HOUSING FINANCE, AFFORDABILITY, AND SUPPLY IN THE DIGITAL AGE

Fifth Annual Symposium on Housing Finance
WELCOME AND INTRODUCTION

Laurie Goodman
Codirector, Housing Finance Policy Center, Urban Institute

Frank Nothaft
Senior Vice President and Chief Economist, CoreLogic

#InnovateHousing
INNOVATION IN LOAN ORIGINATION AND SERVICING PROCESSES: A CONVERSATION WITH THE GSEs

SARAH ROSEN WARTELL
PRESIDENT,
URBAN INSTITUTE (MODERATOR)

ANDREW BON SALLE
EXECUTIVE VICE PRESIDENT FOR SINGLE-FAMILY BUSINESS,
FANNIE MAE

DAVE LOWMAN
EXECUTIVE VICE PRESIDENT FOR SINGLE-FAMILY BUSINESS,
FREDDIE MAC

#InnovateHousing
HOUSING AND MORTGAGE MARKET OUTLOOK: 2017 AND BEYOND

FRANK NOTHAFT
SENIOR VICE PRESIDENT AND CHIEF ECONOMIST, CORELOGIC

#InnovateHousing
Housing & Mortgage Market Outlook

Frank E. Nothaft
CoreLogic Chief Economist
Short-term Interest Rates Heading Up

Federal funds target as of November 1, 2017: 1.00% to 1.25%

Federal funds target projected for December 31, 2018 (based on FOMC member projections):

<table>
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<tr>
<th>Federal Funds Target</th>
<th>Number of FOMC Members</th>
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<tbody>
<tr>
<td>Same as today</td>
<td>2</td>
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<tr>
<td>1.50% to 2.00%</td>
<td>3</td>
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<td>2.00% to 2.25%</td>
<td>6</td>
</tr>
<tr>
<td>2.25% to 2.75%</td>
<td>5</td>
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<tr>
<td>FOMC Members projecting</td>
<td>16</td>
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Source: Federal Open Market Committee projections released September 20, 2017 (individual FOMC participant’s judgment of the appropriate level of the target federal funds rate at the end of 2018).
Short-term Interest Rates Heading Up

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Source: Federal Open Market Committee projections released Sept. 20, 2017 (individual FOMC participant’s judgment of the appropriate level of the target federal funds rate at the end of 2018).
Mortgage Rates Heading Up

Rates are still historically low

Interest Rate on 30-Year Fixed-Rate Mortgages (percent)

Great Recession

April 2011: 5.1%

Forecast
Dec. 2018: 4.7%

Source: Freddie Mac Primary Mortgage Market Survey®; forecast is an average of MBA, Fannie Mae, Freddie Mac, NAHB, NAR and IHS Markit projections.
Effect of Higher Mortgage Rates

Housing market effects:

- Affordability lessens
- Owner mobility may lessen, for-sale inventory remains lean

Mortgage market effects:

- Single-family originations: less refinance, more purchase & HELOC
  - New refi mix: more FHA-to-conventional, cash-out, longer-term
- Credit risk: relatively low on debt outstanding
  - New loans: credit box may open up, fraud risk may increase
Last 12 Months: P&I up 13% while Household Income and Rent Rise Slower

July 2017 vs July 2016: Prices up 6%, FRM rates up 0.5%, P&I up 13%

Inflation-Adjusted Monthly P&I Payment (U.S. median sales price, 80% LTV, 30-year FRM)

Rising Rates A Hurdle for Home Sales

Percent of home buyers that sell by length of ownership, 1976-2016

Source: CoreLogic
Rising Rates A Hurdle for Home Sales

Percent of home buyers that sell by length of ownership, 1976-2016

Source: CoreLogic
Home Prices: Expect U.S. Index Up 5% in 2018

Nominal index back at 2006 peak, but real (inflation-adjusted) index is 18% below

Source: CoreLogic Home Price Index (October 3, 2017 release), peak occurred April 2006, trough March 2011
Home Price Growth Builds Equity

U.S.: $13,000 per home (Average equity gain per homeowner)
State with largest average gain: Washington ($40,000 per home)
States with no change or decline: Alaska (-$1,000), Delaware ($0)

Source: CoreLogic Equity Report for 2017Q2
Fewer “In the Money” Loans To Refinance

10% of UPB has mortgage rate > 5% & is ‘current’;
average remaining UPB ~ $100,000

Source: CoreLogic TrueStandings, Federal Reserve Board Statistical Release Z.1 (Table L.218, $9,317 billion in first-lien home mortgage debt outstanding as of June 30, 2017).
FHA-to-Conventional Refi Volume Up after FHA Dropped MI Cancellation

More than 200,000 FHA-to-Conventional Refinances expected in 2017

Refinances by Month (number)

Share of Refinance

Source: CoreLogic
More Purchase, Less Refi in 2017 and 2018
Smaller refi share leads to more stable annual originations forecast

Single-family Mortgage Originations (Billions of dollars)

Source: 2010-2016 are benchmarked to HMDA. Forecast is an average of the October projections released by Freddie Mac, Fannie Mae and Mortgage Bankers Association; originations exclude HELOCs.
HELOC Volume Projected to Rise

5% growth projected for 2018

Approved HELOCs (Billions of Dollars)

Source: CoreLogic public records, second-lien HELOCs placed more than 60 days after first lien (2017 data through July, annualized).
Effect of Higher Interest Rates on Default Risk

By increasing ARM & HELOC payments, higher rates could add to risk

Factors that Mitigate Risk:

- Hybrid ARMs delay payment ‘shock’ until adjustment date
- 25% are shorter-term FRMs, amortize faster
- Mark-to-market loan value lessens, MTM LTV declines
- Higher rates correlate with faster home-price gain

Mortgages Outstanding (Count) by Product

- FRM 30 yrs 68%
- FRM 20 yrs 6%
- FRM 15 yrs or less 19%
- ARMs 7%

52 Million Loans Outstanding

Source: CoreLogic TrueStandings Servicing ("FRM 20 yrs" includes terms of 16-25 years; "FRM 30 yrs" includes terms of 26 years or more)
When Rates Rise, Refi Credit Scores Fall

Refi Credit Scores Dip 10 points For Each 0.6% Rise in Mortgage Rates

Refinance Credit Score (mean) – Inverse Scale

30-Year FRM Rates (percent)

Source: CoreLogic TrueStandings Servicing, Freddie Mac (monthly average 30-year FRM led one month)
Effect of Higher Mortgage Rates

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Where to find more information

Look for regular updates to our housing forecast, commentary and data at

http://www.corelogic.com/blog

@CoreLogicEcon

@DrFrankNothaft

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Removing Obstacles and Barriers to Access for Credit Worthy Consumers

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Executive Vice President, Center for Responsible Lending

Alanna McCargo
Codirector, HFPC, Urban Institute (Moderator)

Erin Currier
Director of Financial Security and Mobility, The Pew Charitable Trusts

Rob Chrane
Chief Executive Officer, DownPayment Resource

Todd Baker
Senior Fellow, Harvard Kennedy School

Marla Blow
Chief Executive Officer, FS Card Inc.

#InnovateHousing
# Down payment assistance eligibility by MSA

<table>
<thead>
<tr>
<th>MSA</th>
<th>Total Applications</th>
<th>% eligible for assistance (weighted)</th>
<th>Average loan amount</th>
<th>Average income</th>
<th>Average number of programs eligible for</th>
<th>Minimum down payment assistance</th>
<th>Maximum down payment assistance</th>
<th>Average down payment assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York-Newark-Jersey City, NY-NJ-PA</td>
<td>129,799</td>
<td>36%</td>
<td>$409,797</td>
<td>$157,742</td>
<td>7.9</td>
<td>$3,718</td>
<td>$22,500</td>
<td>$13,484</td>
</tr>
<tr>
<td>Chicago-Naperville-Elgin, IL-IN-WI</td>
<td>106,572</td>
<td>43%</td>
<td>$252,890</td>
<td>$110,041</td>
<td>7.5</td>
<td>$4,548</td>
<td>$8,593</td>
<td>$5,647</td>
</tr>
<tr>
<td>Dallas-Fort Worth-Arlington, TX</td>
<td>96,635</td>
<td>36%</td>
<td>$258,104</td>
<td>$115,889</td>
<td>12.4</td>
<td>$2,394</td>
<td>$3,465</td>
<td>$2,768</td>
</tr>
<tr>
<td>Atlanta-Sandy Springs-Roswell, GA</td>
<td>85,728</td>
<td>30%</td>
<td>$242,539</td>
<td>$99,116</td>
<td>4.1</td>
<td>$4,995</td>
<td>$12,277</td>
<td>$7,899</td>
</tr>
<tr>
<td>Washington-Arlington-Alexandria, DC-VA-MD-WV</td>
<td>81,313</td>
<td>39%</td>
<td>$399,014</td>
<td>$133,585</td>
<td>12.6</td>
<td>$1,690</td>
<td>$63,451</td>
<td>$13,222</td>
</tr>
<tr>
<td>Los Angeles-Long Beach-Anaheim, CA</td>
<td>81,066</td>
<td>38%</td>
<td>$543,907</td>
<td>$168,534</td>
<td>10</td>
<td>$6,868</td>
<td>$31,582</td>
<td>$21,151</td>
</tr>
<tr>
<td>Houston-The Woodlands-Sugar Land, TX</td>
<td>77,592</td>
<td>52%</td>
<td>$253,401</td>
<td>$119,410</td>
<td>9.6</td>
<td>$1,562</td>
<td>$7,287</td>
<td>$3,258</td>
</tr>
<tr>
<td>Phoenix-Mesa-Scottsdale, AZ</td>
<td>76,888</td>
<td>51%</td>
<td>$245,297</td>
<td>$91,592</td>
<td>3.2</td>
<td>$7,119</td>
<td>$13,956</td>
<td>$11,178</td>
</tr>
<tr>
<td>Philadelphia-Camden-Wilmington, PA-NJ-DE-MD</td>
<td>59,157</td>
<td>46%</td>
<td>$250,951</td>
<td>$107,390</td>
<td>8.4</td>
<td>$3,331</td>
<td>$7,204</td>
<td>$5,240</td>
</tr>
<tr>
<td>Seattle-Tacoma-Bellevue, WA</td>
<td>58,171</td>
<td>40%</td>
<td>$390,432</td>
<td>$124,076</td>
<td>9.1</td>
<td>$13,367</td>
<td>$49,753</td>
<td>$21,435</td>
</tr>
</tbody>
</table>
Total active programs

Number

United States 2144

District of Columbia
In August 2017 the New York Federal Reserve released household debt information indicating we’re at an all-time high.
If we take a closer look, we find there’s a lot more to the story.

Adjusting for inflation, debt is still below the peak.

2008: $14.26 Trillion
2017: $12.84 Trillion
Real debt per capita (total) peaked in 2008 but has since decreased. That trend holds for the credit card category as well.

Total per capita real debts

- **2004**: $35,800
- **2008**: $46,700
- **2017**: $39,500
**Monthly Debt Obligations**

are LOWER both in $ and as a % of disposable income

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount ($)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>$442</td>
<td>12.16%</td>
</tr>
<tr>
<td>2008</td>
<td>$546</td>
<td>12.78%</td>
</tr>
<tr>
<td>2017</td>
<td>$428</td>
<td>9.91%</td>
</tr>
</tbody>
</table>
If we index real consumer debt to Q1’04, we see student loans are growing much faster than any other category.
Credit Score at Origination

is RISING for auto loans and mortgage

SOURCES

1 New York Federal Reserve Household Debt and Credit Report, Q2’17 (https://www.newyorkfed.org/microeconomics/hhdc)
2 FS Card analysis using population data from Federal Reserve Bank of St. Louis Q2’17 (https://fred.stlouisfed.org/series/B230RC0Q173SBEA)
3 FS Card analysis using Debt Service Payments data from Federal Reserve Bank of St. Louis Q2’17 (https://fred.stlouisfed.org/series/TDSP)
How Is Technology Changing Mortgage Processes, and What’s Next?

Hans Morris
Managing Partner, Nyca Partners; Chairman of the Board, Lending Club

#InnovateHousing
Urban Institute and CoreLogic’s 5th Annual Symposium

Housing Finance, Affordability, and Supply in the Digital Age
November 1, 2017
Hans Morris, Managing Partner at Nyca
1. What is Nyca and how do we approach financial VC?

2. What are the primary developments in mortgage technology?

3. What are important policy and business issues and how do key actors productively shape this evolution?

4. What is the best way to create effective partnerships and engage with technology companies?
Nyca’s four areas of focus

**Payment Solutions**
- ABRA
- avidxchange
- Booyah!
- Goodworld
- mnyway
- Payoneer
- PayRange
- POYNT
- Veem

**Alternative Credit**
- affirn
- CommonBond
- ethos
- LendingClub
- MINES.IO
- NOVA
- Orchard
- Achieve

**Digital Advice**
- acorns
- ArtiVest
- COVR
- EMBROKER
- ladder
- perpetua
- Renew
- roofstock
- Zendrive
- zinc

**Financial Infrastructure**
- Axioma
- Blend
- Built
- Clearmatics
- Centrifugal Networks
- CENTRL
- EverCompliant
- LEAPYEAR
- Merlon Intelligence
- Mirador
- Openfin
- Scratch
- Squawker
- TrueAccord
- VG Security
What’s happening in mortgage technology

• In May 2012, I presented at the first Fannie Mae CIO conference. Here’s what I talked about:
  o The history of legacy mortgage systems and how they were organized
  o Impact of the housing crisis on technology and access to credit
  o Comparison to other financial services industries and Silicon Valley start-ups
  o How mortgage origination, servicing, capital markets, and investor reporting could work
  o What role Fannie Mae could play in encouraging a new ecosystem

• In 2012, there were essentially no Silicon Valley start-ups focusing on mortgage technology.
There are now dozens of well-funded start-ups focusing on mortgages and real estate technology:

<table>
<thead>
<tr>
<th>Capital Markets</th>
<th>Origination Software Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Stack Mortgage Originators</strong></td>
<td>blend</td>
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<tr>
<td>Caliber Home Loans</td>
<td>Rocket Mortgage</td>
</tr>
<tr>
<td>SoFi</td>
<td>LendingHome</td>
</tr>
<tr>
<td><strong>Equity Platforms &amp; Marketplaces</strong></td>
<td>MYND</td>
</tr>
<tr>
<td>Roofstock</td>
<td>RealtyShares</td>
</tr>
<tr>
<td><strong>Second Mortgage / HELOC Originators via Alternative Structures</strong></td>
<td>YAPSTONE</td>
</tr>
<tr>
<td>Point</td>
<td>Landed</td>
</tr>
<tr>
<td><strong>Mortgage Aggregators</strong></td>
<td>Qualia</td>
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<tr>
<td>Morty</td>
<td>Maxwell</td>
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</table>

= Nyca portfolio company
Real estate and mortgage technology themes we like:

- Digital origination: blend
- AI Application to underwriting: ethos
- Rethinking servicing: digital borrower advice → lender analytics & response → investor insight and analytics: scratch
- Equity marketplace platforms: roofstock
- Shared ownership structures: Achieve
- Digital construction loan disbursement tool for lenders/developers/inspectors: built
- Elimination of an archaic title process: SPRUCE
Public benefits and concerns about tech and housing finance

It is clear that technology can result in material public benefits:

- Lower fees and better alignment of interests for consumers
- Lower information costs and barriers to inclusion
- Elimination of bad practices (e.g., illegal or unfair collections activity)
- Improvements to customer experience (e.g., elimination of redundant forms, navigation of complexity, smarter authentication)
- Real time data and reduced settlement risk can materially reduce systemic risk and lower hedging costs
- Reduction in behavioral biases of both borrower and lenders.
- More efficient assessment of credit and matching of risk to cost

But there are equally valid risks and concerns:

- Fraud and illicit use of data
- Impact of cyber-attacks and malicious activity
- Will this help or exacerbate financial inclusion?
- Will selection bias leave small lenders behind (denominator effect)?
- How can existing players be disrupted?
What are the mistakes we’ve seen in credit business models

• **Underwriting:**
  • Fraud can kill you, and authentication is rapidly evolving
  • Customer selection bias and “advantageous access”
  • Models are wrong
    • Limitations of AI in credit
    • Data sets
    • Proving results over a cycle
    • Determining longitudinal variables and other custom variables is painstaking
    • Supply and demand changes the environment: credit stacking, credit crunches

• **Behavior changes happen:**
  • Psychological commitment: does the loan serve a real need for the customer
  • Regulatory and social environments are fluid
  • Taxi medallions vs Uber

• **Data is complicated:**
  • Don’t be creepy
  • Disparate outcomes

• **Mortgage Lending requires lots of capital:**
  • Credit, market, liquidity, and operational risk
  • Large loan sizes and long underwriting feedback cycles
Some areas to focus

• 100% electronic delivery (appraisals, title insurance, filings, signatures, verifications)

• Risk assessment/speed/cost

• Smart servicing tools

• Behavioral insight from financial education tools

• New approaches to authentication and digital IDs

• Continuous, real-time data insight into borrower, debt instruments and collateral

• Efficient mechanisms to share or hedge real estate exposure

• Good processes for technology engagement
WHAT IS THE APPROPRIATE ROLE OF GOVERNMENT IN HOUSING?

MARK CALABRIA
CHIEF ECONOMIST TO VICE PRESIDENT PENCE

@InnovateHousing
Supplied Side Challenges: Cost, Affordability, and Regulation

Sam Khater
Deputy Chief Economist, CoreLogic

Rolf Pendall
Codirector, MPC, Urban Institute (Moderator)

Anne McCulloch
President & Chief Executive Officer, Housing Partnership Equity Trust

Carlos Martin
Senior Fellow, MPC Urban Institute

Michael Neal
AVP of Economics, National Association of Home Builders

Stockton Williams
Executive Director, ULI Terwilliger Center for Housing

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Supply Side Challenges: Cost, Affordability and Regulation

Urban Institute and CoreLogic’s 5th Annual Symposium

November 1, 2017
Inventory Tighter Than it Appears, Much Lower for Entry-Level Buyers

Months' Supply by Price Tier

Source: CoreLogic

Entry Level Supply

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Price Pressures Rapidly Increase As Supply Drops Below 3 Months

Percent Difference Between List Price and Sold Price vs. Months' Supply

- San Jose
- San Francisco
- Seattle
- Miami
- Atlantic City

Source: CoreLogic
Low-End or Entry-Level Home Price Growth Outpaces High-End

Top 20 Market Year-over-Year Percent Change in Prices, August 2017

Note: High tier is for home prices that are 25% or more above the median priced home in that market and low tier are for home prices 75% or less below the median priced home in that market.

Source: CoreLogic
Lack of Supply Led to Surge in Entry-Level Prices Last Two Decades

Note: Entry-level prices are 25% or more below the median and high end prices are 25% or above the median priced in that market.
Source: CoreLogic
Demographic Tailwind Will Propel Entry-Level Demand

Source: CoreLogic and Census
CoreLogic Insights

CoreLogic/blog
@CoreLogicEcon
@TheSamKhater

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Residential Construction: An Overview of Supply Headwinds

Conference on Housing Finance, Affordability, and Supply in the Digital Age
November 1, 2017

Michael Neal
Assistant Vice President and Senior Economist
Supply-Side Headwind Update
Labor

Unfilled construction jobs rising

![Chart showing the job openings rate for construction over 12 months with a moving average.]
Lots

Housing Starts (Area) and Low/Very Low Lot Supply (bars)
Building Materials – Wood Products

Source: Random Lengths; Bureau of Labor Statistics
Regulatory Costs Rising – Up 29% Over Last 5 Years

Total effect of building codes, land use, environmental and other rules

Regulatory Costs as a Share of Home Price

Lower Quartile: 14.0%*  
- During Construction: 4.0%  
- During Development: 7.9%

Average: 24.3%  
- During Construction: 9.7%  
- During Development: 14.6%

Upper Quartile: 30.3%*  
- During Construction: 12.7%  
- During Development: 18.8%

* For quartiles, construction and development costs do not sum to the total.  
Source: NAHB/Wells Fargo HMI survey, assumptions described in the Appendix.
Lending – AD&C Access

1-4 unit Residential Construction Loans
Year-over-Year Growth Rates

Years: 2007 to 2017

Millions of Dollars

$0 to $200,000

0% to 20%
Thank you

Questions?
mneal@nahb.org
@mneal_econ

eyeonhousing.org
housingeconomics.com
Supply Side Challenges: Housing Construction

Carlos Martín, Urban Institute
Labor

All Construction, Monthly Total Employee Turnovers (1000s): 2007-2017*

* thru August 2017.

Labor

Age Distribution of Hispanic Male and Non-Hispanic White Male Construction Workforce: 2003 & 2016

Labor

Hispanic Worker Share of Select Housing Occupations, Percentage: 2007-2016


- Employed Population
- Grounds workers
- Carpenters
- Laborers
- Drywall Installers
- Electricians
- Painters
- Plumbers
- Roofers
- HVAC Installers
- Construction Managers
- Construction Supervisors
- Building Inspectors
- Real Estate Brokers & Agents
- Appraisers & Assessors
- Loan Counselors & Officers

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U R B A N   I N S T I T U T E
Labor

Foreign-Born Worker Share of Major Occupational Groups, Percentage: 2005-2016


- Farming, fishing, and forestry occupations
- Building and grounds cleaning and maintenance occupations
- Construction and extraction occupations
- All Occupations
Materials

Top 5 U.S. Lumber Import and Export Countries by Net Balance Value, 2016

Source: Country and Product Trade Data, US Census

$6.75B

$6.18B
Housing Finance, Affordability, and Supply in the Digital Age

Savanah at Southport Apartments, West Sacramento, CA
✓ Housing Partnership Equity Trust is a social purpose REIT whose mission is focused on the preservation of affordable and workforce housing throughout the United States

✓ HPET was started by the Housing Partnership Network (“HPN”) and 12 nonprofit partners to acquire and preserve multifamily properties serving low and middle income renters

✓ The Nonprofit Partners now include 14 of the nation’s largest affordable housing developers and operators who own a combined portfolio of over $8 billion and employ over 3,900 real estate professionals operating in 40 states and the District of Columbia
MISSION

Housing Partnership Equity Trust works collaboratively with our Nonprofit Partners to preserve the stock of affordable and sustainable rental housing to positively impact the lives of our residents and our communities.

Through this mission we provide investors with a triple bottom line return

- **Economic Return**
  By creating and realizing value from acquiring, improving, operating and, in some cases, selling real estate

- **Mission Return**
  By preserving affordable and workforce housing that improves social outcomes

- **Environmental Return**
  By purchasing energy efficient properties and making energy efficiency improvements to older properties
Rent increases for Class B and C apartments have outpaced increases for Class A properties over the last several years, putting additional pressure on low- and middle-income households.
MARKET CHALLENGE

New supply has been largely luxury, but actual demand is for affordable units. In almost every market the supply of affordable housing has remained stagnant or declined, while demand has increased, leading to historically low vacancy rates for class B/C apartments.
HPET PORTFOLIO OVERVIEW

2,765 units with total acquisition value of $253.1 million
MOVING INTO THE DIGITAL AGE: WHAT DOES IT MEAN FOR HOUSING AND HOUSING FINANCE

Amy Brandt
President & Chief Operating Officer, Docutech

Laurie Goodman
Codirector, HFPC, Urban Institute (Moderator)

Brent Chandler
Founder & Chief Executive Officer, FormFree

Nima Ghamsari
Co-Founder & Chief Executive Officer, Blend

Bradley Thompson
Executive Offering Lead, Mortgage and Compliance-as-a-Service, Accenture

#InnovateHousing
Moving into the Digital Age


11/1/2017
Docutech Overview

Who We Are

Docutech delivers compliant, dynamic, and secure documents and technologies for mortgage, home equity and consumer lending.

Recognition
Mortgage Professional America’s 2016 Hot 100 List
Mortgage Banking’s 2014 Tech All-Stars Award
Mortgage Technology’s 2011, 2012, and 2014 Top 50 Service Providers List Source
Media’s Steve Fraser Award in 2012
Mortgage Banking’s 2009 eMortgage All-Stars

What We Do

For over 26 years, Docutech’s document technology and expertise has been empowering lenders to efficiently produce accurate and compliant loan packages.

Our Solutions:
✓ Optimize Borrower Experience
✓ Improve Regulatory Compliance
✓ Optimize Operational Efficiencies
✓ Provide System Reliability & Document Security

Who We Serve

Financial Services industry including over 200+ Lenders

Bank of America, Santander, Fifth Third Bank, LoanDepot, PNC
Docutech Solution Overview

Data Payload

Event Trigger

Customizable to any Event
e.g.:
✓ Loan Estimates
✓ Disclosures
Statements
Hello/Goodbye

ConformX

Configurable Rules Based Doc Engine
Highly Customizable, Dynamic Documents
Ensures the right documents at the right time

Document Generation

Document Delivery

solex

✓ Web Page
✓ E-Mail
✓ SMS
✓ e-Sign

Print Fulfillment

✓ Full-service
✓ Live-tracking

Commercial LOS

Mortgage LOS

Consumer LOS

Vault, Event Tracking and Pushback

Customer Social Data
Web CMS Data
CRM Data
Campaign Management Data
Customer Communication Preferences

Docutech - Confidential

Docutech
Introducing Solex™ eClosing

Today – Hybrid eClose

Solex eClose

- ConformX – Tight integration with document production
- Solex eSign & eDelivery
- Document Preview with eSigning and read-only option
- MISMO® SMART Doc® eNote, Version 1.02

December Release

eVault integration with MERS® eRegistry

- We are building our own (rather than license third-party software) for control, scalability and tighter integration. MERS and investor certifications in-process, expected in 4Q

eNotarization & eRecording

- Integration with Simplifile Notarization, eRecording
CCM is designed to compose, format, personalize and distribute content to support physical and electronic communications, provide consistent branding and improve the customer experience.

We are expanding our product offering to become a CCM service provider.
Benefits

Borrowers & Lenders

Borrowers:
• Empowerment
• Knowledge during mortgage process
• Efficiency & reduced stress
• Consistent experience from start to finish

Lenders:
• Happier customers
• Streamlined operational processes – Greater adoption with consistent experience on all communications
• Reduced costs
• Improved Compliance
Overview

Blend is a technology company focused on building an end-to-end platform to empower top lenders to originate loans more efficiently and in compliance with regulatory requirements, while offering borrowers a simple, enjoyable experience.
A team with the talent, experience, and direction

Successful Customers
- Wells Fargo
- US Bank
- Camden National Bank
- Movement Mortgage

Industry Partnerships
- Encompass
- Black Knight Financial Services
- optimalblue
- Fannie Mae
- Freddie Mac

Veteran Team
- Palantir
- Salesforce
- Microsoft
- Intuit
- Citi
- Wells Fargo

Seasoned investors & advisors
- Greylock Partners
- Founders Fund
- 8VC
- Andreessen Horowitz

- 30+
- 200+
- $167 million
Market leading insights into consumer lending

Blend’s customers funded roughly 25% of the US mortgage market in 2016

We have access to the most consumer data and insights to guide our product development

US Market
$1.7 Trillion

Blend Customers
$425 Billion
An engaging experience from shopping to signing

Blend NPS vs. Industry Benchmarks

- Apple: 72
- Blend: 68
- American Express: 50
- FinServ Avg: 30

Congratulations, you're all done and ready to move into your new home!
THANK YOU FOR JOINING US!