BancAnalysts Association of Boston Conference

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Chief Data Officer
We want to satisfy our customers’ financial needs and help them succeed financially.
Large financial institutions face a common set of data challenges

- **DATA SILOS**
  - Accumulation of data in business or function silos
  - Fragmented and complex data environments

- **DATA QUALITY AND COMPLEXITY**
  - Fragmentation and complexity create data quality challenges
  - Data aggregation cumbersome and costly

- **DATA GOVERNANCE**
  - Higher expectations for data governance
  - Inconsistent data definitions across silos

- **LEGACY PLATFORMS**
  - Reliance on large legacy systems
  - Difficult to leverage the power of modern technologies (artificial intelligence (AI)/machine learning (ML), etc.)
Immense breadth and depth of data gives Wells Fargo a significant opportunity as we mature our foundational data capabilities

- **Large Customer Base**
  - 70+ million customers
  - Serving one in three U.S. households

- **Industry Leading Distribution**
  - Branches in more states and ~2x as many markets as peers
  - Over 13,000 card-free ATMs

- **Technology and Innovation**
  - 30.2 million digital (online and mobile) active customers\(^{(1)}\) as of August 2019
  - 146.2 million consumer and small business digital payment transactions\(^{(2)}\) in 3Q19

- **Transactions Processed**
  - 1.9 billion ACH payment transactions originated in 3Q19
  - 2.3 billion debit card\(^{(3)}\) point-of-sale (POS) transactions in 3Q19

- **Broad Product Set at Scale**
  - $423 billion credit and debit card purchase volume
  - #1 Residential mortgage originator, CRE and small business lender\(^{(4)}\)

- **Benefits of Large Data Set**
  - Over 200 million gigabytes of data and trillions of unique data points
  - New technologies have the power to unlock insights at scale

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All data is for full year 2018, unless otherwise noted. (1) Digital and mobile active customers is the number of consumer and small business customers who have logged on via a digital or mobile device in the prior 90 days. (2) Metric is reported on a one-month lag from reported-quarter, 3Q19 data includes June 2019, July 2019 and August 2019. (3) Combined consumer and business debit card activity. (4) Residential mortgage originator based on Inside Mortgage Finance, 2018. Commercial Real Estate (CRE) based on 2018 U.S. commercial real estate originations, MBA Commercial Real Estate/Multifamily Finance Firms, 12/31/18. Small Business lender based on U.S. dollars per Community Reinvestment Act data, 2017.
To seize this opportunity, we centralized data management in 2017 and have made significant progress:

<table>
<thead>
<tr>
<th>Legacy Environment</th>
<th>Progress to Date</th>
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<tbody>
<tr>
<td>▪ Data organized vertically by business or function with fragmented accountability</td>
<td>▪ Organized data horizontally by domain (e.g., deposits) and defined clear roles and accountabilities</td>
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<td>▪ Fragmented data environments with varied tools</td>
<td>▪ Built enterprise big data environment with standardized tools</td>
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<td>▪ Federated data governance with localized implementation</td>
<td>▪ Centralized data governance and standardized requirements for all core data</td>
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<td>▪ Large footprint of big legacy applications</td>
<td>▪ Rationalized application portfolio to reduce complexity</td>
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DATA SILOS

DATA QUALITY AND COMPLEXITY

DATA GOVERNANCE

LEGACY PLATFORMS
Our investment in data is amplifying AI capabilities that help us build a better bank for our customers and team members.

- Machine Learning
- Natural Language Processing
- Chatbots and Virtual Assistants

_We are taking a measured, centrally governed approach to AI in order to meet heightened expectations._
Appendix
Forward-looking statements

This document contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. In addition, we may make forward-looking statements in our other documents filed or furnished with the SEC, and our management may make forward-looking statements orally to analysts, investors, representatives of the media and others. Forward-looking statements can be identified by words such as “anticipates,” “intends,” “plans,” “seeks,” “believes,” “estimates,” “expects,” “target,” “projects,” “outlook,” “forecast,” “will,” “may,” “could,” “should,” “can” and similar references to future periods. In particular, forward-looking statements include, but are not limited to, statements we make about: (i) the future operating or financial performance of the Company, including our outlook for future growth; (ii) our noninterest expense and efficiency ratio; (iii) future credit quality and performance, including our expectations regarding future loan losses and allowance levels; (iv) the appropriateness of the allowance for credit losses; (v) our expectations regarding net interest income and net interest margin; (vi) loan growth or the reduction or mitigation of risk in our loan portfolios; (vii) future capital or liquidity levels or targets and our estimated Common Equity Tier 1 ratio under Basel III capital standards; (viii) the performance of our mortgage business and any related exposures; (ix) the expected outcome and impact of legal, regulatory and legislative developments, as well as our expectations regarding compliance therewith; (x) future common stock dividends, common share repurchases and other uses of capital; (xi) our targeted range for return on assets, return on equity, and return on tangible common equity; (xii) the outcome of contingencies, such as legal proceedings; and (xiii) the Company’s plans, objectives and strategies. Forward-looking statements are not based on historical facts but instead represent our current expectations and assumptions regarding our business, the economy and other future conditions. Investors are urged to not unduly rely on forward-looking statements as actual results could differ materially from expectations. Forward-looking statements speak only as of the date made, and we do not undertake to update them to reflect changes or events that occur after that date. For more information about factors that could cause actual results to differ materially from expectations, refer to the “Forward-Looking Statements” discussion in Wells Fargo’s press release announcing our third quarter 2019 results and in our most recent Quarterly Report on Form 10-Q, as well as to Wells Fargo’s other reports filed with the Securities and Exchange Commission, including the discussion under “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018.