Transformation at Bank of America
An Enterprise Systems Analysis

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Daniel Wallance

System Design & Management Fellow

Massachusetts Institute of Technology

MIT System Design & Management (SDM) Program

- ## Sloan School of Management
  - #3 for business, 2010 (US News)
- ## MIT School of Engineering
  - #1 for engineering, 2010 (US News)

- ## 13 to 24 month master's program
  - Management & engineering
  - Systems thinking focus
  - Students have extensive industry experience

- ## SDM Master's thesis
  - Focus is on large scale systems – i.e. enterprises
  - Involves outside companies and are advised by MIT Professors

Sources:
Assorted SDM marketing material
System Design and Management Program, 2011
U.S. News & World Report LP., Best Engineering Schools, 2010
U.S. News & World Report LP., Best Business Schools, 2010

Professional Backgrounds

Daniel Wallance – SDM Fellow **Student**

- Four years experience in the financial industry
- Most recently Director of Operations & Investment Analyst at BGS Investments LLC, hedge fund
- Previously consultant to Honeybee Robotics, NASA contractor

- M.S. degree, 2011 - Massachusetts Institute of Technology
- B.S. degree, 2004 - Worcester Polytechnic Institute

Professor Nightingale – Professor of the Practice **Advisor**

- Co-Director MIT Lean Advancement Initiative (LAI)
- Research is focused on lean enterprise integration, enterprise architecting, and organizational transformation
- 35+ years experience in academia, government, private sector
- Led multiple lean transformation initiatives in industry & government
- Prior to MIT, held executive positions in operations, engineering, and program management at Allied Signal

Sources:
Lean Advancement Initiative, Nightingale, Deborah, 2011
MIT Engineering System Division, Deborah Nightingale, 2011

Bank of America Corporation (BAC)

- Fortune 500 – listed in 5th place in 2010
- One of the largest financial institutions in the world
- Operations in 40+ countries

- Deals with 98% of the Fortune 1,000 companies in the U.S.
- 50% of all households in the United States use Bank of America services
- 80% of the U.S. has access to BAC retail service locations

Sources:
    CNN Money, 2010; Bank of America Corp., Company Overview; Bank of America Corp., Annual Report, 2010, p. 3, 5

Bank of America Corporation - Key Facts

- 59 million deposit consumers and small businesses

- 5,900 retail branch offices

- 18,000+ ATMs

- 29+ million online users in 2009

- $419.6 billion in consumer deposits (2009)

Source: AP Photo/Chuck Burton

California Northwest (CANW) Region

Geography
– California
– Idaho
– Washington

Accounts
– 3.6 million in Northwest
– 15.6 million in California

Deposits
– $141 billion in California
– $22.6 billion in Northwest

Banking center locations
– California: 976
– Northwest: 254

Banking Center Associates: 16,620
Customer Support Associates: 10,000
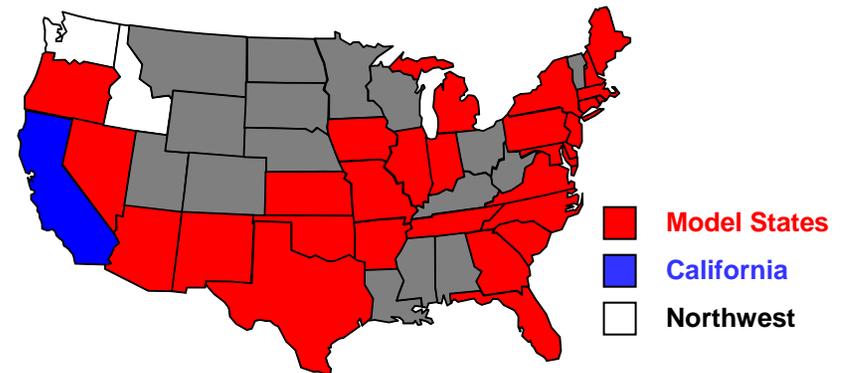
Executive Framework Review, 2010, p. 4

CANW has 29% of all retail consumer deposit accounts

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CANW Transformation

- ## California, Idaho, and Washington
  - Essential systems were integrated during the NationsBank and BankAmerica merger
  - CANW's banking platform remains a legacy system

  - Focus is now on transforming the legacy retail banking platform and converting deposit accounts to the rest of Bank of America's Model environment

  - Current CANW transformation is the 3rd attempt

Sources:
    Skvoretz, September - November 2010

Research Questions & Approach

Research Objective

- To evaluate the effectiveness of, from an enterprise system perspective, the transformation process that Bank of America is using for the CANW initiative

Questions

- Is the process used for transition also truly applicable to transformation?
- Are BAC's transformation processes and procedures "complete and effective"?
- What additional factors need to be considered?

Approach

- Use the California Northwest transformation as a case study for research

Sources:
        Skvoretz, September 8, 2010

Research Questions & Approach

Information

– California Northwest transformation assessment documents

– Meetings and interviews with change management executives
  - Tracie Davis - SVP, Senior Change Consultant
  - Karen McKinney - SVP, Change Management Executive
  - Bryan McNeill – VP, Senior Change Manager
  - Jonathan Skvoretz (Executive Sponsor) - SVP, Change Management Executive

– Public documents including SEC filings, investor material, and press releases

Limitations

– Access to a limited set of California Northwest documents and executives
– CANW initiative is ongoing – not all aspects exist or are complete, i.e. metrics
– Conclusions and recommendations are therefore based on material reviewed

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Sources:
  Skvoretz, September 8, 2010

Transition vs. Transformation

Two Types of Change at Bank of America

Transition		Transformation
– Integration of an acquired business	≠	– Internal system conversion & enterprise improvement
– An "all hands on deck" mentality exists across the Bank	≠	– No significant transformation mandate appears to exist
– Stockholder and public awareness is significant	≠	– Limited awareness by stockholders and the public
– Verbal commitment to investors on synergy cost savings from a specific transition	≠	– Investors informed of intended outcome from aggregate transformation initiatives
– Hard stop date and defined budget	≠	– No specific completion date and set budget
– Transition process used	=	– Transition process used

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Transition vs. Transformation

- Bank of America historically has focused on transition
- Merrill Lynch represents the end of transition
- Focus shifting to internal transformation, enterprise improvement

Fleet — MBNA — LaSalle — Merrill Lynch — US Trust — Countrywide

2003 · 2004 · 2005 · 2006 · 2007 · 2008 · 2009 · 2010

Transition ... **Transformation**
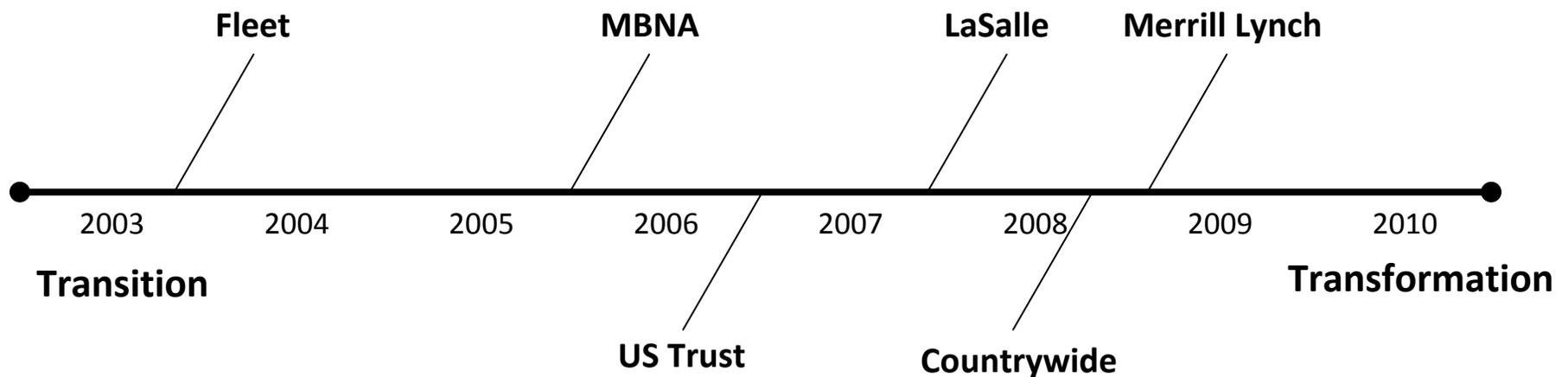
Adapted from Bank of America Corp., How Change Has Evolved, p. 3

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ESAT: Enterprise Strategic Analysis and Transformation

- Developed by the MIT Lean Advancement Initiative (LAI)
  - Government and industry provided testing

- Methodology for enterprise transformation
  - Takes a holistic view of the enterprise
  - Focuses on enterprise-wide processes and end-to-end value streams
  - Considers all stakeholders and their needs

- Reveals areas for improvement and waste elimination
  - Completing ESAT produces an enterprise transformation plan

ESAT Transformation Roadmap

0.	Leadership Engagement
1.	Define the Enterprise
2.	Collect Data
3.	Construct Current State Perspectives
4.	Identify Enterprise Opportunities
5.	Describe Future State Vision
6.	Create Transformation Plans
7.	Create Actionable Projects
8.	Create Deployment Plan

ESAT vs. BAC CANW Transformation

ESAT		BAC Transformation
• <u>Considers all stakeholders and their needs</u>	≠	• <u>Limited focus on selection of few key stakeholders to drive benefits</u>
• <u>Focus on end to end value stream mapping and waste elimination</u>	≠	• <u>Focus on individual tasks and projects</u>
• Future state vision unknown upon commencement	≠	• Target environment is know at the start of the transformation
• <u>Holistic enterprise view - value stream and supporting processes</u>	=	• <u>Considers all processes (primary and supporting)</u>
• "Develop exit strategy for each project proposed"	=	• Significant consideration of when to turn over a project to BAU
• Strong focus on use of metrics to track enterprise performance	≠	• Metrics used to track transformation progress

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Sources:
Nightingale, Stanke, and Bryan, 2008, p. 10-11, 17-19, 30

Research & analysis based on the ESAT methodology

–Stakeholder analysis

–Enterprise goals, processes, metrics

–X-Matrix alignment evaluation

Stakeholder Analysis

Process Improvement Views

- Stakeholder-focused analysis
  - Seek to maximize value for all stakeholders
  - Provide value to stakeholders based on individual importance to the enterprise
  - Target needs a stakeholder places high value upon but are not delivering sufficient value

- CANW transformation approach
  - "Reduce BAC's operational risk" appears to be the primary justification for the investment in the transformation initiative
  - Bank of America stockholders receive the benefit of decreased operational risk
  - Other stakeholders and needs appear to be of secondary consideration

CANW Stakeholders: Identified by BAC

Stakeholder	Needs
Customers & clients	Consistent banking experience Best products, advice, and service Additional features and services Receipt of debit cards for out of state accounts Nationwide linking and servicing of accounts Single point access to bank and brokerage statements and accounts Combined California banking statements "Relationship pricing" across all BAC states Combined overdraft protection from savings and checking Little to no impact felt during system conversion
Associates	Simplified service platform Single set of processes and procedures across the banking system Minimal amount of complex training Quality online experience
Compliance Officers & Risk Managers	Simplified ability to make system changes in fluctuating regulatory environment Reduction in operational risk
Technology Associates	IT support cost reduction Decrease in custom infrastructure Reduced development costs
Marketing Executives	Single marketable platform Ability to offer "advanced features and services" Flexibility to respond to changing market demand
Stockholders	Long-term, consistent returns (dividends, capital appreciation) Quality balance sheet Risk management

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Sources:
Executive Framework Review, 2010, p. 6; Steering Committee, August 2010, p. 14; Steering Committee, September 2010, p. 5-6, 12;
Bank of America Corp., Mid Year 2010 Investor Fact Book, 2010, p. 2

CANW Stakeholders: Other

Stakeholder	Needs	
Ratings agencies	Revenue and service fees Source of work for its employees Sufficient access to Bank documents, associates, and executives	
The public	Economic stability and growth; Access to capital Stability of banks, financial institutions, and financial markets Government receipt of corporate taxes	
Local communities	Regional employment Municipal (local) taxes Access to cash Community support: local philanthropic and environmental initiatives	
Change execution team	Senior management / C-level support Change execution mandate / backing Resources (monetary & non-monetary) Employment and job satisfaction Monetary and non-monetary compensation Professional development and career advancement	
Debit-Card partners	Service advertising platform Customer retention and new customer acquisition	
Endorsing organizations	Royalty payments Reputable products to endorse Retention of individuals on its member lists	
Regulatory bodies	Compliance with applicable regulations Simple banking platforms & systems to oversee Financial market stability Action taken in the public's best interest FDIC insurance fund, other banking industry, and non-compliance fees	The Federal Reserve Board Federal Deposit Insurance Corporation (FDIC) Office of the Comptroller of the Currency (OCC) Office of Thrift Supervision The Basel Committee on Banking Supervision

Sources:
Bank of America Corp., Mid Year 2010 Investor Fact Book, 2010, p. 2, 45; Bank of America Corp., Form 10-K, 2009, p. 2, 43, 127, 175-176;
Bank of America Corp., Debit Cards; Executive Framework Review, 2010, p. 9; Federal Deposit Insurance Corporation; BAC Discussion, 2011

Stakeholder Value Comparison

High

Enterprise Value Delivery to Stakeholder

The Public

Associates / Employees

Change Execution Team

Associate / Employee

Compliance Officer / Risk Manager

Marketing Executive

Technology Associate

Customer / Client

Regulatory Bodies

Local Communities

Stockholder

Debit Card Partner

Rating Agency

Endorsing Organization

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Low

Stakeholder Relative Importance to Enterprise

High

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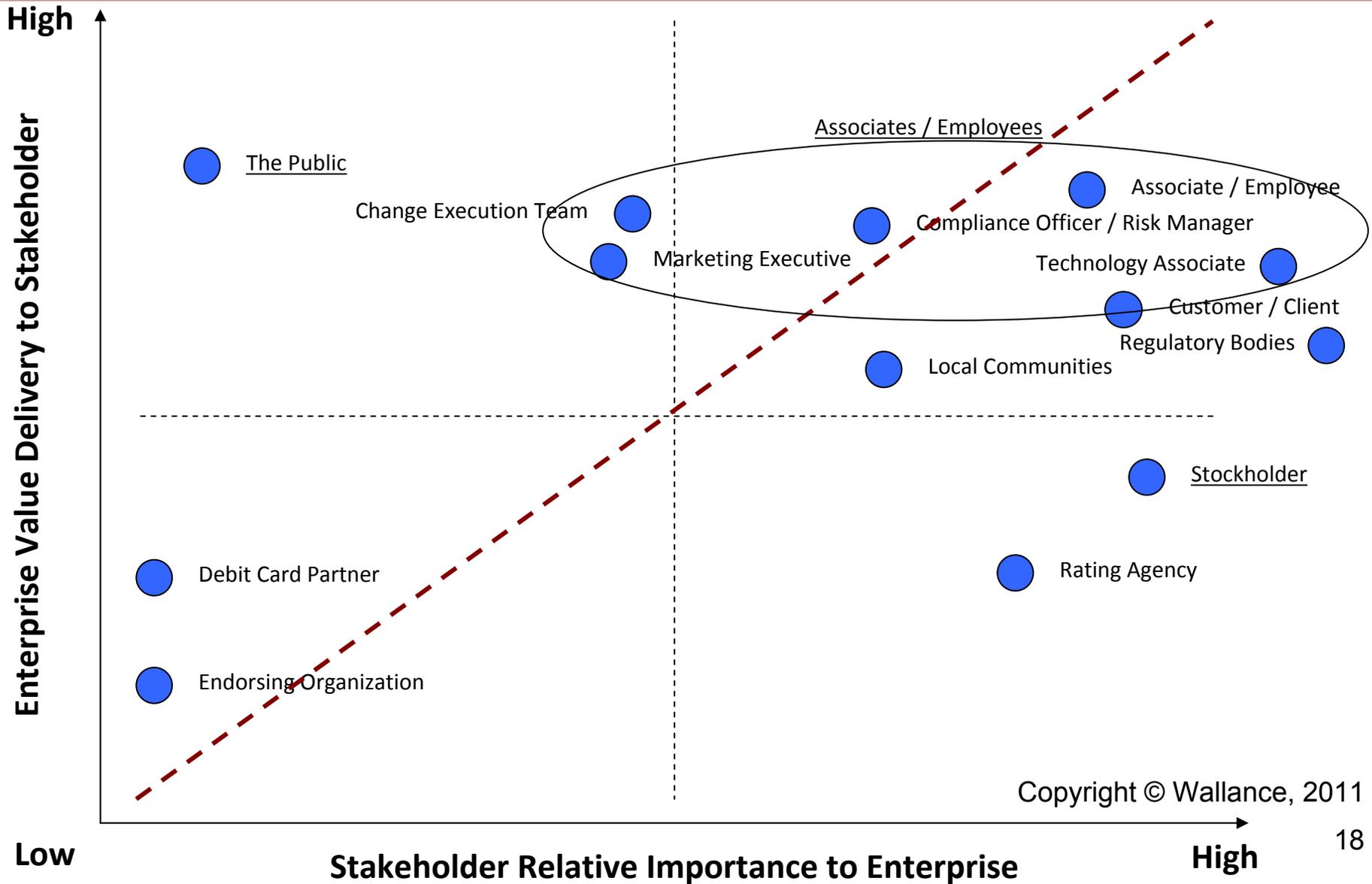
Obtained template from MIT Lean Advancement Initiative

Stakeholder Value Comparison: Key Insights

- **Associates / employees**
  - Balance between value received from and importance to the enterprise

- **Outliers**
  - Stockholders
    - Critical to Bank of America -- often viewed as #1 stakeholder
    - To stockholders, BAC is just one of a series of investments

  - The Public
    - Receives significant value – i.e. financial market stability and functioning capital markets
    - BAC receives little value from the public as a whole (non-customers)

- **Stakeholder need / value charts located in Appendix**

Overview: Goals, Metrics, Processes

- ## Research
  - Reviewed assessment material for CANW metrics, goals, and processes, either stated or implied
  - Condensed lists to 20 key metrics, goals, and processes
  - Reviewed lists with change management executives

- ## Analysis
  - Evaluated CANW goals using industry standard framework
  - Assessed alignment of goals, metrics, processes, and stakeholder values using X-Matrix ESAT tool
  - Recommended consideration of additional metrics, processes, values, and goals

Enterprise System Requirements

	Necessary	Clear & Concise	Measurable	Achievable	Verifiable
Nationwide Consistency	✔	✘	✔	✔	✔
Nationwide Product Rollout	?	✘	✔	✔	✔
Standard Enterprise-wide Processes and Technology	✔	✔	✔	✔	✔
Enhanced Customer and Client Experience	?	✘	✔	✔	✔
Decreased Operating Complexity for Associates	?	✘	?	✔	✔
Maintain BAC's Reputation	✔	✘	✔	✔	✔
Decreased Operational Risk	✔	✘	✘	✔	?
Greater Number of Products and Services Offered	✘	✘	✔	✔	✔

Enterprise System Requirements

	Necessary	Clear & Concise	Measurable	Achievable	Verifiable
Minimize Conversion Adverse Customer & Associate Issues	✔	✔	?	✔	?
Decreased Risk of Compliance Failure	✔	✔	✖	✔	?
Reduce Operating Costs by $x to $x Million by 20xx	?	✔	✔	?	✔
Facilitate Revenue Growth	✖	?	✖	?	✖
Decreased Technology Complexity	✔	✔	✔	✔	✔
Decreased Potential for Technology Problems	✔	✔	?	✔	✖
Decreased Technology Dev. & Deployment Time and Cost	✔	✔	✔	✔	✔

ESAT Tool: X-Matrix

- Analyzes internal enterprise alignment

- Answers "does an enterprise's metrics, processes, strategic objectives, and stakeholder values align?"

- Are there processes that do not deliver value to stakeholders?

- Three possibilities
  - **Blue = strong alignment**
  - **Yellow = weak alignment**
  - White = no alignment

  - The more blue and yellow, the better!

- Where attributes are not aligned, elements need to be recognized or developed

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Source: ESAT X-Matrix template, MIT Lean Advancement Initiative (LAI)

X-Matrix Results

- Map to "Minimize conversion adverse customer and associate issues" by adding
  - Uninterrupted consumer retail deposit access
  - Uninterrupted consumer services
  - Continuous access to consumer accounts
  - Uncompromised ability to service customers

- This is the most complete quadrant

Strategic Objectives ↓ / Stakeholder Values →	Return on investment	Long-term, consistent returns (dividends, capital)	Management of risk	Uninterrupted consumer retail deposit access	Uninterrupted consumer services	Continuous access to customer accounts	Uncompromised ability to service customers	Execution of communication responsibilities	Knowledge of service offerings	Awareness of product and service changes	Successfully perform one's day to day duties	Successfully offer and deliver quality service
Maintain BAC's Reputation			[yellow]									
Decreased Operational Risk		[orange w]	[blue]									
Greater Number of Products and Services Offered	[orange w]											
Minimize Conversion Adverse Customer and Associate Issues				[blue]	[blue]	[blue]	[blue]		[yellow]	[blue]	[yellow]	[blue]
Customer Satisfaction During the Transformation											[blue]	[blue]
Decreased Risk of Compliance Failure		[orange w]	[yellow]									
Reduce Operating Costs by $x to $x Million by 20xx												
Decreased Technology Complexity												
Decreased Potential for Technology Problems			[yellow]									
Decreased Technology Dev. & Deployment Time and Cost												

X-Matrix Results

- Communication and training processes -- add values
  - Execution of communication responsibilities
  - Knowledge of service offerings
  - Awareness of product and service changes
  - Successfully perform one's day to day duties
  - Successfully offer and deliver quality service

- Eliminate secondary values uncritical to transformation
  - Return on investment
  - Long-term, consistent returns

- Add processes to monitor and mitigate risk to BAU
  - Transformation risk monitoring
  - Transformation risk mitigation
  - Resolve undesirable emergent issues

Stakeholder Values

Key Processes

Key Processes	Return on investment	Long-term, consistent returns (dividends, capital)	Management of risk	Uninterrupted consumer retail deposit access	Uninterrupted consumer services	Continuous access to customer accounts	Uncompromised ability to service customers	Execution of communication responsibilities	Knowledge of service offerings	Awareness of product and service changes	Successfully perform one's day to day duties	Successfully offer and deliver quality service
Develop communication plan								Blue				
Develop training plan							Orange	Blue	Orange	Blue	Blue	Blue
Train associates								Blue	Orange	Blue	Blue	Blue
Communicate changes to associates								Blue	Blue		Blue	Blue
Inform customers								Blue				
Transformation risk monitoring		Blue		Blue	Blue	Blue	Blue					
Transformation risk mitigation		Blue		Blue	Blue	Blue	Blue					
Resolve undesirable emergent issues		Blue		Blue	Blue	Blue	Blue					
Develop test plans			Orange									
Implement test plans			Blue	Orange	Orange	Orange	Orange					
Complete dress rehearsal			Blue	Orange	Orange	Orange	Orange					

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X-Matrix Results

Key Processes vs. Metrics

- Communication and training processes -- add metrics
  - Associates trained
  - Customers notified
  - Customer satisfaction level

- Add metrics to track monitoring and mitigation of BAU transformation risk
  - Incident resolution time
  - Transformation operational risk incident & severity
  - System uptime for customer access

Note: number of incidents is not indicative of incident severity

Metrics

Key Processes

Key Processes \ Metrics	Number of systems monitored	Technology deployment cost	Average technology system deployment time	A measure of technology risk	A measure of operational risk	Compliance faults & severity	Incident resolution time	Transformation operational risk incident & severity	System uptime for customer access	Customer satisfaction level	Customers notified	Associates trained
Develop communication plan										orange	orange	orange
Develop training plan										orange		
Train associates												blue
Communicate changes to associates												blue
Inform customers										blue	blue	
Upgrade IT	blue	orange	orange	orange								
Update contact centers												
Transfer legacy products and processes	blue	orange	orange	orange								
Convert deposit apps	orange											
Decommission legacy applications and hardware	blue		orange									
Transformation risk monitoring				blue	blue	blue	orange	orange	blue			
Transformation risk mitigation								blue	orange			
Resolve undesirable emergent issues							blue	blue	orange	orange		
Develop test plans												
Implement test plans			blue	blue	blue			orange				
Complete dress rehearsal							blue	orange				

X-Matrix Results

- Strategic objectives to map to metrics
  - Decreased risk of compliance failure → Compliance faults & severity (add)
  - Decreased operational risk → A measure of operational risk (add)
    - *Note: a lack of incidents / problems does not equate to a low operational risk*

- Technology objectives add metrics
  - Number of systems monitored
  - Technology deployment cost
  - Average technology system deployment time
  - A measure of technology risk
    - *Note: a lack of realized problems does not indicate low risk potential*

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Strategic Objectives (right side labels):
- Maintain BAC's Reputation
- Decreased Operational Risk
- Greater Number of Products and Services Offered
- Minimize Conversion Adverse Customer and Associate Issues
- Customer Satisfaction During the Transformation
- Decreased Risk of Compliance Failure
- Reduce Operating Costs by $x to $x Million by 20xx
- Decreased Technology Complexity
- Decreased Potential for Technology Problems
- Decreased Technology Dev. & Deployment Time and Cost

Metrics (bottom labels):
- Number of systems monitored
- Technology deployment cost
- Average technology system deployment time
- A measure of technology risk
- A measure of operational risk
- Compliance faults & severity
- Incident resolution time
- Transformation operational risk incident & severity
- System uptime for customer access
- Customer satisfaction level
- Customers notified
- Associates trained

Recommendations & Conclusion

Recommendations

- Look beyond the usual suspects
    - Customers, associates, stockholders

- Also strongly consider
    - Ratings agencies, the public, change execution team, etc.
        - Is the change management team able to carryout the transformation?
        - Have ratings agencies been informed to provide a favorable view?

Recommendations

- Two transformation justification views
  - Benefit a single stakeholder need ✘
  - Address the needs of multiple stakeholders ✔

- An "all hands on deck" mentality does not appear to exist with transformation

- To succeed need stakeholder buy-in
  - All stakeholders must receive value and be aware of that value

- Underlying transformation justification must not be forgotten
  - i.e. spending $X hundred million on CANW to decrease operational risk

Recommendations

Public announcement by senior management

- GOAL: external accountability and internal mandate

- Format and contents
  - Press release to media & investors and / or conference call
  - Detail goals, objectives, and expected benefits

- Timing
  - Start of assessment (preferable)
  - Delay if benefit unknown or resources not allocated

- Repeated status announcements during earnings calls and in SEC filings

Recommendations

- Currently executives
  - Familiar with only one transformation segment each
  - Grasp what needs to be done but not necessarily why

- Potential exists for missed opportunities, prevention of full value creation, unintended outcomes

- Decisions appear to be based on limited knowledge set
  - May result in misalignment between one's intentions / objectives and one's actions

Recommendations

Awareness of objectives and back-checking by all parties

- Executives should have a clear understanding of
  - All transformation objectives
  - All stakeholder values and needs
  - Current performance and ranking of importance

- Based on known research not on anecdotal observations
- Understood by all parties from assessment through execution

- Executives must trace decisions made to specific stakeholder values
- All actions must point to original analysis or research
  - Tasks that cannot should be restructured or eliminated

"The transformation planning process is linked directly to the data and analyses that form the basis for defining and executing transformation projects, and the plan must be traceable to those data"
-- Nightingale and Srinivasan, 2010, p. 114

Recommendations

- Ask if the goal is transformation or standardization

- California Northwest is really a standardization initiative

  – Goal is to equate California, Idaho, and Washington to the Bank's Model states

  – Focus does not appear to be process improvement or increasing system efficiency
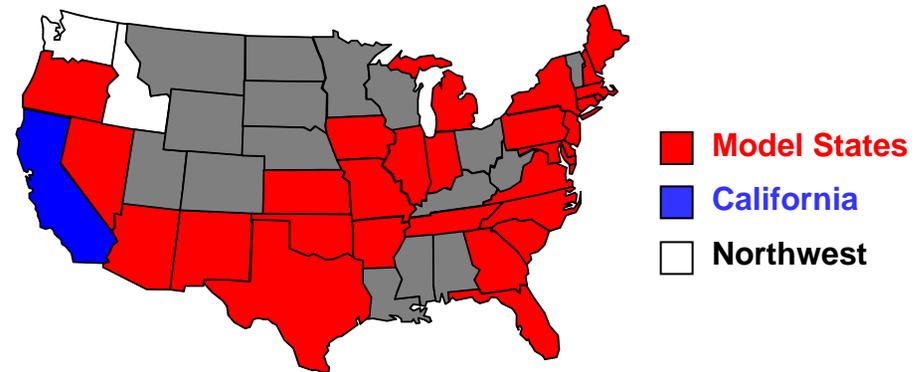
■ Model States
■ California
□ Northwest

Executive Framework Review, 2010, p. 4

■ Model States
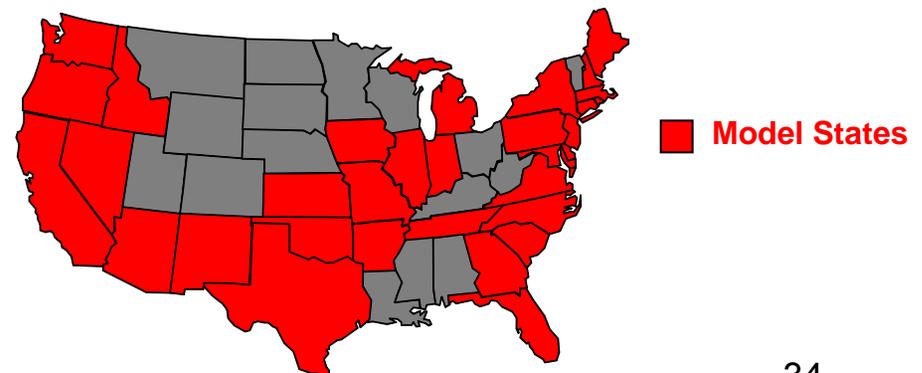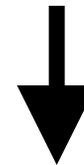
Modified from Executive Framework Review, 2010, p. 4

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Recommendations

Adoption of a standardization vs. transformation mindset

- Non-standardization transformations
  - Analyze and seek out areas for improving efficiency
  - Initially future state is unknown – *should be no preconceived notions*
  - Goal is improve systems and processes NOT make A = B

- Standardization transformations
  - Focus is on making one system or set of processes equal to another
  - Future state is known
  - Improvement should not be the primary focus of the initiative

Sources:
   Dorey, 2010

Recommendations

Clarity of enterprise goals

- California Northwest strategic objectives are complete
- Modify wording to ensure clarity and remove ambiguity

- International Council on Systems Engineering (INCOSE) framework recommends
  - Necessary, clear & concise, measurable, achievable, and verifiable

- Indication of importance and significance in wording recommended
  - INCOSE: "Shall" (hard fast req.), "must" (desire), "will" (operating)

"Goals should indicate importance and rigidity"

-- Crawley, October 2009, p. 123

Sources:
International Council on Systems Engineering, 2010, p. 76-78

Conclusion and Key Takeaways

- The transition process is potentially usable for transformation

- Only applying the transition process to transformation is insufficient
  - Two completely different enterprise states exist

- Need to also develop a "transition environment" for transformation
  - Consider needs of all stakeholders to gain "buy-in" from all supporting parties
  - Develop an "all hands" mentality through a culture of open communication
  - Back-check assumptions to justify actions and stay on message

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- Major Sean Dorey - MIT Graduate Student
- Commander Dennis Evans - SDM Fellow

Questions / Comments

Appendix

- Stakeholders
  - Retail Deposit Customer / Client
  - Associate (Retail Consumer Banking in CANW)
  - Stockholder
- Key Metrics
- Key Processes
- Key Enterprise Goals
- X-Matrix

Retail Deposit Customer / Client

High

5

4

🔵 Additional features and services

Current Performance

1 ---------- 2 ---------- 3 ---------- 4 ---------- 5

Combined overdraft protection
from savings and checking

🔵

Consistent Customer Experience 🔵

"Relationship pricing" across all
BAC states 🔵

Nationwide linking and servicing of
accounts

🔵 **2**

🔵 Combined California banking
statements

🔵 Single point access to bank and
brokerage statements and
accounts

🔵 Issuing of debit cards for out of
state accounts

1

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Low

Relative Importance to Stakeholder

High 41

Associate (Retail Consumer Banking in CANW)

High ↑ **Current Performance**

5

Quality online experience ●

Minimal amount of complex
training ●

4

1   2   3   4   5

Simplified service platform ●

Single set of processes and
procedures across the banking
system   ● 2

1

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Low   **Relative Importance to Stakeholder**   **High** 42

Stockholder

High ↑

Current Performance

5

Ethical behavior ●

Operational Stability / Protection of Bank Assets ● Transparency in revenue / cost profit capabilities ●

Organizational flexibility ●

4

Return on Investment ●
Low operational cost ●

Growth potential ●

1   2   3   4   5

2

Meet regulatory requirements in a cost effective manner ●

1

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Low   **Relative Importance to Stakeholder**   **High** 43

Sources:
Positions provided by Tracie Davis, December 2010
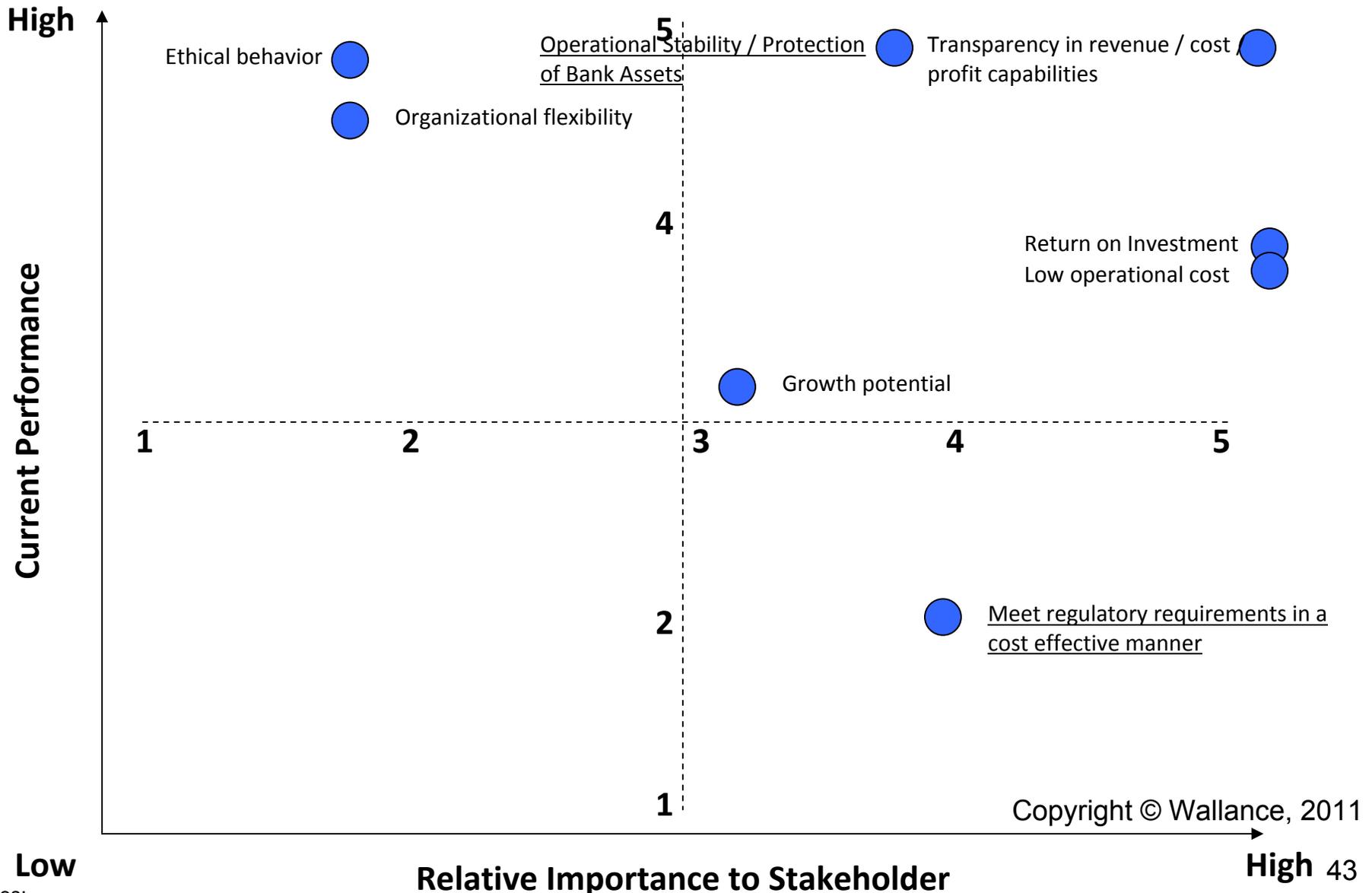
Obtained template from MIT Lean Advancement Initiative

Key Metrics

Enterprise Metric	Measured	Target Value
ATM/POS Transaction Volumes	Volume of transactions at ATMs and card swipe terminals	>= volume prior to transformation
ATM/POS Declines	Failed transactions at ATMs and card swipe terminals	= volume prior to transformation
Fraud Losses	Dollar value lost due to fraudulent account transactions	Unchanged
Claims COE: Service Levels	Quality of support provided by call center associates	= Model system value
Claims COE: Payment Research Timeliness	Time required to investigate a bill payment issue	= Model system value
Deposit Accounts	Quantity of accounts converted to the new system	3.6 million in NW and 15.6 million in CA
Debit Card (CA & NW)	Number of issued debit cards required to be converted	4 million unlinked cards
Debit Card (NW)	Family member cards and 18 digit savings only cards that will be reissued	650,000 and 38,000 (respectively)
Online Banking Conversion	Number of users transferred to target platform	720k users; 300k CheckFree customers
Contact Center: Sales, Service, Operations, NS&S	Transforming service support centers to target platform	Unchanged

Key Processes

Process	Description
Develop communication plan	A communication plan is critical for notifying customers and associates regarding banking changes as a result of the transformation.
Develop training plan	The development of a plan for training associates.
Train associates	Train associates in new systems and processes.
Communicate changes to associates	Communicate changes to associates regarding the transformation.
Inform customers	Customers must be informed regarding planned transformation initiatives, including those that affect online banking and mobile offerings.
Convert consumer deposit accounts	Deposit accounts in California, Idaho, and Washington must be converted to the target platform.
Update online banking	Update WA, CA, and ID online banking including bill payment, mobile banking, etc. and remove of region specific references.
Update ATMs	Update ATMs in ID, WA, and CA including the removal of region specific references.
Establish nationwide customer authentication	CANW customer authentication is to be converted to that of the target banking platform for ATMs, voice transaction systems, online banking, etc.
Convert debit cards	Debit cards tied to California, Idaho, and Washington legacy systems must be transitioned to the target system.
Reissue NW debit cards	Debit cards with 18 digits in Idaho and Washington must be reissued to meet the target platform, which is limited to 16 digits.
Prefix account numbers	Account numbers less than 12 digits long in California, Idaho, and Washington must be converted to the target 12 digit length by adding zeros.

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Key Processes cont.

Process	Description
Update telephone numbers	Telephone numbers on customer checks and statements and in the yellow pages must be updated.
Upgrade IT	IT infrastructure and electronic systems in CA, ID, and WA must be updated to meet the target platform standards.
Update Contact Centers	To meet the target operating environment, existing contact centers in CA, WA, and ID must be upgraded.
Transfer legacy products and processes	In California, Idaho, and Washington, legacy deposit processes and products not discontinued must be transferred to the target system. Select systems will be updated to meet target standards including the money transfer system in WA and ID.
Convert deposit applications	Deposit applications must be converted to the target system; examples include IMPACS, S/T, FAST, etc.
Decommission legacy applications and hardware	Legacy system applications not transferred must be closed, which includes channel applications, Pay By Phone, and other WA, ID, and CA applications.
Develop test plans	Test plans must be developed, which includes specifying the testing environment, timeline, resources, people, and data required to successfully execute the test plans, etc.
Implement test plans	Tests run include component and system integration testing and user acceptance testing, which ensure that the developed software code is inline with the specified functional requirements.
Complete dress rehearsal	The focus of the transformation dress rehearsal is customer and account conversion. A simulation of the transformation execution tasks is run with bank customers to mimic the actual transformation implementation phase.

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Key Enterprise Goals

Goal	Description
<u>Nationwide Consistency</u>	Across all the states where Bank of America operates, customers and clients will have access to a consistent set of products and services and will experience the same quality and level of service.
Nationwide Product Rollout	Products and services are separately released in individual regions at Bank of America. The CANW transformation will facilitate the nationwide deployment of products and services.
<u>Standard Enterprise-wide Processes and Technology</u>	Internally, Bank of America will have a single retail banking technology platform and a consistent set of processes across its entire enterprise, where the enterprise boundary is that of Bank of America Corporation.
Enhanced Customer and Client Experience	Bank of America will seek to provide its customers and clients with an improved experience when conducting business with the Bank.
Decreased Operating Complexity for Associates	In transforming the California Northwest sector, Bank of America seeks a simplified and streamlined operating environment for its associates to work in and serve the Bank's customers.
Maintain BAC's Reputation	Both during the transformation and continuing after, BAC will maintain its enterprise-wide reputation at the current level.
<u>Decreased Operational Risk</u>	Bank of America seeks a state of lower operational risk across its enterprise.
Greater number of products and services offered	Customers and clients across the enterprise and especially in the Northwest region will be offered and have access to a larger quantity of services and products.

Key Enterprise Goals cont.

Goal	Description
<u>Minimize conversion adverse customer and associate issues</u>	As the actual conversion unfolds, BAC seeks to "minimize negative impacts" on customers, clients, associates, and other such stakeholders.
Decreased risk of compliance failure	The California Northwest transformation will result in streamlined operations across the entire corporation as the enterprise. BAC believes that streamlining its operations will decrease the potential for future adverse compliance issues.
Reduce operating costs by $x to $x million by 20xx	Bank of America, through its California Northwest transformation is seeking operating cost savings of $x to $x million by 20xx.
Facilitate revenue growth	BAC seeks to facilitate revenue growth as part of the California Northwest transformation.
Decreased Technology Complexity	The end state of the California Northwest transformation is a retail banking platform reduced in complexity.
Decreased Potential for Technology Problems	Upon completion of the CANW transformation, the resulting enterprise IT system state should provide for a decrease in the potential for the emergence of problems related to technology.
Decreased technology development and deployment time and cost	The California Northwest transformation will result in a single, nationwide platform, which decreases the time required to deploy and the cost to develop technology products and services.

Strategic Objectives vs. Stakeholder Values

Strategic Objectives (rows):
- Nationwide Consistency
- Nationwide Product Rollout
- Standard Enterprise-wide Processes and Technology
- Enhanced Customer and Client Experience
- Decreased Operating Complexity for Associates
- Maintain BAC's Reputation
- Decreased Operational Risk
- Greater Number of Products and Services Offered
- Minimize Conversion Adverse Customer and Associate Issues
- Decreased Risk of Compliance Failure
- Reduce Operating Costs by $x to $x Million by 20xx
- Decreased Technology Complexity
- Decreased Potential for Technology Problems
- Decreased Technology Dev. & Deployment Time and Cost

Stakeholder Values (columns):
- Consistent banking experience
- Additional features and services
- Issuing of debit cards for out of state accounts
- Nationwide linking and servicing of accounts
- Single point access to statements and accounts
- Combined California banking statements
- "Relationship pricing" across all BAC states
- Combined overdraft protection from savings and checking
- Simplified service platform
- Single set of processes across the banking system
- Minimal amount of complex training
- Quality online experience
- Simplified ability to make sys changes in fluctuating reg.
- Reduction in operational risk
- Single marketable platform
- Ability to offer "advanced features and services"
- Flexibility to respond to changing market demand
- IT support cost reduction
- Decrease in custom infrastructure
- Reduction in development costs
- Return on investment
- Long-term, consistent returns (dividends, capital)
- Management of risk

X-Matrix

Stakeholder Values

Key Processes

Overlay annotations: **Customer & Associate Communication**, **Return for Shareholders**

Legend: Y = yellow cell, B = blue cell

Key Processes	Consistent banking experience	Additional features and services	Issuing of debit cards for out of state accounts	Nationwide linking and servicing of accounts	Single point access to statements and accounts	Combined California banking statements	"Relationship pricing" across all BAC states	Combined overdraft protection from savings and checking	Simplified service platform	Single set of processes across the banking system	Minimal amount of complex training	Quality online experience	Simplified ability to make sys changes in fluctuating reg.	Reduction in operational risk	Single marketable platform	Ability to offer "advanced features and services"	Flexibility to respond to changing market demand	IT support cost reduction	Decrease in custom infrastructure	Reduction in development costs	Return on investment	Long-term, consistent returns (dividends, capital)	Management of risk
Develop communication plan																							
Develop training plan																							
Train associates																							
Communicate changes to associates																							
Inform customers												Y											
Convert customer deposit accounts	B			B		B	B	Y	Y									Y	Y				
Update online banking	Y				Y							B		Y	Y	Y	Y		B	Y			
Update ATMs	Y													Y					B				
Establish nationwide customer authentication	Y		Y							Y								Y	B				
Convert debit cards	B		B																				
Reissue NW debit cards	Y		B																				
Prefix account numbers	Y				Y		Y																
Update telephone numbers	Y																						
Upgrade IT	Y								Y		Y	Y	Y	B		Y	Y		B	B	B		Y
Update contact centers	Y								Y	Y	Y					Y			B				
Transfer legacy products and processes	B				Y				B	B	Y			Y		B			Y	Y			
Convert deposit apps	Y	Y			Y				Y		Y					Y			B	Y			
Decommission legacy applications and hardware	Y								Y		Y			Y		B			B	Y			
Develop test plans																							Y
Implement test plans																							B
Complete dress rehearsal																							B

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Key Processes vs. Metrics

- No metrics appear to monitor customer and associate communication

- No metrics identified to measure test and dress rehearsal success

- Limited one metric to one process tracking
  - Convert Deposit Accounts
  - Reissue Debit Cards

- Additional metrics needed

	ATM/POS Transaction Volumes	ATM/POS Declines	Claims COE: Service Levels	Deposit Accounts Converted	Debit Cards (CA & NW) Converted	Debit Cards (NW) Reissued	Online Banking Conversion	Contact Center: Sales, Service, Operations, NS&S
Develop communication plan								
Develop training plan								
Train associates								
Communicate changes to associates								
Inform customers			⬛					
Convert customer deposit accounts				🟦		🟨		
Update online banking								
Update ATMs								
Establish nationwide customer authentication	🟨							
Convert debit cards					🟦			
Reissue NW debit cards						🟦		
Prefix account numbers				🟨		🟨		
Update telephone numbers								
Upgrade IT								
Update contact centers			🟨					🟦
Transfer legacy products and processes								🟨
Convert deposit apps								
Decommission legacy applications and hardware								
Develop test plans								
Implement test plans								
Complete dress rehearsal								

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Metrics vs. Strategic Objectives

- "Nationwide Consistency" adequately tracked

- Decreased Operational Risk & Risk of Compliance Failure
  - Key BAC objectives
  - Few if any metrics located

- Technology objectives
  - Almost no metrics identified

	ATM/POS Transaction Volumes	ATM/POS Declines	Claims COE: Service Levels	Deposit Accounts Converted	Debit Cards (CA & NW) Converted	Debit Cards (NW) Reissued	Online Banking Conversion	Contact Center: Sales, Service, Operations, NS&S	
Nationwide Consistency				🟨	🟨	🟨	🟦	🟦	
Nationwide Product Rollout									
Standard Enterprise-wide Processes and Technology								🟨	
Enhanced Customer and Client Experience			🟦						
Decreased Operating Complexity for Associates								🟨	
Maintain BAC's Reputation			🟨						
Decreased Operational Risk		🟨							
Greater Number of Products and Services Offered									
Minimize Conversion Adverse Customer and Associate Issues	🟨	🟦	🟦						
Decreased Risk of Compliance Failure									
Reduce Operating Costs by $x to $x Million by 20xx									
Decreased Technology Complexity									
Decreased Potential for Technology Problems			🟨						
Decreased Technology Dev. & Deployment Time and Cost									

Strategic Objectives

Metrics

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