Hello everyone. I am Zhao Qi.

Today I want to talk about Artificial intelligence, in short AI. I am sure that everyone here has more or less heard about this term. What is the first image that come to your mind when you think of the term “AI”? …………………………………AI has been applied widely in many fields, such as driverless cars, personal assistants, robots and especially in financial field. We are going to focus on the AI technologies applied in financial field and explore a very serious issue: May AI replace most of the human workers in financial field.

My opinion: There are much possibilities that AI replace most of the human workers in financial field in the future. To prove that, we need to address three sub-questions and then get our conclusion.

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Question1: How widely and deeply has AI been applied in financial field?

AI has been applied in multiple dimensions of the financial industry, from trading to research to wealth management. The application of AI technologies has also changed the organization of the traditional finance companies.

First let’s focus on the multiple dimensions.

Stock Trading

Today more and more financial companies are using AI technologies to predict stock price. Jobs that cost human workers days or weeks now just take AI a few minutes or even seconds to complete. The AI technology has largely reduced the quantity of the traders. This photo is taken in 2000, this photo is taken in 2016. In 2000, Goldman Sachs employed 600 equity traders for its New York trading desk. But today, it just employs two traders with the machine doing the rest of the work (Maney, 2017, p.47).

Wealth management

Almost every significant financial companies utilizes AI technologies to build some models to control risk and manage their money.

For example, BlackRock, the world’s largest asset management company, operates a proprietary artificial intelligence program, called Aladdin, to manage risk on behalf of its clients (Lin, 2016, p.162).

organization

Modern financial companies have been increasingly relying on computer programs and AI technologies. This means they will need more and more technical workers. According to Lin (2016), JPMorgan Chase probably employs more software developers than Google and more technologists than Microsoft in recent years (p.161). This phenomenon indicates the trend of modern financial companies are becoming high-tech organizations.

Why AI is a better choice than human workers for financial company?

Faster, more accurate, more impartial, cheaper

*Based on the* massive computing power and extraordinary precision of supercomputers on which AI runs, AI is much faster and more accurate than human beings. This photo symbolically depicts the relationship between the AI’s compute capacity and human beings’. The life-time work of four smart consultants would just cost the old computer using AI technologies one hour.

Besides, AI does not suffer from the irrational “animal spirits” that move humans. As a management assistant, AI can appropriately recognize and reward performance of the workforce without considering their gender or race. Maybe AI manager would be welcomed by human workers.

potential huge cost reduction

the average compensation for staff in sales, trading and research at the 12 largest investment banks is $500,000 (p.47).

If these companies replace these general workers with AI, how much cost would be reduced?

**What kind of jobs would probably be taken over by AI?**

Easy jobs, routine jobs, some senior-level jobs.

Easy and rountine job: means the work that can be broken down into a series of discrete tasks. These tasks are simple and tend to be repeated over and over again. For example, bank teller.

some senior-level workers like trader, fund manager, financial advisor, may well be replaced by AI. Take the financial advisor as an example. These kind of workers are very good at gathering, cleaning, processing, and interpreting data from disparate sources, but AI is even better. The AI technology of data mining can be used to efficiently collect and analyze data, while another AI technology of expert systems can be used to simulate a human expert and make high quality decisions (Hilovska and Koncz, 2012, p.65). So this job position could be taken over by AI.

Creative jobs

Only people who engage in the truly creative work will not be replaced by AI. For example, designer of AI algorithms, because they design and maintain the AI technologies and computer program of the companies. Decision maker. Because they regulate the rules on which their companies based.

**Conclusion**

In the future, AI may take the easy, routine and general jobs. Only the creative jobs, a small part of job positions, will be remained for human workers. Because AI is faster, more accurate, more impartial and cheaper than human workers.

If this bad thing happens:

That means large amount of people will lose their jobs. What should they do next? What should we do now? Should we embrace this change or reject it? Those are fairly serious issues deserves to be considered by government and every common people.