Financial Talents under the Background of Financial Science and Technology
—— Discussion on the Training of Financial Science and Technology Talents in
Higher Vocational Colleges

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\textbf{Abstract.} Technological innovation drives financial innovation, the mix of and technology and finance has become a new financial format. Financial technology has brought changes in the demand for talent in the subversion of the traditional financial industry. This paper analyzes the financial institutions' demand for talents at different levels from the perspective of financial science and technology, and expounds the idea of training primary and ultimate talents of financial technology and compound financial science and technology talents in higher vocational education.

\textbf{Introduction}

In the Youth day, General Secretary Xi Jinping emphasized in the informal discussion with the teachers and students of Peking University that Colleges and universities should focus on the fundamental task of cultivating socialist builders and successors, adhere to the correct political direction of running schools, build high-quality teams of teacher, form a high-level talent training system, and strive to build the first class university with Chinese characteristics around the world. General Secretary Xi pointed out the direction for running a good university, and offered hope and request. This has brought opportunities and challenges together for higher vocational colleges to cultivate financial technology talents.

\textbf{The Demand for Financial Technology Talents is The Trend of The Times}

\textbf{The Definition of Financial Technology Talents.} The definition of financial technology talents in financial industry is the compound and managerial talents who have proficiency in technology, Internet technology and financial related knowledge, deep understand the development of science and technology in frontier areas, understand of investment, capital market operations and other fields, and also with the abilities of data analysis, innovative thinking, organizational coordination, and decision-making, etc. With the increasing demand for high quality skilled financial talents in financial technology innovation, how to integrate finance and technology is an important topic in higher vocational education research.

\textbf{Technological Innovation Promotes Financial Innovation.} From the national perspective, the layout of domestic financial talents have formed four strategic regions, namely, the Beijing-Tianjin-Hebei region centered on Beijing, the Yangtze River Delta region centered on Shanghai, the Pearl River Delta region centered on Shenzhen, and the Western region centered on Chengdu. The shortage of financial talents in the four major financial regions of China is not
compatible with the rapid development of the financial industry. The interaction between finance and technology is in very great demand for financial technology talents.

**Talent Demand of Financial Technology.** With a series of technological innovations such as big data, artificial intelligence, and block-chain, the integration of finance and technology has subverted traditional finance, and the common development of traditional finance and new finance has brought about changes in the demand for talents. According to the global professional recruitment consulting firm Michael Page, the forecast of 2017 *China Salary and Employment Report* shows that the gap of national financial technology talents has got to 1.5 million. How to solve the current shortage of financial talents and realize the transformation of traditional financial talents into financial science and technology talents is the need to realize technological innovation, financial innovation, and financial technology innovation. It is the trend of the time and the realization of human civilization, social progress and development.

**The Training of Primary and Ultimate Financial Technology Talents is The Base**

For higher vocational colleges, the training of primary and ultimate financial technology talents is universal. The development of financial technology creates more career opportunities for financial talents, and it’s already been presented in three dimensions of customer, channel, product and service. The financial industry has become a popular choice for graduates for its unique industrial characteristics. Financial institutions have different demands for talents at different levels, and accordingly there are different standards for employment. According to the *China Financial Industry Talent Development Report* and the data of authoritative financial recruitment websites, it shows that professional literacy, vocational skills, professional qualifications, and qualification certificates are relatively more important to primary and ultimate financial talents. Therefore, there are two goals for vocational colleges to train primary and ultimate financial talents. One is to train the professional norms, and the other is to develop its excellent business skills.

**Training of Professional Norm.** In terms of professional norms, it is mainly to cultivate the dedication, law-abiding, honesty and trustworthiness, service awareness and dedication spirit of talents. The first is to cultivate the spirit of dedication. In a certain sense, dedication represents the political direction. Only a dedication man can put the sense of social responsibility and dedication to the first place, be full of passion and work practically. Keep conscientious and innovative, and doing things with heart and doing good deeds. The second is to compliance with the law. Compliance with the law is the code of conduct for every citizen, correct the motive, doing good, not bad. The third is to develop honest and trustworthy professional ethics and be a professional man who has ethics. The fourth is to cultivate dedication. The dedication of professional man comes from his love for his job. If you have love, you will have dedication, and if you have dedication, you will have a reward.

**Development of Business Skills.** Business skills include skill and ability. In terms of business skills, primary and ultimate financial talents should develop their basic abilities and professional skills to improve communication, coordination and service skills. Business skills mainly include six aspects of banking business skill, financial analysis skill, finance analysis skills, risk management skill, operating system and office software skills and Internet technology application skill.

Banking Business Skill. According to the composition of the balance sheet, the traditional banking business is mainly divided into asset business, liability business and intermediary business.
For financial practitioners, the traditional banking business is the foundation. Only when master the traditional business can you innovate\(^1\).

**Financial Analysis Skill.** Due to the intensification of the financial market, the scope of financial analysis is quite wide. In most cases, financial analysis usually uses financial analysis tools such as regression analysis, matrix analysis and some other relevant data for analysis, which requires practitioners to learn how to use the professional knowledge and relevant knowledge for financial analysis, thus providing a reference for making decisions.

**Finance Analysis Skill.** The main target of bank credit is enterprise, which means enterprise is the carrier of the credit market. Based on the analysis of the supply and demand relationship of the credit market, especially the analysis of the financial status of enterprises, the financial practitioners need to understand how to analyze of financial statements of companies except observing with eyes. So, financial practitioners must have professional financial knowledge.

**Risk Management Skill.** As the integration of finance and technology constitutes a new financial format, the coexistence of online and offline businesses brings opportunities for the development of the financial industry, but the security of information technology, the uncertainty of regulation and the uncertainty of financial risks also bring challenges to the financial industry. How to mastering risk aversion skill is the major course for financial practitioners.

**Operating System and Office Software Skills.** Operating system and office software are the tools used to help practitioners increase productivity and reduce work errors. For financial practitioners, lots of professional software and collaboration software are the main platforms for daily work. Skilled operating systems and office software are the basic skills that financial practitioners must have. It is a very important indicator for measuring a person's working ability.

**Internet Technology Application Skill.** Internet is the collection of computer networks that use TCP/IP for data communication, and connect computer networks around the world for exchanging information, transcending time and space and sharing resources. With the further integration of finance and technology, lots of the business, financial products and services of banks have been IT, informationization and intelligent, which requires financial practitioners to master the application Internet technology skills.

**The Training of Compound Financial Technology Talents is The Most Important Task**

The development of financial technology has brought challenges to the financial industry. The compound talents who have international professional certificates and cross-border and compound knowledge will become the key trend in the development of talents in the financial industry. In the wave of financial technology competition, how to train compound talents for the future is the second stage of the cultivation of financial talents in higher vocational colleges, that is, to cultivate compound financial and technological talents\(^2\).

**The Connotation of Compound Financial and Technological Talents.** The compound talent refers to the people who have certain abilities, or abilities in several aspects, and who is excellent in one aspect. Compound talents not only have one type of professional skills, but also have expertise, experience and skills in other fields, and can show their talents in many fields. Construct a compound talent training model, increase the knowledge reserve of compound talents, improve their skill level, develop the creative spirit of compound talents, integrate knowledge combination, ability compounding and thinking into one, and gather professional power, scientific and technological power and cross-border power in one. All of these are the higher requirements for training applied talents in higher vocational colleges.
Prerequisites of Compound Financial Technology Talents. Compound financial technology talents boost the momentum of emerging financial development. The six necessary conditions for measuring compound financial technology talents are shown as below:

Adequate Reservation of Knowledge. First of all, train students to have complete financial expertise. As a compound financial talent, it’s impossible to make a difference in the financial field or have any innovation without the complete system of financial knowledge. Secondly, to cultivate students' solid economic foundation. Solid economic knowledge can help financial talents have a more rigorous theoretical basis when solving problems. The third is to train students to obtain advanced certificates, such as Chartered Financial Analyst (CFA), Financial Risk Manager (FRM), and Certified Public Accountant (CPA).

Solid Math Foundation. Solid math foundations include mathematical modeling and mathematical analysis. Financial analysis, trend research, investment decision-making, and economic research require solid math foundations. It’s the necessary knowledge of compound financial talents, and also a yardstick for measuring compound talents. A man can't be considered a qualified compound talent without solid math foundation.

Strong Foreign Language and Computer Skills. Excellent foreign language and computer skills are necessary for financial cross-border and cross-industry talents. The rapid development of high technology such as big data and artificial intelligence plays a role in the development and innovation of the financial industry. The financial & technology compound financial talent is the development direction in the future. Only with excellent foreign language ability and computer ability will we have an international vision and familiarity with international financial rules to truly realize the talents of financial technology empowerment[^3].

Comprehensive Political Quality. Comprehensive political quality is the basic characteristic of compound financial talents. Comprehensive quality means that students have a high sense of social responsibility, mission and responsibility, and consciously link personal career development with human civilization and social progress, cultivate students' noble social character and the ideological character of upholding truth, correcting mistakes, and patriotism and love for the people. Constantly enrich students’ knowledge reservation, let them it have good humanistic qualities and moral feelings, enhance their self confidence and help them have enough courage to face the challenges of the society in the future.

Have Strong Innovative Spirit. Compound talents must have innovative characteristics and innovative spirit. The innovative cultivation of spirit is to cultivate students to establish firm ideals and beliefs, to take the road that the predecessors have not taken, and to create the business that the predecessors have not created. Without firm ideals and beliefs, there will be no perseverance and struggle spirit, and ultimately it will hardly achieve the innovative career. Innovation means arming oneself with modern science, culture and knowledge. Create new knowledge, discover new laws, realize new truths, discover new problems, create new content, and form new ideas, new thinking and new methods to understand and transform the world. This is the highest realm and lofty ideal for training compound talents in higher vocational colleges.

Have Strong Insight. Insight is the ability to penetrate things or problems. It is the ability of people analyzing and judging the development of existing or emerging things. It has strong subjectivity. The interactive development of finance and technology has promoted the innovation of financial technology, and mixed operation will be the development trend of the financial industry. It requires to train financial practitioners not only pay attention to the financial field, but also pay attention to and study in the non-financial field, thus accumulate cross-industry knowledge and cross-industry capabilities to achieve the ability to solve problems in the real world.
References

