

FinTech Knowledge among the Finance Students in Telangana State

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Abstract: FinTech has become a catchword in all over the world and has reached its maturity in recent years. Academia undoubtedly is one of the stakeholders of FinTech ecosystem. Therefore, its involvement in development and usage of financial technology is very much imperative. FinTech companies need qualified employees who are able to deal with FinTech practices; Therefore, just as finance students represent an important segment of FinTech products and services users, they are also potential employees of FinTech companies. The finance students need to tap growing FinTech job opportunities. From this point of view, the paper aims to investigate the FinTech knowledge level among finance students and also to determine their job competency in FinTech companies. It also tries to identify the gap between the academic learning of the students from the colleges with the industry expectations from the students. This paper tries to draw the attention of finance academia including students, scholars, researchers, and also faculties towards improving the efficiency of the syllabus of concerned colleges that has not given adequate consideration so far. Thus, academia overall may approve a proper strategy related to this issue. Finally, the paper also raises some significant recommendations for involved students and policy recommendations to the academia.

Keywords — Academia, Financial technology, FinTech, Innovation, and Knowledge level.

I. INTRODUCTION

Throughout the 21st century with FinTech our view of life on financial operations and transactions has been changed. FinTech is a financial Technology that improves and automates the delivery and use of financial services. Who was thinking to buy products and services via electronic platform and mobile Apps? Nowadays we can order appliances, foods, taxi, even groceries doorstep. We don't have to carry money and ATM cards to look for the things that we want, more than this we can invest and transfer money. FinTech is also changing customer behavior and expectations at the long term, s/he can access the data and information anywhere and anytime.

As finance professionals, scholars and students most if not all heard about FinTech. Of late FinTech has been a buzzword in the technical field, finance industry and public in general. FinTech almost is related to our daily life, no difference it can be used by seniors and juniors, but the knowledge of FinTech must coincide with the technological development. Then the knowledge of FinTech starts form college. FinTech as a term just included in oxford dictionary in 2016 and this innovative concept dominates the financial industry. Nowadays it is in form of alternative lending, crowdfunding, cryptocurrencies, digital payment,

digital insurance, robo-advisor, and wealth management. These contents of financial services industry were emerged by artificial intelligence, blockchain, cloud computing and big data.

The e-commerce market is the fastest growing in the world (51 percent annual growth) (Tomas Likar, 2016)^[1], and India challenges China for the top Asian FinTech market. India was the top Asian market for venture capital backed FinTech funding in Q1'19 with \$286M in funding (CB Information Services, Inc, 2019)^[2]. The universities and educational institutions should think as stakeholders of financial technology and they must move in a parallel line with that headway. Irrespective the development of FinTech goes piecemeal into an advanced level of lazy, luxury and isolated life. Classical banking has been changing significantly through the last century, but today we are facing the birth of new age of financial services, bearing the name "FinTech", which is hardly explored and, therefore, may be seen as challenging environment (EFMA, 2016)^[3]. The daily routines become in terms of internet of things and bank in a box.

The financial markets arena is a field which is constantly evolving; in which updated and specialized knowledge is essential. Financial companies today seek candidates who

not only have excellent knowledge of their field and specialist skills, but who can cope with dynamism and lead the company successfully through changes (Karnik, 2017)^[4].

FinTech play a vital role in the future business world not Indian land only, FinTech is still nascent startups but growing in a huge manner. As the students of finance will be engaged in the financial industry, they must have sufficient knowledge about FinTech before placement.

The study evaluates the knowledge level of finance students in order to know their willingness to be employees in FinTech companies, from the other side to draw the attention of college and management schools to keep up with advancement of technology in order to fill the gap between what they are doing and what the market needs.

Very few people fully understand the implications of knowledge level of finance students, but experts in finance industry lead the way in sense of them. The growth in the usage of FinTech has brought some challenges for developing countries like India. One of the basic challenges is to address willingness, readiness and competence of finance students. Because they are so closer to the finance field that comes by investigating their FinTech knowledge. However, FinTech industry requires not only academically qualified people, but also professionals who are employable in the industry.

But there is one question that is “Are the finance students have the knowledge to deal with FinTech practices, not as users, but as employees?”. This paper put the finance students under scope to do so. The innovations of the financial markets, as well as the globalization process and technological changes require highly trained professionals, able to face the challenges of the financial areas of corporate business. They seek individuals who can represent the company in a positive light when dealing with clients and transmitting in them, confidence of the company’s ability to manage the funds (Karnik, 2017). Every day there is new technology engaged with any aspects of our life e.g. medical, engineering, business, science, social life and so on. So, we have to take steps towards that development, first step to be aware of it, after that to understand it, then to accept it and finally to apply it. Then this is what should the management of academia does.

According to Telangana State Portal, the total population of Telangana State is 350.04 lakhs, and ratio of rural to total population is 61.12 %, while the urban to total population is 38.88 %, literates are 206.97 lakhs literacy rate 66.54 %. (Telangana state profile, 2019)^[5]. According to PRS Legislative Research analysis of the Telangana State budget for 2018-2019, The Gross State Domestic Product (GSDP) of Telangana for 2018-19 is 15% higher than the revised estimate for 2017-18. And the expenditure for Telangana in education is 13,278 (Rs crore) approximately 5% higher

than the revised estimate for 2017-18. Telangana has allocated 8.2% of its total budget on education in 2018-19. This is almost half of the average expenditure share allocated to education by 18 other states (using 2017-18 BE). Between 2016-17 and 2018-19, there is a gradual decrease in the spending on education from 10.6% to 8.2% (PRS Legislative Research analysis, 2018)^[6]. India is gradually moving up the FinTech growth ladder, mainly driven by its solid FinTech ecosystem where various practitioners ought to support providing and building technological and entrepreneurial skills.

II. NEED FOR THE STUDY

As the technological development is a continuous process which is touching almost everything in life. The development of learning and educational system must associate to the technological change. Nowadays the growth of technology is faster than what most of the universities and educational institutions do. The innovative FinTech changes our concept about banking and financial transactions. There is a need to investigate the knowledge level of finance students who are expected to work for FinTech industry and to determine their competence to merge with FinTech startups.

III. OBJECTIVES OF THE STUDY

- To study the evolution and current state of FinTech in India.
- To investigate the concept of FinTech from the finance students’ point of view.
- To identify the gaps between the industry requirements and academic syllabus related to FinTech.
- To make recommendations for improvement in the syllabus.

IV. SCOPE OF THE STUDY

The paper investigates the knowledge level of FinTech and to cover the understanding of financial technology from two sides, first one from the finance students’ point of view and on the other hand from FinTech aspects that should be included in the syllabus of universities and educational institutions. It considers the MBA (Finance) and M.Com students from Government and private colleges across Telangana State. The study conducted during the second half of year 2019 and data is obtained through a well-structured questionnaire.

V. LIMITATIONS OF THE STUDY

- Findings of the study cannot be generalized for the country.
- The study confined to FinTech only, it does not take in to account other technological innovations.
- The study is restricted to Telangana State only.

- The study focuses on MBA (Finance) and M.Com students only.

VI. RESEARCH METHODOLOGY

The research was carried out by focusing on the FinTech knowledge level of students of finance and to know the current state of knowledge among them and their willingness to deal with FinTech practices and models in order to improve the syllabus of universities in Telangana State. The research paper investigates the knowledge level and competency of finance students to fulfil the FinTech requirements. A total sample of 234 respondents composed of MBA (Finance) and M.Com students from Government and private colleges across Telangana State were administered a well-structured questionnaire. The study conducted during the second half of year 2019. Demographic variables (gender, age, specialization and type of college) collected to describe the nature and distribution of the sample. A self-administered questionnaire was designed to gather the information from respondents. Likert scale was used to allow the respondents to express how much they agree or disagree with FinTech knowledge in order to measure their attitudes and to conducive to quantitative data.

Descriptive statistics are used to analyze the level of knowledge of students regarding to FinTech. Inferential statistical tools Chi square and t-test are also used to analyze the impact of the demographics of respondents on their level of knowledge about the practices and terms used in FinTech. One-way ANOVA test and correlation are applied to measure the difference and relationship between variables.

VII. LITERATURE REVIEW

Thomas Philippon^[7] viewed that there is a wide space for improvement in the financial services supported by competition and collaboration among the overall stakeholders. A continuous growth of the investment has been powering the development of FinTech to advance on technologies breakthroughs in multiple areas, such as mobile networks, big data, cloud computing and data analytic techniques etc. therefore, an accurate and up-to-date awareness of FinTech has an urgent demand for both academics and professionals. Keke Gai, M. Q.^[8] found that FinTech is playing a critical value creator in the value chain for most current financial services institutions (FSI) and FSIs also need to ensure that the data are used in a correct manner all the time, which introduces security and privacy concerns when applying FinTech in the financial industry.

Svetlana Saksonova and Irina K.-M.^[9] recommended that start-up enterprises of FinTech should inform the population about FinTech services that are already available for use. Daniela Gabor and SallyBrooks^[10] found that financial inclusion responses to the identification of borrowers in need of education not lenders in need of

regulatory reform as the primary source of risk to the financial system.

International Monetary Fund (IMF)^[11] measured the impact of technology on financial services. It viewed that the fogginess of borders among economic entities and activities policymakers need to consider implications for common standards and legal principles, to the extent that they line up with national priorities. LiudmilaZavolokina, et al.^[12] suggested that collection of knowledge is required and should not be restricted only to technological aspects. They viewed that the Asian continent does not lag behind in technology and development and has a huge potential in growth of new FinTech hubs.

Nasrul Hakim GhazaliandTakashiYasuoka^[13] indicated that awareness of most respondents is still insufficient on Peer-to-Peer lending and crowdfunding as alternative financing instruments. They suggested that there is a need and opportunity to raise awareness among Small Medium Enterprises and startups authorized government related body. Ross P Buckley and Sarah Webster^[14] argued that the capacity of FinTech companies to leverage knowledge of customers' current experience and design products which increase access to, and streamline the provision of, financial products and services in developing countries. They opined that Local knowledge and understanding of the problems potential customers face and their financial literacy levels is the key to the successful design and implementation of FinTech products and services in developing economies. Ekaterina Kalmykovaand Anna Ryabova^[15] viewed that Financial, monetary and credit systems are changing so rapidly because of the fast technology development. They opined that FinTech market is not only new possibilities and perspectives for start-up companies, but also a threat for traditional financial institutes such as banks and credit agencies due to their modernity and utility.

DávidVarga^[16] viewed that the growing interest in FinTech will soon be visible in the academic literature, but there is presently a massive knowledge shortage about this field. The author argued that ecosystem layer includes developments in IT hardware and software technology, such as affordable computers, mobile phones, rapid internet penetration, and basic areas of knowledge such as programming skills.

VIII. LITERATURE GAP

As evident from the literature review most of the literature exiting on FinTech is on and from the non-Indian context. There is a dearth of FinTech studies in India. This paper contemplates to fill this gap by studying FinTech in contemporary state in India.

IX. UNIVERSITY CURRICULUM AND FINTECH

The innovations of the financial markets, as well as the globalization process and technological changes require

highly trained professionals, able to face the challenges of the financial areas of corporate business. There are some universities, colleges and management schools in India such as (University of Mumbai) and around the world e.g. in the USA (Georgia State University, University of Missouri, Campus D'oxford and Yale School of Management) match their syllabus with FinTech requirements in order to improve the capability of the outcomes to provide the market with skilled and efficient workforce. The syllabus includes fundamentals and advances of financial technology that coincide with the frame of FinTech and the period of studying varies from an 8-week course to a 2-year full-time course. Candidates from Engineering /MCA /BCA /Mathematics /Economics /Finance backgrounds get the eligibility for admission appropriate with FinTech; students take FinTech Lab projects, problem sets and quizzes along with final group assignments during the whole course. The following lines elaborate in brief the related subjects to FinTech.

Through reviewing of most FinTech courses, after finishing the course the students supposed to be able to know the basics of the following:

- Fundamentals of FinTech
- Blockchain, Payments and Cryptocurrencies
- Digital Finance and Alternative Finance
- FinTech Regulation and RegTech
- Data coding & TechFin
- The Future of Data-Driven Finance
- Smart contracts and decentralized applications
- Machine learning in robo-advising and FinTech
- Algorithmic Trading and Technical Analysis

The number of subjects differs from college to college; it depends on the length of the course and method of teaching which most of the courses rely on learning by doing.

X. DATA ANALYSIS

The research takes the demographic variables (gender, age, specialization and types of college) in order to use descriptive statistical tools and inferential statistical techniques like t-test, Chi-square and ANOVA test along with correlation to get quantitative results that help in the process of analysis. Number of respondents and percentage of demographic variables from the sample of (234) finance students is as (figure No. 1.)

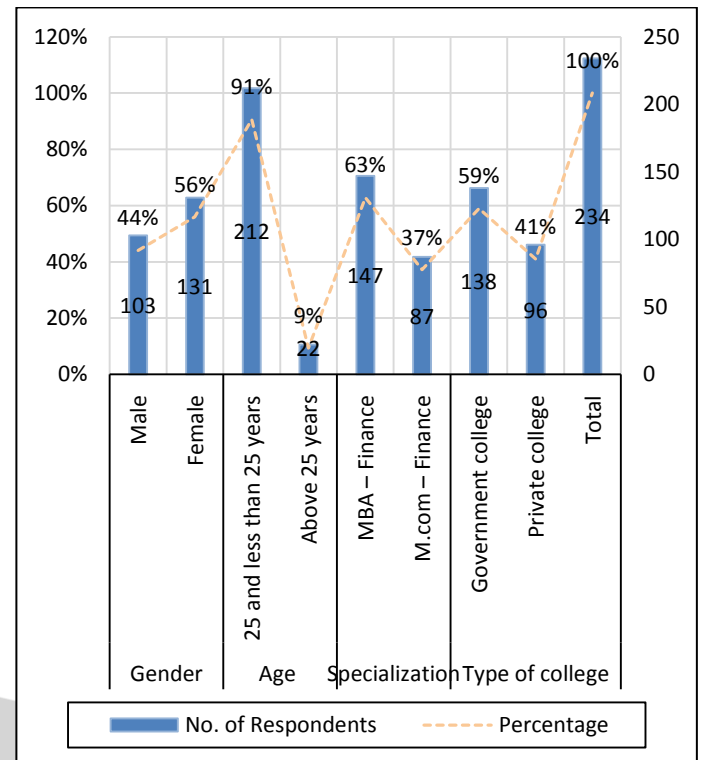


Figure No. 1. Demographic variables

The overall information about FinTech among the sample of finance students indicates that most of them have affordable experience in using the FinTech products and services. As the finance students have their bank account in any authorized bank in Telangana State, India. They have the right to practice their privileges to do any financial transactions. According to them the more convenient way of banking was belonged to 39.7% UPI (Unified Payments Interface), 32.5% mobile banking, 20.5% internet banking, 6.8% using ATM and 0.4% doing the transactions through branch banking.

Using FinTech services vary among the sample of finance students which can be elaborated as 29.5% are using FinTech services from 1 year to 2 years, 27.4% less than 1 year, then 22.2% more than 2 years and 20.9% don't use FinTech services.

Frequency of using electronic FinTech services differs among the sample of finance students as the following, 29.1% of them using FinTech services frequently, 22.6% of them don't use FinTech services at all, 17.5% of them using the FinTech services occasionally, 15.8% rarely 11.5% very frequently and 3.4% very rarely.

The opinion of the sample of finance students about FinTech, the majority was 67.1% good, 20.1% excellent, 9.8% fair and 3% poor.

The using of FinTech products and services either by mobile or computer was as the following 34.6% using Google Pay, 30.3 using PhonePe, 16.2 using Paytm, 11.5% don't use anyone of them, 5.6% using Amazon, and the rest (0.9%, 0.4%, 0.4%) are respectively using Yono SBI, Freecharge and PayPal.

Related to the ambiguity of FinTech most of finance students from the sample, with 41% have neutral knowledge about FinTech, 11.1% and 20.1% of them strongly disagree and somewhat disagree respectively, then 20.5% and 7.3% of them somewhat agree and strongly agree about the ambiguity of FinTech.

By using the Chi square statistical technique to test the relationship between the demographic variables (gender, age, specialization and type of college) and unclarity of FinTech knowledge; the result is as in table No. 1.

Chi-Square Tests		Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	Gender	7.942 ^a	4	.094
	Age	3.588 ^a	4	.465
	Specialization	3.379 ^a	4	.496
	College Type	4.556 ^a	4	.336

Table No. 1. X² test of Ambiguity of FinTech knowledge.

Since all p-values (Sig. (2-sided)) > 0.05 significance level. Then there is no significance association between the demographic variables and the unclarity of FinTech knowledge.

The related knowledge to FinTech practices ABCDs (Artificial Intelligence, Blockchain, Cloud computing and Big Data) were measured among the sample of finance students, from (figure No. 2.) we can see the difference in the level of knowledge regarding to each object.

I have sufficient knowledge about FinTech practices as following:-

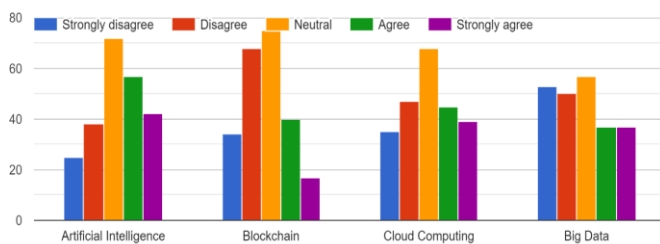


Figure No. 2. Knowledge of FinTech practices (ABCDs)

The high percentage of average knowledge of FinTech practices (ABCDs) among the sample of finance students belong to neutral with 29%, then 22% and 16% of them somewhat disagree and strongly disagree, after that 19% and 14% of them somewhat agree and strongly agree, as it is illustrated in (figure No. 3.)

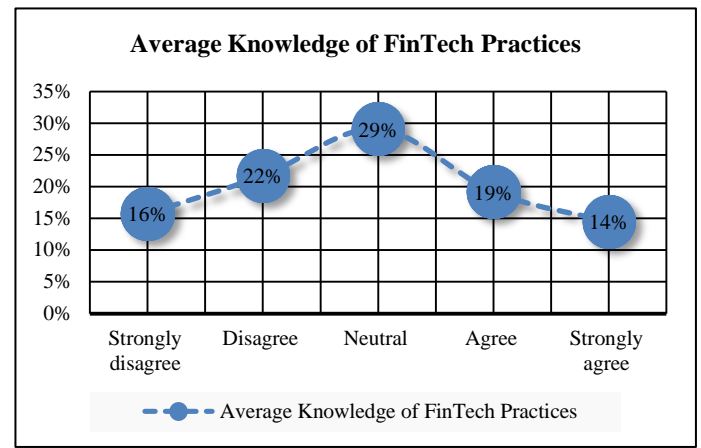


Figure No. 3. Average knowledge of FinTech practices (ABCDs)

The related knowledge to FinTech terms represented in products, services and forms of FinTech (Peer-to-Peer lending, cryptocurrency, crowdfunding, robo-advisor, wealth management, digital payments, digital insurance, internet of things (IoT) and bank in a box) were measured among the sample of finance students, and the results as the (figure No. 4.) we can see there is variance in the level of knowledge regarding to each term.

I have sufficient knowledge about FinTech terms as following:-

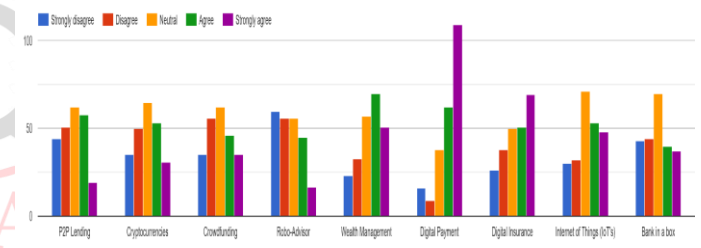


Figure No. 4. Knowledge of FinTech terms

The high percentage of average knowledge of FinTech terms in the sample of finance students belong to neutral with 25%, then 23% and 20% of them somewhat agree and strongly agree, after that 18% and 15% of them somewhat disagree and strongly disagree, as the (figure No. 5.)

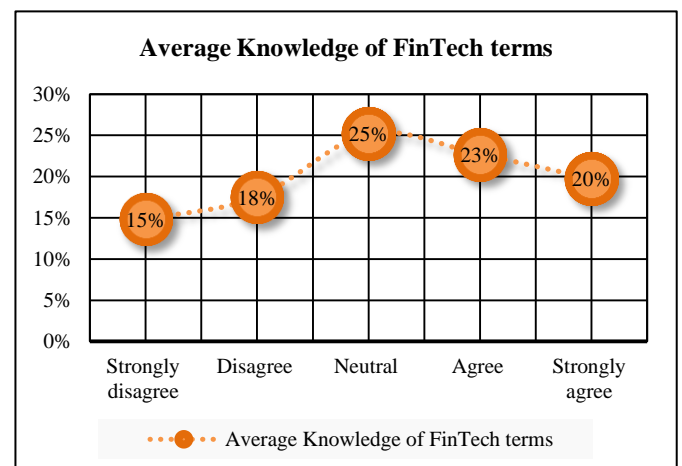


Figure No. 5. Average knowledge of FinTech terms

Regarding to the source of FinTech knowledge the next scatter chart (figure No. 6.) illustrates the relationship between getting knowledge of FinTech either from college or from outside college.

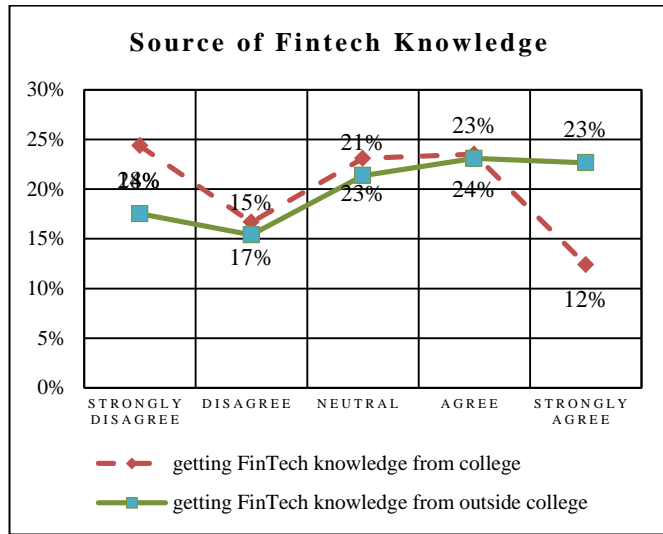


Figure No. 6. Source of FinTech knowledge

By using Chi-square test to measure the relationship between getting knowledge of FinTech either from college or from outside college. The result of testing the null hypothesis (There is no association between demographic variables of finance students and source of FinTech knowledge). Since the p- values > 0.05 significance level except for gender getting FinTech knowledge from outside college. Then the null hypothesis is rejected. But there is fail to reject the null hypothesis and accept the alternative hypothesis (H₁) (There is an association between gender of finance students and getting FinTech knowledge from outside college), as it is in table No. 2.

Source of FinTech knowledge		Getting FinTech knowledge form college		Getting FinTech knowledge form outside college		
Chi-Square Tests	df	Value	Asymp. Sig. (2-sided)	Value	Asymp. Sig. (2-sided)	
						Pearson
Chi-Square to test the source of FinTech knowledge	Age	4	2.505 ^a	.644	2.257a	.689
	Specialization	4	7.531 ^a	.110	1.941a	.747
	Type of college	4	5.323 ^a	.256	3.987a	.408

Table No. 2. X² test of source of FinTech knowledge

At the same time using t-test to measure the difference between getting knowledge of FinTech either from college or from outside college. The result of testing the null hypothesis (There is no statistically difference between finance students who got knowledge from college and finance students who got knowledge from outside college). Since p- value (Sig (2-tailed)) = 0.010 < 0.05 significance level. Then there is fail to reject the null hypothesis (H₀).

Which means source of FinTech knowledge is significance, as it is in table No. 3.

Paired Samples Statistics / Pair 1	Paired Differences	t	df	Sig. (2-tailed)
	Mean			
getting knowledge of FinTech from college to getting knowledge of FinTech from outside college.	-.350	-2.591	233	.010

Table No. 3. t-test of source of FinTech knowledge

Regarding to the improvement of FinTech skills and improvement of syllabus the next scatter chart (figure No. 7.) proves the relationship between improvement of FinTech skills and improvement of syllabus.

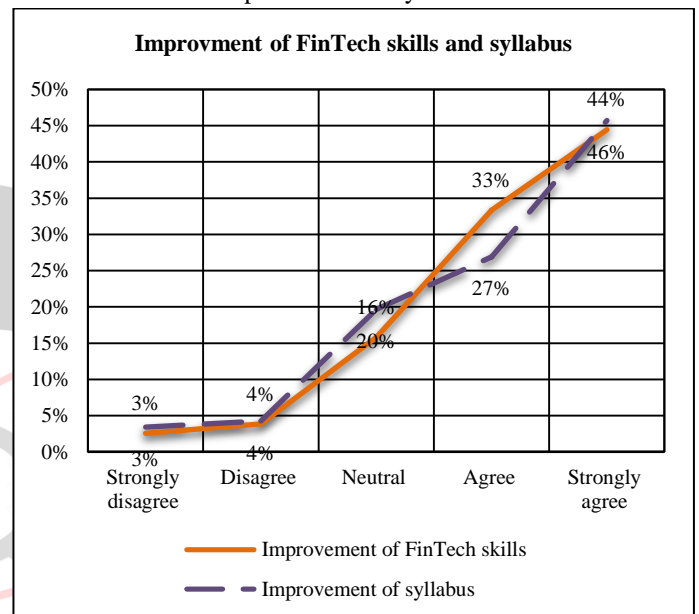


Figure No. 7. Improvement of FinTech skills and syllabus

By using Chi-square test to measure the relationship between willingness of finance students to improve FinTech skills and to improve the syllabus. The result of testing the null hypothesis (There is no association between demographic variables of finance students and willingness of them to improve FinTech skills). Since p- values of gender and age are (.542, .761) > 0.05 significance level. Then the null hypothesis is rejected, except for p- values of specialization and type of college (.026, .034) < 0.05 significance level. Then there is fail to reject the null hypothesis (H₀). Which means there is an association between finance students from different specializations and different colleges and improvement of FinTech skills. Furthermore, the result of testing the null hypothesis (There is no association between demographic variables of finance students and willingness of them to improve the syllabus). Since p- values of age, specialization and type of college are (.254, .519, .409) > 0.05 significance level; then the null hypothesis is rejected, except for p- value of gender (.008) < 0.05 significance level; then there is fail to reject the null hypothesis (H₀). Which means there is no association between gender of finance students towards

improvement of syllabus. But at the same time there is an association between age, specialization and type of college of finance students towards improvement of syllabus, as it is in table No. 4.

Improvement of FinTech knowledge		Improvement of FinTech skills		Improvement of syllabus		
Chi-Square Tests		df	Value	Asymp. Sig. (2-sided)	Value	Asymp. Sig. (2-sided)
Pearson Chi-Square to test improvement of FinTech skills and improvement of syllabus	Gender	4	3.097 ^a	.542	13.798 ^a	.008
	Age	4	1.865 ^a	.761	5.337 ^a	.254
	Specialization	4	11.033 ^a	.026	3.238 ^a	.519
	Type of college	4	10.398 ^a	.034	3.978 ^a	.409

Table No. 4. X² test of improvement of FinTech skills and syllabus

Where by using t-test the result of testing the null hypothesis (There is no statistically difference between finance students who need to improve their skills in FinTech and finance students who need to improve the syllabus to fit FinTech requirements), Since p- value (Sig (2-tailed)) = 0.411 > 0.05 significance level. Then the null hypothesis(H₀) is rejected. Which means most of finance students need to improve their FinTech skills and in the same time they want the syllabus to be improved to fit the FinTech requirements, as it is in table No. 5.

Paired Samples Statistics / Pair 2	Paired Differences	t	df	Sig. (2-tailed)
	Mean			
Need to improve skills in FinTech to need improving the syllabus to fit FinTech requirements.	.060	.824	233	.411

Table No. 5. t-test of improvement of FinTech skills and syllabus

Regarding to lack of knowledge of FinTech and the competency of finance students to work for a FinTech company, the next scatter chart (figure No. 8.) and table No. 6. demonstrate the difference between lack of knowledge of FinTech and the competency of finance students to work for a FinTech company.

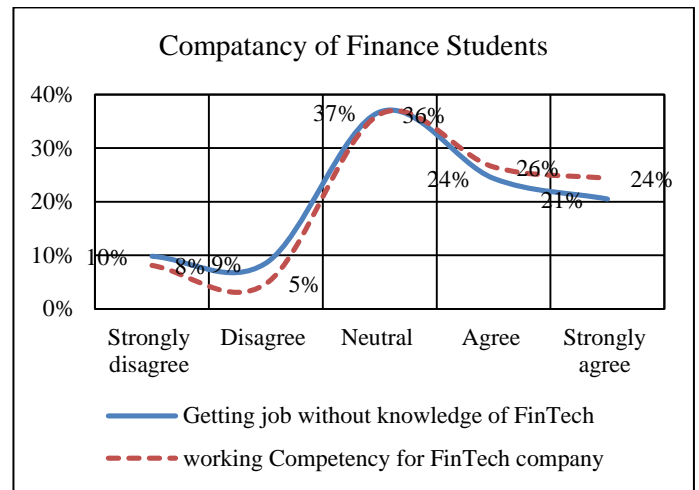


Figure No. 8. Competency of finance students

Where by using t-test the result of testing the null hypothesis (There is no statistically difference between finance students who don't have knowledge of FinTech and finance students who are competent to work for a FinTech company), Since p- value (Sig (2-tailed)) = 0.067 > 0.05 significance level. Then the null hypothesis(H₀) is rejected.

Paired Samples Statistics / Pair 3	Paired Differences	t	df	Sig. (2-tailed)
	Mean			
Lack of FinTech knowledge to get a job to the competency to work for a FinTech company.	-.171	-1.839	233	.067

Table No. 6. t-test of competency of finance students

Which means most of finance students who don't have knowledge of FinTech are not competent to get a job in a FinTech company, and they show a little bit of self-confidence to work for a FinTech company unless they go through placement procedures.

Measuring the knowledge of finance students about impact of FinTech area on the financial services industry, most of them selected (digital payment, wealth management and cryptocurrencies) respectively, as indicated in (figure No. 9.).

Which area in FinTech has more impact on the financial services industry (please tick top three):-

234 responses

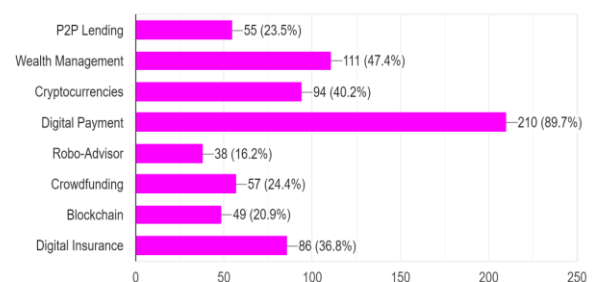


Figure No. 9. Impact of FinTech areas on financial services

By applying ANOVA test on the sufficient knowledge of FinTech among finance students about FinTech practices as well as FinTech terms. The result shows the following, firstly one-way ANOVA test for gender specifies that the p-value = .000 < .05 level of significance, then there is no significance difference between gender of finance students and the sufficient knowledge about FinTech practices as well as FinTech terms. Secondly one-way ANOVA test for the rest of the other demographic variables (age, specialization and type of college) determines that the p-values for them are > .05 level of significance, then there is a significance difference between finance students (age, specialization and type of college) and the sufficient knowledge about FinTech practices as well as FinTech terms, as it is in table No. 7.

One-way ANOVA of Gender		Sum of Squares	Mean Square	F	Sig.
Sufficient knowledge about FinTech practices	Between Groups	13.809	13.809	16.788	.000
	Within Groups	190.826	.823		
	Total	204.635			
Sufficient knowledge about FinTech Terms	Between Groups	9.490	9.490	13.586	.000
	Within Groups	162.060	.699		
	Total	171.550			
Sufficient knowledge about FinTech practices + terms.	Between Groups	11.549	11.549	18.306	.000
	Within Groups	146.359	.631		
	Total	157.908			

Table No. 7. One-way ANOVA test of sufficiency of FinTech knowledge

Finally, by testing correlation between sufficient knowledge of FinTech practices and sufficient knowledge of FinTech terms, since p-value (Sig (2-tailed)) = 0.000 < 0.01 significance level α . Then there is a significant correlation at 0.01 level of significance (2-tailed). Which means finance students who have sufficient knowledge about FinTech practices absolutely they have also sufficient knowledge about FinTech terms. as it is in table No. 8.

Correlations		Knowledge of FinTech practices	Knowledge of FinTech Terms
sufficient knowledge about FinTech practices	Pearson Correlation	1	.682**
	Sig. (2-tailed)		.000
	N	234	234
sufficient knowledge about FinTech Terms	Pearson Correlation	.682**	1
	Sig. (2-tailed)	.000	
	N	234	234

Table No. 8. Correlation of sufficiency of FinTech knowledge

The birth of FinTech, on the one side, brings challenges for traditional financial institutions; on the other side to give opportunity to the universities and educational institutions

to improve their outcomes by accepting FinTech principles and practices in the involved colleges and management school's syllabus.

FinTech industry will be huge in coming years. But what is special about this trend is that it will not only enlarge the pockets of investors and startup founders; it has a chance to affect some real social live. As transformation of the banking industry continues, FinTech firms and banks are beginning to realize the benefits of working together to deliver innovative solutions and higher customer experiences to an increasingly digital consumers; as well as the universities and educational institutions must do.

There is a growing competition between banks and FinTech startups not only in advanced economies, but also in the emerging markets. However, this competition will spread in the universities and educational institutions to offer better education in machine learning, artificial intelligence, digital business and financial technology. More broadly, the rapid rollout of new technologies gives lower-skill workers little time to adapt, and may ultimately cost some of them their jobs. Individuals might gain as consumers but lose as employees (Allison, 2019)^[17]. Smart investment systems that getting increased gradually in the world will have caused unemployment in some big firms and, this issue expects to expand worldwide shortly.

XI. RECOMMENDATIONS

FinTech related courses should be structured, defined and scheduled in advance and should blend demonstration with experiential learning. Students need a coherent understanding of the fundamental quantitative tools ranging from applied economic theory, probability and statistics, to financial modelling and securities rule all of which are becoming increasingly dynamic in the financial industry.

Practical sessions such as case study discussions, projects, group discussions, class presentation, simulation programs and internships along with the theory sessions so that the students can correlate between theory and practice and develop a wholesome understanding of the subjects.

As for any ambitious looking forward to entering this vibrant field, it is essential to have sound technical knowledge. However, at the same time, it is also essential for one to be well experienced in their soft skills, that is, their communication abilities and overall presentation.

Course Element	Weightage
FinTech Lab Projects	45%
Problem Sets and Quizzes	30%
Final Group Assignment	25%
Total	100%

Table No. 9. Recommended grade structure for FinTech course

XII. SUGGESTIONS

Suggestions for Finance Professionals

The finance specialists must set their sight on using new technologies such as AI to data analytics to produce better products and experiences. Finance students who want to improve their skills and talents must not wait for anyone to raise their hands; they have to bear the concept of self-learning through textbooks, internet, private tuitions, participating in any FinTech short course out of campus, interacting with seminars, conferences and workshops related to FinTech aspects.

Choosing the target school to enroll in as this will be a major drive of their career opportunities open to them. Getting feedback from finance professionals, seniors, placement office and friends about the market requirements regarding to new technology in financial industry.

Maintaining balance between technical skills and their decision as the industry continues to adopt change concept in the financial environment.

Finance students should be aware about regulatory surrounding of the financial operations. They are advised to connect their studies to business by debating current issues influences FinTech.

Suggestions for Academia

Technology creates synergy in the financial scenes, which encourages the universities and educational institutions to increase the quantity and quality of their outcomes. As much as the financial institutions seek to develop their own tech capabilities and to stay ahead of the game by making partnership with FinTech startups or obtaining some updated information about them, then universities and educational institutions must engage in this process otherwise they will be behind and will not cover the market needs.

As long as traditional universities and educational institutions continue to adapt to the changing landscape and market needs, they must go alongside with FinTech practices, others who still believe in the “old is gold” adage, s/he will change to as “tech to take”.

Build a strong technological and entrepreneurial talent pool by engaging universities and institutions, India including Telangana State needs to adopt a cautious approach towards the migration of its young and working population to foreign lands. This requires mindful effort by the educational system of the state to impart appropriate technical and entrepreneurial skills.

Academic bodies should be encouraged to act as catalysts towards building an innovative mindset of technological advancement and proto-typing from the beginning.

the governments in general represented by the educational system need to take account for taking care of their people by continually learning new practices, to maintain society stable in the long term.

Academia can start the initiative to include FinTech knowledge and provide the finance students by taking the following considerations:

- a. The current finance students can get the knowledge of FinTech in form of assignments and group discussions during classes.
- b. Conducting short courses (8-week course) during summer vacation, in order to enable the students to understand the basics of FinTech.
- c. . Furthermore, restructuring the current syllabus to fit the FinTech requirements and avail the advantages of other notable universities and educational institutions.
- d. Additionally, establish new specialization and separate sections (Master in Financial Technology) for full-time two-year course after bachelor degree equivalent to a master degree.

Suggestions for FinTech Companies

Most of FinTech companies nowadays would likely consider themselves more “tech” than “fin,” with the technology simply being applied to the financial services industry.

As FinTech companies need qualified and skilled employees, they have to apply the social responsibility in order to collaborate with educational system to gain key success in the long term.

Conducting periodical seminars and conferences about challenging and opportunities of FinTech or any other issues related to financial technology, in order to disseminate FinTech awareness among the promising technological community.

XIII. CONCLUSION

It is clear that finance students have different levels of knowledge about FinTech. They must have knowledge about the progress in financial field. A combination of finance and technology conducive into FinTech and that effects the overall financial industry. Sufficient knowledge of FinTech represents as a catalyst for finance students to engage with startup companies. Due to enormous growth of FinTech investment around the world there is a demand for qualified and skilled employees; then the role of academia comes to the picture to improve its outcomes in order to respond to that urgent request. Applications and models of FinTech should be obvious. ABCDs of FinTech absolutely help finance specialists to be competent and capable to work for FinTech companies.

Despite of new advancement in FinTech, more efforts are needed to develop the educational content effectively. Improving the syllabus to fit FinTech requirements is significance. Nevertheless, interested financial professionals have to strive to get the knowledge either from college or outside college. By all counts, and with proven results it is no wonder that the one who has sufficient knowledge about FinTech practices definitely has adequate knowledge about FinTech terms.

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APPENDIX

Questionnaire

This is a questionnaire is designed to measure FinTech Knowledge among the Finance Students in Telangana State. This questionnaire is designed for research and scientific purpose.

[1] Demographic Variables

Gender: Male () Female ()
 Age: v 25 and less than 25 years ()
 ^ Above 25 years ()

Specialization:

Business Management – Finance ()
 Commerce – Finance ()

Type of college:

> Government college ()
 > Private college ()

[2] General Information:

- According to you which is more convenient way for banking.
 - Branch banking
 - Internet banking
 - Mobile banking
 - UPI (Unified Payments Interface)
 - ATM
 - Other
- How long have you been using FinTech services?
 - Not used
 - Less than 1 year
 - 1-2 years
 - More than 2 years
- How frequently you are using electronic FinTech practices?
 - Very Frequently
 - Frequently
 - Occasionally
 - Rarely
 - Very Rarely
 - Never
- What is your overall opinion about FinTech?
 - Excellent
 - Good
 - Fair
 - Poor
- Which application do you use? (choose one only)
 - Google pay
 - PhonePe
 - Paytm
 - Amazon Pay
 - Others
 - I don't use

[3] Knowledge of FinTech: (Likert scale)

- o Knowledge of FinTech is unclear.
 - Strongly disagree
 - Somewhat disagree
 - Neutral
 - Somewhat agree

- Strongly agree
- I have sufficient knowledge about FinTech practices:
Artificial Intelligence
Blockchain
Cloud Computing
Big Data
 - Strongly disagree
 - Somewhat disagree
 - Neutral
 - Somewhat agree
 - Strongly agree
- I have sufficient knowledge about FinTech Terms:
P2P Lending
Cryptocurrencies
Crowdfunding
Robo-Advisor
Wealth Management
Digital Payment
Digital Insurance
Internet of Things (IoT)
Bank in a box
 - Strongly disagree
 - Somewhat disagree
 - Neutral
 - Somewhat agree
 - Strongly agree
- I got the knowledge (FinTech) from college.
 - Strongly disagree
 - Somewhat disagree
 - Neutral
 - Somewhat agree
 - Strongly agree
- I got the knowledge (FinTech) from outside college.
 - Strongly disagree
 - Somewhat disagree
 - Neutral
 - Somewhat agree
 - Strongly agree
- I need to improve my skills in FinTech.
 - Strongly disagree
 - Somewhat disagree
 - Neutral
 - Somewhat agree
 - Strongly agree
- Syllabus need to be improved to fit FinTech requirements.
 - Strongly disagree
 - Somewhat disagree
 - Neutral
 - Somewhat agree
 - Strongly agree
- Without knowledge of FinTech it is difficult to get a job.
 - Strongly disagree
 - Somewhat disagree
 - Neutral
 - Somewhat agree
 - Strongly agree
- I am competent to work for a FinTech company.

- Strongly disagree
- Somewhat disagree
- Neutral
- Somewhat agree
- Strongly agree
- The future of financial industry is dependent on technology.
a) Yes b) No c) Maybe
- Which area in FinTech has more impact on the financial services industry (please tick top three): -
P2P Lending Cryptocurrencies Robo-Advisor
Blockchain Wealth Management DigitalPayment
Crowdfunding Digital Insurance.
- Why FinTech is important for finance professional?
(Optional)

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