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THE FUTURE OF TECHNOLOGY IN MORTGAGE ORIGINATIONS

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INTRODUCTION

Just like the sci-fi enthusiasts who for years have dreamed of levitating skateboards, jetpacks, and "Beam me up, Scotty," mortgage executives have long had their own futuristic vision: the e-mortgage. Since the early 1990s, voices in the industry have proclaimed that the paperless mortgage was just around the corner. And yet more than 20 years later, many mortgage institutions still rely on paper and green screens.

Today, thanks to new technology, the emergence of Fintechs, and the competitive origination market, a breakthrough finally seems imminent. Mortgage applications are becoming paperless, underwriting is increasingly automated via data-rich rules engines, and electronic closing has become a reality[1].

What should mortgage institutions focus on in this new technology-enabled environment? What are the benefits that really matter? What technological capabilities should they pursue? We interviewed more than 30 mortgage originators to answer these questions. We found that while technology can be employed at many points along the mortgage origination customer journey, a few distinctive capabilities emerge from the pack.

1 Source: Fannie Mae, Mortgage Lender Sentiment Survey, Mortgage Technology Innovation, 26 July 2016

1. WHY TRANSFORM TECHNOLOGY IN MORTGAGE?

The mortgage industry feels ripe for disruption. On the one hand, the environment has become increasingly challenging for lenders, with low interest rates, projected decreases in volume, rapidly evolving client needs, and increased regulation. On the other hand, the mortgage origination process hasn't fundamentally changed in decades. Recent entrants like Quicken have taken share quickly with their new capabilities and focus on client experience. New players are looking to enter, and incumbents are rapidly changing their technology stacks, hoping to protect their turf. In our research, technology was viewed by mortgage institutions as the foremost enabler of change for four important reasons:

1. **Client experience:** Clients increasingly demand a mobile-centric, omni-channel mortgage origination experience. And even institutions with a high-touch relationship-based approach are finding they need to provide relationship managers with better tools and technology while also offering customers more choices in how they interact with lenders.
2. **Regulatory compliance:** Mortgage institutions must comply with several new regulations, the most recent being the TILA/RESPA Integrated Disclosure rule (TRID) and the Qualified Mortgage rules (QM). TRID, in particular, is viewed as highly invasive and costly for lenders to comply with. Lenders know that new regulations will continue to be a burden, and the only way to comply quickly and efficiently is to have technology that can easily be configured to comply with new regulatory needs.
3. **Efficiency:** The current environment of low interest rates, coupled with an anticipated decline in mortgage volume over the next couple of years is making it difficult to lend profitably. With limited opportunity to raise prices, lenders are being forced to cut costs. Automation and straight-through processing are the keys to enabling the next wave of improved efficiency.
4. **Cycle time:** Clients increasingly want a faster mortgage application process, faster decision making, faster commitments, and faster time to close. With most of the low hanging fruit already picked, technology is now the most promising path for the next wave of cycle time improvement.

New technology has the power to transform mortgage origination. But where and how are mortgage originators using it?

2. THE EMERGING FUTURE OF MORTGAGE ORIGINATION

Our research pointed to a few specific areas where technology can help create a distinctive client experience, while also helping lenders with other important priorities such as regulatory compliance, efficiency, and cycle time.

Exhibit 1: Desired attributes and technology-enabled capabilities

A APPLICATION INTAKE	B DECISION MAKING	C PROCESSING AND CLOSING
Desired attributes		
• Digitally centric (for some borrowers) • Minimal information from client • Omni-channel convenience	• Instant (or near instant) decision at POS • Superior risk selection	• Faster closing • Minimal hassles • Paperless • Robust trails and controls
Technology-enabled capabilities		
• Digital portals • Direct data aggregation • Mobile image capture • Cross-channel data synchronization	• Digital document management • Automated rules engine • Automated valuation models	• Auto clearing of loan conditions • eClosing • Loan tracker • Contextual alerts and notifications • Advanced workflow

Source: Oliver Wyman research and analysis

A. APPLICATION INTAKE

Clients want the application process to be easy. "Ask me for as little information as possible," they say. "Don't ask me for the same information more than once." And, "Make it easy for me to provide what you need." To meet this demand, mortgage institutions are turning to four key technology-enabled capabilities:

Web portals and mobile apps make it convenient for clients to provide information. If the client already has a relationship with the lender, the portal can automatically populate the application with basic demographic information. In addition, applicants can securely upload documents digitally.

Direct data aggregation, a recent development, enables lenders to pull client data such as income, taxes, and property information from verified third parties, significantly reducing the borrower's effort in assembling documentation, while also improving the quality of data.

Mobile image capture allows clients to take a smart-phone photo of required borrower documentation and transmit it easily and securely to their lender.

Cross-channel data synchronization allows clients to start the application process on one channel and complete it on another.

These capabilities vastly simplify the mortgage application process. Borrowers provide minimal required information, either digitally or via a quick conversation with their relationship manager. Lenders pull data on income, taxes, property information, etc. directly from verified sources. If further documentation is needed, the borrower can easily and securely transmit an existing digital document using an intuitive digital portal, or take a picture of a physical document and upload it securely from a mobile device. And if clients need to temporarily suspend their application before completion, they can resume it on a channel of their choice.

B. DECISION MAKING

Clients want the decision making process to be fast. Lenders want speed but they also want to truly understand the underlying risk of the applicant in as automated a fashion as possible, and price the loan optimally. And, of course, lenders want efficiency and automated compliance. To accomplish these goals, they are turning to three key technology-enabled capabilities:

Digital document management allows lenders to automatically digitize paper documents (if any), use pattern recognition software to automatically recognize the document type, use OCR to intelligently extract and deliver data to the underwriter to enable easy verification or decision making, and automatically flag missing or inconsistent data. Storage of documents and extracted data meets the latest Mortgage Industry Standards Maintenance Organization (MISMO) and other industry standards, aligns with future investor and secondary marketing requirements, and enables regulatory compliance.

Automated rules engines compare borrower information to criteria in a pre-architected decision engine and if conditions match those in the engine, provide an automated instant (or near instant) decision. Exceptions are flagged for underwriters to easily review and decide on.

Automated valuation models enable lenders to estimate factors such as property value without waiting for an official appraisal or inspection. Because appraisals can take up to a week to process, and that's only after an appointment has been scheduled, valuation estimates based on advanced algorithms and proprietary property value databases can help provide a conditional underwriting decision and significantly reduce cycle time.

These capabilities dramatically reduce the need for lenders to manually verify data back to source documents and enable automated decisions for a potentially large portion of the portfolio. Borrowers get an instant or near-instant conditional decision. Codified elements of decision-making are fully automated, enabling underwriters to focus on confirming decisions and reviewing exceptions.

C. PROCESSING AND CLOSING

Clients want no surprises between decision and closing. They also want fast closing and clear visibility into the status of their mortgage. Lenders want speed, efficiency, and automated compliance. Mortgage institutions are accelerating processing and closing with five key technology-enabled capabilities:

Auto clearing of loan conditions allows lenders to automatically clear conditions for the borrower by using data directly from source, for example, checking the borrower's bank balance (with the borrower's permission) to ensure that there is adequate balance to cover closing requirements. This reduces borrower effort while accelerating time to close.

eClosing allows borrowers to close a mortgage virtually using a web-based closing and title processing suite. eClosing infrastructure includes a secure digital portal for documents, eSignatures that allow all parties to virtually sign documents, and robust security and audit trails that are admissible in a court of law.

Digital loan trackers, much like the famous "FedEx tracker," allow borrowers to track the loan through its life cycle, so that they know exactly where they are in the process and have predictability and visibility into closing dates. While this capability is typically used throughout the loan life cycle, it is particularly valuable during this stage because of borrower sensitivity to timely closing.

Contextual alerts and notifications, in coordination with the loan tracker, trigger messages to the borrower via a channel of their choice, letting them know when the status of their loan changes or if something is needed from the borrower. The borrower can choose the types of alerts they want to receive to suit their preferences.

Advanced workflows, driven by data and analytics, are designed to flag important information to be reviewed or processed and minimize effort on the part of processors. New workflows are highly adaptive, allowing lenders to respond quickly to new processes or procedures mandated by regulators. Again, this capability is used throughout the loan life cycle but is particularly valuable at this stage given the various moving pieces that need to come together to enable timely and successful closing.

Processing and closing a mortgage using these capabilities leads to a faster, simpler, and more transparent process. Borrowers expend less effort because conditions are cleared on their behalf and contextual information is sent to them on a real-time or near-real-time basis. eClosing significantly reduces the effort to close a loan, eliminating the need to schedule and conduct a multi-hour, multiparty in-person mortgage closing. And robust workflow leads to higher efficiency while making it easier for lenders to comply with existing and upcoming regulation.

Exhibit 2: Benefits of new mortgage technology capabilities

		LIKELY BENEFITS TO:			
ORIGINATION STEP	**CAPABILITY**	**CLIENT EXPERIENCE**	**REGULATORY COMPLIANCE**	**EFFICIENCY**	**CYCLE TIME**
A **Application intake**	Digital portals	●		●	●
	Direct data aggregation	●	◑	●	●
	Mobile image capture	◑		◑	◑
	Cross-channel data synchronization	●			
B **Decision making**	Digital document management	●	●	●	●
	Automated rules engine	◑	◑	◑	◑
	Automated valuation models	◑	◑	◑	◑
C **Processing and closing**	Auto clearing of loan conditions	◑	◑	◑	◑
	eClosing	●	◑	●	◑
	Loan tracker	●			
	Contextual alerts and notifications	●			
	Advanced workflow	◑	●	●	●

Source: Oliver Wyman research and analysis

As indicated in the above table, these new technology capabilities drive improvements across the competitive dimensions viewed as most important by mortgage institutions. By leveraging these capabilities, lenders have been able to drive down decision cycle times from days to minutes, and have been able to shave several days off decision-to-close cycle time. Mortgage unit costs can be driven down by double-digit percentage points. Regulatory compliance becomes vastly more efficient. And most important, clients are more satisfied, increasing pull-through rates and improving the odds of future cross-sell.

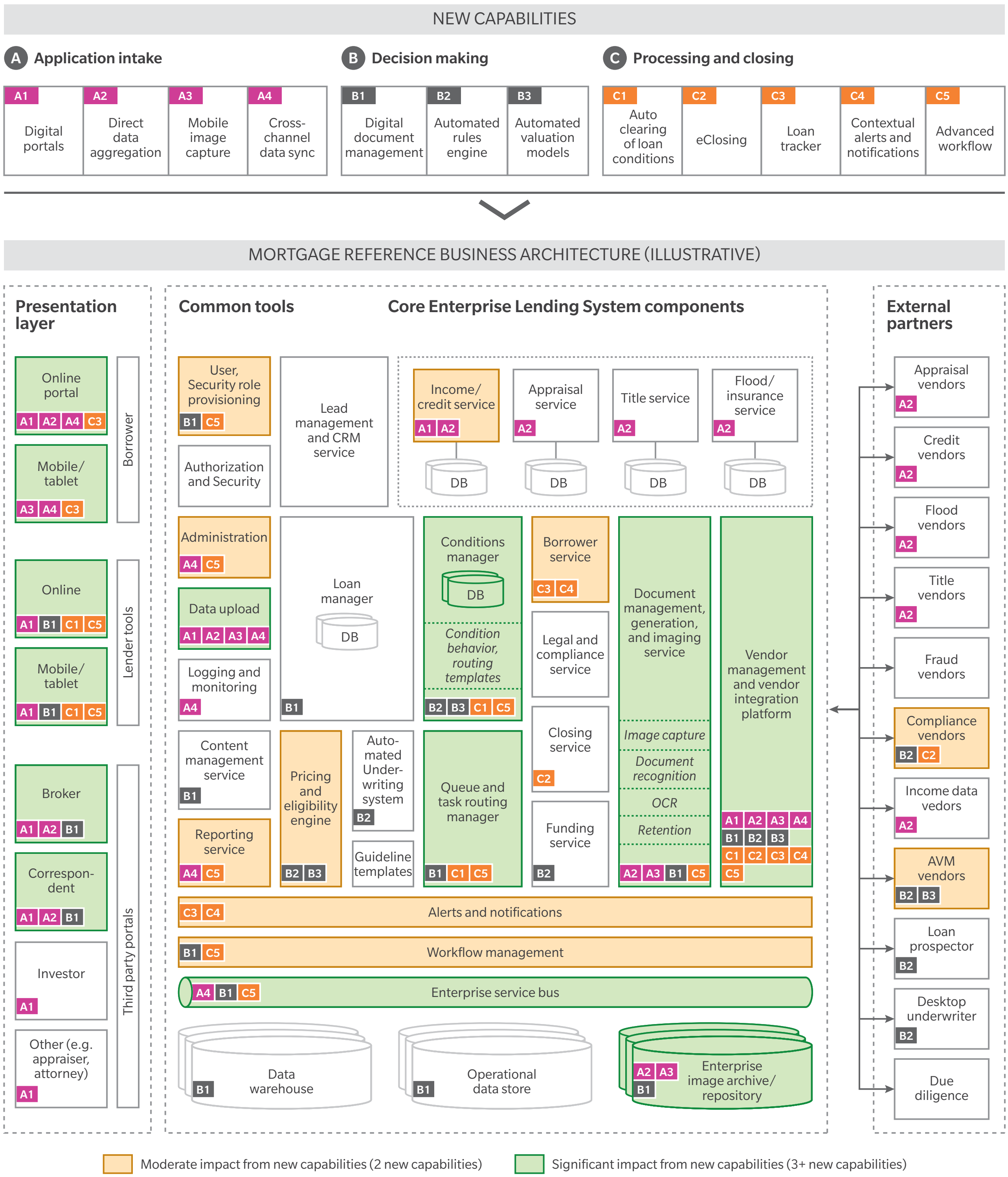
3. THE TECHNOLOGY TRANSFORMATION PATH

Most mortgage institutions face a few fundamental challenges in building out the technological capabilities described above. They are often saddled with legacy platforms that make technology change hard and expensive. In our interviews with mortgage originators, we heard some common themes:

- About 40 percent of the mortgage originators we interviewed have changed their loan origination system (LOS) recently or are considering doing so. Their primary reasons are to reduce the cost of technology while improving the agility of the platform, making it cheaper and faster to keep up with changing client expectations and regulatory requirements
- Almost 60 percent do not use the built-in borrower portal capability in their LOS, opting instead for a best-in-breed provider or building a portal themselves
- Similarly, about 55 percent do not use the built-in document management capability in their LOS, opting instead for specialist solutions

So, yes, LOS replacements will continue to be in the cards, particularly for mortgage originators with legacy platforms. But most of the emerging mortgage capabilities we described earlier are best situated outside the traditional LOS. The exhibit below shows how mortgage architecture needs to evolve to accommodate these new capabilities.

Exhibit 3: Target state mortgage technology architecture schematic



Source: Oliver Wyman research and analysis

What's the best path to the new set of mortgage capabilities? In our discussions with mortgage originators, here is what we heard:

Buy and build: Rather than a buy-versus-build decision, future mortgage technology capabilities will require institutions to buy and build solutions. Third parties beyond the traditional LOS vendors have developed niche solutions in areas like digital portals, direct data aggregation, and document management. These vendor-provided solutions can reduce cost and time to market. But to derive the most value from them, mortgage institutions will need to focus build efforts on (a) configuring the various pieces of the solution to deliver differentiation to the client, aligned with the lender's target client segment and value proposition; (b) integrating these solutions to various internal and external systems to deliver a seamless client experience journey; and (c) configuring, customizing, or building client-facing digital interfaces where opportunity for differentiation is most pronounced.

Modular IT architecture: For mortgage institutions to drive down the cost of technology while making it more adaptive, architecture evolution is a must. Key attributes of a good target state architecture include API-based connectivity, service based architecture, cloud-hosted platforms, configurable business rules, and robust data architecture that brings together the full set of "golden" information into a single, unified data view. This type of architecture enables lenders to reuse solution components, accelerate the build or addition of new capabilities, and reduce the overall cost of technology.

Test and learn: A number of mortgage institutions we talked to have achieved strong results by employing agile development methodologies, breaking down product and technology silos, rapidly building and launching minimally viable products (such as borrower portals) and continuously improving them based on client feedback. This approach allows the mortgage institution to develop new capabilities more rapidly and to bring them into closer alignment with client needs. Agile development requires new skills in both product and technology, plus a nimble approach to decision making that puts more accountability on the delivery team.

Mortgage institutions that have pursued these practices increase the odds of achieving a successful technology transformation, accelerate the introduction of new capabilities, and reduce the overall cost of technology by as much as 20 to 30 percent.

CONCLUSION

The use of technology in mortgage origination is at an important inflection point. Technology capabilities are available to transform the client experience, but they have not yet been developed into off-the-shelf, end-to-end solutions. It is an ideal time for mortgage institutions to create a distinctive way of interacting with their customers, differentiating themselves from their competitors, while also making their internal operations more efficient and adaptable to changing regulation. With the appropriate use of technology, a "wow" experience for consumers doesn't have to be incompatible with reduced costs, accelerated processing, and improved compliance. The winners in the current environment will be the ones that leverage technology to work both sides of the equation—consumer-facing and internal operations—to stand out from the crowd.

Oliver Wyman is a global leader in management consulting that combines deep industry knowledge with specialized expertise in strategy, operations, risk management, and organization transformation.

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