



THE POWER OF PRECISION IN FINTECH: A VISION FROM PARAG BHISE, CEO, NUCLEUS SOFTWARE

In conversation with Parag Bhise,
Executive Director & CEO, Nucleus Software.



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The Fintech sector has undergone a revolutionary transformation. What are the attributes of Nucleus Software that give it an edge in the market?

The fintech landscape is evolving at an unprecedented pace, and Nucleus Software is not just keeping up—we are setting the benchmark. With over three decades of leadership in financial technology, we have consistently redefined industry standards by scaling our intellectual property globally and delivering robust, scalable, and future-ready solutions.

Long before automation and AI became industry standards, Nucleus Software was already pioneering digital innovation. In 1997, we achieved an industry-first by enabling 24x7 ATM functionality for a leading American bank—leveraging screen-scraping technology to integrate with mainframe systems. Our VRU (Voice Response Unit) and Credit Card solutions played a pivotal role in shaping India's personal finance sector in the late 1990s.

Over the decades, banking has evolved significantly - the 2000s saw the rapid adoption of internet banking,

electronic transactions, and the first wave of mobile banking. The 2010s ushered in AI, fintech startups, and mobile-first banking, fundamentally reshaping customer expectations with innovations like open banking, digital wallets, and real-time payments. Now, as we enter the 2020s and beyond, banking is becoming AI-driven, cloud-native, and seamlessly integrated into broader digital ecosystems.

At Nucleus Software, innovation isn't reactive—it's proactive. We anticipate industry shifts, leverage emerging technologies, and continuously evolve our platforms. As customer expectations rise and regulatory landscapes evolve, we remain focused on delivering intelligent, agile, and future-ready fintech solutions, ensuring near-zero downtime and real-time decision-making.

Today, our platforms process over 26 million transactions daily across 200+ financial institutions in 50+ countries. Our lending platform manages US \$500 billion of loans in India alone, and over US \$700 billion of loans globally other than India, while enabling 500,000+ users to log in daily enabling seamless banking experiences.

Our cutting-edge AI-driven insights, advanced security frameworks, and seamless integrations offer unparalleled functionality. We embrace cutting-edge methodologies, including Acceptance Test-Driven Development (ATDD), Continuous Integration/Continuous Deployment (CI/CD), and Lean Software Engineering, to deliver rapid, fail-proof banking solutions.

A key driver of our sustained innovation and execution excellence is our adoption of Hoshin Kanri, a strategic management methodology that ensures company-wide alignment, continuous improvement, and a structured approach to achieving breakthrough goals. By translating long-term objectives into clear, actionable steps, Hoshin Kanri helps us navigate complex industry challenges, align our teams toward a shared vision, and systematically drive customer-centric product development, operational efficiency, and business growth.

The future of financial services is digital, intelligent,

and seamless—and we partner with financial institutions to make that future a reality.

What are the key offerings in the company's portfolio, and what are the plans for future expansion?

At Nucleus Software, our product portfolio is designed to empower the financial services industry by combining deep BFSI domain expertise, groundbreaking innovation, and strategic foresight. Each of our solutions is designed to meet the evolving needs of the modern financial landscape, delivering efficiency, scalability, and enhanced customer experiences, all while ensuring adherence to global compliance standards.

FinnOne Neo® is our flagship AI-powered digital lending platform, designed to transform the entire lending lifecycle—from origination and servicing to collections. With 2,700+ lending variants, FinnOne Neo® is built on a API First architecture, offering out-of-the-box digital APIs and scalability to ensure seamless integration, agility, and future-ready banking.

FinnAxia® is our advanced transaction banking solution that offers real-time global cash management, liquidity optimization, and cross-border payments. Built for seamless integration and flexibility, FinnAxia® enables businesses to make informed decisions about working capital while managing risk and enhancing efficiency.

PaySe® our financial inclusion solution, is built to drive accessibility and transform the way banking reaches underserved communities.

At Nucleus Software, we are committed to continuous innovation and regulatory compliance to stay ahead in the evolving financial landscape. We have established a dedicated regulatory compliance team to proactively review all circulars and ensure FinnOne Neo® integrates the latest mandates. On the technology front, we are actively exploring Unified Lending Interface (ULI) integration into FinnOne Neo®, recognizing its transformative potential. Additionally, we are enhancing our Co-Lending capabilities to deliver an advanced solution that ensures seamless collaboration between lending partners with greater transparency

and efficiency. Strengthening our AI capabilities remains a top priority, with a strong emphasis on responsible AI, alongside continuous investments in cloud-native, microservices, and event-driven architectures. Furthermore, we are making significant strides in UX/UI enhancements, applying usability design principles to create an intuitive and engaging user experience.

FinnAxia® is continuously evolving incorporating cutting-edge technologies and regulatory compliance to drive greater efficiency and security. We are addressing evolving regulatory mandates by reviewing all RBI and NPCI circulars, ensuring compliance with requirements such as CTS cheque processing and Bharat Bill Payment. To empower businesses with deeper insights, we are integrating AI-driven MIS and analytics, allowing for better decision-making, enhanced financial forecasting, and smarter up-selling and cross-selling strategies.

Further enhancing user experience, we are introducing interactive dashboards and widgets for real-time transaction monitoring and financial data analysis. We are also strengthening support for ISO 20022 messaging standards to improve global interoperability and SWIFT GPI UETR compliance, ensuring better traceability and transparency in international payments.

With a focus on user experience, we are refining FinnAxia®'s design using micro-frontend architecture to ensure smoother, faster transactions in high-volume environments, providing a seamless, intuitive experience for our users. We are also enhancing API infrastructure to enable secure and efficient third-party integrations, streamlining business processes and improving automation.

For treasury management, we are enhancing Virtual Account Management to provide better visibility into cash flows, automate reconciliation, and support efficient treasury operations. Our upcoming co-lending capabilities integrated with supply chain finance will streamline workflows and enhance collaboration between lenders, addressing the growing demand for working capital financing.

In terms of system architecture, we are transitioning to Packaged Business Capability (PBC) to improve flexibility, scalability, and faster deployments. Finally, to ensure robust security, we are aligning with OWASP Top 10 vulnerabilities using security checks and static code quality audits, ensuring FinnAxia® remains secure and resilient in a rapidly changing environment.

Geographically, our expansion strategy remains robust. With new business heads appointed for ANZ and SEA markets, we are sustainably growing our international footprint. Beyond mainstream solutions, we are pioneering specialized solutions, including Shariah-

compliant Islamic banking, auto finance innovations, and remote lending enablement for underserved markets. These strategic initiatives reinforce our commitment to ensuring financial institutions stay ahead of evolving customer expectations and regulatory landscapes.

How does Nucleus Software ensure customers get optimum benefits from its technology platforms?

Our technology platforms are designed for effortless integration backed by over 540 APIs, ensuring banks can quickly adopt and scale without operational disruptions. Unlike conventional banking solutions that require extensive customization, our plug-and-play adaptability allows for swift and easy implementation. With AI-driven decision intelligence, predictive analytics, and no-code configurability, we help banks unlock new revenue streams while enhancing both operational efficiency and customer engagement.

For end-users, our solutions ensure a frictionless banking experience—whether it's seamless onboarding through automated KYC, quick and easy loan approvals powered by AI-driven credit assessment, or hyper-personalized financial journeys based on real-time behavioral analytics. Security and compliance are built-in, with proactive fraud detection and risk mitigation ensuring a safe banking environment. By delivering intuitive, easy-to-use, and future-proof banking solutions, we empower financial institutions to lead the digital-first economy.

How is Nucleus Software leveraging AI to enhance fintech solutions?

At Nucleus Software, AI is more than an enabler. We are redefining how financial institutions harness AI to drive precision, efficiency, and profitability.

Nucleus Software leverages cutting-edge AI technologies to revolutionize banking operations, reducing fraud and enhancing customer experience. Our Blur Detection API ensures only clear, usable documents are processed, eliminating delays caused by poor-quality uploads. Document Classification automates the categorization of financial documents, expediting organization and decision-making. With Credit Decisioning API, banks can assess creditworthiness, enabling faster, data-driven loan approvals while mitigating risk. Document Masking safeguards sensitive customer data, ensuring compliance with global regulations. Our Document Details Extraction & Face Similarity APIs automate identity verification and fraud detection, strengthening security. Video Generation of Statement of Account and Reports transform complex banking data into engaging, easy-to-understand visual summaries, improving communication. Sentiment Analysis of a Call

helps banks analyze customer interactions, uncovering insights into service quality and customer sentiment. Together, these AI-driven solutions will empower financial institutions to operate seamlessly, securely, and intelligently in a fast-evolving digital landscape. Our implementation of Hoshin Kanri and Lean methodologies ensures that every innovation is aligned with strategic business goals, driving tangible impact across the financial ecosystem.

Is Nucleus Software considering expanding into other sectors beyond BFSI?

Our expertise in banking and financial services technology is unparalleled, and we remain committed to deepening our impact in this space. The BFSI sector is vast, complex, and continuously evolving, presenting limitless opportunities for innovation and growth.

We believe in sharpening our specialization. Our deep domain expertise allows us to build AI-driven solutions that address the most intricate challenges in financial services, ensuring we continue delivering cutting-edge technology to cater to the sector's unique demands. By staying focused, we remain the go-to technology partner for financial institutions worldwide, helping them navigate the future of banking with confidence and agility. This deep specialization enables us to refine our capabilities, drive unparalleled innovation, and remain the gold standard in banking technology.

In India's vision for a Viksit Bharat, how is Nucleus Software driving growth?

As India accelerates towards a fully digitized financial ecosystem, Nucleus Software is at the heart of this transformation. We are actively driving financial inclusion by aligning with national initiatives such as Digital India, Unified Lending Interface (ULI), and RBI's Digital Lending Guidelines. India's path to Viksit Bharat is underpinned by a digitally inclusive financial ecosystem. At Nucleus Software, we have always believed that technology should serve people including those who do not have the access to benefit from it, hence we continue to strive towards our vision of making financial services access easy and enriching, worldwide.

For over 30 years, Nucleus Software has been creating intellectual property on Indian soil, building world-class Lending and Transaction Banking products that power financial institutions across the globe.

We are on the verge of something extraordinary, with technologies like AI, embedded finance, and digital banking shaping the world we live in. At the same time, we are committed to driving positive change through ESG principles and green finance, ensuring that innovation not only fuels growth but also contributes to an environmentally responsible future for Bharat and the world at large.