

# Live Oak Bancshares

First Quarter 2018



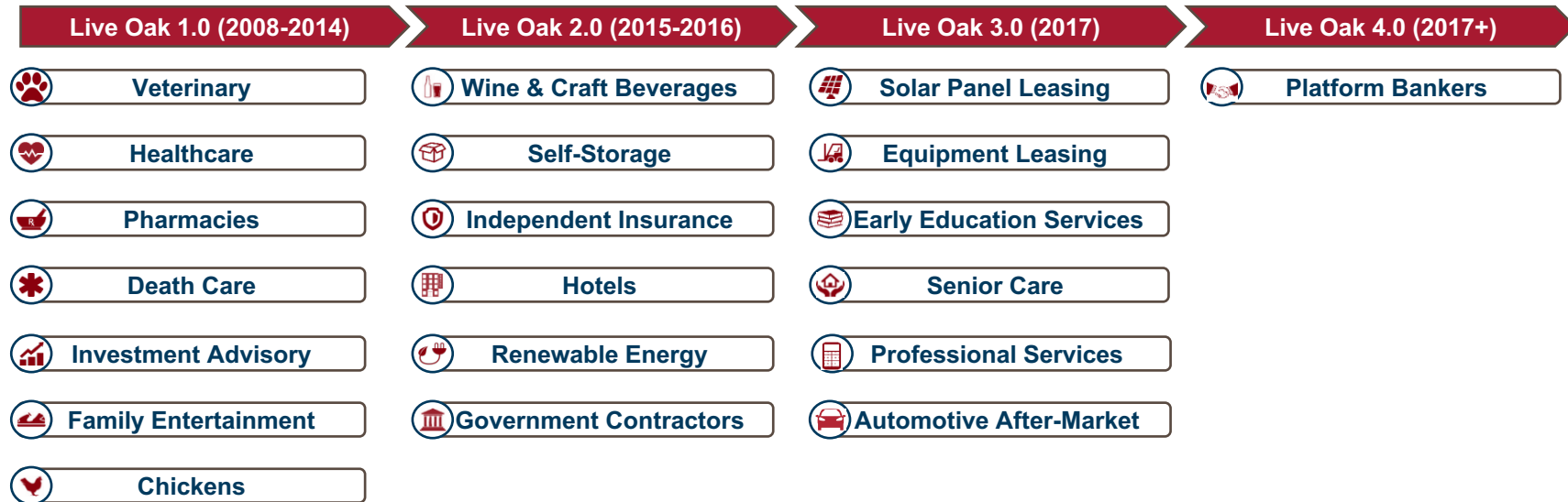
LIVE OAK  
BANCSHARES

Information in this presentation may contain “forward-looking statements” within the Private Securities Litigation Reform Act of 1995. These statements generally relate to our financial condition, results of operations, plans, objectives, future performance or business and usually can be identified by the use of forward-looking terminology such as “may,” “will,” “would,” “should,” “could,” “expect,” “anticipate,” “estimate,” “believe,” “plan,” “intend,” “project,” “goals,” “outlook,” or “continue,” or the negative thereof or other variations thereof or comparable terminology. These statements represent our judgment concerning the future and are subject to business, economic and other risks and uncertainties, both known and unknown. These statements are based on current expectations, estimates and projections about our business, management’s beliefs and assumptions made by management. These statements are not guarantees of our future performance and involve certain risks and uncertainties, which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in the forward-looking statements. These risks, uncertainties and assumptions include, without limitation:

- deterioration in the financial condition of borrowers resulting in significant increases in our loan and lease losses and provisions for those losses and other adverse impacts to results of operations and financial condition;
- changes in SBA rules, regulations and loan products, including specifically the Section 7(a) program, changes in SBA standard operating procedures or changes to Live Oak Banking Company’s status as an SBA Preferred Lender;
- changes in rules, regulations or procedures for other government loan programs, including those of the United States Department of Agriculture;
- changes in interest rates that affect the level and composition of deposits, loan demand and the values of loan collateral, securities, and interest sensitive assets and liabilities;
- the failure of assumptions underlying the establishment of reserves for possible loan and lease losses;
- changes in loan underwriting, credit review or loss reserve policies associated with economic conditions, examination conclusions, or regulatory developments;
- a reduction in or the termination of our ability to use the technology-based platform that is critical to the success of our business model, including a failure in or a breach of our operational or security systems or those of its third party service providers;
- changes in financial market conditions, either internationally, nationally or locally in areas in which we conduct operations, including reductions in rates of business formation and growth, demand for our products and services, commercial and residential real estate development and prices, premiums paid in the secondary market for the sale of loans, and valuation of servicing rights;
- changes in accounting principles, policies, and guidelines applicable to bank holding companies and banking;
- fluctuations in markets for equity, fixed-income, commercial paper and other securities, which could affect availability, market liquidity levels, and pricing;
- the effects of competition from other commercial banks, non-bank lenders, consumer finance companies, credit unions, securities brokerage firms, insurance companies, money market and mutual funds, and other financial institutions operating in our market area and elsewhere, including institutions operating regionally, nationally and internationally, together with such competitors offering banking products and services by mail, telephone and the Internet;
- our ability to attract and retain key personnel;
- changes in governmental monetary and fiscal policies as well as other legislative and regulatory changes, including with respect to SBA lending programs and investment tax credits;
- changes in political and economic conditions;
- the impact of heightened regulatory scrutiny of financial products and services, primarily led by the Consumer Financial Protection Bureau;
- our ability to comply with any requirements imposed on us by our regulators, and the potential negative consequences that may result;
- operational, compliance and other factors, including conditions in local areas in which we conduct business such as inclement weather or a reduction in the availability of services or products for which loan proceeds will be used, that could prevent or delay closing and funding loans before they can be sold in the secondary market;
- the effect of any mergers, acquisitions or other transactions, to which we may from time to time be a party, including management’s ability to successfully integrate any businesses that we acquire;
- other risk factors listed from time to time in reports that we file with the SEC, including in our Annual Report on Form 10-K; and
- our success at managing the risks involved in the foregoing.

Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Moreover, these forward-looking statements speak only as of the date they are made and based only on information actually known to us at the time. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise. Except as otherwise disclosed, forward-looking statements do not reflect: (i) the effect of any acquisitions, divestitures or similar transactions that have not been previously disclosed; (ii) any changes in laws, regulations or regulatory interpretations; or (iii) any change in current dividend or repurchase strategies, in each case after the date as of which such statements are made.

# Scalable Business Model



Q1 17      Q1 18  
**\$256   \$170**  
 million      million

Q1 17      Q1 18  
**\$194   \$171**  
 million      million

Q1 17      Q1 18  
**\$19   \$51**  
 million      million

Q1 17      Q1 18  
**\$0   \$6**  
 million      million

**YTD Originations\* 2017 vs. 2018**

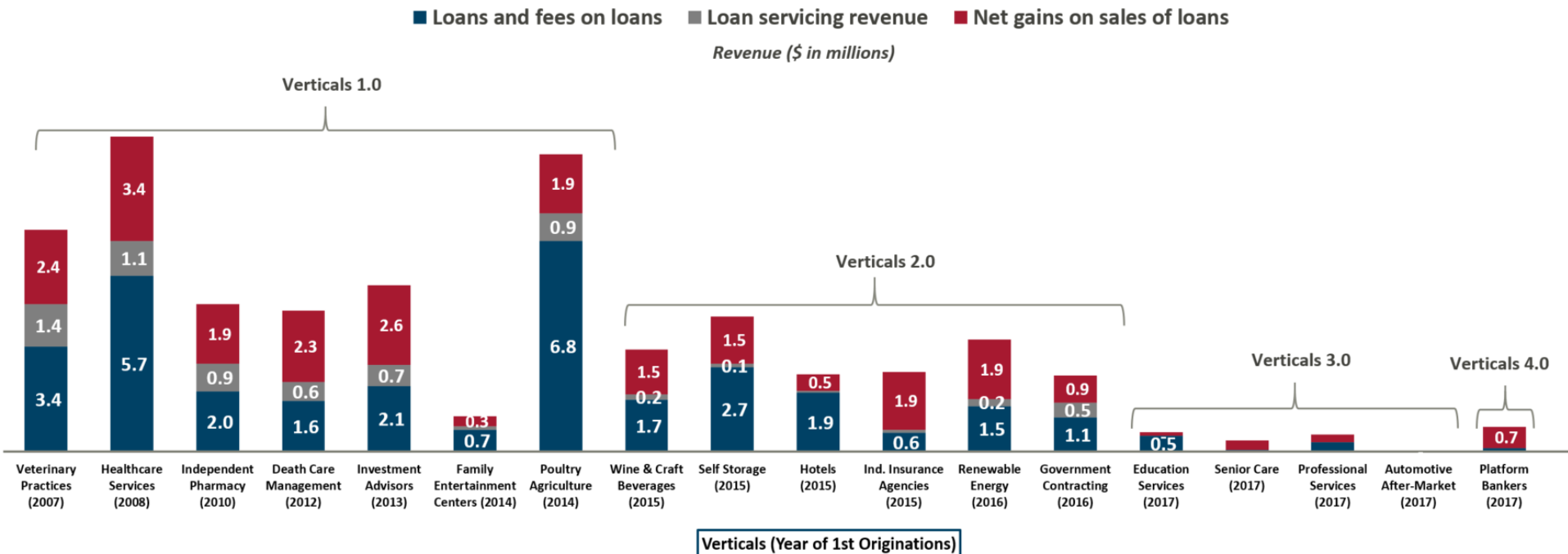
\*YTD as of April 23

**\$583 million**  
 YTD 2017

**\$554 million**  
 YTD 2018



# Scalability





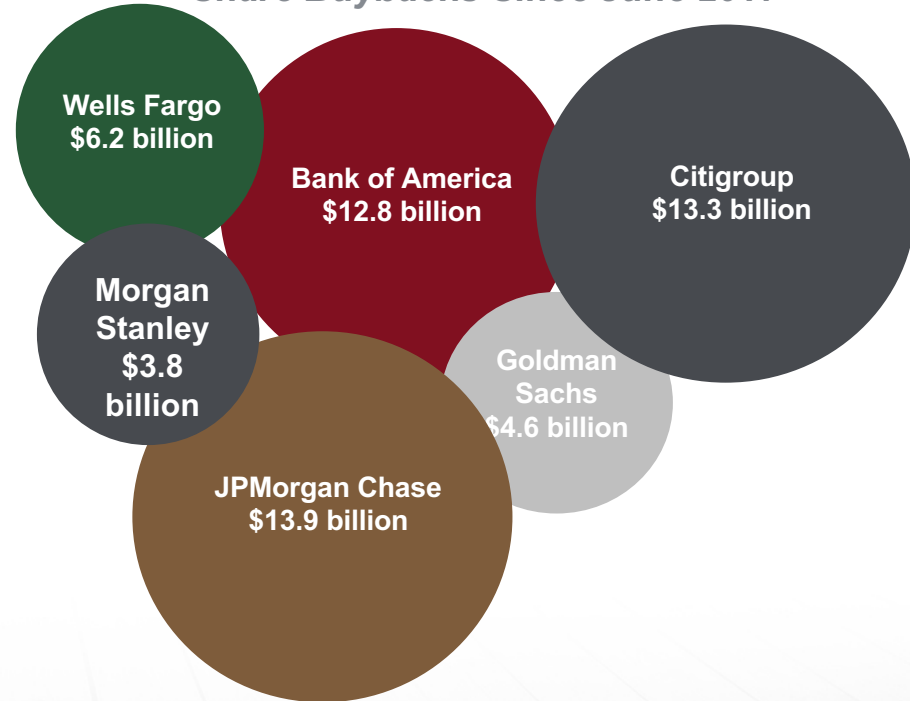
# Fed Stress Tests Holding Back Bank Stocks

*“1Q earnings strength could be overwhelmed by disappointing CCAR guidance...**JPMorgan closed down 1.7%...Wells Fargo fell 1.3%**”  
Investor’s Business Daily<sup>1</sup>*

*“**Goldman’s stock fell Tuesday** after it reported earnings when management explained that it would suspend share buybacks for the quarter.”  
MarketWatch<sup>2</sup>*

*“...dividends and buybacks...in the hands of the Federal Reserve...through its annual stress tests. This year...the tests will be particularly tough.”  
Wall Street Journal<sup>3</sup>*

## Share Buybacks Since June 2017<sup>3</sup>



<sup>1</sup> <https://www.investors.com/news/jpmorgan-chase-earnings-citigroup-wells-fargo-dividends-buybacks/>

<sup>2</sup> <https://www.marketwatch.com/story/goldman-was-king-of-the-quarter-but-morgan-is-the-one-to-buy-analysts-say-2018-04-18>

<sup>3</sup> <https://www.wsj.com/articles/how-the-fed-keeps-bank-stocks-down-1524319200>

# Deposit Betas

*“Betas came in reasonably well relative to expectations. So we've been signaling that they've been floating up. We had betas in the U.S. in the low 40% range, which is kind of right where we had thought they would come. That's up from last, I guess, the last rates hike we had. We had it about 25%. So we're kind of in – we've been moving up in line with our expectations.” – State Street<sup>1</sup>*

*“Deposit betas continue to move upward in the first quarter. Our cumulative beta, which is the beta on our total interest-bearing deposits since December 2015, was 21%, and our current beta since December 2017 was 32%, compared to our stated long-term expectation of 46%” – PNC<sup>1</sup>*

*“The metric to watch is ‘deposit beta’ - essentially the percentage of each Fed rate hike that gets passed along to customers. The higher the number, the better it is for savers; the lower the number, the better it is for bank profits.” – TheStreet.com<sup>2</sup>*

*“JPMorgan, Wells Fargo Get Fat Profits by Skimping on Savers as Rates Rise” – TheStreet.com<sup>3</sup>*

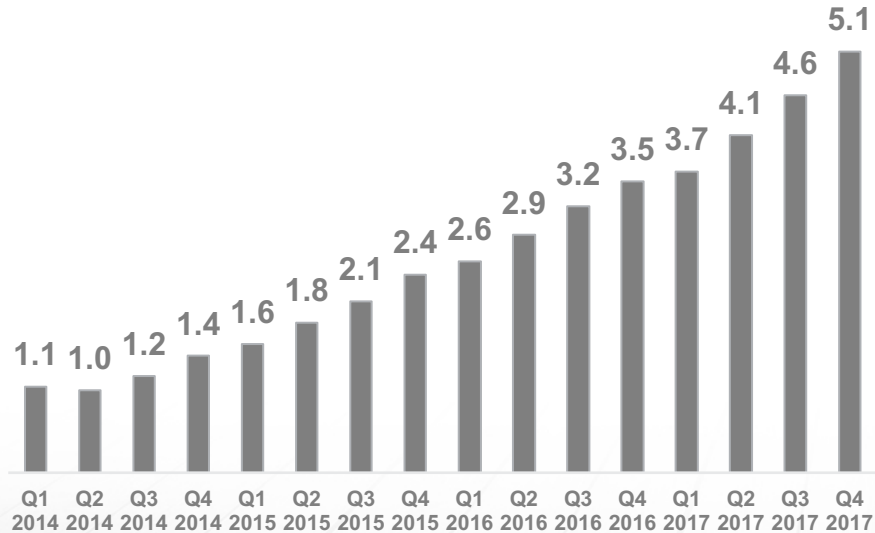
<sup>1</sup> J.P. Morgan Q1 2018 Bank Earnings Tracker - 4/23/2018

<sup>2</sup> <https://www.thestreet.com/investing/five-things-big-bank-earnings-reveal-about-the-trump-economy-14555785>

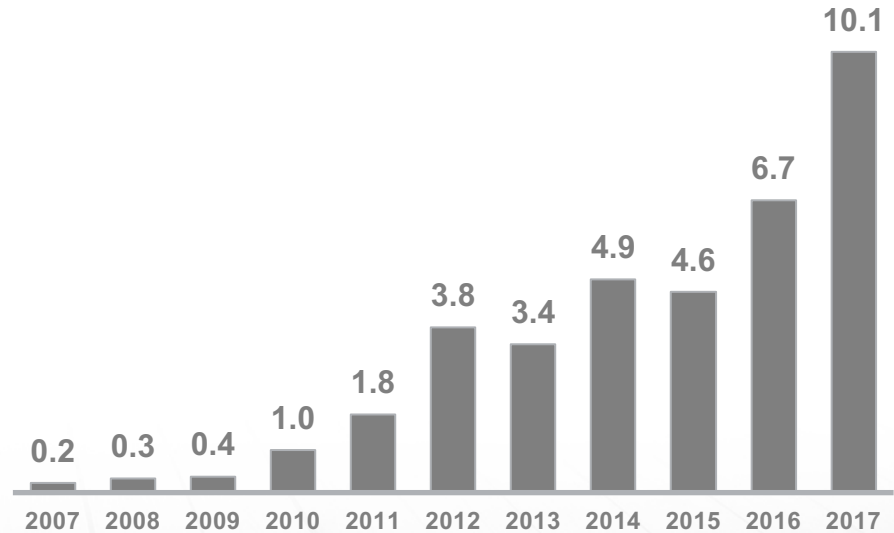
<sup>3</sup> <https://www.thestreet.com/story/14465665/1/jpmorgan-sees-fat-profit-skimping-on-savers-as-rates-rise.html>

# Amazon Web Services

## AWS Net Revenue<sup>1</sup> (\$BB)



## Amazon Capital Expenditures<sup>1</sup> (\$BB)



# AWS and Total Cost of Ownership

**\$6,500,000**

Legacy Data Center, Fully Loaded

**\$750,000**

"Lift & Shift" Legacy Technology to AWS\*

**\$100,000**

Technology rebuild to Cloud-Native\*

*\*Computed via AWS Models*



# Benefits of Cloud-Native, or “Serverless” Architecture

- Reduced TCO
- Limitless Scalability
- Increased Security
- Better Business Continuity
- More Flexible

## fPaaS Design Is Native to Cloud Experience

Function PaaS Attributes	Cloud-Native Experience
Opaque	Cloud-native delivery: like IaaS and SaaS
Provisionless	Cloud QoS: "unlimited" resource capacity
Available on-demand	Cloud QoS: continuous resource availability
Pay only for consumed value (no idling)	Cloud QoS: efficiency to democratize cloud
Event-driven	Autonomy for microservices agility
"Headless" (back-end only)	Hybrid application platforms
More constrained	Compact microservice design



AWS  
Lambda  
Functions



Microsoft  
Azure  
Cloud  
Functions



Google  
Cloud  
Functions



IBM  
Cloud  
Functions

ID: 338335

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QoS = quality of service

Source: Gartner (February 2018)

# The Digital Bank

- **nCino – Loans & Workflow**

- Platform: Force.com
- Status: Installed

- **Apiture – Online Banking**

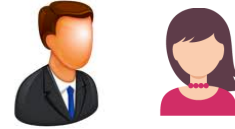
- Platform: AWS
- Status: Installed

- **Payrailz – Payments Platform**

- Platform: AWS
- Status: Q4 Go-Live

- **Finxact – Core Banking**

- Platform: AWS
- Status: Q4 Go-Live



Workflow



API Layer

A P I T U R E

Core Banking

Payments



# The Power of The Platform

## Q1 2018 New Online Savings/CD Originations

**\$515 million**

153% increase vs. Q4 2017  
with 9,021 new accounts

## Q1 2018 Maturing CD Retention

**\$222 million**

78% Renewal Rate

## Q1 2018 Consumer Savings Retention

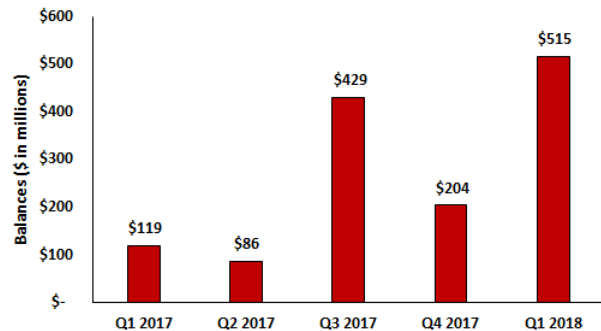
**97.0%**

Compared to active accounts at  
December 31, 2017

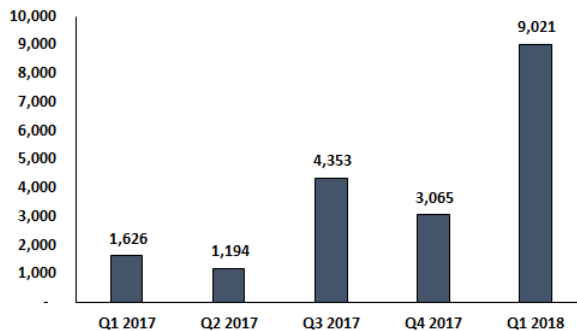
Savings Portfolio at December 31, 2017  
grew 1.2% in Q1 2018

**14,555 (131%) account growth since Q1 2017 yet only 6 new FTEs**

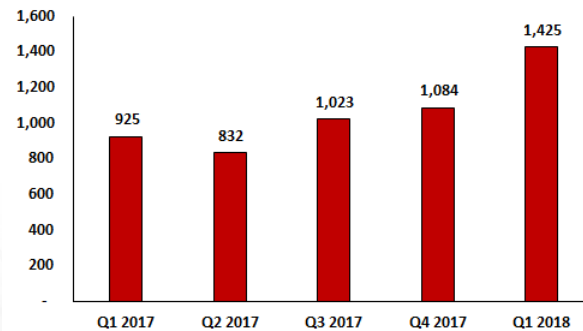
### QoQ New Retail Deposits (Savings & CDs)



### QoQ New Retail Accounts (Savings & CDs)



### Total Open Accounts per Deposits FTE



# First Quarter 2018 | Highlights

**35 bps** 

decrease versus Q4 2017

Net Interest Margin

**3.72%**

**45%** 

increase versus Q1 2017

Net Interest Income &  
Loan Servicing Revenue

**\$31 million**

**43%** 

increase versus Q1 2017

Total Loans & Leases

**\$2.2 billion**

**18%** 

increase versus Q1 2017

Guaranteed Loans Sold

**\$247 million**

**23%** 

increase versus Q1 2017

Guaranteed Portion of HFS Loans  
(Note Amount)

**\$1.1 billion**

**32 bps** 

increased diversification versus Q1 2017

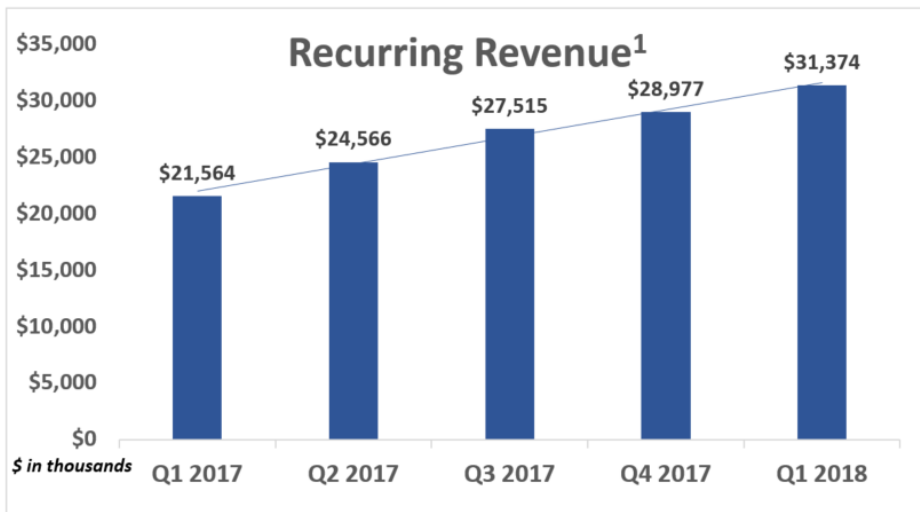
% of SBA Loans to Total Originations

**68%**

# Growing Recurring Revenue Quarterly

Year-Over-Year

## 45%



52%

55%

60%

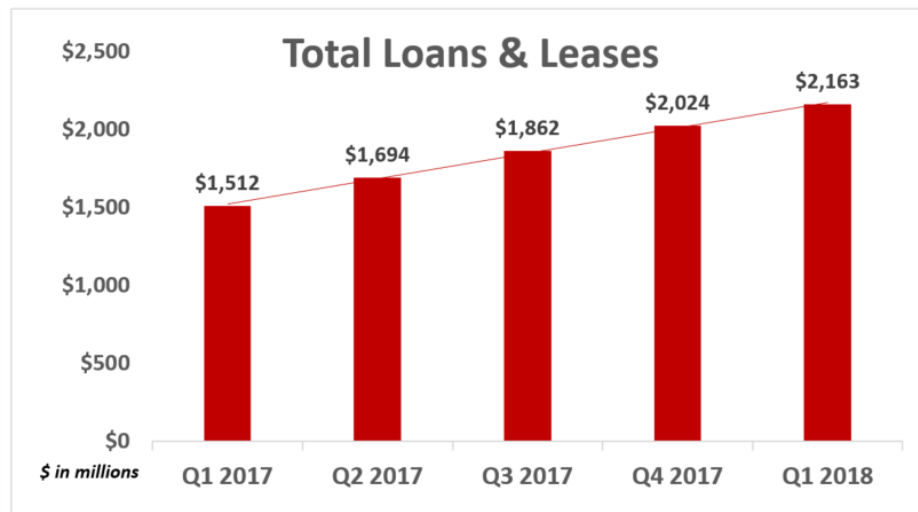
58%

57%

Recurring Revenue as a percent of Total Revenue<sup>2</sup>

Year-Over-Year

## 43%



37%

38%

39%

39%

39%

Guaranteed Loans as a percent of Total Loans & Leases

1. Net Interest Income plus Loan Servicing Revenue

2. Q4 2017 excludes one-time gain of \$68 million

# Q1 2018 – Credit Quality

**15 bps**

Versus Q4 2017 of 28 bps  
Annualized Net CO to  
Average Loans & Leases HFI

**1.95%**

Versus Q4 2017 of 1.80%  
ALLL to Loans & Leases HFI

**\$7.5 million**

Versus Q4 2017 of \$3.7 million  
Unguaranteed Nonperforming Loans &  
Foreclosures

**22 bps**

Versus Q4 2017 of 13 bps  
Unguaranteed Nonperforming Loans &  
Foreclosures to Total Assets





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