

2024 Cost to Originate Study

How Technology Impacts Savings, Cycle Time and Revenue



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Key Findings





Gone are the times of wide spreads and high production volume. Today, lenders are increasingly experiencing rising costs and depressed revenues, incomes and margins. According to Freddie Mac's calculations, average origination costs have gone up 35% over the past three years alone. With growing costs and lower production revenues, how can lenders stay efficient and competitive in today's market environment?

AVERAGE ORIGINATION COSTS HAVE GONE UP

35%

over the past three years

Key Findings and Insights



Operational Costs are Rising

Average origination costs have increased by ~\$3,000 per loan in the past three years. To potentially mitigate the increase in costs and gain efficiency, many lending institutions are leaning into technology adoption, with more digitally mature organizations showcasing higher benefits/efficiencies. In fact, the top cost-effective companies originate loans nearly half the cost of the industry average and ~2.4 times less than the bottom 25% performers.



Loan Product Advisor® (LPASM) Saves Time and Money

Lenders that utilize digital tools within LPA at higher rates originate loans that are \$1,500, or 14%, less costly, generate positive net margins and generally operate with a profit. They also tend to have a shorter loan production cycle time and higher pull-through rates and generate incremental yearly revenue and greater customer satisfaction.



Digitization is the Path Forward

In interviews with executives, it's clear that mortgage firms recognize the benefits of a fully digitized mortgage process and believe it can help them save up to 40% in costs. While the leading tech adopters are interested in artificial intelligence (AI), blockchain and predictive analytics, the path forward varies depending on where they are in their digital journey and how they should be responsibly incorporating these tools into their processes.



Effective Change Management is Critical

It's not enough for organizations to simply bring in various tools and technology; an effective change management strategy is imperative. Lenders should build their technology stack to incorporate their unique organizational strategies and workflows to determine the right tool adoption and optimization pathway.

A New Paradigm Drives
Operational Shifts and Rising Costs



Operational Adjustments in Response to Market Changes

The cyclical nature of the mortgage market presents evolving challenges. Due to shifting interest rates over the past several years, the pendulum swung from record high mortgage volumes to the lowest in a decade. With all the complexities of today's predominant purchase market, lenders are experiencing decreased mortgage demand, fierce competition and market consolidation. According to our recent survey, when lenders were asked to list the major challenges their institutions are currently facing, the top responses included rising costs, inflation and fewer leads due to lower volume and severe competition¹. On a positive note, most originators are reporting lower cycle times as compared to two years ago, when file backlogs were a major production concern.

To address the challenges posed by the current market conditions, lending institutions have enhanced their focus on operational efficiency. While the strategies lenders adopt vary depending on lender size, type and digital footprint, mortgage lenders are continuing to lean into technology to potentially gain efficiency. Our research shows two of the top three tactics used by lenders to control costs and increase margins are centered around expansion of technology and their digital tools stack. Other strategies include:

- Increasing focus on customer satisfaction.
- Eliminating or combining functions.
- Outsourcing and/or reducing staff.
- Negotiating vendor prices, particularly in the technology space.

Despite these efforts, the industry continues to grapple with increasing origination costs.





We're in a huge downturn right now. It's shaping all of our decisions. So really for us, everything, like all of our technology projects around automation, are pointing towards trying to do more with less. There's a lot of minutia of tasks, and technology out there that can solve for taking care of that minutia.

EVP of Mortgage Technology, Luminate Home Loan



¹ Freddie Mac, through a third-party research firm, conducted an online survey of loan officers, loan originators, and underwriters on the topic of Loan Operations and Digital Adoption (see "SOURCES AND METHODOLOGY" section for additional detail).

Costs are Rising and Will Likely Continue to Rise

Our analysis of the financial statements of retail-only lenders shows that the cost to originate a loan in Q3 2023 averaged approximately \$11,600. That is \sim \$2,400 or 26% more expensive than during the last downturn cycle in Q4 2018, which had similar market conditions and production volumes **(Exhibit 1)**. Additionally, when we compare Q3 2023 results to results reported in our original cost to originate study in Q4 2020, a time of low rates and high volume, we found the costs increased even more, to \sim \$3,000 or nearly 35%.

In our survey of loan officers/underwriters and loan production management, most report cost increases across the entire spectrum of origination functions. Moreover, many lenders report administration and operations, digital tools and customer support as having more significant cost increases than any other categories.

EXHIBIT 1: AVERAGE LOAN PRODUCTION REVENUE, EXPENSE (\$ PER LOAN) & LOAN VOLUME



Note: Cost and revenue production results include retail/consumer direct only lender data.

Source: Freddie Mac, Moody's, MBA's Quarterly Mortgage Bankers Performance Report; <u>www.mba.org/performancereport</u>





While mortgage production is a complex process impacted by multiple factors across individual functions, several key reasons drive variations in costs in today's mortgage environment, including:



Inflation: Elevated inflation has had a significant impact on costs. Lenders particularly mention challenges related to the increase of vendor technology costs/fees, including credit reports and third-party verifications². Negotiating with vendors and seeking more cost-effective alternatives were often mentioned in our interviews with mortgage institutions.



Production Mix: Today's production volume mix is dominated by purchase originations, which tend to be more complex, labor intensive and time consuming. As our prior research, "<u>Digital Innovation Drives Loan Quality</u>" shows, purchase loans are more prone to errors and defects. All of this has the potential to drive up origination costs.



Economies of Scale: The market is also experiencing lower production volume than two or three years ago, which typically drives a higher perloan allocation of total costs.



Increasing Technology/Digital Tools Stack: While the interviewed lenders generally note the value of technology outweighs the costs, adding new technology to the digital stack can also be a contributor to the overall cost increases the industry is seeing. Our analysis of lenders' financial data³ shows that technology-related expenses per loan have risen from 2% to 4% in the past three years.

In our interviews, many lenders expressed a heightened focus on cost reduction and improving efficiencies. Despite their efforts, they anticipate costs will continue in an upward trajectory, at least in the short run. Nevertheless, as the market data in the next section shows, some institutions manage production costs better than others, no matter the environment.

² Freddie Mac, through a third-party research firm, conducted an interview with mortgage originator executives (see "SOURCES AND METHODOLOGY" section for additional detail).

³ Sourced from MBFRF data (see "SOURCES AND METHODOLOGY" section for additional detail).

Indicators of Top Performers

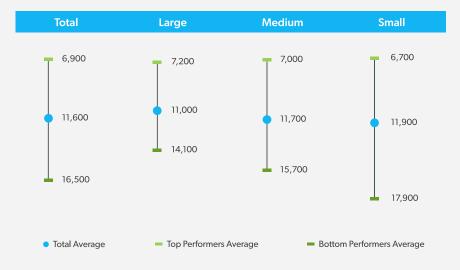


Top Performers Originate Loans Nearly Half the Cost of Industry Average

According to Freddie Mac's analysis, the average annual market cost to originate a mortgage in Q3 2023 was \sim \$11,600⁴. For the top 25% more efficient originators⁵, the average per-loan costs were nearly half of that at \sim \$6,900 (**Exhibit 2**) and nearly 2.4 times less than the bottom 25% performers (\sim \$6,900 vs \sim \$16,500).

- 4 To determine how operational costs might differ across originators, we analyzed MBFRF data costs per loan across 204 industry originators (see "SOURCES AND METHODOLOGY" section for additional detail). The source primarily captures information across non-banks. The data was benchmarked against the MBA Quarterly Mortgage Bankers Performance Report.
- To present an accurate picture of industry norms and help lending institutions assess their own performance, this study benchmarks lenders using quartile statistical technique. The data is broken out into four quartiles. The first quartile represents an average cycle time achieved by the top 25% lending performers within the sample distribution, whereas the fourth quartile represents the average cycle time achieved by the bottom 25% of lending performers. The results shown for the top 25% performers and bottom 25% performers represent averages for the first and fourth quartiles.

EXHIBIT 2: Q3 2023 AVERAGE MARKET ORIGINATION COST PER LOAN*



Source: MBFRF data; Freddie Mac (N=203)

*Numbers are rounded

Note: Large-size Lenders defined as lenders with total loan volume greater than \$500M quarterly; Medium-size Lenders defined as lenders with total loan volume between \$150M to \$500M quarterly; Small-size Lenders defined as lenders with total loan volume of less than \$150M quarterly.

AVERAGE COSTS PER LOAN

Top 25% performers

\$6,900

Bottom 25% performers

\$16,500

Paving the Future Through Digital Transformation



With market activity slowing and growing origination costs, some companies report stepping back from digital tools and opting for more manual processes to save money. Nevertheless, most lenders we interviewed recognize automation is the path forward. Despite market-related challenges, numerous lending institutions—especially techforward ones—continue to increase their technological investments to stay ahead in a competitive market. This speaks to an acknowledgement of the benefits of mortgage process optimization across the marketplace.

In interviews with executives from across the mortgage industry, lenders emphasize the significant push in the past several years (especially during the COVID-19 pandemic) towards digitalization and technology adoption in the loan origination space. They reported multiple tangible benefits of increased technology adoption, including efficiency/cycle time reduction, cost reductions, customer satisfaction, compliance and mitigation of fraud and risk.

Ways the Industry is Addressing Today's Challenges

The question is no longer whether lenders are adopting digital tools into their process, but how they can do it in the most effective manner to maximize returns while not overspending. Top performers set themselves apart through strategic investments with the right mixture of tools and technology that emphasizes scalability, balances efficiency and their customer base and growth.



We have the unique view of seeing best- and worst-case scenarios of cost effectiveness. The common thread of best-in-class lenders for reducing loan origination costs is leveraging digital capabilities.

Kevin KauffmanSVP and Head of Single-Family Seller Engagement







Our research identified some common challenges and potential solutions, including:

Challenges	Potential Solutions
Rising Technology Costs: The rising cost of technology is one of the top concerns lenders have in implementing more technology, particularly smaller organizations with fewer resources. Originators universally agree vendor costs per seat/application have been increasing—specifically in third-party solutions, where they've doubled in a short time.	 Cost Management and Partnerships: The leading organizations are managing costs by: Meticulously scrutinizing contracts and renegotiating fees. Eliminating duplicative and redundant work. Creating groups to manage orders for validation tools. Shopping for alternative solutions. Initiating peer discussion to assess tools' value. Ensuring technology solutions align with their current goals. Developing measurable key performance indicators (KPIs) of successful implementation and adoption. Aligning the right resources to work the right loans. Strong relationships with technology partners are emphasized for their importance, as they foster collaboration, better alignment, flexibility and the sharing of best practices.
Employee and Customer Adoption: Adoption of digital tools by both customers and employees is yet another common challenge originators are facing. Internally, the operations and processing teams can be resistant to change, particularly if they are concerned about "tech taking their jobs" or can't immediately see the benefits. Some borrowers are worried about the safety and security of digital tools for their online information. Others simply don't want to learn to use the new technology or prefer to handle their loan application in person.	Communicate, Educate and Incentivize: Successful change management necessitates a delicate balance between automation and maintaining accountability. Leading institutions recognize the strategic importance of employee training, development and the right adoption strategy. Clear communication, outlining the rationale behind the change, ongoing training and the right reward/incentive system will ensure higher adoption, making it crucial for employees to see the value of adopting these tools. It's About the Digital Journey: According to our lender interviews, borrowers are increasingly wanting faster and easier ways to maneuver through the mortgage process. The way to maximize adoption is to promote the digital experience/journey as an added benefit. Sellers that are digital-first set expectations with their loan officers and borrowers from the beginning; some are even offering price incentives for a digital loan or a shorter time to close. Make Incremental Changes and Solicit Feedback: Instead of overhauling entire processes, make small, incremental changes and bring on new tools slowly and thoughtfully. This allows customers and employees time to adapt to new processes and gather feedback on what's working and what can be improved.
Scalability and Gap in Integrating Digital Tools: Integration challenges arise when bringing in new tools that can be incompatible with legacy systems and end up siloed and without connection across the origination process.	Comprehensive Digital Integration for Optimal Efficiency: Many lenders are implementing a digital strategy and building an infrastructure that adopts "easy to maneuver" technology that is scalable, structured to incorporate various digital platforms and tools and accompanied by effective change management. Integration of various solutions allows mortgage lenders to flexibly scale operations and optimize resource allocation though examples like online platforms and partners' digital offerings.

Loan Product Advisor® (LPASM) Saves Time and Money



Using LPA Digital Capabilities at High Rates Can Maximize Cost and Revenue Benefits

To better understand how maximizing the use of Freddie Mac's digital offerings can benefit lenders, we can compare the performance of retail-only lenders that delivered loans to Freddie Mac in Q3 2023 and used Freddie Mac solutions at different levels (higher take rate versus lower take rate) (**Exhibit 5**). Lenders that utilize automated offerings at high rates (i.e., maximize the usage):



Originated loans, on average, ~14% or \$1,500 less costly per loan than lenders with a lower usage of Freddie Mac technology offerings.



Generated, on average, positive net margins and operated at profit, unlike an average lender with a lower usage of technology offerings (or an average market lender with a net margin of -5.8%).



Had a **five-day shorter**loan production cycle
time, **spending 15% less time originating a loan** compared to
lenders with a lower
usage of technology
offerings.

While **Exhibit 5** displays the correlation between higher overall LPA digital offerings usage and lower total cost per loan, in this next section we examine specific cost and revenue line-item savings and gains the use of these technology offerings can potentially deliver.

EXHIBIT 5: COSTS, MARGINS & CYCLE TIMES COMPARISON OF FREDDIE MAC LENDERS' DIGITAL TOOLS UTILIZATION RATES (Q3 2023)

Technology Tool Offerings Take Rate* (Q3 2023)			
	High	Low	Variance
Origination Cost Per Loan	~\$10,800	~\$12,300	~\$1,500 less
Net Margin	3.7%	-6.3%	~10% point higher
Mortgage Cycle Time	~34 days	~39 days	~5 days shorter

Source: Freddie Mac & MBFRF

Note: The study analyzed a sample of Q3 2023 Freddie Mac-approved lenders that leverage Freddie Mac technology tool offerings and evaluated their average production cost, net margin per loan, as well as the average cycle times using combination of MBFRF, Freddie Mac LPA and Freddie Mac Loan Coverage Advisor® data.

*Lenders with high usage of digital offerings (high take rate) are defined as those leveraging Freddie Mac technology offerings (i.e. AIM, ACE, etc.) for at least 75% of all the volume sold to Freddie Mac in an applicable period. Lenders with low usage of digital offerings (low take rate) are defined as those leveraging Freddie Mac technology offerings (i.e. AIM, ACE, etc.) for less than 60% of all the volume sold to Freddie Mac in an applicable period. The take rate ranges were based on tool usage statistical distribution across Freddie Mac lender base.



EXHIBIT 6: PERSONNEL AND CYCLE TIME COST PER LOAN SAVINGS BY LPA OFFERING

	Personal Costs Savings		Cost of Fur	ds Benefit Total	
	Production Hours Saved*	Productivity Save (\$)	Cycle Time Saved (Days)	Time in Process Saved (\$)	Savings
ACE	2.4	\$189	7.3	\$179	\$368
AIM	9.9	\$198	1.2	\$28	\$227
ACE + AIM	12.3	\$388	7.6	\$187	\$574
Collateral	2.2	\$165	5.5	\$135	\$300
CRWR +	12.1	\$363	7.2	\$177	\$541

Source: Freddie Mac LPA data

Note: Automated collateral evaluation (ACE) provides Sellers with the option to waive the appraisal requirements for certain LPA mortgages. LPA asset and income modeler (AIM) is a solution for automating the manual processes of assessing borrower assets and income. Collateral rep and warranty relief may be offered with LPA's ACE capability, which provides the option to waive the appraisal requirement on certain loans.

PERSONNEL EXPENSES REPRESENT

Two-thirds

of a lender's total production costs

Don't Miss Opportunity Cost Savings

One of the cost benefits the tools deliver is associated with personnel. Based on our latest estimates of lenders' financial statements, personnel expenses represent two thirds (67%) of lenders' total production costs, showing just how labor-intensive the mortgage production process is. Even though lenders have made significant strides in automating the front- and back-end of the origination process and costs have slightly declined over time, some parts of the process (i.e., underwriting) remain fairly manual and, therefore, costly.

Leveraging lenders' mortgage industry compensation and loan operations data, we estimate a lender can **eliminate** on average a minimum of 2.2 hours and a maximum of 12.3⁶ hours of production time by leveraging LPA when performing processing, underwriting, QC or closing. As seen in **Exhibit 6**, the personnel cost savings impact can vary across each offering, ranging between \$165 and \$388 per loan. That could equate to an average loan reduction in labor costs **between 2% and 5%**, with much of those savings driven by reduction in underwriting labor costs.

Additionally, effective use of technology tools can help lending institutions process loans faster, which can, in turn, reduce the cost of hedging and carrying funds. Based on our latest annual assessment of mortgage cycle time data, Freddie Mac digital offerings can produce up to 8 days of savings in closing cycle time (Exhibit 6), which translates into cost savings of nearly \$190 per loan.

⁶ Freddie Mac lender operational benefit framework calculations include savings associated with reduction of hours spent on such tasks as processing, underwriting, QC and closing (Freddie Mac's assumptions).

Conservatively, a lender can save between ~\$230 and ~\$570 per loan in total personnel and costs of funds-related expenses by leveraging LPA technology offerings **(Exhibit 6)**, while cycle time production-related savings can vary from one to eight days. These savings can be even greater with the right technology strategy that focuses on the optimization of available tools.

Technology optimization not only has cost benefits for a lender, but borrower benefits as well. For example, leveraging Freddie Mac's ACE offering could potentially save a borrower up to \$600 in closing costs.

AVERAGE BENEFITS OF USING LPA DIGITAL TOOLS FOR ORIGINATION

Up to

\$600

per loan in personnel/ funding costs

Up to

8 days

in cycle time

Up to

\$600

in closing costs for the borrower



Don't Leave Revenue on the Table

An effective use of technology offerings can also lead to additional loan volume capacity due to:



Faster loan processing/shorter cycle times.



Higher customer satisfaction (more referrals leading to more customers)7.



Reduction in recourses/ repurchases. AIM can help eliminate certain income, assets and employment related defects.

These will, in turn, lead to an average increase of 1.3% in pull-through rate and \$5.9M per year in incremental revenue (Exhibit 7). Note that depending on a lender's size and capacity, the annual benefits can total \$1M for a small-sized lender and up to \$21M for a large-sized lender. Leveraging collateral and ACE can yield the benefit of shorter cycle times, while AIM benefits can be attributed to additional revenue caused by fewer recourses and repurchases.

While this section's focus is mainly on the savings and gains of specific Freddie Mac digital offerings, to maximize the benefits, lenders must not only optimize the suite of offerings but also bundle all of the available tools (AIM, ACE and eMortgages) in order to maximize the return.

EXHIBIT 7: AVERAGE ANNUALIZED REVENUE GAINS BY LPA OFFERING

Total Additional Net Production Revenue*					
	Cycle Time Saved (Days)	Large-sized Lender	Medium-sized Lender	Small-sized Lender	Average
ACE	7.3	\$1.3M	\$0.2M	\$0.1M	\$0.4M
AIM	1.2	\$5.2M	\$0.9M	\$0.2M	\$1.5M
ACE + AIM	7.6	\$4.9M	\$0.8M	\$0.2M	\$1.4M
Collateral	5.5	\$4.2M	\$0.7M	\$0.2M	\$1.2M
CRWR +	7.2	\$5.2M	\$0.8M	\$0.2M	\$1.5M
Cumulative	Impact	\$20.8M	\$3.4M	\$0.9M	\$5.9M

Source: Freddie Mac LPA data

AVERAGE ANNUAL BENEFITS CAN TOTAL

for a small-sized lender

\$1M \$21M

for a large-sized lender

⁷ Mike Seminari, "The Seven Commandments for Optimizing Customer Experience," STRATMOR Group, January 2020

Digital Investments Today and Beyond

Looking ahead, industry leaders express optimism about advancements in technology, regulatory frameworks and collaborative industry trends. The expectation of increased technology investments by originators of all sizes reflects an industry readiness for continuous growth and a desire to bridge this industry into the next, fully digitized chapter of mortgage production. However, the path forward varies depending on where they currently are in their digital journey. Mortgage respondents are optimistic that a **fully digital origination process** would help reduce the cost per loan significantly. The majority of surveyed respondents believe a reduction in the cost per loan could be as much as 40%.

In the short term, we found a number of tech-forward institutions showing interest in evolving their sales enablement and lead management digital tools. Other technology trends gaining traction include:



Artificial Intelligence (AI): While many lenders are in the initial stages of investigating how AI can change mortgage production and fit their needs, some digital lenders see the potential for AI across several functions, particularly in underwriting, lead sourcing, quality control and compliance/risk functions. The key to successful future adoption of AI will require companies to strategically look at their digital optimization plans and how they can responsibly incorporate AI at various stages of their existing processes.



Digital Underwriting: The adoption of technology in underwriting is identified as a critical area for improvement, with the majority feeling it remains very costly and time-consuming. Automation is seen as a solution to streamline these processes and reduce manual workload.



Integrating Technology Across the Process: Top cost-effective performers' emphasis is on managing "leakage" in costs and ensuring investment in technologies that bring the most value and efficiency. That's why they are on the lookout for systems that better integrate tools and data from different parts of the process, with connection points along the way that talk to each other, creating a smooth and seamless digital experience for both employees and customers.



SURVEYED RESPONDENTS BELIEVE A FULLY DIGITAL ORIGINATION PROCESS WOULD HELP REDUCE COSTS AS MUCH AS

40% per loan



Together, We Can Lower the Cost to Originate

Overall, one key takeaway has emerged: Technology is not a standalone solution but a strategic enabler that should complement modifications in business processes and changes in staff and consumer daily practices.

The evolution of the mortgage industry in response to market changes and increasing digital presence necessitates a delicate equilibrium between cost efficiency, technology adoption and future growth. Industry leaders need to focus on how technology should align with overall business goals, improve operational efficiency and enhance the borrower experience.

The industry's future hinges on continuous adaptation to technological advancements, proactive problem-solving and strategic investments. Our research shows maximized benefits can be realized through optimizing digital tool adoption, integration and usage. A well-executed implementation strategy that successfully engages staff, customers and technology partners can maximize operational and financial impacts of digitization.

To ensure sustained growth and efficiency in the loan origination process, stakeholders should embrace ongoing innovation, continue developing partnerships across the industry, address challenges proactively and strategically invest in technology for a competitive and resilient future. Freddie Mac possesses the industry expertise and data necessary to help lenders think about ways to successfully develop and implement best practices when adopting solutions that meet their unique business objectives.

Technology is not a standalone solution but a strategic enabler.

Sources, Methodology and Calculations





WebMB

The underlying data is derived from the Quarterly Mortgage Bankers Financial Reporting WebMB Form (MBFRF), through a joint agreement with the Mortgage Bankers Association (MBA), Freddie Mac, Fannie Mae and Ginnie Mae. Independent mortgage companies are required to submit quarterly MBFRF data to the agencies and have the option of releasing their data to MBA for use in aggregate industry statistics.

Loan Product Advisor® (LPASM)

LPA is Freddie Mac's automated underwriting system (AUS). It gives users access to Freddie Mac's credit requirements, allowing you to easily identify the overall underwriting risk.

Loan Coverage Advisor®

Loan Coverage Advisor is Freddie Mac's tool for calculating and tracking the selling representation and warranty relief date for every loan sold to Freddie Mac, based on the requirements under the rep and warranty framework.

MBA's Mortgage Bankers Performance Reports

The cost to originate outputs were benchmarked to the quarterly and annual performance reports and provide current data on the revenues and expenses associated with the origination and servicing of 1- to 4-unit residential mortgage loans. Detailed information on production and servicing volume mixes by product type is also included. For more information, go to www.mba.org/performancereport.

Lender Calibration

	Sample Size	
Institution Sizes	Total Lending Institutions	203
	Large Institutions Lenders in MBFRF data whose total Q3 2023 Ioan volume is greater than \$500M	42
	Medium Institutions Lenders in MBFRF data whose total Q3 2023 Ioan volume is between \$150M and \$500M	68
	Small Institutions Lenders in MBFRF data whose total Q3 2023 Ioan volume is less or equal than \$150M	93

Qualitative Interviews

Freddie Mac partnered with global research firm Ipsos Public Affairs to conduct virtual interviews with mortgage originator executives November 2-13, 2023. A total of 13 interviews were conducted with a mix of lending institutions of different sizes and types.

Quantitative Survey

Freddie Mac partnered with global research firm Ipsos Public Affairs to conduct an online survey fielded November 28-December 14, 2023. The sample consisted of 500 loan officers, loan originators and underwriters with at least one year of experience. The survey targeted loan professionals with a variety of seniority levels within their company, including executive decision makers and individual contributors.

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