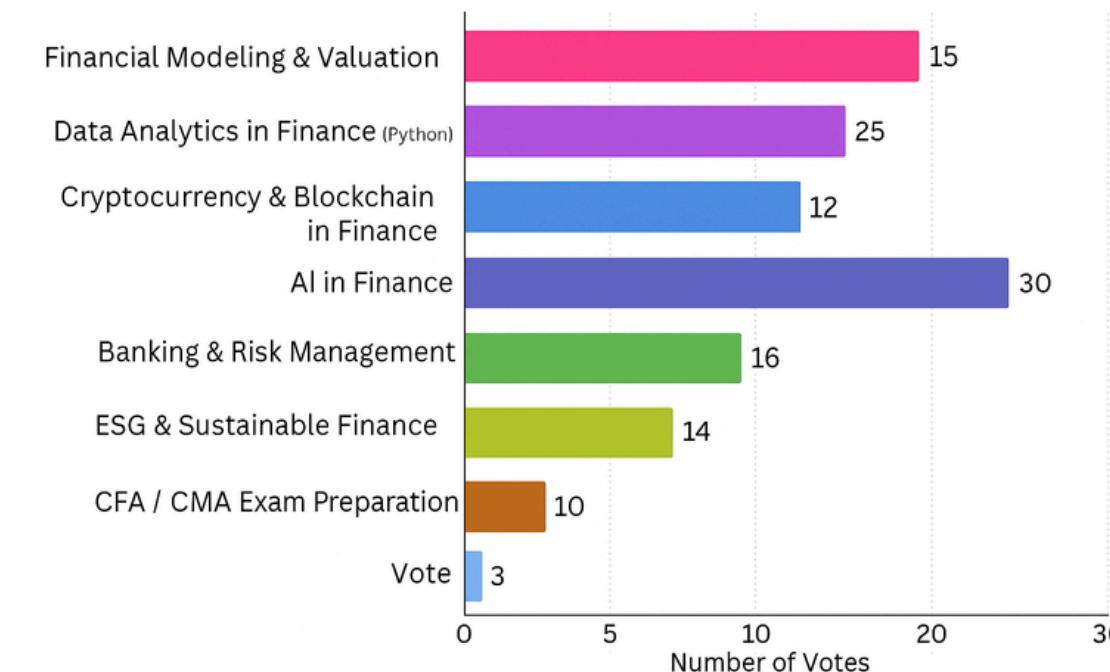
## What Finance Students Value Most



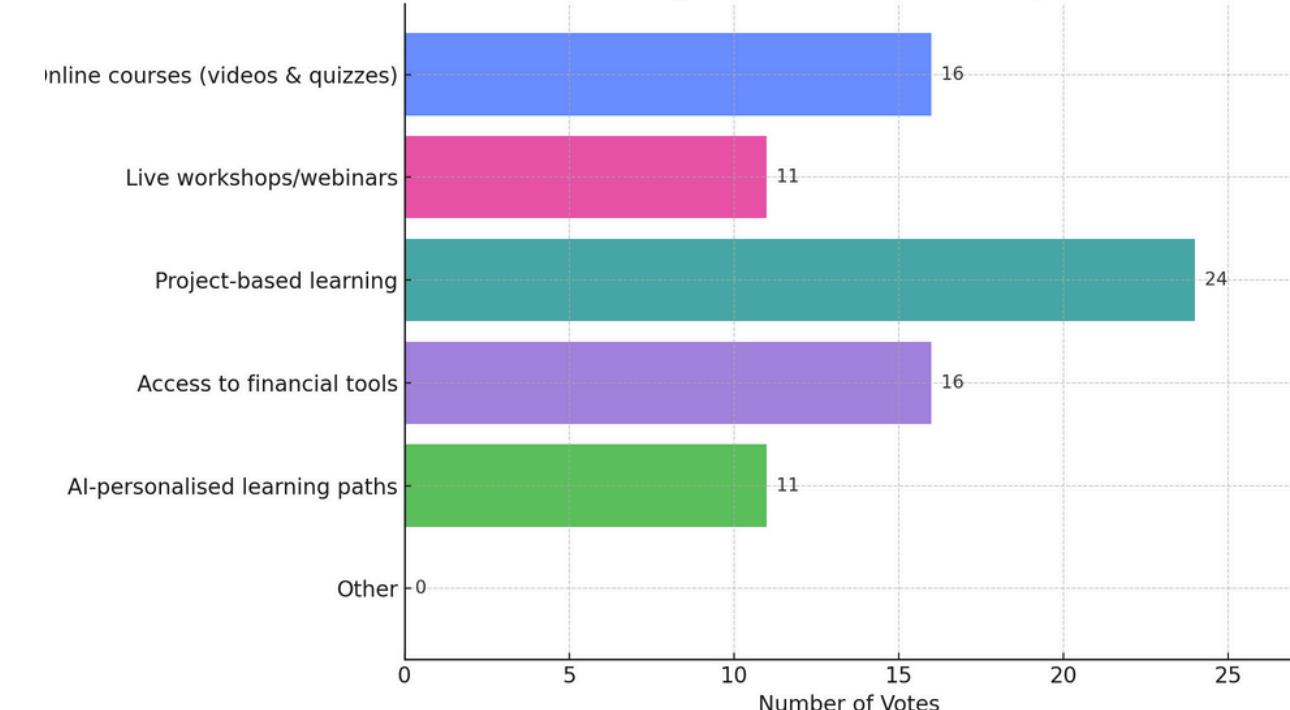
### Insights from Finance Students

- Our primary research reveals that students believe the most important skills for the future are AI in Finance, Python for data analysis, and blockchain.
- When it comes to learning methods, students overwhelmingly prefer project-based learning and hands-on tools such as Excel and Python, rather than traditional lectures. These findings support the need for SkillsBuild to expand on creating practical, hands-on courses that teach real skills needed for finance careers.

Most Important Finance-Related Skills (Next 5 Years)



Most Effective Learning Methods for Finance Expertise (Next 5 Years)



IBM

# Primary Research

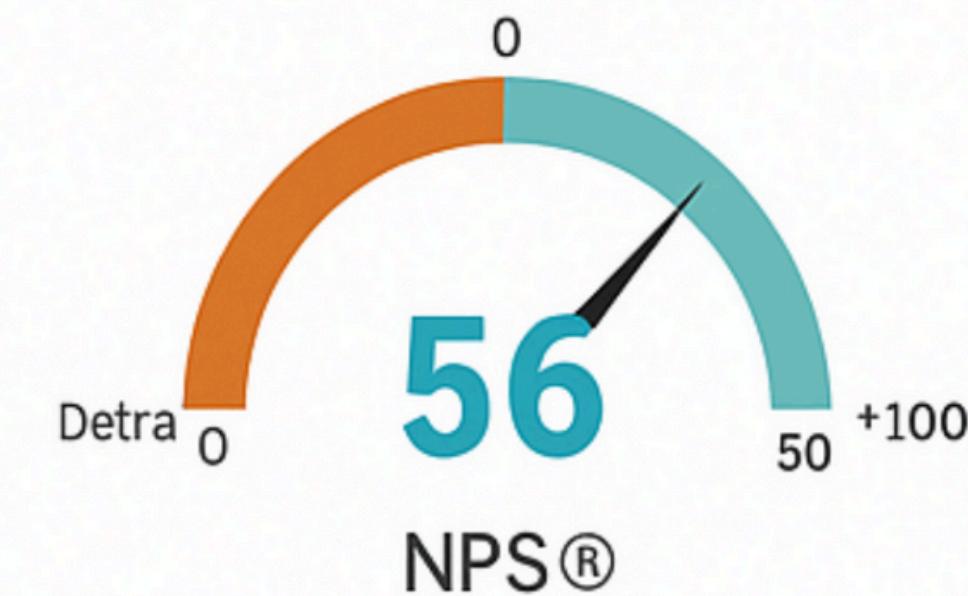
## What Finance Students Value Most



### Real-World Experience Matters

With a Net Promoter Score of 56, again we can see students clearly view internships, case studies, and simulations as essential to their career development, since it will allow them to apply knowledge to real-world scenarios.

How important do you believe reeal-word experience (e.g. Internchips, case studies) will be for finance students in the next 5 years?





# Secondary Research

Generative AI course enrolments have surged since 2022, especially in enterprise settings (Coursera, 2024).

Finance professionals must now master AI-powered tools for forecasting, fraud detection, and client advisory.

IBM Skills Build can lead the way by:

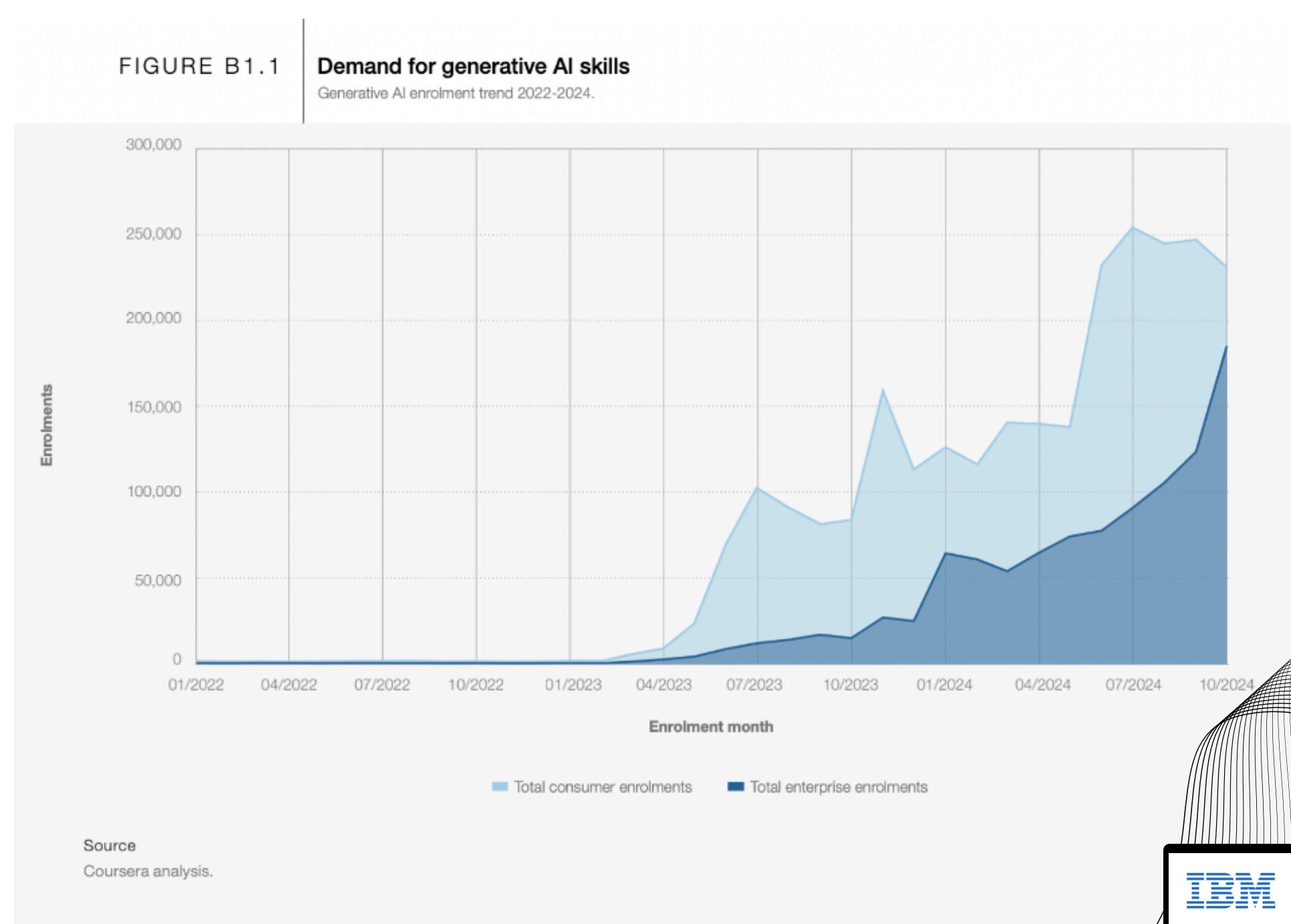
- Integrating AI finance simulations
- Including real-world case studies
- Offering tailored courses for financial careers

According to the **World Economic Forum (2025)**, the fastest-growing finance careers include:

- Big Data Specialists
- FinTech Engineers
- AI & Machine Learning Specialists

However, many finance education platforms **do not integrate AI or ML into financial decision-making.**

IBM SkillsBuild has the opportunity to **bridge this gap** by introducing AI-powered finance courses.





# Insights and Improvements



## What's working?

1. Established reputation:
  - It is a reputable provider for teaching resources - particularly in technology.
2. AI-relevant badges:
  - Covers essential topics such as Generative AI, automation and ethics to form strong foundations.



## What's not?

1. Lack of financial application:
  - It takes a generalised approach rather than applying to real world finance - for example, AI.
2. Limited career relevance:
  - Few pathways link badges directly to finance careers like investment analysis or risk management.



## What's next...

1. Finance-focused AI badges:
  - Creating applicable badges to practical finance scenarios.
2. Interactive elements and leaderboards:
  - Stimulates continuous engagement and drives active-learning
3. Career Linkage



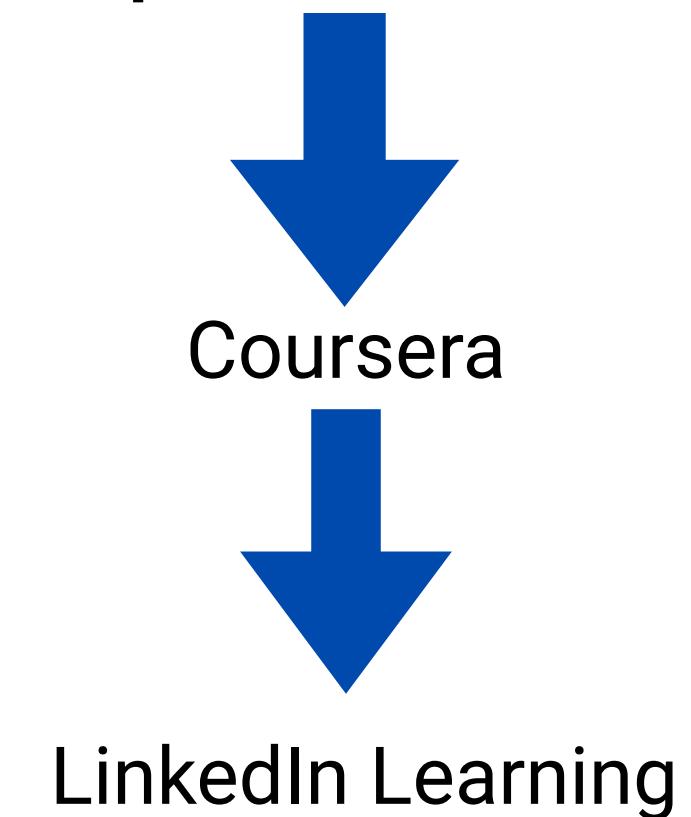
# Commercial Awareness

**Commercial Awareness is an important factor of SkillsBuild to ensure the platform stays up to date with trends and competitive areas, so it meets the needs of finance-focussed students.**



Big companies such as KPMG have emphasised the importance of AI and ESG for financial institutions (KPMG, 2024). Integrating this into SkillsBuild can help increase productivity for finance students interested in this area.

## Competitor Awareness:

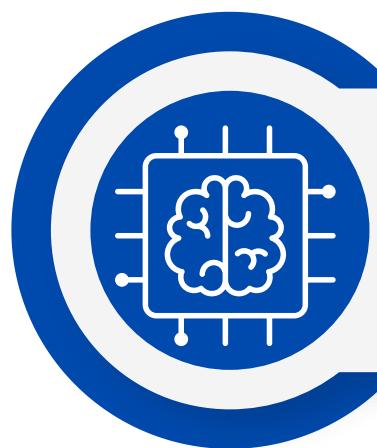


## Integrating Bitcoin and CryptoCurrency:

Data from the Financial Times suggests crypto currency has been on the rise, closer to becoming a mainstream asset class. By monitoring this shift platforms must adapt their strategies to stay ahead in an increasingly competitive market (Longitude, 2025).



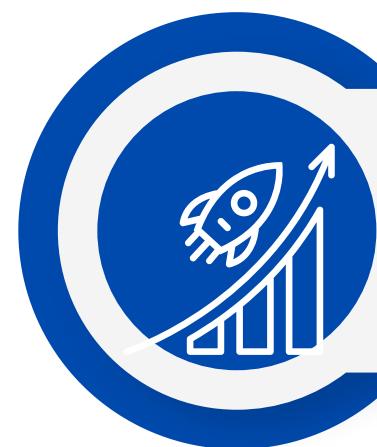
# Our Recommendations



AI in Finance  
Badge Series



Financial Modelling  
Simulation



Leaderboards and Industry  
Connections



Esg in AI and  
Finance Badge

# AI in Finance Badges

A set of badges to help finance students understand and apply AI specifically in the sector

- Our primary research shows that AI is the most in-demand skill in finance for current students over the next 5 years
- Current SkillsBuild badges teach general AI topics such as Generative AI, but are missing finance specific applications to integrate AI into financial decision-making.
- According to the World Economic Forum (2025), the fastest-growing finance careers include: AI & Machine Learning Specialists. IBM SkillsBuild has the opportunity to introduce AI-powered finance courses.



## Timeline of Rollout

### Phase 1 (0-3 Months):

AI in Finance: Foundations

### Phase 2 (3-6 months):

Advanced badges: AI in Risk, Fraud, Asset Management

### Phase 3 (6-9 months):

Interactive simulations using IBM Watson & real world case studies



## Advantages and Risks

✓ Bridges education and real finance roles

✓ Supports graduate employability

✗ AI content may become outdated | *Modular content*

✗ Difficulty aligning global financial practices | *Flexible badge framework design*





Artificial intelligence    Cybersecurity    Data Science    Cloud

## Artifical intelligence in Finance

**Introduction to AI In Finance**

IBMSkillsBuild

**Introduction to AI In Finance**

Languages: English  
Eligibility: Eligible to registered learners  
Duration: 90 minutes total course time

In this course you will learn how AI is used and applied across the finance industry, understanding key uses. For instance, you'll explore how firms use AI to enhance personalised experiences for customers and automate processes such as loan approvals and financial reporting.

[Start learning](#)

**AI for Financial Risk Modelling**

IBMSkillsBuild

**AI for Financial Risk Modelling**

Languages: English  
Eligibility: Eligible to registered learners  
Duration: 3 hours total course time

In this course, you will learn how AI is used to evaluate market patterns, anticipate price changes, and assist automated trading techniques. You'll discover how financial institutions utilise machine learning to detect trends and make quicker, data-driven investing choices.

[Start learning](#)

**Using NLP in Financial Services**

IBMSkillsBuild

**Using NLP in Financial Services**

Languages: English  
Eligibility: Eligible to registered learners  
Duration: 1 hour total course time

This course will teach you how financial companies utilise Natural Language Processing for operating chatbots, assess financial news, and extract insights from correspondence with clients.

[Start learning](#)

IBMSkillsBuild

discover how [redacted] are created using historical data, as well as how artificial intelligence may increase stress testing and scenario analysis accuracy.

[Start learning](#)

**AI-Powered Compliance and Reporting**

IBMSkillsBuild

**AI-Powered Compliance and Reporting**

Languages: English  
Eligibility: Eligible to registered learners  
Duration: 2 hours total course time

This course will teach you how AI is helping firms automate compliance monitoring and financial reporting. You will learn about technologies for detecting abnormalities, monitoring regulations, and automating audit preparation and risk disclosure.

[Start learning](#)

**AI in Trading and Market Analysis**

IBMSkillsBuild



# Financial Modelling Simulation

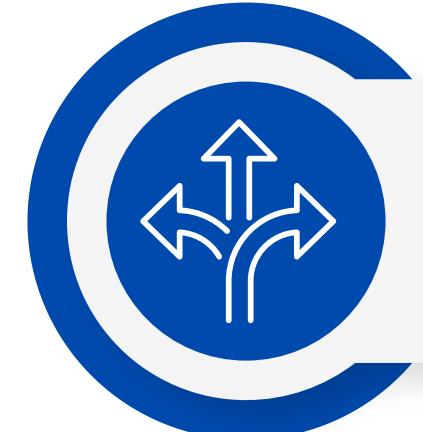
Phase 3 Expansion to AI in Finance Badges

## Why Financial Modelling?

- 32% of students are looking for careers in Investment Banking & Financial Analysis, therefore financial modelling is a key & in-demand skill.
- Currently no available badges on SkillsBuild offering finance-specific simulations, giving a chance to provide in-demand hands on learning using technology IBM already has.

## Target Students & Career Relevance

- Designed for students to learn Valuation, Forecasting in conjunction with AI
- Can use IBM Watsonx to simulate real world tasks
- Supports AI badge rollout, which extends SkillsBuild's digital learning roadmap to cater for in-demand finance needs



**Integrated Pathway**  
Naturally builds on AI in Finance badge content to deepen applied skills



## Feasability

Leverages current IBM Watsonx technology



## Competative Advancement

Strengthens SkillsBuild's Position in Fin. Education e.g. LinkedIn Learning



# Corporate Finance Simulation Badge



Using the provided data, calculate the following financial metrics for the year ended December 31, 2023:

	2022	2023
Revenue	\$550,000	\$625,000
Cost of Goods Sold	\$330,000	\$375,000
Operating Expenses	\$150,000	\$160,000
Operating Income	\$70,000	\$90,000
Interest Expense	\$15,000	\$20,000
Income Before Taxes	\$55,000	\$70,000
Income Tax Expense	\$13,750	\$17,500
Net Income	\$41,250	\$52,500

Complete the provided data:

- Gross Profit Margin

- Gross Profit Margin
- Operating Margin



# Top Performer Leaderboards

Motivating students with through exclusive recogniseable digital certificates and opportunities for connecting with industry experts



## Rewards System

- Top 1%, 5%, and 10% of learners receive IBM-branded certificates issued via Credly
- LinkedIn-shareable → boosts student profiles and visibility to employers
- Public leaderboard rankings foster motivation, ambition, and gamified engagement



## Learner Retention

- We found that finance students find it difficult to retain complex information
- Leaderboards introduce gamification, shown to increase course completion (Wulan et al., 2024)
- Helps finance students differentiate themselves for competitive roles
- Builds loyalty and encourages badge progression (repeat use of platform)



## Career Integration

- If certificates and leaderboard are successful, next step: high performers are flagged to IBM Finance team via LinkedIn
- Adds a unique “career touchpoint” feature missing from competitors
- Strengthens IBM’s position as a future-focused, employer-connected platform





# Conclusion

- Our research shows that finance students are seeking practical, tech-focused learning to prepare for the future.
- By aligning badge content with AI, ESG, and real-world applications, IBM SkillsBuild can stay relevant and support students in building the skills that truly matter.
- Our recommendations aim to make the platform more engaging, industry-ready, and better tailored to the needs of tomorrow's finance professionals.



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