

Mortgage Lender Sentiment Survey™

Lenders' Consumer-Facing Mobile Technology Priorities: Are Mortgage Lenders Missing Out on Mobile Opportunities?

Topic Analysis
Q3 2015

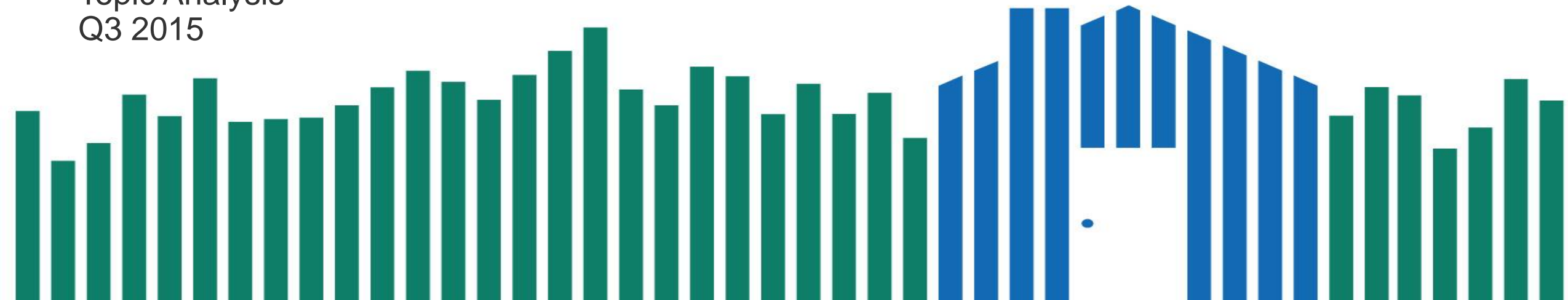


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Executive Summary: Mortgage Lenders Should Consider Whether They Need to Rebalance Their Traditional and Mobile Mix of Channels and Tools to Better Address Consumer Needs

Marketing Channels

- ❑ Most lenders employ a combination of traditional and digital marketing channels to advertise their mortgage products, but mobile apps are much less often used. They expect to continue to invest in traditional channels over digital, and especially mobile, channels in the future.

Mobile App Deployment, Barriers, and Competitors

- ❑ Approximately three out of four lenders do not offer a mobile application (app) to help consumers shop for or obtain a mortgage.
 - 40 percent of lenders who do not offer a mobile app plan to make one available over the next 12 months. Larger institutions are significantly more likely to be planning to deploy an app if they do not offer one already.
 - Lenders cite the high cost of IT investment as the top reason for not developing an app. They are also concerned with information security risks, compliance issues, and slow consumer adoption.
- ❑ Lenders are most likely to see current online B2C lenders as the top competitor offering mortgages via mobile channels in the future, versus technology and non-traditional financial services players.

Mobile App Features

- ❑ The most important mobile app features cited by lenders are those allowing consumers to get pre-qualification, connect with loan officers, fill out application forms, and track the application process, regardless of whether they currently have a mobile app or not.
- ❑ Recent homebuyers' appetite for future mortgage mobile app usage may imply faster adoption than lenders state as a concern for not developing an app.

Consumer Needs

- ❑ Recent homebuyers' and lenders' mobile app priorities show both differences and similarities:
 - Recent homebuyers are more interested in using an app to obtain a mortgage quote than what lenders report as their prioritization of this feature.
 - Recent homebuyers are less interested in using an app to fill out a mortgage application than what lenders report as their prioritization of this feature.
 - However, recent homebuyers share lender security concerns.

Business Context and Research Objectives

Business Context

Mobile devices such as smart phones and tablets have been increasingly used by consumers for banking, making payments, budgeting, and shopping. Services used on mobile devices have transformed from “informational,” such as checking account balances, to “transactional,” such as shopping and making payments.¹ However, mobile activities conducted by consumers for mortgage shopping still are limited. A survey among recent homebuyers shows that only 12 percent and 6 percent of recent mortgage borrowers say they have used mobile devices to get a mortgage quote and fill out a mortgage application, respectively.²

Fannie Mae’s Economic & Strategic Research Group (ESR) surveyed senior mortgage executives in August through its quarterly Mortgage Lender Sentiment Survey™ to examine lenders’ marketing channel strategies and mobile technologies to better understand lenders’ mobile technology offerings and the extent to which lenders’ offerings meet consumers’ needs.

Research Questions

1. What are lenders’ marketing channel strategies across traditional and digital channels? What types of channels are their investment priorities for the future?
2. To what extent do lenders deploy a mobile app to help consumers shop for or obtain a mortgage? What types of lenders are more likely to offer a mobile app? If they don’t have an app today, what are the major barriers?
3. Who do lenders perceive to be the key competitors offering mortgages via mobile channels in the future?
4. What consumer-facing mobile app features are considered critical to support lenders’ mobile strategies? What features are consumers interested in? Is there a gap between consumer interests and lender mobile app features?

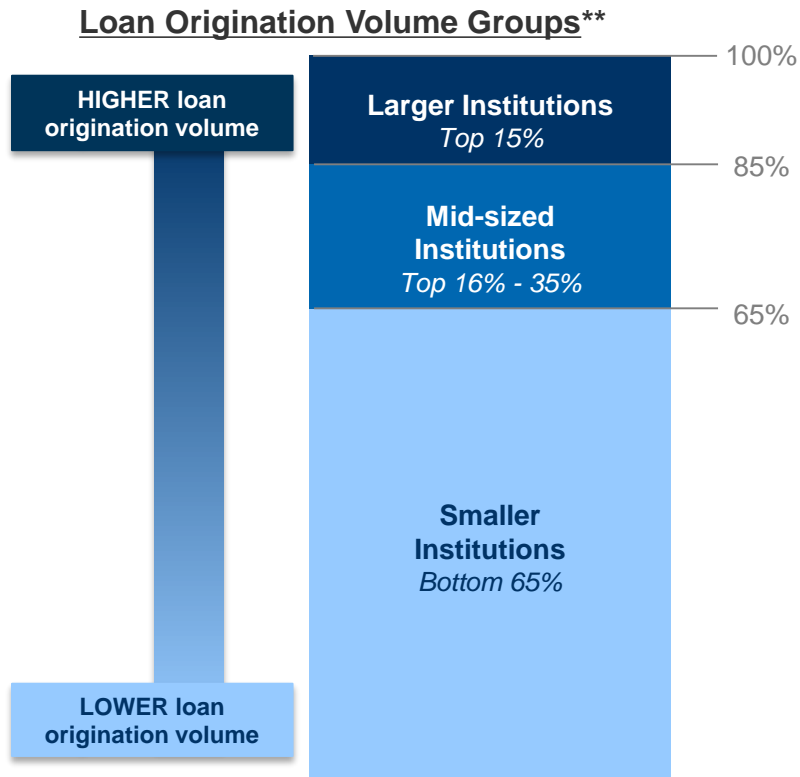
1. “Consumers and Mobile Financial Services 2015,” March 2015, Board of Governors of the Federal Reserve System, <http://www.federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201503.pdf>

2. Results from the Fannie Mae National Housing Survey™, Q1 2015 (*National Housing Survey*: <http://www.fanniemae.com/portal/research-and-analysis/housing-survey.html>)

^ *Individuals who took out purchase mortgage loans in 2014 and whose loans were acquired by Fannie Mae*

Q3 2015 Respondent Sample and Groups

For Q3 2015, a total of 246 senior executives, representing 209 lending institutions, completed the survey between August 5 and 17.*



Sample Q3-2015		Sample Size
Total Lending Institutions The "Total" data throughout this report is an average of the means of the three loan origination volume groups listed below.		209
Loan Origination Volume Groups	Larger Institutions Fannie Mae's customers whose 2014 total industry loan origination volume was in the top 15% (above \$631million)	55
	Mid-sized Institutions Fannie Mae's customers whose 2014 total industry loan origination volume was in the next 20% (16%- 35%) (between \$176 million to \$631 million)	83
	Smaller Institutions Fannie Mae's customers whose 2014 total industry loan origination volume was in the bottom 65% (less than \$176 million)	71
Institution Type***	Mortgage Banks (non-depository)	78
	Depository Institutions	81
	Credit Unions	43

* The results of the Mortgage Lender Sentiment Survey are reported at the lending institutional parent-company level. If more than one individual from the same institution completes the survey, their responses are averaged to represent their parent institution.

** The 2014 total loan volume per lender used here includes the best available annual origination information from Fannie Mae, Freddie Mac, and Marketrac.

*** Lenders that are not classified into mortgage banks or depository institutions or credit unions are mostly housing finance agencies.

Marketing Channels

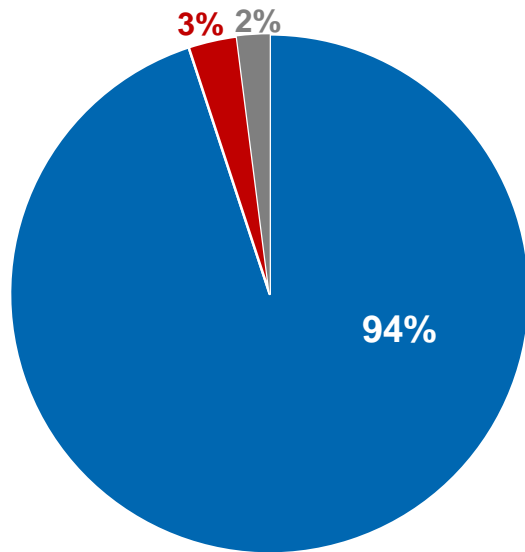
- ❑ Most lenders employ a combination of digital and traditional marketing channels to advertise their mortgage products. The most widely used marketing channels are loan officers' networks, firm websites, and retail locations. Mobile apps are less often used.
- ❑ Most lenders say that traditional marketing channels are their current top methods of marketing mortgage products to consumers, and they will continue to invest in them over digital channels in the future. Digital channels, except firm websites, are considered to be lower investment priorities.

Current Consumer Marketing Channels

Most lenders employ a combination of digital and traditional marketing channels to advertise their mortgage products. The most widely used marketing channels are loan officers' networks, firm websites, and retail locations. Mobile apps are much less often used.

Does your firm originate, purchase, or refinance mortgages directly with consumers or directly interact with consumers in originating purchase or refinance mortgages?

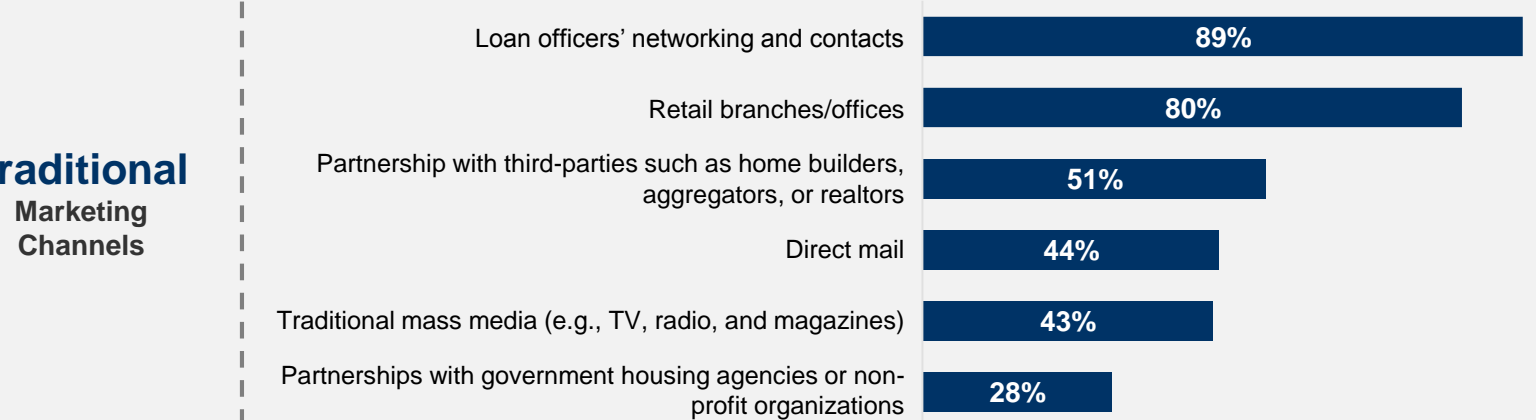
Results across subgroups can be found on pp. 29



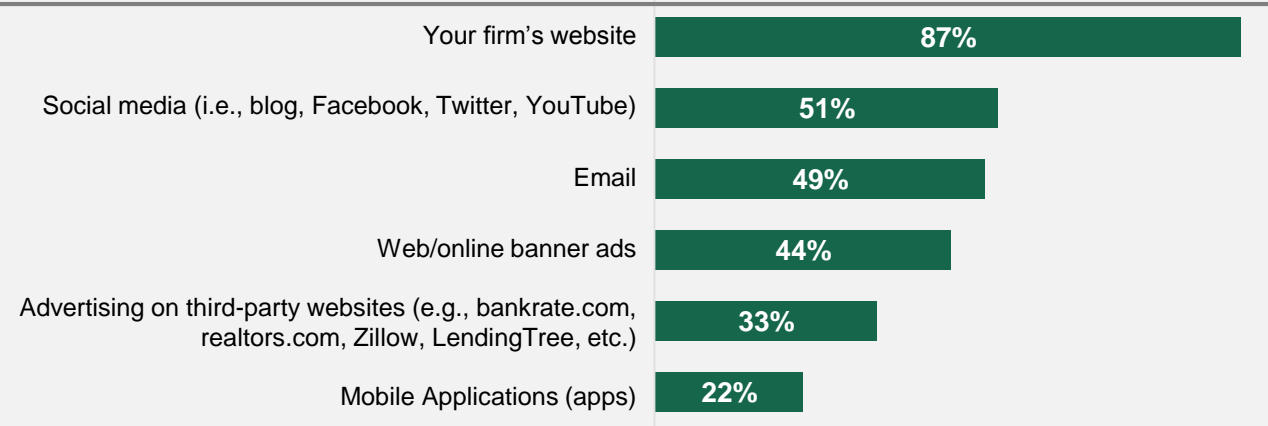
[IF originate mortgages directly with consumers] Please indicate if your firm currently uses any of these channels to market your mortgage products to consumers. Showing Total (N=198)

Results across subgroups can be found on pp. 30-31

Traditional Marketing Channels

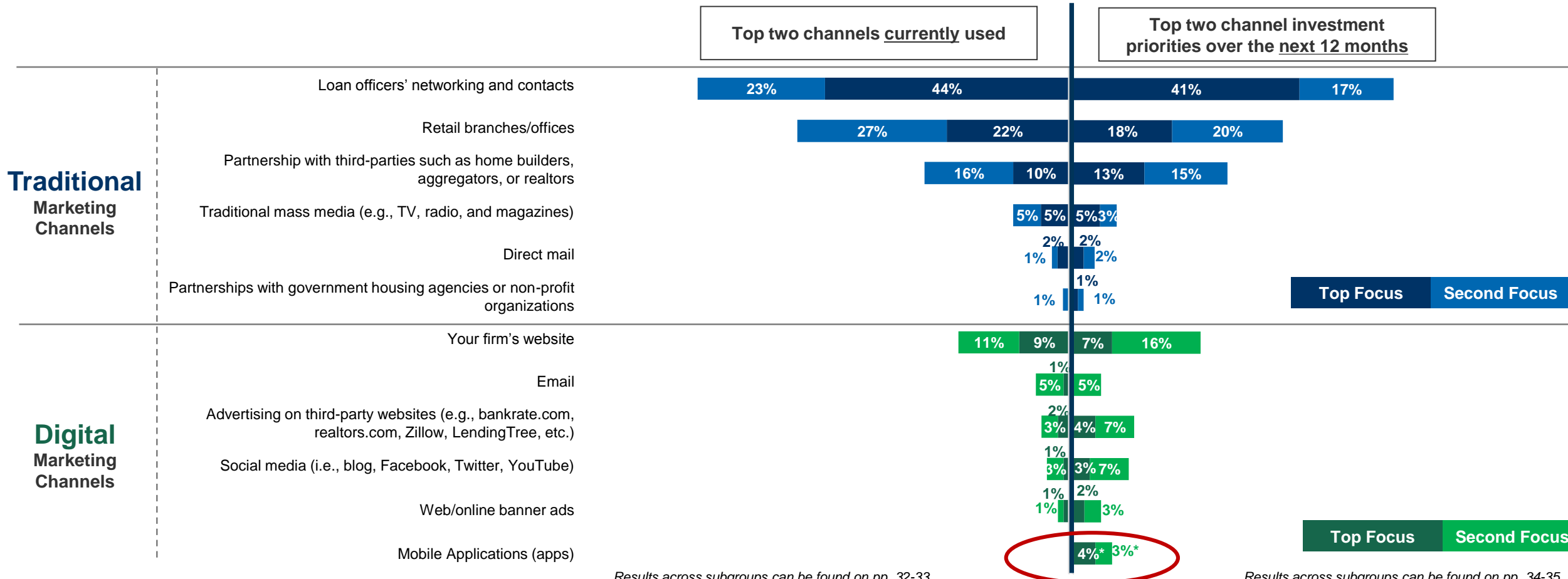


Digital Marketing Channels



Current Top Marketing Channels and Future Channel Investment Priorities

Most lenders say that traditional marketing channels are their current top methods of marketing mortgages products to consumers, and they will continue to invest in them over digital channels in the future. Digital channels, except firm websites, are considered to be lower investment priorities.



* Denotes a statistically significant difference between the current channel focus percentage and the channel investment focus percentage at the 95% confidence level.

Results across subgroups can be found on pp. 32-33

Q: [IF originate mortgages directly with consumers] Among the channels your firm currently uses, which are your firm's Top TWO channels to market your mortgage products to consumers? Showing Total (N=198)

Results across subgroups can be found on pp. 34-35

Q: [IF originate mortgages directly with consumers] Now, thinking about your firm's future channel strategy, which TWO channels will be your firm's investment priorities over the next 12 months? Showing Total (N=198)

Lenders' Mobile Deployment, Barriers, and Future Competitors

Mobile App Deployment and Barriers

- ❑ Approximately three out of four lenders do not offer a mobile app today to help consumers shop for or obtain a mortgage. However, of these lenders, 40 percent plan to make one available over the next 12 months. Larger institutions are significantly more likely to be planning to deploy an app if they do not offer one already.
- ❑ Lenders cite the high cost of IT investment as the major reason for not developing an app. They also are concerned with information security risks and compliance issues that could arise, and that consumers are not yet adopting mobile apps for mortgage activities.

Future Competitors Offering Mortgages via Mobile Channels

- ❑ Lenders are most likely to see current online B2C lenders as the top competitor offering mortgages via mobile channels in the future, versus technology players and non-traditional financial services players.

Mobile Apps Offered by Lender Size and Lender Type

Approximately 1 in 4 lenders offer a mobile app to help consumers shop for or obtain a mortgage. Larger and mid-sized institutions are significantly more likely than smaller lenders to offer an app.

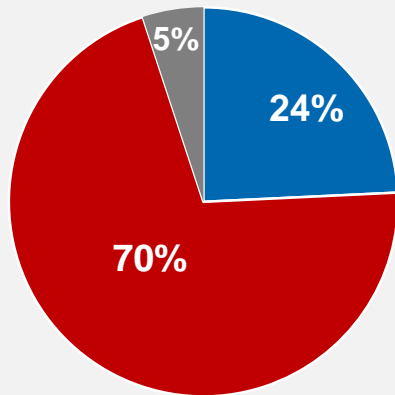
Firms that currently offer a mobile app

Yes

No

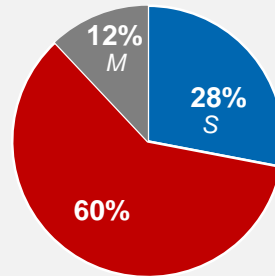
Not sure/
don't know

Total
N=198



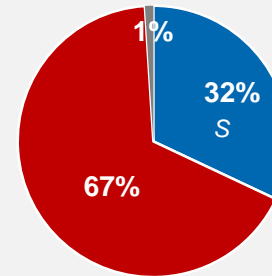
Larger Institutions (L)

N=50



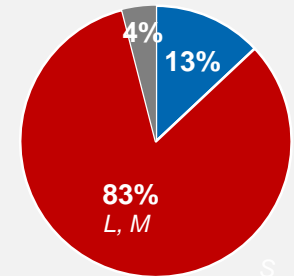
Mid-sized Institutions (M)

N=79



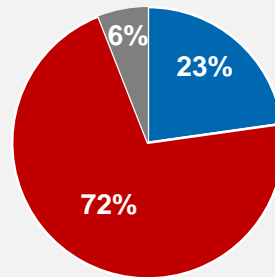
Smaller Institutions (S)

N=69



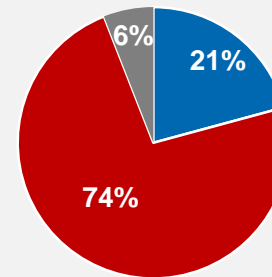
Mortgage Banks (M)

N=72



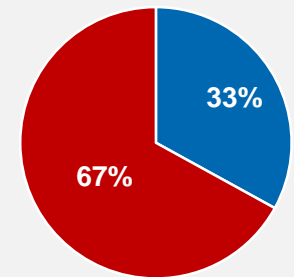
Depository Institutions (D)

N=79



Credit Unions (C)

N=41



Q: [IF originates mortgages directly with consumers] Does your firm currently offer a mobile application (app) (developed internally or externally) to help consumers shop or obtain a mortgage?

L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level
M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

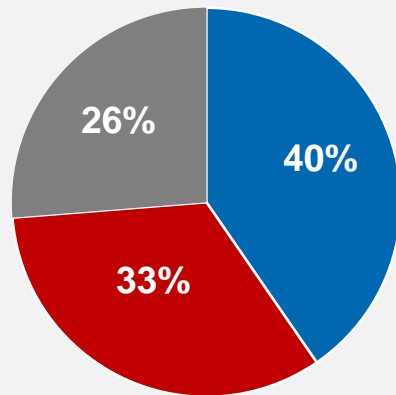
Deploying Mobile Apps Over the Next 12 Months

Of those who do not currently offer an app, 40% plan to make one available in the next 12 months. Larger institutions are significantly more likely to be planning to deploy an app if they do not offer one already.

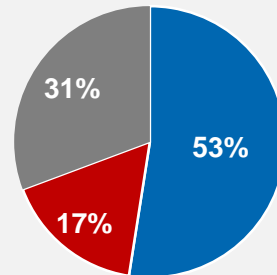
Firms that plan to deploy a mobile app over the next 12 months
(among firms that don't currently offer one)

Yes **No** **Not sure/ don't know**

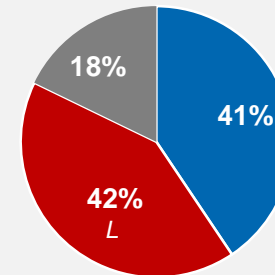
Total
N=140



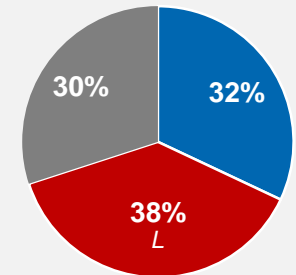
Larger Institutions (L)
N=30



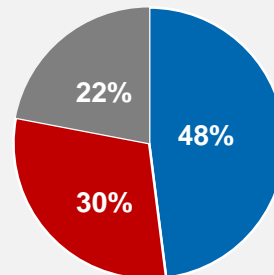
Mid-sized Institutions (M)
N=53



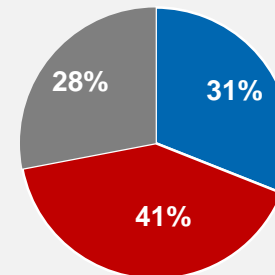
Smaller Institutions (S)
N=58



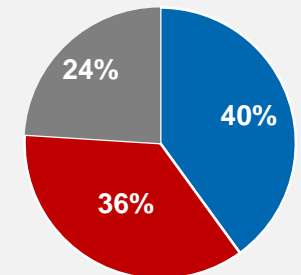
Mortgage Banks (M)
N=51



Depository Institutions (D)
N=58



Credit Unions (C)
N=28



Q: [IF does not offer mobile application for customers] Does your firm plan to deploy a mobile app (developed internally or externally) over the next 12 months to help consumers shop for homes or obtain a mortgage?

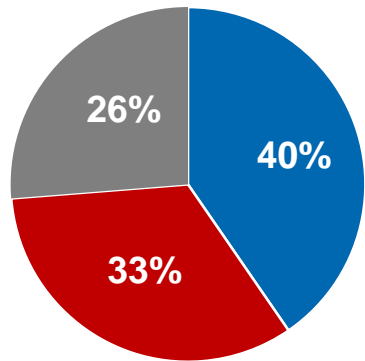
L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Mobile App Deployment Barriers

Lenders cite the high cost of IT investment as the major reason for not developing an app. They are also concerned with security risks and compliance issues that could arise, and that consumers are not yet adopting mobile apps for mortgage activities.

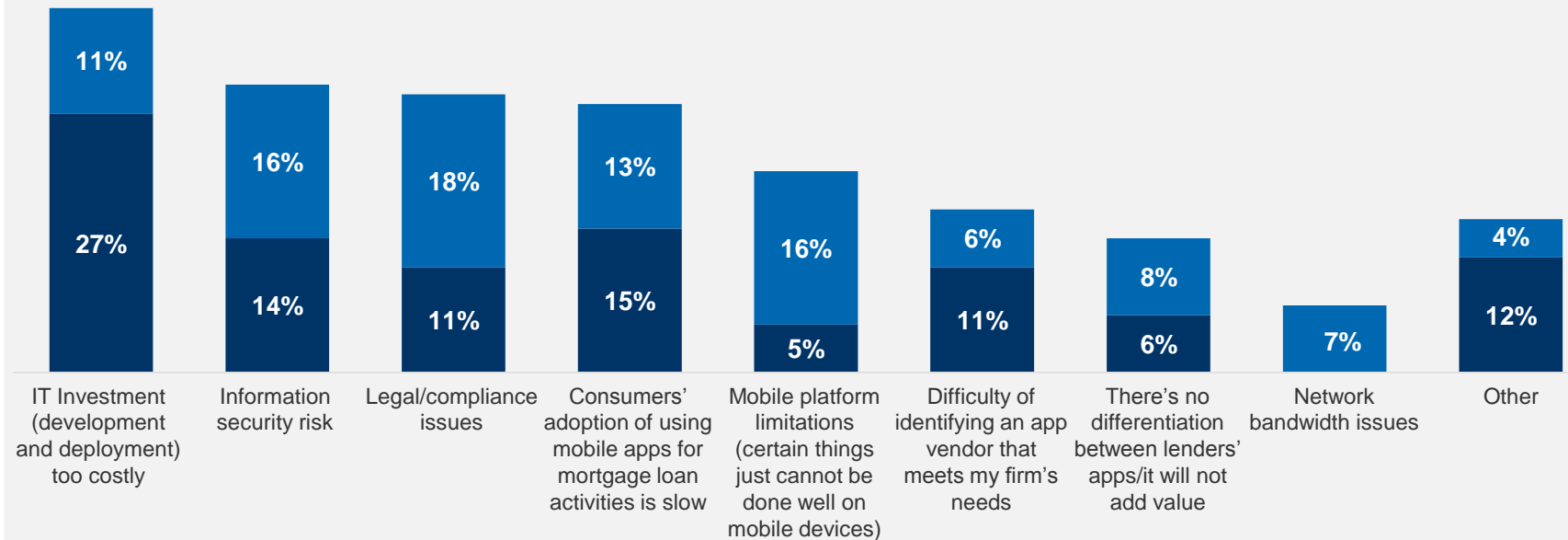
Firms that plan to deploy a mobile app over the next 12 months
(among firms that don't currently offer one)



Top two reasons firms are not investing in mobile apps

Results across subgroups can be found on pp. 44-45

2nd Most Important Reason
Most Important Reason



Q: [IF does not offer mobile application for customers] Does your firm plan to deploy a mobile app (developed internally or externally) over the next 12 months to help consumers shop for homes or obtain a mortgage? Showing Total (N=140)

Q: [IF does not plan to offer mobile application for customers] Why does your firm NOT want to invest in developing or licensing third-party mobile app to help consumers shop or obtain a mortgage? Please select the two most important reasons and rank them in order of importance. Showing Total (N=49)

Due to small sample sizes, results should be interpreted with caution

Future Top Competitors Offering Mortgages via Mobile Channels

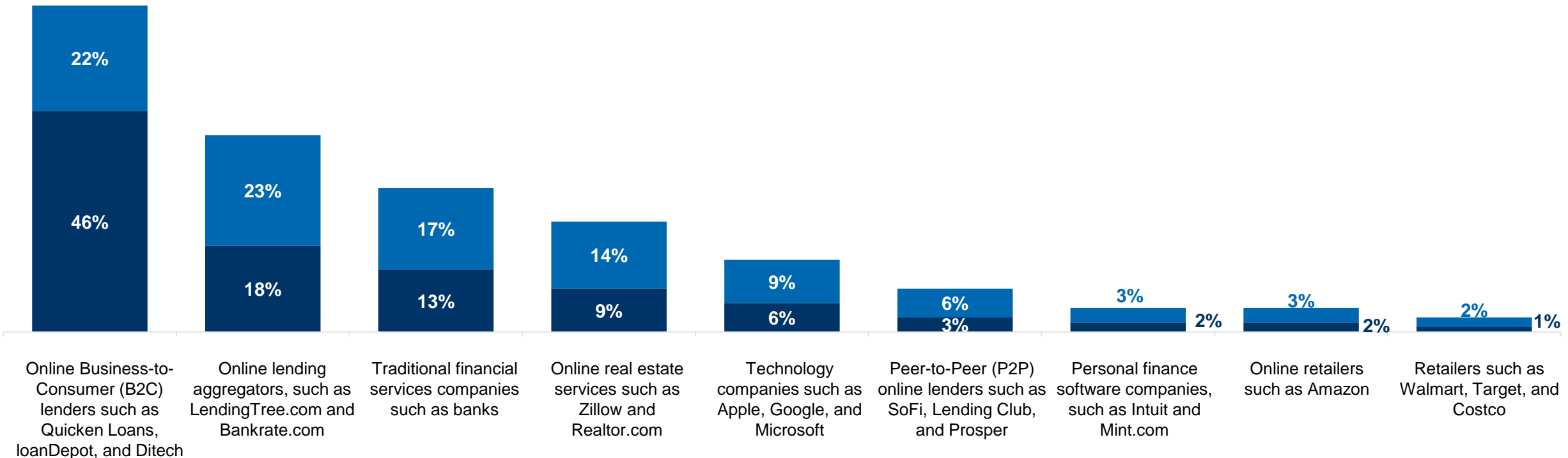
Lenders are most likely to see current online B2C lenders as the top competitor offering mortgages via mobile channels in the future, versus technology players and non-traditional financial services players.

Listed below are some key players in the technology or financial services industry. For the future, who do you think will be the **top two** competitors offering mortgages via mobile channels? *Showing Total (N=209)*

Results across subgroups can be found on pp. 48-54

2nd Top Competitor

Top Competitor

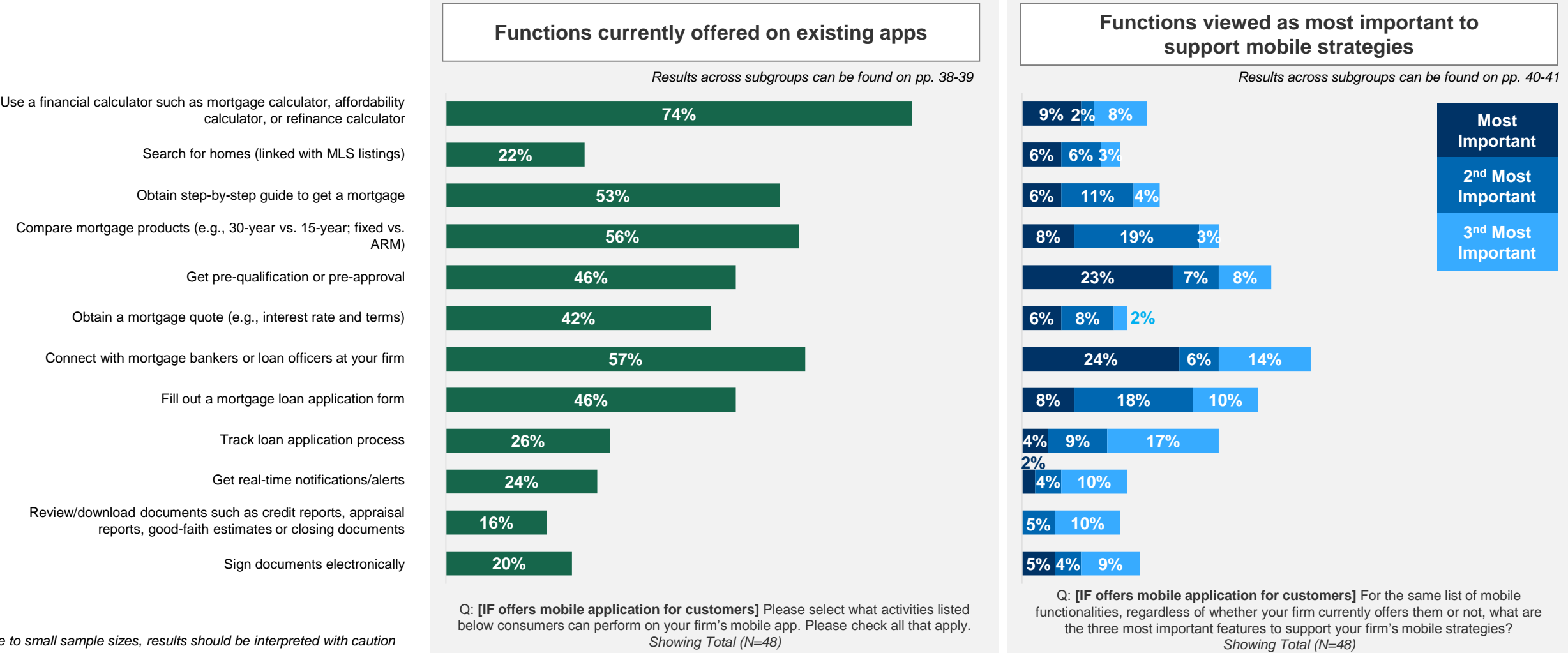


Important Features to Support Lenders' Mobile Strategies

- ❑ The most important features cited by lenders are those allowing consumers to get pre-qualification, connect with loan officers, fill out application forms, and track their application process, regardless of whether they currently have a mobile app or not.
- ❑ These features are considered most important regardless of whether lenders currently offer an app or not.

Mobile App Features: Currently Offered vs. Most Important

While educational tools such as financial calculators or mortgage guidelines are commonly offered on lenders' mobile apps, they are not likely to be viewed as top important features to support lenders' mobile strategies. The most important features cited by lenders include allowing consumers to get pre-qualification, connect with loan officers, and fill out mortgage application forms.



Due to small sample sizes, results should be interpreted with caution

Most Important Features for Mobile App (Comparison)

Features that allow consumers to get pre-qualification, connect with loan officers, fill out application forms, and track their application process are considered the most important features to support their firm's mobile strategies, regardless of whether they currently offer an app or not.

Most Important App Features to Support Firm's Mobile Strategies

Most Important **2nd Most Important** **3rd Most Important**

Institutions That Currently Offer a Mobile App

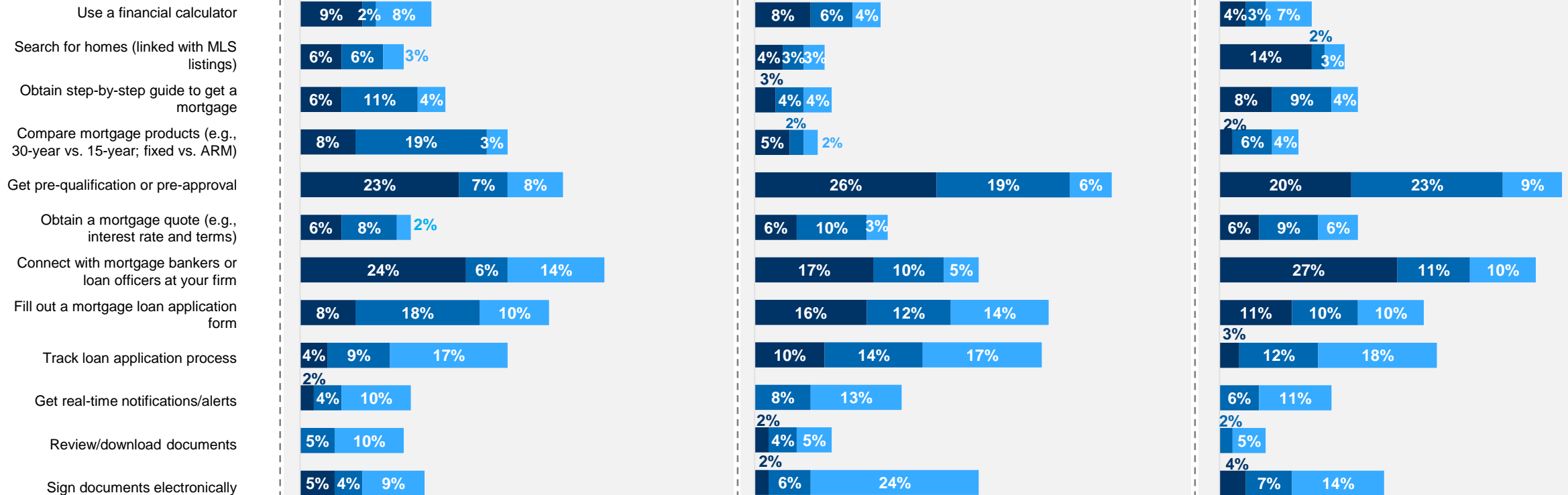
Showing Total (N=48)

Institutions That Plan to Deploy a Mobile App Over the Next 12 Months

Showing Total (N=56)

Institutions that do not offer a mobile app, and do not plan to deploy a mobile app over the next 12 months

Showing Total (N=49)



Due to small sample sizes, results should be interpreted with caution

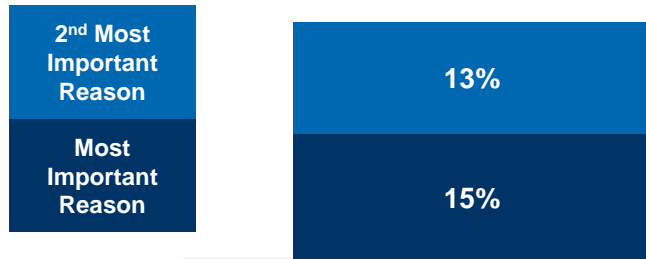
Lender and Recent Homebuyer Mobile App Priorities Differ

- ❑ Recent homebuyers' appetite for future mobile app usage may imply faster adoption than lenders assume.
- ❑ Recent homebuyers' and lenders' mobile priorities show both differences and similarities:
 - Recent homebuyers are more interested in using an app to obtain a mortgage quote than what lenders report as their prioritization of this feature.
 - Recent homebuyers are less interested in using an app to fill out a mortgage application than what lenders report as their prioritization of this feature.
 - However, recent homebuyers share lender security concerns.

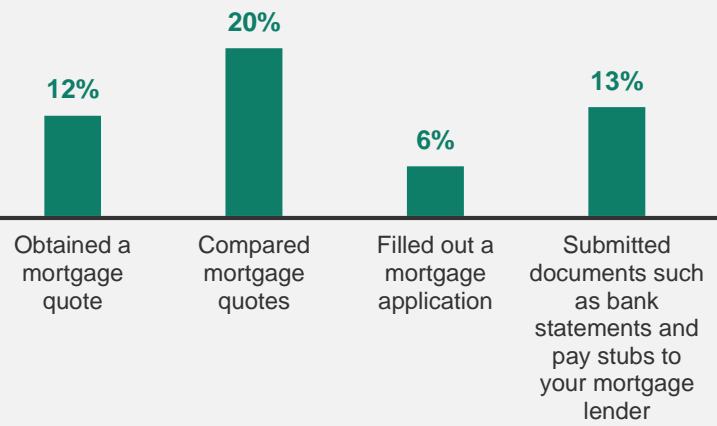
Lenders and Consumers Differ in Mobile Adoption Expectations

Among firms that are not investing in a mobile mortgage app, the low level of adoption among consumers is a key reason for the lack of investment. Though most recent homebuyers have not used a mobile device for mortgage shopping, their appetite for doing so in the future implies significant growth.

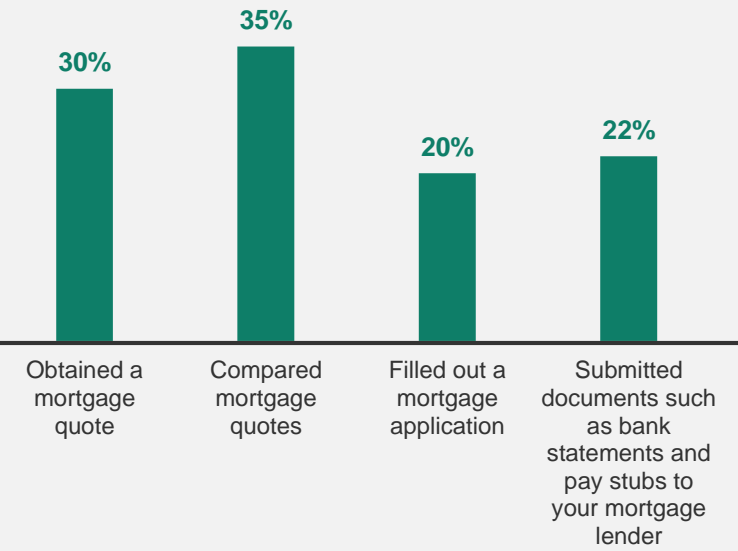
Firms that are not investing in a mobile app because consumers' adoption of mobile apps for mortgage loan activities is slow



Recent homebuyers^ that have done this on a mobile device



Recent homebuyers^ that would like to do this on mobile device in the future



Due to small sample sizes, results should be interpreted with caution

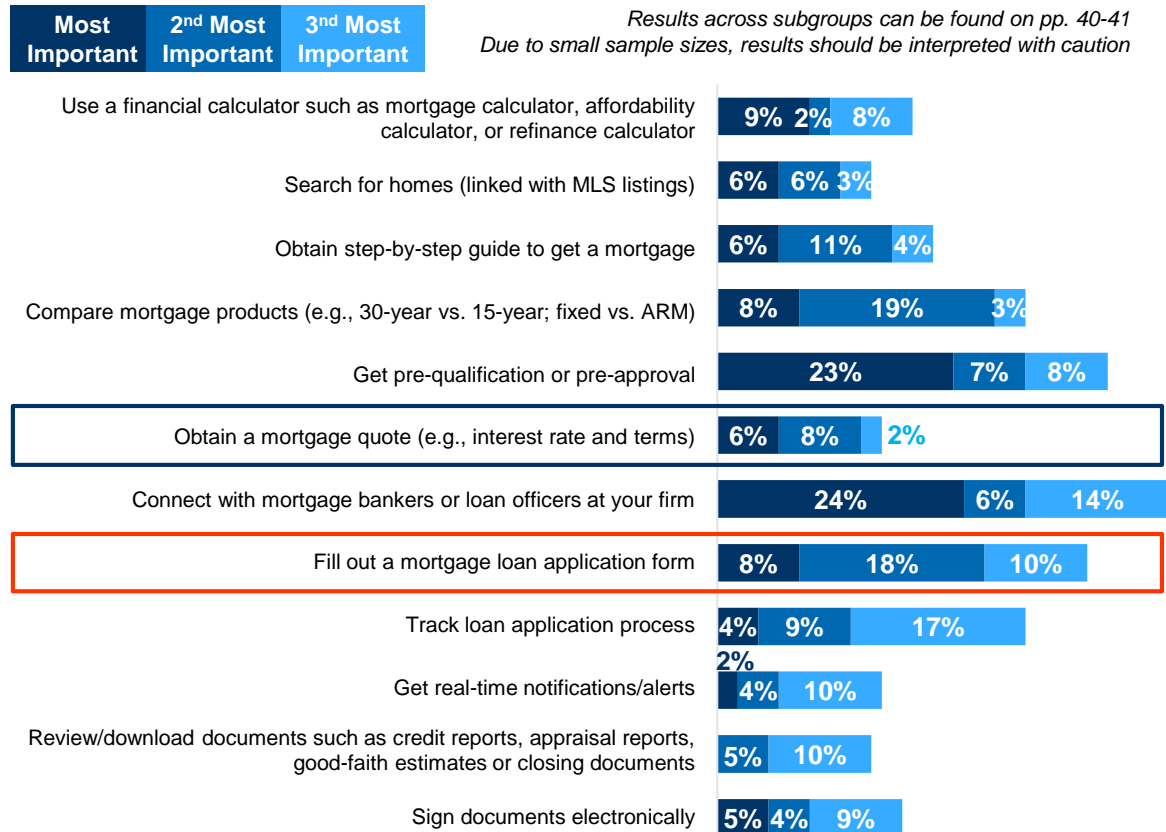
Q: [IF does not plan to offer mobile application for customers] Why does your firm NOT want to invest in developing or licensing a third-party mobile app to help consumers shop or obtain a mortgage? Please select the two most important reasons and rank them in order of importance. Showing Total (N=49)

Results from the Fannie Mae National Housing Survey™, Q1 2015 (National Housing Survey: <http://www.fanniemae.com/portal/research-and-analysis/housing-survey.html>)
 ^ Individuals who took out purchase mortgage loans in 2014 and whose loans were acquired by Fannie Mae
 Q: Have you ever done this online? Q: Would you like to do this online in the future?
 (Showing % of Recent Homebuyers who said "Yes, using a smartphone" or "Yes, using a tablet") (Recent Homebuyers: N=1213)

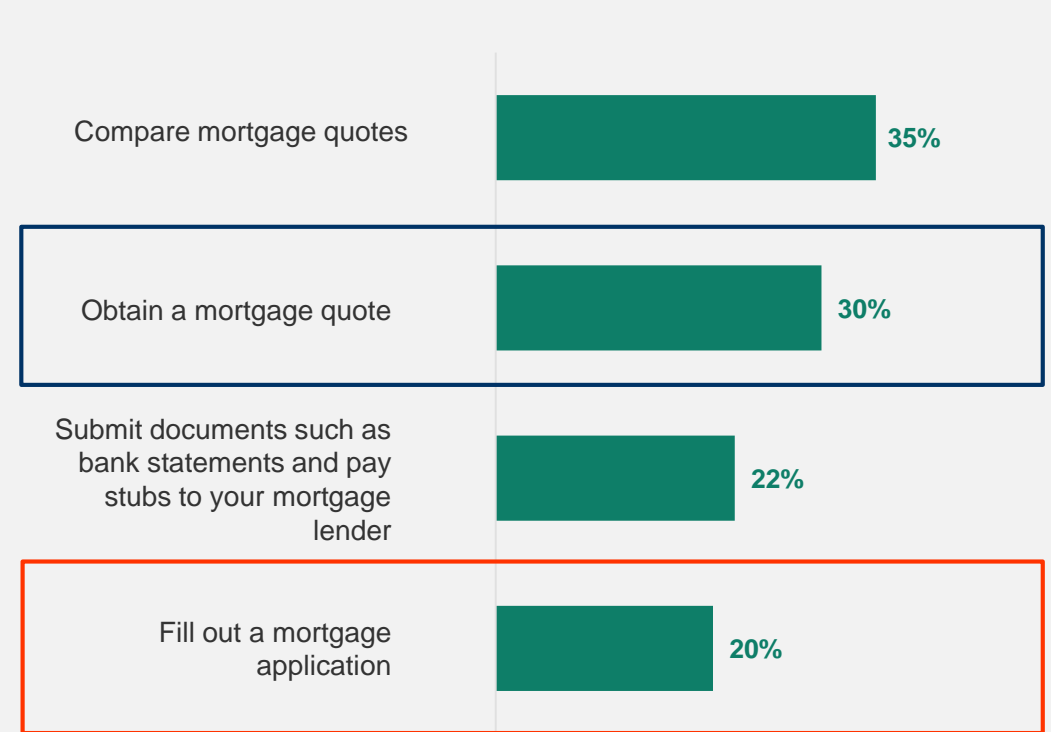
Lender and Consumer Mobile Priorities Show Differences

Recent homebuyers are more interested in using a mobile device to obtain a mortgage quote than what lenders report as their prioritization of this feature. In contrast, there is less interest among consumers in filling out a mortgage application than what lenders report as their prioritization.

Functions viewed as most important to support mobile strategies (among firms that currently offer an app)



Tasks that recent homebuyers^ would like to do on a smartphone or tablet in the future



Results from the Fannie Mae National Housing Survey™, Q1 2015
(National Housing Survey: <http://www.fanniemae.com/portal/research-and-analysis/housing-survey.html>)
^ Individuals who took out purchase mortgage loans in 2014 and whose loans were acquired by Fannie Mae
Q: Would you like to do this online in the future? (Showing % of Recent Homebuyers said "Yes, using a smartphone" or "Yes, using a tablet") (Recent Homebuyers: N=1213)

Q: [IF offers mobile application for customers] For the same list of mobile functionalities, regardless of whether your firm currently offers them or not, what are the three most important features to support your firm's mobile strategies? Showing Total (N=48)

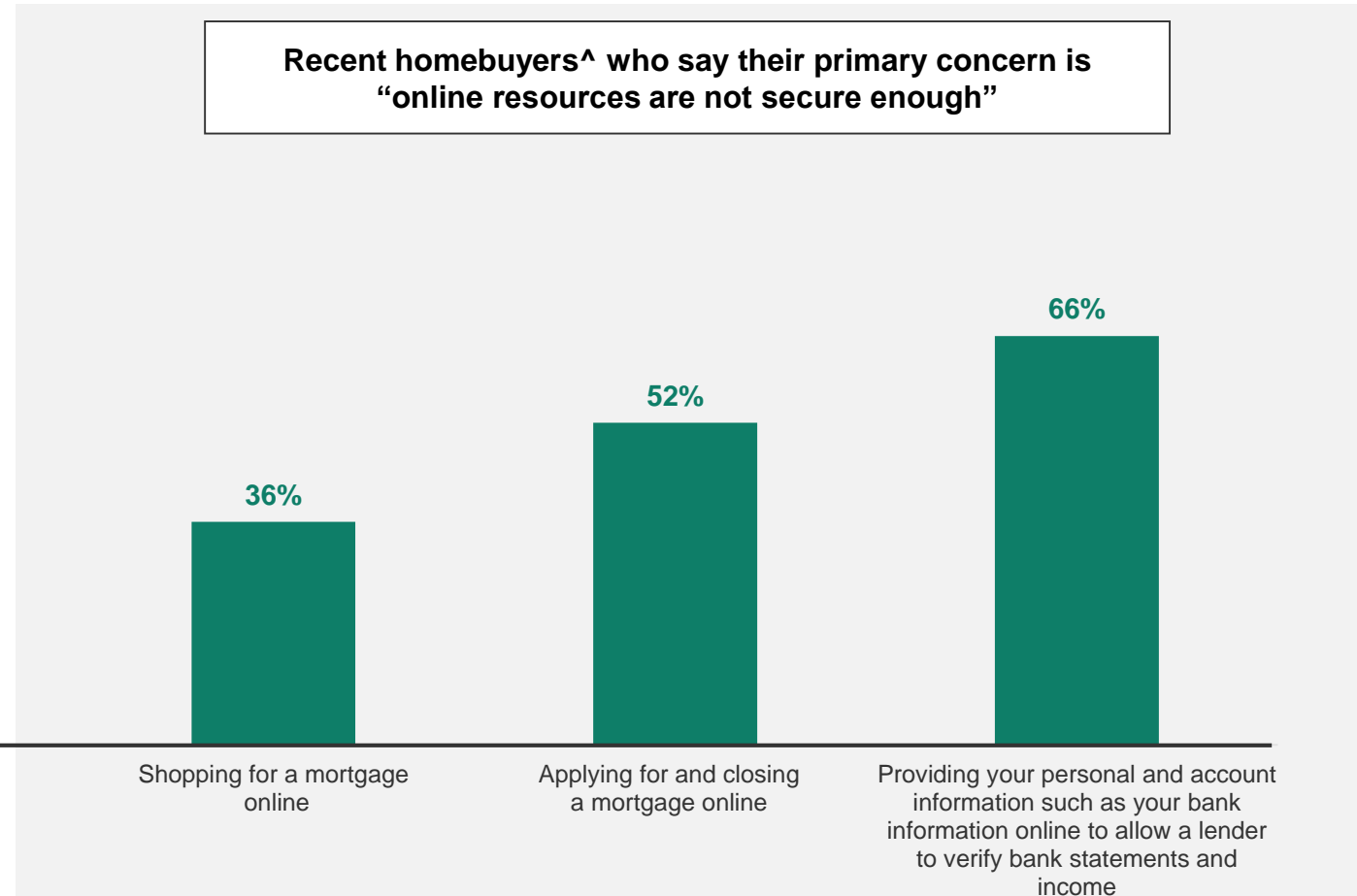
Lenders and Consumers Share Online Security Concerns

Almost one-third of lenders cite security risks as the major reason for not developing an app, and online security is the biggest concern among consumers related to applying for and closing a mortgage online.

Firms that are not investing in a mobile app because of the “information security risk”



Recent homebuyers^ who say their primary concern is “online resources are not secure enough”



Due to small sample sizes, results should be interpreted with caution

Q: [IF does not plan to offer a mobile application for customers] Why does your firm NOT want to invest in developing or licensing a third-party mobile app to help consumers shop or obtain a mortgage? Please select the two most important reasons and rank them in order of importance. *Showing Total (N=49)*

Results from the Fannie Mae National Housing Survey™, Q1 2015

(National Housing Survey: <http://www.fanniemae.com/portal/research-and-analysis/housing-survey.html>)

^ Individuals who took out purchase mortgage loans in 2014 and whose loans were acquired by Fannie Mae

Q: What, if any, would be your primary concern about doing this online in the future? Showing “Online resources are not secure enough” (Recent Homebuyers: N=1213)

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Survey Background

- Fannie Mae's Mortgage Lender Sentiment Survey™ is a quarterly online survey among senior executives of Fannie Mae's lending institution partners to provide insights and benchmarks that help mortgage industry professionals understand industry and market trends and assess their own business practices.
- Each quarter, the survey covers both regular tracking questions and specific industry topic questions:

Quarterly Regular Questions

- Consumer Mortgage Demand
- Credit Standards
- Mortgage Execution
- Mortgage Servicing Rights (MSR) Execution
- Profit Margin Outlook

Featured Specific-Topic Questions

- GSEs' 97% LTV products and the FHA's Mortgage Insurance Premium Reduction
- Credit Overlays & Access to Credit
- Mobile Technologies

Quarterly Reporting and Quarterly Special Topic Analyses

- Quarterly reports provide a timely view of trends on the topics listed above, such as consumer mortgage demand, lenders' credit standards, and profit margin outlook.
- Quarterly Special Topic Analyses provide insights into important industry topics.

Reports can be found on the Mortgage Lender Sentiment Survey page on [fanniemae.com](http://www.fanniemae.com):

<http://www.fanniemae.com/portal/research-and-analysis/mortgage-lender-survey.html>

Mortgage Lender Sentiment Survey™

Survey Methodology

- A quarterly, 10-15 minute online survey among senior executives, such as CEOs and CFOs, of Fannie Mae's lending institution partners.
- To ensure that the survey results represent the behavior and output of organizations rather than individuals, the Fannie Mae Mortgage Lender Sentiment Survey is structured and conducted as an establishment survey.
- Each respondent is asked 40-75 questions.

Sample Design

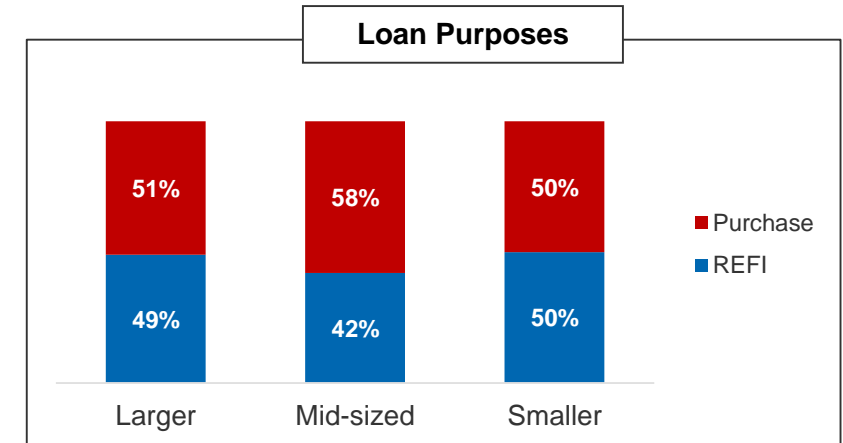
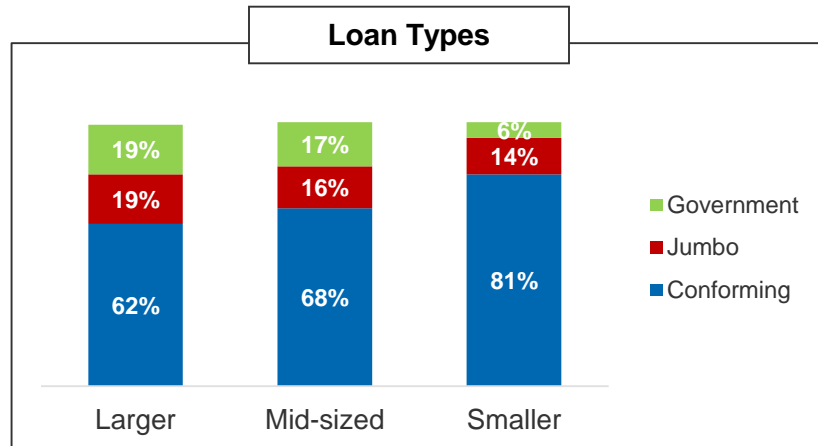
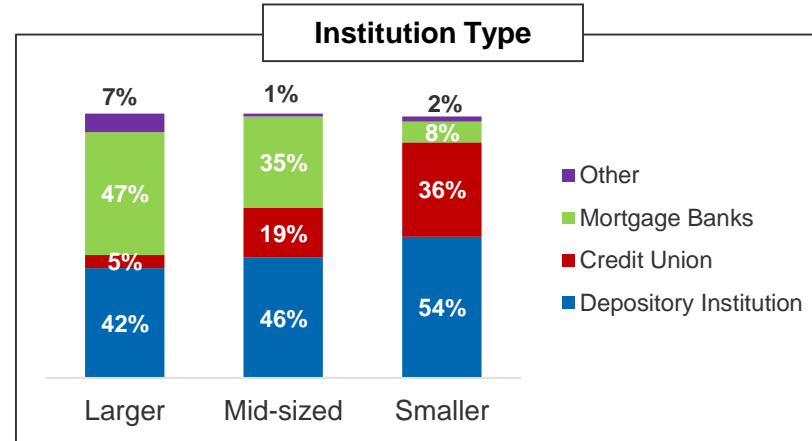
- Each quarter, a random selection of approximately 2,000 senior executives among Fannie Mae's approved lenders are invited to participate in the study.

Data Weighting

- The results of the Mortgage Lender Sentiment Survey are reported at the institutional parent-company level. If more than one individual from the same parent institution completes the survey, their responses are averaged to represent their parent institution.

Lending Institution Characteristics

Fannie Mae’s customers invited to participate in the Mortgage Lender Sentiment Survey represent a broad base of different lending institutions that conducted business with Fannie Mae in 2014. Institutions were divided into three groups based on their 2014 total industry loan volume – Larger (top 15%), Mid-sized (top 16%-35%), and Smaller (bottom 65%). The data below further describe the compositions and loan characteristics of the three groups of institutions.



2015 Q3 Cross-Subgroup Sample Sizes

	Total	Larger Lenders	Mid-Sized Lenders	Smaller Lenders
Total	209	55	83	71
Mortgage Banks (non-depository)	78	32	37	9
Depository Institutions	81	14	29	38
Credit Unions	43	2	17	24

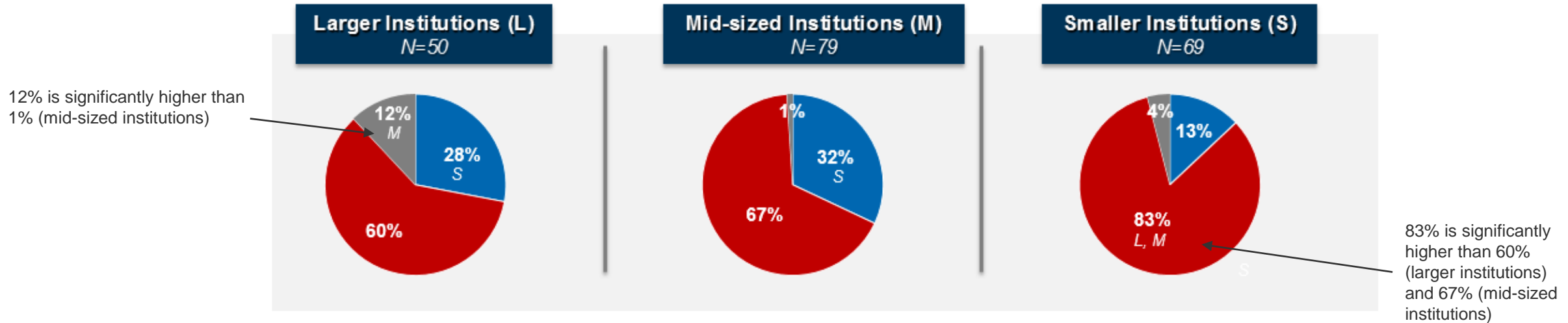
How to Read Significance Testing

On slides where significant differences between three groups are shown:

- Each group is assigned a letter (L/M/S, M/D/C)
- If a group has a significantly higher % than another group at the 95% confidence level, a letter will be shown next to the % for that metric. The letter denotes which group the % is significantly higher than.

Example:

[IF originates mortgages directly with consumers] Does your firm currently offer a mobile application (app) (developed internally or externally) to help consumers shop or obtain a mortgage?

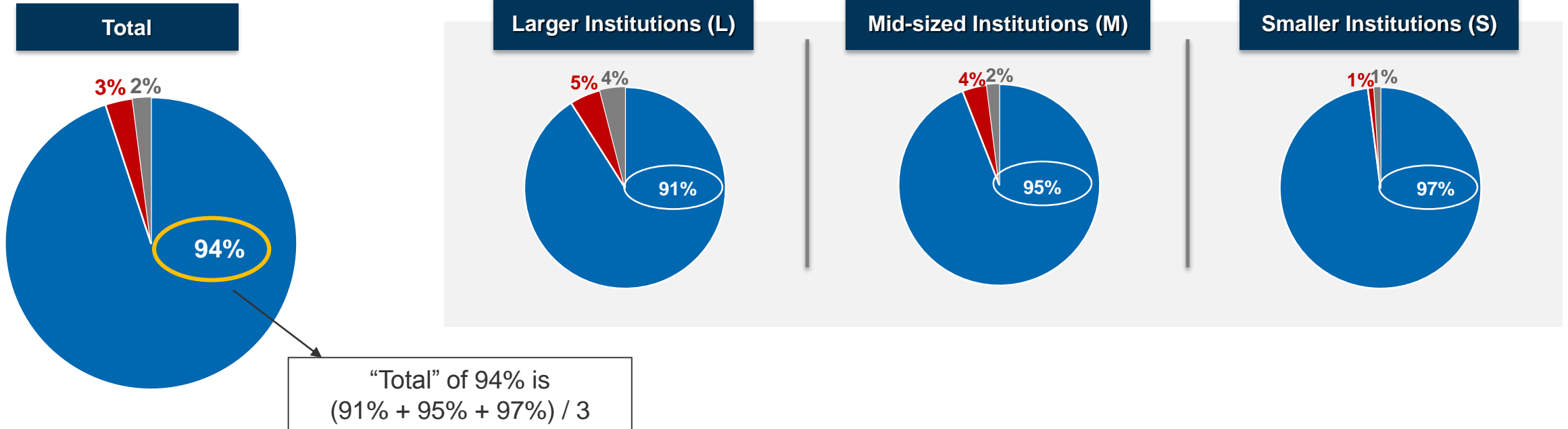


Calculation of the “Total”

The “**Total**” data presented in this report is an average of the means of the three loan origination volume groups (see an illustrated example below). Please note that percentages are based on the number of financial institutions that gave responses other than “Not Applicable.” Percentages may add to under or over 100% due to rounding.

Example:

Does your firm originate purchase or refinance mortgages directly with consumers or directly interact with consumers in originating purchase or refinance mortgages?



Appendix

Marketing Channels

Firms That Originate Mortgages Directly with Consumers

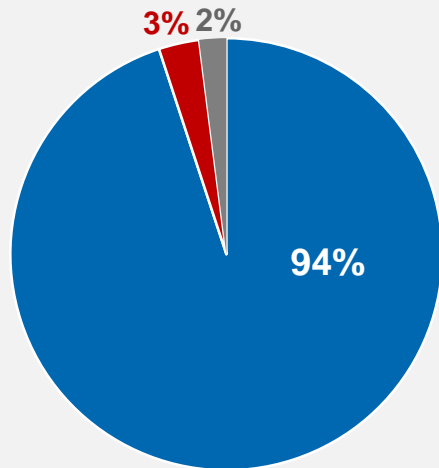
Does your firm originate purchase or refinance mortgages directly with consumers or directly interact with consumers in originating purchase or refinance mortgages?

Yes

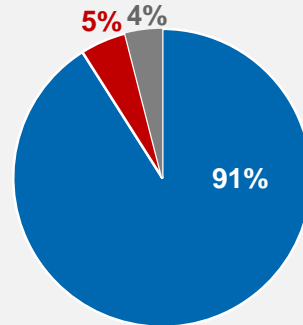
No

Not sure/
don't know

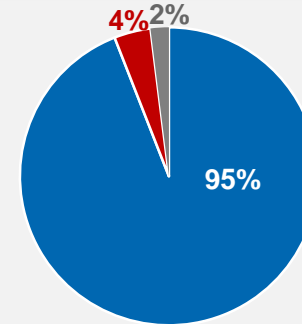
Total
(N=209)



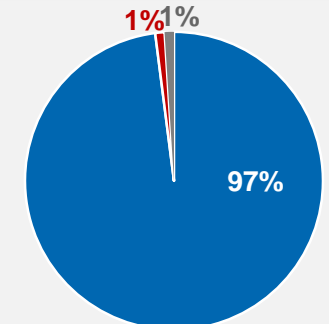
Larger Institutions (L)
(N=55)



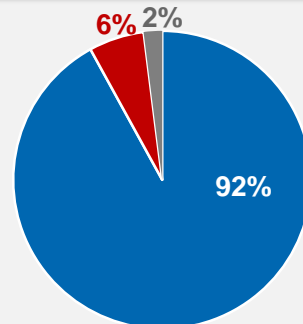
Mid-sized Institutions (M)
(N=83)



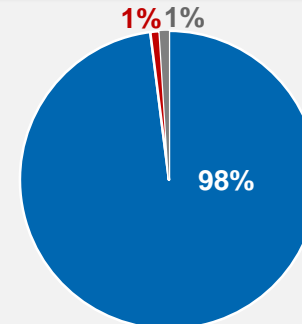
Smaller Institutions (S)
(N=71)



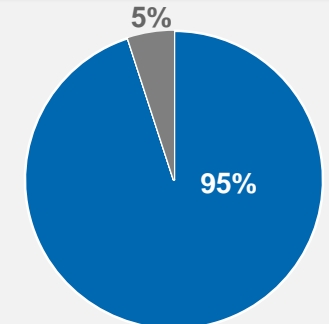
Mortgage Banks (M)
(N=78)



Depository Institutions (D)
(N=81)



Credit Unions (C)
(N=43)



L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level
M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Marketing Channels Currently Used (by lender size)

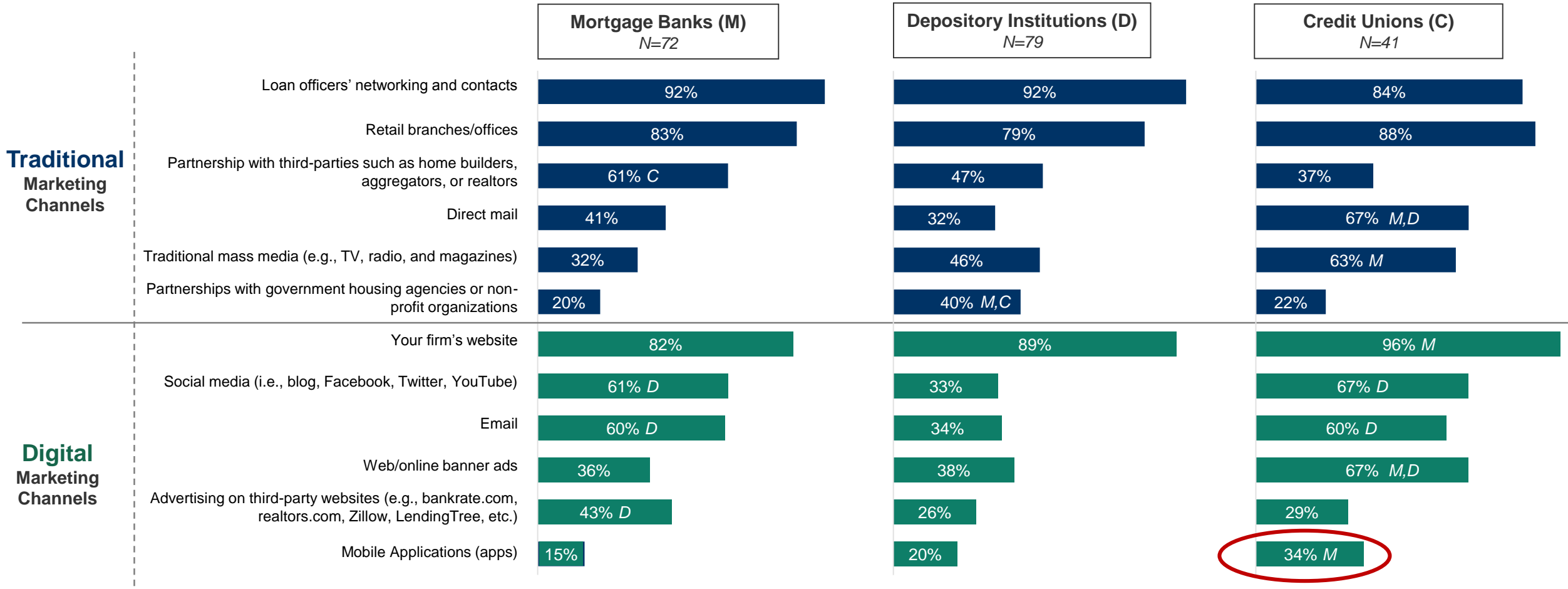
[IF originate mortgages directly with consumers] Please indicate if your firm currently uses any of these channels to market your mortgage products to consumers.



L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Marketing Channels Currently Used (by lender type)

[IF originate mortgages directly with consumers] Please indicate if your firm currently uses any of these channels to market your mortgage products to consumers.

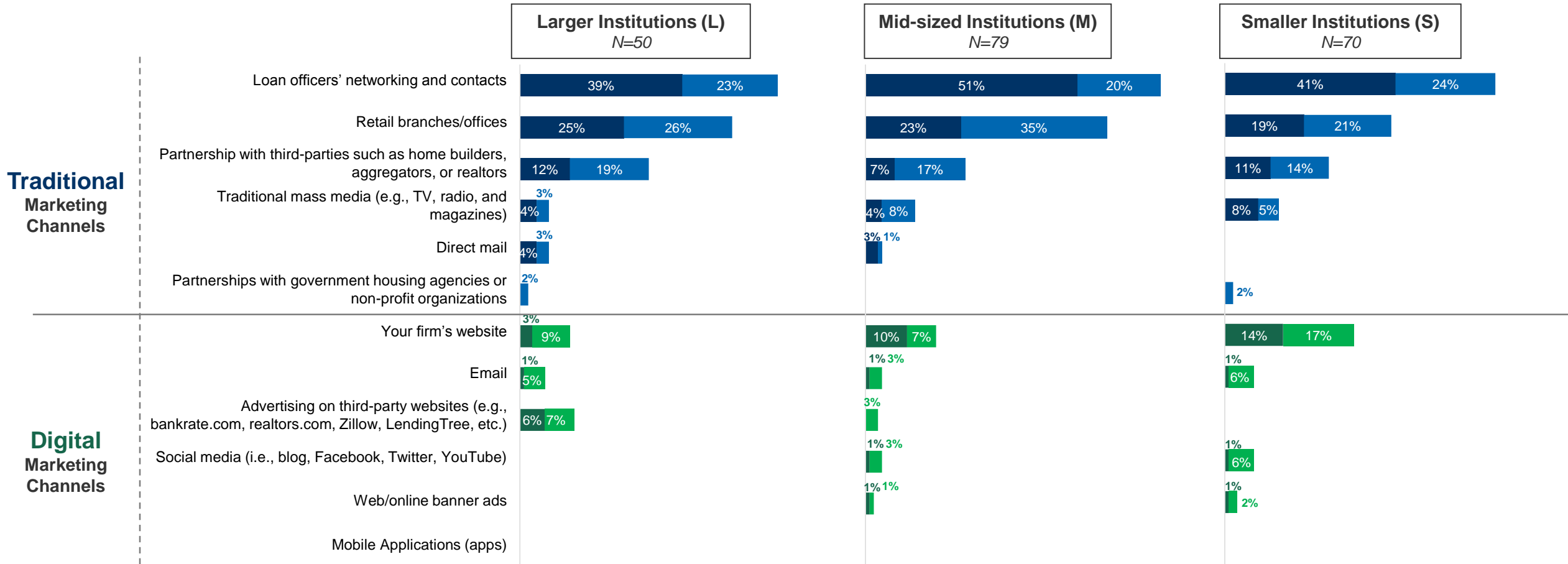


M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Top Two Marketing Channels Currently Used (by lender size)

Top Focus	Second Focus
Top Focus	Second Focus

[IF originate mortgages directly with consumers] Among the channels your firm currently uses, which are your firm's Top TWO channels to market your mortgage products to consumers?

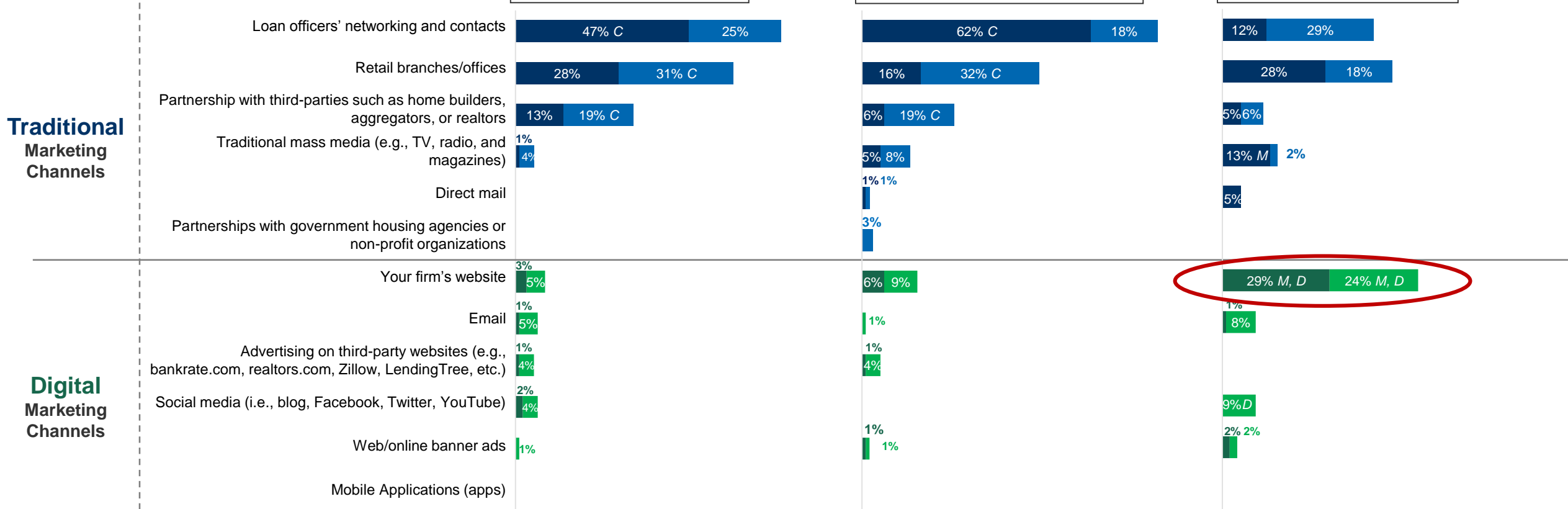


L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Top Two Marketing Channels Currently Used (by lender type)

Top Focus	Second Focus
Top Focus	Second Focus

[IF originate mortgages directly with consumers] Among the channels your firm currently uses, which are your firm's Top TWO channels to market your mortgage products to consumers?

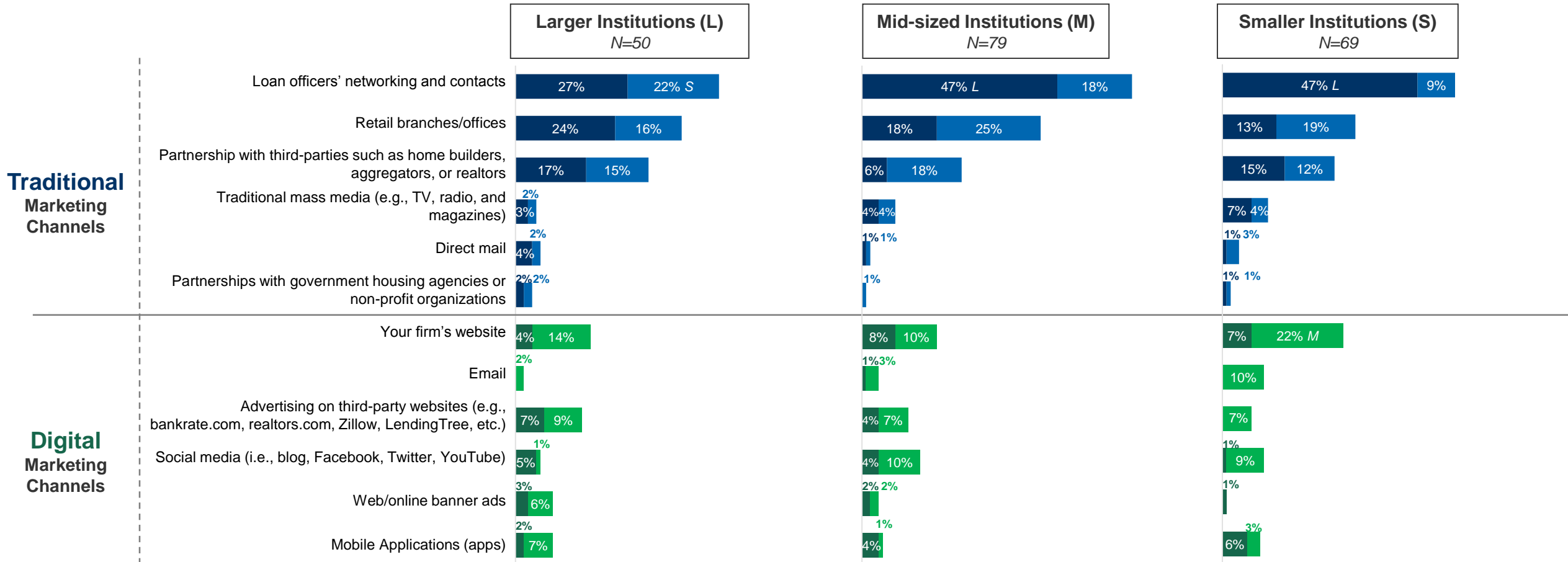


M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Future Channel Investment Priorities (by lender size)

Top Focus	Second Focus
Top Focus	Second Focus

[IF originate mortgages directly with consumers] Now, thinking about your firm's future channel strategy, which TWO channels will be your firm's investment priorities over the next 12 months?



L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Future Channel Investment Priorities (by lender type)

Top Focus	Second Focus
Top Focus	Second Focus

[IF originate mortgages directly with consumers] Now, thinking about your firm's future channel strategy, which TWO channels will be your firm's investment priorities over the next 12 months?

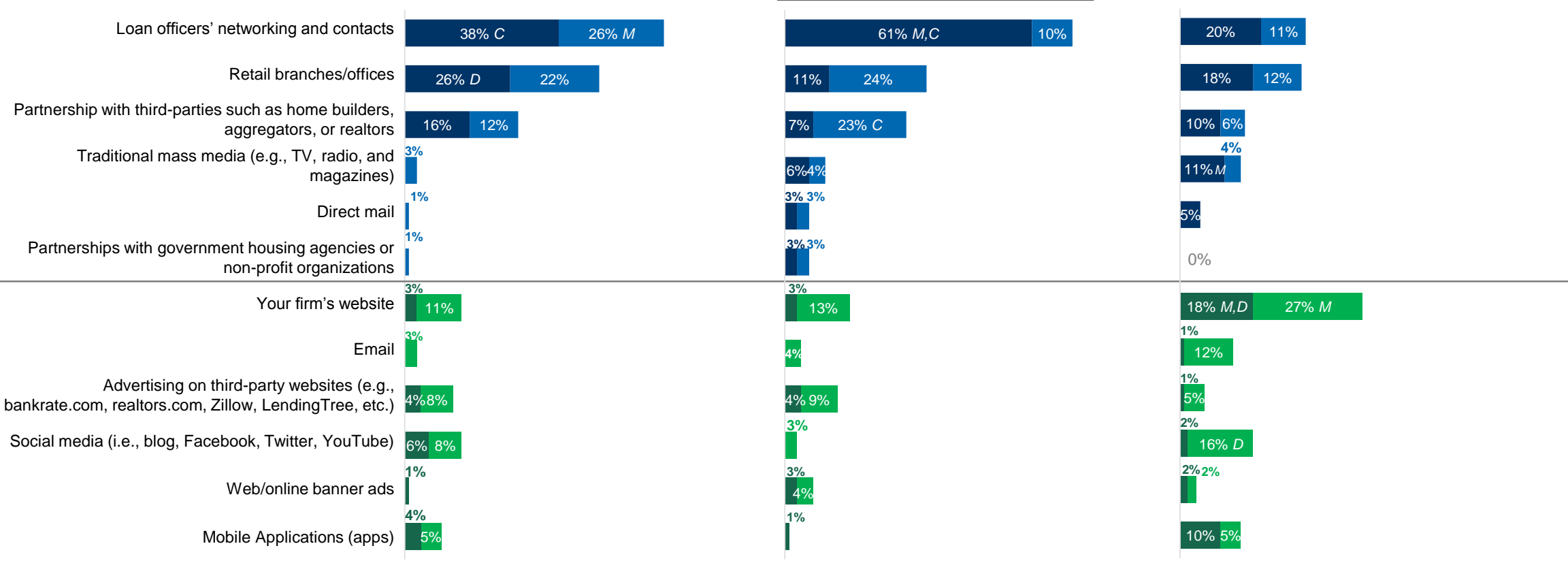
Mortgage Banks (M)
N=72

Depository Institutions (D)
N=79

Credit Unions (C)
N=41

Traditional Marketing Channels

Digital Marketing Channels



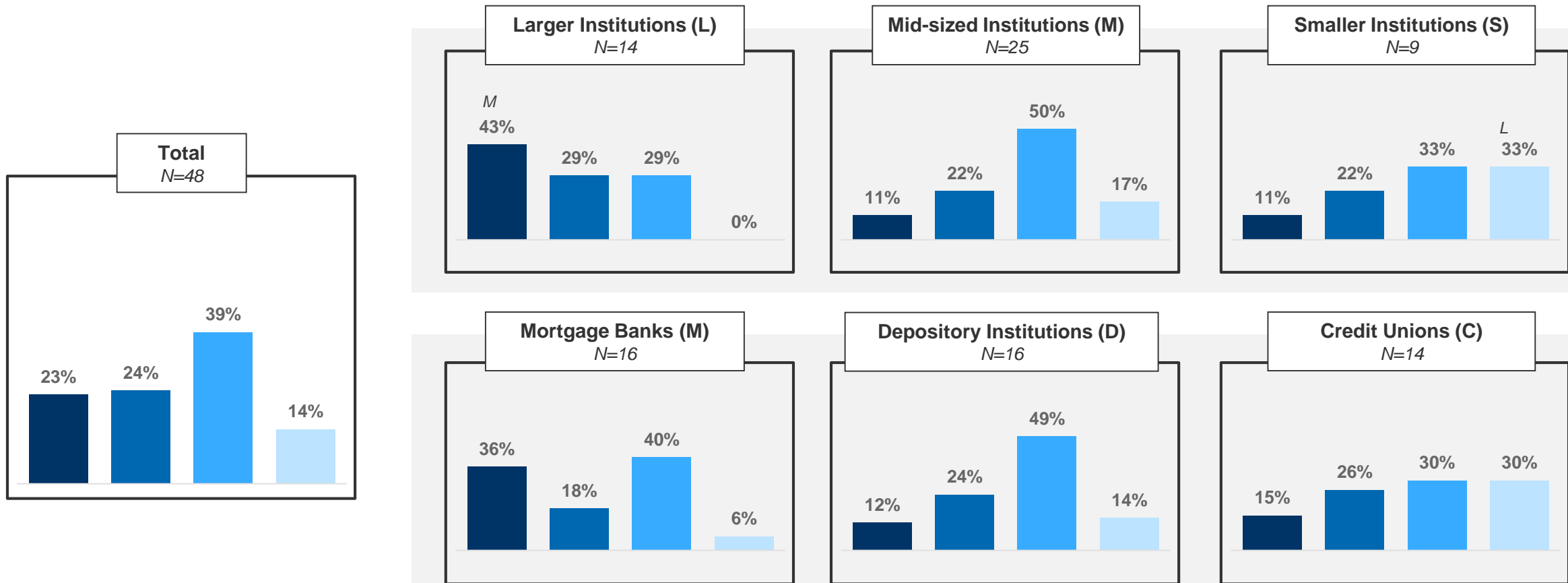
M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Appendix

Consumer-Facing Mobile Technologies

Mobile App Development

[IF offers mobile application] How did your firm develop the mobile app?

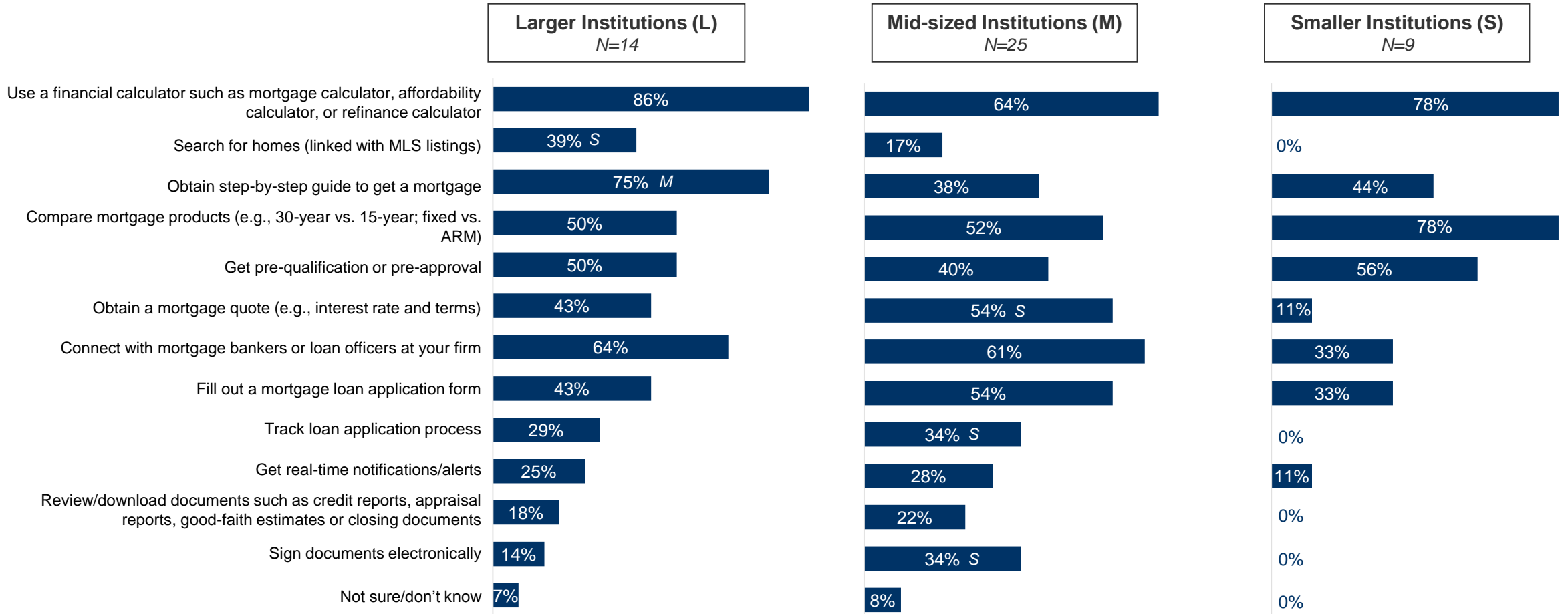


L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level
M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Activities Offered on Mobile Mortgage App (by lender size)

[IF offers mobile application] Please select what activities listed below consumers can perform on your firm's mobile app. Please check all that apply.

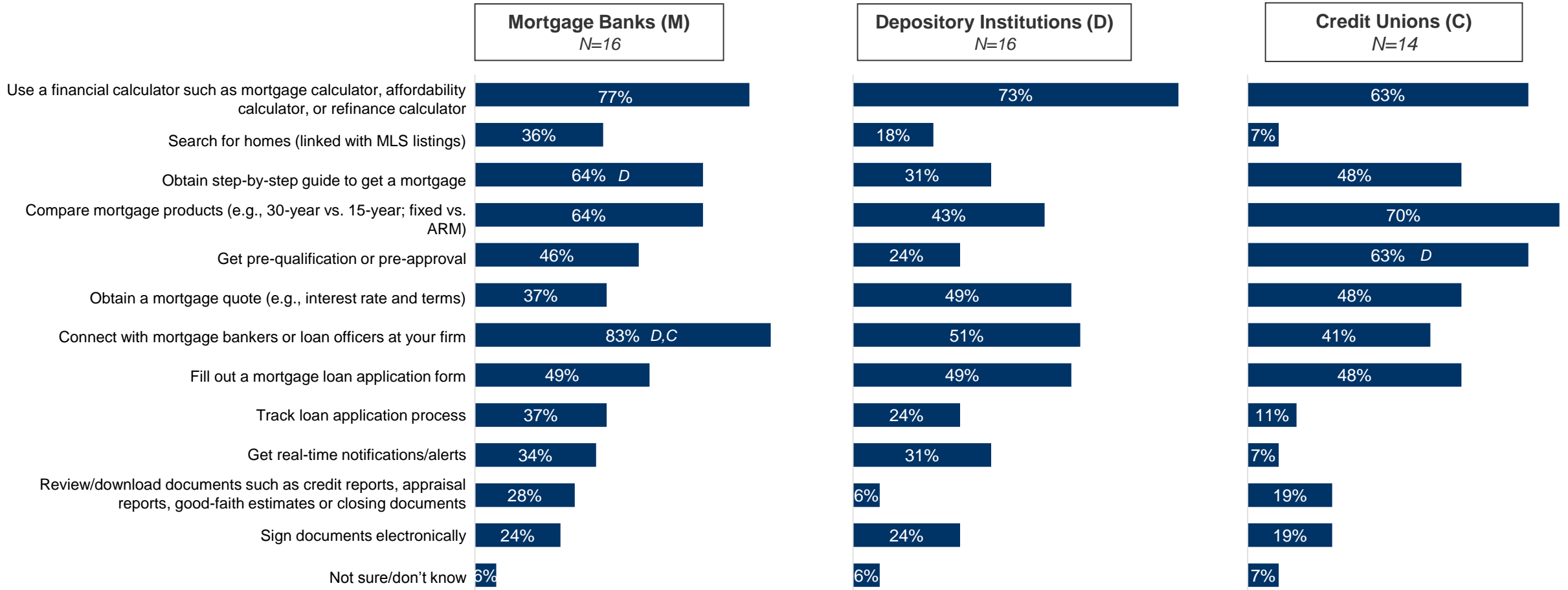


L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Activities Offered on Mobile Mortgage App (by lender type)

[IF offers mobile application] Please select what activities listed below consumers can perform on your firm's mobile app. Please check all that apply.



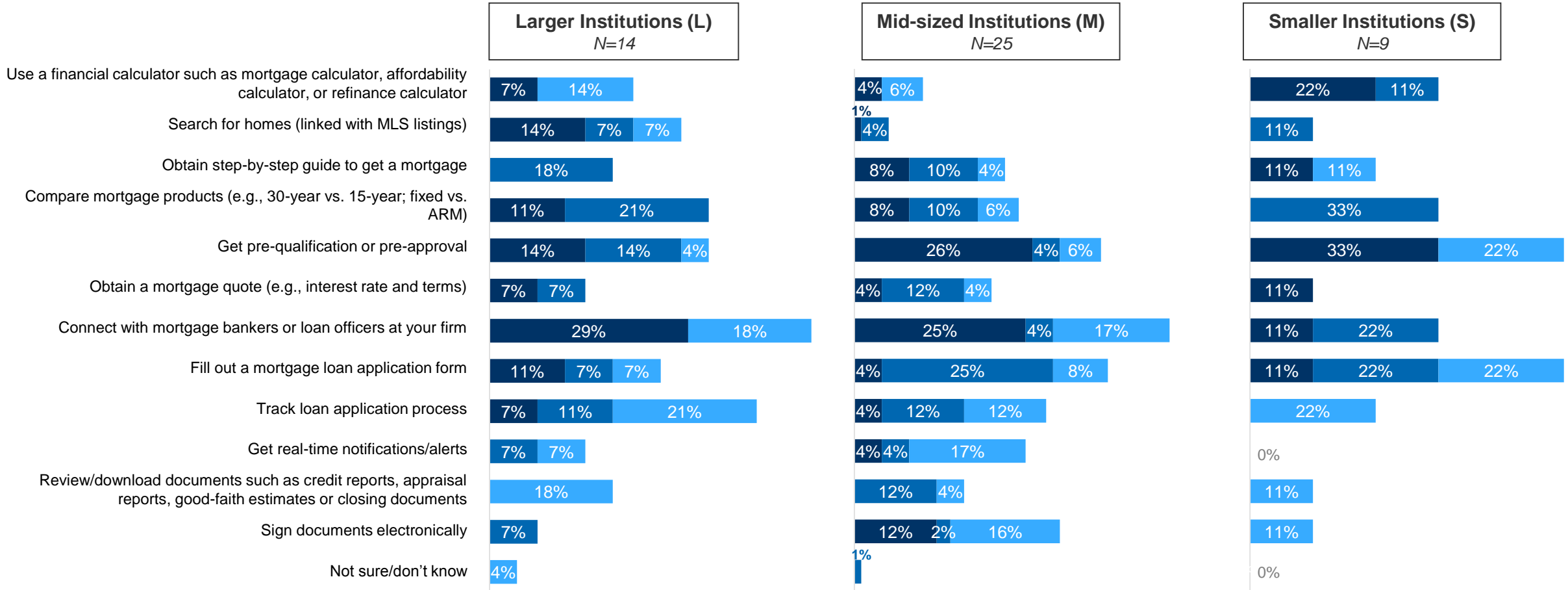
M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Important Mobile App Features (by lender size)

[IF offers mobile application] For the same list of mobile functionalities, regardless of whether your firm currently offers them or not, what are the three most important features to support your firm's mobile strategies?

Most Important **2nd Most Important** **3rd Most Important**

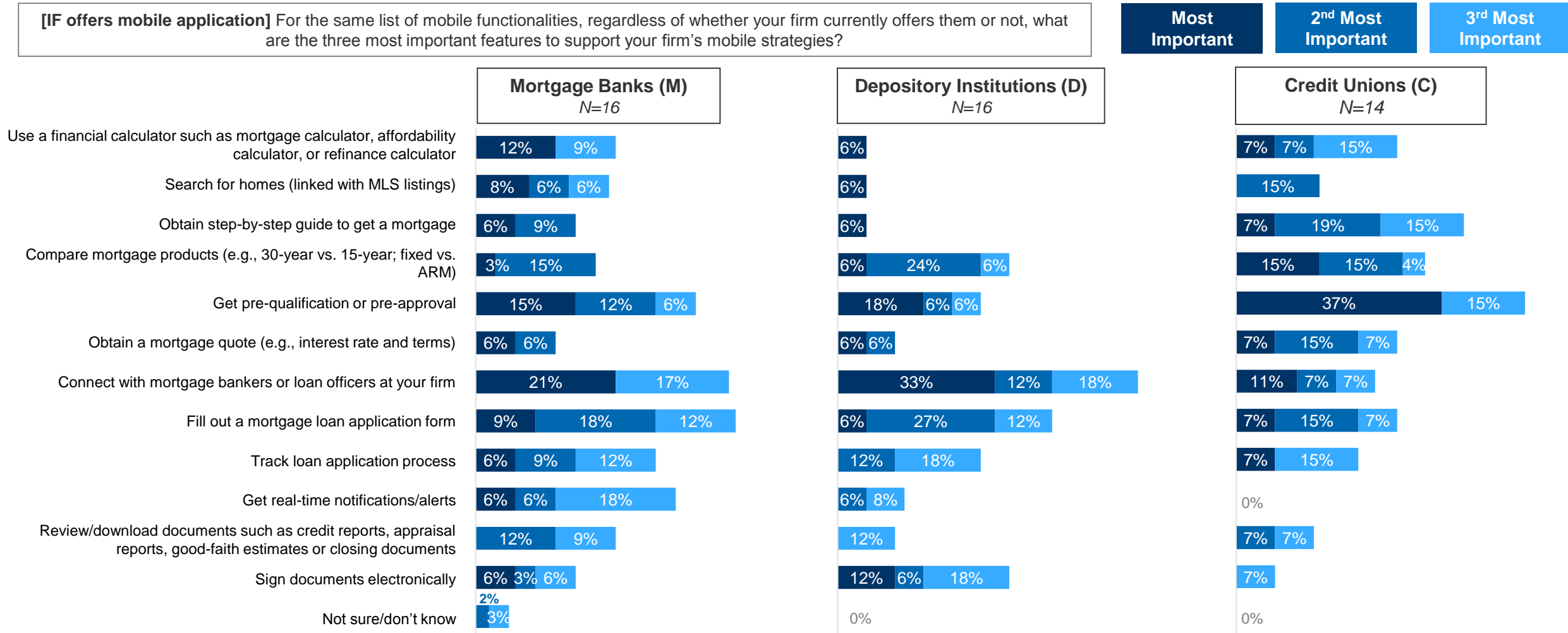


L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Important Mobile App Features (by lender type)

[IF offers mobile application] For the same list of mobile functionalities, regardless of whether your firm currently offers them or not, what are the three most important features to support your firm's mobile strategies?



M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

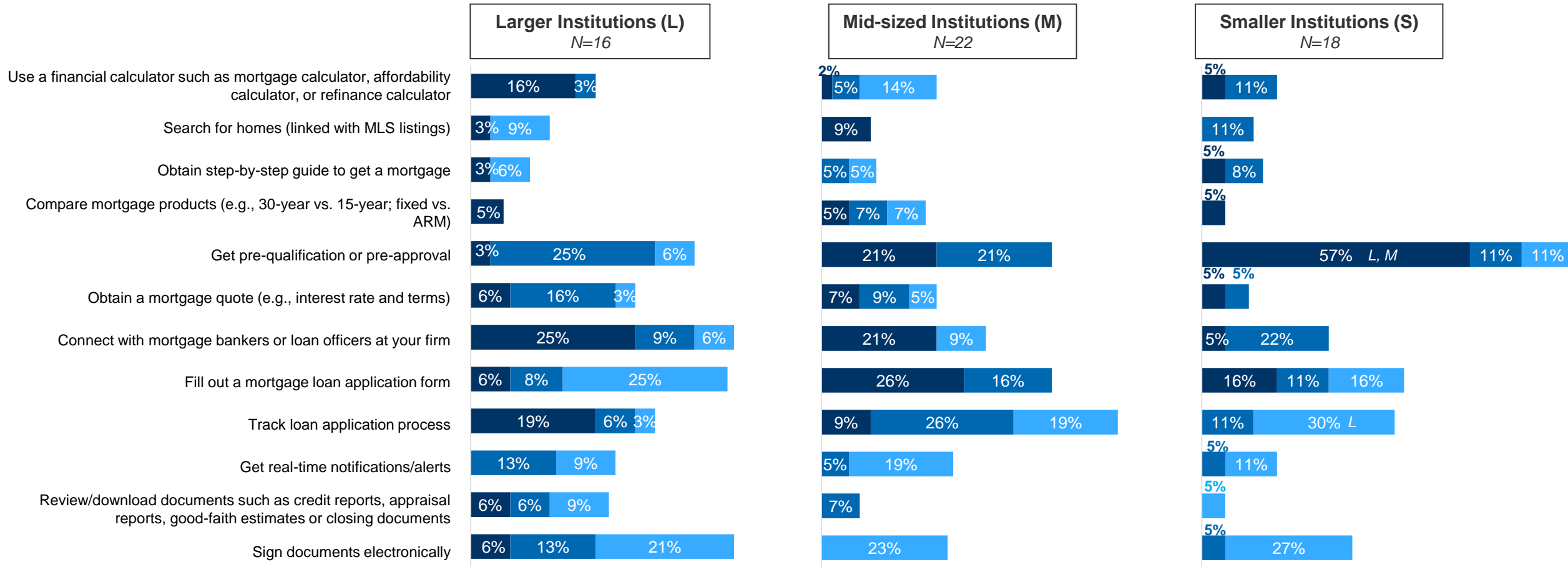
Potential Important Mobile App Features (by lender size)

[IF plans to offer mobile application] Listed below are some consumer-facing features that mobile apps could provide. Please select the three most important features to support your firm's mobile strategies and rank them in order of importance.

Most
Important

2nd Most
Important

3rd Most
Important



L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

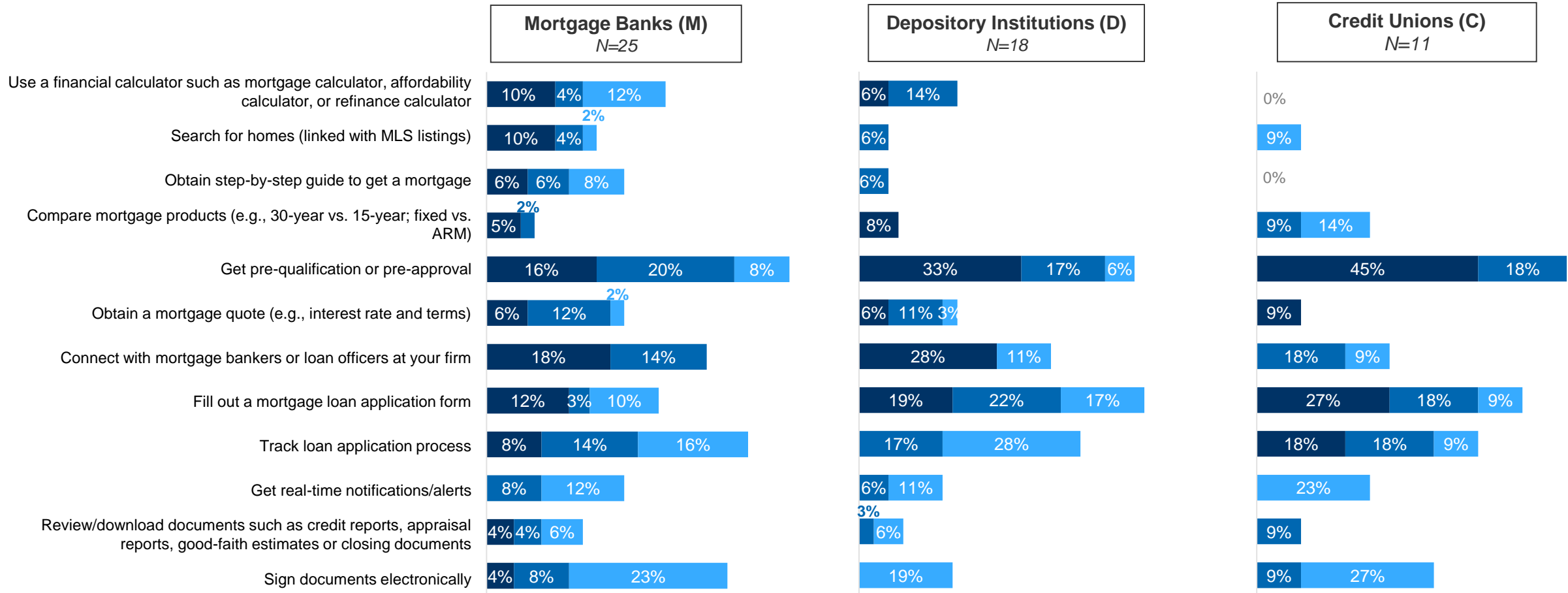
Potential Important Mobile App Features (by lender type)

[IF plans to offer mobile application] Listed below are some consumer-facing features that mobile apps could provide. Please select the three most important features to support your firm's mobile strategies and rank them in order of importance.

Most
Important

2nd Most
Important

3rd Most
Important



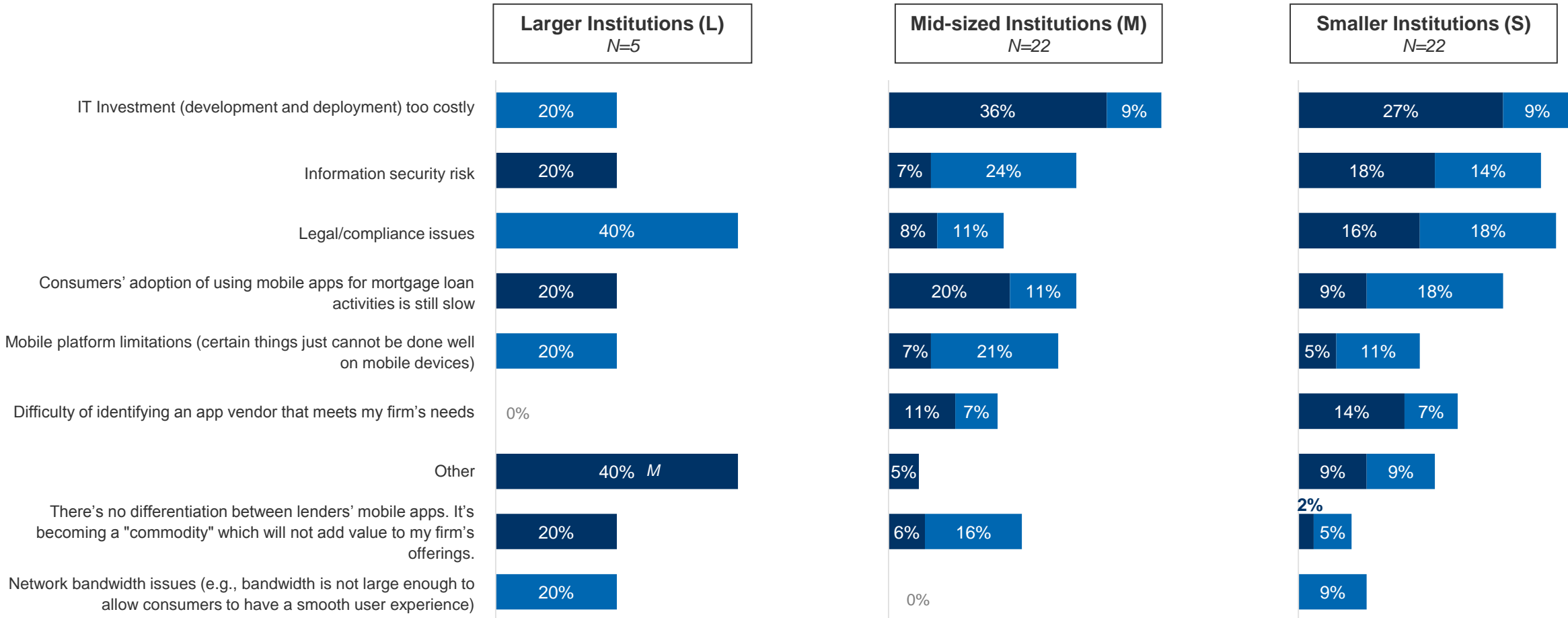
M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Reasons For Not Developing a Mobile App (by lender size)

[IF does not plan to offer mobile application for customers] Why does your firm NOT want to invest in developing or licensing a third-party mobile app to help consumers shop or obtain a mortgage? Please select the two most important reasons and rank them in order of importance.

Most Common Reason **2nd Most Common Reason**



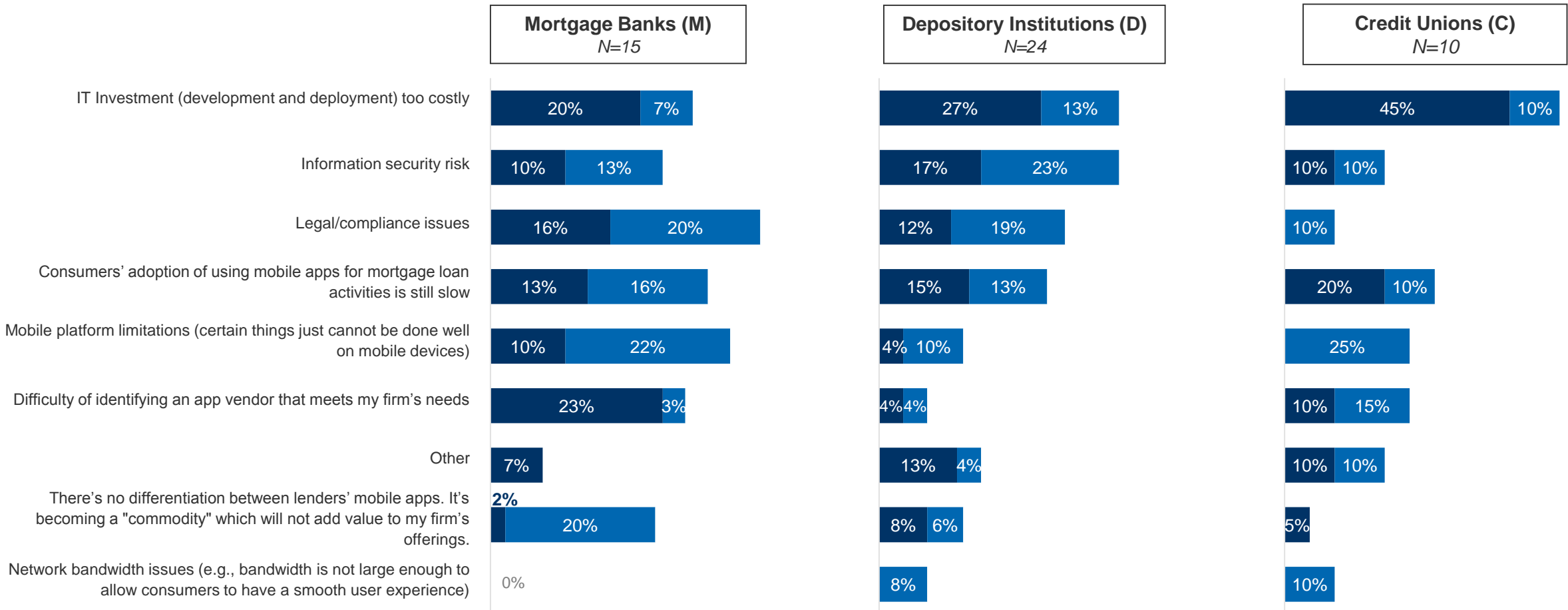
L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Reasons For Not Developing a Mobile App (by lender type)

[IF does not plan to offer mobile application for customers] Why does your firm NOT want to invest in developing or licensing third-party mobile app to help consumers shop or obtain a mortgage? Please select the two most important reasons and rank them in order of importance.

Most Common Reason **2nd Most Common Reason**



M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

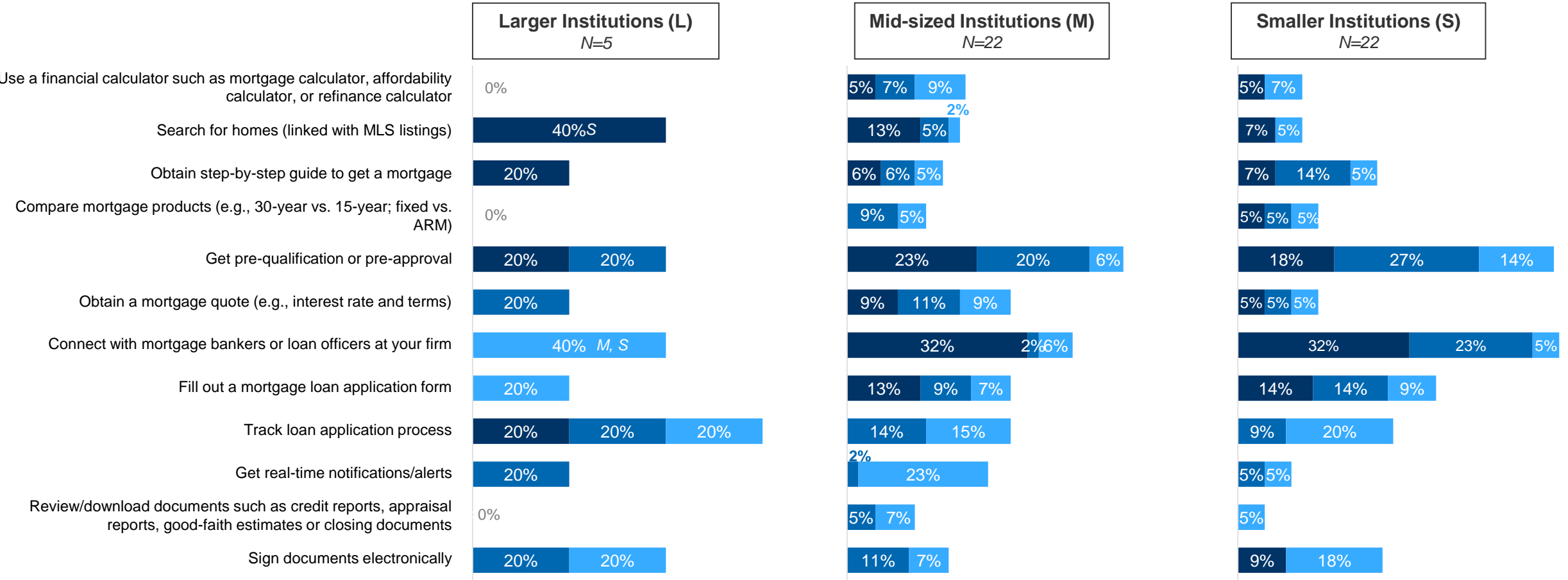
Potential Important Mobile App Features (by lender size)

[IF does not plan to offer mobile application for customers] If your firm were to deploy a mobile app for consumers in the future to support your firm's mobile strategies, what would be the three most important features? Please rank these features in order of importance.

Most
Important

2nd Most
Important

3rd Most
Important



L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

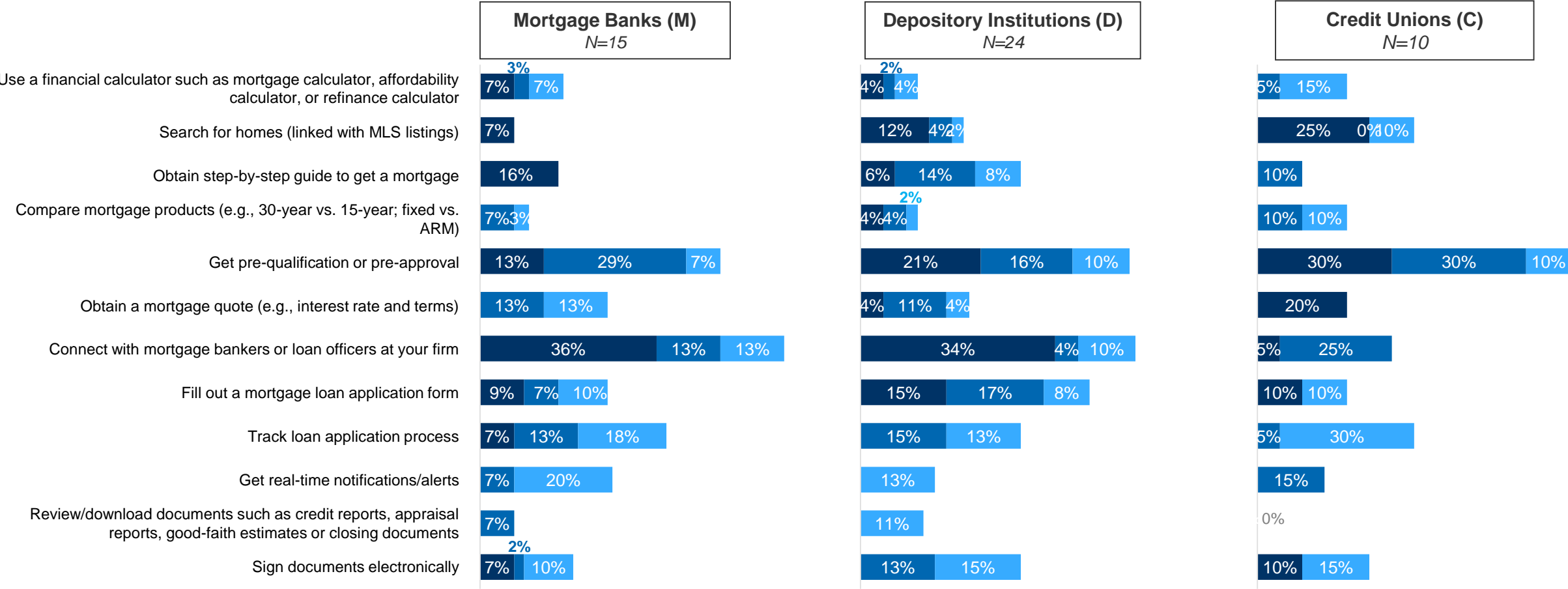
Potential Important Mobile App Features (by lender type)

[IF does not plan to offer mobile application for customers] If your firm were to deploy a mobile app for consumers in the future to support your firm's mobile strategies, what would be the three most important features? Please rank these features in order of importance.

Most
Important

2nd Most
Important

3rd Most
Important



M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Future Competitors Offering Mortgages via Mobile Channels (by whether lenders currently offer a mobile mortgage app)

Listed below are some key players in the technology or financial services industry. For the future, who do you think will be the **top two** competitors offering mortgages via mobile channels?

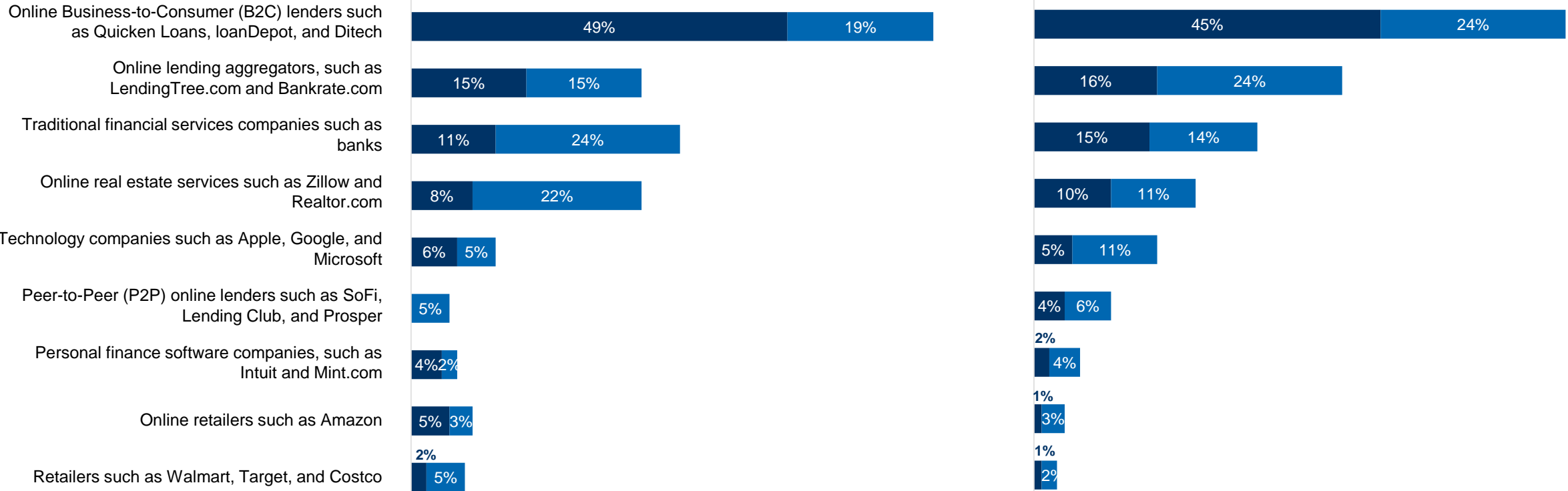
Top Competitor **2nd Top Competitor**

Lenders with Mobile Mortgage Apps

N=48

Lenders without Mobile Mortgage Apps

N=140



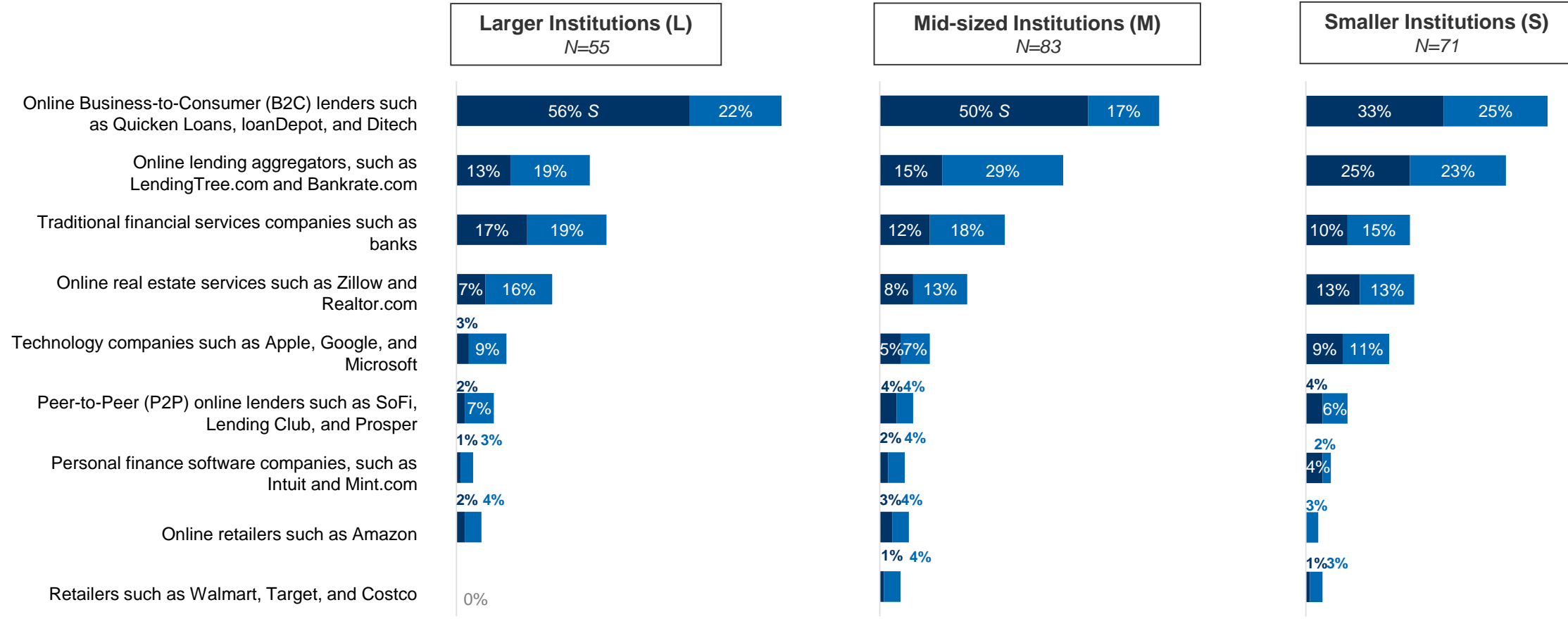
* Denotes a statistically significant difference at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Future Competitors Offering Mortgages via Mobile Channels (by lender size)

Listed below are some key players in the technology or financial services industry. For the future, who do you think will be the **top two** competitors offering mortgages via mobile channels?

Top Competitor **2nd Top Competitor**

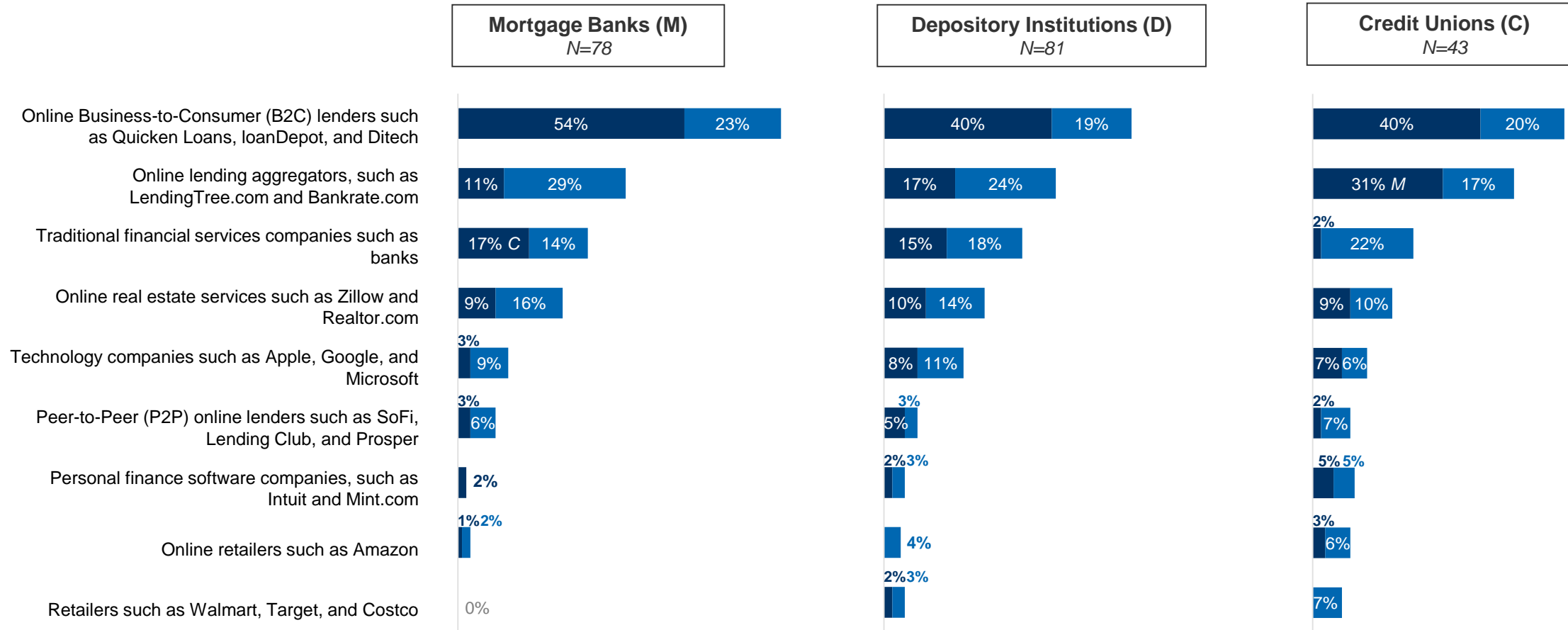


L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Future Competitors Offering Mortgages via Mobile Channels (by lender type)

Listed below are some key players in the technology or financial services industry. For the future, who do you think will be the **top two** competitors offering mortgages via mobile channels?

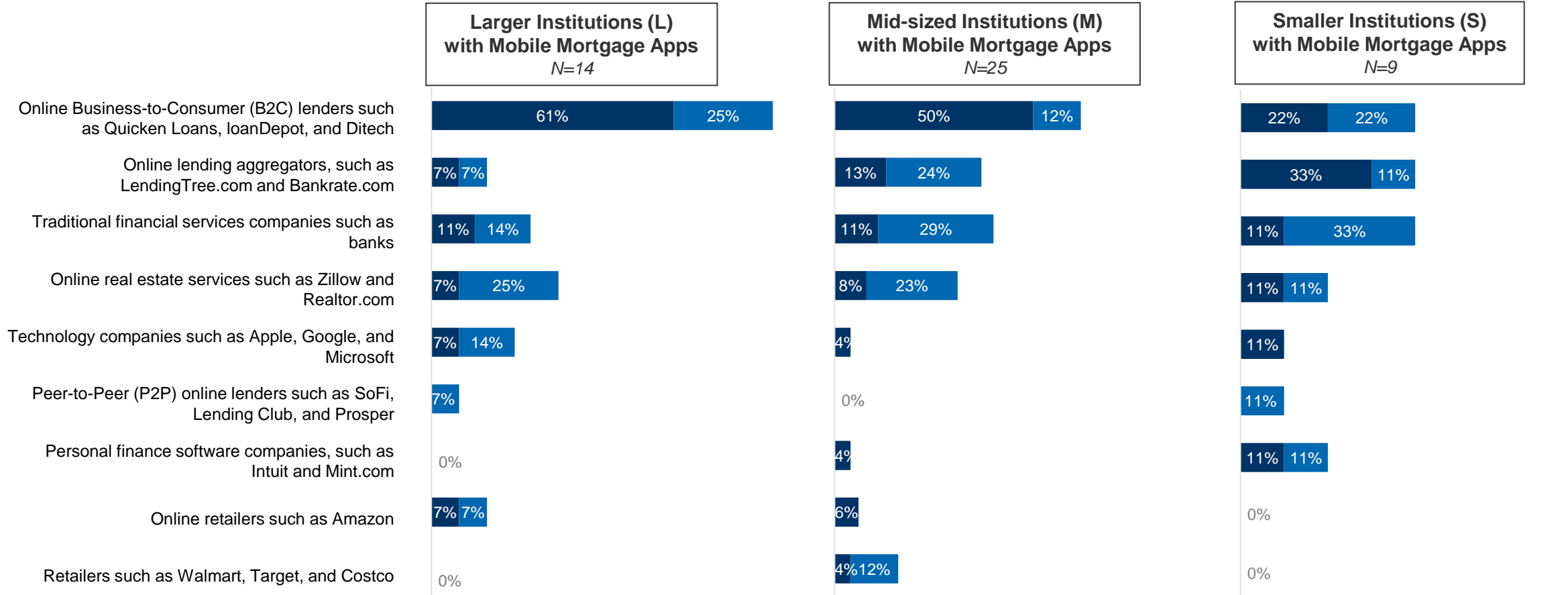
Top Competitor **2nd Top Competitor**



M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Future Competitors Offering Mortgages via Mobile Channels (by lender size, among lenders with mobile mortgage apps)

Listed below are some key players in the technology or financial services industry. For the future, who do you think will be the **top two** competitors offering mortgages via mobile channels?

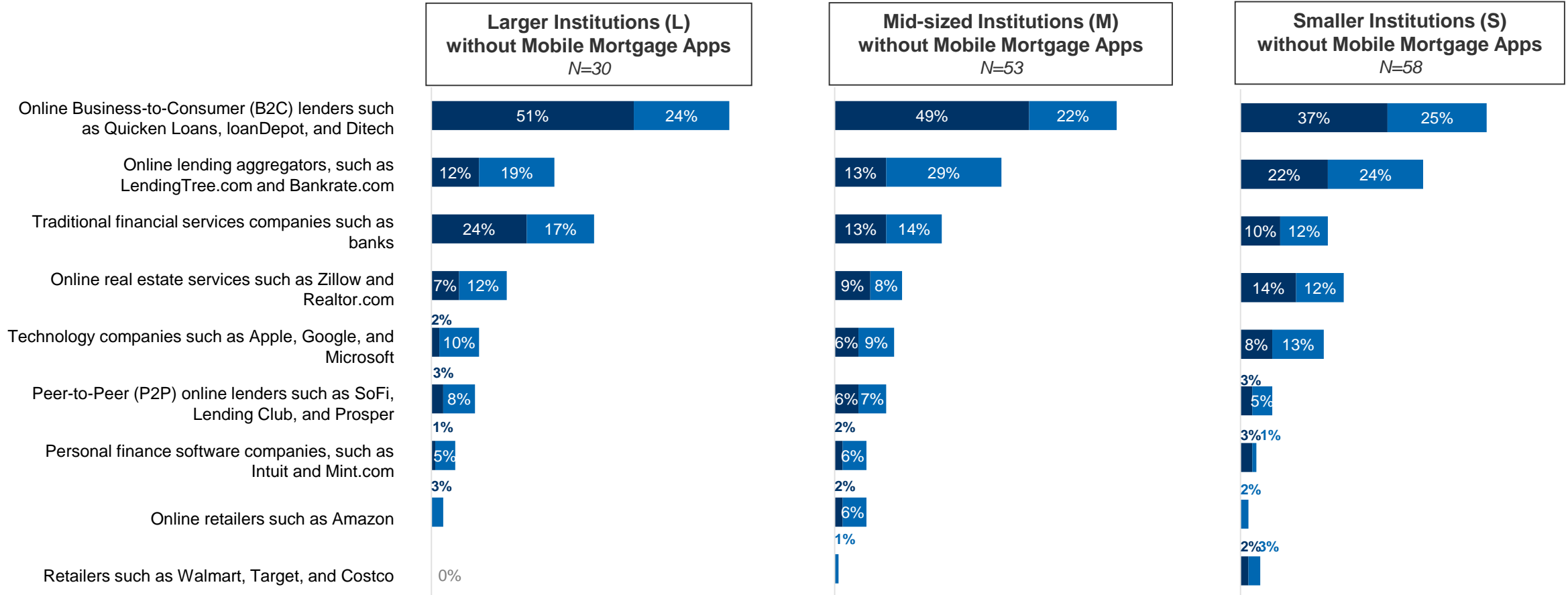


L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Future Competitors Offering Mortgages via Mobile Channels (by lender size, among lenders without consumer mortgage apps)

Listed below are some key players in the technology or financial services industry. For the future, who do you think will be the **top two** competitors offering mortgages via mobile channels?



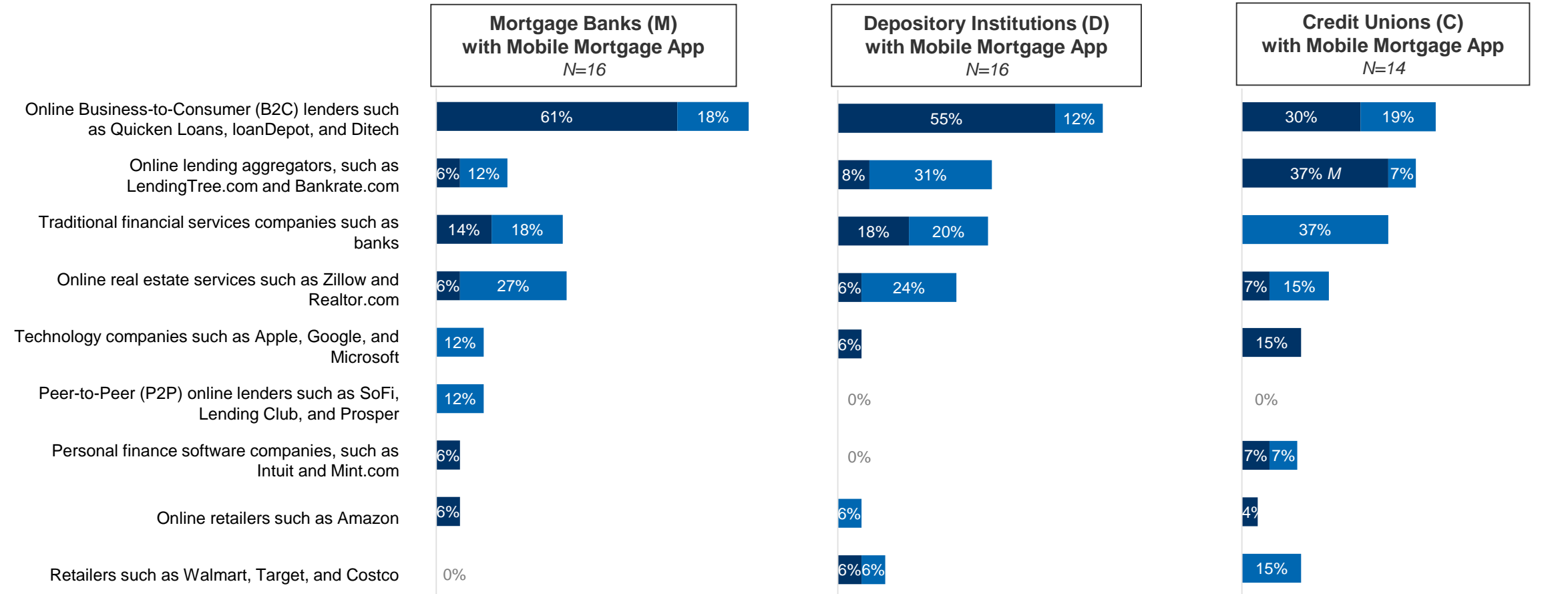
L/M/S - Denote a % is significantly higher than the annual loan origination volume group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Future Competitors Offering Mortgages via Mobile Channels (by lender type, among lenders with mobile mortgage apps)

Listed below are some key players in the technology or financial services industry. For the future, who do you think will be the **top two** competitors offering mortgages via mobile channels?

Top Competitor **2nd Top Competitor**

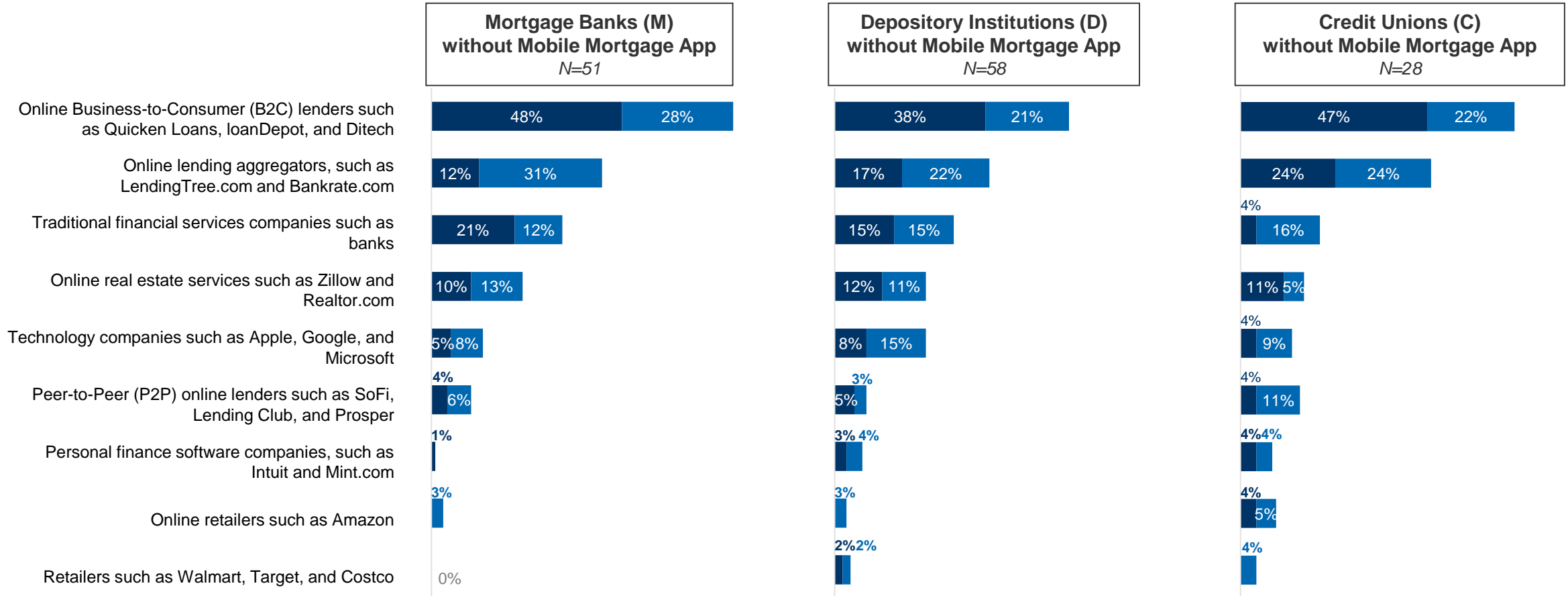


M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Future Competitors Offering Mortgages via Mobile Channels (by lender type, among lenders without mobile mortgage apps)

Listed below are some key players in the technology or financial services industry. For the future, who do you think will be the **top two** competitors offering mortgages via mobile channels?



M/D/C - Denote a % is significantly higher than the institution type group that the letter represents at the 95% confidence level

Due to small sample sizes, results should be interpreted with caution

Question Text

Marketing/Sales Channels

qR92. Does your firm originate purchase or refinance mortgages directly with consumers or directly interact with consumers in originating purchase or refinance mortgages?

qR93. Please indicate if your firm currently uses any of these channels to market your mortgage products to consumers.

- Traditional mass media (e.g., TV, radio, and magazines)
- Your firm's website
- Social media (i.e., blog, Facebook, Twitter, YouTube)
- Web/online banner ads
- Email
- Direct mail
- Retail branches/offices
- Advertising on third-party websites (e.g., bankrate.com, realtors.com, Zillow, LendingTree, etc.)
- Partnership with third-parties such as home builders, aggregators, or realtors
- Partnerships with government housing agencies or non-profit organizations
- Loan officers' networking and contacts
- Mobile Applications (apps)
- Other

qR94. Among the channels your firm currently uses, which are your firm's Top TWO channels to market your mortgage products to consumers?

- Traditional mass media (e.g., TV, radio, and magazines)
- Your firm's website
- Social media (i.e., blog, Facebook, Twitter, YouTube)
- Web/online banner ads
- Email
- Direct mail
- Retail branches/offices
- Advertising on third-party websites (e.g., bankrate.com, realtors.com, Zillow, LendingTree, etc.)
- Partnership with third-parties such as home builders, aggregators, or realtors
- Partnerships with government housing agencies or non-profit organizations
- Loan officers' networking and contacts
- Mobile Applications (apps)
- Other

qR95. Now, thinking about your firm's future channel strategy, which TWO channels will be your firm's investment priorities over the next 12 months?

- Traditional mass media (e.g., TV, radio, and magazines)
- Your firm's website
- Social media (i.e., blog, Facebook, Twitter, YouTube)
- Web/online banner ads
- Email
- Direct mail
- Retail branches/offices
- Advertising on third-party websites (e.g., bankrate.com, realtors.com, Zillow, LendingTree, etc.)
- Partnership with third-parties such as home builders, aggregators, or realtors
- Partnerships with government housing agencies or non-profit organizations
- Loan officers' networking and contacts
- Mobile Applications (apps)
- Other

Question Text

Consumer-Facing Mobile Technologies

qR96. Does your firm currently offer a mobile application (app) (developed internally or externally) to help consumers shop or obtain a mortgage?

qR97. How did your firm develop the mobile app?

- Higher credit scores
- Lower LTV ratio
- Lower DTI ratio
- Additional documentation
- Restrictions on property type
- Limitations on sources of funds permitted for down payment and closing costs
- Other

qR98. Please select what activities listed below consumers can perform on your firm's mobile app. Please check all that apply.

- Use a financial calculator such as mortgage calculator, affordability calculator, or refinance calculator
- Search for homes (linked with MLS listings)
- Obtain step-by-step guide to get a mortgage
- Compare mortgage products (e.g., 30-year vs. 15-year; fixed vs. ARM)
- Get pre-qualification or pre-approval
- Obtain a mortgage quote (e.g., interest rate and terms)
- Connect with mortgage bankers or loan officers at your firm
- Fill out a mortgage loan application form
- Track loan application process
- Get real-time notifications/alerts
- Review/download documents such as credit report, appraisal report, good-faith estimates or closing documents
- Sign documents electronically
- Other

qR99. Which three features of your firm's mobile app are considered the most important?

- Use a financial calculator such as mortgage calculator, affordability calculator, or refinance calculator
- Search for homes (linked with MLS listings)
- Obtain step-by-step guide to get a mortgage
- Compare mortgage products (e.g., 30-year vs. 15-year; fixed vs. ARM)
- Get pre-qualification or pre-approval
- Obtain a mortgage quote (e.g., interest rate and terms)
- Connect with mortgage bankers or loan officers at your firm
- Fill out a mortgage loan application form
- Track loan application process
- Get real-time notifications/alerts
- Review/download documents such as credit report, appraisal report, good-faith estimates or closing documents
- Sign documents electronically
- Other

Question Text

Consumer-Facing Mobile Technologies (continued)

qR100. Does your firm plan to deploy a mobile app (developed internally or externally) over the next 12 months to help consumers shop for homes or obtain a mortgage?

qR101. Listed below are some consumer-facing features that mobile apps could provide. Please select the three most important features for your firm’s mobile app and rank them in order of importance.

- Use a financial calculator such as mortgage calculator, affordability calculator, or refinance calculator
- Search for homes (linked with MLS listings)
- Obtain step-by-step guide to get a mortgage
- Compare mortgage products (e.g., 30-year vs. 15-year; fixed vs. ARM)
- Get pre-qualification or pre-approval
- Obtain a mortgage quote (e.g., interest rate and terms)
- Connect with mortgage bankers or loan officers at your firm
- Fill out a mortgage loan application form
- Track loan application process
- Get real-time notifications/alerts
- Review/download documents such as credit report, appraisal report, good-faith estimates or closing documents
- Sign documents electronically
- Other

qR102. Why does your firm NOT want to invest in developing or licensing third-party mobile app to help consumers shop or obtain a mortgage? Please select the two most important reasons and rank them in order of importance.

- Network bandwidth issues (e.g., Bandwidth is not large enough to allow consumers to have a smooth user experience)
- Information security risk
- IT Investment (development and deployment) too costly
- Consumers’ adoption of using mobile apps for mortgage loan activities is still slow
- Mobile platform limitations (certain things just cannot be done well on mobile devices)
- There’s no differentiation between lenders’ mobile apps. It’s becoming a “commodity” which will not add value to my firm’s offerings.
- Legal/compliance issues
- Difficulty of identifying an app vendor that meets my firm’s needs
- Other

qR103. If your firm were to deploy a mobile app for consumers in the future, what would be the THREE most important features? Please rank these features in order of importance.

- Use a financial calculator such as mortgage calculator, affordability calculator, or refinance calculator
- Search for homes (linked with MLS listings)
- Obtain step-by-step guide to get a mortgage
- Compare mortgage products (e.g., 30-year vs. 15-year; fixed vs. ARM)
- Get pre-qualification or pre-approval
- Obtain a mortgage quote (e.g., interest rate and terms)
- Connect with mortgage bankers or loan officers at your firm
- Fill out a mortgage loan application form
- Track loan application process
- Get real-time notifications/alerts
- Review/download documents such as credit report, appraisal report, good-faith estimates or closing documents
- Sign documents electronically
- Other

Question Text

Consumer-Facing Mobile Technologies (continued)

qR102. Listed below are some key players in the technology or financial services industry. For the future, who do you think will be the **top two** competitors offering mortgages via mobile channels?

- Technology companies such as Apple, Google, and Microsoft
- Retailers such as Walmart, Target, and Costco
- Online Business-to-Consumer (B2C) lenders such as Quicken Loans, loanDepot, and Ditech
- Traditional financial services companies such as banks
- Personal finance software companies, such as Intuit and Mint.com
- Online retailers such as Amazon
- Online real estate services such as Zillow and Realtor.com
- Online lending aggregators, such as LendingTree.com and Bankrate.com
- Peer-to-Peer (P2P) online lenders such as SoFi, Lending Club, and Prosper
- Other

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