



Better decision-making starts with advantaged insights

***Grow Your Value through
Market Prioritization***

Marakon

Management Consulting at
Charles River Associates

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BankVQ is a data and analytics engine used to support growth strategies

Needs BankVQ Addresses



Market Prioritization – select high value geographic market opportunities (existing and new) with new insight on who you beat and where you win

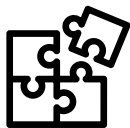
Focus of this Document



Market Growth Playbook – profile an individual market's 'winners and losers', identify local market opportunities, and define your MSA playbook



Business Line Growth – strengthen and grow your Wealth Management and Mortgage business lines



M&A Advantage – create your M&A advantage with advantaged screening and evaluation to identify win-win deals

Working With BankVQ

BankVQ's Advantaged Analytics and Insights can be accessed through a range of working models to meet your needs

Custom Insights / Reports

Consulting "Lite"

Consulting Advisory

An external perspective on strategic questions, leveraging unique insights and data from the BankVQ platform

Workshop-led model (new data, new insights, implications) tailored to your strategic need, supported by BankVQ analytics

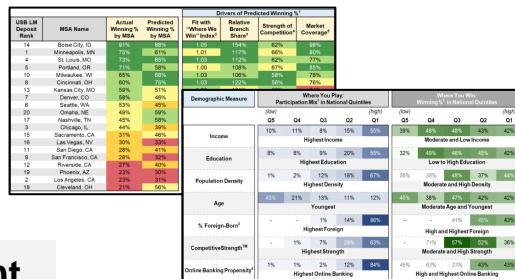
Partner to address strategic issues using both internal and external data via a traditional consulting model

Coming 2023: an online subscription to the BankVQ platform will provide unlimited and on-demand access to data and analytics

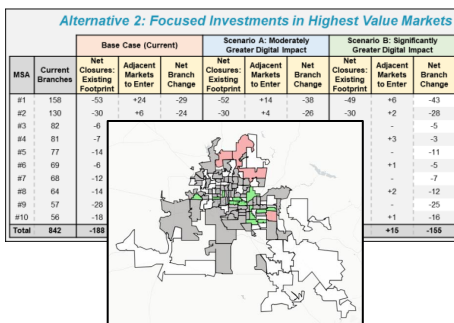
Use BankVQ when you need to ...

- ✓ Understand your bank's 'Patterns of Winning' - **who you serve, who you beat, and where you win** - to discern which markets are highest strategic fit, and inform where you are best positioned to play and win
- ✓ Allocate **capital and resources across your existing footprint**, with a structured framework that accounts for value growth potential from both expansion and rationalization opportunities
- ✓ Rank and prioritize **opportunities across both existing and new markets**
- ✓ Evaluate **market investment decisions and alternatives** in the context of future banking trends (e.g., changes in growth and interest rates, online adoption, competitive intensity) and market participation choices (e.g., broad vs. focused and deep)

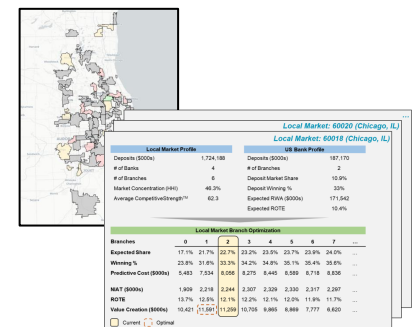
1 Assess Market Patterns: Who You Serve, Who You Beat and Where You Win



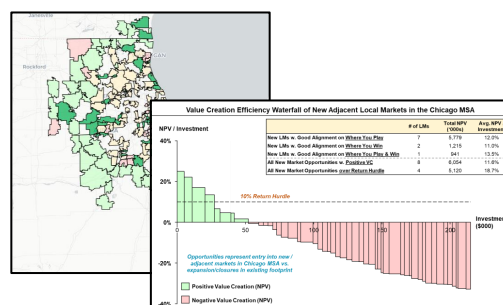
4 Align Market Investment Choices and Scenarios



2 Prioritize Existing Markets



3 Prioritize Adjacent Markets



The Case and Opportunity for Market Prioritization	4 – 6
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<ul style="list-style-type: none">• <u>Assess Market Patterns</u>: understand who you serve, who you beat and where you win• <u>Prioritize Existing Markets</u>: inform capital and resource allocation for existing markets• <u>Prioritize Adjacent Markets</u>: rank new and adjacent markets for entry• <u>Align Market Investment Choices and Scenarios</u>: develop integrated priorities across existing and new / adjacent markets, and align investment choices with industry scenarios	
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Banks must balance tensions and trade-offs in the ever-changing branch banking landscape

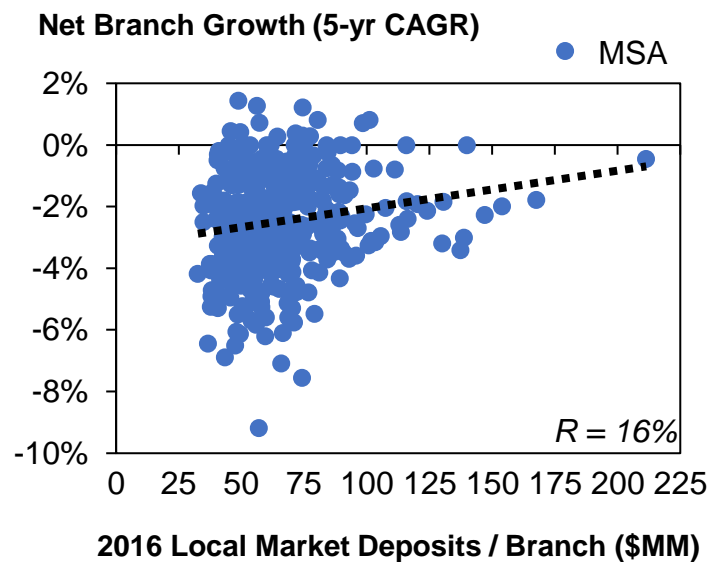
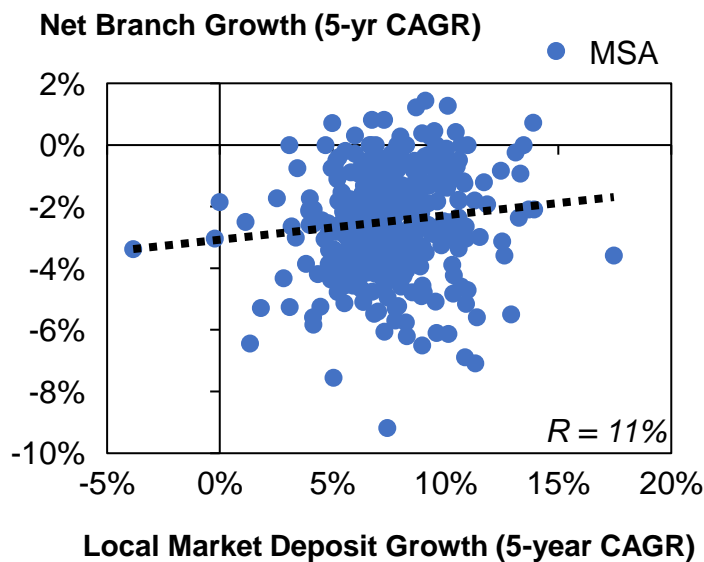
Banks face numerous market challenges:

- **Customers needs, behaviors and locations (e.g., home office) are changing**, resulting in new patterns of growth, competition and economics
- **Contradictory signals make it hard to discern cause and effect:** e.g., local deposits are growing even as branch activity falls; non-traditional banks proliferate and expand; new branches open even as total branches decline and online activity soars
- **Multi-market banks face difficult trade-offs:** e.g., market focus vs breadth; grow existing vs new markets; balance branch expansion vs reduction; focus on growth vs returns
- **New players and COVID-19 has changed customer behavior (i.e., digital usage) and accelerated the need for adaptation**

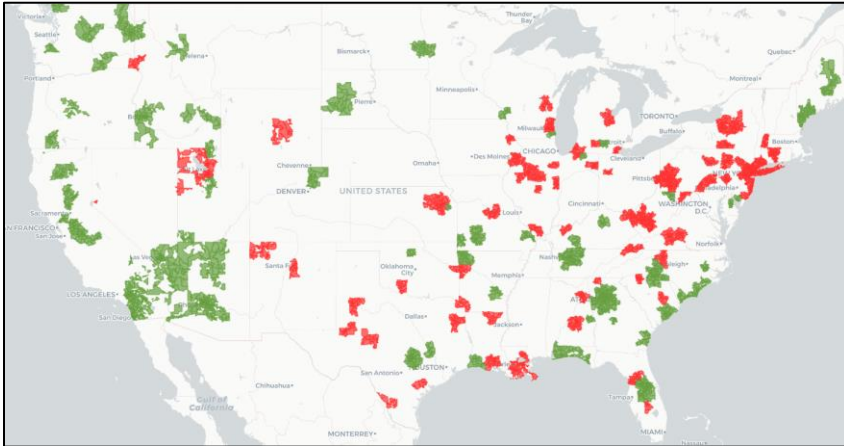
Traditional approaches are insufficient:

- **Traditional market portfolio strategy frameworks are incomplete**, focusing on market attractiveness (e.g., size, growth, deposits per branch) but *missing competitive differences*
- **Traditional footprint optimization models are tactical in orientation**, focusing on existing markets and *underemphasizing* the value of growth

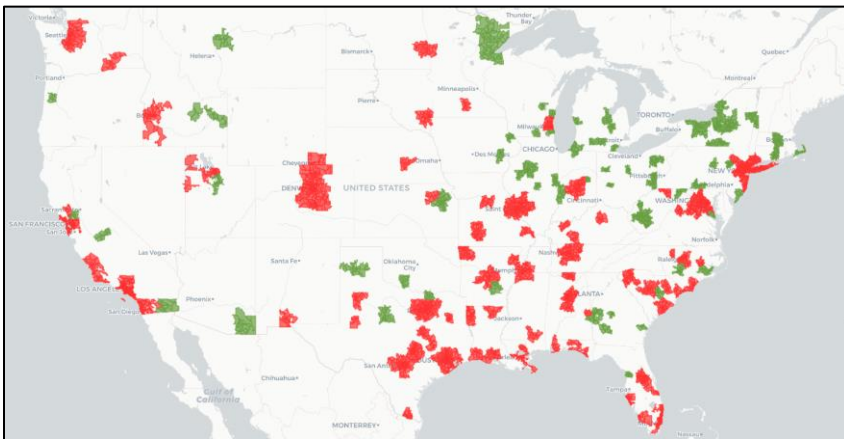
Net branch growth is not well aligned with market growth or branch productivity, signaling opportunity for better prioritization



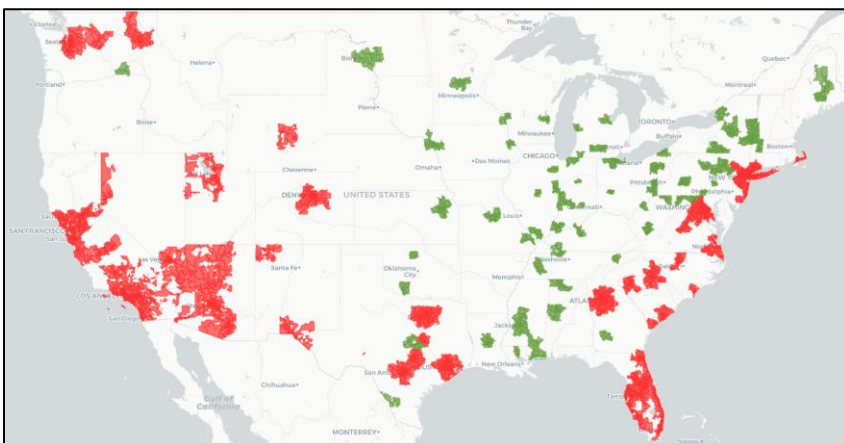
Common approaches to market prioritization do not put sufficient emphasis on competitive differences across markets, which often trade-off against common measures like market growth



Highest growth markets (*labeled green*)...



...often attract more competitors (*labeled red*)...



...and stronger competitors (*labeled red*)... which creates strategic trade-offs

- Most Attractive MSAs
- Least Attractive MSAs

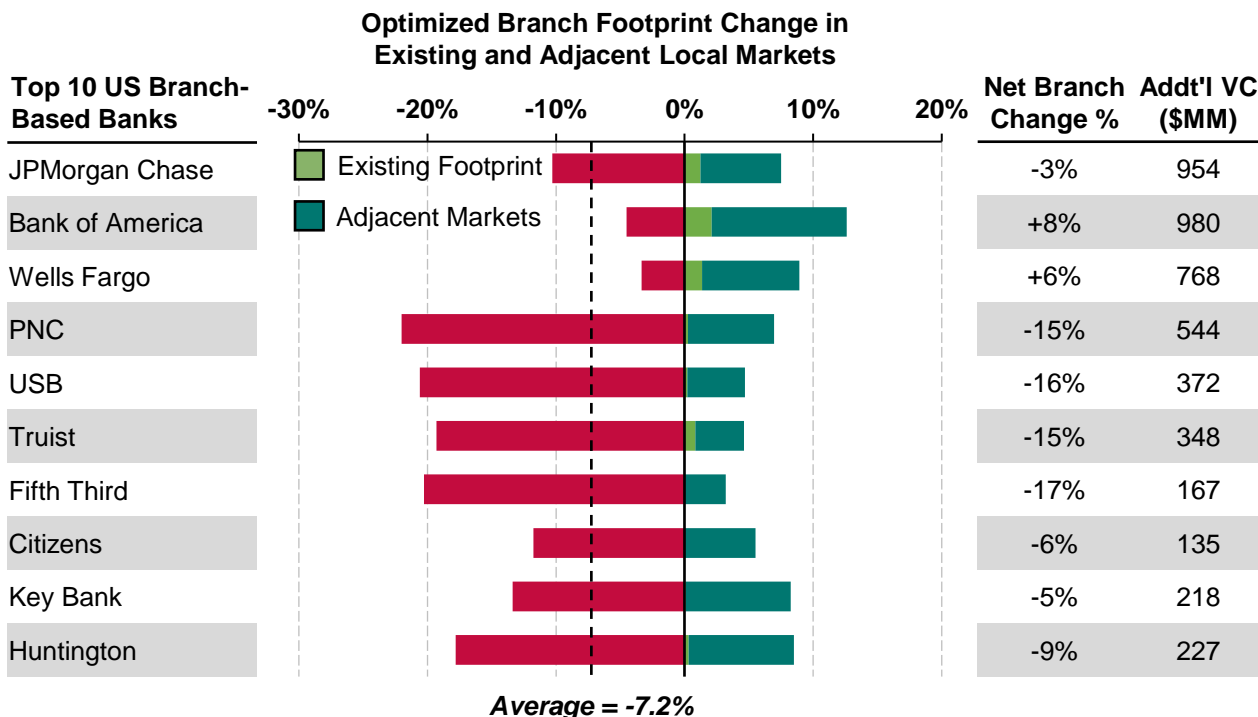
Effective market prioritization needs to account for both market measures (e.g., size, growth, branch productivity) and competitive measures (competitive intensity and strength of competition)

Making better choices on the allocation of resources across and within markets is a central capability to delivering superior growth and returns

The size of the prize is significant - what's required to achieve it?

1. **Develop advantaged insights on what underpins winning and value creation**
 - More emphasis on what underpins competitive advantage
 - More emphasis on economics (e.g., scale economies, relative investment, relative returns) and trade-offs up front (as part of strategy, not *after* strategy)
2. **Address difficult trade-offs at the heart of resource allocation**
 - Address both sides of a tension at the same time (e.g., where to grow vs. where to rationalize vs. where to renovate; new market vs. existing market opportunities)
 - Use value creation as a means of addressing economic trade-offs (growth vs. returns, short-term vs. long-term performance)
 - Rank opportunities based on value creation (NPV) and highest value per dollar of scarce resource (“bang for the buck”)
3. **Place informed strategic bets and adapt as markets evolve**
 - Make choices clear and actionable – e.g., who to serve, where to defend, where to grow, where to shrink, where to invest or refresh
 - Concentrate resources on highest value opportunities
 - Understand the impact of future market scenarios on choices and outcomes (e.g., digital penetration)

The Opportunity for Effective Market Prioritization is Large



Additions create more value: additions account for over 50% of additional value creation and only 37% of branch changes

Head-to-head winning performance provides new lenses on who you beat, where you win, and why

New measures of competitive performance are based on a simple sports analogy for defining winning, strength of schedule, and overall rank.

Definitions of Key Terms

Winning %	Total wins divided by total matches (i.e., the bank with higher Deposits 'wins' when two banks compete head-to-head in the same local market). This can be applied to banks, markets, head-to-head combinations, patterns, etc.
CompetitiveStrength™	A rating for each bank based on its overall win/loss performance and the strength of competition it faces head-to-head
Strength of Competition	The average CompetitiveStrength™ of all competitors that a given bank competes against head-to-head. This can also be applied to understand strength of competition in a market

Common competitive performance measures (market position, market share) are inadequate:

- Don't capture head-to-head performance (Bank A vs. Bank B in markets they directly compete)
- Don't capture differences in branch footprint and strength of competition
- Don't capture competitive intensity (e.g., competitive performance is very different for a bank that is #2 in a local market with 2 competitors vs 20 competitors)

When combined with other measures of market attractiveness (e.g., market size, growth, branch productivity), these new competitive measures provide the foundation for guiding strategic resource allocation choices.

Note: CompetitiveStrength™ and Strength of Competition are solved for simultaneously across all banks and markets based on head-to-head matches and win/loss records

For most banks, winning % varies widely across customers, competitors, and markets, providing opportunity for improved market prioritization

For most banks, wide variation in Winning % is observed across:

- **Customer segments:** which demographic segments you win most with (e.g., income, urban/rural, age, education, foreign, digital propensity)
- **Competitors:** who you beat and lose to
- **Markets:** your relative market coverage and branch share compared to the competition in each each market

Four strategic drivers explain most of the variation in observed winning %; for most banks, 3 of the 4 measures are new and not used to guide strategy

Strategic Drivers	Banks Win More When They...
<p>1 Competitive Strength vs. Competitors</p>	<p>✓ Compete in local markets with weaker banks than themselves, and avoid well-entrenched competitors</p>
<p>2 Market Coverage¹ vs. Competitors</p>	<p>✓ Build higher coverage of the overall market (MSA) than competitors do</p>
<p>3 Demographic Fit with 'Where We Win'</p>	<p>✓ Compete in local markets that match the customer demographics they serve best and win most with</p>
<p>4 Relative Branch Share</p>	<p>✓ Build greater branch presence vs. competitors</p>

The strategic drivers can be used to guide market prioritization and address key trade-offs: whether to concentrate investment, whether to focus on new vs. existing markets, whether to focus on large, growing markets vs. markets you are advantaged in

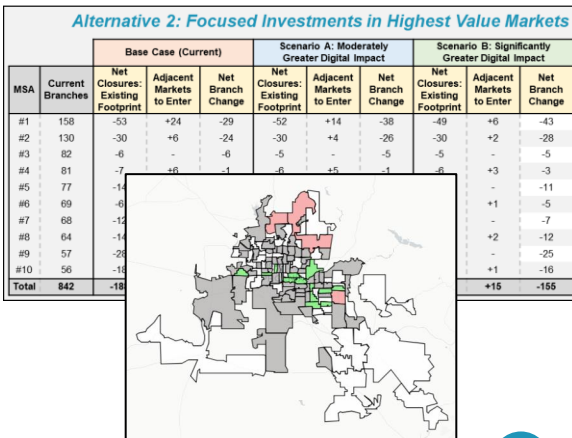
1. Market coverage is the percent of market (MSA) deposits that your branch footprint 'covers'

Following pages provide detail on each step of BankVQ's Market Prioritization approach ...

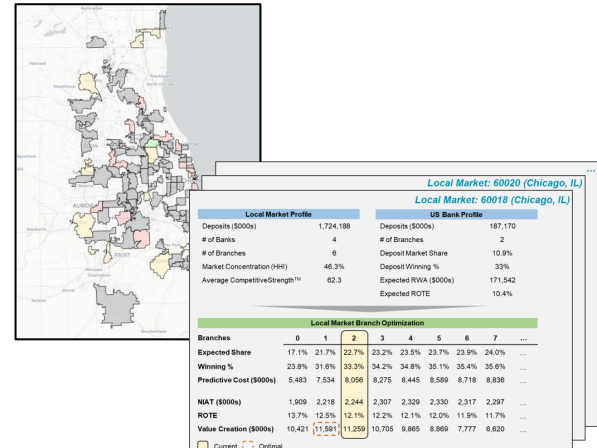
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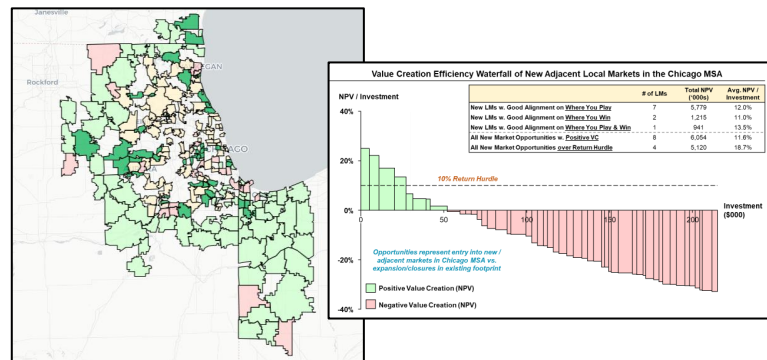
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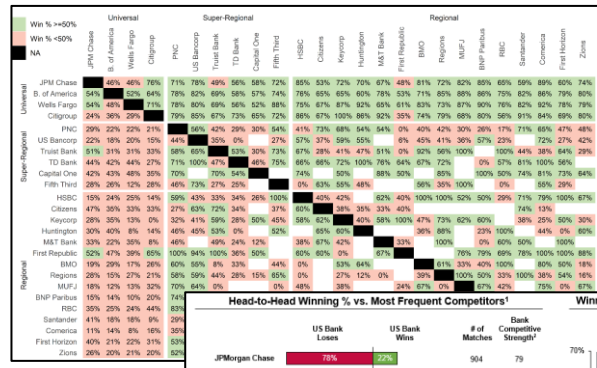
Understanding market portfolio patterns provides the foundation to identify, prioritize and address market opportunities

- Profile where you win today by MSA and how it has changed over time
- Understand and explain differences in Winning across your MSAs
 - Who you serve: profile which types of demographic markets you win most (least)
 - Who you compete against: understand who you beat and who beats you
 - How well-positioned you are: understand your market coverage, relative branching share and how well they connect with where you win
- Benchmark how aligned your positioning and priorities are with where you win

Who You Serve

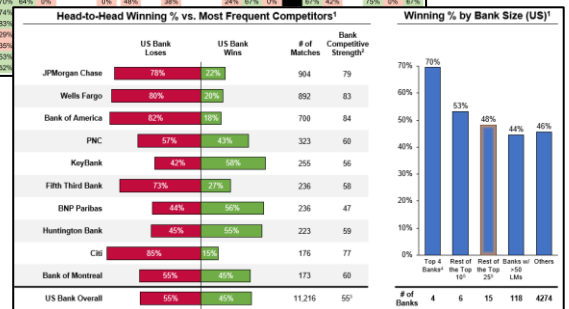
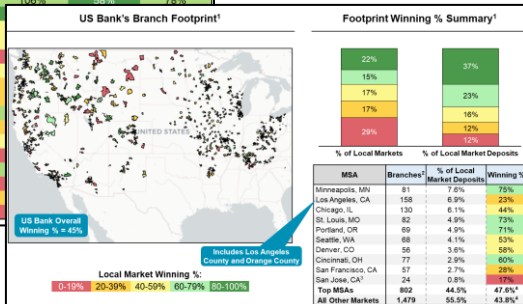
Demographic Measure	Where You Play: Participation Mix ¹ in National Quintiles					Where You Win: Winning % ² in National Quintiles				
	(low) Q5	Q4	Q3	Q2	(high) Q1	(low) Q5	Q4	Q3	Q2	(high) Q1
Income	10%	11%	8%	15%	55%	39%	48%	48%	43%	42%
	Highest Income					Moderate and Low Income				
Education	8%	8%	9%	20%	55%	32%	49%	46%	45%	42%
	Highest Education					Low to High Education				
Population Density	1%	2%	12%	18%	67%	56%	38%	48%	37%	44%
	Highest Density					Moderate and High Density				
Age	43%	21%	13%	11%	12%	45%	38%	47%	42%	42%
	Youngest					Moderate Age and Youngest				
% Foreign-Born ³	-	-	1%	14%	86%	-	-	41%	45%	43%
	Highest Foreign					High and Highest Foreign				
CompetitiveStrength™	-	1%	7%	29%	63%	-	71%	57%	52%	36%
	Highest Strength					Moderate and High Strength				
Online Banking Propensity ⁴	1%	1%	2%	12%	84%	46%	63%	23%	43%	43%
	Highest Online Banking					High and Highest Online Banking				

Who You Beat



Where You Win

USB LM Deposit Rank	MSA Name	Drivers of Predicted Winning % ¹				
		Actual Winning % by MSA	Predicted Winning % by MSA	Fit with "Where We Win" Index ²	Relative Branch Share ³	Strength of Competition ⁴
14	Boise City, ID	91%	88%	1.05	154%	98%
1	Minneapolis, MN	75%	61%	1.01	117%	90%
4	St. Louis, MO	73%	55%	1.03	112%	77%
5	Portland, OR	71%	53%	1.00	109%	87%
10	Milwaukee, WI	65%	68%	1.03	106%	78%
8	Cincinnati, OH	60%	75%	1.03	103%	93%
13	Kansas City, MO	59%	51%	1.03	103%	93%
7	Denver, CO	58%	46%	0.96	100%	93%
6	Seattle, WA	53%	45%	0.96	100%	93%
20	Omaha, NE	49%	59%	1.03	103%	93%
17	Nashville, TN	45%	58%	1.01	101%	93%
3	Chicago, IL	44%	39%	0.97	100%	93%
15	Sacramento, CA	31%	46%	0.95	100%	93%
16	Las Vegas, NV	30%	33%	0.92	100%	93%
11	San Diego, CA	28%	41%	0.94	100%	93%
9	San Francisco, CA	28%	32%	0.94	100%	93%
12	Riverside, CA	27%	40%	0.93	100%	93%
19	Phoenix, AZ	23%	30%	0.96	100%	93%
2	Los Angeles, CA	23%	31%	0.93	100%	93%
18	Cleveland, OH	21%	56%	1.03	100%	93%



BankVQ's baseline sets a foundation for prioritizing existing and adjacent markets based on strategic evidence and competitive insights of where you succeed today

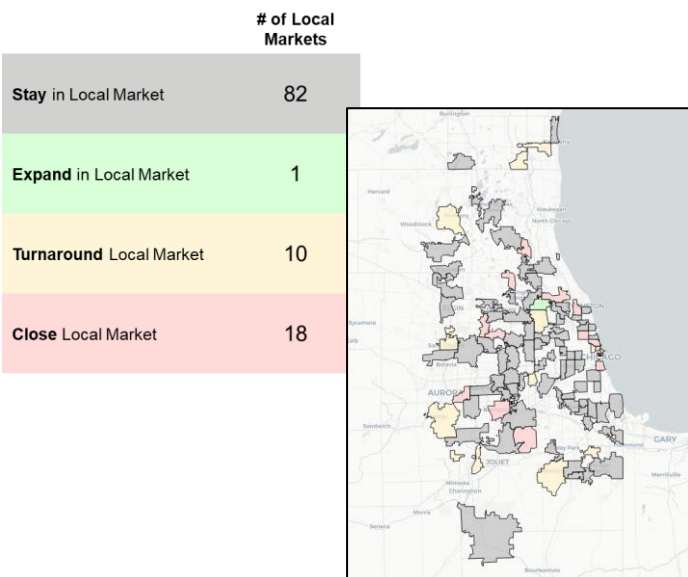
Prioritize your existing markets' capital and resource allocations based on strategic and economic lenses

- **Assess markets based on strategic attractiveness, including:**
 - **Market attractiveness:** size, growth, market structure, branch density
 - **Competitive advantage:** fit with who you serve, where you win, who you beat, and opportunities to expand market coverage and market share
- **Evaluate choices:**
 - **MSA level:** relative attractiveness of investment across MSAs; benefit of concentrated bets
 - **Local market level:** relative attractiveness of investment, branch expansion, and branch reduction
- **Prioritize and rank market opportunities**
 - **Strategic priorities:** market share, market coverage, relative branch share
 - **Economic priorities:** market/branch/cost productivity, scale economies, value creation (NPV), “bang for the buck” (NPV vs investment required), payback
 - **Test robustness to industry scenarios** (e.g., impact of digital)

Strategic Assessment



Economic Perspective



Local Market Profile		US Bank Profile	
Deposits (\$000s)	1,724,188	Deposits (\$000s)	187,170
# of Banks	4	# of Branches	2
# of Branches	6	Deposit Market Share	10.9%
Market Concentration (HHI)	46.3%	Deposit Winning %	33%
Average CompetitiveStrength™	62.3	Expected RWA (\$000s)	171,542
		Expected ROTE	10.4%

Local Market Branch Optimization									
Branches	0	1	2	3	4	5	6	7	...
Expected Share	17.1%	21.7%	22.7%	23.2%	23.5%	23.7%	23.9%	24.0%	...
Winning %	23.8%	31.6%	33.3%	34.2%	34.8%	35.1%	35.4%	35.8%	...
Predictive Cost (\$000s)	5,483	7,534	8,056	8,275	8,445	8,589	8,718	8,836	...
NIAT (\$000s)	1,909	2,218	2,244	2,307	2,329	2,330	2,317	2,297	...
ROTE	13.7%	12.5%	12.1%	12.2%	12.1%	12.0%	11.9%	11.7%	...
Value Creation (\$000s)	10,421	11,591	11,259	10,705	9,865	8,869	7,777	6,620	...

Legend: Current Optimal

BankVQ uses proprietary analytics to simulate different branch configurations within a local market, and for the bank overall, to determine optimal branch count

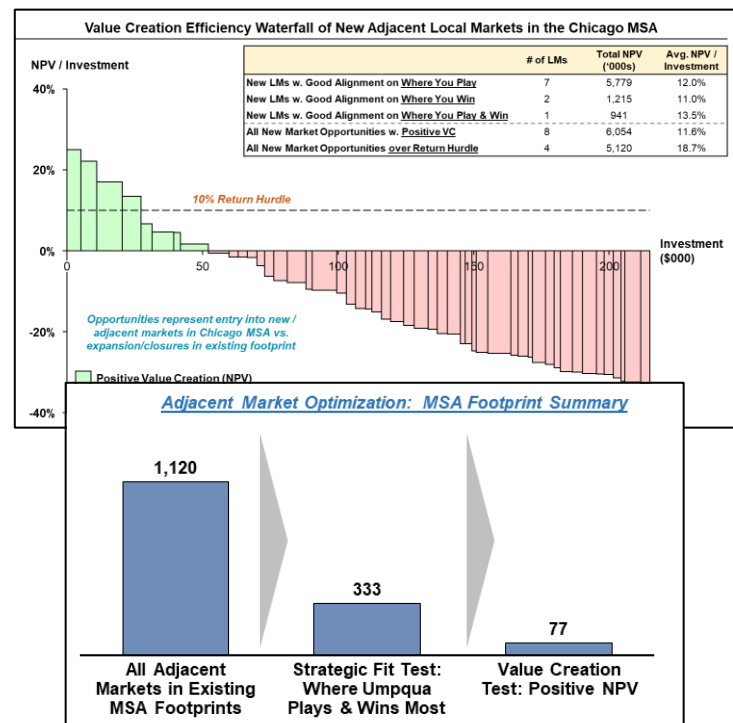
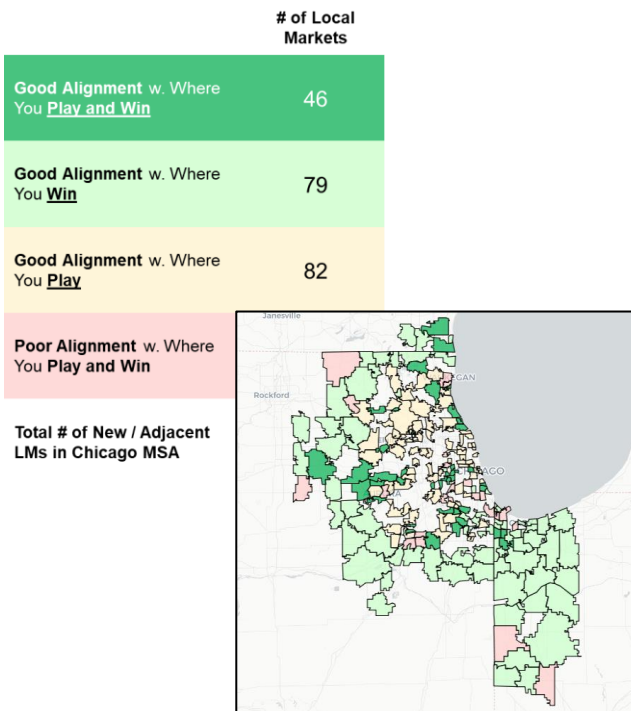
Identify and rank new and adjacent markets for entry that are attractive from both strategic and economic perspectives

- **Identify new/adjacent local markets** that are potentially attractive strategically and economically:
 - Attractive size, growth, competitive strength and intensity, fit with where you win
 - High potential value creation relative to investment required
 - Avoidance of intensely competitive markets or well-positioned competitors
- Aggregate local market view up to MSA level and **compare MSA attractiveness** for new/adjacent growth
- **Prioritize markets for new/adjacent market growth**, and test versus future scenarios (e.g., digital impact on local market growth)
- **Profile aggregate strategic and economic performance** over time, (e.g., ROTE, ROI, IRR, Payback Period, NPV, investment)

Strategic Assessment



Economic Perspective



By combining both 'strategic' and 'economic' lenses for new market entry, BankVQ provides a structured framework to rank expansion opportunities

Align choices and scenarios across existing and new / adjacent markets to achieve the highest value and adapt as the industry landscape evolves

- **Synthesize an integrated perspective** across existing and new/adjacent markets for each MSA and across MSAs
- **Identify key strategic and economic trade-offs** to evaluate/address
- **Develop integrated alternatives** that best achieve different strategic and economic objectives; e.g.
 - Strategic objectives: overall growth / market share
 - Economic objectives: Value Creation (NPV); near-term performance improvement (e.g., cost reduction, ROTE increase)
- **Understand the impact of level of investment** on optimal choices and outcomes
- **Understand the impact of market scenarios** on optimal choices and outcomes

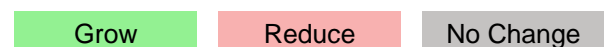
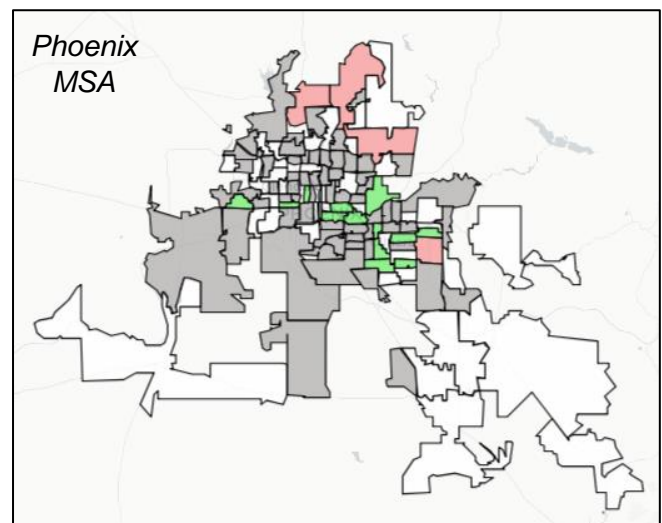
Integrated Prioritization Choices Across Scenarios

Alternative 2: Focused Investments in Highest Value Markets

		Base Case (Current)			Scenario A: Moderately Greater Digital Impact			Scenario B: Significantly Greater Digital Impact		
MSA	Current Branches	Net Closures: Existing Footprint	Adjacent Markets to Enter	Net Branch Change	Net Closures: Existing Footprint	Adjacent Markets to Enter	Net Branch Change	Net Closures: Existing Footprint	Adjacent Markets to Enter	Net Branch Change
#1	158	-53	+24	-29	-52	+14	-38	-49	+6	-43
#2	130	-30	+6	-24	-30	+4	-26	-30	+2	-28
#3	82	-6	-	-6	-5	-	-5	-5	-	-5
#4	81	-7	+6	-1	-6	+5	-1	-6	+3	-3
#5	77	-14	-	-14	-12	-	-12	-11	-	-11
#6	69	-6	+3	-3	-6	+2	-4	-6	+1	-5
#7	68	-12	-	-12	-9	-	-9	-7	-	-7
#8	64	-14	+8	-6	-14	+6	-8	-14	+2	-12
#9	57	-28	+7	-21	-26	+4	-22	-25	-	-25
#10	56	-18	+2	-16	-17	+1	-16	-17	+1	-16
Total	842	-188	+56	-132	-177	+36	-141	-170	+15	-165

Alternative 1: Broad Investment Across Markets

Prioritization Choices for Individual Markets



Use of BankVQ’s data-driven insights to inform prioritization decisions can highlight where investments and focus are most likely to yield advantaged performance

Learn More ...

- **Contact us to learn more about how the data and analytics inside BankVQ can help you**
 - ✓ **See the real-time analytics** powering the tool
 - ✓ **Explore specific opportunities** for your bank based on your strategic objectives
 - ✓ **Request a one-pager** on any of BankVQ's Primary Areas of Focus
 - ✓ **Discuss options for leveraging BankVQ at your bank**
- **Visit our website: www.bankvq.com**
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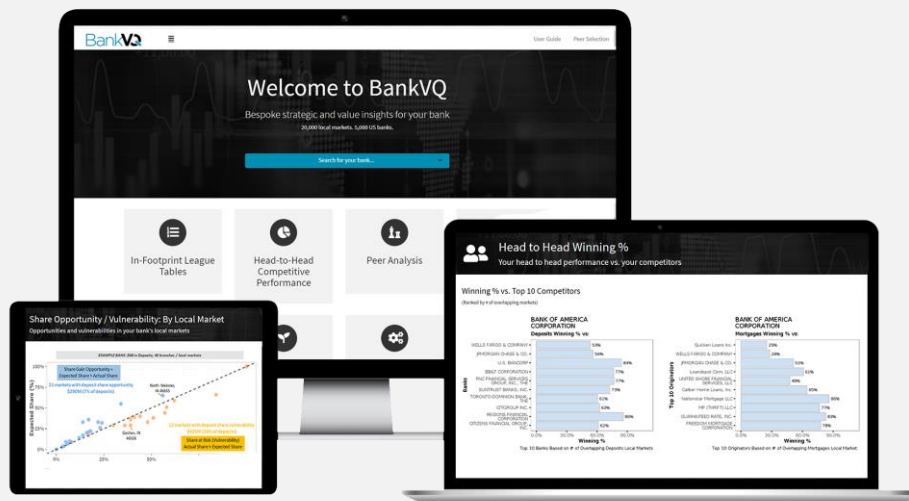
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BankVQ products & services are part of the banking practice of Marakon

- **BankVQ was born out of a recurring observation:** Banks have access to substantial data, but insight to inform strategic decisions is consistently lacking
- We developed BankVQ to **empower banks with advantaged, and readily accessible insight** – bespoke to your bank – to inform organic growth (across and within markets; across business lines), and M&A opportunities
- The underpinning analytics are built bottom-up with granular understanding of markets and competitors - **who wins where and why – and predictive financial models** for a bank or any bank combination (e.g., synergy) – all pre-analyzed
- **Marakon is best known for** integrating strategic insights with rigorous value-based financial analysis to guide decision-making. This sharp focus on maximizing value creation is at the core of BankVQ



Better decision-making starts with advantaged insights

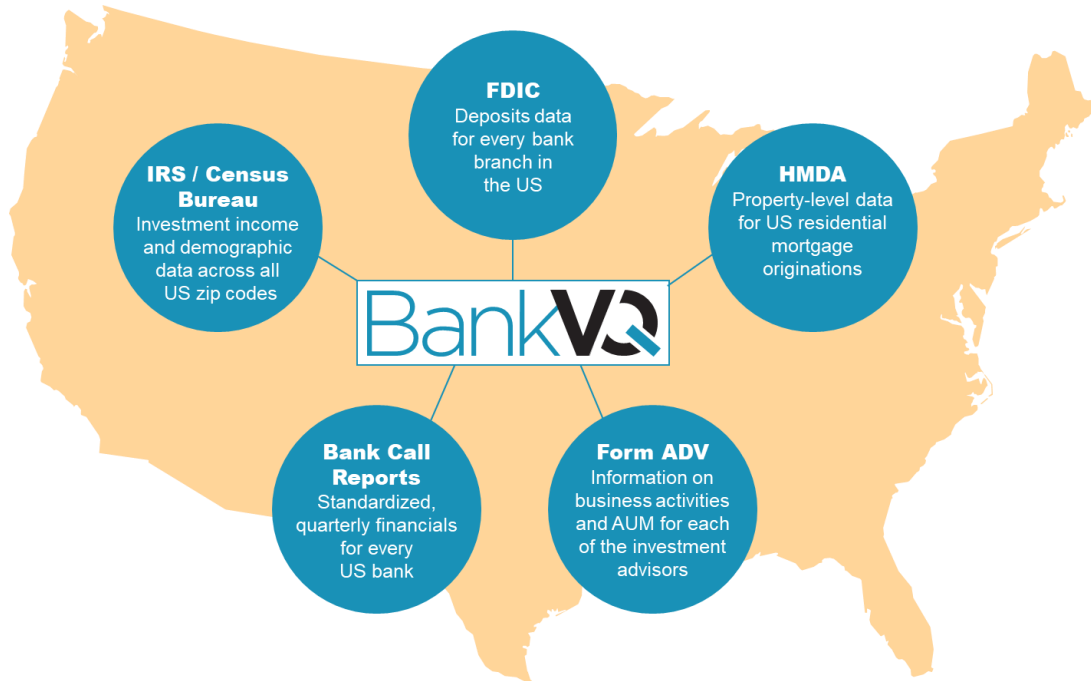


**Strategic Management. Performance Management.
Mergers and Acquisitions.**

The #1 resource for value-based analytics, bespoke for every bank

Market Prioritization	
Patterns of Winning	New lenses and insight on your bank's competitiveness – where you play, where you win, who you beat
Market Prioritizer	New insights on strategic fit, growth opportunities and value across <u>existing</u> markets to inform capital and resource allocation
New Market Finder	Evaluation and prioritization of <u>new or adjacent</u> markets for expansion, including value creation from entry
'Bigfoot' Optimizer	Strategic optimization of all your <u>existing</u> local market footprint – where to close, turnaround or expand
Market Growth Playbook	
Market Winners and Losers	Understand drivers of win-loss across competitors in an MSA – who is winning, who is losing, and why
Deposit Share-Builder	Identification and quantification of market share opportunities and vulnerabilities by local market, counties and/or MSAs
MSA Playbook	Detailed strategic and competitive local market insight to inform the 'playbook' for how to <u>grow and win</u> in an MSA
Business Line Growth	
Mortgage Builder	Identifies opportunities for Mortgage growth based on patterns of winning
Wealth Builder	Prioritizes markets for the Wealth business based on where you win, where the wealth is, and who your competitors are
M&A Advantage	
Top Targets	'Top Targets' for your bank for different strategic objectives, ranked based on value creation
Combination Snapshots	Summary profile and deal valuation for any bank combination
Deal Evaluator	Detailed strategic and financial evaluation, including synergy potential, pricing and expected value creation
Best Buyers	'Best Buyers' for your bank given different strategic objectives, ranked based on value creation


Underpinned by multiple public data sources, integrated at a local market level across 4000+ banks, 88,000 branches, 20,000 zip codes, and 10 million bank combinations, all pre-analyzed and custom to every bank




Powered by proprietary measures of competitive performance and predictive analytics

 **Head-to-Head Analytics**


- Market Coverage and Footprint Share
- In-Footprint League Tables
- Footprint Growth and ROE
- Strategic Drivers of Winning

 **Market Growth Analytics**

- Market Prioritization
- Expected vs Actual Share
- Adjacent Market Entry Simulator
- Branch Footprint +/- Simulator

 **M&A Analytics**

- M&A Screen (Buyer & Seller)
- Advantaged Owner
- Combination Analytics
- Public and Private Bank Valuations and Purchase Prices

 **Performance Analytics**

- Expected vs. Actual Cost, Capital, ROTE
- In-Footprint League Tables
- Business Line Strength
- Peer Selection and Benchmarking

Marakon

Our Experience in Financial Services

Sample Clients



Business Areas Covered

- Retail Banking and Community Banking
 - Consumer Finance
 - Mortgage Banking
 - Payments and Cards
 - Private Client
- Small Business Banking
- Wealth and Asset Management
- Commercial Banking
- Investment Banking and Capital Markets
- Transaction Services
- Insurance and Reinsurance

Functional Expertise

- Corporate and Business Unit Strategy
- M&A and Divestitures (Strategic Due Diligence, Post-Merger Integration)
- Financial Resource Allocation and Risk (Capital, Liquidity, Balance Sheet)
- Customer and Product Proposition Design and Launch
- Customer Segmentation / Channel Management
- Performance Management (Goals, Measures and Rewards)
- Organizational Design

BankVQ products and services are part of the banking practice of Marakon, an advisory consultancy with 40 years of experience partnering with CEOs on strategic value growth

Marakon specializes in strategic portfolio management, value capture, and event driven advisory

Marakon works with executive teams to raise the level of strategic ambition, create clarity on the best strategic direction, and shift resources towards the generation of superior value growth, putting in place the standards, accountabilities, and performance management systems for making it happen on a consistent basis.

We also work with executive sponsorship to translate the new strategic direction into a transformation blueprint, mobilize the organization, steer the change effort, and maintain the execution standard required to ensure the optimal balance of pace, impact, and strategic consistency.

And when real life does not adhere to the strategic plan, due to shifting market dynamics or unforeseen opportunities emerge, we work with CEOs and management teams to understand alternative paths and drive towards the targeted outcome.

Marakon is part of Charles River Associates, a leading global consulting firm that offers economic, financial, and strategic expertise.

Charles River Associates (CRA) is a leading global consulting firm that offers economic, financial, and strategic expertise to major law firms, corporations, accounting firms, and governments around the world. Our experts bring a unique combination of cutting-edge research, state-of-the-art methods, and proven experience to bear on our clients' most complex challenges, creating a client-centric service model. CRA's clients include 80% of the Fortune 100, and 94% of the Am Law 100.

CRA specializes in management consulting and economic litigation. 81% of senior staff hold advanced degrees. Our senior-led teams include leading academic experts and business leaders with experience across industries. Because of our proven skills in complex cases and exceptional strength in analytics, client depend on our objective, fact-based advice for their high-profile, high-stakes matters, leading to practical, actionable solutions.

CRA brings extensive experience and expertise specific to banks and financial services, including competition (anti-trust), regulation/compliance (e.g., Fair Lending, Community Reinvestment, Labor), cyber risk, financial economics, and insurance economics.