

Agenda

PANORAMIC CAPITAL

- Technology Trends and Opportunities:
 - Expanding Technology Role of Capital Markets
 - Underutilization of Existing Systems
 - Al Hype
- Business Trends and Opportunities:
 - Servicing
 - Non-Hedged Products
 - Granularity

Education/Training:

- About Panoramic Academy
- Course Offering and Details

Question and Answers

Technology: Role of Capital Markets



- Traditional Roles of Capital Markets:
 - Curating and maintenance of investor relations
 - · Identifying and implementing loan products, margins and pricing
 - Production of daily rate sheets and competitive analysis
 - Establishing and implementing lock policies and practices
 - Establishing and implementing hedge policies
 - Implementation of best execution practices with strategic considerations
 - Loan sales and delivery
 - Performance measurement and attribution
- Expanding Technology Leadership Role:
 - Understanding of economics and workflows and their dependence on technology
 - Selection and implementation of technology platforms and ecosystem
 - Deploying and configuring technology to enable strategic differentiators
 - Identifying technology to increase profitability

"Capital Markets needs to own their technology role and lenders need broader capital markets knowledge across the org"

Technology: Underutilization of Existing Systems



- Lender Perspective:
 - So many options, but switching costs are high...but
 - Each channel has very distinct needs
 - Technology is a key performance differentiator
 - Worry about alienating production with wrong technology choice
 - Too hard or too risky to redo large scale reconfigurations
 - Never enough sandboxes to test full configuration changes
- Vendor Perspective:
 - Clients don't read our release notes, forget our features
 - Clients don't configure new features to fully realize benefits
 - Clients try to replicate their internal processes instead of vendor best practices
 - Clients benefit by features that serve the broader client base
 - It takes years to develop full set of foundational features and diverse client base
 - Clients don't always appreciate the cost of maintaining fully vetted, secure system

Lenders: "View vendors as partners and participate directly in vendor roadmaps"

Vendors: "Innovating lenders represent tomorrow's growth stories"

Technology: AI Concerns



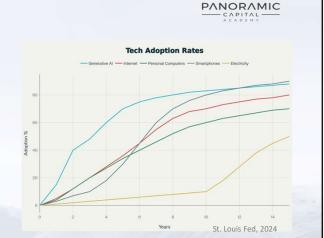
- Concerns about Al Use:
 - Hallucinations (Optimal Text, Not Truth)
 - Tractability (Auditability, Repeatability)
 - Data Privacy (Consumer, Organization)
 - Employee Concerns
- Other Concerns:
 - Legal Compliance (Fair Lending, CFPB, LO Licensing/Comp)
 - Model Validation
 - SOC Reporting Obligations/Non-Use in Key Decisioning/Reporting
 - Concern Over Hidden/Unknown Al Dependence

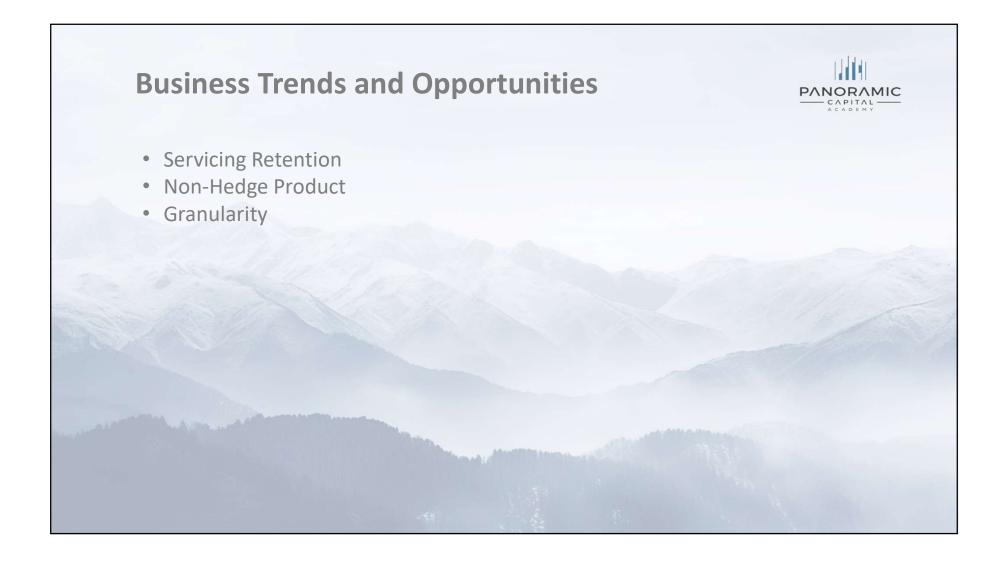
"The current state of AI requires conscientious review and governance over its use"

Technology: AI Opportunities

- Broad Categories:
 - Distillation of Large Quantity of Data (Compute Power)
 - Natural Language Processing
 - CoPilot/Assist with Operational Review
 - Scaled Consumer Personalization
 - Structuring Unstructured Data
 - Form Completion (Document or Voice-to-Text)
- Industry Opportunities:
 - Form Completion (Applications, Configuration Screens, Trade Tickets)
 - Loan Product Selection (Near Misses, Higher Value, Product Changes)
 - Guideline Explanations
 - Pre- and Post- Underwriting File Findings, Operational Pullthrough
 - Fraud Detection (e.g. Occupancy)
 - Production/Margin Suggestions
 - Trade/Hedge Recommendations

"Despite current shortcomings, AI represents enormous promise of productivity gains to loan officers and operations"





Servicing Primer:

- Loan Pieces:
 - Rate to Investor (Pass-through)
 - Rate to Agency (Guarantee Fee)
 - Rate to Servicer (Service Fee)
- Agency Approved Lenders:
 - Can sell Service Fee (Released)
 - Can keep Service Fee (Retained)
- Service Fee (MSR) Valuation:
 - · Value of MSR is realized over time as individual payments are received
 - · The longer the loan stays in the portfolio, the more income it earns (slower prepayments)
 - The cost to service a loan is the same for a loan, regardless of loan amount
 - Larger servicers have lower costs to servicing
 - Retaining MSRs is typically a negative cash flow

	Manual Control of the	Loan			Corp	Branch	Price to	Cash (bps)
Investor	Servicing	Price	MSR	Total Price	Margin	Margin	Borrower	at Sale
Aggregator	Released	103.5	The same	103.5	0.5	3.0	100.0	0.50
Fannie	Retained	102.5	1.0	103.5	0.5	3.0	100.0	-0.50





Servicing Primer/Retention Considerations:



- Recapture Economics:
 - Loss of existing asset versus extends life of loan
 - Generates transaction revenue
 - What business model
- Future Dependence on Interest Rates:

	Interest Rates			
Category	Down	Up		
Purchase Volume	Slightly UP	Slightly Down		
Recapture Volume	Up to Capacity	Limited		
Other Refi Volume	Up to Capacity	Slightly Down		
Prepayments	Up	Down		
Cash	Up	Down		
Existing MSR Book Value	Down	Up		

Capacity Considerations

"Leverage MSR valuation providers for applicable economics and be thoughtful and honest in your recapture efficacy"

Non-Hedged Products:

12/10/1
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Products	Typically Hedged?	Committed/Sold	Features
Agency Fixed	Yes	After Closing	Lower rates/payments
Jumbo Loans	No	At Lock with Borrower	Higher loan balances
Non-QM	No	At Lock with Borrower	Broader qualifying, faster
ARMs	No	At Lock with Borrower	Possibly lower rates

- Considerations/Possibilities:
 - Product Growth
 - Hedging:
 - Sufficient Volume
 - Mandatory Investors and Sufficient Mandatory-Best Efforts Spread
 - Sufficiently Liquid Hedge Instruments with Limited Basis Risk
 - Technology Considerations

"Always be on the lookout for best delivery execution and investors"

Business: Granularity



- Pricing/Margins:
 - Rate Sheet Pricing Starts with Fully Loaded Best Execution Pricing
 - Record All Margin Adjustments
- Profitability:
 - Target Margin versus Realized Margin (Leakage)
 - Lock Level:
 - Undocumented Margin Adjustments
 - Price and Data Concessions, Lock Changes and Renegotiations
 - Investor Price Changes and Sales Premiums
 - Position Level:
 - · Fallout, Pullthrough Misspecification
 - Hedge Mismatch
 - Attribute Performance to Lock Level (Product, Originator Profitability)

"Relentlessly improve rate sheet pricing and margin accuracy, and realized profit margins. Use that analysis to become even more granular."

Education: About Panoramic Capital Academy



- Provide Capital Markets Education and Consulting Otherwise Unavailable:
 - Focus on Mortgage Lending and Secondary Markets
 - Economics of Valuation and Profitability
 - Strategic Path and Technology for Profitability
- Masters-Level and Executive Classes:
 - Content
 - Participation
 - Assessment
 - Certification

Faculty/Creators:

- Rob Kessel Founder Panoramic, Former CEO, Compass Analytics
- Gary Malis Chief Strategy and Capital Markets PRMG
- James Baublitz SVP Capital Markets First Home Mortgage
- Wide Industry Input

The Course Content and Suggested Participants



Content:

Topics	Masters	Exec
Mortgage Finance Foundations	Υ	Υ
Best Execution Principles & Math	Υ	Υ
Rate Sheet Margin and Pricing Practices	Υ	Υ
Lock Desk Interaction	Υ	Υ
Hedging Fundamentals	Υ	Υ
Hedging Practices & Math	Υ	
Servicing Decision and Valuation Overview	Υ	Υ
Servicing Valuation Practices & Math	Υ	2
Post Closing and Performance Topics	12/15	Υ
Loan Sale Best Practices	Υ	
Loan Sale Best Practices - Part 2	Υ	
Performance Reporting Overview	Υ	100
Hedge Accounting, Attribution	Υ	
Full Access to Private Panoramic Podcast Library of Industry Expert Interviews	Y	Υ

Participants:

Masters	Exec
Capital Markets/Secondary	Branch Managers/Loan Officers
Lock Desk	Mortgage Industry Entrants
Loan Sales and Trading	Agency AEs, Policy
Pricing/Margin Strategists	Correspondent AEs
Product Development	Wholesale AEs
MSR Valuation/Acquisition	Mortgage Insurance AEs
CFOs and Controllers	Broker/Dealer Sales
Business Analysts	Lender Operations
Developers	Servicing Operations
Industry/M&A Analysts	Vendor Sales and Product
C-Suite w/Deep Dive Desire/Time	C-Suite w/Desire but Less Time

Top Strategic Topics Addressed



- The Role of Capitalization and Experience in Competitive Pricing
- Competitive Pricing, Margin and Lock Desk Strategies
- Systemic Management of Leakage:
 - Lock-Level Margin Realization
 - Actual vs Expected Sales Price
 - Explanation of Material Changes in Position and P&L
 - Attribution of Investor Reprices
 - Robust Branch and LO, Realized Margin and Pullthrough Analysis
 - Trade Best Practices
- Key Hedging Considerations
- Foundational Understanding of MSR Retention and Valuation
- Best Practices in Loan, Pool and MSR Trading, Including Investor Relations
- Enterprise Risk
- Technology Roadmap for Better Secondary Performance

Enterprise ROI of Capital Markets Education



Department	Benefits				
	Enhanced focus on strategies, capitalization and operations to improve performance				
C-Suite	Greater confidence and predictability in financial projections and performance				
C-Suite	Better understanding of deviations of target margins				
	Demystify capital markets jargon for better interdepartmental communications				
	Implement more profitable rate sheet and margin strategies				
Secondary Marketing	Ensure full deployment of best execution strategies				
Secondary Marketing	Identify areas to reduce hedge cost and improve performance attribution				
	Improve communication to c-suite and accounting				
	Loan Officers and Brokers: Enable better pullthrough, lock performance, confidence and comprehension of rate				
Production	sheet and market dynamics				
Production	Correspondent/MI/Agency Reps: Enable more productive conversations with sellers, better feedback loop with				
	secondary, and production success				
Operations	Improved focus on operational areas to best support financial performance consistent with secondary and C-Suite objectives				
	Improved accuracy of valuations and understanding of rate sensitivity				
Servicing	Better cash flow planning and forecasting				
	Expanded context on economics and workflow associated with retention strategies				
	Greater confidence in secondary, servicing and month-end reporting				
Accounting	Deeper understanding of fair value, derivatives and hedge accounting				
Accounting	Better forecasting and understanding of performance rate sensitivity				
3-1 TV-1	Remove language, jargon disconnect with secondary and servicing				
Development and	Foundational understanding of business, urgency, and workflow required for development or deployment of				
Technology	enterprise systems, consistent with secondary and C-Suite objectives				

Imagine what your company could do if most of your employees understood the business and your business model!

Conclusion



- Final Questions/Suggestions
- Slide Deck is Available to Interested Parties
- More Information on Panoramic Capital Academy

www.panoramiccap.com or rkessel@panoramiccap.com

Thank you!