



Research Article

**WHAT CAN ARTIFICIAL INTELLIGENCE DO TO CORPORATE FINANCE:
INFLUENCES, PROBLEMS AND SUGGESTIONS**

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ABSTRACT

With the breakthroughs and continuous progress in information science and technology, artificial intelligence (AI) began to be applied to financial management. On the ground of this situation, this paper investigates the far-reaching impact and existing problems of AI application in the field of financial management, and puts forward corresponding suggestions and countermeasures for the problems arising from AI application in corporate finance.

Key words:

Artificial intelligence; financial management; intelligent finance

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INTRODUCTION

Artificial intelligence (AI) plays a huge role as a core driver of industrial development, constantly driving the emergence of new opportunities, new products and new technologies. While traditional financial management has the disadvantage of being finance-oriented and management-light, the emergence and application of financial AI has completely changed this situation (Faggella 2016). However, although AI has begun to be applied to many areas of financial management and can provide great convenience to companies, there are still some problems with the maturity of AI technology and the integration of AI technology with corporate finance.

Application of Artificial Intelligence in the field of financial management

The current applications of artificial intelligence mainly in the field of financial management mainly include:

1. Intelligent financial analysis, which is to import financial data and then analyze them according to the database of financial analysis models already established in the system, and generate multiple financial analysis reports with different styles and functions in a short period of time to meet different purposes of enterprises by virtue of its computational advantages (Granlund 2013).

2. Intelligent business analysis, which is, after importing detailed business data, based on the established business analysis model database to analyze, and then generate business analysis reports for managers to use as an effective basis for the next stage of business planning (Martin 2011).
3. Intelligent budget management, which is based on the financial analysis report, business analysis report and financial indicators generated by the enterprise, form a scientific and reasonable comprehensive financial budget plan, and can realize the whole process of budget monitoring (Stancheva 2018).
4. Intelligent financial decision-making, which is aimed to integrated business data, financial data and various financial indicators, based on the system database data and computer algorithm program, automatically generate financial decisions, but also financial decision-making management (Makridakis 2017).

The use of financial artificial intelligence enables the integration of business operations and finance, improves efficiency in business forecasting, internal control management, financial analysis and performance evaluation, effectively saves human and material resources, and can achieve the purpose of assisting business decisions.

Impact of Artificial Intelligence on Financial Management

The Impact of AI on the Security of Financial Management Systems

Applying artificial intelligence to financial management, with the advantage of its high integration and strong computing

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power, the risk model in the system database can be compared and analyzed with historical data and various indicators, which improves the identification of financial risks and can further secure the financial system.

The various modules of AI are more coordinated and less prone to errors than the financial systems of previous eras, and have fewer security risks compared to them. The setting of financial artificial intelligence is more scientific and reasonable, easier and faster to operate, which leads to higher stability of financial artificial intelligence system and the financial data will not be lost due to human error, with a certain degree of information protection ability (Martin et al 2014). In addition, after the application of financial artificial intelligence, combined with the specific situation of the company and the existing equipment, and then purchase a small amount of equipment can establish an intelligent supervision system to perform the processing, further reducing the probability of human supervision of financial activities to produce human and irregular accidents. In comparison, financial intelligence can further improve the security of the financial system.

The Impact of AI on Financial Professionals

For financial management-related practitioners, the application of financial artificial intelligence makes them face unprecedented opportunities and challenges. In terms of work content, transaction reconciliation and invoice entry are highly repetitive, heavy and tedious, and time-consuming. Comparatively, the use of intelligent financial systems can greatly reduce the workload of financial data processing (see Table 2.1), thus saving a lot of time, the enterprise demand for basic financial management positions is reduced, while for middle and senior financial staff, the application of AI has a certain positive impact, they can spend more time and energy to concentrate on investment analysis, financial budget control, internal control management, financial analysis, strategy formulation, etc. And they can make full use of the characteristics of financial AI to make the best financial decisions based on efficient and precise analysis and processing, combined with their own subjective thinking ability and analytical ability, and integrated with the subjective opinions of financial managers and the environment in which the enterprise is located, so as to enhance the creation of value for the enterprise as much as possible.

Table 1 Comparison of financial staff and financial AI work capabilities

Staff Category	Time spent on work	Work error rate
Finance staff (10 people)	3 days	10%-18%
Financial AI	2.5 hours	2.7%

From the perspective of professional skills, the application and development of financial AI, coupled with the reduction and integration of basic financial management-related positions in enterprises, has brought opportunities for financial practitioners, mainly in the direction of promoting the transformation of them to meet the development of Internet technology and big data technology, to become a higher level, composite financial management professionals.

The Impact of AI on Financial Information

Financial information is not only a reflection of whether the past business performance meets the standard, whether the past plan is in line with the current situation of the enterprise but

also a basis for future business forecast and plan making. The application of AI can assist financial personnel to check the correctness of financial information, reduce the risk of human error or distortion in prepare information, improve the quality of work of financial personnel as well as work efficiency, guarantee the accuracy and timeliness of financial information, and effectively reduce the accumulation of information. It also facilitates the collection of data for internal control management, reduces or even eliminates enterprise risks, and guarantees the authenticity and validity of financial information.

Impact of AI Investment on Business Operating Costs

Because of the need for computer and network technology applications and qualified financial personnel need to invest a larger amount of research and development costs to maintain, develop, and upgrade products, the procurement costs of financial AI will be much higher than in previous periods. From this point of view, financial AI has increased the procurement cost of enterprises, which has a negative impact on the cost control and cost management of enterprises and may affect the normal level of capital budget of enterprises.

Problems in the application of AI in the field of corporate finance

Cybersecurity issues for AI financial systems

Artificial intelligence is a high-tech product that integrates technologies from computer science, big data, biometrics, natural language technology and other disciplines, but the development and upgrading of AI is also overly dependent on computer networks, automation and other technologies. In the era of increasingly mature Internet technology, AI financial systems may become the new target of cyber attacks. Once an enterprise's AI financial system is attacked by network hackers, it may lead to the collapse or paralysis of the AI financial system, followed by the leakage of financial information within the enterprise, resulting in significant financial risks. Under malicious network attack, the program of AI financial system may be maliciously attacked or tampered with, which in turn leads to a series of work deviations, and if not detected in time, the business decisions of the enterprise will be affected. Needless to say, network security issues have always been the top priority of enterprise financial system security.

Professional skills of financial staff

The application of artificial intelligence in the field of corporate finance is not friendly to the basic financial staff, because a large number of simple and repetitive basic financial work will be replaced by financial artificial intelligence. The demand for finance staff will be reduced, and the requirements for professional skills and comprehensive quality of finance staff will become higher than ever.

Information Security Liability Issues

Financial data and information are very sensitive to enterprises, and improper disclosure of financial information can cause irreparable damage to the investment and financing and financial performance of enterprises, and also involve the determination of the accuracy of financial information or other related responsibilities. Due to the high degree of process of the system in intelligent finance and the many departments involved, there will be a blurring of departmental

responsibilities and the difficulty of determining responsibilities. Therefore, after artificial intelligence is applied to the field of financial management, the problem of dividing responsibility for information security is more common.

The Cost issue of AI Financial Systems

The application of financial AI, the introduction of new financial systems, and the building of new financial frameworks for financial transformation in enterprises is a long-term investment with high costs, and the updating and upgrading of financial AI will cause enterprises to incur ongoing expenses as technology advances. These matters are a major factor to be considered for enterprise budget control.

Suggestions for the implementation of financial intelligence enterprises

Strengthen network security protection

Network security issues are related to the security of enterprise financial system, so enterprises should establish the risk awareness of due network security. In order to realize the security management of enterprise financial data, it is recommended to introduce or upgrade relevant network security protection facilities for AI, establish exclusive network firewall for financial AI, and improve the network protection system to ensure the security of financial data. At the same time, it can follow the internal control system such as the principle of separation of incompatible positions set up by traditional financial management positions to strengthen enterprise network security inspection.

Encourage finance staff to improve technical level and professional quality

The ideal mode of financial intelligence is to realize mutual assistance and complementarity between human and machine. At present, we are at the early stage of financial intelligence, and enterprises still lack composite and professional financial management talents. It is an inherent requirement for financial management personnel to improve their technical level and professional quality and realize successful transformation of financial intelligence

Clarify responsibilities related to information security

Each department of the enterprise that implements financial AI should have clear responsibilities to ensure the unity of power, responsibility and benefit. In addition, the enterprise should also establish the relevant supervisory positions of financial AI information security to form a post control. With the deep application of artificial intelligence, work adjustments and problems that arise after the application of the enterprise, the rules and regulations should be revised in a timely manner to ensure that the responsibilities related to information security are in proper place.

Cost planning

The progress of information science and technology such as Internet and big data is completely changing the financial management. In order to improve the overall level and efficiency of financial management of enterprises and make it better serve the strategic development of enterprises,

enterprises should establish a new idea of financial management using high technology to drive the development of work, and the early application of financial artificial intelligence is imperative, but caught in the current environment, the application and update costs are high, which increases the cost burden of enterprises, therefore, enterprises should actively carry out cost planning, strengthen the cost budget constraints, make efforts to control the application costs of AI financial system.

Taken together, the application of financial AI is a major trend, and while it makes costs high in the near term, its long-term effects are promising. Corporate finance practitioners must both adapt to financial AI and make good use of it in order to achieve the goal of creating more value for the company.

CONCLUSIONS

Based on the encouraging development of technology, artificial intelligence has gone into all fields of today's economy and society. In the field of corporate financial management, the application of AI has shown its unique charm in intelligent financial analysis, operational analysis, as well as budget management and financial decision making, and has had a positive impact on the security of financial systems, the screening and motivation of financial personnel, and the quality of financial information and the profitability of corporate operations. At the same time, the primary development stage of AI in various fields also reflects some double-edged sword effects. Among other things, AI places higher demands on the security of financial systems and the professional quality and expertise of finance personnel, and presents a degree of challenge in the division of responsibility for the security of information associated with it and the control of financial budgets. In order to cope with these problems, corporate finance should strengthen network security protection, encourage finance personnel to improve their professional competence, develop and implement a clearer responsibility system, actively carry out cost planning and budget management, aiming to play the positive role of AI in the field of finance.

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