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A Bimonthly Magazine on BFSI Sector

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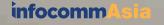
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EVENT NAME	PLACE	MONTH
URBAN / SMART CITY		
Smart City Summit	Kochi	18 August
National Waste Alternate Conclave, Telangana	Hyderabad	27-28 August
IT/GOVERNANCE/TOURISM/INFRASTRUCTURE		
National Summit on Strategy for Ports, Highways Infrastructure & Logistics Efficiency	New Delhi	13 August
Digital India Conclave	Chandigarh	30 August
National Transport Summit, Haryana	Chandigarh	September
National Transport Summit, Uttar Pradesh	Lucknow	September
Digital India Conclave	Trivandrum	September
Power IT Summit	New Delhi	September
Digital Social Innovation Summit	Canberra, Australia	30 November
BFSI		
Elets Secure IT Summit	Mumbai	September
BFSI Insurance Summit	Mumbai	October
BFSI CIO Summit	Mumbai	November
5th NBFC100 Tech Summit	Mumbai	December
HEALTH		
Healthcare Summit, Uttar Pradesh	Lucknow	August
Healthcare Summit, Rajasthan	Jaipur	27 September
Healthcare Summit, Madhya Pradesh	Bhopal	September
EDUCATION		
World Education Summit	Delhi	9 - 10 August
HE-HR Conclave	Jaipur	6-7 September
8 th School Leadership Summit	Mumbai	12 October
13 th World Education Summit	Hyderabad	16-17 November
4 th Elets Education Conclave	Chennai	15 December
5 th Elets Education Conclave	Bengaluru	19 January
9 th School Leadership Summit	Indore	23 February
10 th School Leadership Summit	Delhi	27 March

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Dr Ravi Gupta

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SALES & MARKETING TEAM

Manu Raj Singhal, Shivam Pathania, Hina Shukla, Shashank Jaiswal

SUBSCRIPTION & CIRCULATION TEAM

Manager, Subscriptions: +91-8860635832; subscription@elets.in

DESIGN TEAM

Art Director: Om Prakash Thakur

Deputy Art Directors: Gopal Thakur, Shyam Kishore,

Raja Das, Pulak Paul

ADMINISTRATION

Director: Archana Jaiswal



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EDITORIAL & MARKETING CORRESPONDENCE

BFSI – Elets Technomedia Pvt Ltd: Stellar IT Park Office No: 7A/7B, 5th Floor, Annexe Building, C-25, Sector-62, Noida, Uttar Pradesh - 201301, Phone: +91-120-4812600, Fax: +91-120-4812660, Email: info@elets.in

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EDITORIAL

JULY - AUGUST 2018

Transforming BFSI through Technology and **Innovations**

The world is changing so is the banking sector. The way the economies are witnessing transformation in many parts of the world, the BFSI sector is playing a key role. It holds true especially in a country like India where a mix of innovation and technology is actually writing the script of national growth.

As a big section of banking sector, especially the private banks, is being largely influenced by the strategies of the CTOs, the technology chiefs of banks, their significance cannot be underestimated by any figment of imagination. In a bid to sail through this change smoothly, banking and financial institutions are now appointing Chief Technology Officers (CTOs).

Our magazine's latest cover story "CTOs -The Key Factor Defining Success in BFSI" tries to explore and explain how significant these CTOs have turned and playing quintessential role in transforming banks' definition for customers irrespective of their place of existence.

Through this, we have tried to explore and highlight how rapid innovations in banking sector today require better risk governance and solid strategies, especially in terms of technology and why there is an urgent need to appoint CTOs across the BFSI industry.

The latest issue also carries a special feature 'Marketing-Key to Banks' Expanding Horizon in India' explaining how being a customer-oriented industry, the banking sector today appears tremendously drawn to marketing and why growing number of banks have perked up their innovations, using various marketing tools.

We have also carried interviews of L R Ramchandran, Chief General Manager, Financial Inclusion and Banking Technology, NABARD, Andra Vamsi, Additional Registrar, Cooperatives and Banking, Government of Uttar Pradesh, and Pinak Chakraborty, Senior Vice President of Technology - Building Digibank, DBS India, among others.

The magazine features a summit report of our '4th NBFC100 Tech Summit' held in Hyderabad, highlighting the excellence and understanding the innovations made in the field of NBFCs in South India.

The mega congregation of experts from across financial institutions was inaugurated by Ajay Mishra, Special Chief Secretary, Department of Energy, Government of Telangana.

Jayesh Ranjan, Principal Secretary- Information Technology, Industry and Commerce, Department, Government of Telangana, also attended the summit and shared his valuable insights of NBFCs.

Continuing our legacy of organising knowledge-sharing platforms for banking and financial institutions, we are organising 3rd BFSI CTO Summit in Goa. This two-day residential-cum-networking platform is expected to be a grand congregation of CXOs from across the BFSI sector.

With this latest collection of special stories, articles and interviews, we hope our endeavour will evoke an invaluable feeback of our esteemed readers.





Dr Ravi Gupta Editor-in-Chief The Banking & Finance Post Magazine and CEO Elets Technomedia Pvt Ltd





INDIA's **NBFCs'** ANKING 2018

After garnering massive popularity in "India's Top 50 NBFCs' Ranking -2017", The Banking & Finance Post, Asia and the Middle East's premier bimonthly magazine, is pleased to announce the second edition of its ranking issue, to be published in the month of September 2018.

The ranking will be analysing Non-Banking Financial Companies (NBFCs) on the basis of three parameters:

Annual Turnover | Social Media Engagement | Customer Satisfaction

For Queries, Contact: Shashank Jaiswal: 9555790109 | nbfc@elets.in

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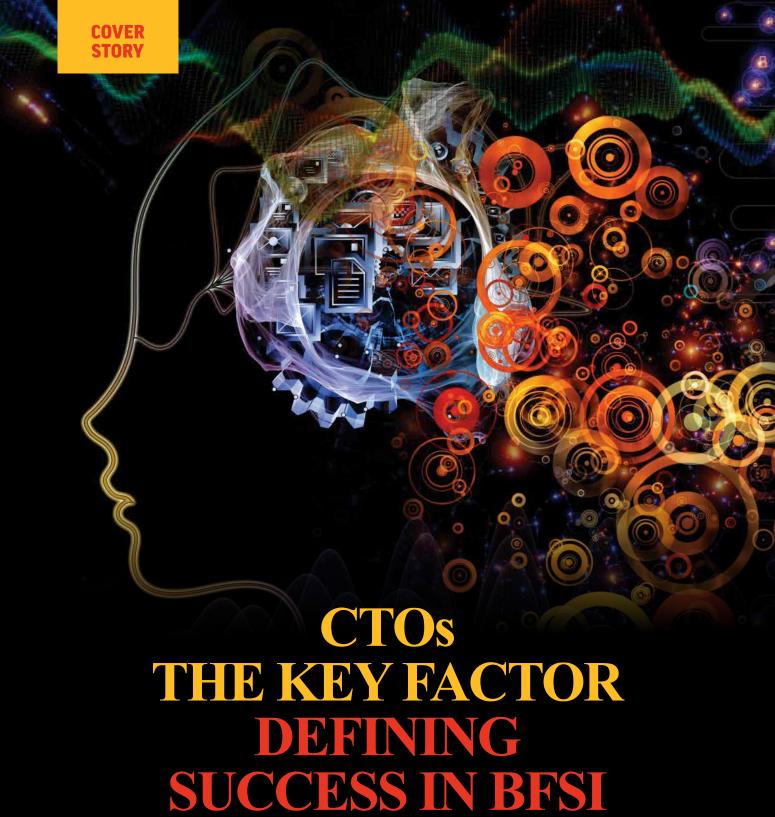








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Rapid innovations in banking sector today require better risk governance and solid strategies, especially in terms of technology – the key factor behind any financial institution's rise. These changing trends have flagged off the need to appoint CTOs across the BFSI industry. Rashi Aditi Ghosh of Elets News Network (ENN) explores how CTOs are helping to reinvent the financial institutions while broadening their horizon in the technology landscape.





CTO's role has become intrinsic to organisations embracing technology. In addition to decisions pertaining to choice of technology, the CTO today plays a pivotal role in incubating new business lines and reinventing/innovating business processes.

officers to bring multiplier effect on growth and development of banks.

Defining the role of CTOs, V G Kannan, Chief Executive, Indian Banks' Association once said, "The role of Chief Technology Officers (CTOs) has become critical in the Banking, Financial Services and Insurance (BFSI) industry. Technology interface is bringing robust changes in the financial institutions."

Financial institutions are investing in tech-driven innovations for redefining their services. Technologies focused on big data, behavioural and predictive analytics, blockchain, and others impacting multiple areas in BFSI from authentication to transaction management.





TECHNOLOGY TRANSFORMING BFSI INDUSTRY IN INDIA

The banking industry is in the midst of an Information Technology revolution and banks are now becoming a one-stop supermarket. The focus is shifting to Class banking, even in mass banking, with the introduction of value-added and customised products.

Technology transforms the bank branch into a business building's lobby that omits the requirement to hire manpower for manual operations. The branches are run on the concept of 24X7 working, made possible through the use of telebanking, ATMs, internet banking, mobile banking

and e-banking. These technologydriven delivery channels are being used to reach out to maximum number of customers at lower cost and in the most efficient manner.

CTOs - PLAYING ARMOUR'S **ROLE IN BANKS**

Considering their key role, the technology officers play a very critical role by putting both the banks and the customers in a win-win situation. The effective implementation of right technologies has enabled technology

Explaining the need to appoint CTOs for technology advancement and efficiency, Shiv Kumar Bhasin, Chief Technology Officer, State Bank of India, said, "A CTO is significant in deciding technology theme or vision of the banking industry."

"I believe that to transform the banking industry, appointing CTOs and completing their goal setting is very important. CTOs can help in setting up the bank as an open platform that can help consumers in enabling better banking options loaded with





COVER

innovations," he said.

Citing the need to hire CTOs in alignment with the rapid tech-driven changes, the Reserve Bank of India (RBI) last year urged the banks to appoint qualified chiefs to head the critical finance and technology functions. It came out with minimum qualifications for CTOs. "Rapid innovations in banking and technology call for better risk governance in the areas of finance and technology," the bank said in a notification.

"A CTO in banks' management structure would play a crucial role in strengthening and sustaining the banks' risk governance framework," it added.

A CTO should be an engineering graduate, or hold a Masters in Computer Applications (MCA) or equivalent qualification with a 15-year experience in banking information technology-related projects, the RBI stated.

The notification said the candidate's experience should include work on IT policy and planning, financial networks and applications, financial information systems, cyber security technologies and payment technologies.

sector, Byju Joseph, Chief Technology Officer- Future Generali India Life Insurance said, "The recent breakthrough in the power of digitalisation and technology within the BFSI sector has compelled one to reimaging the role of a Chief Technology Officer in an organisation. Being architects of comprehensive digital infrastructures in an organisation, CTOs today are working towards ensuring better access of essential services for their customers on digital platforms."

"At Future Generali India Life Insurance Company, we are working towards increasingly becoming a technology-



Technology allows banks to create what looks like a branch in a business building's lobby without having to hire manpower for manual operations.



led financial service company, rather than just an insurance company with a technology division. We believe in fostering relationships to nurture a culture that balances business mandates with digital initiatives. All our services are now designed to be cloud aware. Furthermore, we have adopted a more 'inclusive' approach where instead of worrying about fintech start-ups, we are actively building bridges to leverage interdependent ecosystems of partners, suppliers, distributors and consumers," he added.

With advancement in technology growing at a faster pace every day, and decision-making becoming increasingly dependent on multiple large sources of data, the role of a CTO has evolved significantly with a heavy focus on innovation and adaptation to the competitive landscape of today.

"CTO of an organisation is becoming increasing critical to an organisation's long-term success. Further, in a digital era that adds multiple layers of complexity to effective management of data security, it is imperative for a CTO to make the right decisions to ensure that the organisation remains competitive and protected in today's and tomorrow's world," said V Srinivasan, Founder Chairman, eMudhra.

eMudhra works with financial institutions around the world to ensure they choose the right technologies and deploy them in ways to reducing operating cost and driving new revenue.

CHANGING BUSINESS NEEDS

With digital transformation impacting businesses like never before, technology has become a critical source of sustained competitive edge. The BFSI industry, especially the lending industry, is witnessing a similar disruption where technology is creating new possibilities to attain scale, drive op-ex efficiencies and enhance customer experience across the value chain.

"CTO's role has become intrinsic to organisations embracing technology. In addition to decisions pertaining to choice of technology, the CTO today plays a pivotal role in incubating new business lines and reinventing/innovating business processes. From being a peripheral role, the CTO has moved to the top of the table in the process of reinvention for the BFSI (including the lending) sector," said Vaibhav Sanghavi, Chief Technology Officer, Clix Capital Services Pvt Limited which offers unique financing solutions to help people meet their financial needs.

It is evident that the Financial Institutions which use the right technology will gain a competitive edge over peers. As the main differentiating factor will be customer experience. A rapid innovation in technology calls for CTOs to play the strategic role in the BFSI Sector.

"In any financial institution, CTOs will be expected to wear multiple hats ensuring Risk Governance and moving away from a support role to Strategic Partnership role. In this highly under penetrated market, technology will be the prime driver in reaching out to the customers, in much faster and cheaper way. CTOs' role will be there to transform businesses from conventional to convenience mode. In addition CTOs will need to keep up the pace up Digital Adoption and drive technology led Innovation," said Amit Vadera, Assistant Vice President, TeamLease Services-India's leading recruitment and online job portal.

BFSI is all about volume, scale and computations. In all these aspects, technology plays a critical role as an enabler. A CTO must be fully aware of the business opportunities/challenges and come up with solutions to achieve business goals.

"With the way tech is evolving, the CTO in addition must also don the role of a business partner in using latest/advanced





CTOs play a very critical role by putting both the banks and the customers in a win-win situation.



tech to innovate new business models and help the business grow. A business enabled CTO is an asset and pure tech CTO's could become a liability," said Senthil Natarajan, Chief Executive Officer, OpenTap.

OpenTap is a disruptive AltFin startup in India. They enable access to shortterm credit for the vast under banked population.

As a theme convenience, 24x7 accessibility, security and low cost are the bedrock of the current wave of new product development across sectors including BFSI. Customers' expectations and the interfaces to service them are rapidly changing.

Fintech companies are often at the forefront of creating new products, interfaces and delivery channels. They are leveraging all available technologies to reach out to customers which were inaccessible earlier.

Low cost of digital delivery allows acquiring customers are low cost. Further, technologies available today have automated most of the repetitive and predictable workloads, this increases customer delight as the services quality is now less variable both in terms of time and quality.

"FINTECH CTOs are leveraging cloud-hosted specialised services, rapid application development techniques to quickly create solutions for their customers. GBs of data generated per day is processed through self-learning AI models to personalise user experience and solutions," said Virender Bisht, CTO and Co-Founder, NiYO-a start-up that works with the employer to carve out the employee's cost-to-company (CTC).

Financial institutions in India are undergoing massive transformation and investing in technology at a larger extent. This investment needs to be governed keeping potential risks under surveillance.

Playing a significant role in this regard, CTOs are acting as a catalyst for business development of the financial institution by aligning technology in line with the business goals in multiple ways. •

MARKETING KEY TO BANKS' EXPANDING HORIZON IN INDIA

Being a customer-oriented industry, the banking sector today appears tremendously drawn to marketing for building good relations. Sensing the immense difference it can make to business prospects, a growing number of banks have perked up their innovations, using various marketing tools, writes **Rashi Aditi Ghosh** of **Elets News Network (ENN).**



Marketing and its Significance in Banking

The Indian banking industry has shown tremendous growth in terms of adapting marketing strategies, a practice not confined to opening saving bank accounts, credit cards, investments, wealth management, mutual funds, insurance and so on. This is compelling them to improve customer service and build relationships with customers.

For executing successful marketing strategies, every financial marketer has to focus on improving the customer experience across channels and with every communication.

Touchpoints such as mobile, video and social media continue to grow in importance, as far as marketing strategies are concerned.

"In India, banks are always associated with trust and were able to get customers for life. The next door bank branch was an enabler in providing customer centric approach. While India still have majority of people who are comfortable with traditional bank setup but Digital Banking is more cost effective and productive. Today, the banking methods have changed with people moving to cashless economy like never before," said Amit Vadera, Assistant Vice President, TeamLease Services.

"Marketing will play a significant role in partnering with business teams to offer banking services from deposit to lending effectively and tapping both Transitional and Digital customer's will be the biggest challenge and opportunity for the marketing team. Marketing will continue to play a significant role in driving growth in under/un-penetrated markets, driving sales for new product offerings, acquiring new customers and more importantly retaining existing customers, and growing their share of wallets," added Vadera.

Transition in Banking Marketing Strategies

Customers no longer tolerate the poorly targetted marketing communications in banking sector and their interest and demands are updating with changing times. Customers are now aware and want the financial marketers to register their interest with interesting and rewarding ideas that can make their shopping and purchasing journey more exciting.

If consumers' experience expectations are not met, they will ignore or block your communications, or abandon the relationship with your bank or credit union altogether.

It is important to acknowledge the significance of improved marketing communications process in complete alignment with the consumer's perspective. This will help in driving growth, loyalty and profitability. Managing the marketing process without taking advantage of the technology tools available is becoming more and more difficult.

"Banking is a complicated and stressful industry that is, to say the least, intimidating for most. What marketing can do - and should do - is bring a human touch to banking. We create products teeming with complexity that aim to make our customers lives simpler, but no one will use them unless we showcase the benefits to the customer. That's where marketing comes in. We facilitate the emotional connect between the product and the user, and encourage them to take charge of their finances," said Vineet Sethi, Chief Marketing Officer, NiYO.

Marketing Trends for Banking Industry

Following are some important trends that are pivotal for financial marketers for becoming a key differentiator in the future:

Insight-Driven Marketing

Consumer insight and data for financial marketers will become significant than ever in the near future. It will be important for financial institutions to leverage advance analytics for insight driven marketing. New tools and technologies make advanced analytics available for all sized organisations, while digital channels and the desire for personalised offers make the investment in data analytics mandatory for success.

Mobile Marketing

Mobile banking is no longer a new mode for consumers and it is well-known that consumers do a significant proportion of their researching, shopping and buying on their smartphones. Leading banking organisations are already leveraging the mobile device for sales messaging.

Increasing Focus on ROI

It is important that every marketing campaign should be measured to gauge success. The necessity to measure results has never been greater, as advanced tools can now delve into the customer purchase



Indian Banking Industry has shown tremendous growth in terms of adopting marketing strategies, a practice that is not just limited to opening saving bank accounts, credit cards, investments, wealth management, mutual funds, insurance and so on.

journey to determine what blend of channels were used in the decision process.

Moving to Social Media Mainstream

Instagram, Twitter and Snapchat are also becoming more popular with certain segments of the population. An ongoing challenge for financial marketers is in linking social media campaigns to sales. This challenge is what is holding most marketers back from increasing investments in social marketing. This is but obvious as social media use is growing as internet access spreads. Facebook already has more than 112 million users in India and Twitter has around 30 million. With increasing competition, banks have increased their marketing budgets and social media is the major part of it. Banks using these social platforms as another customer care, to launch new products, endorsing celebrities and many more.

"Marketing is critical for the industry from two main perspectives (not penning them down in order of preference) - one keeping the company visible out there in the relevant markets. And two, constantly working on building sustainable differentiators - without which every company would very simply look alike. This becomes even more relevant in the banking industry, where there is precious little differentiation and consequently, customer acquisition becomes that much harder," said Senthil Natarajan, Chief Technology Officer, OpenTap.

While convincing customers through lucrative marketing strategies has become significant for all brands across all industries, banking sector is also adopting several tech-driven ideas to aware customers' attention towards their offerings.

On one hand, the strategies are helping in attracting more consumers; on the other hand it is also boosting the level of financial inclusion by helping the rural consumers to opt for banking services.



HOW ARTIFICIAL INTELLIGENCE IS TRANSFORMING BFSI SECTOR



s the entire business world is heading toward a revolutionary transformation from an era of "Digitisation" to an era of "Cognification", we must confess that our banks and financial institutions worldwide are the ones that have recognised the potentials of Artificial Intelligence at a very early stage and adopted it in their transformation journey. Using Artificial Intelligence to redefine their products, processes and the strategies is the main consideration for most of the forefront banks and financial institutions today. This includes predictive and cognitive capabilities enabled through cutting-edge technologies like Machine Learning, Deep Learning and Natural Language Processing.

One of the main reasons behind the same

Utpal Chakraborty

is essentially banks are in a data intensive business, So they can't avoid artificial intelligence which is again a technology that can provide intelligent predictions and recommendations by processing multiple data sources of huge volume in a very efficient way. Secondly, banks have access to financial details of their customers and know them far more intimately than probably any other business. With AI they can make highly relevant recommendations about financial products and services to their customers by leveraging such details.

Also, as AI applications have the capabilities of automating many repetitive manual tasks, there is always an angle of optimisation of time and effort and hence the cost. But the most important angle is the efficiency and robustness that it brings on the table which is remarkable and not possible to achieve manually.

There are many areas of Financial Industry where Artificial Intelligence and Machine Learning have already created its footprint but there are still many areas that are untouched and are going to be the core focus in the coming years.

The financial services industry can be broadly classified into three major segments where AI has become the needof-the-day today. They are Capital Market, Consumer Banking and Insurance and that almost covers the majority of the sector.

Robo Advisors, High Frequency Trading, Risk Management, Anti-Money Laundering, Cyber Security, Fraud Detection, Intelligent Predictions and Recommendations are few areas where AI applications has always been linked to. But in reality there are many more areas in financial industry where AI has been already playing a crucial role that many of us probably not much aware of those, like many embedded AI algorithms advices to their customers.

Risk and Credit Assessment is an area where Machine Learning and Deep Learning are playing the role of a game changer and insurance industry have adopted it largely. They are finding it very compelling primarily because AI is to simply changing their business entirely.

Smart wallet is another area of interest for the banks all over the world, the banks has started providing smart wallets to its customers. These AI enabled smart wallets will look at customer's spending habits and it will learn from his/her behaviour to provide smart advises and

signal will help banks to offer him/her more suitable product which may help retaining the customer.

Now coming to the Risk Assessment, Credit assessment and Regulatory areas, today if you want to apply for a loan, in a conventional way then a home loan or a personal loan takes couple of weeks or may be even more to clear all kinds of credit checks before approving such loans. With Artificial Intelligence the processing lead time will come down to an hour or maximum two. This is because AI's capability to do credit assessment in much faster and better way by interrogating various customer data sources.

We are already experiencing the change in the interface the banks are having with their customers. They are increasingly changing those to Chat Bots, Robots and Humanoids as their first line of interfaces with their customers to enhance service experiences. We are seeing the similar trends in the banks in India too.

Also there are lots of AI applications coming up into areas like Anti-Money Laundering and Regulations because it's very easy for an AI system to analyses lot of data at its finger tips and determine the patterns and better identify frauds, money laundering and criminal activities quickly and highlight those to the bank authorities well in advance so that immediate actions can be taken to arrest those activities.

Other areas of AI booming in the financial sector are using facial stress analysis to automatically detect ATM frauds. AI financial advisers called Robo-Advisers of different variances work proactively for its customers providing intelligence 24x7. ●

Views expressed above are a personal opinion of the author. He is an industry expert on Artificial Intelligence in banking.



within enterprise applications to bring the intelligence and smartness in those enterprise applications.

Artificial Intelligence has the ability to process enormous amount of data very quickly, which is far more data than ever processed in the past by human or any conventional computer programme. And that's going to improve the financial institutions to provide better services that they provide to their customers. In wealth management, they will be able to provide much better, more targetted and efficient

Artificial Intelligence has the ability to process enormous amount of data very quickly which is far more data than ever processed in the past by human or any conventional computer programs.



recommendations of future spending. It will encourage savings and responsible spending in the form of predictive alerts and recommendations. Similarly, AI can detect if a customer is likely to switch their products or services, this early

'TECHNOLOGY TO DRIVE BANKING IN INDIA'

What are the upcoming tech-driven innovations planned by G P Parsik Sahakari Bank (multi-State scheduled bank), apart from its traditional offerings?

We are planning to develop technology platform which can enable us to deliver banking services such as money transfer facility and micro ATM in rural areas where there is poor connectivity. Further, we are also in process of upgrading our core banking applications. We have consolidated our datacentre by server virtualisation and optimised the power consumption up to 70 per cent by datacentre precision cooling systems. We are evaluating Near Field Communication (NFC) debit cards.

Your bank is expected to reach a total number of 101 branches and business of 10,000 crore by 2020. What new States are you adding into your operations?

We have started our operations in Goa and Karnataka and our focus will be on expanding more branches across these States.

Majority of the Indian population resides in the rural areas. What measures do you take to promote financial inclusion in those areas?

Banking services need to reach unbanked areas of rural India. We already have good number of branches in rural areas. We are also planning to reach internal parts of rural area with our Business Correspondence (BC) model. In collaboration with our fintech partner, we will enable technology platform for BC that will help them with services such as money transfer via Aadhaar Enabled Payment System (AePS), open account

Technology is going to drive the banking sector in near future and self intuitive services will be at the forefront. G P Parsik Sahakari Bank Ltd is planning its services in alignment with this trend, deploying tech-driven innovation for all its consumers both from urban and rural areas, says **Manoj Gadkari**, Chief Information Officer, G P Parsik Sahakari Bank Ltd, in conversation with **Harshal Yashwant Desai** of **Elets News Network (ENN).**



Manoj Gadkari Chief Information Officer, G P Parsik Sahakari Bank Ltd

with the help of eKYC and distribute Rupay debit card without any charges.

In the age of technological innovations, how do you cope up with safety threats?

We have implemented cyber security framework in our existing information security policy. We have 24x7 Security Operations Center (SOC) monitoring and Security Information Event Management (SIEM) System in place. Besides, dynamic vulnerability assessment (VA) and penetrative testing (PT) are part of regular security exercise.

Regular system audit and gap analysis help us remain informed about the state of our information security and internet facing infrastructure.

What are your plans for future interventions?

India will be a country of youngsters by 2020 as the average age of Indians will be of 29 years. Our focus will be to attract younger customers in the 25-35 age group. To deliver frictionless banking, we are deploying technology which can enable self intuitive account opening and register for various delivery channels offer by the bank without visiting branch. Chatbots for customers' assistance and analytics will be used to analyse customer behaviour to pitch right products.

Real-time recommendations will become reality. Big Data and sophisticated analytics have transformed how banks mine and understand customer data. To leverage huge data with advancements in artificial intelligence and machine learning, we want to be equipped to provide predictive personalisation, from tailored products and services for anticipated life events, such as a mortgage or a child's university education, to real-time recommendations and financial advice.

How do you perceive Hyderabad as a land of opportunities for NBFCs?

Hyderabad holds huge potential in terms of Small and Medium-sized Enterprises (SMEs) and start-ups. People, not only in Hyderabad but across Telangana, are highly educated and hold huge potential to become entrepreneurs. This State, in particular, is a hub for entrepreneurship.

In the last five years, a lot of start-ups have come up with very progressive ideas but they want funds to execute these ideas, NBFCs play a very important role in this regard. They always look for assessing better concepts.

NBFCs are now identifying good concepts and ideas to promote entrepreneurship across the State. Start-ups now prefer Hyderabad over Mumbai and Bengaluru.

Hyderabad is increasingly emerging as the hub of start-ups. Do you think the Government intervention can be beneficial?

Yes, the government inventions are indeed very significant in terms of setting up start-ups in Hyderabad and promote new innovative ideas. They should think about offering subsidies or provide recommendation pertaining to funding.

NBFCs can also help the Government in this regard by helping start-ups in learning financial discipline. There are organisations that are charging mentorship fees from the start-ups, as high as Rs 50-60 Lakhs. Government can intervene here and offer mentorship to the start-ups free of cost.

Tell us about GOLDMARGH Venture Capital

GOLDMARGH Venture Capital invests in start-ups and independent VC (Venture Capital) funds worldwide. It invests in seed, early-, and late-stage Venture Capital

NBFCs DRIVING START-UP REVOLUTION IN TELANGANA

Telangana has executed many initiatives in recent times, garnering the attention of numerous national and international financial giants feeling fascinated towards Hyderabad. The city has shown a huge potential in terms of SMEs and start-ups, says **Vaddi Satyanarayana**, Executive Director and Chief Operating Officer, GOLDMARGH Venture Capital, in conversation with **Sudheer Goutham** of **Elets News Network (ENN).**







elets Secure



Meet & Network with Security Experts at Elets Secure IT Summit-2018

Highlighting the significance of security across the industry in India, Elets Technomedia is pleased to announce Elets Secure IT Summit- 2018, Mumbai in October. The summit will congregate "100 security experts in the IT domain".

It will serve as a unique knowledge sharing cum networking platform for dignitaries across:

- Governance
- BFSI
- Manufacturing
- Automobile

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GAME-CHANGING TECHNOLOGIES FOR VISIONARY BUSINESSES



When employees of Deloitte Amsterdam report for work at The Edge, the office app will review their schedules for the day and automatically assign them a desk or even a quiet room where they can concentrate. Once in the office, they can adjust the temperature and lighting via the app, which also remembers their coffee preferences. This is just one example of what connected Professional Audio Visual and Integrated Experience technologies can achieve.

Read on and discover how InfoComm India exhibitors Crestron and Business Octane have helped their clients to heighten productivity with their innovations.

Integrated Technology Spurs Collaboration in the Workplace

Founded in 1974, Petroliam Nasional Berhad, or PETRONAS, is a Malaysian oil and gas multinational company that operates in over 50 countries. A proponent of innovation and strategic research and development, the company requires a technology infrastructure that can facilitate smooth communication and collaboration. As such, it launched the PETRONAS Digital Collaboration Centre,

a 22,000-square-foot visualisation and collaboration facility.

At the centre, multidisciplinary technical teams can come together and discuss complex challenges and make real-time decisions for the company's Exploration and Production operations. In the early days of operation, however, the centre faced numerous issues:

- Recurring interface issues during high facility usage, which led to frequent system restarts
- The downtime meant that meetings could not take place as scheduled or spontaneously

To improve the efficiency and reliability of the centre's system, Crestron was brought in to deploy its suite of intelligent solutions, which integrated multiple operational functions under a single processor, and also introduced extenders and scalers into the IT infrastructure. Crestron was an ideal provider as the company already had prior experience with its CP2E, a compact Ethernet control system and Crestron Fusion, monitoring and scheduling software.

The CP2E was upgraded to the CP3, a compact 3-Series control processor that allows the team to manage and integrate individual technologies for an easier, greener experience. PETRONAS's existing display matrix was switched to the Crestron DigitalMedia, responsible for managing and distributing digital AV and control signals. Smaller rooms were powered by Crestron DigitalMedia Presentation Systems to make smooth automation and matrix switching a reality.

RESULTS

Thanks to the enhanced infrastructure, the facility has seen a huge decrease in downtime. The benefits of the revamp include:

- Room utilisation rate now averages 95 per cent
- A more reliable and easy-to-use interface to automate AV, lighting, video conferencing and mechanical lifter for electric privacy glass
- Operations for the entire Centre are managed by a lean team

Business Octane's Ultra-immersive Telepresence Technology Ups the Effectiveness of Business Meetings

Vedanta Group is a globally-diversified natural resource group committed to sustainable development and growth in the areas they operate: copper, zinc, aluminium, iron ore and power. To ensure

its over 32,000 employees and offices in four continents were well aligned with its business goals, Vedanta used to organise monthly face-to-face review meetings, a complex operation as it required almost all of its 150 top executives to fly to one location, and put up in hotels for the duration of the meeting.

Wanting to streamline this process, Vendata made the decision to partner with Business Octane to create telepresence rooms. Business Octane's Ultra-immersive Visual Collaboration Group Telepresence solution makes collaboration easier, allowing participants to maintaineye-to-eye contact, enjoy high-definition video and stereo spatial audio. They canalso read the nuances of the other participants' body languages. The participants, no matter where they are, will get to access and write on the same whiteboard. The entire solution also comes with AltraAcoustic Interiors. The acoustically-treated walls improve the quality of audio in telepresence meetings and audio teleconferences. There are also motorised table top content displays, enabling all participants to see content crystal clear.

Today, Vedanta has 19 telepresence rooms across India, one in London, one in Zambia and another one in South Africa. Itschairman has these telepresence rooms at his residences in Mumbai, London as well as New York. Interoperability is also possible — the solution lets participants connect to any videoconferencing machine inside a mining plant office or anywhere else in the world. It also enables employees at Vedanta to conduct meetings with vendors,



customers and consultants, even if they are not equipped with a telepresence facility.

SEE SIMILAR TECHNOLOGIES AT **INFOCOMM INDIA 2018**

Looking for cutting-edge technologies? This September at InfoComm India 2018, over 200 exhibitors from 20 countries will showcase their latest innovations. Industry bellwethers such as Aero, Crestron India, Delta, Harman, Kramer Electronics & Panasonic India will be here. Discover a wide array of Pro-AV and Integrated Experience solutions such as room scheduling, interactive digital boards, presentation room controls, enterprise automation technologies and more.

INFOCOMM INDIA 2018 SUMMIT:

How Advanced Technologies will Transform the World We Live in

InfoComm India 2018 Summit is the show's learning platform. This year, there are over 53 free-to-attend educational

sessions across AVIXA Seminars, Industry and Technology Forums, AVIXA FlashTracks, and Platinum Partners' Presentations. Experts will be here to share their hard-earned insights.

Express Computer will lend muscle to the Enterprise IT & CXO Forum. This is a jam-packed three-hour session covering a wide range of topics, from digitisation best practices to cybersecurity in a hyperconnected world and an introduction on emerging technologies. It will take a close look at security management as well as the need to chart digital roadmaps, especially with the proliferation of AI, blockchain and IoT.

In "Information Technology: A Catalyst for India's Healthcare Sector", the Computer Society of India will cover howcloud, AI and machine learning areincreasingly being tapped by the Indian healthcare ecosystem. With the power of the cloud, doctors are sharing high-resolution 3D imagery and can consult partners locally and abroad in real time, hence improving pre-planning and success of the overall procedure. AI is giving better insights to clinicians in early detection of diseases by capturing and analysing various vitals of patients, predicting prognosis and future action plan for patients. Be here to understand how these emerging technologies will impact healthcare.

Full Summit program and updates are available at www.infocomm-india.com





ORACLE AUTONOMOUS CLOUD SERVICES: SECURING BANKS FOR EXCELLENCE

The role of a technology provider is very strategic when banks plan to overcome technology risk through better integration. The right partner can bring in strong, integrated technology systems that incorporate artificial intelligence and automation, and can flag inconsistent, out-of-pattern transactions to the responsible authorities, says **Sunil Mehra**, Vice President-Cloud Platform, Oracle India, in conversation with **Souvik Goswami** of **Elets News Network (ENN)**.

Our banking sector is undergoing an enormous digital transformation. Do you think our public sector banks are ready for the digital age?

Digital transformation is underway in practically every industry sector, and I'd say the banking industry has been an early mover. We work with most of the banks in India both -- private and public, small and large. One common observation across all these banks is the intent to transform into digital-first businesses. True, each one might be at varying stages of digital transformation – but the key aspect we should understand is that digital transformation is a journey, not a destination.

Banks, in general, are a lot more aggressive today on digital innovation, partly because of rapidly changing consumer expectations and partly because of new entrants like born-digital FinTech players. From a modernisation perspective, I think some public-sector banks have really pushed the envelope. You'd be surprised to know that some public-sector banks have even surpassed some of the private banks when it comes to the pace and breadth of new technology adoption and innovative customer offerings. One thing that public sector banks are now looking to enhance



Sunil MehraVice President-Cloud Platform. Oracle India

further is to develop a holistic, digital mindset at their core.

In the wake of recent frauds, especially in public sector bank ecosystem, how important is it now to have a special focus on risk management?

Cyber crimes are on the rise, with fraud syndicates proving to be a step ahead at times. The popular adage, 'A chain is only as strong as its weakest link', holds especially true in the context of Indian public-sector banks, given what we've witnessed in the last 12 months. Risk management

has emerged as a super critical function. However, in the absence of a holistic, integrated risk management strategy, disparate efforts aren't of much help.

Public sector banks need to move beyond focusing just on operational risk concerning banking systems and procedures; equal weightage must be placed on two other areas: credit risk spanning actions like identity verification via Know Your Customer (KYC) procedures, credit assessment and monitoring, risk assessment of businesses/industries; and technology

risk involving future-proof, scalable, interoperable, secure technology.

Sound policy interventions are essential too. The Reserve Bank India (RBI) is mulling more stringent banking practices to pre-empt fraud. For example, the RBI has directed banks to focus more on the function/role of fraud prevention and management and strengthen their risk management policies, as well as review loan applications and borrowings using enhanced credit risk policy procedures. A recent example was its directive mandating banks to integrate their core banking systems with the SWIFT messaging network.

All these steps will certainly help strengthen the risk management fabric of our public-sector banks.

How important is the role of technology providers in mitigating risks?

Overcoming the technology risk can be a challenge for public sector banks, as many banks still operate in silos and their current IT structure is unable to respond to the emerging threats. Disparate systems also pose the difficulty of gaining a single source of truth - one that's supported by modern security and authentication systems, as these are the key to verifying manual entries across different computer systems. It's important to have the ability to identify, control and restrict user access by associating rights with roles, and thresholds are critical.

The role of a technology provider is very strategic when banks plan to overcome the technology risk through better integration. The right partner can bring in strong, integrated technology systems that incorporate artificial intelligence and automation, and can flag inconsistent, out-of-pattern transactions to the responsible authorities. A good, strategic partner, therefore, becomes the key to implementing a strong technology



platform that will help banks pre-empt compliance breaches, identify threats and prevent incidents. You should look for a partner who can provide expertise on a variety of solutions like automated processes and identity management, authorisation, concurrent auditing in real time, push-based mechanism for realtime alerts and a 360-degree customercentric view.



"Oracle believes a better IT integration is the way forward for Indian public sector banks. Our banking industry needs to arrive at a consensus to put in place more effective processes for inter-bank collaboration, more so in the area of customer credit assessment. That'll be a great, first step to envisage a fraud-proof banking system in India."

Where does Oracle stand in terms of empowering banks to manage risk?

Oracle believes better IT integration is the way forward for Indian public sector banks. Our banking industry needs to arrive at a consensus to put in place more effective processes for inter-bank collaboration, more so in the area of customer credit assessment. That'll be a great, first step to envisage a fraud-proof banking system in India.

With about 70 million cloud users and 33 billion transactions every day, Oracle is the preferred partner to some of the world's largest banks to successfully run their business. We help banks to integrate the entire financial ecosystem and modernise their IT engine to make them future ready.

Powered by next-generation AI/ML, our latest suite of autonomous cloud services incorporates industry-first autonomous capabilities that will enable customers to rapidly detect and respond to threats. The self-securing nature of these services ensure banks are protected from external attacks and malicious internal users. Security updates are automatically applied while running to protect against cyber attacks; encryption of all data happens automatically as well.







INFORMATION TECHNOLOGY MAINSTAY ENABLER FOR BANKING IN INDIA

Technology has changed the face of banking and it is an accepted fact that information technology is the mainstay enabler for banking in India, says **L R Ramchandran**, Chief General Manager – Financial Inclusion and Banking Technology, NABARD, in an interview with **Rakesh Roy** of **Elets News Network (ENN)** as he also shares about technology trends in terms of the BFSI sector.

Tell us about the role of NABARD's Financial Inclusion Fund (FIF) and its significance in terms of banking the under-banked segments.

A major segment of the population, inhabiting in geographically interior and underdeveloped regions, isolated on the grounds of gender equality economic, social status etc. are catered through NABARD's Financial Inclusion Fund (FIF). The deployment of fund support is to meet the need of banking the under banked segments through awareness, capacity building and several other ways. It also helps in creation of tech-driven infrastructure for delivering the financial services to enable financial inclusion.

How is the information technology (IT) helping the banking and financial sector in India to transform?

Technology has changed the face of banking. The banking technology, in particular, has brought in several changes in the recent years. Now it is an accepted fact that information technology is the mainstay enabler for banking. Core Banking Solution (CBS) has provided the foundation on which these technologies sit and provide functionalities to bank, enhancing their



L R RamchandranChief General Manager – Financial Inclusion and Banking Technology, NABARD

business, outreach and also customer satisfaction. The advent of cloud platform has further opened up new vistas for the banks, in devising and delivering new products. The brick and mortar branches which were earlier the only delivery channel have now become one among the many available channels. Incidentally, the framework

for new technologies especially for the rural segment, got impetus through NABARD facilitated CBS project. This enabled these banks to provide RTGS/NEFT, Mobile Banking, Anytime Anywhere Banking etc. to rural customers.

What measures have been taken by NABARD to implement Information Communication and Technology in cooperative banks and regional rural banks (RRBs)?

NABARD has been facilitating technology adoption in the above mentioned banks (cooperative banks and regional rural banks. It has been an exciting journey with fruitful partnerships. It has provided the framework both at policy-level as well as infrastructure level. It facilitated adoption of card technology, acceptance of its infrastructure (ATM, microATM, POS) or adoption of mobile banking technology including BHIM or AEPS. The institution has been guiding and supporting these banks. It has been responsive to external environment and requirement of banks in designing support mechanism in postdemonetisation like supporting Pointof-Sale devices in tier-V and tier-VI and the digital financial literacy awareness programme to the rural population so that they can transact digitally. The long association and understanding of Cooperative and RRBs on one hand and the rural population on the other has provided a unique advantage to NABARD to meaningfully support their needs through our interventions.



Which digital payment innovations are going to be the game-changers for banking sector in future?

The Bharat Interface for Money (BHIM), Unified Payments Interface (UPI), Bank-Sakhi Dual Authentication and Aadhaar Enabled Payment System (AEPS) are the new models of delivery channel, reducing the service and infrastructure costs that are gaining importance. The transactions and activity on BHIM UPI platform have clocked more than 900 million in volume and close to Rs 1 trillion in value in FY 2017-2018.

The growing importance of these channels and promotion of digital transaction, NABARD has launched a scheme to support RRBs and Cooperative to onboard on the BHIM UPI platform for providing better services to the rural population. The other noteworthy access introduced by us facilitating Self Help Groups (SHGs) to seamlessly operate at BC points with the 'Dual Authentication' feature extended to Scheduled Commercial Banks (SCB) and Regional Rural Banks (RRB).

"Bharat Interface for Money (BHIM), Unified **Payments Interface** (UPI), Bank-Sakhi Dual **Authentication and Aadhaar Enabled Payment** System (AEPS) are the new models of delivery channel, reducing the service and infrastructure costs that are gaining importance."

The RuPayKisan Card is going to stay and the related card acceptance infrastructure is being built around it.

Which digital initiatives by NABARD will boost the financial inclusion in India?

The next wave of innovation is expected to come from technologies which provide customer-friendly solutions on the mobile feature phone as most of rural India has such phones and smartphones in keeping with the growing penetration. The focus of scheme would be to address the need of the rural customers in doing digital transactions such as: BHIM-UPI, PFMS, Aadhaar Authentication Agency/KYC verification services, microATM, Dual Authentication, Digital Financial Literacy, Mobile Demo Vans, Central Know Your Customer etc.

In addition, NABARD is also supporting the implementation of the Government of India schemes for boosting of BHIM-UPI and BHIM Aadhaar Pay platform. Apart from this, it is desired to harness the available media space to deliver financial literacy, especially awareness about digital transaction platform to aid financial inclusion and digital transaction in a big way. •



FINANCIAL LITERACY, DIGITAL TRANSACTIONS TO BOOST MFIs' GROWTH

Fusion Microfinance has taken extra-miler steps towards making a difference in the lives of over one million households to inculcate the banking habits in customers. Striving to create a cashless culture in a predominantly cash-based ecosystem, we are putting conscious efforts to create this radical transformation, says **Devesh Sachdev**, Chief Executive Officer and Director, Fusion Microfinance, in conversation with **Elets News Network (ENN).**

The Non-Banking Finance Company-Microfinance Institutions (NBFC-MFIs) registered a robust growth in 2016-17. How promising has been this growth for MFIs?

The key reason for the growth of the sector has been its adaptability to change, resilience in the face of persistent challenges and an ability to maintain high repayment rates of almost 99.5 per cent. Right now, MFIs have reached out to only 10-12 per cent of the households in India which indicates that there is enough headroom for further growth.

Going forward, in my view, this segment's continued focus on financial literacy by sector's stakeholders, increased enablement of cash-in and cash-out points in remote areas using biometric authentication and most importantly, growth in digital transaction infrastructure are going to be the key drivers for the NBFC-MFIs sector's growth.

How significantly is technology transforming the MFIs in India? What technologies are you using in your organisation?

There are many ways in which the technology is transforming the MFIs

in India. These include processes that involve managing of entire customer lifecycle – from offering them a convenient banking experience to enabling last-mile connectivity through modes such as tablet and digital banking. Companies are also leveraging automation for driving a faster turnaround of services and making use of cloud computing for the purpose of clients servicing, on boarding etc.

In our organisation, we employ many cutting-edge technologies that include cloud computing among others. Our robust IT infrastructure has enabled us to link more than 95 per cent of our clients with Aadhaar on our database. Besides, carrying out the data analysis of existing clients, we also carry out their 'Area identification' through our 'Area Lucrative Index' Analysis. Our current Client Contact Tracking Mechanism is very effective and at present, 90 per cent of our customer contacts stay updated in our system. We currently have over 55 per cent of cashless disbursements and we are looking at further increasing its share. We also have digital branches where we operate paperless with 100 per cent cashless disbursements. Last but not the least, another area where we employ technology is the Credit Bureau Auto Check, which helps us in defining the



Devesh SachdevChief Executive Officer and Director, Fusion Microfinance

creditworthiness of our customers.

Fusion Microfinance primarily focuses on the poorer section of the society. How challenging is ensuring the services to a section that is said to have low financial awareness?

Yes, that's true. A majority of people living in rural areas lack basic financial services, having no bank accounts and/or lacking the knowledge to use them. They not only lack in awareness on saving, sending and borrowing money but also

on aspects such as financial security and mitigation of financial risks. In addition, women in this segment are generally excluded from the formal financial ecosystem. There is also the problem of lack of valid identification documents/ KYC in this segment. Moreover, the companies operating in this segment have to manage higher operational costs along with risks related to unsecured lending and put in huge efforts to ensure last mile reach. Despite such hurdles, Fusion Microfinance has made extra efforts to make a difference in the lives of over one million households through giving them easy access to financial services. The company is also striving to create a cashless culture in a predominantly cash-based ecosystem, and to this effect, we are putting conscious efforts towards contributing to this radical transformation in our economy.

Fusion Microfinance takes its Corporate Social Responsibility (CSR) earnestly and contributes towards the development of society and the environment. What services do you offer under your CSR initiative?

We have undertaken several initiatives under our CSR programme. These include various Digital and Financial Literacy Programmes. Further, considering that women in rural areas are often prone to health issues because of inaccessibility to proper healthcare system in their locations, Fusion has started organising health camps for its clients and their families. In these health camps, our attempt is to give them access to Gynaecologists, General physicians, ENT and Eye specialists who are especially made to travel to these villages. We also distribute medicines to the clients thus providing them with complete healthcare solution under one roof. In addition, as part of our livelihood training programme 'Jivika' clients are trained in livelihood skills such as paper bag making, tailoring, pickle and papad making etc. We also train and assist them



in product packaging and market linkage to enhance their knowledge on selling the products in the right market.

Banking, Financial Services and Insurance sector (BFSI) in India is progressively working towards promoting the women. How is your brand contributing to this cause?

Fusion takes great pride in serving women clients and it's a matter of great pleasure for us to share that the firm has



Fusion is a frontrunner in promoting the holistic development of women. Through providing easy accessibility to credit, it provides women a means to generate income, which ultimately leads to an increase in their status not only within their households but in the wider community as well.

already played a key role in transforming the lives of one million women clients from across the nook and corner of the country.

Fusion is a frontrunner in promoting the holistic development of women. Through providing easy accessibility to credit, it provides women a means to generate income, which ultimately leads to an increase in their status not only within their households but in the wider community as well.

Some of our key efforts in making women entrepreneurs self-reliant are directed towards increasing creditworthiness of the unbanked segment of the society, driving financial and digital literacy in the remotest of regions. We also strive to inculcate saving habits in the unbanked and underbanked clients along with providing insurance cover to both the customer and her spouse. Additionally, we also provide them with emergency loans to meet adhoc needs of the customers.

In a nutshell, we are contributing in enhancing the sectoral image of MFIs in India by encouraging the women entrepreneurs to participate in the livelihood earning leading to their financial empowerment.







DIGITISING UP WITH INNOVATIONS IN COOPERATIVES AND BANKS

Emphasing on innovations made in alignment with IT, we are digitising the data across our cooperative and banking department in Uttar Pradesh. This move will help us in getting closer to developing a Digital Uttar Pradesh, says **Andra Vamsi**, Additional Registrar, Cooperatives and Banking, Government of Uttar Pradesh, in conversation with **Arpit Gupta** of **Elets News Network (ENN)**.

What are the new IT-driven initiatives you have planned to introduce in the Cooperatives and Banking Department of Government of Uttar Pradesh?

The department of cooperative banking in the Government of Uttar Pradesh has a threetier system. The first-tier is UP Cooperative Central Bank (UPCB), headquartered in Lucknow, the second-tier is the District headquarters and Tehsil headquarters where the cooperative Central Bank is located and the third -tier is Primary Agricultural Cooperative Society which is operational at the rural level, named as Primary Agricultural Cooperative Society. So far, we have one UPCB in Lucknow, 50 District Cooperative Central Banks as well as Urban Cooperative Banks in 75 districts of Uttar Pradesh.

Of the 50 District Cooperative Central Banks, 36 are better performing cooperative central banks. In addition, we have 7,500 primary agricultural societies of which around 2,500 societies are better performing.

So, the plan is to reorganise the entire system and digitise the entire system and ensure transparency and effective control over entire system through IT initiatives. In collaboration with NABARD, we are working on some IT initiatives in the Cooperative Department.

For this, the first task will be to set up an independent IT cell and prepare a roadmap. The roadmap will have a one year timeline. While computerisation is one aspect, digitisation of records is



Andra VamsiAdditional Registrar, Cooperatives and Banking,
Government of Uttar Pradesh

another aspect. We will also emphasise on omitting the ghost data.

There are a number of recoveries that have to be taken care of. We have to systemise and digitise that data. Our major tasks include, merger of Primary Agricultural Cooperative Societies and computerising the Cooperative Society, integrating them with the Cooperative Central Banks and with UP Cooperative Central Banks as well as the Land Development Bank of Uttar Pradesh.

We are also working on Uttar Pradesh Livestock Development Board, an organisation of Cooperative Department., constituted to implement, monitor and control the activities related to improve breeds of cattle. We are working on its integration with us.

Once IT initiatives are effectively taken care of, we will emphasise on offering the Rupay debit cards for farmers and initiate the procedures through Kisan Credit Card. We will also be launching some mobile ATMs at the rural level so that farmers or the rural people can have access to digital cashless transactions.

Prime Minister Narendra Modi-led government lays a lot of emphasis on Digital India. Do you have any plans in terms of digital Uttar Pradesh?

As far as cooperatives are concerned, the existing level of financial and literacy needs to be strengthened in order to build Digital Uttar Pradesh. This awareness can be ensured by taking relevant and progressive initiatives in alignment with awareness programmes. As of now, we are focusing on all these innovations.

Do you believe this IT intervention will bring transparency and efficiency in the department?

I believe that the new system will help in reducing the burden of maintaining several files. There will be greater transparency within the department as well as before the public. This will ensure greater convenience to people.

IT intervention will help us in reducing the amount of time spent on documentation within the department. It will escalate the level of efficiency and help in getting closer to the people that we serve.



INNOVATIVE NBFCs IN SOUTH INDIA DRIVING FINANCIAL INCLUSION



(From L to R) Gowra Srinivas, President, Federation of Telangana & Andhra Pradesh Chambers of Commerce & Industry, Ajay Mishra, Special Chief Secretary, Department of Energy, Government of Telangana, inaugurating the 4th NBFC100 Tech Summit, Hyderabad, in the presence of Venkatesh Commurl, Corporate Marketing & New Initiatives, Precision Biometric India Pvt Ltd and Dr Ruchi Agarwal, Senior Researcher, Indian School of Business and Manu Raj Singhal of Elets Technomedia.

As the Government is steadily working on ensuring financial inclusion in the country, the BFSI sector has acquired an unprecedented significance to facilitate it the real way. Innovation and tech-driven banking sector along with big financial companies are big factors behind this financial transformation happening at a fast pace.

In this light, highlighting the excellence and understanding the innovations made in the field of Non-Banking Financial Companies (NBFCs) in South India, Elets Technomedia organised the 4th NBFC100 Tech Summit in Hyderabad in June.

The mega congregation of experts from across financial institutions was inaugurated by Ajay Mishra, Special Chief Secretary, Department of Energy, Government of Telangana.

Jayesh Ranjan, Principal Secretary- Information Technology, Industry & Commerce, Department, Government of Telangana also attended the summit and shared his valuable insights of NBFCs.

Other eminent dignitaries namely Gowra Srinivas, President, Federation of Telangana and Andhra Pradesh Chambers of Commerce & Industry, Dr Ruchi Agarwal, Senior Researcher, Indian School of Business, Dr B Yerram Raju, Adviser and Telangana Industrial Health Clinic Limited, Government of Telangana addressed the inaugural session and shared their views on Hyderabad and its financial landscape.

On this occasion, experts talked about several revolutionary changes the NBFCs underwent and how it is emerging as a leader of India's Banking, Financial Services and Insurance (BFSI) sector.

Esteemed dignitaries discussed about the paradigm shift in NBFCs in the last three decades. Changes in terms of their scope, style of functioning and the way they handled the menace of Non Performing Assets (NPAs) were also discussed during the summit. Here is a glimpse of the summit:

4TH NBFC100 TECH SUMMIT



(R to L) Dr B Yerram Raju, Adviser, Telangana Industrial Health Clinic, Venkatesh Commurl, Corporate Marketing & New Initiatives, Precision Biometric India Pvt Ltd, Dr Ruchi Agarwal, Senior Researcher, Indian School of Business Ajay Mishra, Special Chief Secretary, Department of Energy, Government of Telangana (Centre), Gowra Srinivas, President, Federation of Telangana & Andhra Pradesh Chambers of Commerce & Industry and Manu Raj Singhal of Elets Technomedia, launching the special issue of The Banking and Finance Post Magazine at 4th NBFC100 Tech Summit, Hyderabad.

INAUGURAL SESSION

ROLE OF NON-BANKING FINANCIAL COMPANIES (NBFCS) IN BOOSTING FINANCIAL INCLUSION



Non Banking Financial Companies (NBFCs) are playing an important role in meeting up the goal of financial inclusion. They have emerged as a very disciplined platform, following the guidelines of the regulators. NBFCs, are today spread across the country with more than 13,000 players registered with the Reserve Bank of India and many of them are even authorised to accept public deposits. When compared to the banking sector, NBFCs have lower Non Performing Assets (NPAs) due to efficient loan management systems, due diligence, the system in place for assessing borrowers' credit worthiness. Today, many borrowers are switching over to NBFCs because these institutions comparatively take lesser time for processing applications.

GOWRA SRINIVAS

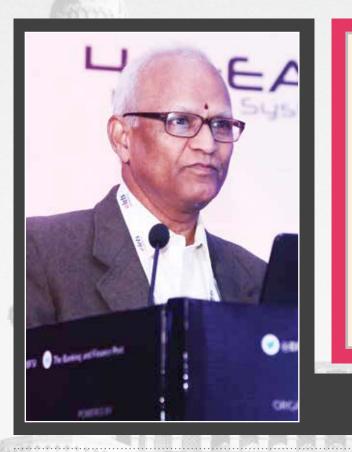
President, Federation of Telangana & Andhra Pradesh Chambers of Commerce & Industry

Indian banks are currently facing a lot of issues related to NPAs. As per my research, NPAs and frauds also affected NBFCs. Recently Punjab National Bank (PNB) was hit with a big fraud and we found that there is one commonly adopted worldwide model called three lines of the defense model that's used to control frauds worldwide. This was not in place in Indian public sector banks. We are several decades behind the international market. After interviewing 50 Chief Risk Officers and 30 chairmen of large Indian insurance companies, and seven large British insurance companies, I have found in my study that we have weak fraud control systems in place, compared to global practices.

DR RUCHI AGARWAL

Senior Researcher **Indian School of Business**





NBFCs have been occupying a space that is largely left unattended by the conventional banking institutions for the past several years. There is a negative growth in the MSMEs lending by the commercial banks. The progressive NBFCs now take major innovative steps to cater to the credit lines faster as compared to the commercial banks. The demand for lending in MSMEs is growing faster as per the latest figures reported by the Reserve Bank of India (RBI), the contribution of NBFCs in this lending is significantly high. I believe in future this contribution is going to grow beyond six per cent.

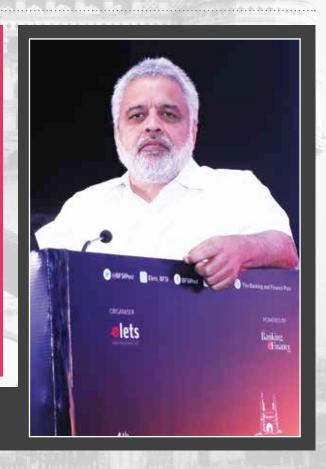
DR B YERRAM RAJU

Adviser, Telangana Industrial Health Clinic Limited, Government of Telangana

The NBFCs have undergone a paradigm shift for last three decades. Their scope, style of functioning and meeting the customer needs, everything changed significantly. These institutions are growing positively, reaching out to the credit demands of the underbanked segments of the society. These financial institutions are serving the populace that represents significant segment, namely rural and agricultural sector etc. In addition to this, I also believe that Indian banking sector is increasingly getting tech-drive but it should also understand that several users in this cash dominated country are yet to get digitised. Financial institutions should take them along and then get digitised by spreading proper awareness pertaining to digital payments.

AJAY MISHRA

Special Chief Secretary, Department of Energy, Government of Telangana



TECHNOLOGY PRESENTATION:

PREVENT IMPERSONATION, IMPROVE SECURITY, INCREASE EFFICIENCY USING BIOMETRICS



If you look at the password based security approach, either it goes too simple to a point that it can be hacked and impersonation is possible, or it gets so complex that we have to write it down to remember it - which defeats the whole purpose. In big breaches, passwords have been the weakest link. An eight character password can be cracked in about five hours by a computer. And there is a cost associated with resetting this password. So while passwords have for long have served their intended purpose, it's time to move forward and embrace biometric system- bio means life metric measuring - a comparatively safer option. We at Biometrics provide a host of biometric solutions.

VENKATESH COMMURI

Corporate Marketing & New Initiatives Precision Biometric India Pvt Ltd

PANEL DISCUSSION:

HOW TECH-DRIVEN NBFCs ARE REINVENTING THE SECURITY LANDSCAPE?



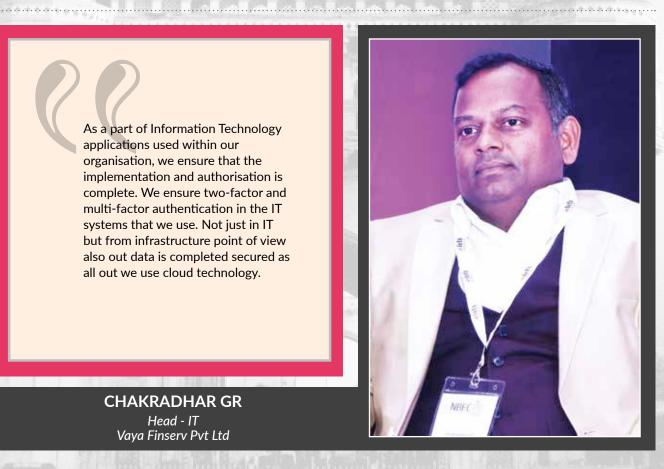


At PrestLoans, loan onboarding of customer happens online but then we make sure that atleast two people go to the person at two different instances to make sure that a human touch is there. An instance is related to small businesses owners is worth sharing. When we ask them to come over to the branch; they typically come with their family. So, we give them a gift hamper to help the customer in connecting with us emotionally. Along with a digital touch, human touch is a must.

ASHOK MITTAL Chief Executive Officer PrestLoans

As a part of Information Technology applications used within our organisation, we ensure that the implementation and authorisation is complete. We ensure two-factor and multi-factor authentication in the IT systems that we use. Not just in IT but from infrastructure point of view also out data is completed secured as all out we use cloud technology.

CHAKRADHAR GR Head - IT Vaya Finserv Pvt Ltd





Security management in a financial institution depends on the way it looks at its technology implementation and adaptability. As soon as an organisation starts thinking about embracing technology for data management security automatically takes the front seat. We believe in creating awareness amongst our employees and customers making them conscious to the fact that safety is paramount.

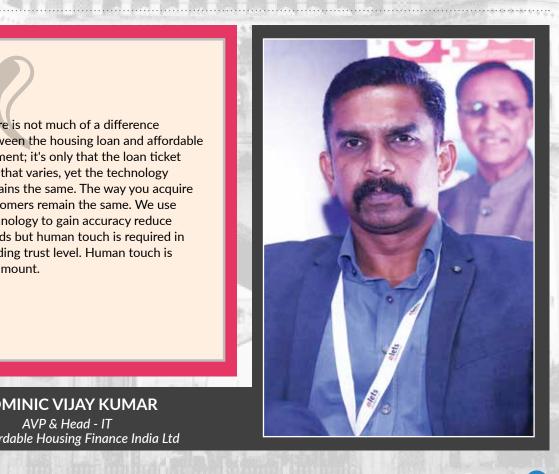
GANAPATHY SUBRAMANIAN

Co-Founder & Chief Operating Officer **FundsCorner**

There is not much of a difference between the housing loan and affordable segment; it's only that the loan ticket size that varies, yet the technology remains the same. The way you acquire customers remain the same. We use technology to gain accuracy reduce frauds but human touch is required in building trust level. Human touch is paramount.

DOMINIC VIJAY KUMAR

AVP & Head - IT Art Affordable Housing Finance India Ltd



CEOs ROUNDTABLE:

EXISTING ROADBLOCKS AND EMERGING OPPORTUNITIES FOR NBFCs AND ROLE OF REGULATORY BODIES



The rising menace of Non-Performing Assets (NPAs) in India is bringing a lot of challenges for banks. In these tough times, NBFCs-MFIs are emerging as the new leaders catering to the demand of the customers in several innovative ways. Opportunities for both banks and NBFCs are equal but NBFCs are reaching out to the actual demand of the consumers.

PUNIT JAIN

Chief Executive Officer Nelito Systems Ltd





In the last few years, banking sector in India has opened up to a lot of innovations and several new players like Small Finance Banks, Payments Banks and many others have emerged as the faces of non-conventional banking. This is the golden period when the regulators are ready to offer licenses to financial institutions, in order to help them in serving the consumers better.

ABHIJIT RAY

Founder and Director UC inclusive Credit Pvt Ltd

Non Banking Financial Companies (NBFCs) are catering to the needs of Small and Medium Enterprises (SMEs) that are highly deprived of credit. The demand for credit in this particular segment is huge. It is generally believed that demand for credit is high only in Tier III and Tier IV cities but in my view it has an equal need in the metros as well.









The greatest opportunities for NBFCs are in terms of tech-enablement. There is a lot of scope for smaller businesses with regard to digitisation. It is significant for them to convert digital footprint into a credit worthy data. Tech-enablement model is a new way of digital lending and it is proving to be an efficient way serving the customers.

SRIHARI ADURTY

Co-Founder & Chief Risk Officer FundsCorner

NBFCs are gaining a lot of popularity within the consumers because they offer customised products as per their need unlike banks that are less flexible and online offer products that they have in their inventory. This is the reason why the level of NPAs in the NBFCs is also significantly low.

AVISHEK GUPTA

Director - Investment Caspian Impact Investment Adviser Private Limited





By 2022, India is going to be an urban-rural nation in 50-50 ratio. This suggests that the lending requirement will be equally divided between the urban and rural populace and therefore the offerings from the financial institutions will also change in alignment to the customers and their demands. In this context, NBFCs have a lot of opportunity to innovate its credit offerings.

G RAMESH KUMAR

Chief Financial Officer Nabsamruddhi Finance Ltd

Micro Finance sector was non-existent 20 years ago. The customers we are catering to now were either underbanked or they were lending from friends and family or maybe they were taking loans from money lenders at very high rate of interest. Several stalwarts such as NABARD and Grameen Banks have actually laid the foundation of Microfinance Institutions (MFIs) that is helping in meeting the lending demands of a large section of Indian society that were earlier not looked upon.

JAGADISH RAMADUGU

Co-Founder & CEO Vaya Finserv Pvt Ltd



PANEL DISCUSSION:

WHAT COMES FIRST FOR NEXT-GEN BANKING-INNOVATION OR LEGACY?



Opening of bank accounts in India has seen a phenomenal change in the recent times, according to a study by World Bank. But the report also suggests that several of these bank accounts are not operated by the holders for months. In my view, innovation is important but prior to that banking the underbanked is the priority.

ANAND SHARMA Chief Technology Officer Asirvad Microfinance Ltd





Legacy and innovation are both equally significant for the banking and financial sector. They should both work hand-in-hand. There are several brands that have innovated many new products but are still associated with their original offering. For example, Amazon is now an e-commerce giant that originally started from selling books and have now diversified their business.

CHAKRADHAR GR

Head - IT Vaya Finserv Pvt Ltd



Innovation is important but it should be done keeping our customer base in mind. We will have to make sure that technologies that we are adopting should help us in serving our customers better. Innovation just for the sake of trendsetting without any significance in terms of application is not beneficial.

DHRUMIL DALAL

Senior Vice President - IT Bharat Financial Inclusion Ltd



Regulatory reforms in India are required to be changed, prior to thinking about any innovation in the banking and financial sector. If the central system changes in alignment to the changing technology, every innovation will be in complete coordination and it will help us in serving our valuable customers efficiently.

SRIHARI ADURTY

Co-Founder & Chief Risk Officer **FundsCorner**









Valedictory Session by Special Guest

The Indian Banking, **Financial Services and** Insurance (BFSI) sector is primarily focusing on two significant aspects namely financial inclusion and digital payments. However, despite being in the spotlight for quite some time, major innovations in the terms of financial inclusion has been reported only from last eight to 10 years. Simultaneously, the push for digital payments only began in the last one-and-a-half year, after the withdrawal of large currency notes through demonetisation drive. These two forces, in some ways, are also intersecting each other. This has led the conventional BFSI sector into a tailspin.

JAYESH RANJAN

Principal Secretary- Information Technology, Industry & Commerce Department, Government of Telangana

GLIMPSES OF AWARDS





















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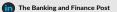














India has come a long way in terms of its financial structure, especially when it comes to the banking and finance industry. Today, the methodologies to evaluate one's credit worthiness have witnessed a sea change. People are being evaluated even in terms of their financial activities' record of everyday life, Ahmad Shariq Khan of Elets News Network (ENN) examines all this and much more.



ou may describe it as strange, interesting or simply the new norm in the financial world of India but certainly, thanks to fintechs, the financial sphere here has undergone a sea-change in last decade or so. After all, the Indians are now living in an era of fintech-backed e-payments.

In the recent times, the Indian banking sector coupled with its traditional financial services space have undergone a big transformation, thanks to the entry of Fintech players – that, backed by technology and innovation, along with many industry's firsts, have brought a new kind of energy, and modus operandi to the whole banking and financial sphere.

Across the globe too, the fintech sector is flourishing.

As per KPMG, the fintech segment that by definition, comprises technology-based businesses that are competing against, enabling or collaborating with existing financial institutions, is likely to continue its current growth trajectory heading northwards, with the global fintech software and services sector forecasted to touch \$45 billion by 2020 at a Compound Annual Growth Rate (CAGR) of 7.1 per cent.

In India too, the fintech space seems to be placed on a solid footing. Let's explore the key reasons that have fuelled or are fuelling the sector's growth in recent times.

RECENT ENABLERS

Consider this, India is home to the largest unbanked or under-banked population in the world. As per a top auditing firm, the financial services market in India is primarily untapped, with 40 per cent of the nation, having no association with any bank and more than 80 per cent of the transactions across the country still carried out through cash. It's in this backdrop it can be said that in recent times, a strong, proactive policy level push from the Indian government appears to have worked in favour of the sector, giving it the muchneeded boost to increased user-adoption



in this segment.

For sure, Prime Minister Narendra Modi-led government's recent consistent push towards initiatives such as cashless economy, Jan Dhan Yojana, Aadhaar and the emergence of Unified Payments Interface (UPI) plus a consistent push for popularising apps such as Bharat Interface for Money (BHIM), developed by National Payments Corporation of India (NPCI), based on the Unified Payment Interface (UPI), all such IT-driven measures have certainly provided a good foundation for Indian fintech companies to reach to, and cater to the potential demand across the nook and corner of the country, thereby

As per KPMG, the Fintech industry is likely to continue its current growth trajectory, with the global Fintech software and services sector predicted to touch \$45 billion by 2020 at a Compound **Annual Growth Rate** (CAGR) of 7.1 per cent.

facilitating the last mile touch-points and giving a significant boost to the idea of a holistic and effective financial inclusion across the country.

WHAT'S MAKING FINTECHS TICK?

Of late, India's fintech landscape has witnessed a strong user-adoption. The sector, driven largely by the payments sector has enjoyed a boost, postdemonetisation of high-value currency notes by the current Government. In addition, one of its subdomain i.e. alternate lending, fuelled by the large number of unbanked, new-to-bank, and under-banked consumers has also emerged as a key growth driver.

According to Punit Jain, Chief Executive Officer, Nelito Systems Ltd, "The differentiator is: Agility. The technology plays a game-changing role here. Be it approving of loans or customers' onboarding - in all such processes, technology has been the key enabler for NBFCs, setting them apart from traditional BFSI players."

Mentioning how IT has brought efficiency across the sector, another industry stalwart, Ashish Ojha, Chief Technology Officer, Aye Finance, adds, "Thanks to technology enablement, our company grew from a start-up phase to a mid size one in a span of just two years. We grew from 150 Cr to 500 Cr in a matter of a year. Last year, our entire process was paper-based, and turnaround time was 10-12 days. Thereafter, thanks to the consistent usage of automation technology, we managed to reduce our loan disbursal time to 3-4 days." Such is the potential of IT in driving the growth of the fintech space in India.

FINTECH SECTOR'S GROWTH **DRIVERS:**

Digital Payments





Of late, riding high on the demonetisation wave, the digital payments segment has garnered huge recognition. As per a leading international audit company, it is estimated that 80 per cent of economic transactions in India still happens through cash, contrary to around 21 per cent for developed economies. This certainly hints at the mammoth size of the opportunity that exists for fintech firms in this segment in the country.

Further, the digital payments sector in India is estimated to grow to \$500 billion by 2020, up from roughly \$50 billion last year, and representing around 15 per cent of GDP in 2020. Mobile payment solutions, such as wallets, P2P transfer applications and mobile points of sale, are al observing good growth in terms of strong user-adoption across Indian cities, tier-2 and tier-3 cities.

being a 100 per cent digital bank, opines, "Technology is so integral to us and to the NBFC sector, that without it, the sector cannot operate, let alone succeed. We are innovating each day to be more agile to customers' needs."

According to a research, over 95 percent of financial services incumbents seek to explore fintech partnerships.

77



In addition, some fintech players in the sector have started taking advantage of Govt's policy initiatives such as 'Payments Bank' licenses to become a hybrid model, thereby facilitating a blend of mobile-based services with many traditional banking services.

Sarath Chandra, Chief Technology Officer, Airtel Payments Bank, while summing up the lifeline role of technology in a modern day IT-driven NBFC such as his own (organisation), that as per him, right from the word go, has had the distinction of

ALTERNATIVE LENDING

Alternative lending is the second most funded and one of the fastest growing segments in the Indian fintech space. Worth noting is around 37 per cent of India's GDP is contributed by MSMEs but the supply of credit lines to this important segment has often been found to be uneven. This has resulted in the growth of alternative lending as a medium for meeting the needs of different borrowers seeking financial products such as consumer loans, SME loans, working capital loans, and even

payday loans among others. Recently, in this domain, many startups have brought in many innovative processes for credit scoring, risk assessment and loan disbursement.

According to Srivaths Varadharajan, Chief Information Officer, Niyogin Fintech Ltd, "Besides application programming interface (API) integration and a Credit bureau's perspective, we now take into account the social profiling score." Interestingly, it's worth mentioning that in India, things have come down to the level that now even Swiggy's (food delivery app) orders history is being taken into account by many fintech players for judging the credit-worthiness of customers. This very well demonstrates the level of excellence being enjoyed by Indian players in this domain - and things are bound to only get better here on, we believe.

DIRECT LENDING

Direct Lending includes platforms that have a lending license to lend funds to various sectors. The major contributors to the growth of this sector include a large amount of unmet demand for loans from MSMEs, with a gap of roughly \$200 billion in credit supply, and a significant underbanked and new-to-bank population, as per PwC. Joining the bandwagon, recently many NBFCs have started competing with traditional banks in this segment – offering MSMEs with better offerings, hasslefree application processes, eKYC norms, alternate credit-scoring algorithms and lower processing time.

P2P LENDING

Peer-to-peer (P2P) lending involves building a marketplace to bring together individual borrowers and lenders through tech-enabled platforms. This allows borrowers to access low-cost quick loans at a rate they can afford. Increasingly, such marketplaces use alternate credit scoring models for risk assessment and underwriting. Vaibhav Pandey, Co-Founder, i2iFunding, tells us, "For a P2P lender like us, technology has been an enabler. Dealing

in loans with a ticket size of Rs 50,000 to one lakh, all enabled through our mobile app, with customers' insights from social media platforms, and its triangulation to effectively judge the credit-worthiness of our customers."

BANKING TECHNOLOGY

Led by emerging technologies such as artificial intelligence, machine learning and BOT-enabled conversational banking services, this segment effectively forms the bedrock for fintech solutions being offered by fintech firms. The domain includes software solutions, fraud and risk management tools, regulatory compliance and other solutions for banks and other financial institutions (FIs) – all of which are essential for hassle-free IT- driven banking or a related experience.

INSURANCE TECH

With rising consumer expectations and increased access to technology-enabled efficiencies, insurers world over are increasingly looking to incorporate solutions that improve customer engagement, retention and improve the complete customer lifecycle. For example, backed by Internet-of-Things (IoT) enabled solutions and its collaboration with health and wellness data, can greatly help insurers predict consumer behaviour better.

WEALTH MANAGEMENT

Backed by Artificial intelligence (AI), Machine Learning (ML), coupled with an automation shift to a hybrid model, the asset and wealth management industry in India is one segment that in recent times has achieved significant growth. Globally, we are seeing a shift from robo-advisory to hybrid human-assisted robo-advisory and thus all such future innovations involving hybrid technologies are set to further fuel this segment's growth in India too.

CROWDFUNDING

This domain involves raising funding



opportunities from a large group of investors. Under the process, the investors can interact with the investees and view their innovative ideas on a crowdfunding platform meant for this specific purpose. Once the two parties agree, the financing can then be received in the form of donations. While, this form of alternative lending is at a very young stage in India, certainly there exist many untapped opportunities waiting to be explored.



THE ROADMAP AHEAD

Despite a few concerns raised about regulatory clarity, the outlook for fintech in India remains very promising.

Going forward, increased regulatory support, push on financial inclusion and most importantly, a rapidly-increasing adoption of emerging technologies in the financial services industry are likely

to further enhance the prospects of this domain.

Nevertheless, one built-in Achille's heel of NBFCs that stems from the very nature of their inherent design is the fact as highlighted by Rakesh Dubey, Chief Executive Officer, SV Creditline Limited, saying: "Since a bank in India is synonyms with trust, hence being an NBFC equals to being a non-trust holding entity, hence to gain back the trust of the level of bank, the sector needs to work extra hard and needs better regularisation for the purpose."

Equally important is another grey area that needs to be addressed i.e. the fact that the segment's ecosystem, taken as a whole, still lags behind other global fintech hubs in terms of the number of middleware and B2B solutions - that are much needed for a robust and consistent performance of the sector since these effectively enable financial institutions to provide end-to-end solutions for their users.

Going forward, as the sector's stakeholders proactively work towards enhancing the finer details of the entire fintech ecosystem, the domain is bound to register healthy growth in future.

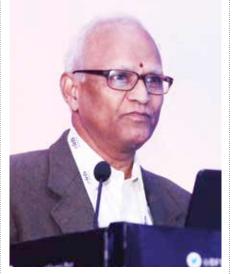
TELANGANA INDUSTRIAL HEALTH CLINIC HELPING MSEs TREAT FINANCIAL SICKNESS

Telangana Industrial Health Clinic Limited is a pioneering concept design, aimed to facilitate the needs, challenges and efforts of the manufacturing Micro and Small Enterprises (MSEs) within the gamut of industry ecosystem comprising entrepreneurs, industries department, ministry/government, banks, financial institutions and other stakeholders, says Dr B Yerram Raju, Adviser, Telangana Industrial Health Clinic Limited, Government of Telangana, in conversation with Sudheer Goutham of Elets News Network (ENN).

How did you get the idea of starting Telangana Industrial Health Clinic Limited (TIHL)?

I started my career as a probationary officer in the State Bank of India (SBI) and then moved on to various institutions studying several enterprises and their financial stress management system. I wrote nearly 2000 research-based articles and several books. After years of research and observation, I came up with the idea that the enterprises need some level of external institutional effort to help the MSEs in coping up with bad loans. With this, I approached the government and they decided to appoint me as an advisor of Telangana Industrial Health Clinic Limited.

On realising that the existing institutional mechanisms proved to be inadequate both in spirit and activity to deal with the challenges of the manufacturing MSEs, lead us to fill the gaps with an innovative institution, interventions and instruments through Telangana Industrial Health Clinic (TIHCL), to resolve and prevent the sick and incipient sickness challenges of the enterprises in Telangana.



Dr B Yerram Raju Adviser, Telangana Industrial Health Clinic Limited, Government of Telangana

Tell us about TIHL and its services.

"Telangana Industrial Health Clinic Limited (TIHCL)", a Fintech driven Non-Banking Finance Company (NBFC), is a 'diagnositic' and 'curative' industry initiative for manufacturing MSEs, promoted by the State Government of Telangana and anchored



TIHCL is a pioneering concept design, aimed to facilitate the needs, challenges and efforts of the manufacturing MSEs within the gamut of industry ecosystem comprising entrepreneurs, industries department/dics, ministry/government, banks, financial institutions and other stake holders.

TIHCL has a corpus of Rs 100 crores fund, with an initial contribution of Rs 10 crores from Government of Telangana, a Rs 50 crores from Government of India and the rest through Equity holding from MSEs, banks and Financial Institutions etc.

TIHCL sets a benchmark in the chapter of 'inclusive-financing' by creating a paradigm-shift of focus in engaging, rejuvenating and advocating the state of affairs and synergies in manufacturing MSEs.



TIHCL spearheads a key role in the programme of 'Make in Telangana'

Our services:

Proposing a due diligence of micro and small enterprises through structured formats and effective measures helps DIC's in capacity building, would pave the way for setting up manufacturing enterprises in clusters

Willing to facilitate and recommend financing requirements for clusters with the banks, Financial Institutions and others

Devising a mechanism for sponsoring and handholding MSE applicants with a due diligence report with connectivity through 'TS-iPASS' and 'Udyami Aadhar' would merit immediate sanctions

Facilitating MSEs with a true opportunity



TIHCL sets a benchmark in the chapter of 'inclusive-financing' by creating a paradigm-shift of focus in engaging, rejuvenating and advocating the state of affairs and synergies in manufacturing MSEs.



to establish in clusters propelling employment and entrepreneurship across the projects like Textile Park, Leather Park, Food Park, Pharmaceuticals Industrial City etc.

What are your plans for the next five years?

In the next five years, we would like to go for IPO. We offer 7 per cent in the capital invested with us with a locking period of two years. We are now looking for better funds. The Reserve Bank of India (RBI) has directed the banks not to fund non-core areas. We therefore have requested RBI to classify the categories into priority and non-priority sections in terms of non-core segments as we cater to the needs of MSEs which falls under a priority area. This would be of great help to us and simultaneously the capital would get greater leverage. We are also requesting investors to come and invest with us as it is a completely new venture.

Do you levy any interest on the SMEs investing with you?

Yes, we charge 5 per cent rate of interest, which is much lower than what the bank charge. Banks pay 3 per cent hand holding charges to us because we are working on their behalf. We are helping the banking in lowering Non Performing Assets (NPAs) and preserving their capital. Our aim is to bail out 500 enterprises in a year. With this annual target, we are likely to secure the employment of 22,500 employees on an average. We are acting as insurance for the MSMEs.

What are your views on the NBFC100 Tech series of conferences organised by Elets Technomedia?

I believe that these summits are very important in terms of exchange of ideas on various types of technologies that are available. These summits are significant as they help in passing some important recommendations to government pertaining to how technology and human interface are important in services the demands of the customers.



Pinak Chakraborty Senior Vice President of Technology - Building Digibank, DBS India

How is digitisation reinventing the banking sector in India?

Digitisation has laid a profound impact on banking in several ways. Be it the upgradation of mobile banking, wearable gadgets or social media that is increasingly becoming an interactive platform to develop applications, advancement of machine learning and artificial intelligence, robotic process automation, Open API, flexibility and scalability of cloud infrastructure and lastly blockchain distributed ledger technology.

Ideally, any technology platform can easily become a channel for banks to deliver its banking services. However, that platform should be mature enough to provide security, scalability and address the bank's concern of confidentially of customer data.

I mentioned blockchain distributed ledger technology as the last point, not because of the impact that it may have on banking because I personally believe that the underlying technology and related process to support its implementation in

STAY AHEAD IN RETAIL BANKING THROUGH DIGITAL TECHNOLOGIES

To match the customers' changing demands in the digital era, banks in India should emphasise on embracing tech-driven initiatives. They should enhance their services and modernise offerings to provide personalised products to customers, says **Pinak Chakraborty**, Senior Vice President of Technology - Building Digibank, DBS India, in an interview with **Rakesh Rov** of **Elets News Network (ENN).**



production are still maturing and are at an experimentation stage for now.

Many aspects of it, for example, confidentially, data model, consensus building or even scalability aspects are not fully understood as of now. It will require some more thoughts and experiments before it can be fully adopted. My opinion on this is that banks cannot turn their back on this interesting technology but should stay engaged and help in developing it further doing experimentation in collaboration with other banks and define process around it so

that they are ready when the time comes finally.

How different are the Indian digitisation initiatives in retail banking as compared to the measures taken by the US?

While the challenges faced by the retail banks and their approach towards digital journey are more or less the same across India and the USA in my opinion, there are many differences as well. The two prominent differences that I have noticed are:

Firstly, in the USA, there is a realisation in retail banks that they need to be more cautious and diligent in protecting intellectual property that they are creating to be able to compete with technology companies and hence, we have seen a lot of focus to file patents and a willingness to spend time and budget allocation to this end. This is not the case in India so far, perhaps because of the regulatory framework and situation in the industry in terms of IP.

Secondly, in India, the central bank and the Government have a clear direction to move towards digital and some initiatives like Unified Payment Interface to modernise



payment delivery mechanism is driven by the central entities which retail banks have adapted to. But in the USA, central banks are playing a role of advisor and consultant and innovation is more driven from ground-up by the retail banks themselves.

How did AI, Machine Learning, Robotics change the banking system?

Advancement of Artificial Learning (AI) and Machine Learning algorithms and multitude

of data points from customers' interactions with banking channels, social media updates mean that banks can now have a deeper understanding of their customer and their needs.

This insight can be used to provide a frictionless, personalised and contextual experience to the customers. The mobile or any other self-service channels UI may not be a fixed one, but change depending on the tasks that customers are about to perform. There can be dynamic help for customers to navigate the UI and advise



"Advancement of Artificial Learning (AI) and Machine **Learning algorithms** and multitude of data points from customers' interactions with banking channels, social media updates mean that banks can now have a deeper understanding of their customer and their needs."



them from going on a wrong route to try out a transaction.

In another context, AI/ML can make bank's internal processes more efficient, like fraud detection can certainly improve if it can be based on customers' behavioural pattern, inputs from social media etc., instead of following a static rule-based mechanism.

Please apprise us on how retail banks are looking at increased competition from non-banking entities and FinTech companies?

It is well-known that banks are facing challenges of disintermediation from non-bank Fintech organisations who are placing themselves between banks and banks' customers. Most of these Fintechs are developing expertise in one area like payments or unsecured loan etc. and providing an efficient, personalised and speedy execution of those banking functions of their expertise.

But the way banks have attempted to address this challenge varies. In some cases, banks attempted to launch a competing product to retain their customer base, and we have seen close collaboration among banks in developing these products as their challenge back to the Fintechs. Zelle, a digital payment app launched in the USA where most of the retails banks worked collaboratively, is one such example.

However, in some other cases, banks' approach was to work closely with Fintech and to find a common ground that is beneficial for both. After all, if a digital wallet provider can increase usage of the credit cards, then banks also stand to earn more in interchange fees, but may miss out on details of transaction data if the digital wallet provider does not share all the merchant details etc. in a transaction to the issuer banks.

You can notice that barring a few exceptions, most of the USA retail banks did not launch a digital wallet based on NFC, but worked collaboratively with Apple Pay, Google Pay, Samsung Pay etc. and of course, payment networks, like Visa, MC and Amex to launch tokenisation solution.

To summarise, I think we will see retail banks learning from Fintech challenges and using this as an opportunity to modernise their technical stack to offer more efficient and personalised products to the customers and will also work collaboratively with Fintech in some cases.





Vijay Thomas Chief Executive Officer, Tangentia



Cloud is one of the core technologies at the forefront of the digital age - providing an infrastructure fabric for other technologies such as mobile, automation, artificial intelligence, social computing, Internet of Things (IoT) and analytics, and blockchain, to name a few. The banking and financial industry in India has been quick to adopt these technologies, and cloud technology is often the backbone for any implementation in this space. Cloud technologies such as virtualisation, Infrastructure-as-a-Service (IaaS), and Platform-as-a-Service (PaaS) can help banks improve cash flows by moving from a Capital Expenditure (CapEx) to an Operational Expenditure (OpEx) model. Risk Profiling Systems, Early Warning Systems using Predictive Analytics, Non Performing Assets (NPAs) monitoring are applications which can be built on a cloud technology infrastructure. Technologies such as robotics process automation (RPA), Artificial Intelligence (AI), Blockchain, Augmented and Virtual Reality, IoT, Big Data and other digital technologies can help



Tangentia OFFERING SECURE BFSI SOLUTIONS TO ENABLE EFFICIENCY AND TRANSFORM EXPERIENCE

Tangentia is a Global Boutique technology consulting firm with extensive experience working with BFSI clients. With innovative solutions, a proven track record over fifteen years and a strong partner network, the company is well poised to support BFSI customers as they look to embrace the realities of the digital age and transform their companies, says, Vijay Thomas, Chief Executive Officer, Tangentia, in conversation with Elets News Network (ENN).

the Indian banking and financial industry both in optimising their operations as well as transforming digital customer experience and engagement.

What sort of cloud-based services do you offer in the banking sector?

We are among the world leaders in Electronic Data Interchange (EDI) and B2B integration and our proprietary Tgateway offering, used by 1,000+ customers globally, is a cloud-based offering. Tangentia has built SWIFT gateways for multiple large global banks and has been involved in



multiple projects integrating banks with their intermediaries and partners as well as integrating Core Banking applications to Wealth Management and Trading Platforms. In addition, Tangentia has built one of the first mobile banking apps built on the IBM Bluemix Cloud Platform on a private cloud.

Tangentia understands the BFSI sector very well and we think this sector is poised for a lot of transformation especially with Robotic process automation (RPA), AI, Blockchain and related digital technologies. Tangentia is well poised to support our customers in this sector via our alliances with partners such as IBM, UI Path, Automation Anywhere and Blue Prism, to name a few.

Technology is significant for innovation but it also carries the risk of data breach. How do you ensure the safety through your products and services?

Technology security has multiple facets. For example, we were among the early movers in the area of Identity and Access Management (IDAM) where we have significant maturity and proven implementations. Apart from standard testing, we also include a security testing phase in all our project implementations. Tangentia is SOC 2

certified and we have tried to make sure that we internally use some of the same security infrastructures as our customers and this has helped us understand this better. However, the security business is ever evolving and the "good guys" have to keep working hard to keep ahead of the "bad guys".

Tell us about the B2B industry in India. How do you think technologybased innovation can transform it?

The B2B(Business to Business) industry's



"Technologies such as robotics process automation (RPA). **Artificial Intelligence** (AI), Blockchain, Big Data, Analytics and other digital technologies can help transform Indian banking"



success depends on a simple metric: the ease of doing business. And this metric can be dramatically transformed through technology innovation. Electronic Data Interchange (EDI) technologies such as our Tgateway offering mentioned earlier can help businesses streamline their purchase order, invoicing and related operations with their trading partners. Process digitalisation using technologies like Robotic Process Automation (RPA) and AI can help reduce process cycle times, which are critical in any B2B interaction. Blockchain technology is well-known in financial services for crypto-currency applications. A lesser known but emerging application area for Blockchainis in "Smart Contracts" which have the potential to dramatically reduce contract risks and dispute management in B2B scenarios. In B2B, for Banking and Financial Services, technology innovations around AI, Big Data and Analytics can help in scenarios such as commercial lending to optimise processes such as KYC (Know Your Customer) and improve risk profiling, underwriting and real-time risk monitoring. Finance & Accounting (F&A) is an example department that is critical to keep the wheels of the B2B industry turning. And technology based innovations such as predictive analytics for invoice delinquency, delivery reconciliation automation, advanced data visualisation can all help to streamline F&A operations for any company.

What services do you offer in terms of application development? What more have you planned for the future?

We offer full-stack development and implementation services for mobile, web and enterprise applications. We've helped customers with applications in areas such as B2B integration, e-commerce, IDAM, mobile experience and custom web development. For example, one of our flagship projects is for a leading Canadian bank, with whom we have partnered for a mobile experience solution for customer loyalty. The solution has helped the bank transform the digital experience for their customers, and has won them multiple awards in customer loyalty summits. Going forward, we are investing in and executing on application development, consulting, implementation, training and managed services around technologies such as RPA, AI, and Blockchain. We have a strong partner ethos and always look to leverage our partnerships for customer success. For example, we have a 15 years relationship with IBM and are a platinum partner with them, with cognitive AI applications using IBM Watson as a key focus area. In RPA, we are partnering with the industry leading software vendors to build solutions and services around their platforms.



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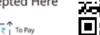
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HELIXTECH

CO-CREATING AWARD-WINNING APPS FOR ENTREPRENEURS & ENTERPRISES

Our Journey At A Glance

In 2013, when the Indian Start-ups had just started gaining momentum and smartphones were picking up faster than ever, two new Information Technology (IT) graduates started building mobile apps, exploring the best out of the trend. Five years and we've expanded our presence across six cities, three continents and we are growing. We've consulted close to 500+ Apps for over 100 clients.

Our goal is simple - amaze our clients by delivering high-quality software which runs smoothly, strategically and predictably. Helixtech is voted as the company of the year by CIO review and has ranked among the top 30 companies to watch out for by Silicon Review. Clutch has listed us as the "Top Enterprise Mobile App Developers". We have been listed among the top Internet of Things (IoT) App development companies by Design Drizzle. Helix Tech has also been considered as one of the best wearable app development companies by Top App Creators.

We have worked with over half a dozen tech start-ups:

- Beet Runner: Gaming App featured in Appstore
- TimeLooper: Created AR-VR app for a disruptive Start-up that has raised over \$2 million
- Filoturk: Created a Mobile suite for Turkey's largest commercial fleet management service provider
- Govego: Ported the booking process onto Mobile for Turkey's largest land and sea travel portal



- 3laModak: Strategised mobile solutions for one of Saudi Arabia's biggest daily deals platform accounting for 90 percent of the average traffic.
- X (US Start-up under NDA): Built an award winning AR/VR app that featured at Tech-crunch Disrupt **NYC**
- **CHALL:** Tech partners to a Start-up Istanbul finalist company
- Clean SMS: Worked with Google veterans to build a product hunt listed cellular network spam filtering app

Bringing an evolution in the Mobile world, Helix is a 'Mobile First Company' providing end-to-end solutions from a suite of mobile services including app strategy, design, development, QA and testing, app marketing, analytics all the way up to app lifecycle and management along with app indexing and most importantly security and compliance. Helix SWIFT, the company's flagship solutions, helps build mobile products for bootstrapped entrepreneurs, funded start-ups and enterprises through their programmes -- Swift LAUNCH, Swift GROW and Swift SCALE

Additionally, the company has

successfully jotted down a plan to spin off 'Helix Tech LABS' a product division of the company having its focus on the 'Internet for the Next Billion' in growing markets of Southeast Asia. Also, the company strongly believes in the paradigm shift from pipes to a platform which is why they are making an investment in that direction by building certain white label apps and solutions across the travel, fashion and transport verticals.

The company works closely with most promising incubators, accelerators and start-up governing bodies from across the globe including, Etohum from Istanbul, Hannover Impulse from Germany and Reactor from Warsaw to name a few!

Helix Tech holds a strong foothold in the area of Mobility and for a blooming future ahead. We are looking to expand across the Intelligent (Artificial Intelligence Foundation, Intelligent apps and Analytics and IoT) Digital(Digital Twins, Cloud to the Edge, Conversational Platforms, Immersive Experiences), and Mesh (BlockChain, Event Driven, Continuous Adaptive Risk) domains.





2018 - 2019







Elets Technomedia has been organising several high-profile summits across the country to explore emerging innovations in the BFSI sector. Join us in our upcoming endeavours and enhance your brand's visibility.

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2019

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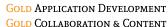


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