

# Analysis of Status Quo and Paths of Innovation and Entrepreneurship Among Undergraduates in “Internet Plus” Era

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**Abstract**—With the fast development of internet information technology, high coverage of smart mobile devices, Internet industry in China enjoyed a blooming growth. Problems of development of innovation and entrepreneurship nowadays are mainly caused by unclear guiding policies, unbalanced allocation of teaching faculty and facilities, inadequate experience, resource and capital support, immature platform and social environment and so on. To promote innovation and entrepreneurship among undergraduates needs four-dimension collaboration from government, universities, enterprises and undergraduates themselves, to create a “Internet plus” way of thinking, exploring path and policy under the new economic era of Innovation and entrepreneurship.

**Keywords**—“Internet plus”; innovation and entrepreneurship; problems; path and policy

## I. INTRODUCTION

With growing of Internet technology, Internet industry helps our nation gradually move into a full information-driven development society — Internet economic era. In 2015, Premier Li Ke qiang brought up the idea of “Internet plus” initiative in the report on the work of the government for the first time, to promote sustainable and vigorous economic development under the full application of information technologies such as big data, internet of things and cloud calculation in economic and other fields. In the same year, “to promote ‘Mass innovation and entrepreneurship’ among public in whole scale” was also brought up in the report for the first time. As the main force of Innovation and Entrepreneurship, undergraduates are provided with both opportunities and challenges to embrace a success under a promising future based on “internet +” era.

## II. STATUS QUO OF INNOVATION AND ENTREPRENEURSHIP AMONG UNDERGRADUATES IN “INTERNET PLUS” ERA

With the advent of “internet +” era, perfection of online infrastructure, growth of creative stimulation and ideas, the development and breakthrough of internet platform and information technology will have a huge impact on the

transformation and upgrading of economic structure. According to date analysis “China’s digital transformation: Internet’s impact on productivity and growth” by McKinsey Global Institute, “2013-2015 Internet will help China realize an 0.3 to 1.0 percent increase of its GDP growth.” As a new information technology covering internet of things, mobile internet, cloud calculation, big data, Internet is the main driving force to fuel China’s economic development, applied in different fields, widely spreading in economic, social and other aspects, bringing new vitality and motivation to China, promoting economic development of high standard and efficiency, and having a great impact on human life.

Internet gets involved in people life more and more while the mode of “Internet +” entrepreneurship increases. Undergraduates become the main participants due to their forehead life vision, vigorous innovative spirit, systematic expertise and various information channels. Currently, Chinese government puts forward a lot of favorable policies to promote innovation and entrepreneurship among undergraduates and put all kinds of paper work into practice through different departments. Ministry of Human Resources and Social Security of the People’s Republic of China took the initiative and made an announcement on “promotion of innovation and entrepreneurship among undergraduates” (2015 21). Next, state council published two documents “guideline on increasing mass creative space to promote mass innovation and entrepreneurship” and deepen the plan of innovation and entrepreneurship education in university. These policies covers trainings, financing, tax, enterprising space instruction, innovation and entrepreneurship education and other aspects, providing guidelines for start-ups. Besides, Ministry of Education, Communist Youth League also initiates various entrepreneurship campaigns such as “Challenge Cup”, national college student science academic competition, “Internet +” undergraduates’ innovation and enterprising competition, Youth Innovation and Enterprising competition and so on. For now, China has set up an over 40 billion Yuan investment foundation for start-ups in emerging industry and insist on integrate resources and promote sustainable development.

To understand the situation of innovation and entrepreneurship for undergraduates in such economic era,

the author conducted an online questionnaire for graduates from a university in Wuhan who graduated between 2010 and 2017 and had entrepreneurship on wenjuanxing website. Among 452 questionnaires in total, 418 cannot be used for record, marking 92.5% availability. The result shows that 78% male undergraduates participate in entrepreneurship while the percentage of female is 22%, much lower engaging in enterprising. As the high prevalence of smart mobile device, entrepreneurship among undergraduates mainly happens in software developing industry including social Apps, O2O software, software tools and software games. 109 participants choose this area, accounted for 26%. 160 participants choose E-commerce area including opening online shop on major E-commerce platforms, doing small business on social platform, developing relevant mobile software for E-commerce, marking 38.3%. Besides, 87 participants choose industrial commerce such as hardware projects, product processing and marketing, accounted for 20.8%. Except for major areas mentioned above, 62 undergraduates, accounting 14.9% of total tried to use official accounts on WeChat or other science and technology projects of innovative and entrepreneurship area. It is showed that starting business ratio undergraduates still remains low and there are major problems in guiding innovation and start-ups even under the circumstances where government, society and universities work hard to encourage innovation and entrepreneurship.

### III. DILEMMA FOR INNOVATION AND ENTREPRENEURSHIP AMONG UNDERGRADUATES IN "INTERNET PLUS" ERA

#### A. Unclear Official Guidelines and Incomplete Working Plan

To follow the rising trend of innovation and entrepreneurship in "Internet +" era, central and local governments pay more attention to activities happening in this area and introduce a series of policies, laws and regulations to guide and support entrepreneurship and innovation among youth. However, there is no complete system and problems existed. First, there is no actual plan to carry out all the relevant policies step by step. Policies mostly provide directions while lacking of systematic working plan, resulting in inefficient operation, unexpected change during process or even unqualified outcome. It is because that some local officials followed the paper guidelines without interpreting them with real situation, leading into an inefficient implement. Second, the favorable policy offers fairly small of amount of fund with tedious applying requirements. Since 2014, Chinese central and local government introduced a large number of favorable policies, including favorable projects and tax-reduced or tax-free projects. However, the actual amount of money is rather small, not giving enough support for undergraduates' start-up business under internet + era. Meanwhile, the applying requirements are complicated and the process lasts too long so that the policy does not provides efficient help for entrepreneurship and lowered applying efficiency instead of realizing maximum support. Besides, although government provides financing and loan, working space and tax reduction support, it cannot meet the needs of

undergraduates. Service support including logistic infrastructure, financing services and e-commerce service grows slower than innovative actives and entrepreneurship. Moreover, the lack of supervision from government causes problems. Due to the lack of supervision, start-ups are not able to spot their problems or run away instead of loving them, which leads to failure of their business out of untimely discovered problems and adjustments. Also, with media exposure of online products of poor quality, consumers might not trust business from innovation and entrepreneurship under internet + era anymore.

What's more, the development of infrastructures of internet + era falls behind its growing need. Under internet + era, internet has becomes the important basic infrastructure as highways, railways, airports, telecommunication, tap water, power grid and gas. For now, internet infrastructures in some areas are still outdated and related services fall behind. For example, unstable network service, high cost of network service and poor coverage of internet in remote area. These problems have a bad impact on entrepreneurs who need to use internet to do marketing and will cast a shadow over their business activities.

#### B. Low Quality of Faculties and Institutions Cannot Cultivate Core Technical Talents

Our innovation and entrepreneurship education to better promote undergraduates' entrepreneurship is still at elementary stage, facing a lots of challenges. Spooned-feed education make innovation and entrepreneurship courses focus on format instead of contents. Students are trained by majors within faulty in university, which means their knowledge will remain in one area, not helpful for talent training cross-over fields and innovative spirits. Though some universities provide students with cross-major optional courses, due to the teaching method, students cannot get deeper understanding and exploration of another field while start-up teams need talents possess knowledge of different field and communicate with each other to give cooperative performance on projects. So, required courses will be the main focus by students which is hard to cultivate innovative talents and change the situation of lacking core innovative talents in a fundamental way.

Meanwhile, Lacking good teachers and professors to guide students in starting business is the weakness. Universities may actively have activities and campaigns to encourage students for entrepreneurship while ignoring the education for teachers who provides such guidance for students. Some mentors of innovation and entrepreneurship courses possess a lot of theoretic knowledge and expertise while lacking the real experience of starting business. Besides, some of them have not gone through a systematic study of internet entrepreneurship or training so that cannot fully understand knowledge of specific fields. Hence, university cannot provide efficient training for students as well as good teaching methods.

### C. *Students Do Not Fully Understand the Risk of Starting Business in Internet Industry, and Lack Experience and Resources*

Lacking of experience is the main reason to fail to be a successful start-up. The fundamental reason is that students are short of understanding the concept of internet + so that they cannot react accordingly in a complex and changeable market with the outcome of bad product and service positioning. To be specific, undergraduates mostly started business related to their major or schoolwork while do not fully understand how to run and develop internet platform. Also, inexperienced undergraduates are not good at executing plans and do not have clear visions, lack of strategic plan to run a business and awareness of risk management. When starting business, they often did not conduct survey and research and carry out their plans according to personal interest. This is likely to cause risks when running the business and let business walk into wrong way, suffer setback or fail right away. Most college students are studying full time, not financially independent. When they start their own business, capital would be a major problem. According to statistics from Europe and America, 50% of enterprises last less than 5 years, and the situation for start-ups by undergraduates is worse. Besides, there are less creative ideas and more similar business modes showing up, which means a higher ratio of failure among start-ups. Though "Internet +" era lowers the cost of starting a business, it makes the competition severer than that of traditional innovative industry. If the business is not to tackle the existing problems but to follow the existed hot projects, it will waste resources of innovation and entrepreneurship and lead to easy defeat by their competitor.

Per capita hold of resources of undergraduates is low and shortage of valuable support from government, university and family will easily give them frustration when they meet challenges. Based on survey by relevant department, "49.74% undergraduates think the most important prerequisite for starting a business is to have a rich social network base." Every entrepreneur who walks out of university would face the inevitable problem of lacking resources. For example, universities emphasize on innovation and entrepreneurship education and hold all kinds of relevant activities while cannot offer adequate resources to build a platform for start-ups and ignore practice. Also, there are not enough internship bases for innovation and entrepreneurship or incubating base is not well-built, not giving students a beneficial environment to utilize resources from university, enterprises and society.

### D. *Environment for Entrepreneurship Needs Improvements*

Currently, China is lacking a good environment for innovation and entrepreneurship to prosper. From GEM, Chinese entrepreneurship environment falls behind the middle level, seeing a gap compared with developed economies. According to newly announced The Global Competitiveness Report by World Economic Forum, China ranks 28 out of 140 economies. As for internet entrepreneurship environment, the requirements to start a business is still high and the whole processing procedures are

not as good as developed countries. First, though the overall environment does improve in recent years as government introduced a lot of policies, laws and regulations to support and encourage undergraduates to start business under Internet + era, there are still deficiencies in front of intellectual property right protection, tax favorable articles, approval of enterprises. So, they cannot give efficient help in terms of laws and regulations. Second, it is a new business mode different from the traditional one where people use money to buy goods. Under Internet + era, there are less well-developed business modes in China and not enough entrepreneurship resources sharing platform. Even the renowned internet giants companies are facing the challenge by trying without the guidance from a well-developed business model, undergraduates nowadays will definitely run their businesses in a worse environment. That is also bad for creating a good environment for young entrepreneurs. Moreover, there are severe competition among talents and business in market-driven economy. Many big internet businesses bring pressure on entrepreneurs with the advantages of capital and recourse. They dominate the market by running business in a monopolistic way.

## IV. METHODS OF DEVELOPMENT OF INNOVATION AND ENTREPRENEURSHIP IN "INTERNET PLUS" ERA

In new economic era, to help undergraduates make full use of their professional skills in line with the internet trending, boost their enthusiasm to start own business, we need efforts from Chinese party and government, universities, enterprises and undergraduates.

### A. *Enhancing the Supervision and Support from Government on Innovation and Entrepreneurship*

As the promoter of innovation and entrepreneurship of internet + among undergraduates, government should provide good environment for innovation and entrepreneurship. First of all, information infrastructure is one of most fundamental support for undergraduates to make innovation and start their business. Government needs to accelerate the information infrastructure development, providing necessary support for students. Up to the end of 2016, the number of Chinese netizens reached 731 million and internet penetration rate is 53.2%. However, information infrastructure development in rural and western China area remains slow, which hinders the market to expand and makes it more difficult for innovation and entrepreneurship to take place in rural and undeveloped areas. Therefore, government should put more effort to improve the situation in those areas and expand markets of innovation and entrepreneurship, so as to give full play of its potential. Second, government should improve relevant policies, laws and regulations. That is very important to clear the path for undergraduates to start their business. Government is expected to introduce better favorable policies on archives management, tax reduction, housing subsidy and medical insurance, which will lower the cost on the early stage of business, reduce financial burden, release undergraduates from worries and concerns and provide follow-up support. Also, China started their internet journey rather late, and it is

still young in this field. It faces the problems of incomplete laws and regulation, and supervision system. To encourage creativity and dynamism among undergraduates of innovation and entrepreneurship, government should enhance guidance towards market in terms of laws and regulations and supervision according to undergraduates' needs. Government should improve polices and make it efficient, given a better environment for innovation and entrepreneurship.

*B. Improving Innovation and Entrepreneurship Education in Universities and Integrating Resources Through University Platforms*

Universities should make good strategic plans and improve quality of innovation and entrepreneurship education. As for education quality, universities should provide scheduled trainings for teachers to enrich their knowledge on innovation and entrepreneurship and improve their expertise in this area. It should also hire teachers with degrees and some entrepreneurs with rich experience on entrepreneurship as part-time lecturers, meanwhile, provide fair package and benefits for part-time teachers. As for course curriculum, innovation and entrepreneurship education must combine innovative education with professional training, creating a sustainable talent training mode. With innovation and entrepreneurship education as base, offer experiencing entrepreneurship courses for students so that they can put theories of internet sector into practice, and improve their ability. In this way, universities will push forward reform in higher education system, improve quality of education and provide talents for innovative country goal and further fuel the economic development driven by innovation and entrepreneurship. Universities should set up incubation parks, think of students' need and solve their problems, and provide wholesome instructions on innovation and entrepreneurship and well-developed infrastructure for internet + era for them. That will help undergraduates start their business in a right way. Universities slash need to create software and hardware platforms such as entrepreneur experience space, SYB curriculum and training bases. Inviting experienced and successful entrepreneurs is also helpful for students to choose their future path and lower the risk of potential barriers.

*C. With the Help of Training Base, Setting up the Cooperative Training System by Universities and Enterprises*

Enterprises are believed to be the second place after universities for talents cultivation of innovation and entrepreneurship. They are the main supporting force to universities, providing a platform for students to put theoretical knowledge into practice, also helpful for teachers who need the experience of entrepreneurship to train students. So after undergraduates decide to start their business, they should make full use of what enterprises can offer, opportunities like professional trainings and internships. That will deepen their understanding and experience of business operations and marketing strategies and prepare themselves

for innovation and entrepreneurship. Especially when they enter the enterprises, they can experience the environment, see how owners run their business and enjoy the culture of that company and feel the actual challenges and difficulties they company face before making itself successful. During that process, undergraduates can equip themselves with what they need to run a business, pioneering spirit and creativity. It will raise their ability and awareness of "want to, dare to, be able to and finally make a success". Meanwhile, undergraduates who want to start their own business can sign a training program with enterprises where they can get entrepreneurship education and professional instruction so as to improve their ability of execution of innovation and entrepreneurship under the internet + era, leading into a win-win situation.

*D. Improving Undergraduates' Ability as Entrepreneurs to Realize Better Risk Management in Entrepreneurship*

Whether undergraduates can successfully start their own business under "internet +" era, the most decisive and fundamental factor is their subjective effort. Government, society and university are all objective or external factors. Since most undergraduates are not that experienced, they cannot cope with various risks running through their business while risks are something existing and inevitable. So they need possess determination, strong will and hardworking spirit so as to fight this battle. They need to face up the challenges at the initial stage, turning adversity into advantage. Hence, university and society should pay effort in guiding students see these challenges and difficulties in a positive way, regarding them as a good opportunity to grow and make achievement. They are expected to analyze the situation and prepare themselves with the ability to handle emergencies. Meanwhile, in university, students should enhance their professional skills through courses and intrusions. They can take optional course such as computing, marketing and laws which are complementary for their later entrepreneurship under the internet + era. Moreover, internships in enterprises are significant for students to gain experience of how to run a business and do marketing before they entered their working life. Students should take more participation in various activities and campaigns held on platforms like Weibo and other forums, gaining more experience through practices, improving their comprehensive ability of innovation and entrepreneurship. Only in this way, can they overcome the difficulties and barriers during the process of starting their own business, and realize their dreams and values through innovation and entrepreneurship.

## V. CONCLUSION

Today, the "Internet +" era has undoubtedly become a fundamental force for transformation and upgrading of China's traditional industries. The integration of the Internet and industry has also continuously promoted the digitization, networking and intelligence of emerging industries, and has profoundly changed people's production and lifestyle. Although college students have advantages of innovation and entrepreneurship by relying on the Internet, they also have very broad development prospects, but they are also faced

with difficulties. Therefore, as college students in a new era, they should correctly grasp national policies, establish entrepreneurial ideas, and enhance their accomplishment. They are welcoming the arrival of the era of innovation and entrepreneurship in the context of "Internet +" and becoming outstanding talents for the great rejuvenation of the Chinese nation.

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