



Re-imagining Home Loans:

Unlocking Speed and Efficiency through Digital Transformation

Foreword

The home loan sector is on the verge of a groundbreaking transformation, driven by the vast potential of digital technologies, rising GDP growth, and the opportunities presented by an under penetrated market. I believe that digitization is not merely an option but a necessity to re-imagine the home loan landscape, making it more efficient, customer-centric, and future-ready.

India's housing loan market, valued at ₹27.37 trillion in 2024, is projected to grow to ₹46.60 trillion by 2029, showcasing remarkable growth in recent years. With outstanding individual home loans growing at a 16.4% from FY23 to FY24, the sector demonstrates immense potential for transformation and innovation. This report delves deep into how advanced technologies like Al-driven analytics, automated valuation models, and phygital approaches—seamlessly blending physical and digital touch-points—can address inefficiencies, reduce turnaround times, and elevate customer satisfaction. It highlights the role of regulatory support and key government initiatives, such as Pradhan Mantri Awas Yojana (PMAY), RERA, and the India Stack framework, which have laid the groundwork for this evolution. These initiatives have not only created a favorable ecosystem for innovation but also positioned lenders to expand into under penetrated markets with greater efficiency and scale.

The report emphasizes that embracing these innovations can help lenders to streamline operations, enhance customer experiences, and unlock new revenue opportunities. By improving operational efficiency, reducing costs, and expanding market reach—especially in rural and under served segments—lenders can achieve sustainable growth while contributing to broader financial inclusion. Additionally, this report provides an in-depth analysis of the home loan lifecycle, spotlighting common market practices, challenges, and operational inefficiencies observed in the market.

The insights and recommendations presented here have been derived through conversations with Banks, NBFCs, HFCs, and investors. The experiences and feedback underscore the immense opportunities in how the home loan journey can be redefined, creating a future that is not just digitally efficient but also economically impactful and socially inclusive. The insights are from a broad market perspective and can serve as a foundation for stakeholders across the spectrum to adapt to their unique circumstances.

Let's together create a future where housing finance is not only seamless but also a driver of sustainable growth and inclusion.

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ABOUT THE DIGITAL FIFTH





Organiser of Bharat Fintech Summit, one of the largest & most influential Fintech event in India.



Amongst the Largest Player in Asia.



1st in India to provide practical and pioneering training programs in Fintech and Digital Finance.

CONSULTANCY SERVICES



Digital Strategy

Building vision and roadmap for the organizations to embark on the Digital Journey



Product Management

Assisting in building Digital Products through Benchmarking, PRD, BRD and Optimized Journeys



Program Management

Setting and implementing robust program governance framework for executing critical and time-bound programs



Regulatory Compliance Framework

Overview of the current compliance practices and regulatory policies to build best compliance practices



Technology Advisory

Studying the technology architecture, platforms, cybersecurity frameworks to ensure scalability, security and sustainability



Process Optimization

Assist in understanding current processes and research through market practices to design the optimal processes

CORPORATE TRAINING



PARTNERSHIPS







Amicus Capital is an India-dedicated growth capital fund setup by experienced PE professionals. The Firm currently has assets under management of \$280 million across two funds.

Amicus Capital is focused on investing in sectors where the investment team has deep experience and networks – financial services, consumer, healthcare, technology & business services, and specialty manufacturing. The Fund seeks to invest in capital efficient and fast-growing businesses looking to scale-up once the business model is proven and partners with entrepreneurs to create segment/category leaders.

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Altum Credo Home Finance Private Limited (ACHF) is a Housing Finance Company registered with the National Housing Bank and headquartered in Pune, with operations across Maharashtra, Tamil Nadu, Karnataka, Rajasthan, Andhra Pradesh, and Telangana.

With a commitment to financial accessibility, the company empowers first-time home buyers by offering tech-driven, affordable housing finance solutions by delivering personalized, best-in-class services at affordable EMIs. The company caters to customers traditionally excluded from formal long-term financing channels.

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STRATEGIC INSIGHTS

HOME LOAN LIFE CYCLE MAPPING

EXECUTIVE SUMMARY

India's home loan sector is undergoing a transformative shift, fueled by strong GDP growth, a rising working population, and increasingly aspirational customers. With outstanding individual home loans reaching ₹27.37 trillion in FY24—growing at 16.4% year-on-year—the demand for housing finance has never been stronger. However, this growth is hindered by inefficiencies in the lending process, from cumbersome documentation to slow approvals and manual underwriting that adds cost and friction for both lenders and borrowers.

Digital transformation is no longer optional—it is imperative. The India Stack framework has revolutionized financial services, with Aadhaar-based eKYC, UPI, and the Account Aggregator framework enabling seamless, consent-driven data sharing. These innovations have reduced onboarding time from days to minutes, improving credit assessments and financial access. Yet, major bottlenecks remain, particularly in legal verification, property valuation, and land record digitization. While nearly 80% of secured lending processes can now be automated, the remaining 20%—which involves complex, manual workflows—continues to slow down the system.

Customer experience in home loans lags behind other lending segments, weighed down by lengthy turnaround times, redundant paperwork, and a lack of transparency. Legacy systems and high staff attrition further compound these challenges. Because home loans are infrequent, digitization in this space has historically been deprioritized, even as demand for a faster, more seamless experience grows. The solution lies in Al-driven analytics, automated valuation models, and hybrid 'phygital' approaches that combine digital efficiency with human support to simplify due diligence and verification.

Government policies such as Pradhan Mantri Awas Yojana (PMAY) and RERA are playing a critical role in expanding financial inclusion and driving innovation. By encouraging digitization, streamlining approvals, and enforcing transparency, these reforms are helping reduce friction and improve trust in the system. Faster processes, lower costs, and broader market reach will not only benefit lenders but also ensure housing finance is accessible to millions of Indians.

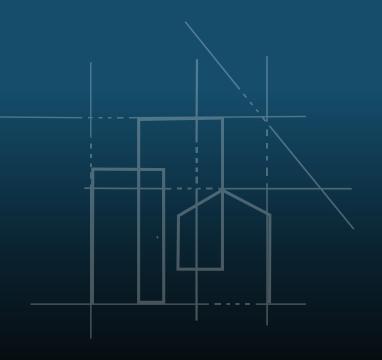
The future of home loans will be shaped by those who embrace technology, rethink customer experience, and leverage data to unlock new opportunities. As the sector evolves, the organizations that lead with digital-first solutions will define the next era of housing finance. It's time to reimagine home loans—not just to meet demand, but to create a system that is efficient, inclusive, and built for the future.

This report explores the potential of digital transformation to revolutionize the home loan landscape in India and analyzes how to strike the right balance between the traditional human-centric approach to home loans and the efficiencies of digitization.

Unlocking Speed and Efficiency through Digital Transformation

1 INTRODUCTION TO HOME LOANS

INTRODUCTION TO HOME LOANS
HOME LOAN PRODUCT SUITE
MARKET OVERVIEW
HOME LOAN LANDSCAPE
KEY OPPORTUNITIES



1.1 INTRODUCTION TO HOME LOANS

Purpose

Home loans are financial products designed to help individuals purchase, construct, or renovate residential properties



Home ownership



Construction & Renovation



Investment

Providers

A wide range of financial institutions in India offer home loans, catering to diverse customer segments and needs. These providers include:



Commercial Banks Co-operative Banks



Societies



NBFCs

Underwriting

Home loans are secured loans, backed by the property being purchased as collateral



Property as Collateral



Loan-To-Value Ratio



Borrower

Steps for Home Loans:

Lead Generation

Assessment

& Qualification

Validation &

Underwriting

Technical

Legal

Servicina

Disbursal



1.2 HOME LOAN PRODUCT SUITE

に

HOME LOANS

Purpose Purchase of residential properties

(ready/under construction), resale properties, balance transfer

Segment Salaried, self-employed professionals,

and non-professionals

Purpose

Segment

PLOT LOANS

Purchase of residential plots within approved layouts or municipal limits

Salaried, self-employed professionals, and non-professionals

HOME EXTENSION LOANS

Purpose Adding additional rooms or floors to

an existing residential property

Segment Salaried, self-employed professionals,

and non-professionals

HOME CONSTRUCTION LOANS

Purpose Construction of a residential property

Salaried, self-employed professionals, Segment

and non-professionals

HOME IMPROVEMENT LOANS

Purpose Renovation, repairs, or upgrading

existing residential properties

Segment Salaried, self-employed professionals,

and non-professionals

Purchase or construction of **Purpose**

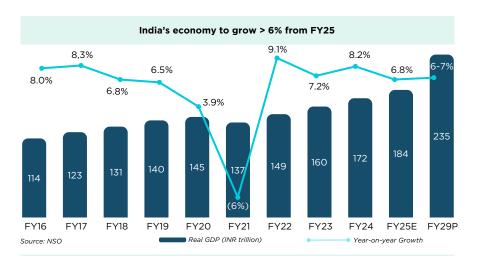
commercial properties

Business owners and self-employed Segment

individuals



1.3 MARKET OVERVIEW



Favorable demographics & Rapid Urbanization driving demand for housing

Demographic Dividend

67%

Population of working age (<50 yrs) **Nuclear Household**



Average household size has reduced from 5.5 in 1991 to 4.8 in 2011 <u> Urbanization</u>

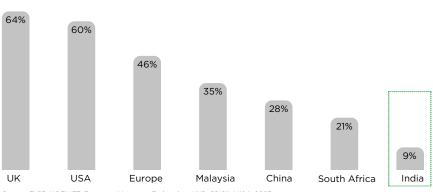
40% Urban Population in 2030



28% Urban Population in 2011

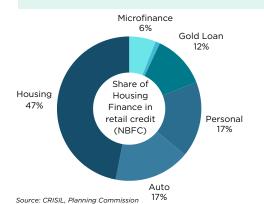
Source: World Economic Forcum, CRISIL, World Urbanisation Prospects





Source: FY23; HOFINET, European Mortgage Federation, NHB, CRISIL MI&A, 2023;

Shortage despite 47% share of housing finance in retail credit

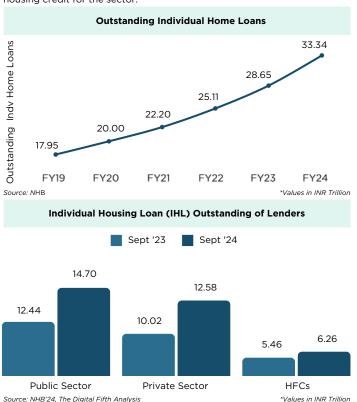


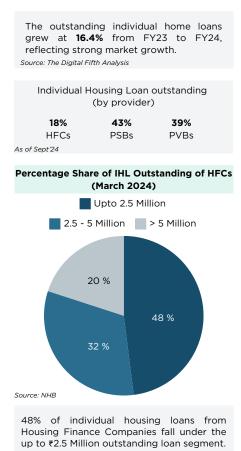
100 mn Housing Shortage

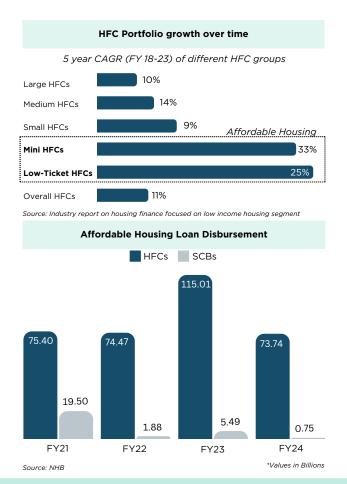
95 mn
Affordable Housing
Shortage

1.4 HOME LOAN LANDSCAPE

The housing finance sector comprises key players such as Public Sector Banks (PSB), Private Sector Banks (PVB) and Housing Finance Companies (HFCs), channeling financial resources and enabling formal housing credit for the sector.







1.5 KEY OPPORTUNITIES

Digitization and Tech-First Borrowers

While digitization in the home loan sector has made significant strides, opportunities for further refinement remain. With a growing base of tech-savvy customers, Do-It-Yourself (DIY) digital journeys can transform borrower experiences by enabling self-service for loan applications, document uploads, and status tracking.

These journeys not only enhance borrower convenience but also drive cost savings for lenders by reducing manual intervention and shortening Turnaround Times (TAT). By integrating Al-driven credit assessments and real-time data analytics, lenders can tap into this potential to cater to evolving borrower preferences while ensuring operational efficiency.



Reduced Turnaround Time (TAT)

Digital workflows and Al-powered underwriting minimize manual interventions, reducing loan processing times significantly.



Cost Efficiency for Lenders

Automation lowers operational costs, replacing manual tasks like document verification and loan assessments with streamlined digital systems.

Partnership based Lending

Partnership of banks with NBFCs for colending and Fintechs for sourcing to leverage their digital sourcing capabilities.

Enabling NBFC or Fintech to cater to large amount of customer base with lesser capital by leveraging large balance sheet of partners.



Diversified sales channel and digital sourcing



Customer Experience enhancement and personalization of products

Collaborative Ecosystem

Unifying valuers, legal experts, technology providers, proptech players, and builders can greatly enhance efficiency and transform the home loan process.



Reduced inefficiencies



Targeted marketing and customized loans

Digitization of Legal & Technical Verification

Digitizing land records and registration, combined with the usage of LLMs and AI for data matching, can streamline the home loan process and improve efficiency through standardization.



Faster Document Verification



Al enhances accuracy, minimizing fraud

Open Network for Digital Commerce

ONDC has launched unsecured personal loans and plans to expand into other unsecured products. After stabilizing these, the organization will focus on secured lending products like home loans.



Standardized & Streamlined Processes



Ecosystem
Development



Broader Financial Inclusion



Enhanced Market Reach

Source: ONDC

Green Financing

The rise in demand for eco-friendly homes offers lenders growth opportunities, with government incentives like higher Floor Area Ratio, fast-track clearances, NHB refinancing, and reduced stamp duty & property tax for green home loans.



Attractive Loan Products



Expanded Market

Source: NHB

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MARKET DYNAMICS

INDIAN HOME LOAN ECOSYSTEM

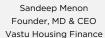
MAJOR REGULATORY INFLUENCES

GOVERNMENT & REGULATORY SUPPORT

KEY ISSUES IN HOME LOAN







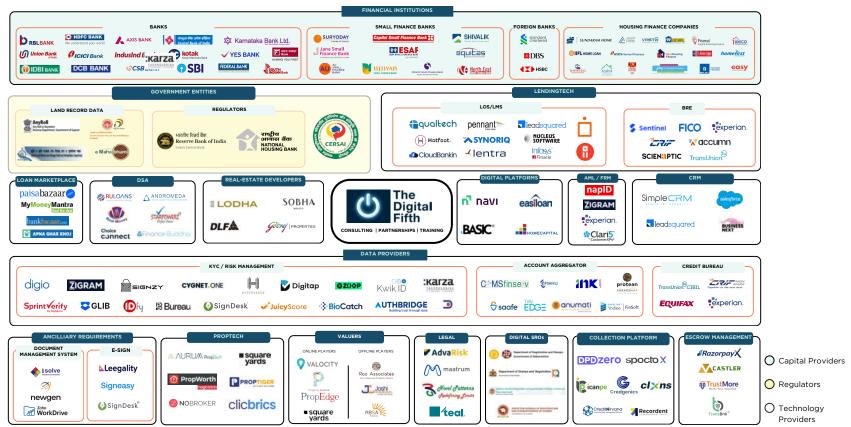


The market is rapidly advancing in digitization, yet a fully seamless and integrated customer experience remains an aspirational goal for many. As companies prioritize customer-centric strategies, they are making significant strides in leveraging digital ecosystems like land records, KYC, account aggregators, etc., to streamline the home loan process. This transformation is driving faster approvals and disbursements, enhancing overall efficiency. With standardized procedures and digital platforms improving scalability and customer experience, the vision of a fully digital home loan process is progressing at pace.



2.1 INDIAN HOME LOAN ECOSYSTEM

This Ecosystem incorporates institutions that originate loans, facilitators who streamline the process, lenders supplying the capital, service providers managing back-office functions, technology partners, builders enabling home ownership, and regulatory bodies overseeing the entire process



2.2 MAJOR REGULATORY INFLUENCES

Focusing on the opportunities highlights how regulatory frameworks can foster growth, innovation, and stability in the home loan sector, benefiting both borrowers and lenders.

GOVERNMENT AUTHORITIES

भारतीय रिज़र्व बैंक Reserve Bank of India India's Central Bank







POLICY & OBJECTIVE

- Prudential Norms: Manages housing loan risks through LTV ratios and risk weights, outsourcing guidelines, ensuring financial stability.
- Interest Rate Guidelines: Ensures transparency and fairness in loan interest rates.
- Customer Protection: Mandates robust grievance redressal mechanisms to protect borrowers.
- Proactive Monitoring: Early Warning System (EWS) facilitates continuous surveillance of transactions, allowing for the early identification of anomalies indicative of fraudulent activities.
- Focus on Housing for individuals: Principal Business Criteria (PBC)
 ensures that the housing finance companies are extending loans to
 individuals and promoting house ownership in the country
- Liquidity Management: Provides refinance facilities to HFCs and banks, ensuring liquidity in the housing finance sector.
- **Supervisory Authority:** Strengthens governance in HFCs through compliance frameworks and risk management norms.
- Affordable Housing Promotion: Supports housing for all through refinancing schemes for affordable housing projects.
- Fraud Prevention: Maintains a registry to prevent fraudulent property transactions
- Ease of Verification: Facilitates quick verification of property titles and encumbrances.
- Recovery & Lender Empowerment: SARFAESI, provides framework for recovering NPAs, allowing enforcement without court intervention

 Risk Optimization: Ensures stability by targeting low-risk segments and optimizing credit portfolios.

OPPORTUNITIES

- Transparent Lending Practices: Attract borrowers with transparent and competitive interest rates to build trust and expand the customer base.
- **Customer Relationship Strengthening:** Strengthen customer relationships and loyalty by implementing robust grievance redressal mechanisms and positioning as a borrower-friendly lender.
- Automated Monitoring: The EWS automates risk monitoring which reduces the need for manual checks, improving operational efficiency, lowering costs, and enabling faster decision-making.
- **Growth Through Acquisition:** Opportunity to acquire portfolios of existing NBFCs, increasing market share and leveraging economies of scale.
- Promote Business Expansion: HFC's with refinance facilities have the ability to serve more customers at better rates while effectively managing credit risks.
- Governance Control: Strong governance and controls enable borrowers to trust HFCs as lenders, resulting in higher loan uptake.
- Share in Affordable Housing Growth: NHB has made a significant contribution to promoting housing.
- Data Utilization: Financial institutions can leverage CERSAI's data for better risk assessment and management, improving the overall loan portfolio quality.

- Transparency: Mandates project registration and detailed disclosures, providing buyers with essential information
- Accountability: Ensures timely project completion and quality by holding builders accountable.
- Consumer Protection: Offers a grievance redressal forum for buyers.
- Consumer Confidence: RERA's focus on transparency and accountability increases buyer confidence, leading to higher home loan uptake and greater demand for housing.
- Market Growth: Ethical practices mandated by RERA attract more investors to the real estate sector, boosting overall market growth and stability.



2.3 GOVERNMENT & REGULATORY SUPPORT

Government Schemes and Initiatives



Digital SRO:

The rise of digital Sub Registrar Offices (SROs) standardizes processes, enhances collaboration, and streamlines workflows through digital platforms, improving efficiency and regulatory compliance in the home loan ecosystem.



Digital India Land Records Modernization Programme (DILRMP):

This initiative aims to digitize land records, making property title verification seamless and reducing legal risks. States like Telangana and Karnataka are early adopters.



RERA Integration:

The Real Estate (Regulation and Development) Act (RERA) has increased transparency and trust in the real estate sector. Digital RERA platforms streamline project approvals and property verification, reducing risks for lenders.



GST Benefits:

The government reduced GST rates on affordable housing projects to 1% (without ITC) and on under-construction properties to 5%, encouraging home buyers and increasing demand for home loans.



Rajiv Awas Yojana (RAY): Introduced in July 2009, the Rajiv Awas Yojana (RAY) aimed to eliminate slums by providing durable, affordable housing and basic facilities to urban dwellers, while promoting community involvement in planning and implementation.









Pradhan Mantri Awas Yojana (PMAY):

Under the Mission "Housing for All by 2022", two broad categories, namely Pradhan Mantri Awas Yojana (Urban) and Pradhan Mantri Awas Yojana (Gramin), were implemented. Credit Linked Subsidy Scheme (CLSS) is a scheme under PMAY (U) to promote affordable housing for weaker sections, with NHB as the Central Nodal Agency.

- CLSS for EWS/LIG: As of June 30, 2024, NHB disbursed ₹397.75 Billion for loans totalling ₹1,988.34 Billion through 239 lenders, benefiting 1.6.4 Million households.
- CLSS for MIG: As of June 30, 2024, NHB disbursed ₹972.18 Billion (loan disbursements of ₹1.01 Trillion) to 191 PLIs, benefiting 0.46 Million households



Rural Housing Interest Subsidy Scheme (RHISS):

As of June 30, 2024, NHB executed MoUs with 100 PLIs, disbursing ₹2.43 Million in subsidies to 23 lenders, and benefiting 12,084 households.



Urban Infrastructure Development Fund (UIDF):

In the fiscal year FY 2023-24, the Bank sanctioned ₹296.8 billion and disbursed ₹178 billion



Indira Awas Yojana (IAY) and Rural Housing Fund (RHF):

Subsidized housing loans for rural borrowers are provided under schemes like IAY, with a focus on underprivileged sections.

2.4 KEY ISSUES IN HOME LOANS



HIGH PEOPLE DEPENDENCY & ATTRITION

- Home loan journeys are heavily people-dependent. Starting from sourcing, verification, underwriting, disbursement and collections, each stage involves manual intervention.
- The complexity of the product and the lack of clear process deviations result in heavy reliance on human resources.
- Nearly 50% annual churn of field staff creates significant operational challenges, leading to high costs for hiring and training new staff, as well as disruptions in the loan lifecycle and customer experience.



PARTNER RELATED CHALLENGES

- The highly competitive landscape makes it challenging to establish strong and exclusive partner relationships.
- Inefficient and fragmented processes lead to delays, reducing the effectiveness of partnerships.
- The absence of clear rulebooks adds to the difficulties faced by partners during the initial stages of lead qualification
- The lack of visibility and clear communication between partners hampers trust and collaboration.



COST OF COMPLIANCE

- The RBI's tightening of regulatory norms, including mandatory monthly ALM reporting and stricter PBC compliance- which requires a majority of assets and income to be from financial activities- have significantly increased the cost burden.
- · Key challenges include:
 - Managing compliance through real-time tracking and streamlined workflows to meet regulatory timelines.
 - Ensuring robust Asset Liability Management (ALM) processes to align with regulatory expectations.
 - Addressing increased operational complexity, which leads to higher compliance costs and a greater risk of non-compliance penalties.



LOW LEVEL OF DIGITISATION

- Digitization in the secured lending segment remains nascent, with limited adoption compared to the digital maturity achieved in unsecured lending.
- Customers increasingly expect a seamless and efficient digital experience in secured loans, akin to what is available in the unsecured loan space.
- The lack of digitization in secured lending leads to slower processes and greater operational inefficiencies compared to unsecured loans.

Unlocking Speed and Efficiency through Digital Transformation

03

HOME LOAN LIFECYCLE MAPPING

HOME LOAN LIFECYCLE OVERVIEW

EMPATHISE WITH CUSTOMERS





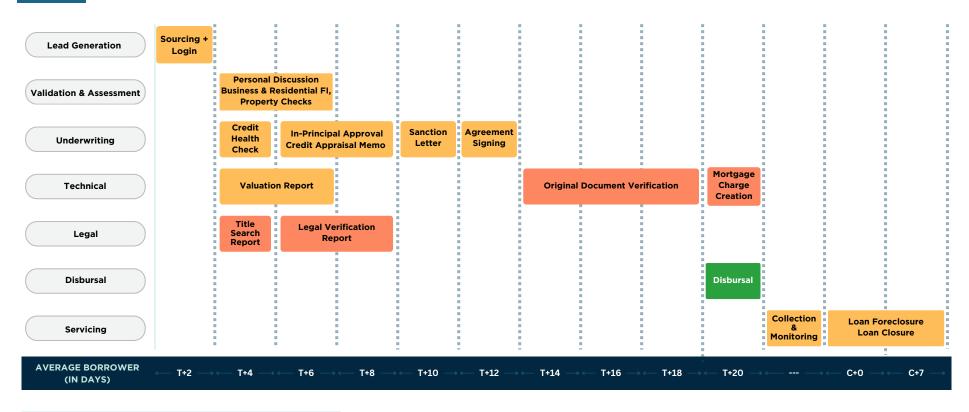




Digitization enables companies, whether starting fresh with digital solutions or transitioning from traditional models, to automate around 80% of their secured loan processes. This can increase productivity by around 20%, but also enhances customer experiences through multichannel access and minimizes manual errors by leveraging systematic API-based approaches. While full digitization remains challenging due to legal checks and property verification, businesses are making significant strides, especially with esigning, improved centralised legal/valuation management and are poised for further improvement with digitisation of land records, more easier availability of property registration data and fraud detection with AI.

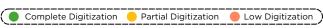


3.1 HOME LOAN LIFECYCLE OVERVIEW



Assumptions:

- T = time loan application initiated by customer
- C = time loan closure application initiated by customer
- · This timeline does not apply to pre-approved properties
- · Working days are considered for the timeline



Digitization: Refers to extent of dependence in the journey on technology vis-a-vis human







3.1.1 HOME LOAN LIFECYCLE - LEAD GENERATION

CURRENT SCENARIO

CHALLENGES

IMPACT

Sourcing - Manual

- Loan Application & Document Collection
 - Alternate Sourcing Channels (ASC)
 - Alternate sourcing channels can leverage market reach and connector networks to engage customers seeking loans
 - Loan Application and KYC related documents are collected and screened to identify the most appropriate lender
 - Physical application form is filled with limited available details and KYC documents are shared with the lender
 - Updates regarding application intimated by the lender manually as and when required
 - Sales RM
 - Sales RM contacts the customer to understand their requirements performs an initial lead qualification
 - Physical Application form is duly filled by the RM & additional specific documents are
 - collected as per loan scheme requirement Document collection is an ongoing process throughout the entire loan journey
- The RM visits the customer's location to gather the
- necessary inputs & complete the application form · Manually collected data is entered into the CRM for Lead Generation



Customers & DSAs face uncertainty and discomfort due to the lack of transparency in loan application status



Lengthy and irrelevant standardized printed forms often result in incomplete submissions, requiring RMs to re-fill the forms, thus leading to increase in TAT



Manual Document Collection and Handover process between Customer. ASC and Lender lacks a structured approach, resulting in duplication of work, inconvenience and delays



Exchanging documents between ASCs and customers through informal communication channels results in customer discomfort due to data privacy concerns



The requirement for a manual visit for Lead Generation is time consuming as the visit depends on the availability and comfort of the customer



Manual lead registration may result in duplication of efforts for the RM, causing delays in the initial process



· Enabling Digital Channel for ASC engagement will ensure timely updates of the Loan Application to

Digital Application Forms

SOLUTION

- ASCs can be given access to Mobile Apps / APIs to integrate (for Digital Channels) to facilitate faster and structured data exchange with the lender, aligned with basic loan data requirements
- · Well-designed documentation requirements in the Digital Channel ensures collection of required data inputs from the customers are done first
- · Further Integrations with Document Management System of the lender will secure the exchange of digitally collected documents

Real-time Lead Generation

- Real-time data entry and de-duplication checks help reduce duplication of efforts, enabling guicker responses to customers and ASCs. It also provides lead identification information to facilitate tracking and monitoring of further progress.
- RMs can conduct telephonic personal discussions with customers to confirm their intent, ensure lead qualification, and verify the lead's presence.
- · Customer DIY journeys can reduce these efforts subject to borrowers convenience

ASC Engagement Channel

alternate sourcing channels



Improvement in the efficiency and productivity of Alternate Sourcing Channels



Secured and trusted process for document collection, gaining customer's trust and offering convenience



Paperless process reduction in the cost of paper printing, scanning, transport and maintenance. It also improves the ease of searching for and sharing the documents within lenders' internal departments



Reducing physical visits to customers by RMs lowers costs and improves the TAT for lead generation.



ASCs with regular Providina updates fosters healthy engagement, ensuring comfort and convenience at scale

Lead Generation Validation & Assessment

Underwriting

Technical

Legal

Disbursal





3.1.2 HOME LOAN LIFECYCLE - VALIDATION & ASSESSMENT

CURRENT SCENARIO

CHALLENGES

SOLUTION

IMPACT

KYC Verification

- Borrowers provide physical identity documents. such as Aadhaar, PAN, or Voter ID during this step
- · OSV is conducted using the submitted physical documents for verification
- · During the transitional phase, this process is handled by the back office where they validate documents using trusted resources (e.g PAN through NSDL)

Risk Screening

- · Borrowers submits bank statements, salary slips, and income tax returns (ITRs) manually to validate income eligibility
- · Lenders manually cross-check details such as monthly salary, average bank balance, and income tax filings
- For business owners, additional financial statements (e.g., GST returns), are reviewed for authenticity

Risk Assessment

- · Original KYC document reference checks
- · Cross-referencing borrowers or businesses against government or international sanction lists (e.g., SEBI defaulters. AML watchlists, PEP checks for politically exposed persons, Hunter)
- Geographies and market dynamics
- Repeated loan applications using different details



Manual verifications are lengthy and contribute to significant delay in the overall process



Semi-digitized methodologies require the customer's intervention to complete the process, thus leading to delays & inconvenience



Manual assessment of income requires a specific skillset and requires intervention by a specialised team, leading to increase in internal process overload and delavs



At this stage, Bureau Validation based rejections leads to redundant efforts invested during the Lead Generation process and inefficiency



Fraud detection relies on manual reviews, leading to higher error rates and delayed escalations



Limited integration of databases (e.g., CIBIL, GSTN, MCA) with internal systems. increasing verification times

Digital KYC

- Adoption of Digital KYC services reduces TAT for KYC Check and also helps to reduce data input requirements
- Digital KYC through DIY journeys offers and comfort of secured convenience communication to customers

Digital Credit Assessment

- Integration with the consent-based Account Aggregator framework enables seamless sharing of Bank Statement Data, providing a trusted data source for assessment
- · Digital credit assessments based on bureau and bank statement ensures standard credit policy application across the products
- Initial system based bureau checks enables lenders to faster rejection of leads resulting into better management of qualified leads

Centralized Fraud Detection

- Automated fraud checks leveraging OCR and AI/ ML driven advanced digital solutions help in improving quality checks
- Deep API based integrations with trusted sources for verification helps resolve fraud concerns in real-time



Automated KYC integrations can significantly reduce processing times, offering better TAT



Digital credit assessment enables faster rejection of unqualified leads, allowing focus on qualified ones, thereby reducing effort and cost



Real-time digitized fraud checks help reduce the TAT for the validation process



Qualified applications can be leveraged for competitive pricing and customized loan offerings, enhancing the value proposition for customers

Lead Generation Validation & **Assesment**

Underwriting

Technical

Legal

Disbursal

Servicina

*Applicable whenever properties are identified



3.1.3 HOME LOAN LIFECYCLE - UNDERWRITING

CURRENT SCENARIO

CHALLENGES

SOLUTION

IMPACT

Credit Personal Discussions

- In-person visits are conducted to validate the borrower's intent, stability, and additional income sources (especially for self-employed or informal sector borrowers)
- For businesses, PDs involve understanding revenue models, market dependencies, and repayment trends

Credit Capability Analysis

- Verified data and FI reports, such as bureau records and bank statements, are used to assess the borrower's creditworthiness based on obligations, income, and credit policies
- In case of any policy deviation, approval is to sought from the respective authority via email
- Lenders use rule-based methodologies (like FOIR) to evaluate eligibility for the proposed loan amount

CAM + IPA

- Based on PD and credit assessments, the Credit team drafts CAM consolidating the borrower's financial data, credit history, PD outcomes, and preliminary loan limit
- An IPA, indicating the preliminary loan amount the borrower qualifies for, is issued subject to subsequent technical and legal evaluations and shared with the customer, emphasizing the conditional nature of the approved limit



Manual PDs increase the turnaround time (TAT), especially when multiple stakeholders (e.g., self-employed borrowers) are involved



Credit team may opt for manual calculation in Excel due to the complexity of credit policies and the variety of products, increasing the risk of errors



Current methods rely heavily on manual interpretation, overlooking opportunities for Al/ML-driven insights into creditworthiness and repayment capacity.



CAM preparation is a labor-intensive process, prone to human errors, especially for borrowers with diverse income streams or irregular financial behavior



Borrowers often assume the In-Principal Approval to be a final sanction, leading to dissatisfaction if technical or legal evaluations reduce the loan limit

Virtual PD

- The usage of Al-driven virtual PD platforms for preliminary discussions through automated video calls eliminates the need for in-person visits
- Al tools can be used to identify inconsistencies or red flags during discussions.

Business Rule Engines

- BREs are equipped with rule-based automated decision-making capabilities and real-time data integration with external data sources, enabling accurate risk assessment in-line with credit policies
- New-age BREs are cloud compatible and highly configurable, offering flexibility and scalability
- BREs can be enhanced to manage the deviation approval matrix, enabling system-based approvals through proper configurations and eliminating the need for email communications
- Automated BREs can also simplify the CAM preparation by leveraging integration and calculation capabilities

Clear IPA Communication

 The borrower communication & portal must include the conditional nature of the In-Principal Approval and call out pending steps for final sanction letter



Reduced dependency on physical visits eliminates location-specific practices, ensuring a unified customer experience and reduction in costs



Al-Powered Underwriting will significantly reduce manual intervention, eliminating human errors and delays in financial assessment.



Real-time data integration ensures lenders stay updated with the borrower's financial health.



Faster In-Principle Approvals (IPA) with Al-powered BRE reduces the processing time to minutes, aligning with digital-first lender standards.

Lead Generation Validation & Assessment

Underwriting

Technical

Legal

Disbursal





3.1.4 HOME LOAN LIFECYCLE - TECHNICAL

CURRENT SCENARIO

CHALLENGES

SOLUTION

IMPACT

Property Document Submission

- Borrowers submit property-related documents. such as title deeds, sale agreements, approved building plans, and encumbrance certificates**
- Documents are often collected manually during visits or uploaded on semi-digital platforms

Property Valuation

- · External valuation agencies or internal technical teams or both conduct property valuations to verify the location, dimensions, condition and estimate the market value based on comparable properties in the area
- For under-construction properties, the technical team verifies the construction stage & developer compliance with approved plans (as applicable)
- Physical visits are conducted to cross-check claims against actual progress

Technical Valuation Report

- · A technical valuation report is prepared and reviewed by technical experts to assess the property's market value, location, condition, and risks, such as zoning violations, structural issues, or illegal acquisitions
- · The report and remarks are shared with Credit Teams for further processing
- · Borrowers frequently encounter variations in valuations across lenders



Ensuring the reliability and quality of valuation agencies is time-consuming, especially in remote geographies



Valuation outcomes vary across agencies and lenders due to differences in risk appetite and assessment frameworks, leading to borrower dissatisfaction



Physical property inspections for valuation and construction verification cause delays, particularly for rural or under-construction properties



Manual verification processes are prone to errors, increasing the risk of relying on forged documents or misrepresented property details



Lack of seamless integration among credit, legal, and technical teams results in redundant efforts and extended TAT

Standardized Valuation Practices

- Empanel valuation agencies with uniform guidelines and frameworks to ensure consistent property assessments
- · Practice utilization of GIS platforms (e.g., Bhuvan by ISRO) or state-specific GIS systems (e.g. Bhoomi) for real-time property verification

Digital Property Valuations

- · Deploy machine learning-driven Automated Valuation Models (AVMs) to generate property valuations based on historical data, market trends, and property details
- · Integrate AVMs with RERA databases and local property registries for accurate valuations
- Utilize digital inspection tools for real-time updates on property condition, dimensions, and construction progress

Integrate Technical Evaluation Platforms

· Deep integrations with Digital Technical evaluation platforms accessible to Credit and Legal teams for better collaboration and faster TAT



Reduced TAT with Automated Valuation Models eliminates the 2-3 day manual process for property valuations



Standardized reports across vendors ensure consistency and transparency for better decision-



Streamlined workflows across technical, credit, and legal teams eliminate redundancies, improving overall process efficiency

I ead Generation Validation & Assessment

Underwriting

Technical

Legal

Disbursal

Servicina

**Applicable for pre-identified properties



3.1.5 HOME LOAN LIFECYCLE - LEGAL

CURRENT SCENARIO

CHALLENGES

SOLUTION

IMPACT

Title Search Report

- Borrowers submit property ownership documents, including title deeds, sale agreements, mutation certificates, and encumbrance certificates
- Legal teams or empaneled advocates validate the chain of ownership to ensure there are no disputes, pending litigations, or encumbrances (e.g., mortgages, liens)
- Verification of compliance with zoning regulations, municipal bylaws, and government approvals (e.g., approved building plans, RERA registration).
- Title Search Report (TSR) is generated by legal teams to document the property's ownership history and highlight any legal risks associated with the title.

Legal Clearance

- Legal teams authenticate title deeds, encumbrance certificates, and sale agreements using offline and semi-digital methods
- A legal opinion, including findings from the TSR, is prepared to summarize the property's ownership validity, encumbrance-free status, and potential risks
- This report is shared with the credit and technical teams to proceed with loan approval



Preparing a TSR involves significant manual effort, especially for properties with incomplete or older records.



Dependence on unstructured and fragmented property records from SROs and local authorities further increases the TAT



Forged documents like title deeds or encumbrance certificates can lead to inaccurate TSRs, risking the lender's collateral security



Many SROs are digitizing, but manual land records still hinder quick title or encumbrance searches



Unavailability of required documents from the borrower may extend the process of Legal Opinion Report

Automated Title Search Reports (TSR)

- GIS based property validation with platforms like Bhuvan (ISRO) and state-specific GIS systems (e.g., Bhoomi in Karnataka) for faster property validations
- Integrations with RERA for project verification and Digital SROs for ownership related validation reducing the human efforts
- Early stage startups focused on creating an online real estate title verifications can support in minimizing TAT by generating automated "Title Search Report" in customized formats



Automated access to digitized records reduces TSR preparation time by 30-40%, improving overall TAT for loan approvals



Digital integration with SROs, RERA, and municipal databases minimizes the risk of relying on forged or tampered documents

Centralized Legal Verification

- A centralized platform integrates records from SROs, RERA, and municipal bodies to expedite the TSR process
- Synergies to be explored for integration with RERA platforms to verify project approvals and compliance digitally
- The adoption of Digital Legal Verification platforms can accommodate legal requirements
- Automated legal report generation standardizes the report format mutually decided with Credit and Technical team for faster processing



Centralized workflows reduce redundancy, ensuring smoother coordination between legal, technical, and credit teams



Transparent and efficient legal evaluations increase the trust of the borrower in the loan process

Lead Generation Validation & Assessment

Underwriting

Technical

Legal

Disbursal



3.1.6 HOME LOAN LIFECYCLE - DISBURSAL

CURRENT SCENARIO

CHALLENGES

SOLUTION

IMPACT

Digital Signatures reduced TAT

by eliminating the need for

physical signatures, accelerating

disbursements.

Sanction Letter

- Upon IPA acceptance by borrower and post credit, technical, & legal evaluations, the lender generates the Final Sanction Letter detailing the loan terms, disbursement conditions, and repayment structure
- Borrowers review the terms and provide formal acceptance through signed acknowledgment or digital acceptance via portals

Disbursement Memo (DM)

- After receiving the borrower's acceptance of the sanction letter, the credit team prepares the Disbursement Memo (DM), summarizing:
 - Loan amount approved for disbursement
 - Disbursement schedule or conditions (e.g., linked to property registration or construction milestones)
- Borrower account details for fund transfer
- Before disbursement, the DM is handed over to the disbursement team, which conducts a file health check

Disbursal Payouts

- Once verified, the approved loan amount is disbursed to the borrower via NEFT/RTGS, cheque, or demand draft
- For under-construction properties, disbursement is milestone-based (e.g., foundation stage, superstructure completion) and linked to project progress



Sharing the sanction letter physically or manually following up for borrower acceptance delays the overall process



Both disbursement memo preparation and file health checks are largely manual, increasing the chances of errors and operational delays



Borrowers are often required to sign and submit documents in person, which adds dependencies and increases TAT



Payment reconciliation for disbursements is not integrated with real-time banking systems, leading to delays in validation



Borrowers and internal teams lack visibility into the status of disbursement, creating gaps in communication and borrower satisfaction

Digital Sharing of Sanction Letters

- Share sanction letters through secure digital channels (e.g., email, customer portals)
- Enable borrowers to review and provide Aadhaarbased e-signatures or digital acknowledgments to accept the terms.



- Integrate rule-based automation tools to autogenerate disbursement memos once the sanction letter is accepted
- Link the DM preparation workflow with predisbursement conditions to ensure compliance
- Integrate disbursement workflows with banking APIs to automate payment reconciliation, ensuring real-time validation of fund transfers

\mathcal{n}{\%}

Efficient payment reconciliation simplifies the process and reduces manual effort.

End-to-End Digitization

- The adoption of platforms like DocuSign or Adobe Sign can help replace physical signatures with legally valid digital signatures
- Automate the generation and delivery of disbursement-related documents such as payment schedules and confirmation letters



Real-time visibility improves tracking and control over payment status and reconciliation

Lead Generation Validatiion & Assessment

Underwriting

Technical

Legal

Disbursal



3.1.7 HOME LOAN LIFECYCLE - SERVICING

CURRENT SCENARIO

CHALLENGES

SOLUTION

IMPACT

Monitoring & Service

- · Many institutions rely on traditional methods for tracking repayments, leading to delay in detection of missed payments or discrepancies
- · Institutions primarily depend on static reports and post-due alerts to monitor payment delays
- Post-disbursement, customer service often depends on in-person visits or phone calls

Repayment

Lenders use e-NACH or physical NACH for

Prepayment and Foreclosure · Leads are reviewed by the lender's business team

• Preliminary quality checks and customer due

· Loan documents are collected for further

Cheques (SPDCs) for security

repayments and may collect Security Post-Dated

OVER DUE

After disbursal, limited engagement with risk of default, impacting asset quality

customer prevents early assessment of



Lack of self learnable monitoring tools capable of generating pro-active alerts leads to reactive management of



The additional handling, verification, and processing of multiple disbursals increases operational costs



The retrieval of property documents after loan foreclosure is often a timeconsuming and cumbersome process

Active Engagement

- Automated prompts to field staff for updates in loan account - change in interest rate, issuance of certificates, year-end charges, etc.
- Automated call centers for payment reminders
- Digital FAQs

Risk Management & Loan Recovery

- Early Warning Systems use payment patterns and micro-economic trends to identify risks and reduce defaults
- Bureau scrubs monitor borrower indebtedness to improve portfolio health
- Beat planning optimizes field staff routes for efficient collections
- Escalation matrices automate physical verification for high-risk cases



Better communication, transparent processes, will improve customer engagement and reduce portfolio



Structured implementation of EWS will provide better control over Risk and proactive actionable for Default management



Real-time payment reconciliation ensures accurate updates on repayment status

Video Verification

 Video-based verification can streamline property verification, reducing the need for in-person documentation and physical visits



Enhanced customer experience ensures faster communication and seamless digital repayment options

Lead Generation

diligence are conducted

processing

Validation & Assessment

Underwriting

Technical

Legal

Disbursal



Laks Duraiswamy
MD & CEO
Sundaram Home Finance



We are at a point in the home loans and mortgage business where speed, productivity, customer service, risk management, regulatory compliances and ease of doing business- all revolve around technology. No business discussion is complete without seeking a technological solution first. Technology no longer an enabler, it is the business





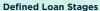
3.2 EMPATHIZE WITH CUSTOMERS



LACK OF TRANSPARENCY

Home loan process has been a frustrating process, leaving borrowers in the dark.

Lack of crucial details about the process, next steps and remaining requirements ultimately creates delays and hinders a smooth loan application experience.





Standardized set of stages, and proactive communication at each step would help customers anticipate the next steps and plan better

Documentation Checklist



Comprehensive & readily available checklist of all necessary documents for the home loan application

Omni Channel Consistency



Information, processes, and communication is not accessible regardless of whether a customer interacts with the lender through a website, mobile app, or in person with a representative.



PROCESS INEFFICIENCIES

The absence of a single source of truth, where all loan application data and progress are readily accessible, creates significant challenges.

Without a unified view of the process, borrowers may receive conflicting information or experience delays due to redundant data entry or missing updates

Process Standardization



and detailed Standardized process procedural guidelines has ability to improve the customer experience

Prioritising Digitisation



Digitisation of as many steps as possible to reduce the human delays & bring standardisation to the non-digital process to ensure process consistency.

Eliminating Redundant **Document** Collection



Multiple requests for the same documentation from borrowers, builders, and other parties

UNIFORM UNDERWRITING

One-size-fits-all approach to digital loan applications can disrupt the borrower's experience.

By offering customized digital experiences, lenders can streamline the process for each borrower type and avoid unnecessary complexities that disrupt the flow.

Behavioral Data Integration



Leverage digital footprints, such as payment behaviour or financial activity, for nuanced risk profiling.

Segment-Specific Underwriting



Design underwriting policies tailored to specific borrower segments, like selfemployed professionals or first-time homebuyers.

Dynamic Policy Adjustment



Flexible BRE to use real-time data and market trends to adjust thresholds, making the process more adaptive.

Unlocking Speed and Efficiency through Digital Transformation

1 TECHNOLOGY & DIGITAL TRENDS

OVERVIEW OF TECHNOLOGY IN HOUSING FINANCE

TECH-ENABLED LEGAL AND VALUATION INNOVATIONS

TRENDS IN DIGITAL PROCESSING & AUTOMATION

DIGITAL FIRST VS TRANSITIONING VS TRADITIONAL

CASE STUDY ON DIGITAL TRANSFORMATION

DIGITAL FIRST COMPANIES

DIGITAL TRANSITIONING ACROSS LIFECYCLE





Jyothirlatha B
CTO & CIO
Godrej Housing Finance



End to End Digitization of secured lending for home loans in India presents substantial hurdles. Despite digital tools like e-signatures and automated data capture, regulatory mandates and unavailability of certain digital data make this process phygital with manual verifications and document checks, creating friction and causing significant customer drop-offs. Address validation remains another major pain point, as KYC documents often fail to reflect current addresses. Even with progress in digitizing land records, the heavy documentation and regulatory demands make end-to-end automation a challenge. These obstacles emphasize the need for **adaptable technology solutions** that can streamline processes, while ensuring full regulatory compliance



4.1 OVERVIEW OF TECHNOLOGY IN HOUSING FINANCE

Digital onboarding in housing finance has evolved with Aadhaar-based e-KYC and video KYC, reducing borrower verification time and enabling remote completion.

Loan marketplaces such as BankBazaar and PaisaBazaar empower borrowers to compare loan offers from banks, NBFCs, and HFCs, streamlining the loan application process.

Proactive regulatory monitoring is crucial for adhering to RBI guidelines, avoiding penalties, and building customer trust. The RBI emphasizes tech-driven compliance to enhance financial stability and safeguard customer interests.

Al and ML have automated credit risk assessment, analyzing borrower data for more accurate lending decisions, while **BREs** also help in improving loan approval times, as seen with multiple lenders in the market.

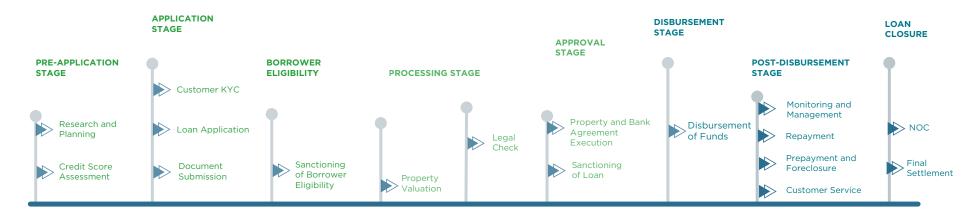
AVMs provide quick property valuations, reducing manual appraisals. **OCR and LLMs** are digitizing property due diligence processes, while e-registration and e-deeds speed up property transactions.

Property insurance can be obtained digitally, offered by several institutions, protecting against title defects, ensuring smoother transactions for both borrowers and lenders

Advanced analytics and early warning systems, including through bureau scrubs, enable continuous monitoring of loans and help lenders track delinquencies and portfolio health.

Real-time reconciliation through digital channels like **UPI** and **NEFT** improves loan servicing, with automated EMI alerts enhancing customer compliance.

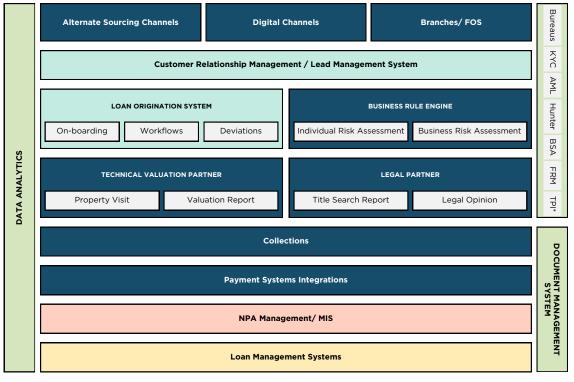
Automated systems manage disbursement, loan closure, and NOC generation, reducing manual intervention. Alpowered tools for loan monitoring, prepayment, and foreclosure enhance risk management, while **chatbots** and self-service portals improve customer support





4.1 OVERVIEW OF TECHNOLOGY IN HOUSING FINANCE

TRADITIONAL HOME LOAN ARCHITECTURE



*This architecture is indicative in nature

Challenges with Current Architecture

Monolithic Architecture

Built on a single code-base, financial institutions often operate on legacy systems that lack integration across stages, and are not only inefficient, but are also not scalable

Limited Automation

Multiple processes are dependent on the manual intervention, lack of usage of Al and data analytics capabilities to automate the processes for instance, credit behaviour checks, bank statement analysis, deviation management, auto escalation for delayed cases.

Workflow Management

Very limited adoption of workflow management for any deviation approval, mostly all the communication is carried out on the email leading to additional effort and chances of missing the timeline.

Absence of Real-time Third Party Integrations

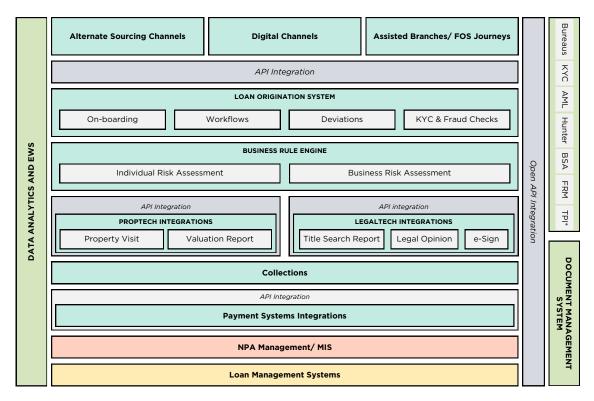
Integration capabilities with external partners such as credit bureaus, valuation agencies, GIS systems, RERA, and payment systems are limited, resulting in repeated data submissions and poor customer experiences.

Data Analytics

Limited efforts spend on data management and analysis through cross referencing data points ensuring better understanding of the borrower during engagement period. Thorough data analysis also enables to tap the cross sell and up sell opportunities.

4.1 OVERVIEW OF TECHNOLOGY IN HOUSING FINANCE

PROPOSED HOME LOAN ARCHITECTURE



*This architecture is indicative in nature

Benefits of Digital-led Process Adoption

Centralized Loan Origination System

Integrate onboarding, workflows, deviations, and document management into a unified system to eliminate silos.

Automated Business Rule Engine

BREs are integrated within systems, utilizing business rules based on credit policies to assess borrower eligibility and creditworthiness.

API-first Approach

Enable seamless integrations with external systems, including credit bureaus, GIS platforms, digital sub-registrar offices (SROs), and payment gateways, to streamline processes.

Scalable Queue Management

Deploy queue optimization systems to prioritize tasks dynamically based on workload, borrower risk profile, and service-level agreements (SLAs).

Data Analytics

Leverage real-time data for borrower profiling, predictive analytics for creditworthiness, and portfolio monitoring for risk mitigation.

Digital Interfaces Across Channels

Provide consistent digital experiences for branches, field officers, and alternate sourcing channels through unified LOS cum customer relationship management (CRM) systems.

4.2 TECH-ENABLED LEGAL AND VALUATION INNOVATIONS

Digital Transformation in Legal Due Diligence

The legal team safeguards the lender's position by scrutinizing property documents to confirm clear ownership and identify potential encumbrances or disputes. This due diligence minimizes the risk of approving a loan on a property with unclear legal status.



Advarisk streamlines collateral management with LLMs, offering a unified API for the largest repository of translated and organized property data.



Maatrum simplifies collateral risk assessment by leveraging advanced analytics and automation, providing lenders with accurate insights and property verification.



Teal revolutionizes property due diligence with its robust data platform, offering comprehensive property insights and streamlined workflows.

Automation of Due Diligence

The current state of title deed digitization finds itself in a phase of "assisted journey", where lawyers validate the collated digital documents. As lenders gain confidence in the efficiency of these solutions, a trend towards full automation is unavoidable.

Standardization through AI and Large Language Models (LLMs)

Innovative players are leveraging Optical Character Recognition technology, LLMs & Al. Automates the process of translating property documents & matching critical data points. Multiple public sector banks use similar whitelisted platforms for efficient title deed verification.

Digital Property Valuation Tools

The technical team ensures reliability of property valuations, reduces processing delays, and supports fraud prevention, and identify potential risks in collaboration with external stakeholders as required.

clicbrics



These companies provide digital property valuation tools that use AI and big data analytics for accurate assessments.

Example: Propries integrates similar digital valuation services with lending platforms for instant property valuations.

Automated Valuation Models (AVMs)

AVMs (Automated Valuation Models) utilize statistical modeling and algorithms to estimate property values by analyzing data from comparable sales, public records, and market trends. They take into account various factors such as location, property size, condition, and economic conditions to generate accurate and real-time valuations. This technology enables faster and cost-effective property assessments, often used in real estate transactions, lending, and investment decisions.

These models provide quick and reliable estimates, reducing the need for manual appraisals and enhancing efficiency.

4.3 TRENDS IN DIGITAL PROCESSING & AUTOMATION



- Al-Driven Customer Insights: Use of Al to analyze customer data, predict needs, and offer personalized home loan recommendations, improving customer engagement and satisfaction.
- Digital KYC and e-Signatures: CRM systems integrating digital KYC processes and e-signatures to enable faster verification and loan approvals.
- Automated Workflow Management: Automation of repetitive tasks such as document verification, application status updates, and reminders, improving efficiency and reducing turnaround time (TAT).
- Cloud-Based CRM Solutions: Adoption of cloud-based CRM systems for scalability, flexibility, and real-time collaboration among teams across locations.
- Scoring Models Integration: Integrating credit scoring and alternative data scoring models (Social Media Activity, Telecom Data, Utility Payments, E-commerce and Transactional Data) into BRE to improve decision accuracy for new-to-credit (NTC) borrowers.
- Al-Powered Rule Optimization: Integration of Al and machine learning in BRE to dynamically optimize credit policies and underwriting rules based on borrower profiles, market conditions, and risk factors.
- Rule Standardization: Standardizing credit assessment and compliance rules across branches and partner ecosystems to ensure
 consistency and regulatory adherence.





- Automated Legal Case Management: Digitized platforms to manage legal proceedings, track case statuses, and streamline
 document submissions for litigation in default cases.
- Legal Risk Assessment Tools: Advanced analytics to assess the litigation risk associated with specific loan defaults and prioritize cases accordingly.
- **Geo-Tracking for Field Agents:** Using geo-location technology to monitor and optimize the performance of on-ground recovery agents.
- Data-Driven Recovery Strategies: Leveraging borrower data and repayment history to design customized recovery strategies for different borrower segments.
- Digital Negotiation and Settlement: Enabling borrowers to negotiate repayment terms or settlements through digital platforms, improving recovery rates.





4.4 DIGITAL FIRST VS TRANSITIONING VS TRADITIONAL

FEATURES	Application Process	Customer Experience	Cost Structure	Technology Adoption
Digital First Companies	Fully online, quick approvals	User-friendly, transparent	Lower due to automation	High; embraces latest tech
Transitioning Companies	Mixed; gradual shift to online	Familiar but evolving	Higher initially; needs investment	Moderate; adapting existing systems
Traditional Companies	Manual, paper- intensive	Conventional, time- consuming	High due to manual processes	Low; minimal or no tech adoption

4.4 CASE STUDY ON DIGITAL TRANSFORMATION - ALTUM CREDO



Vikrant Bhagwat
MD & CEO
Altum Credo Home Finance

The adoption of digital solutions is transforming the home loan experience, especially for first-time homeowners in underserved communities. By embracing a digital-first approach, companies are simplifying the entire loan process, reducing approval times, and increasing transparency. Technology-driven tools enhance operational efficiency, improve customer experiences, and ensure compliance. With digital platforms offering greater accessibility and convenience, the home loan journey is becoming faster and more streamlined. Moving forward, the integration of advanced technologies like AI will further refine the process, improving both service delivery and risk management, ultimately driving sustainable growth in the housing finance sector.

Founded in 2016, Altum Credo is a housing finance company focused on providing accessible home loans to underserved populations, particularly economically weaker sections and lowincome groups in semi-urban and rural India. Digital First Home Finance Company: Altum Credo Cloud-Based Platform End-to-End Digital Cashless Transactions for Core Operations Processes Enhanced Efficiency Through Automation Underserved Market Focus ₹10.000 mn Gross AUM

4.4 CASE STUDY ON DIGITAL TRANSFORMATION - ALTUM CREDO

Loan Life-cycle before Digital Transformation















Lead Generation

Loan Application

Credit Bureau Check

Personal Discussion

Technical Assessment

Pricing & Sanction

Disbursement

Technology layer limited to policy-based pricing, cashless disbursement, and cloud-based hosting

TRANSFORMED FROM A TRADITIONAL LENDER TO A DIGITAL FIRST HOUSING COMPANY

Lead Management

Mobile based lead to login tool

Data Entry & KYC

API authentication tools for Data Entry & KYC

Legal & Financial
Assessment

Legal and property

checks, banking analysis,

advisor logins

Personal Discussion

Personal discussion through **mobile and prefilled templates** Underwriting & Policy Control

BRE driven underwriting, auto deviation, and file tracking tools Disbursement, eSign & Servicing

Integrated LMS and GL Module. Zero cash transactions and Digital payment collection







4.5 DIGITAL FIRST COMPANIES





Dr. Malcolm Athaide Co-founder & CEO Agrim Housing Finance

₹31.4 Bn AUM

10

Branches

Digitization is significantly enhancing the home loan experience by automating key processes such as data collection. customer verification, and property checks. This shift not only improves operational efficiency but also offers a seamless and faster experience for customers. By leveraging digital tools video calls. real-time integration, and automated decisionmaking, businesses are reducing reliance on manual processes, minimizing errors, and improving accessibility. While challenges with physical verification remain, the continuous adoption of digital mediums is driving improvements in both the speed and reliability of the home loan iourney.

States





Rohit Chokhani Managing Director Easy Home Finance ₹33 Bn AUM

35

States **Branches**

The Indian home loan process highlights a unique challenge: while unsecured loans are processed almost instantly, home loans often face significant delays. These extended timelines not only add to costs but also create hurdles for customers and lenders alike. By embracing technology and operational innovations, the industry has the potential to significantly streamline processes, enhance transparency, and reduce overall costs, paving the way for a faster, more seamless lending experience.





Unico Housing Finance

82

AUM

States **Branches**

₹22 Bn

Digital transformation in home loans is not just about automating processes; it's about reimagining the entire customer journey to prioritize transparency, ease, accessibility. reducing touchpoints, leveraging data, and self-service platforms, integrating lenders can create an ecosystem where customers feel informed and empowered at every stage of their loan journey. This approach not only enhances customer satisfaction but also drives operational efficiency, paving the way for a more inclusive and scalable lending model.







4.6 DIGITAL TRANSFORMATIONS ACROSS LIFECYCLE



24 hr

Home Loan Disbursement

100% Digital Customer Onboarding

30 min 24%

Processing

Decrease in cost per file, FY' 22 -23



Business Rule Engine based on

- Realtime KYC Validation
- On-the-spot Banking and ITR Validation
- Credit Score
- Digital Policy



Customer Service

- · Multiple Digi-channel Support (Whatsapp,
- · Chatbot, Client Portal, App)
- DIY Procedure for Customer Convenience



Digital Onboarding

- Centralised Underwriting
- Digital Policy and Workflows
- Business Rule Engine Based Sanction
- · and Deviations



Collections and Operations

- Extensive Collection Points
- · Online Channel for Payments (Debit Card, Netbanking, Wallets UPI, UPI)
- Real Time Reconcilliation

Source: IIEL Home Finance, Annual Report '23 & '22



50%

of total IT spends on digitisation

75%

of monthly collection from digital and auto debit payments

HOMY App

for applying for loans and sanctions

35%

disbursements through the HOMY App

Digital Technologies & Processes

- · Customer acquisition
- Customer appraisal
- KYC processes
- Video KYC
- E Nach

Source: LIC Housing Finance, Annual Report'23



Digital onboarding platform

is used for direct and website based applications

94%

New loan applications through digital channels



Direct fetch information from:

- · Goods and Services Tax Network
- · Ministry of Corporate Affairs
- Income Tax

• Bank Statement Information Analyzer

Source: Housing Development Finance Corporation, Appual Report'23



100% paperless

process

Proprietary System Pulse

end to end digital loan process from customer onboarding to collection



Technology and Analytics Capabilities

- Proprietary AI/ML scorecards and in-house analytics
- Predictive scorecards and collections module
- · Early warning signals
- Dedupe tools
- · Mobile dashboards



Mahesh Parasuraman Founding Partner Amicus Capital



The surge in housing demand across income segments is a clear reflection of India's economic growth and evolving aspirations. However, traditional housing finance companies, reliant on manual processes and rigid underwriting models, struggle to keep pace with the needs of modern borrowers who expect seamless digital engagement. The future of housing finance lies in leveraging both traditional and alternative data sources to assess creditworthiness, ensuring financial inclusion for new-age customers. Moreover, digitization is no longer just an efficiency enhancer—it is a game changer, driving productivity, reducing costs, and managing risks effectively as they scale. In a market where product differentiation is minimal, technology will define the winners by enabling smarter underwriting and delivering superior customer experience.



Unlocking Speed and Efficiency through Digital Transformation

5 STRATEGIC INSIGHTS

ENHANCING DIGITAL PROCESSING AND DATA MANAGEMENT DIGITIZATION RISKS & CHALLENGES



5.1 ENHANCING DIGITAL PROCESSING AND DATA MANAGEMENT

RECOMMENDATION

IMPACT

Digital Onboarding and Document Collection

Automation of Credit Underwriting

Optimizing Technical Processes

Optimizing Legal Processes

E-Signature and Paperless
Disbursement

Post-Disbursement Servicing

Implementing a customer-facing web/app with VKYC, OCR-based document verification, and centralized APIs for KYC and critical verifications to streamline onboarding and improve data accuracy.

Using a Business Rules Engine (BRE) integrated with the Loan Origination System (LOS) to automate credit assessment based on predefined risk categories. Include real-time data integrations from credit bureaus and financial aggregators.

Using AI and Machine Learning (ML) to enhance technical processes. This includes property valuation, encumbrance checks, and KYC compliance using AI-driven tools

Using automated case management, e-filing, Al-driven risk assessment, and real-time tracking, reducing delays and improving efficiency.

Enabling e-signature functionality for signing key documents like sanction letters, loan agreements, and disbursement request forms (DRL). Providing customers with the option to digitally manage the entire disbursement process via a self-service portal.

Implementing tools for tracking post-disbursement activities such as payment reconciliation, and portfolio monitoring through a single system.

IMPROVED CUSTOMER **EXPERIENCE INCREASED OPERATIONAL EFFICIENCY COST SAVINGS FASTER TURNAROUND TIME** (TAT) **ENHANCED EFFICIENCY &** CONVENIENCE STREAMLINED MONITORING & **ACCURACY**





5.2 DIGITIZATION RISKS & CHALLENGES



Digital Divide

Provide alternative channels and support for non-tech-savvy customers

The home loan customer base may include individuals with varying levels of technological proficiency, diverse borrower profiles, and unique needs, each requiring workflows tailored to their specific requirements. Ensuring consistency in service, support, and customer experience across all channels—whether online, mobile, inperson, or a combination—is a challenge lenders must address. Rather than adopting a one-size-fits-all digital approach, the solution lies in prioritizing the customer's perspective.



Limitations of Digitization in Source Data

Delays in the digitisation of legal and valuation of home loan journeys hinder process efficiency

Despite efforts to digitize home loan processes, due diligence remains a significant roadblock due to a lack of standardization and streamlined workflows in the legal and valuation aspects.

The primary challenge lies in the fragmented nature of land records and other documentation across various state governments. Standardizing these documents and enabling efficient digital access necessitates collaboration between industry players and government agencies.



Technology Integration & Reliability Challenges

Build robust, scalable, and reliable digital infrastructure

Integrating legacy systems presents a significant challenge in the digital transformation of traditional lenders. While the initial investment in new solutions can be substantial, the long-term benefits often outweigh the upfront costs. However, achieving seamless data exchange between new systems and existing legacy infrastructure remains a key obstacle.

Furthermore, any outsourcing or third-party integrations necessitate thorough due diligence and robust vendor management practices to mitigate potential risks.



Data Quality, Security, and Fraud

Inconsistent data formats, security vulnerabilities, and fragmented systems hinder seamless digital workflows

Data quality and standardization pose significant challenges in the digitization of the home loan sector. The increased reliance on digital data exposes to cyberattacks and data frauds. This could lead to incorrect underwriting and potential losses. Robust data security measures, encryption and access controls, as well as data verification are essential to not only safeguard sensitive borrower information, but also prevent frauds.

Industry-wide initiatives to standardize data formats can streamline data extraction and processing. Strong data governance practices, encompassing data quality control and access management, are essential to ensure data integrity and security.



GLOSSARY

AVM	Automated Valuation Model	GST	Good and Services Tax	PBC	Principal Business Criteria
AML	Anti- Money Laundering	GDP	Gross Domestic Product	PSB	Public Sector Bank
AI	Artificial Intelligence			PD	Personal Discussion
AA	Account Aggregator	HFC	Housing Finance Company	PVB	Private Sector Bank
AHF	Affordable Housing Fund			PLI	Primary Lending Institution
ASC	Alternate Sourcing Channels	IAY	Indira Awas Yojana	PSL	Priority Sector Lending
BRE	Business Rule Engine	IHL	Individual Housing Loan	PMAY	Pradhan Mantri Awas Yojana
		IPA	In-Principal Approval	PMAY (U)	Pradhan Mantri Awas Yojana (Urban)
CAM	Credit Appraisal Memo	ITR	Income Tax Return		
CERSAI	Central Registry of Securitisation Asset Reconstruction and			RAY	Rajiv Awas Yojana
	Security Interest of India	KYC	Know Your Customer	RBI	Reserve Bank of India
CRM	Customer Relationship Management			RHISS	Rural Housing Interest Subsidy Scheme
CLSS	Credit Linked Subsidy Scheme	LLM	Large Language Models	RERA	Real Estate Regulatory Authority
CAGR	Compound Annual Growth Rate	LIG	Low Income Group	RM	Relationship Manager
		LTV	Loan to Value	RPS	Repayment Schedule
DILRMP	Digital India Land Records Modernization Programme	LOS	Loan Origination System		
DIY	Do It Yourself	LMS	Loan Management System	SARFAESI	Securitization and Reconstruction of Financial
DM	Disbursement Memo				Assets and Enforcement of Security Interest Act
DSAs	Direct Selling Agents	MIG	Middle Income Group	SPDCs	Security Post-Dated Cheques
				STP	Straight through process
EMI	Equated Monthly Instalment	NBFC	Non Banking Financial Company	SRO	Sub Registrar Offices
EWS	Early Warning System	NACH	National Automated Clearing House		
ETB	Existing to Bank	NHB	National Housing Bank	TAT	Turn Around Time
		NTB	New to Bank	TSR	Title Search Report
FI	Field Investigation	NPA	Non Performing Assets		
FOIR	Fixed Obligations to Income Ratio	NOC	No Objection Certificate	UIDF	Urban Infrastructure Development Fund
FRM	Fraud Risk Management			UPI	Unified Payments Interface
FY	Financial Year commencing April 1 the previous year, and	OPDA	Open Property Data Association		
	ending March 31, for the reference year	osv	Original, Seen and Verified		
GIS	Geographic Information Systems				

Unlocking Speed and Efficiency through Digital Transformation

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