



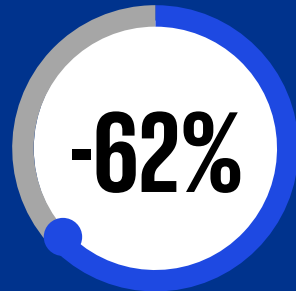
# Trends in Digital Finance

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# Where did 2022 drop us off

challenging economic conditions, shocks and growing uncertainty



**Global Fintech  
Investments in  
H2'22**

**-\$40 Billion**

**Investor losses due to  
the collapse of crypto  
coins**



**Value growth  
of Bigtech  
Payments**

# Where did 2022 drop us off

**Blockchain  
is here to stay**

**Banking as a  
Service**

**Automation &  
AI**

# 45%

of the activities individuals are paid to perform can be automated by adopting the correct technologies\*

## Autonomous Finance

Applying technologies that move beyond traditional automation to include capabilities, such as self-learning and self-correction, and can make decisions based on the data collected.

Approximately 66% of financial services firms have adopted AI to some degree. That includes using it to operate more efficiently and better understand client needs.

More AI models are being used for:

- Personalization
- Supporting decision making and risk management
- Speed up services

# ChatGPT by OpenAI

> 667M

The official website of OpenAI has had over 667 million visits

## HOW DOES CHAT GPT WORK?

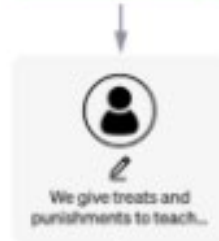
Step 1

Collect demonstration data and train a supervised policy.

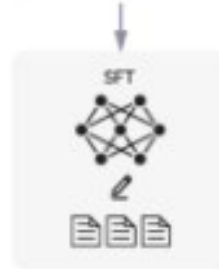
A prompt is sampled from our prompt dataset.



A labeler demonstrates the desired output behavior.



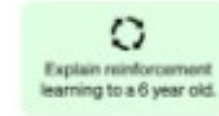
This data is used to fine-tune GPT-3.5 with supervised learning.



Step 2

Collect comparison data and train a reward model.

A prompt and several model outputs are sampled.



A labeler ranks the outputs from best to worst.



This data is used to train our reward model.



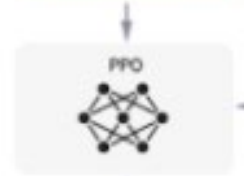
Step 3

Optimize a policy against the reward model using the PPO reinforcement learning algorithm.

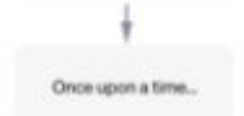
A new prompt is sampled from the dataset.



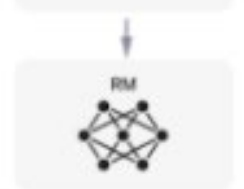
The PPO model is initialized from the supervised policy.



The policy generates an output.



The reward model calculates a reward for the output.



The reward is used to update the policy using PPO.

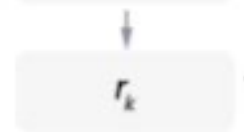
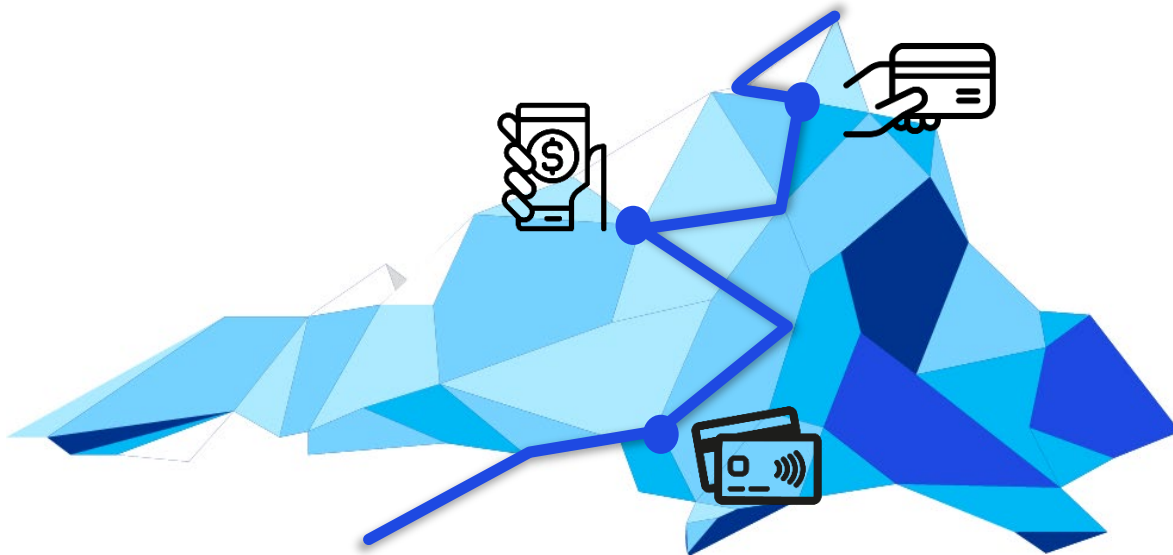


Image Source: <https://openai.com/blog/chatgpt/>  
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# Embedded Finance

Non-financial companies offering financial products and services is not a new trend. For decades, nonbanks have offered financial services via private-label credit cards at retail chains, supermarkets, and airlines.



X10

It's estimated that embedded financial services will produce \$230B in revenues in 2025 —a 10-fold increase over the \$22.5B in revenues in 2020

# >50%

More than half the world's central banks are actively exploring or developing CBDC's (central bank digital currencies)

## Blockchain is Here to Stay

- **Cryptocurrencies** are becoming more mainstream, with increasing acceptance from traditional financial institutions.
- **Blockchain solutions** outside of the crypto space are getting more traction and used for identity verification, supply chain management, and more.
- More **DeFi** (Decentralized Finance) solutions based on Blockchain technology allow users to access financial products and services without relying on traditional financial institutions

# Customer Experience and Ease of doing Business are driving investments

**Invisible Banking**

**Buy Now, Pay Later (BNPL)**

**Web3 enabled  
Low to zero-cost  
transactional fees**



# H1'23 Investment Trends in Fintechs

- **Regtech** continuing to gain steam in the eyes of investors
- Increasing focusing on fintech solutions that align with **ESG and climate change**
- **Seed and early-stage** companies continuing to draw attention
- **Blockchain solutions outside of the crypto space** gaining increasing attention from investors
- Growing focus and investment in the **B2B and embedded solutions space**, including embedded finance, embedded payments and embedded insurance.



# The Convergence of technologies will Change Finance Forever

By feeding the data gathered from customers – organizations can harness AI to develop bots that can go beyond doing basic assistance and become integrated into our financial life.

Will Financial institutions seize the opportunity to be embedded into our life in a more holistic way?



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