







Quotable Quotes

To get rich, you have to be making money while you're asleep.

David Bailey



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Message from the Board

Sonia Gandhi, CFA (Director, CFA Society India)



Dear Members,

This newsletter marks a special occasion - CFA Society India's inaugural Fintech Conference in Bengaluru- the Silicon Valley of India. Fintech is evolving at a rapid pace with numerous companies sprouting all over the globe. The solutions offered by these companies are being adopted and embraced not only by tech savvy customers and millennials, but the larger population as well.

"Would you like to see it one more time? You may have blinked and missed it!" This quote by Tim Cook at the launch of Apple Pay aptly sums up the rapidly changing landscape in this space. In India, factors like demonetization and development of Unified Payments Interface have led to a tremendous surge in digital transactions. Last year, an article in Financial Times stated that the CFA exam curriculum may be broadened to incorporate aspects of fintech, AI, and big data to meet demands for fintech skills by employers. Continued adoption of AI, increased investment in regtech, rise of online mortgage tech, insurtech innovation and more partnering between fintech and tech giants are amongst KPMG's top predictions for this space in 2018.

Our volunteers have worked very hard to put together this "industry special" edition. In the first cover story various aspects of fintechs are beautifully explained followed by interesting conversations with several industry experts. While Rajat Gandhi (Faircent) talks about P2P lending servicing a large segment of unbanked, credit needy population using AI and Big Data, Gautam Seshadri (ZPX) advocates addition of Blockchain related courses into academia, Vinayak Bhat (FactSet) states the greater acceptance and adoptability of analytics. Krishna Heade (NovoPay) expounds on the need for significant education about the reliability and safety of digital payments, and Nithin Kamath (Zerodha) explains the intricacies of algo trading. According to Shrikant Meenakshi (FundsIndia), the biggest challenge in robo-advisory is managing customer behaviour. Deepak Gupta (Saxo group) stresses on the importance of selecting the right technology & its relevant implementation, while Nitin Chugh (HDFC Bank) advocates perusal of AI at a strategic level, going beyond focusing on one or two applications, and Shalabh Singhal (Ziploan) states complementary skills and strong work ethics as attributes for an ideal co-founder. There is also lots of sensible advice in each of these interviews for young charter holders looking to build and grow a career in different aspects of fintech. Larry Cao, Director of Content at CFAI lays out some clear patterns emerging in fintech's growth in the second cover story - The three stages of Fintech.



Message from the Board

At CFA Society India, the year started on a high note with the blockbuster India Investment Conference. With over 500 delegates, the IIC is second in size only to the CFA Institute annual conference. The momentum continues with the highly successful Financial Talent Summit in Delhi, the inaugural fintech conference in Bengaluru, a two day advanced modelling & valuation workshop in Pune. We will continue in our endeavour to organize many more high quality Continuing Education events during the course of the year. Your participation and feedback is highly appreciated and is critical to the success of these events.

Thank you!



Demystifying FinTech

Manish Jain, CFA
(Communication Committee, CFA Society India)
Manoj Khokale, CFA
(Communication Committee, CFA Society India)
Jitendra Kumar, CFA
(Communication Committee, CFA Society India)



The year 2017 witnessed record deals by the PE/VC firms clocking around USD 24 Bn investments in India which is about 50% higher than that of 2016. The technology space commanded the highest investments in terms of deal value followed by financial services. The FinTech sector is at the intersection of technology space and financial services. The startup space benefitted significantly during the year and is estimated to have raised around USD 13.5 Bn in investments and Fintech sector at USD 3 Bn. This is backed by strong investor confidence in Indian markets due to the opportunity of large untapped informal economy along with Government's push to boost cashless transactions and economic inclusion of the Indian population.

So, how do you define Fintech? Even though this term is used rather loosely, according to Financial Stability Board (FSB), "FinTech is technologically enabled financial innovation that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services". So, under the umbrella of FinTech, with the help of technology, the startups and incumbent financial institutions are solving the age-old problems of banking and financial services industry with new products and services.

As described above the FinTech space is attempting to solve multiple problems and they can be categorized in to following broad categories:

Payments and Money transfer

The mobile based payments such as Wallets, P2P (Person to Person) transfer apps and mobile PoS (Point of Sale) applications fall under this category. In 2017, majority of Fintech funding happened in this space, with Paytm, raising USD 1.4 Bn and PhonePe (owned by Flipkart) raising USD 500 Mn. Out of the 78 top Fintech startups in India, about 29 are working in this space. After Government's demonetization drive in 2016, there was a phenomenal boost to the number of digital transactions. Paytm witnessed 700% increase in overall traffic and 1000% growth to Paytm wallets. Overall digital payments surged 55% in 2017. Government's 'Pradhan Mantri Jan-Dhan Yojana' (PMJDY) is a scheme for financial inclusion by providing bank accounts to all. With Jan Dhan accounts linked with Aadhaar and Mobile numbers (JAM trinity), Government is targeting to provide direct subsidies to underprivileged sections of society Additionally, this has opened up phenomenal opportunities in digital transactions. National Payment Corporation of India (NPCI), an initiative of



Reserve Bank of India (RBI) and Indian Banks' Association (IBA), is an umbrella organization for creating a robust payment and settlement infrastructure. Their products Rupay cards, Bharat Interface for Money (BHIM) along with United Payments Interface (UPI) are already quite popular. The UPI is used by several banks and mobile payment apps. NPCI has several other products and initiatives. However there has been a dip in the digital transactions after remonetization in 2017. It is estimated that digital transactions constitute only 10% of overall transactions in terms of volume. With increase in smartphone penetration and reducing mobile data cost, there will be faster adoption of digital payments. The India digital payments industry is expected to be USD 500 Bn by 2020 according to a report by Google and Boston Consulting Group.

Alternative Lending and Capital raising

This is expected to be one of the most promising areas for growth in India. There is a huge unbanked population like small businesses whom the traditional banks do not finance. Additionally, there are a large number of SMEs and MSMEs who are credit hungry to meet their working capital needs and in need of short term financing. The Alternative lending space is targeting to cater to this segment with effective use of technology. Peer-to-peer lending (P2P), Crowd funding are most prominent under this category. The P2P lending startups offer online platforms to match lenders with borrowers. While traditional banks rely on credit scores from the credit bureau, the P2P lending startups use algorithms and integration with India Stack and Aadhaar. The credit profiling uses lot more data points (like social media) than that of credit bureau and tries to quantify not only the ability to pay but also intention to pay by the customer. Further, the entire credit profiling can happen in a matter of 30-45 mins enabling quick customer onboarding. The P2P lending is said to be a form of crowd funding but along with debt financing, crowd funding platforms raise equity capital too for startups. Many startups have partnered with banks and NBFCs for financing along with committing their own capital. For example, startup BillionLoans has partnered with Yes Bank and ICICI Bank. On the other hand, startups Kissht and EarlySalary are lending their own money instead of partnering with a bank. Some Fintech firms like KredX specialize in marketplace for invoice discounting to provide quick access to working capital.

In October 2017, the Reserve Bank of India (RBI) released guidelines for NBFCs to operate P2P Lending platform defining its scope of activities, transparency and disclosure requirements adding more clarity and legality to the business. Alternative funding is said to be the second most funded space from past few years. In H1 2017, Alternative Lending startups had raised about USD 50 Mn funding that includes MoneyTap, EarlySalary, LoanTap, ZipLoan and few others. According to Inc42 Datalabs, this business could grow up to USD 4 Bn - 5 Bn by 2023.

Wealth Management

One of the biggest beneficiaries of demonetization was perhaps equity markets. By November 2017, one year after the announcement of demonetization the Sensex and Nifty had gained 22% and domestic mutual funds had invested of Rs.1.17 lakh crores. It was never a better time for Wealth Management Advisories and along with traditional practices, Robo-advisory services have started gaining popularity. Investopedia defines Robo-advisor as "an online wealth management service that provides automated, algorithm-based portfolio management advice without the use of



human financial planners." The moot point is what it means to traditional players. Interestingly, automated advice generation has been around for quite some time. Asset allocation based on clients' personal, financial and risk profile data also has been in vogue for decades. However, it was mostly designed for use by advisors rather than the end-consumers. Robo-advisors take this to the next level where investors can directly access these services through the Robo-advisor platforms.

The financial advisory market is fast adopting these tools to reach out to the millennials who are expected to be inheritors of USD 2 trillion assets along with its accompanying growth. Roboadvisory platforms can be designed to serve this huge market cost effectively by offering it as an added layer to existing services for mass-affluent, HNI and UHNI clients. India, with the significant smartphone and data penetration, the introduction of Aadhaar based E-KYC, Jan Dhan bank account for all and big push to digital payment channel post demonetization, is opening gates for a more formal economy. Digital players like Paytm Money and others are eyeing a significant market share using the technological prowess, they possess.

Some firms like Clearfunds and Scripbox offer only Mutual Funds, whereas firms like Wixifi and FundsIndia offer Robo-advisory services for both Mutual Funds and Equity. Also players like Scripbox, FundsIndia have adopted traditional Mutual Fund distribution model and some others like Clearfunds and ArthaYantra have adopted Investment Advisory model by charging a fee to clients.

Pros and Cons of Using Robo-Advisors

Benefits	Limitations		
Lower Cost	Standardized offering		
Lower Asset Thresholds	Lack of personalized advice		
No errors, emotional bias and accurate – algorithm based	Incomplete Information (not meet high standard of care)		
DIY appeals to Millennials & self-directed users	Lack of personal interaction		
Greater Fee Transparency	Simplistic assumptions		

Insurtech

This sector is witnessing increasing interest from Investors with new players entering along with incumbent Insurers offering technology based solution. Insurtech is leveraging on offering customizing insurance solutions and reducing Insurers' costs. However, there is a good scope for technologies like Artificial Intelligence (AI) and Machine Learning (ML), big data and analytics, blockchain to contribute by bringing efficiencies in terms of customer on-boarding, claim settlements. US based startup Sureify offers a platform that connects Insurers with consumers' mobile phones, health and wearable devices and integration with social media and option to engage with them. They provide solutions that offer fast underwriting along with accurate risk assessment based decisions at the point of sale. There are also other business models like microinsurance that offers insurance for very small value or small time-frame and P2P insurance that pools premiums in a peer network to insure against a risk.



Currently, most funding in Indian Insurtech startups are online insurance broking/aggregators. Startups like Policybazaar, Coverfox fall in this category. The Insurance sector is bound by heavy regulation and the technology innovations must go hand in hand with opening up of regulations to facilitate new business models. As per The Economic Survey 2018, insurance penetration - the ratio of premium underwritten in a given year to the gross domestic product (GDP) in India is only 3.49% and is way below global average including China's which is at 4.77%. This shows that there is a huge opportunity for this space in India.

BankTech

FinTech is now driving an evolution in the existing business and operation models of banks, helping them cut down overheads. It is resulting in a pull model that targets customers irrespective of location. With technology eradicating physical boundaries, banks and financial institutions have also been able to supplement and boost services such as customer acquisition, online shopping, travel/entertainment services and more. It has led to the rise of Al-driven marketplaces where customers and banks are interacting in ways never seen before.

We are experiencing a digital shift in all walks of life. As we progress, Al will ultimately drive this shift with the ultimate goal of improving customer engagement and overall experience. These are two crucial factors measuring business success, and they can be perfected by implementing Al to study historical data with regards to customer habits and preferences. These actionable insights into the evolving new-age customer enable the service provider to differentiate themselves from the competition. Conversational Al (Chat bot that can interact at near human level) plays a key role here. What initially began as a simple customer response system has become a dynamic virtual assistant that every leading bank is implementing. HDFC OnChat and EVA, SBI InTouch, YES mPower, YES Pay Bot and Digibank are just a few notable examples.

Blockchain (Digital Ledger Technology) may have gained popularity from the context of crypto currencies. But there are other use cases that the financial institutions are leveraging this technology in the areas of smart contracts, settlements and trade finance. Blockchain offers complete and secure transactions without the need for central authority. They allow Peer-to-peer (P2P) transactions that are more efficient and secure when compared to existing technologies. The smart contracts can by itself execute, verify and enforce the performance of contracts and they can find their applications in trade finance, derivatives trading or into Robo-advisory services.

The RBI has suggested a roadmap for the adoption of blockchain in India, and has already conducted a proof of concept (POC) for Trade Finance, jointly with NPCI, SBI, PNB, HDFC, Citi Bank, Deutsche Bank and MonetaGo. In the last few years other banks like ICICI Bank, Kotak Mahindra Bank, Mahindra & Mahindra, Yes Bank and Axis bank have tested Blockchain use cases in partnership with other institutions.

RegTech

Regulatory Technology is still at a nascent stage but promises enormous scope of opportunities. Financial institutions spend enormously on regulatory compliance. The RegTech firms use technologies like cloud computing, big data, artificial intelligence and blockchain to help



financial institutions to comply with regulations efficiently and at a lower cost. They help monitor business processes, regulatory reporting, protecting customer interest and fraud detection. With the technology they have advantages like shared utilities between firms, advanced analytics that can interpret large amounts of structured and unstructured data and interactive technology (Robo handbook) that allows firms to understand the impact of regulations on their systems and processes.

FixNix is an Indian firm that partners with RBI and offers solutions in the area of Governance, Risk and Compliance (GRC) to institutions like co-operative banks, lending institutions and payment banks. The Indian startup space is expected to witness significant investments in this area.

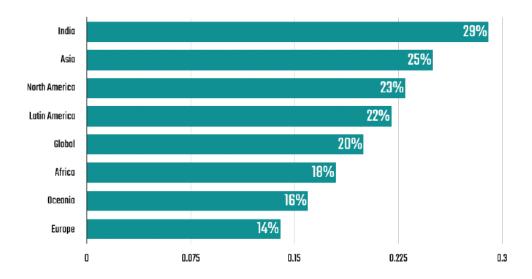
Conclusion

As some sectors within Fintech have reached some level of maturity there are other sectors that are still at a nascent stage and promise a huge opportunity in the Indian landscape. Mr. Kazi A Zaman, CFA, Partner at GestAlt Network LLP says "Lending and payments to the unserved bottom of the pyramid will be the big growth engines to my mind. Robo-advisory is already a cluttered space with sub-optimal unit economics". This is supported by rapid technological adoption by Indian consumers. As per an Ernst and Young report, which report are we referring here the Fintech adoption Index for India is at 52%, well above the global average of 33%. According to Price Waterhouse Coopers, Fintech investments in India offers an expected Rol of 29% against global average of 20%.



Kazi A Zaman, CFAPartner at GestAlt Network LLP

Expected Annual Rol on FinTech Investments



Source: Fintech Trends Report India 2017 – PWC and Startupbootcamp



While the innovations in Fintech space is expected to cause major disruptions in the financial services industry, some incumbent financial institutions view Fintech startups as partners and others as competitors. They are either collaborating with the startups or investing themselves in technology. Mr. Umesh V. Kudalkar, CFA, Director at Multi-Act Trade and Investments opines "I think smart Fintech Entrepreneurs might take off exponentially leaving the incumbent bureaucratic financial services firms behind. 'Collaboration wins over Competition' may be a politically correct statement but may not be a sustainable phenomenon. Smart Fintech Entrepreneurs may collaborate just for the sake of 'Proof of Concept' for raising Venture Capital Funding. Remember how in the 1980s ... startup Microsoft used incumbent IBM as a launch pad?". It is the innovation from Fintech sector along with strong support from Finance Ministry, Regulators and the Central bank that real economic benefit can be brought to the Indian population.



Umesh V. Kudalkar, CFADirector at Multi-Act Trade
and Investments

References

- Report of the Working group on Fintech and Digital Banking Reserve Bank of India
- Fintech Trends Report India 2017 PWC and Startup bootcamp
- Inc42 Datalabs reports

About Manish Jain

Manish is Managing Partner, Angaros Group, looks after the group's capital and investment businesses. A mechanical engineering graduate from Indian Institute of Technology, Madras and a CFA Charterholder, he has more than two decades of experience working in the Japanese and Indian Financial Services Industries.

About Manoj Khokale

Manoj works in the area of commercial strategy with Nokia Corporation and is a Fintech enthusiast. He has 18+ years of industry experience. He is an Electronics Engineering graduate, holds Executive MBA from T.A. Pai Management Institute and a CFA Charterholder.

About Jitendra Kumar

Jitendra is a CFA Charter holder and holds MBA from Alliance Business School. He has completed Executive Education Certification in Investment & Portfolio Management from IIM Bangalore. Currently, Jitendra works as an Investment Counsellor at SBI Exclusive and has a decade long experience in Investments management & Wealth management space.



P2P Lending- A Definitive Checklist

Industry Expert

Rajat Gandhi

(Founder and CEO of Faircent)

Interviewed by

Varsha Dhamasia, CFA (Communication Committee, CFA Society India)



Lending has existed for thousands of years and lately it has been integrated with technology to create one of the most innovative financial products of recent times, i.e., a technology driven marketplace-lending platform, online peer to peer ("P2P") lending, that has enabled creditworthy borrowers lower their cost of loans and individual investors to lend directly to their peers thereby earning higher returns. What makes online P2P lending even more rewarding as an investment is the fact that it offers lenders diversification options across multiple risk buckets. With the recently announced RBI's guidelines and the creation of a regulatory framework, online peer-to-peer lending is set to headline financial technology's growth story. To shed more light on this up and coming disruptive force in consumer lending, we reached out to Mr. Rajat Gandhi, founder and CEO of Faircent, one of the leading players in the Indian P2P space to share his insights. Read on below for this alluring conversation:

<u>Varsha Dhamasia</u>: What motivated you to enter the field of peer-to-peer ("P2P") lending? Please take us through your journey so far.

<u>Rajat Gandhi</u>: The idea of Faircent.com was born from a personal experience. A colleague used to borrow small loans from multiple other friends to fulfil his needs at a specific point of time. For example, he once wanted to buy a motorcycle and he had posted on Facebook requesting his friends and family for a portion of the funding, and in a week, he was riding his motorcycle to office. This incident, coupled with my knowledge and experience in building online exchanges previously (for Timesjobs.com, simplymarry.com, magicbricks.com), led to Faircent.com.

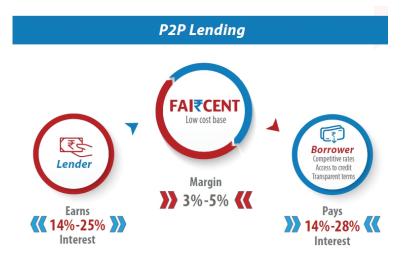
The idea was to build a tech-enabled platform that brought lenders and borrowers directly in contact with each other thereby removing the traditional intermediary like banks and other financial institutions. However, that was in 2011, and I felt that the ecosystem then was not conducive for a P2P finance platform. There were two big building blocks in making this business scalable and viable – Robust and credible Bureau data, which provides personal information on credit history and other details, and the second, Digital payments. The ecosystem for payments back then was still evolving. But in 2013, I felt that the time was more conducive to build a P2P business, so the company was incorporated and after spending, along with my Co-Founder & COO Vinay Mathews and Co-founder Nitin Gupta, close to a year in building the product, Faircent.com was launched in 2014.



We aim to provide cheap, easy and fast access to Borrowers and an alternative investment opportunity that delivered higher returns to Lenders. With more than 3 lakhs registered Borrowers, 30,000 registered Lenders and till date loan disbursals of INR 30+ crore, we feel we are on the right track to bridge the credit gap present in the Indian economy while providing an alternative assetclass to individual investors.

<u>Varsha</u>: Will you please explain Faircent's business model? What opportunities and challenges do you foresee for your business model vis-à-vis the competition both locally and globally?

<u>Rajat</u>: Faircent.com is an online Peer to Peer Lending marketplace that enables people to lend and borrow money directly, facilitating higher returns for lenders and lower interest rates for borrowers. This happens as Faircent.com removes banks & financial institutions from the middle and its customers get a part of the margins enabling them to get better value by transacting directly. Faircent operates on low cost online technology enable processes which enable it to considerably reduce the intermediary margins. Faircent.com charges Lenders and Borrowers nominal registration and processing fees for transactions conducted on its platform.



As the pioneer in the P2P lending space in India and the largest player, the biggest challenge that we face is that of awareness of the online P2P lending model amongst lenders and borrowers. Even though we have received phenomenal traction from borrowers as well as lenders across multiple regions, there still remains a very large section of the population which is not aware of the benefits that platforms such as Faircent.com enable. Faircent.com has been working towards this goal of facilitating large-scale financial inclusion and of establishing P2P lending as an asset-class that deliver returns that help investors beat inflation by tapping into hitherto less-explored geographies through various marketing and outreach initiatives.

The opportunity lies in the over 600 million people and MSMEs in this country that lack a credit record and are thus not eligible for credit from legacy financial institutions. These individuals and businesses need credit sometimes for very basic functions, such as sudden medical emergencies, business expansion or raw material procurement, but are unable to do so even if they have a substantial turnover. In such circumstances, the only recourse for them is to use offline options, which are usually very exploitative; such channels generally offer loans at extremely high interest rates and provide low repayment flexibility to borrowers. The untapped market of potential



borrowers in India is huge. This is where we step in. By using new technologies like AI and Big Data, we are able to cover a large segment of unbanked or under-banked credit-needy population of India.

At the same time, Faircent.com by providing lenders on the platform with a huge bank of preverified borrowers and varied loan products, tech-enabled processes that help them build diversified portfolios on the platform, is enabling more than 90% of the lenders to earn net returns higher than 18% p.a By offering predictable and stable returns, P2P lending is providing an opportunity to those with surplus funds to make their money earn more for them.

<u>Varsha</u>: P2P lending has been in India for only few years and already there are more than 50 companies operating in the field. How do you see the Indian P2P market to shape in light of competition and RBI's new guidance-making NBFC-P2P license compulsory?

<u>Rajat</u>: We feel that the regulations are an extremely progressive and a positive move. They will undoubtedly help online P2P lending platforms break forth into the mainstream financial market. It will usher in greater stability and credibility for the digital P2P lending model, thereby establishing it as a lucrative asset class like other market-linked investments such as mutual funds, SIPs, stocks etc. Over a period of time, the increasing awareness will also drive large-scale financial inclusion by facilitating easier access to credit for the country's unbanked and underbanked segments.

<u>Varsha</u>: Do you think there will be a limiting effect due to the borrower cap and lending cap imposed by RBI?

<u>Rajat</u>: In my opinion, the cap of Rs. 10 lakh on lenders is restrictive. In fact, diversifying investments across multiple borrower categories is the best way for lenders to maximize their returns on P2P lending platforms. Even if it's a cautionary move, the limit is too low and should be revised upwards.

The P2P lending business model depends on both lenders and borrowers, and, if sufficient funds are not available for lending, consumers will be driven to the unorganized sector, leaving them vulnerable to exploitation. This defeats the entire purpose of financial inclusion that P2P lending contributes to.

<u>Varsha</u>: Despite the P2P industry's existence for over 10 years globally, P2P firms have been grappled with issues such as frauds and delinquencies creating sustainability issues for P2P operators. How do you think Indian players and regulators are gearing to face this, considering Indian P2P market is still at a nascent stage?

<u>Rajat</u>: I feel RBI regulations will help. They have added credibility to the sector helping it in realizing it's true potential. Regulations require all existing platform to register with RBI as NBFC-P2P, thereby only legitimate P2P lending platforms will last. Also, as NBFC-P2P, online lending platform will report to credit bureau, which will help control defaults.

<u>Varsha</u>: How do you envisage P2P lending developing into a separate asset class?

<u>Rajat</u>: Lending is one of the oldest profession in the world P2P lending allows Lenders to invest surplus funds in loans. The annual returns from Saving Accounts are at 3.5% p.a., PPF & NSC at 7.8% p.a. and FDs at 7% p.a. These returns are lower or at par with the average inflation rate (6.07% p.a.). Real Estate requires very heavy investments, Stock Markets are extremely volatile and require investors with high-risk appetites, whereas Mutual Funds need long-term investments in order to generate high returns. In such a scenario, online lending allows Lenders to invest their surplus funds by lending



it out to people who need credit and are willing to repay the money lent with interest. The reasons for why P2Plending is doing so well as an alternative asset class are simple: attractive, predictable investor returns protected from stock market volatility; opportunity to diversify a portfolio with an alternative investment which was previously only available to institutional investors. The fundamentals of this asset class are extremely strong and will lead to its continued growth.

P2P Lending in comparison with other Asset Classes.

Criteria	Stocks	Equity Mutual Funds	Debt Mutual Funds	Fixed Deposits	Real Estate	P2P Lending
Returns	High	Medium	Low	Low	Low	High
Risk	Very High	High	Medium	Low	Medium	Medium
Monthly Income	×	~	~	~	~	~
Minimum Investment Required	Any Amount	Any Amount	Any Amount	Any Amount	High	Any Amount
Liquidity	High	High	High	Medium	Low	Medium

<u>Varsha</u>: What advice would you like to share with budding entrepreneurs?

Rajat: Think big and don't quit.

About Rajat Gandhi

A marketer, strategist, and brand builder with over 20 years of experience, Rajat Gandhi is the Founder & CEO of Faircent, India's largest peer-to-peer lending platform. As one of the earliest Internet professionals in India, Rajat has leveraged his extensive expertise in online and digital realms to pioneer the concept of online peer-to-peer lending in India and establish Faircent as the largest P2P lending platform in the country.

Rajat holds a Master's degree in Business Administration, and has been involved in launching and building online portals and communities as well as e-commerce, classifieds, and digital advertising businesses for some of the leading organisations in the country.

About Varsha Dhamasia, CFA

Varsha is a business valuation professional and presently works with KPMG Global Services. Previously, she has worked with Deloitte, EXL Services and Thomson Reuters. Varsha is an MBA (Finance) and a CFA Charterholder.



Gazing at the Crystal Ball: Blockchain & Cryptocurrencies

Industry Expert

Mr. Gautam Seshadri, CFA
(Co-founder of ZPX)

Interviewed by

Shivani Chopra, CFA

(Communication Committee, CFA Society India)





Rumblings about Blockchain and cryptocurrencies can be heard everywhere. The mysterious nature of valuation of crypto-assets, potential wealth generating opportunities, updates by the regulatory authorities, etc have all increased curiosity among the investor community. Companies here span key software or technology firms in the distributed ledger space, ranging from bitcoin wallets to security providers to sidechains. To shed more light on this nascent asset class, Mr. Gautam Seshadri, CFA –co founder of ZPX and an early adopter of Bitcoin shared his valuable insights.

<u>Shivani Chopra</u>: Blockchain is being considered as one of the most emerging technologies to watch. What is Blockchain technology and how it can be used in Fintech Industry?

<u>Gautam Seshadri</u>: Blockchain, simply put, is an immutable distributed transaction ledger which is decentralized. The transaction records in the blockchain cannot be altered, erased or tampered with. Unlike traditional databases, blockchain is not vulnerable to single point of failure risks as copies of the ledger are held by multiple users who can verify the transactions. This technology ensures complete transparency as it keeps track of all financial transactions and provides accountability and proof of who performed what transactions and when. The current infrastructure stack in the Fintech Industry is rife with intermediaries and middlemen, resulting in additional overheads and significantly long processing times. Blockchain technology and smart contracts can eliminate the need for intermediaries through automation and digitization as key tasks such as background verification and loan disbursement can be automated.

<u>Shivani</u>: While this technology has seen adoption in many countries especially in the western world, it seems to be in a nascent stage in India. Which categories of companies have started leveraging it?

<u>Gautam</u>: In the western world, blockchain and cryptocurrency innovation is growing at a breakneck pace. We are witnessing a considerable rise in decentralized alternatives for traditional centralized internet applications such as Facebook, AWS, etc. In the Indian context, blockchain innovation is primarily focused on digitization of outdated and antiquated business processes to improve their efficiency, lower costs and ensure transparency. Banking, Insurance and Manufacturing industries are the first ones to capitalise on blockchain technology, in addition to



government initiatives such as Digital India Land Records Modernization Program (DILRMP). With the help of technology giants such as Microsoft and IBM, Indian banks are making a concerted effort to truly push the envelope for blockchain adoption. The launch of Blockchain Foundation of India initiative reaffirms the belief that blockchain technology is truly disruptive and ensures that blockchain awareness and adoption increase in the near term.

<u>Shivani</u>: In the context of Indian landscape, what measures should be taken by different stakeholders to promote the growth of successful implementation of Blockchain in Fintech Industry?

<u>Gautam</u>: As internet and smartphone penetration increases in India, the Fintech space in India is expected to witness tremendous growth. Digital payments are expected to grow by over ten-fold over the next four years and blockchain technology can accelerate the process of digitization in India. As blockchain technology is still evolving and a relatively obscure field, more focus should be placed on educating various stakeholders and participants and improving awareness to bring blockchain innovation in India up to speed with global best practices. Forging symbiotic associations between banks and blockchain startups, the addition of blockchain related courses into academia and fostering blockchain development through VC investments will pave the way for an effective blockchain-powered Fintech landscape in India.

<u>Shivani</u>: Globally, trading in cryptocurrencies has gained a lot of attention. The market value of Bitcoin experienced a meteoric rise in 2017. But finance minister Arun Jaitley signalled a clampdown on the use of cryptocurrencies in the recent budget speech. Why is government indicating its aversion to them?

<u>Gautam</u>: Mr. Jaitley in his budget speech said that cryptocurrencies will not be an acceptable legal tender in India. This is perhaps because of growing concerns among global regulators that the anonymous nature of cryptocurrencies might fuel nefarious activities, such as drug trafficking and terrorist financing, etc. That being said, we think that the completely transparent nature of blockchain technology actually curbs illegal activities as all the transactions are recorded, are easily auditable and incorruptible. In addition, the volatile and speculative nature of cryptocurrencies might wipe out significant investor wealth in case of a market crash. So, the government's aversion towards cryptocurrencies should be viewed as an attempt to protect investors from investing in multiple scam cryptocurrency projects out there. India's reaction and likely regulatory approach seem broadly in line with what other major nations are contemplating.

<u>Shivani</u>: Which roles can CFA charterholders and members look for if they are interested in Blockchain/cryptocurrencies asset class?

<u>Gautam</u>: While cryptocurrencies have been in existence since the advent of Bitcoin in 2009, they only came to the fore and caught significant investor attention in 2017 driven by the meteoric rise in cryptocurrency valuations across the board. The proportion of institutional capital in the crypto asset class in comparison to other asset classes is very minimal. With the establishment of custodial rails for institutional inflows currently in progress, we expect a huge inflow of institutional capital into this nascent asset class over the next 18 to 24 months. The research, valuation and operational frameworks for investing in cryptoassets are still evolving and we expect numerous job opportunities in research and trading-related roles once the institutional money is ready to be deployed.



<u>Shivani</u>: What is the vision you have for ZPX? Any new initiatives that you would like to share.

<u>Gautam</u>: ZPX is a Singapore-based creator and operator of next-generation assets in the blockchain space. ZPX is in the process of launching 108 Token, a Crypto index token built on top of the Ethereum blockchain (ERC-20) that will dynamically re-adjust every month to the top 15 Crypto token assets basis ZPX's own proprietary, indexing methodology. The firm's tech platform initiatives are supported by a dedicated private markets and blockchain research and analytics division.

ZPX also has several other technology-powered initiatives in the pipeline that will seek to 1) tokenize traditional, illiquid, "fiat" assets such as private equity and real estate 2) build the infrastructure that will enable tokens to be freely transacted between consenting parties

About Gautam Seshadri, CFA

Gautam has over 15 years of experience in Investment banking, corporate strategy, entrepreneurship and venture capital. Gautam is a Co-founder of ZPX, a leading Singapore-headquartered investment & advisory firm in the blockchain and private technology space. He is an occasional angel investor, and serves as Advisor to several tech start-ups including Blowhorn, India's leading intra-city logistics company. He was an early adopter of Bitcoin, and closely tracks the burgeoning public crypto/blockchain asset class. Gautam is a BSc (Honours) graduate in Philosophy and Economics from the London School of Economics (LSE) and has an MBA from INSEAD. He is also a CFA Charterholder (USA)

About Shivani Chopra, CFA

Shivani has more than ten years of experience across investment management, corporate finance and training. A CFA Charterholder and Masters in Economics, she is a financial consultant at pharma startup named EOS Pharmaceuticals.



Technology: The Driving Force for Capital Markets

Industry ExpertVinayak Bhat, CFA(VP, Regional Sales Manager - FactSet)

Interviewed by

Rajni Dhameja, CFA

(Communication Committee, CFA Society India)



Technology is an important enabler for any business/ industry to thrive and capital markets are no different in this aspect. An investment management firm in capital markets business has various functions which span across research, pre-trade analysis, execution, asset allocation, portfolio management, risk management, post-trade analytics etc. For smooth running of these wide and intertwined functions, technology becomes an important enabler. Depending upon the size of business, certain functions are handled with in-house developed technology and for certain functions specific products which can handle these functions.

Since the end users of these products are investment professionals, this industry provides a unique niche for CFA charter holders. Considering this, we invited one of our fellow CFA charter holder Vinayak Bhat, CFA, who has crafted a successful career in this industry to engage in a dialogue with us through this newsletter. Vinayak Bhat, CFA is Vice President, Regional Sales Manager, at FactSet which creates software solutions for investment professionals.

Below is the exciting and insightful conversation with Vinayak.

Raini Dhameia: Which all are the industries to which FactSet caters to?

<u>Vinayak Bhat</u>: FactSet offers Enterprise solutions that comprise Market data, Analytics, Portfolio Management & Trading tools to a wide spectrum of firms in Financial Services industry. The clientele in the Institutional asset management space includes firms such as Mutual Funds, Insurance companies, Sovereign investment vehicles, Pensions funds, Hedge funds, Endowments, Foundations, Private Banking/Wealth Management firms, PE. The sell-side clientele includes Corporate Finance, Research, Sales & Trading, Treasury and the like.

<u>Rajni</u>: What are the functions for which your clients are looking out for support from external vendors like FactSet?

<u>Vinayak</u>: The broad categories where FactSet partners with its clients include Research, Portfolio Construction, Post-trade analysis, Risk Management, Order & Execution Management. Post-Trade Analysis and Risk Management are particularly popular in the Indian context.

<u>Rajni</u>: Do you face any reluctance from fund managers for first time decision to select a particular vendor/software especially for the functions like asset allocation or stock selection?



<u>Vinayak</u>: It is unusual to face resistance for use of tools in asset allocation/portfolio construction. However, we have had some scintillating debates on post-trade analysis and risk analysis. This is not because of the resistance to embrace technology, rather a consequence of an effort to reconcile different viewpoints and investment philosophies. E.g. – how can a fundamental, bottom-up equity portfolio manager use the insights from factor risk analysis to improve portfolio construction process? Such debates are very welcome and help enrich the environment for everyone.

<u>Rajni</u>: You have been a part of Factset for almost 7 years now, how you have seen this industry evolving over the period? Is there any correlation between the size of AUM and reliance on external vendors i.e. do the larger player prefer to handle the above functions with in-house development and vice versa?

<u>Vinayak</u>: The acceptance and the use of sophisticated tools for analytics has grown both in India and other parts of South East Asia. In India, the institutional mandates that the mutual fund firms receive give a fillip to greater adaptability of analytics. The rigorous internal processes for Performance & Risk management act as differentiators in competing for institutional mandates. The mutual fund market in India is predominantly retail driven. It leads to limited "pull" from the clients. However, there is an appreciation for the insights that analytical rigor brings to the table – helping to improve performance and reduce risk.

<u>Rajni</u>: We understand that FactSet has created solutions towards Factor Based investments. Would you like to share more about this and its propositions for Indian investors?

<u>Vinayak</u>: FactSet has made major investment to enable Factor based investing. FactSet recently launched cobranded ETF's with BlackRock and State Street Global Advisors. FactSet's offerings include two broad dimensions – one is unique content that helps select meaningful and differentiated factors. Second is a robust solution for back-testing the strategy and tweaking the investment philosophy. The Indian mutual fund market is predominantly active management oriented. Factor investing offers a very good avenue to create a differentiated product and the interest is on the rise.

Rajni: What are your views on changes which may be brought about by AI in this industry?

<u>Vinayak</u>: All and machine learning are transforming the industry in profound ways. Unstructured data that was earlier unusable is becoming usable in a structured and consistent way. Broadly categorized as "Alternative Data", these include data sets such as shipping data, satellite images, analysis of social media etc. Advances in Natural Language Processing have made it possible to parse quarterly calls and determine management "sentiment" (beyond just words). Many of our clients have started using such alternative data in portfolio construction.

Al and ML are making an impact in other associated areas – such as algorithmic trading, predictive analytics, deep learning. It is not possible to analyze elements such as the likelihood of a firm facing hostile takeover, supply chain vulnerability upstream or downstream, portfolio's geopolitical sensitivity to different regions etc.

<u>Raini</u>: Is the industry concentrated or fairly spread across various technology providers?

<u>Vinayak</u>: The market data and analytics industry is estimated to be worth about \$27 BB globally. A handful of international players possess the lion share of the market. There are many smaller providers that predominantly play in the domestic market. The industry is evolving through



consolidation, some players addressing the immediate adjacent functions – especially professional services, push towards open platforms enabling inter-operability of data and analytics across vendors.

<u>Rajni</u>: How a CFA charter holder can bring value to the table while pursuing a career in this area and what are the roles which one can expect to get into?

<u>Vinayak</u>: CFA charter is very beneficial in the industry. One would regularly deal with portfolio managers, research analysts, personnel in the Performance and Risk teams. A solid understanding of the industry and pain points of the practitioners goes a long way in having meaningful conversations with clients and prospects. This is true for most roles – across Consulting, Specialty, Product development and Sales.

<u>Rajni</u>: Suggestion which you would like to give our young aspirants who would want to consider the career in this kind of techno functional roles?

<u>Vinayak</u>: FinTech is a very fascinating field. Financial services industry is typically at the forefront of technology adoption. The advances in technology in conjunction with the developments in the financial services industry – both in terms of regulatory pressures and cost pressure open very interesting possibilities. Advances in Al and Machine Learning are opening new vistas and the technology would have a profound impact on FS industry; well beyond merely servicing the FS industry.

About Vinayak Bhat, CFA

Vinayak is Vice President, Regional Sales Manager, at FactSet. Vinayak is responsible for FactSet's business in South East Asia. Vinayak has been with FactSet for about 7 years. He has 15+ years of experience in the Financial Technology – working closely with firms in the areas of Asset Management, Wealth Management and Investment Banking. Prior to joining FactSet, Vinayak worked in consulting industry for about 10 years, based in New York. He is an Electronics Engineer by training (National Institute of Technology Surat), has Post Graduate Diploma in Management (PGPX, Indian Institute of Management, Ahmedabad) and a Charter holder of CFA Institute. Vinayak is based in Singapore.

About Rajni Dhameja, CFA

Rajni is a finance professional with an overall experience of over a decade in banking and capital markets industry. Currently she is working with ICICI Bank Ltd, in market risk management group, handling valuation and risk management of investments portfolio. Prior to that, she worked with National Stock Exchange of India Ltd. She is a Chartered Accountant by training and a CFA charter holder.



Promises to Keep: A Look at Digital Payments

Industry Expert

Krishna Hegde, CFA
(Senior Vice President - Innovations at Novopay)

Interviewed by

Ishwar Chidambaram, CFA, CIPM (Communication Committee, CFA Society India)





Any discussion on the role of technology in finance is incomplete unless it covers the revolution being witnessed in India in the domain of digital payments. India's progress towards a truly cashless society has received a major boost in recent times. This seismic shift has been propelled by factors like Demonetization, increased mobile phone penetration, the technological revolution in banking, etc. Adoption of digital payments received a major fillip when Prime Minister Narendra Modi launched the BHIM (Bharat interface for Money) application, which achieved a record 17 million downloads in less than 2 months. Other channels such as IMPS have witnessed phenomenal growth. The country's leading mobile wallet service provider boasts of a subscriber base running into hundreds of millions of regular users.

The critical role of the digital payments industry in fueling the nation's e-commerce engine is indisputable. We, therefore, requested our fellow Charter Holder, Mr. Krishna Hegde, CFA, to elucidate the phenomenon by sharing his views on the subject. Krishna has had a ringside view of the revolution in the digital payments industry. Krishna Hegde, CFA is Senior Vice President - Innovations at Novopay, a rapidly growing fintech company in Bangalore whose key businesses include a 50,000 outlets retail network and a next generation core banking software.

The following is the gist of the illuminating conversation with Krishna:

<u>Ishwar Chidambaram</u>: The digital payments landscape in India has undergone a massive transformation and is rapidly evolving as we speak. How do you see this transformation impacting the way we make payments in future?

<u>Krishna Hegde</u>: Adoption of digital and mobile payments has seen a huge upswing in India over the last few years. With the government putting in place effective common rails like UPI (Unified Payments Interface) that enable easy, instant bank-to-bank payments from any phone, I expect transaction numbers and value to continue to grow exponentially. The convenience of quick & reliable payments will also open up a number of use-cases ranging from micropayments for online content to innovative offline business models. Affordable smartphones, ubiquitous network connectivity and the secure government established payment rails have created a robust foundation and there is scope for significant further innovation in the payments space.

<u>Ishwar</u>: What are the challenges that you foresee for the digital payments ecosystem?



<u>Krishna</u>: The number of users who regularly use digital payments - say for at least 1 transaction a month, is well under 10% of the Indian population. If we need to expand this to say 20-30% over the next 3 years, there is a need for significant education about the convenience, reliability and safety of digital payments. The government's initiatives via BHIM are definitely helping and we have seen an upsurge in awareness & usage from Tier 2 & Tier 3 cities also. The challenge is to continue this push while further improving the ease of doing payments. Finally, the security aspects cannot be emphasized enough. Users need to know that their money is safe and in case of any issues - there is a quick and appropriate resolution.

<u>Ishwar</u>: Based on a survey by a leading consulting firm, "Ease of doing payments" is a major factor for users to move to digital payments. Can this be a key enabler to encourage rapid growth in digital banking/payments?

<u>Krishna</u>: 'Ease of doing payments' is definitely going to be a key enabler. With new players entering the digital payments market, we will see more innovation in user interfaces & flows that can help expand the user universe. The Ease of Doing Payments should be coupled with a reassurance of security. Whether through overt elements like password/PIN or through smart server-side intelligence, security is a hygiene factor and cannot be compromised.

<u>Ishwar</u>: Mobile instruments and smartphones are driving innovation and adoption of digital payments. How do you see this phenomenon playing out over the foreseeable future?

<u>Krishna</u>: Lower prices of smartphones & mobile internet connectivity have been a key factor enabling mobile payments. While consumers who switch to smartphones will start with messaging & content applications, innovation is likely to the subsequent cohorts to adopt digital payments sooner than previously. The tighter coupling of payments with messaging/content apps is likely to be a help adoption. In coming years, I also expect significant innovation in the offline world to reduce friction & enable digital payments. FasTag on highways is one recent example and we can see more of these across transportation and other frequent spend categories.

<u>Ishwar</u>: The wide prevalence of feature phones (as opposed to smartphones), especially in rural areas, makes it difficult to transact. How can we overcome these limitations?

<u>Krishna</u>: Feature phones remain a preferred choice in rural areas as well as among older people. While feature phones can use UPI to transact via USSD, the friction is high and adoption is likely to stay limited. Digital payments will likely spread faster if enabled through the assisted model with certain trusted individuals within the user's neighborhood having access to smartphones. Systems like AePS (Aadhaar enabled Payment System where a customer can make deposits/withdrawals from any account where Aadhaar has been linked) are likely to increasingly be the cash-digital interface for users who are not comfortable with mobile payments. Similarly, BBPS - the national bill payment system will enable digital payments of utility payments.



Conclusion

The Digital Payments industry in India is witnessing explosive growth and is poised on the cusp of ubiquity. To quote Robert Frost, the industry has "miles to go", and needs to be revolutionary (rather than merely evolving) in order to live up to its potential in ensuring India's continued progress. This can happen only by balancing the conflicting interests of its myriad stakeholders, leveraging technology to the fullest extent and making it accessible to the masses. To sum up, a lot is riding on the industry's ability to achieve a "creative disequilibrium" and transform the way we make payments.

About Krishna Hegde

Between July 2006 and Feb 2016, Krishna worked in various capacities in the research department of Lehman Brothers & Barclays. In his last sell-side role, he was Managing Director Asia Credit Research and was ranked in the Asset Magazine Hall of Fame for being among the top credit strategists in Asia for multiple years in a row. From Feb 2016 to Jan 2018, he worked at Paytm as Senior Vice President and established the lending, wealth management and insurance businesses.

About Ishwar Chidambaram

Ishwar is an MBA in Finance from IIM Calcutta and an MS in Industrial Engineering from SUNY Buffalo, USA. He also holds the CFA Charter and CIPM Certification. He currently serves as co-chair of the Communications Committee of the CFA Society India. He has over a decade of experience in blue-chip organizations like L&T, ICICI Bank and Credit Suisse, among others. Key areas of expertise include Corporate Finance, Private Banking, Investment Advisory and Wealth Management. He can be reached at ishwar.iimc@gmail.com.



Getting Smart With Algorithmic Trading

Industry Expert

Nithin Kamath
(CEO of Zerodha)

Interviewed by

Manoj Khokale

(Communication Committee, CFA Society India)





The use of algorithms in trading is in ever increasing trend. In the US and other developed markets, algorithmic trading constitutes about 70% equity market share, while India is not far behind at 40%. However, it is mostly restricted to Institutions with very little retail participation. There is a new class of retail investors emerging who are venturing into algo trading. Let's get some more insights on Algo trading from Mr. Nithin Kamath, CEO of Zerodha, discount brokerage firm.

<u>Manoj Khokale</u>: As a Brokerage firm you have been at the forefront using technological innovation in your products. What do you offer that enables algo trading for your customers?

<u>Nithin Kamath</u>: The term 'algo trading' is quite broad, and so there is usually confusion on what construes to be algo trading. We don't offer any algos or programs that can automatically take trades on behalf of a client. What we have done though, is open up APIs to all aspects of our business from account opening to trade execution. These APIs are today consumed by startups to build new age trading/investing experiences, and traders with programming knowledge to build algos.

Manoi: Who are your typical customers using algo trading strategies?

<u>Nithin</u>: Today the biggest consumers of our APIs are startups trying to build user experiences that can potentially get the next few million Indians to the capital markets.

<u>Manoi</u>: There are some regulatory concerns around algo trading today. Please tell us where we are with respect to that?

Nithin: Regulatory concerns are mainly around high frequency trading and not really algo trading. This was because not everyone could access exchange colocation services (where trading servers are placed within the exchange to be able to trade at high frequencies in micro seconds) and tick by tick data (TBT) feed. In a recent board meet, SEBI has approved exchange proposals on shared colocation services and free TBT data feeds. SEBI has also amended the penalty framework for order to trade ratio (OTR) penalties from the existing +/-1% to +/-0.75%. It is to ensure that high frequency traders don't unnecessarily place orders which never execute, clogging up the exchange infra.

Manoi: What is your advice to CFA Charterholders preparing for a career in Algo trading?



<u>Nithin</u>: To be an algo trader you not only need to have a trading strategy, but also have the programming knowledge to code it. Relying on someone else to code your strategy isn't really a great idea. If you really want to build a career in algo trading, you also need to learn the programming. High level programming languages like Python are extremely popular among algo traders. Picking up a course on one of these is a must.

<u>Manoi</u>: Rainmatter, an initiative of Zerodha, funds and incubates innovative fintech startups. Tell us more about it.

<u>Nithin</u>: As we grew as a business, we realized that we were like a big fish in a small pond. The retail capital market participation is extremely shallow. Around 5 million unique active direct equity investors and around 15 million through mutual funds. The real problem to solve in India is to get a lot more people to invest actively. As Zerodha, we have been focusing on being the best place if someone has an intent to execute a trade or wants to learn how to trade. But if we have to get the next 50 million to invest, it has to be about new age, niche experiences.

Through Rainmatter, we are trying to partner with startups who are looking at solving this problem. Not just through capital and our APIs, but also by allowing them to showcase the product to our huge client base and quickly validate the business idea.

About Nithin Kamath

Nithin had been a stock trader for over a decade before founding Zerodha in 2010, India's first discount brokerage, widely credited as being a disruptive force in the Indian broking industry. Today, Zerodha serves 7+ lakh clients and contributes a trading turnover of 2% daily.

With Zerodha, Nithin has worked relentlessly on solving the woes individual Indian investors face. On top of being extremely low cost, Zerodha is also the first Indian broker to offer investments completely free of charge and to introduce its investing platforms in several regional languages in rural India.

Nithin was the winner of 'EY Entrepreneur of the Year 2017 - Start-up'. In 2014, he won the CII "Entrepreneur of the year" award. In its annual business review, the Economic Times featured Kamath as one of the 10 Indian businessmen to watch out for in 2016, who will be most influential in their respective industries. Zerodha has also won ET Startup Award of the Year (Bootstrap) 2016 and most recently, Nithin was adjusted as one of the achievers in finance sector at BW 40 under 40 in 2017.

About Manoj Khokale, CFA

Manoj works in the area of commercial strategy with Nokia Corporation and is a Fintech enthusiast. He has 18+ years of industry experience. He is an Electronics Engineering graduate, holds Executive MBA from T.A.Pai Management Institute and a CFA Charterholder.



The Essential Guide To Robo-advisory Systems

Industry Expert

Srikanth Meenakshi
(Co-founder of FundsIndia)

Interviewed by

Jyoti Soni, CFA
(Communication Committee, CFA Society India)





Robo-advisory is a breakthrough in wealth management services, bringing services to a broader audience with lower cost compared to traditional human advice. Mr. Srikanth Meenakshi, co-founder of FundsIndia shares his experience and challenges of robo-advisory. As per Mr. Srikanth, key features of a robo-advisory service should be a) a service where human biases are removed from the generation of advice, b) a service where human interaction is kept at a minimum, if not absent, and c) a service where the portfolio can be serviced through its existence in an automated, hands-off, pro-active manner by an algorithm. The advantage to the customer from such an advisory system is that they get a personalized portfolio, a pro-active monitoring service, and a constantly up-to-date portfolio at a cost that's lower than employing a full-service advisor.

<u>Jyoti Soni</u>: Robo-advisory is the most talked about innovation in the investment world. What are the key features of robo-advisors and how do they work?

<u>Srikanth Meenakshi</u>: As with any industry terminology that gets into the popular vernacular, the term robo-advisory has acquired a variety of meanings. Originally, robo-advisory was meant to mean an advisory plan for an investor that was created by an algorithm, delivered through a digital channel, and, post-subscription, is maintained by an algorithm or a system. However, these days, robo-advisory has come to mean just any part of this equation. Typically, especially in the Indian context, robo-advisory is simply advice delivered through a digital channel, without a human presence. Some robo-advisory service providers go further than that and provide maintenance (reviewing, rebalancing, and re-allocating) services in an automated fashion as well.

From the customer's point of view, the key features of a robo-advisory service should be a) a service where human biases are removed from the generation of advice, b) a service where human interaction is kept at a minimum, if not absent, and c) a service where the portfolio can be serviced through its existence in an automated, hands-off, pro-active manner by an algorithm. The advantage to the customer from such an advisory system is that they get a personalized portfolio, a pro-active monitoring service, and a constantly up-to-date portfolio at a cost that's lower than employing a full-service advisor.

<u>Jyoti</u>: To what extent in-depth, goal linked investment-planning essentials are serviced by Robo-advisory firms?

Srikanth: Robo-advisory services shine at their best when they are employed to fulfil goal-linked investment plans. The reason for this is that when a financial goal is being serviced, there is a fixed time frame, a fixed amount (target) to reach, and many of such goals (like retirement and children's



education) have broad applicability across customer segments. So, such goal-based planning requirements are very well serviced by robo-advisory systems. The most important challenge with managing customer portfolio is to manage customer expectation and behaviour. In the case of goal-based portfolios, expectations are rational, time-frames are long-term, and the ambitions are specific. These factors make the intangibles lesser and easier to manage.

<u>Jyoti</u>: Please share your experience as the co-founder of FundsIndia on how you conceptualized the idea of Robo-advisory, your early stage and current challenges?

<u>Srikanth</u>: Robo-advisory services in FundsIndia have had an evolutionary path over the years. We launched our first such service in 2011 when we created and rolled-out our 'SIP designer' – an algorithm that would match an investor profile, time frame, and risk appetite to an SIP portfolio. The fundamental idea was to metricize the diverse and some times intangible factors such as risk profile and demographic profile of the customer, and arriving at a canonical formula to match it with the investment portfolio of comparable risk metrics. It took a lot of iterations to get it right, with tons of back-testing and simulations. But even this was only a one-time advice provision – a customer comes in, the system creates a portfolio, and it's done.

Since then, our robo-advisory service has come a long way. We have, over the years, launched a much more comprehensive system called 'Money Mitr', which does portfolio creation, portfolio monitoring, review, rebalancing, and asset reallocations as required. It also services SIP as well as one-time investments apart from providing portfolios for goal-oriented and wealth-building requirements. Today, we have the most comprehensive, in-depth robo-advisory system in the country that provides end-to-end system-driven counsel to our clients.

As for challenges, again, the most important challenge that robo-advisory services, especially in India, will need to encounter is managing customer behaviour. Down-markets are still perceived with some dread by investors and there's a tendency to withdraw from the market in such occasions. Robo-advisory systems, with limited ability to counsel clients on such occasions, tend to be passive onlookers as investors stop SIPs or withdraw money. In countries such as the USA, where robo advisory services are used for locked retirement accounts (like 401k accounts), this is less of a problem.

<u>Jyoti</u>: What are the main advantages of Robo-advisory over personal advisors to an individual investor for its portfolio management and financial planning? How the current wealth managers can grow their Robo-advice capabilities?

<u>Srikanth</u>: Robo-advisory services provide unbiased portfolios and pro-active monitoring of investments for a customer at a low-cost. For a wealth manager, the prime benefit of using a robo-advisory solution is to achieve scalability of their services and acquire an ability to service in order-of-magnitude more customers with the same bandwidth they have today. They can grow their robo-advisory capabilities either by employing a small but agile tech team (outsourcing is an option), or by adopting an existing platform that provides such services.

<u>Jyoti</u>: How effectively do you think Robo-advisory services can address emotional biases of Investors, for example, panic reaction of Investors during market downturns?

<u>Srikanth</u>: As I remarked in an earlier answer, this is the most difficult aspect for a robo-advisory service to tackle. Managing investor behaviour is hard enough for a regular human advisor, especially in market downturns. It becomes significantly harder for an automated system. Solving this via creative communication efforts and persistent education of customers is the only viable, long-term solution. There's no magic bullet solution for this problem. Either we can let the market place evolve by itself in terms financial literacy, or we can pro-actively educate people about the wisdom of staying invested. This will take time, energy, and a lot of creativity to solve. On the flip side, any entity that solves this problem effectively will have a huge advantage in the market. These days, gamification is



put forth as a possible solution for this. One has to wait and see.

<u>Jyoti</u>: How significant is the impact of Robo-advisory on wealth and portfolio management job market today and expected to unfold going forward.

<u>Srikanth</u>: Understanding and being aware of these services – what they are, how they work, how the algorithms are conceptualized, what problems do they solve, what problems they don't – would be very important for any aspirant entering into the wealth management space as a candidate for a job. This is a must-have in the technology arsenal of every candidate. There are only two kinds of good companies in the wealth management space today – ones that are already into robo-advisory space and ones that will be into it in future. In either case, a candidate walking in with solid knowledge of these principles will stand a good advantage over those who don't.

<u>Jyoti</u>: How CFA Charter holders primarily wealth advisors and financial planners can seek new opportunities in Robo-advisory. What is your advice for Fresher CFA Charter holders to build and grow their career in this field?

<u>Srikanth</u>: The simple advice I would provide to such people is to suggest that they imagine themselves as running an advisory service that provides advice for a million customers. They have to create personalized portfolios for each and every one of these people. How would they go about doing it? What thought process would it need? What kind of solutions would be successful? Also, think about it from the perspective of a customer – what kind of solution would be satisfactory for them? What would make them happy and feel that they are being serviced properly? Answering these questions would lead them naturally to the doorsteps of an automated system for advice provision and portfolio monitoring. Once they start thinking in terms of solutions, they can evaluate the options in the market and see how different entities in the industry are tackling these problems and will raise their understanding of this field.

Robo-advisory services are trying to solve a hard problem – the problem of providing good, unbiased advisory services to a lot of people in a scalable manner. It is not a fully solved problem and there is a tremendous opportunity for furthering the existing crop of solutions towards an optimal result. CFA charter holders will do very well – both for themselves and for the marketplace – if they apply themselves to this area and create further innovations.

About Srikanth Meenakshi

Srikanth is one of two founders of FundsIndia, a digital platform for mutual fund investors that services more than 2 lakh customers across the country. The company has more than Rs 5200 crores of assets under advisory. Srikanth started his career with IBM Global Services in USA, and moved on to a start-up online brokerage platform – Folio Investing. This platform pioneered several innovative concepts in the personal financial industry such as basket trading, fractional ownership and personal folios. After Folio, Srikanth worked in Fannie Mae, the largest rm in the secondary mortgage market in USA, where he specialized in the securitization and capital markets divisions. He received his Masters degree in Computer Science from the Oregon Graduate Institute in Portland, Oregon.

About Jyoti Soni, CFA

Jyoti is a Senior Finance Expert in IGH division, KPMG India. An Engineer and MBA by qualification, she has rich experience in equity fund raising, mergers & acquisitions.



Primer on Pathways to Digital Banking

Industry Expert

Deepak Gupta, CFA, FRM

(Country Head - Saxo Group, India)

Interviewed by

Shreenivas Kunte, CFA
(Director of Content at CFA Institute)





Technology has been forcing disruptive changes in the ways we conduct business. Products and services are now finding their way to the doorsteps of the customer, instead of the other way around. Financial services and banking mainly deal with information exchange. These sectors have been among the early adopters of state of the art technology driven changes. Deepak Gupta, CFA, in this interview, provides comprehensive insights on the digitalization of the banking sector.

Shreenivas Kunte: Please can you share an overview of the digital banking market place?

<u>Deepak Gupta</u>: Founded in the year 1992 in Copenhagen as a small phone-based broking firm Saxo saw the opportunities in the internet at an early stage and launched its first online trading platform in 1998, effectively becoming a Fintech long before the term was created. Since launching an FX trading platform in 1998, Saxo Bank has extended its product reach to multiple asset classes, global markets and more than 35,000 tradable instruments. Saxo sources liquidity from 15 large global banks, 85 exchanges and trading venues. In sourcing liquidity, Saxo Bank partners with the best of the best "We have been establishing relationships with the biggest global banks and with the relevant liquidity and trading venues with our technology to enable the democratization of trading and investment", says founder CEO, Kim Fournais.

Saxo packages that unique market access with technology, including hosting, development and the delivery of open API solutions. Its online trading and investment platforms are available in 28 languages and offer investors the ability to trade on mobile devices and desktops. As an enabler, Saxo also white-labels its trading technology to other banks and brokers and supports the full digital value chain delivering "Banking-as-a-Service". On that basis, Saxo's award-winning technology forms the technology backbone of more than 100 financial institutions worldwide. With a more competitive landscape than ever before, people are seeing the pressure on margins and the importance of having a better business model. With its partners in liquidity and distribution, this is where Saxo vows to make a difference. As Kim Fournais puts it "it is important for people to understand that if they want a long term sustainable business, they have to develop a win-win relationship with their client". In order to cope with regulation, technology plays a massive part because you have to have digital audit trails. Regulation will force the technology agenda, hygiene levels and operational efficiency among institutions".



Shreenivas: Tell us about key players in this industry.

<u>Deepak</u>: Several providers offer online trading options, but the ability to trade global capital markets on a multi-asset basis from a single account is unique to Saxo.

Shreenivas: In how many locations do you serve?

<u>Deepak</u>: We serve customers in more than 170 countries and has offices in 16 countries.

Shreenivas: How do you thinking banking will evolve in the next decade or so? What about India?

<u>Deepak</u>: As I see Banking landscape is changing at a very fast pace. New technologies like Open API, Blockchain will change the whole customer experience faster than many expect. India is a bit behind the technology adoption but is catching up very fast.

Shreenivas: What are the types of competitive strengths required to run a digital bank?

<u>Deepak</u>: I would say first thing required is thought leadership to set the vision for what the future banking technology would look like. At the same time, you need technical experts to convert this vision into reality. Time is money and hence it is of utmost importance that we make the right move in right time to stay ahead of the competition.

<u>Shreenivas</u>: What are some of the biggest risks digital banks face?

<u>Deepak</u>: "Technology". It is changing at such a fast pace that by the time you implement a new technology it may be already obsolete. So, selecting the right technology and its relevant implementation is important.

Shreenivas: What challenges do you foresee to your business model?

<u>Deepak</u>: As a fully digital operation, we need to ensure that we are always ahead of the technology curve and as other financial institutions. We also face potential challenges from market disruptions and geopolitical risks.

Shreenivas: What career opportunities do you envisage for charter holder members

<u>Deepak</u>: Career opportunities are ever growing for charter holders. Many companies are moving more Analysis work to India. New regulations are putting pressure on Financial Institutions adjust or re-configure the product offering. Less than 1% people in India do financial planning. This is the biggest space where the charter holders can start helping Indians plan their Financials.

About Deepak Gupta, CFA, FRM

Deepak Gupta is the country head of Saxo Group, India and a board member of Saxo India and IDBA (Indo Danish Business Association). He holds a Bachelor's degree in Science from the University of Delhi, PG in Computer Applications and is also an MBA from Faculty of Management Studies, Delhi University. Deepak has more than 22 years of industry experience in Banking Financial Services Industry. In his present role as the country head of Saxo Group, India he manages the entire India operations.

About Shreenivas Kunte, CFA

Shreenivas is Director of content at CFA Institute and an external research scholar at the Indian Institute of Technology Bombay. Previously, he taught at and managed SP Jain's Trade and Applied Research lab, which he helped found. Kunte also served as a country trading strategist at Citigroup's Tokyo office.



First Among Equals: HDFC Bank's Approach to FinTech

Industry Expert

Nitin Chugh

(Country Head - Digital Banking, HDFC Bank)

Interviewed by

Larry Cao, CFA

(Director of Content at CFA Institute)





As FinTech gets more popular by the day, the response from banks, and more broadly, the financial services industry, is an import factor in determining the industry's future. We recently had the opportunity to speak with Nitin Chugh, country head, digital banking at HDFC Bank, the largest private sector bank in India, and discussed their approach to FinTech.

Larry Cao: What areas of FinTech has HDFC been actively engaged in?

<u>Nitin Chugh</u>: We started our early engagement in payments three years ago and launched a UPI-IMPS based app. There are so many people trying to get into payments so the area will remain active for a while. What's significant now is that tech giants such as Google and WhatsApp are also getting into the business. There are very few solutions accepted on the merchant side, so there is a lot of consolidation going on. Most recently, the bank is focusing on (1) artificial intelligence, with applications in loans, process, and risk management, and (2) customer experience, in analytics and real-time marketing.

<u>Larry</u>: Let's talk about mobile payments first. Has this been a growing segment? Are FinTech firms taking market share from banks?

<u>Nitin</u>: Mobile payments is an evolving space. Some players will dominate the segment for a variety of reasons. Some have been able to scale up while many have not. Some players are targeting mostly the underserved segment and so they are not in direct competition with the Banks.

Since UPI was launched in India a year ago, banks have been handling most of the transactions on the platform, including for third-party payment service providers such as Google. So banks are growing their business on their own and through partners such as Google.

<u>Larry</u>: What are your thoughts on applying artificial intelligence in finance?

<u>Nitin</u>: We are pursuing AI at the strategic level, not at a use case level. In my opinion, AI can not only be applied in customer service, but also in the customer onboarding, transactions, risk management and internal processes such as hiring.

There are obvious areas such as customer service where AI makes sense, for example chatbot applications. However, if an organization wants to look at AI at a strategic level, they need to go beyond simply focusing on one or two applications. When we work with partners, we do not limit



them to one or two use cases.

<u>Larry</u>: You mentioned the other area of HDFC's focus now is customer experience.

<u>Nitin</u>: Digitization can make the customer interactions very impersonal. So, improving customer experience is very important. We endeavor to create highly personalized and contextualized conversation and recommendations for our customers.

Larry: How do you typically work with your technology providers?

<u>Nitin</u>: It is a model of partnership. We don't acquire the fintech startups. We allow start-ups to work in ways which they are most comfortable with. In turn, we can partner with many more fintech firms than if we acquire or incubate a small number of them. We also work with universities. The solutions could also have come from large technology companies but, in our case, our partners in the past few years have mostly been fintech startups.

Larry: More specifically how do you work with your partners through the product cycle?

<u>Nitin</u>: In most cases, the start-ups will have 3 months for their products to scale up. If they do not after 3 months, the product needs to show it has the capability to succeed.

60% work and 40% don't work. When they do not work, it's usually because they do not scale up. There could be customer acceptance issues, technology issues, or challenges internally.

<u>Larry</u>: Banks have historically faced the challenge of effective communications between the business lines and the internal IT department. What's your experience?

<u>Nitin</u>: HDFC Bank has professionals on the business side who understand technology and vice versa. They are obviously the experts in that area that you can lean on. It's critical that we speak the same language. Then you get the experts from the technology, business, marketing, and compliance etc. in one room to make sense of all things.

Oscar Tai contributed to this article.

About Nitin Chugh

Nitin Chugh is currently the Country Head - Digital Banking at HDFC Bank. He is also responsible for the Digital Marketing and Acquisition functions, Phone Banking, Outbound Customer Contact Center and the Virtual Relationship Manager channel. Nitin has been with HDFC Bank for 17 years in various leadership roles. He is an engineer and an MBA by qualification with 25 years of experience across office automation industry and retail banking.

About Larry Cao, CFA

Larry is director of content at CFA Institute, where he serves as a thought leader for Asia-focused content, events, and conferences. Previously, he has served at HSBC, People's Bank of China, Munder Capital Management and Morningstar. Cao was a visiting scholar at the MIT Sloan School of Management and holds an MBA from the University of Notre Dame.



Disruptive Innovations in Fintech Lending

Industry Expert

Shalabh Singhal, CFA
(Co-Founder & COO, ZipLoan)

Interviewed by

Sandeep Gupta, CFA
(Head Comm. Projects - Britannia Industries)





The fintech space has seen a number of startups in the past few years in India. Many have gone on to become marquee names with stupendous valuations. There are opportunities across the spectrum. Established firms and startups in diverse businesses like retail, cab aggregators, messaging services etc. are now extending into payments. The industry has seen a number of acquisitions of new start-ups by the larger players in the ecosystem at multi-bagger exit multiples for the initial investors and founders. All these developments are fuelling the dreams of wannabe entrepreneurs who are looking to realize their aspirations. We caught up with Shalabh Singhal, CFA, co-founder of Zip Loan, a Fintech startup focused on MSE Loans to understand more on the entrepreneurship journey of a Fintech Start-up.

<u>Sandeep Gupta</u>: Can you give a brief overview of what ZipLoan does and the problems it solves? What made you choose this? What is the market landscape for SME Loans?

Shalabh Singhal: ZipLoan is a fintech lender with a single point focus on solving financing needs of small businesses (MSEs) by leveraging upon technology and astute understanding of special needs of this segment. ZipLoan is registered as NBFC-ND and regulated by Reserve Bank of India. Given the manual underwriting approach, MSE as a segment had unfavorable unit economics for most Financial Institutions (Fls). This led Fls to neglect this segment for long and private money lenders dominated this space till now with extortionary market practices. The growing adoption of mobile internet by MSEs and digitization of transactions have made fintech startups well-positioned to crack this problem. More than 95% of MSMEs are either unserved or underserved with \$ 250 Bn of financing deficit as per the 4th MSME Census, 12th Five Year Plan, Govt of India.

<u>Sandeep</u>: How does Ziploan market its products or services?

<u>Shalabh</u>: ZipLoan sources its customers through multiple channels including Digital, Referrals, Corporate Partnerships and Channel Partners.

<u>Sandeep</u>: Can you share your story? What made you take the entrepreneurial plunge. How has the journey been and where do you want to be?

<u>Shalabh</u>: Businesses and entrepreneurship have excited me since my teens. After completing my Engineering from IIT-BHU, I joined Goldman Sachs. But I realized it soon that what really drives me is to build an Enterprise and solve problems for masses in India. Rather than waiting for long to take the plunge, I decided to start early. So I quit Goldman Sachs and launched my first venture in Sales



CRM space where we served SMEs from multiple industries. After successfully running that business for 4 years I decided to take on a bigger challenge and that's the time when I started ZipLoan. Entrepreneurship for me has been a roller coaster ride but it has been worth every moment. Now my only focus is to build ZipLoan into a great Institution.

<u>Sandeep</u>: Who are your co-founders and how do the dynamics between them work? What advice do you have for a founder on ideal co-founders?

<u>Shalabh</u>: I have one co-founder at ZipLoan. We have divided our responsibilities at ZipLoan with clearly defined KRAs and work closely on key decisions for ZipLoan. The ideal co-founder(s) is someone with complementary skill sets and a person whom you respect for his work ethics. It is best to have 2 or at maximum 3 co-founders in any startup.

<u>Sandeep</u>: What do you see are the principal risks to the business and its sustainability?

<u>Shalabh</u>: One of the risks in lending industry is of aggression by few FIs that lead to over-leveraging in the industry.

Sandeep: How did you fund your venture?

<u>Shalabh</u>: We funded our product development, operations and growth through Equity capital raised from VC funds. For our loan book, we use debt capital and co-lending capital lines available to ZipLoan from different Fls.

<u>Sandeep</u>: Can you shed some light on your unit economics? What are your thoughts on equity dilution to investors and employees.

<u>Shalabh</u>: ZipLoan is targeting 8-9% RoA on it AUM. We (founders) at ZipLoan believe that the Investors and Employees are partners in the business and we don't treat it as pure Equity Dilution. To build an Institution, you need a great team by your side and offering them equity in the business keeps their interests aligned with the founders.

Sandeep: What advice would you like to share with budding entrepreneurs?

<u>Shalabh</u>: Start early and keep learning from others i.e. mentors, professionals in your industry, books, investors, your employees etc. Also, your attitude and hard work matter most in whatever you do.

Conclusion

With a huge market with under-served customer base, IT prowess, the increasing data penetration and attractive demographic profile, the sector has the potential to spawn a number of successful Indian entrepreneurial ventures capitalizing on unique opportunities to create value.

About Shalabh Singhal, CFA

Shalabh Singhal, CFA is co-founder of Zip Loan, a Fintech startup focused on MSE Loans. Shalabh had earlier founded Credence, a CRM, Digital Marketing and Sales Solutions startup for SMEs. Prior to his entrepreneurial journey, Shalabh was part of Goldman Sachs Asset Management team. He is a B-Tech (Electrical) from IIT BHU and a CFA Charter Holder.

About Sandeep Gupta, CFA

Sandeep is Head of Commercial Projects at Britannia Industries (Wadia Group). A aspiring Fintech Entrepreneur, he has more than 20 years of experience in diverse industries and domains. Sandeep is also a volunteer at the India Fintech Conference 2018.



Cover Story

The Three Stages of FinTech

Larry Cao, CFA (Director of Content, CFA Institute)



FinTech has taken the financial services industry by storm.

According to Google Trends, current interest in FinTech globally is ten times as high as that three years ago. There's been much talk about disruption, particularly earlier in this period. So how would fintech develop? Would it replace or enhance the financial services industry? Hanging in the balance is far more than the FinTech start-ups' future.

Over the last two years, we spoke with many financial institutions, fintech entrepreneurs, regulators, researchers, technology companies, and venture capital investors across the Asia Pacific region. We believe there are clear patterns emerging in fintech's growth, both in terms of the popular areas of activities and in the stages of development.

Stage 0: The Pre-FinTech Years

Recall how everything looked before FinTech came onto the stage?

The IT departments at financial institutions have universally been big spenders. The money went to not only hardware vendors such as IBM and EMC and software vendors such as Fiserv and Oracle but also IT service vendors in addition to in-house teams.

Money could not buy happiness though, at least not in banking IT. The regulatory and security burden makes it extraordinarily hard to update systems at a financial institution. Often management would have to sacrifice user friendliness out of concerns that putting in a new system could give rise to compatibility and system stability issues. Financial institutions have also been complacent in the high margins they get in serving the top clients such that they have not been aggressive as a group in serving the un-banked and under-banked.

Typical Stage 0 Companies: Financial institutions. They purchase and develop technology solutions at their will.

Stage 1: The Early Days

Some entrepreneurs smelled opportunities. They wanted to offer services with Improved user friendliness. They also wanted to leverage low-cost technology solutions to reach out to the



Cover Story

unserved and underserved segments, which financial institutions were not able to cover profitably.

Peer-to-peer lending, mobile payment, and robo advice are the three areas with the most activities around the world in the early days of fintech development. The U.S. was unequivocally the leader in this stage, with many pioneers entering the fintech businesses before the term fintech was even coined. PayPal, Betterment, Wealthfront, and Lending Club are examples of early movers in these businesses.

By and large, major financial markets in APAC entered Stage 1 around 2015-2016. China has clearly been the leader in the region, where current FinTech leaders such as CreditEase, Lufax, and Ant Financial (AliPay) opening doors for service largely around the same time as the U.S. FinTech pioneers.

Typical Stage 1 Companies: FinTech start-ups and VCs. Together they have created much buzz and disturbed the sweet dreams of a sleepy industry. The disruption talk was overblown though. In most markets, successful FinTech start-ups, such as the ones we mentioned, have chosen to serve the unserved and underserved. For example, CreditEase lends mostly to borrowers that banks would not lend to; AliPay entered the market only because lack of payment services became a hurdle for its e-commerce parent Alibaba to grow.

Stage 2: The Power of Collaboration

The most significant development that signals the entry into stage 2 for a market is the active collaboration between powerful players from both the financial services and technology sectors.

We hypothesized that "the collaboration between powerful fin and powerful tech is the most promising path to powerful fintech" in May 2016. Since then we have seen some high profile announcements, such as the closely-watched deal between ChinaAMC, a Chinese mutual fund, and Microsoft on AI first announced in June 2017 and a similar one between Bank of China and Tencent.

Although this is still in early stages, we believe this type of collaboration is promising for three reasons:

- 1. Mutual respect: Stage 1 is marked by the mutual "despise" of financial service executives and technology innovators. The start-ups can fall victim to their own disruption dreams. Financial institutions, on the other hand, do not believe start-ups know the first thing about finance. Starting down the collaboration path alone is significant as it indicates that both parties have come to realize that they can help each other.
- 2. Domain expertise: The fundamental reason is of course success in both finance and technology requires deep expertise built up over time with a variety of entry barriers, or "moats". Equal partners may benefit from the balanced perspective and access to domain expertise.
- 3. Culture: Both fin and tech professionals agree that their corporate cultures are dramatically different. Partnerships allow them to work together without having to adopt the other party's culture.

For anyone still in doubt, the recently announced joint venture between Amazon, Berkshire, and JPMorgan should hopefully put it to rest.

Typical Stage 2 Companies: Leaders in financial services and technology.



Cover Story

Stage 3: Nirvana

The financial services industry is clearly in transition. We believe that, in the end game, the industry will be dominated by linkups between powerful financial institutions and powerful technology innovators. They have an edge in resources and expertise compared to the average firm in their respective industry. And thanks to the FinTech start-ups, they've also now got motivation.

A small number of FinTech start-ups will also make it to the finishing line. We do want to remind future entrepreneurs that the financial services industry is not retail. It is probably the industry with the strongest moat. Aside from the inhibitive customer acquisition cost and heavy regulation, gaining a customer's trust that she'd allow you access to her money is far more challenging than getting her to surf your online store.

It's hard to predict when the legacy systems will be completely phased out. A more likely scenario is that customers will move their businesses to successful Stage 2 and Stage 1 companies over time that eventually firms running the legacy systems will become unprofitable. (A point of clarification is that we see Stage 0 - 2 companies coexist in a market. The stage a market is in can be defined by the most advance stage company in that market.)

A technology luminary has famously said, "We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run." We believe it applies equally to the case at hand. Although we believe collaboration is the name of the game at this point, the risk of long term disruption is real. Fintech players worldwide will serve their shareholders, clients, and employees well by actively plan and execute a strategy that will improve their chance of success through the three stages of fintech development.



8th India Investment Conference – Growth Conundrum, Opportunities and Threats in 2018



It was a great gathering of luminaries at the 8th India Investment Conference at Mumbai organized jointly by CFA Society India and CFA Institute in Mumbai on January 12, 2018. The event was very well crafted around its title – "Growth Conundrum, Opportunities and Threats in 2018". It started with the presentation by Rupal Bhansali, CIO of Ariel Investments, on Non-Consensus Investing. This was followed by Richard Koo, Chief Economist at Nomura Research Institute, who explained the other half of macroeconomics not dealt by conventional economists & academics, a phenomenon he refers to as balance sheet recession. James McGregor, Chairman of APCO (Beijing) Consulting Company, discussed the Geopolitical Landscape in Asia as China Expands and America Retreats. The event brought in Carla Harris of Morgan Stanley who explained what it takes to succeed in the organization. Lastly, Anil Gaba, Professor of Decision Sciences at INSEAD presented on Illusion of Control and its impact on Judgement while dealing with Risks and Uncertainty.

Like in the past each of the speaker sessions was moderated by the industry experts and practitioners like Sunil Singhania CFA, Global Head Equity at Reliance Capital, Navneet Munot CFA, CIO, at SBIMF, Jayesh Gandhi CFA, President CFA Society India and Senior Portfolio Manager at Aditya Birla Sun Life Asset Management, Madhu Veeraraghavan, Director, TA Pai Management Institute, and Anil Ghelani CFA, Director CFA Society India and Senior Vice President DSP Blackrock.

IIC18 was co-chaired by Sonia Gandhi CFA, Director CFA Society India and Anil Ghelani CFA, Director CFA Society India. Opening Keynote address of IIC18 was presented by Amit Khurana





CFA, Director CFA Society India and Nick Pollard, MD, Asia Pacific, CFA Institute. Paul Smith CFA, President and CEO, CFA Institute gave global insights on the investment industry and roles of CFA charter holders in shaping the industry. The conference was wrapped up with closing remarks by Vidhu Shekhar CFA, Country Head, CFA Institute India.

Apart from the participants, the corporate supporters of the events were Flame University as Academic Supporter; TAPMI as Platinum Sponsor; CMT, DART, MSCI, Morningstar, SBI Mutual Funds, S&P BSE Indices and Wiley as Silver Sponsors; Bajaj Allianz as Delegate Bag Sponsor, Thomson Reuters as Lunch Sponsor; Aditya Birla Sun Life Mutual Fund and Reliance Mutual Fund as Delegate Sponsors respectively.



Risk and Uncertainty: Illusion of Control and its Impact on Judgements

Contributed by: Chetan Shah, CFA, Secretary - IAIP



Speaker: Anil Gaba, Professor of Decision Sciences and the Orpar Chaired Professor of Risk Management Academic Director, Centre for Decision Making and Risk Analysis, INSEAD

Moderator: Anil Ghelani, CFA, Director, IAIP

One of the vocal critiques of the practices in investment banking and management industry across the world, Anil Gaba is also one of the most invited ones at such conferences. That's because he speaks the facts as he sees them, as against the industry practices of showing self-fulfilling and self-serving best data fits and illusion of control. Spyros Makridakis a leading authority in data sciences has been carrying series of competition on prediction. To everyone's surprise, he found that complex models fit the past data very well, but when it came to predicting the future, the simple naïve models do far better than the sophisticated models.

Professor Gaba showed the results of the futility of some of the studies like those in medical sciences where there is a tendency to correlate any disease or weakness to various activities or non-activities. Ezekiel J. Emanuel an oncologist and White House advisor, said that the annual health check-up plans are totally useless as studies have shown that they did not reduce overall mortality or specific causes of death from cancer or heart diseases. The PSA tests for detection of Prostate Cancer were removed because of the futility of those tests. Another case in point is the activity of running. Though as a group of runners gained three extra years of life compared to adults who never ran, the benefits were the same no matter how much or little people ran. Yet a trillion-dollar industry thrives around treatments and supplements. Likewise, the narrative of the number of



deaths on account of obesity kept reducing from 2,60,000 to 26,000 to even lower over a period of time.

There was one person called Klaus who believed in removing all kind of risk from life. He maintained a diary for most of his activities like how much time it takes for him to reach his office desk from home taking the subway. Based on the data developed he grew confident of predicting the time it takes for him to reach office. Once he was planning a vacation with his family. So, he started studying all the airlines including records like the number of accidents, almost 9 months in advance. Finally, he booked his flights and reached his destination. And based on his probability he reached safely. One afternoon after the lunch he lay down on the beach below the tree. Unfortunately, a coconut fell on him and he died! This is what Prof. Gaba described as "Subway Uncertainty" and "Coconut Uncertainty" with the former representing the known risks and the latter the unknown risks.

All through the examples Prof Gaba conveyed one common message – Be mindful of Illusion of control as it distorts our ability to see, act or learn. We, therefore, become susceptible to cognitive biases and fall prey to Anchoring, Availability, Overconfidence and Loss Aversion. Likewise, one should not become religious about traditional or behavioral finance but take the best wisdom from both the streams. One has to attempt to assess uncertainty, be prepared to face the same and build options around them. Doctors attending emergencies or traders in the midst of volatile markets both do not have the luxury to wait and take time to decide or act.



Tools for Maximising Your Career Success

Contributed by: Ishwar Chidambaram, CFA, CIPM



Speaker: Carla Harris, Vice Chairman, Managing Director, Senior Client Advisor-Morgan Stanley Moderated by: Madhu Veeraraghavan, Director and T.A. Pai Chair Professor of Finance, T A Pai Management Institute (TAPMI)

Carla Harris enthralled the audience with her outstanding presentation, in which she spoke about the everyday tools and techniques necessary for maximizing one's career success. She began by asserting that every organization- no matter how meritocratic- will always have the human element. She then proceeded to share her nuggets of wisdom, which she called "Carla's Pearls". These Pearls of wisdom formed the bulwark around which her presentation was based. They are as follows:

Carla's First Pearl: Perception Is the Copilot to Reality

Harris said that how people perceive you will directly impact their interactions with you. The market's perception about you supersedes your own intelligence and work ethic. For example, if you are looking for a team leadership role, it essential to be perceived as motivational, inspirational



and organized, otherwise it will be next to impossible to get the assignment. While other people's perception may seem to be outside your control, Harris contended that it is possible to train people to think positively about you. You start by selecting 3 adjectives that you would like people to use to describe you when you are not in the room. These 3 adjectives must be consistent with who you really are, and they must be qualities valued by the organization. Once you have identified those 3 adjectives, it is important to behave consistently around those adjectives and even use that language when describing yourself. Harris offered an example from her own career to illustrate: After a manager told her that he thought she wasn't tough enough for finance, Harris talked tough, walked tough, and described herself as tough from then on. Within a few months, she had established a reputation as one of the toughest employees at Morgan Stanley.

If you offer that which is not valued, you will not be rewarded. Never assume you know what success looks like. Instead you must ask "What does success look like in this seat?" Success is always shifting.

Corollary for leaders: It is incumbent on leaders to define what success looks like, to get maximum productivity, even in uncertain environments. All human beings are programmed to outperform.

Harris then proceeded to explain the difference between a mentor and a sponsor, stating that both are indispensable to success in scaling the corporate ladder.

Read more: https://iaip.wordpress.com/2018/01/16/tools-for-success/



Geopolitical Landscape in Asia as China Expands and America Retreats

Contributed by: Chetan Shah, CFA, Secretary - IAIP



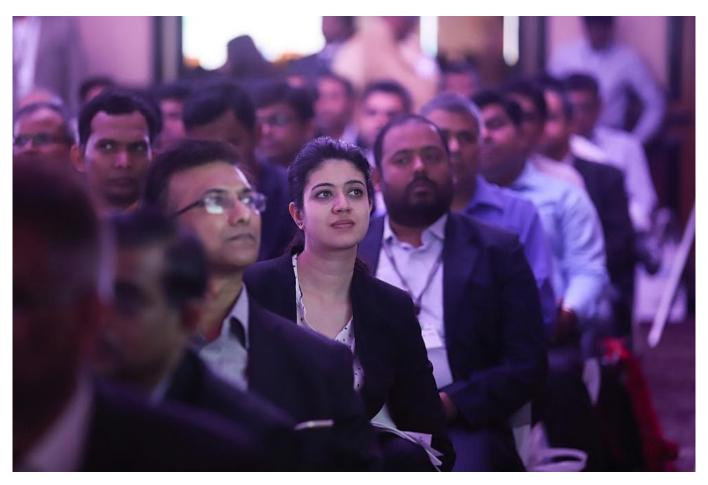
Speaker: James McGregor, Chairman, Greater China, APCO (Beijing) Consulting Company Ltd. Moderated by: Jayesh Gandhi, CFA, President, IAIP

There are stark differences in the boards of Chinese and US companies. According to James Mc Gregor, the Chinese boards talk more about opportunities and are ambitious. While, those at the US talk more about risks and downside. The same things echo at the national level. China under Xi Jinping wants to overtake other nations at the world stage, take a path of its own, away from those prescribed by the west, and propagate its own development model across the developing world. Through the Belt and Road Initiative, it is offering funds for infrastructure projects at commercial rates. It has taken Hambantota port in Sri Lanka at a strategic southern location on a 99 year lease.

In Kazakhstan, it has committed to 51 projects around Khorgos International Centre for Boundary Cooperation (a dry port and free trade zone) that opens the door to the West. In Pakistan, it has committed large sums to build roads, rails, industries and stabilize the economy. In the last 20 years,



it has done similar things on the African continent building infrastructure for natural resources. It has convinced leaders there that the Chinese model of development could be easily adopted by them. It has invested into education and offered scholarships to students as a result of which more Africans go to Chinese universities than to the US. While countries joining OBOR will improve their infrastructure, it will help utilize China's own huge capacities in industries like cement and steel. In Asia, China controls around 2/3rd of the South China Sea having built thousands of acres of land and islands. In Malaysia, it has 20% ethnic Chinese to cater to. The generals in Thailand prefer closer relationships with China. China is working on a high-speed train from Kunming to Singapore involving 154 bridges, 50,000 workers and around \$7bn investment. Chinese leaders have spelled out the "Made in China 2025" vision which includes attaining global leadership in areas like artificial intelligence, cloud computing, bio-pharmaceuticals, new materials etc.



There is a shift of power from the collective opinion system, with 9 member standing committee, in the past to single person in the party. This has been possible due to Xi Jinping's own background, dissatisfaction over excessive corruption in the past, debt-fuelled expansion, ageing population and middle-income trap for the nation. Besides, there is a spin of the story with hostile forces surrounding China, greedy MNCs exploiting its people, Japan stealing islands and so on.

Read more: https://iaip.wordpress.com/2018/01/16/geopolitical-landscape/



The Other Half of Macroeconomics and The Fate of Globalisation

Contributed by: Ishwar Chidambaram, CFA, CIPM



Speaker: Richard Koo, Chief Economist, Nomura Research Institute. Moderated by: Navneet Munot, CFA, Director, IAIP and CIO, SBIMF

Mr. Richard Koo began his enthralling presentation with some insights into Donald Trump's Presidency. He said that Trump won the White House by focusing on "middle USA"- the geographical area between the USA's Atlantic and Pacific coasts. This region has for long been neglected by successive administrations. Trump merely filled that vacuum. Richard asserted that Trump is having a profound impact on the forex markets, as he is speaking about US trade imbalance. Despite popular opinion to the contrary, Trump's macroeconomic policies are actually sound, as he is focused on infrastructure spending. The US is beset with problems, as dollars are not flowing from financial sector to the private sector. Nobody is borrowing, even at zero rates! Everyone is simultaneously engaged in repairing their balance sheets, leading to a phenomenon which Richard termed as "Balance Sheet Recession".

He lamented the fact that most textbooks and theories focus only on the situations wherein





borrowers exist in the market- this is the scenario where the private sector is maximizing profits. However, the case where borrowers are absent is largely neglected. This is the situation where the private sector is minimizing debts. All advanced economies are currently witnessing this situation, wherein private sector borrowers have vanished post the 2008 financial crisis.

Ideally, the Monetary Base, Money Supply and Bank Credit should move together. But in the US today, they have decoupled. Despite the relentless injection of liquidity by the US Federal Reserve, Bank Credit has increased only 30% in past 9 years, which is practically nothing! The situation is worse in Europe, where Credit has increased only 1% over the past 9 years, while in the UK it has actually fallen. Similarly, in Japan, Governor Kuroda increased liquidity, but it had zero impact on Bank Credit.

Read more: https://iaip.wordpress.com/2018/01/16/the-other-half-of-macroeconomic/



Non Consensus Investing

Contributed by: Jainendra Shandilya, CFA



Speaker: Ms. Rupal Bhansali, CIO, International and Global Equities Portfolio Manager, Ariel Investments

Moderated by: Sunil Singhania CFA, Global Head Equities, Reliance Capital Ltd

The 8th India Investment kicked off on January 12, 2018 and Rupal Bhansali hogged the limelight by slicing and dicing the myths associated with investing. The theme of her presentation was Non-Consensus Investing and she stated that the best things in the world are simple and smart, like the Apple of Steve Jobs. There have been people who dared to pick winner far from the consensus and the classic example was of Billy Beans of Oakland Athletics. The advantage of non-consensus investing is high return at lower risk; however, one must understand that this is possible only when one is correct and proves the consensus wrong. She started her presentations with a classic example of Blackberry, how this tech company, once a darling of growth investors, lost out in the race of investing. Blackberry had the advantage in terms of technology as during the era of 2G mobile telephony, the bandwidth was not sufficient to process too much of data along with voice calls. Blackberry did a fine job of compressing data and that allowed its users to communicate seamlessly without bothering about call drops, etc.





The technology, however, moved forward with the migration to 3G and 4G and this advantage did not remain unique to this instrument. The share price of blackberry, which rallied to around 900 percent during its heydays, soon lost momentum and also the charm. The stock price lost so much that it is unlikely that stock will reach its high watermark of yesteryear. Why investors lose out on this kind of stock is they try to see the performance of the stock in its financials which is a lagging indicator of a stock performance. The share price of Blackberry and Nokia performed very well during their heydays, however, they are not in the race now. What about Apple? "Apple is no longer a technology company and maybe it will also have the same fate at some point of time", feels Bhansali. The reason why Apple does not look promising is there is nothing in it that is unique to its platform. Almost all the top apps used worldwide, viz. Uber, Snapchat, Facebook, Spotify, etc. are also available on other platform. The fast charging technology, wireless charging, etc. is not in the domain of Apple. In other words, it is no longer ahead of the curve -inventing the way it did before.

Read More: https://iaip.wordpress.com/2018/01/16/non-consensus-investing/



How Fintech will Disrupt the Future?

Contributed by: Manish Chandak



CFA Society India, Pune organized a Speaker session on "How Fintech will Disrupt the Future" with Mr. Kunal Bajaj on 8th December 2017. Kunal is Founder & CEO of Clearfunds. Clearfunds is an online investment advisor which lets investors buy mutual funds in India at a low, flat fee, not a fat fee. Kunal has 18 years of experience in Investment Banking domain and has also worked with Goldman Sachs, Credit Suisse, J.P. Morgan and CLSA.

Kunal began the session with a caveat that technology will ensure that all products and services which can be commoditized will be commoditized. Hence if traditional brick and mortar industries want to stay in business, they need to customize and differentiate their product offerings. Otherwise, their business will be disrupted and commoditized by technology. How Jeff Bezos of Amazon has disrupted and commoditized traditional retailers by providing products and services at wafer-thin margins. He talked about how 15-20 years back Craigslist and Yahoo used to provide directory services by listing various services like ridesharing, dating, rental on their sites.

Now all those services got unbundled as various start-ups attacked different parts or services of Craigslist. This is called Unbundling of Craigslist and has spawned many unicorns.

Read More: https://iaip.wordpress.com/2018/03/06/how-fintech-will-disrupt-the-future/



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