

# Research on the Cultivation of Financial Talents in Universities Against the Background of Fintech\*

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**Abstract**—Fintech has quickly become a prominent science and the mainstream trend of the future development of the financial industry. Compared with traditional finance, the emergence of Fintech has put forward higher requirements for financial talents.

**Keywords**—financial technology; online finance; cultivation of talents

## I. INTRODUCTION

The application and popularization of the Internet rapidly deepened the financial informationization. Through the network, electronic banking, electronic transaction services, electronic money and payment services, online financial information services as well as other financial products and services have rapidly promoted and expanded. Moreover, the financial business layout has been constantly reshaped as well. Fintech, as a combination of modern economic core and primary productivity, has attracted worldwide attention in recent years. Fintech refers to the financial innovation brought by technology, which can create new business models, applications and processes, thus having a significant impact on the financial market, financial institutions or the way financial services are provided. The essence of Fintech is that the emerging Internet or high-tech information technology companies take advantage of the Internet, big data, artificial intelligence and other emerging technologies to carry out inclusive financial services for the public. The emergence of Fintech challenges the cultivation of financial talents.

The demand for financial talents is undergoing a series of rapid changes. What the industry needs cannot only refer to vertical professional talents in the financial and economic fields, but also compound talents with financial knowledge and ability to make sustainable development of Fintech through technical means. As an important base of talent cultivation, colleges and universities should adjust the talent cultivation plan and reorganize the goal of talent cultivation

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according to the change of times. Moreover, colleges and universities are supposed to vigorously carry out financial education and talent training in the age of Fintech, and reserve talents for the development of information-based finance in China. In March 2017, the ministry of education announced the record and approval results of 2016 undergraduate, who major in ordinary institutions of higher learning, agreeing for the first time to set up the Internet finance major in colleges and universities, including University Electronic Science and Technology, Yunnan University of Finance and Economics, Guangdong University of Finance and Economics, and Anhui University of Finance and Economics. When it comes to 2018, the additional 19 undergraduate colleges and universities offered this major. The Internet finance industry, from then on, has finally entered colleges and universities.

## II. CHARACTERISTICS OF FINTECH DEVELOPMENT

As one of the most important innovations in the financial sector, Fintech is growing at the fastest pace. To some extent, it was driven by the sharing economy, favorable regulation and information technology. The integration of Fintech and finance has brought about changes in technology and application, and it changed the traditional business model of gold, gradually forming a new business model of finance, which has gained extensive and sustained attention and development. Globally, the investment boom in the field of Fintech is heating up. Fintech is a deep integration of new technology and finance, and it typifies a cross-discipline characteristic.

For financial technology, people do not put the focus of research in the capitalization of the financial support for science and technology. Meanwhile, it is not limited to financial electronic or networking, but under the background of big data, which puts its emphasis on how to make use of all kinds of existing technology to the traditional financial products and services provided by the innovation, digging out potential financial requirements. Then, the specialists provided financial services and improved the financial service efficiency, changing the way of price risk. However, technology finance is not involved in these aspects, so it cannot be called as, financial technology. With the rapid development of Fintech, Fintech industry has formed its scale, and the prospect of Fintech development is immeasurable. In turn, the development of Fintech also

increases the risk contagion in the financial market, and the lack of unified regulatory measures and principles further increases the risk coefficient in the financial market. Therefore, compared with traditional finance, Fintech requires matching financial talents with higher standards.

### III. CHALLENGES OF FINANCIAL TALENTS TRAINING AGAINST THE BACKGROUND OF FINTECH

#### A. *Inaccurate Positioning of Talent Cultivation in Colleges and Universities*

Fintech compound talents are innovative talents with both innovative thinking and practical ability. Fintech comes from financial innovation. In order to adapt to the ever-changing Internet technology and financial innovation, in addition to professional basic knowledge and skills, students must have the ability to acquire new knowledge and innovative thinking pattern. It is not only necessary for the talents to take the initiative to learn and master new development directions and achievements in Internet, finance and other fields, but also necessary for them to combine knowledge and technology of these disciplines and innovate business development models. In order to meet the requirements for the cultivation of compound financial talents, higher standards are put forward for the cultivation of talents in local colleges and universities. Financial major education should not only meet the requirements of traditional education major, but also have a more accurate positioning of talent cultivation, and a teaching staff, curriculum system and practical arrangement, which can stand in the forefront of the industry. Otherwise, under such a tide, local college financial talents will be increasingly separated from the requirements of the society and industry development. Therefore, it is not an overnight display for professors to clarify the positioning of talent training, to detail the learning objectives of students, to stimulate the innovative consciousness of students, and to develop the innovative ability of students. It requires every teacher to start from himself and pay attention to the cultivation of innovative consciousness of students in teaching concepts. Paying attention to the formation and development of students' innovation ability, gradually forming students' innovation consciousness and ability, and then fully developing students' learning interest has become a key issue to improve teaching quality.

#### B. *Unscientific Curriculum*

At the level of higher education, the discipline and specialty construction related to Fintech is still very weak. At present, when most applied colleges and universities set up finance major, the course setting is unreasonable. There are too many courses setting up macro financial theories such as finance and economics, and too few courses setting up micro financial theories such as financial asset and financial derivative pricing, corporate finance and financial risk management. The curriculum of finance major in local colleges and universities should be market-oriented and should have its own characteristics. However, from the perspective of the actual curriculum setting, the macro

contents of the curriculum are relatively easy for teachers to explain it. As a result, micro-finance courses are often neglected. Micro-finance courses are closely related to Fintech theories, and professional courses are set up in a single way, which are lack of the integration with other interdisciplinary courses. For instance, the computer technology and large data curriculum are lack of certain scientific system. Not to mention it that, for the vast majority of liberal arts-origin students, whose mathematical foundation is very poor, it is hard to do well in the special study, such as microscopic financial credit assessment of financial engineering, data mining, and econometric analysis, risk management and financial related curriculums.

It can be seen that the contents of core professional courses are often divorced from the actual development of the financial market and far from the requirements of the industry. The curriculum should not only enable students to acquire the necessary basic knowledge, but also enable them to have the necessary basic abilities. The formation of abilities is inseparable from the mastery of thinking methods. Colleges and universities must try their best to meet the content and quality of students' optional courses. If they cannot meet the requirements due to the limitations of infrastructure and the number of teachers, they can adopt the methods of discussion, study and discussion to expand the scope of knowledge, mobilize the enthusiasm of students and improve the quality of teaching.

### IV. RESEARCH ON COUNTERMEASURES FOR FINANCIAL TALENTS TRAINING AGAINST THE BACKGROUND OF FINTECH

#### A. *Repositioning the Talent Training Program*

Fintech talents should have professional knowledge in finance, science and technology, innovation and other fields, so as to be competent for work in an era when the Internet is developed and the value of the financial industry is increasingly reflected. In the future, all kinds of professional skills that can reasonably and effectively apply professional knowledge and maintain professional values, ethics and attitudes in the professional environment should start from the goal transformation of cultivating financial professionals to financial generalists. Application-oriented colleges and universities should reposition the talent training program. The teaching objective is to change from a professional knowledge specialist to a comprehensive and multidisciplinary general talent. In terms of Fintech related specialty construction and talent cultivation, it should be more flexible and allow multiple paths to be tried, so as to find and overcome the problems in the past mechanism. Colleges and universities should pay attention to the organic integration of mathematics, statistics and computer science and the deep integration with the application field when making the talent training program and training plan, and customize the personalized training program according to the students' different professional backgrounds.

Fintech talents need to be trained in big data collection, management analysis, decision-making and other comprehensive abilities, which require the collaborative

training of government, enterprise, industry, education and research departments. Related specialists ought to promote the mode of combining industry-university-research and jointly cultivating talents. By establishing industry-university-research bases, constructing directional entrusted training, and establishing laboratories, business executives should be encouraged to teach in schools, to open a new model of school-enterprise cooperation, and to solve the problem of insufficient supply of Fintech talents at the source. Finally, it is necessary for them to analyze data with effective methods and models according to specific requirements, and form reports to provide decision-making basis for practical problems.

#### *B. Paying Attention to Innovative Teaching Methods and Means*

In the process of cultivating financial professionals, local colleges and universities can make use of the modern development of science and technology to learn basic financial knowledge and make full use of the traditional advantages of financial learning. During this period, the mode and teaching of financial informatization talent training must be reformed and innovated so as to meet the requirements of the new era. Teachers should combine the needs of social development and the international economic situation to boldly innovate teaching methods and constantly develop students' innovative thinking ability and ability to link theory with practice. In the system, teachers are encouraged to innovate teaching methods and teaching forms to adapt to the situation of large number of students and uneven quality of students. A small change in the teaching process can stimulate students' enthusiasm for learning and improve their professional skills. For example, the method of grade rationalization can be adopted to rationalize students' final grades, and the innovative teaching and assessment method that combines the simulation experiment and case discussion in class at ordinary times. With the evolution of teaching concept, teachers no longer regard the teaching of specialized courses simply as the transmission and acceptance of basic knowledge and information, but gradually improve to the teaching of strengthening the ability to solve practical problems and the training process of cultivating students' innovative spirit and ability. This requires teachers to treat students as explorers and simulate the teaching process as an innovation process in the whole teaching process, so that students can realize meaningful discovery and learning. The famous educator Zancoff said: "the teaching method once touches the student's emotion and the will domain, touches the student's spiritual need, this kind of teaching method can play the highly effective role. This shows that in teaching activities, to cultivate students' thinking innovation, the most important thing is to ensure students' subject status, to courage students to think independently and actively. Teachers should make full use of Internet technology, resources, as well as artificial intelligence skills to achieve a comprehensive and flexible way of teaching, making finance a common thing for students to learning and to live. Through the reform in education intelligence and teaching method, it may eventually enhance the teaching quality.

#### *C. Strengthening the Training of Double-qualified Teachers*

The construction of Fintech related disciplines and majors must have a sound teacher talent system, but at present, professional teachers who master Fintech and have experience in big data application are still very limited. The shortage of teachers' talents and the resulting unsound system are bound to be a challenge to the construction of Fintech related disciplines and specialties. In addition to solid theoretical knowledge, teachers should also be familiar with the cutting-edge development trends of financial disciplines and the latest practices of the industry, and be familiar with the employment needs of enterprises. In order to cultivate high-quality financial talents, it is necessary to strengthen teacher training, send teachers to domestic and foreign universities and research institutions to visit and exchange and cooperate, and participate in academic conferences, teaching training and experience exchange meetings, in order to effectively improve the theoretical literacy of teachers. It is necessary for colleges and universities to actively expand the source channels of the teaching staff, and strengthen the training of the existing teachers who undertake the courses of finance, management, marketing and computer. Secondly, relevant experts and scholars from domestic or international Internet finance enterprises are invited to give lectures in schools to gradually improve teachers' understanding of Internet finance. Third, colleges and universities should gradually increase the number of double-qualified teachers with both professional theories and practical experience in enterprise work, strengthen the teaching force for cultivating compound talents in financial science and technology, and build a double-qualified teaching team.

## V. CONCLUSION

With the development of Fintech, colleges and universities, especially financial undergraduate colleges and universities, are facing unprecedented challenges in the cultivation of financial application-oriented talents. Faced with the replacement of jobs by artificial intelligence and the resulting changes in the talent demand structure of the industry, financial undergraduate colleges and universities need to think about the reform of talent cultivation. As for education, the core spirit given by financial technology is change. Moreover, under the support of big data, cloud computing and artificial intelligence technology, the way of reforming, optimizing education resources and its use has become an inevitable requirement for the cultivation of financial application-oriented talents in colleges and universities. Only when these goals achieved, can the colleges and universities realize the reorganization of educational resources through Internet + education and help students improve their learning, practice and artificial intelligence application ability in school.

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