

TOPICAL REPORT

Digital Banks: Threats & Opportunities

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Digital Banks: Threats & Opportunities

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INTRODUCTION

About this report

The Monetary Authority of Singapore (MAS) announced on August 2019 the criteria for the issuing of new digital bank licenses in Singapore. Compared to traditional banks, these new banks will operate entirely online without any physical bank branches. Diving into data collected as part of the Customer Satisfaction Index of Singapore (CSISG) study, this report seeks to provide insights to the following questions:



- What is the willingness of customers to take up products with Digital Banks?
- Who is more likely to try using Digital Banks in Singapore?
- How can traditional banks defend against new Digital Banks?
- How might Digital Banks entice current banking customers to switch over?

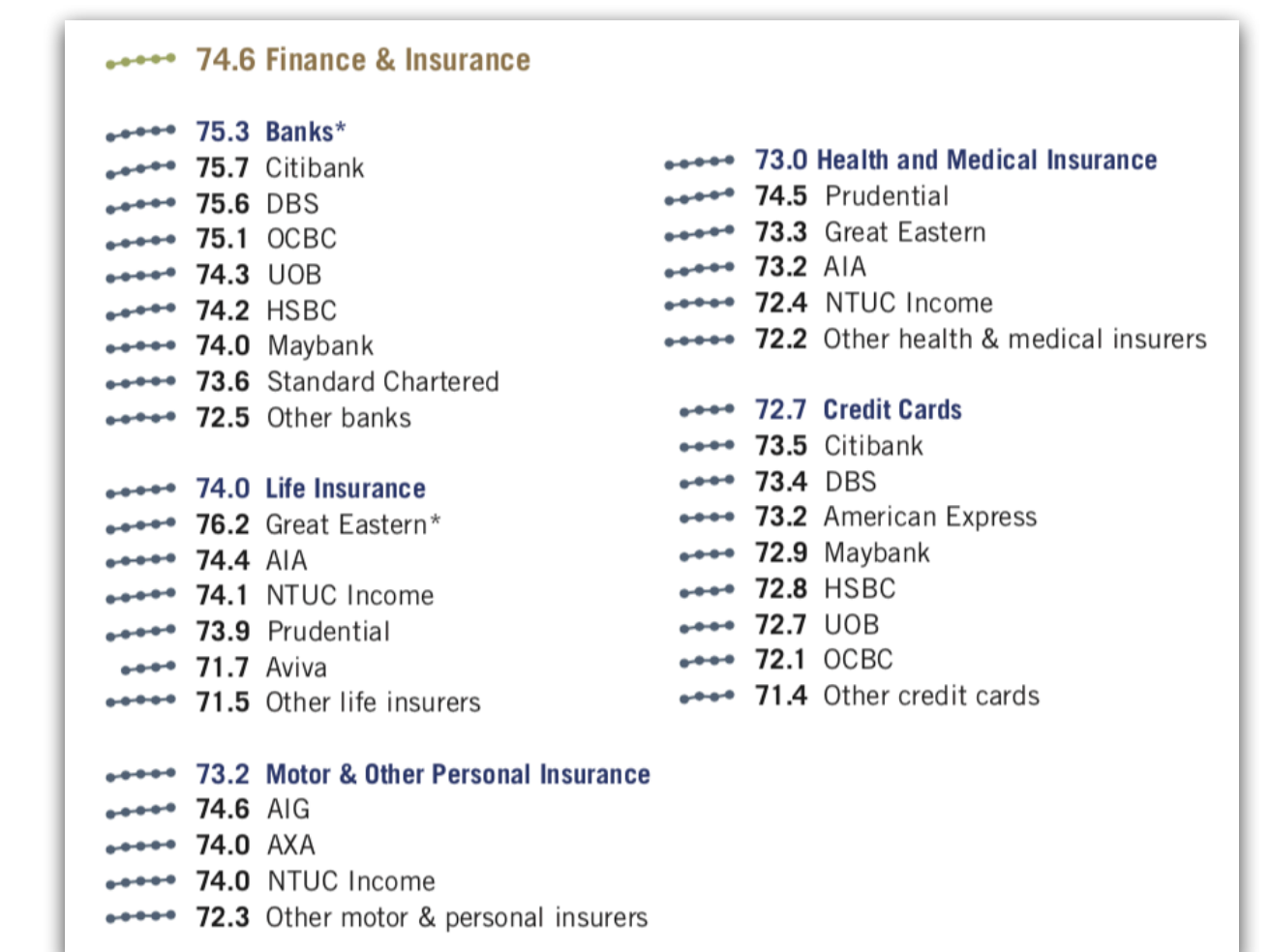
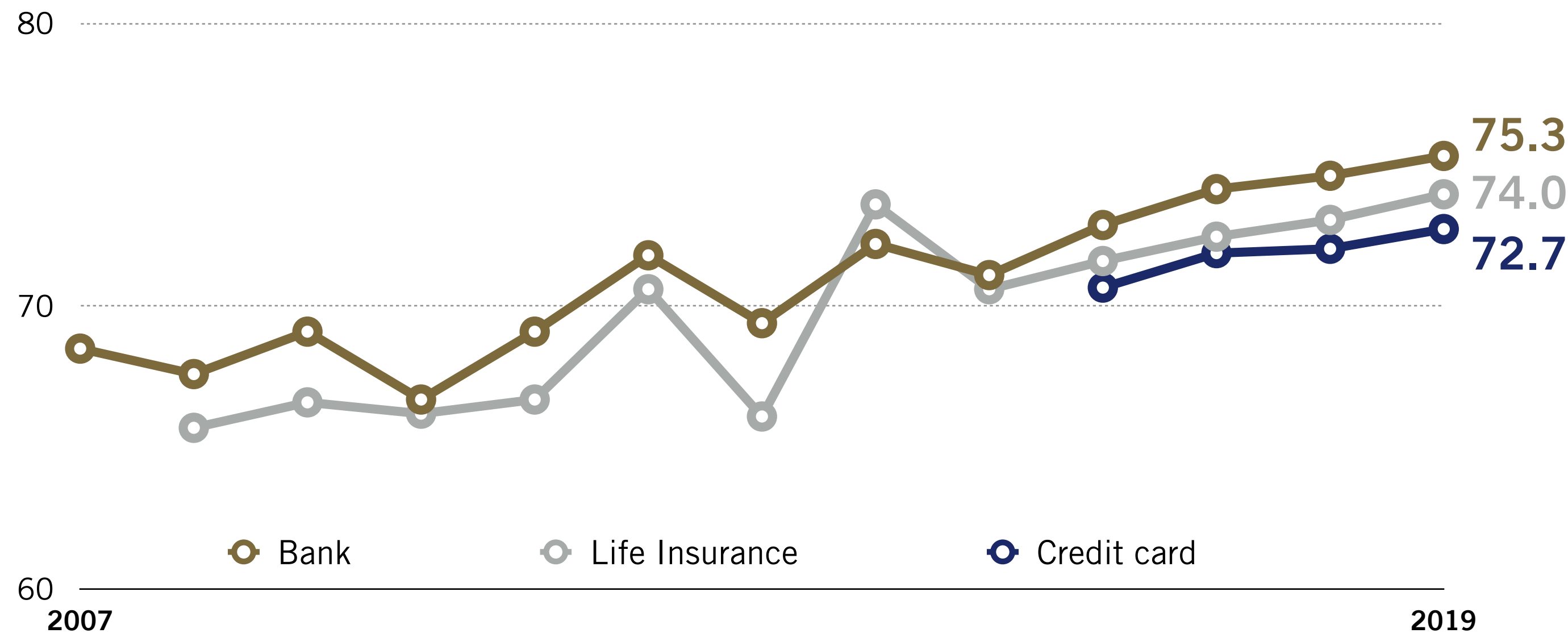
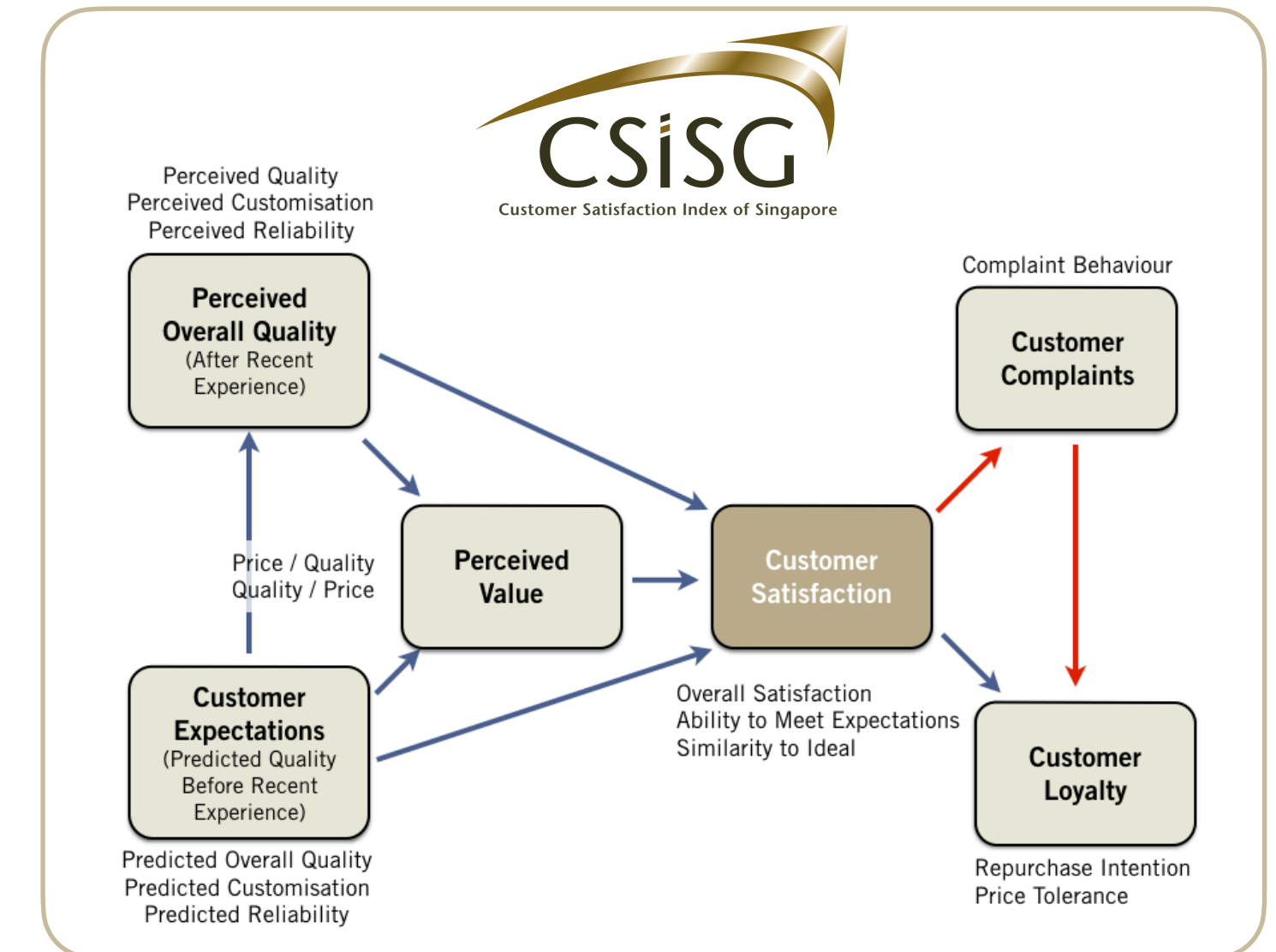
Full digital bank license — Shortlisted applicants

				
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METHODOLOGY

The Customer Satisfaction Index of Singapore

- The Customer Satisfaction Index of Singapore (CSISG) is the only national, cross-industry customer satisfaction index in Singapore.
- An established methodology modelled after the American Customer Satisfaction Index (ACSI) developed by the University of Michigan in 1994.
- The CSISG has been measuring the Banking sub-sector since 2008.
- The data in this report was extracted from the 2019 research on the sub-sector.



Research Methodology

	Banking Sub-Sector
Data Collection Methodology	Door-to-door household surveys with local residents who have a Current or Savings account (CASA) and have interacted with their Bank in the last 3 months.
Fieldwork Period	Oct 2019 to Jan 2020
Sample Size	Banking Sub-Sector: n=1430 Local Banks (DBS, UOB, OCBC): n=200 each Foreign Banks (HSBC, StanChart, Citibank, Maybank): n=170 each Other Banks: n=150

EXECUTIVE SUMMARY

Willingness To Apply for Products Through New Digital Banks

Generally, banking customers were almost split down the middle, with 43.3% willing to apply products with digital banks.



Question on Willingness to Apply for Products on Digital Banks
“Now, which of the following products would you be willing to apply for through a digital bank?”

56.7%

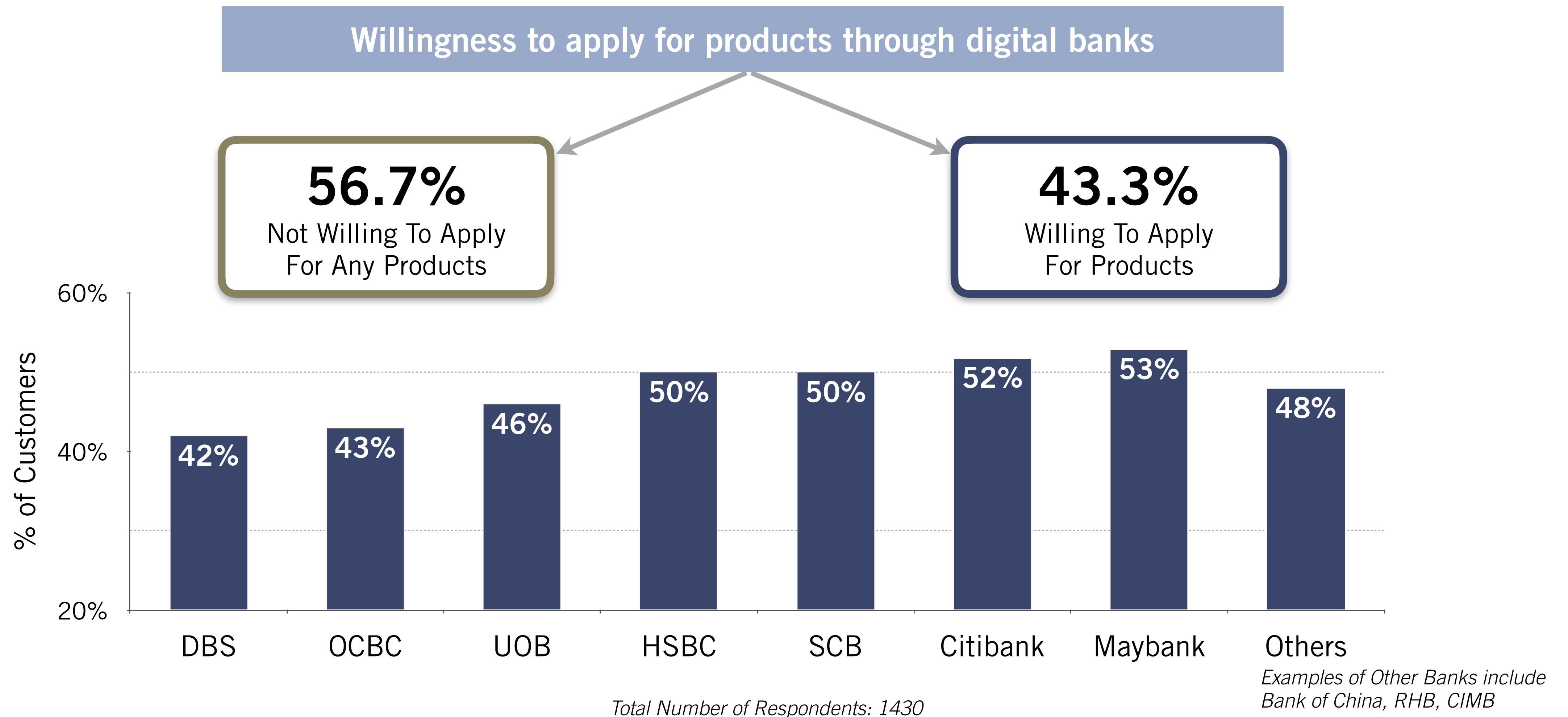
Not Willing To Apply
For Any Products

43.3%

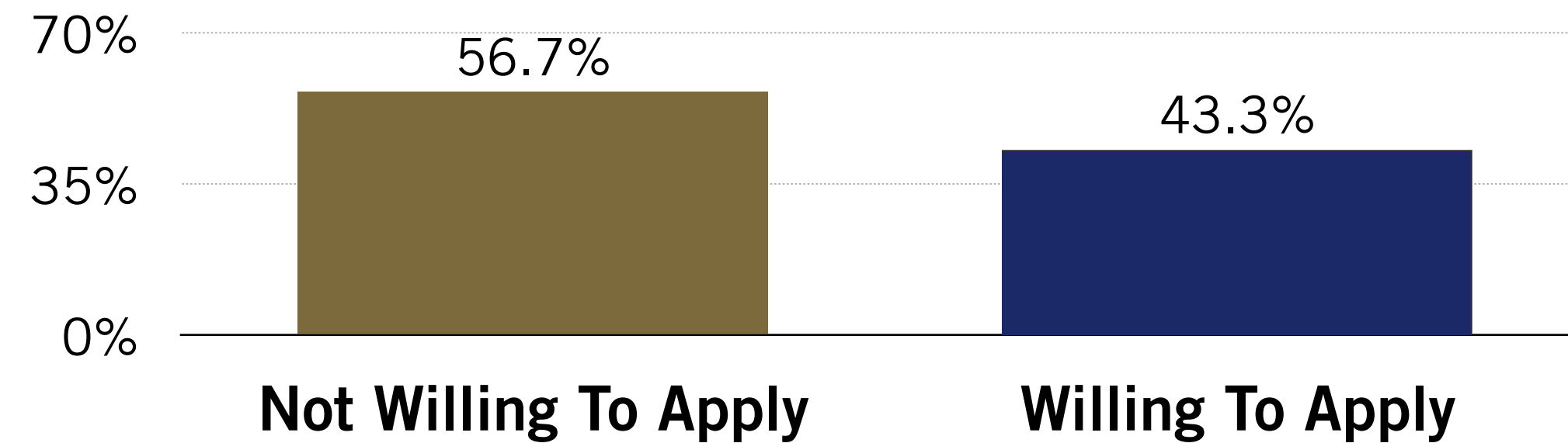
Willing To Apply
For Products

Customers of Foreign Banks More Willing To Try Digital Banks

While a significant proportion of banking customers were willing to try applying for products on digital banks (43.3%), customers of local banks seemed less willing to do so, compared to foreign banks' customers.



Who Are They: Emerging Affluent Customers Aged Between 18-49 Years Old Appear More Willing To Apply for Digital Banking



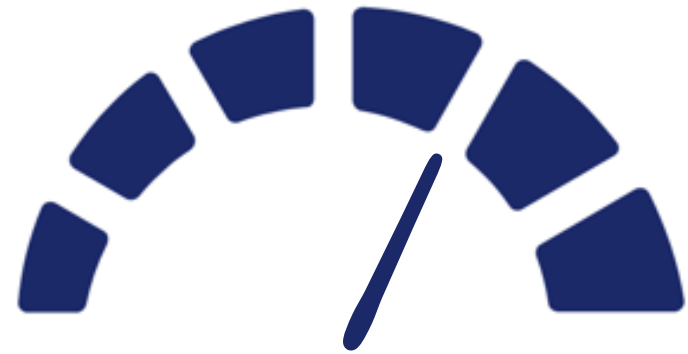
		Not Willing To Apply	Willing To Apply
Online Banking Usage	Used Internet/ Mobile Banking	48.5%	51.5%
	Did Not Use Internet/ Mobile Banking	77.9%	22.1%
Age	18 to 29 Years	43.8%	56.2%
	30 to 49 Years	48.4%	51.6%
	50 Years & Above	76.5%	23.5%
Personal Income	Under SGD 3K	53.2%	46.8%
	SGD 3K - Under SGD 6K	46.6%	53.4%
	SGD 6K - Under SGD 10K	45.2%	54.8%
	SGD 10K or over	65.1%	34.9%
		% Within Each Demographic Sub-Group (Row Percentage)	

Willingness To Try: Customers Willing To Try Digital Banks Are Not Underserved

In fact, they are more loyal and rate their current banks higher on several attributes

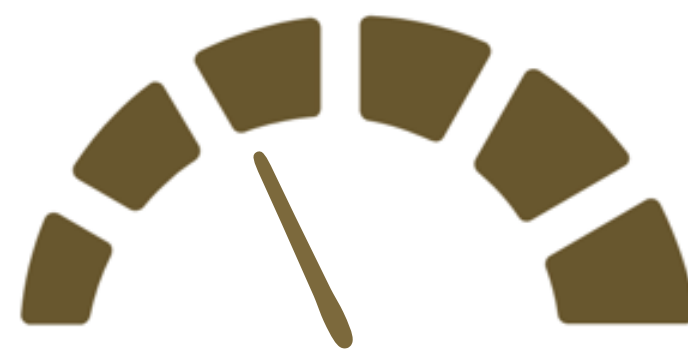
Customer Loyalty Score (0 to 100 Scale)

73.3



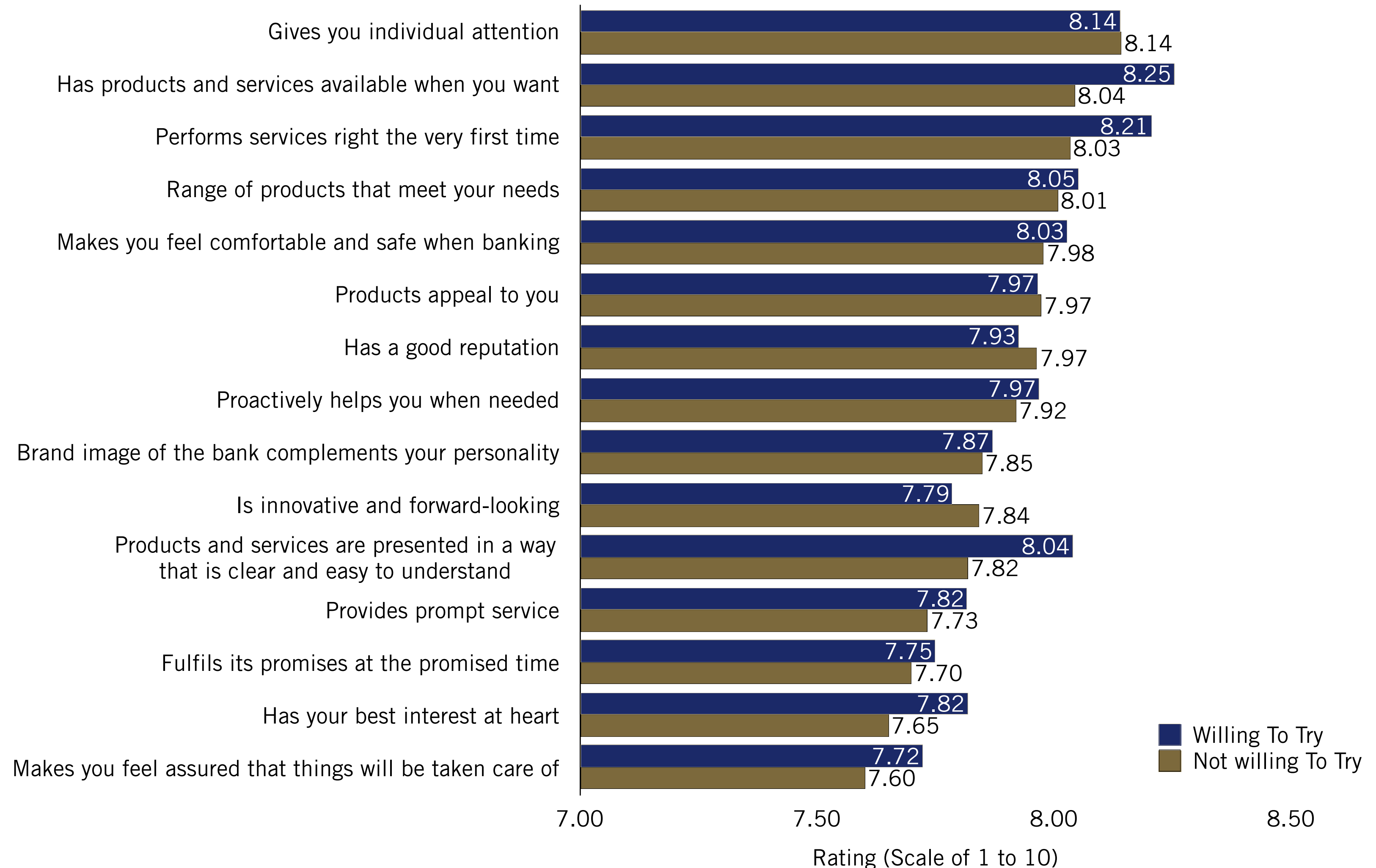
Loyalty score amongst those **WILLING** to try Digital Banks

70.9

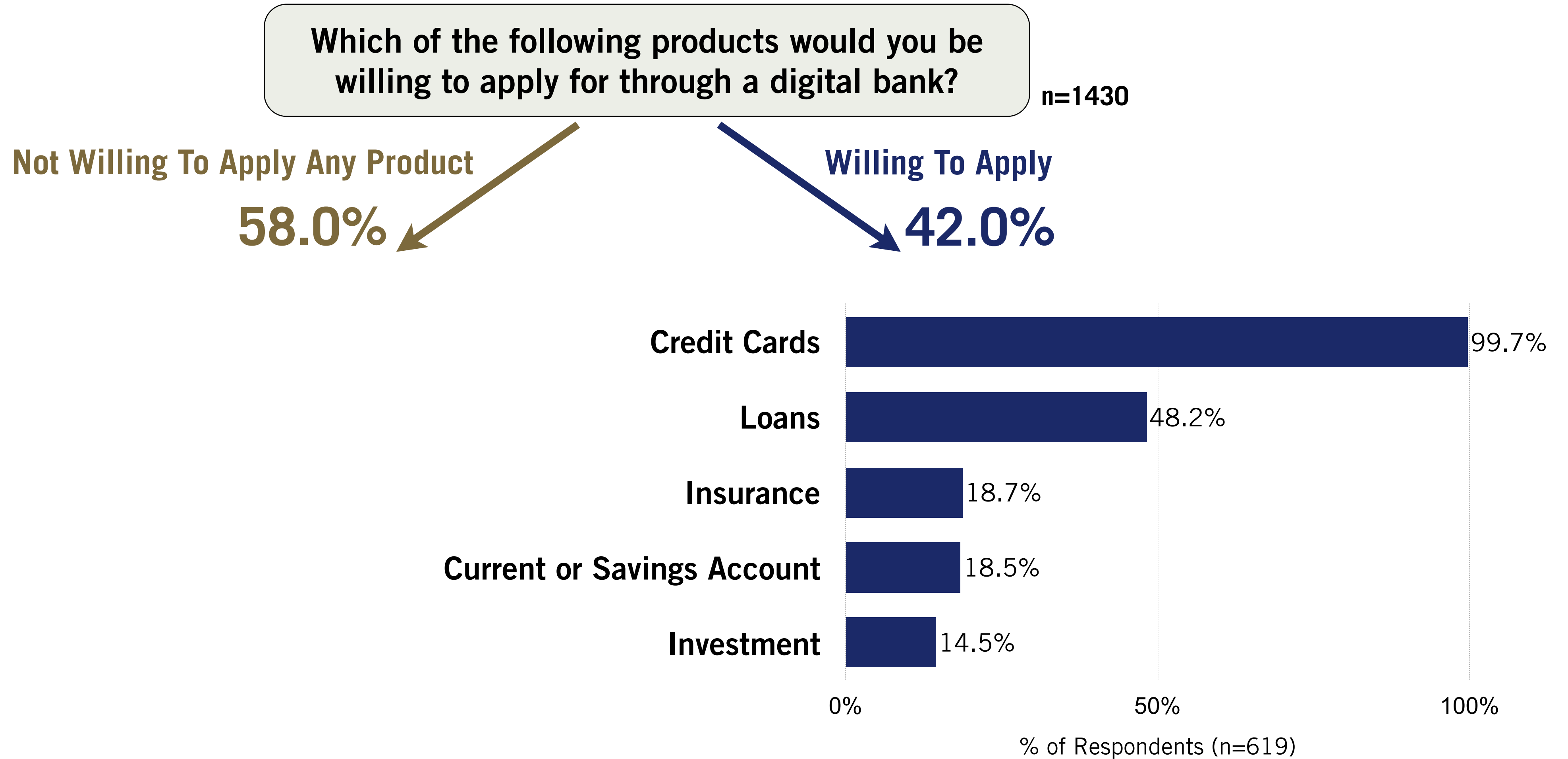


Loyalty score amongst those **NOT WILLING** to try Digital Banks

Attribute Ratings



What Are They Willing To Try: Top Products for Potential Customers of Digital Banks Are Credit Cards and Loans



Multiple responses allowed, hence percentages may not add up to 100%

Defending Against Digital Banks: Customers Willing To Try Digital Banks Were Driven by Availability and Efficiency

Increasing Impact on Customer Loyalty

DRIVERS OF LOYALTY FOR CURRENT BANK	
Customers <u>Not</u> Willing To Apply for Products Through Digital Banks	Customers <u>Willing</u> To Apply for Products Through Digital Banks
Products and services are presented in a way that is clear and easy to understand	Has products and services available when you want
Is innovative and forward-looking	Has a good reputation
Gives you individual attention	Performs services right the very first time
Has a good reputation	Products and services are presented in a way that is clear and easy to understand

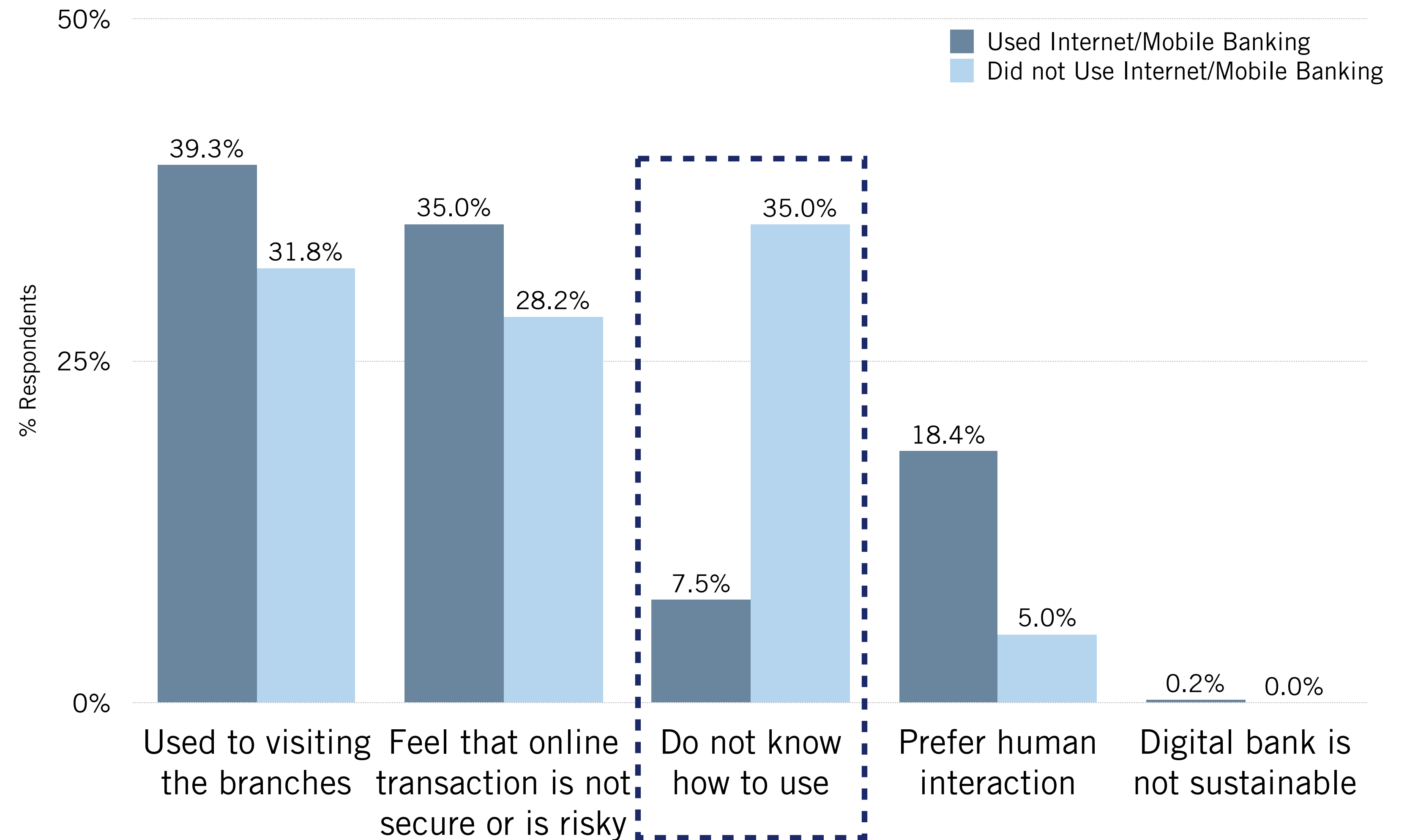
What Willing Customers Want

Among the key drivers of loyalty for customers willing to try Digital banks, reliability related issues, namely (1) availability, and (2) services being executed right, feature among the top five.

Incumbent banks should note that these are potential areas digital natives like digital banks may have a competitive advantage in, and work on improving these areas to defend their market share.

Why Not Try Digital Banks: Familiarity With Branches & Security Key Reasons for Unwillingness To Try New Digital Banks

- Among those who use i-banking/m-banking:**
 The strong habit of visiting branches was supported by the perception that online transactions were risky.
- Among those who do not use i-banking/m-banking:**
 Given the fact that this group does not use i-banking or m-banking, it was not surprising that not knowing how to use Digital Banks was the key reason for not wanting to try Digital Banks.



TRYING OUT DIGITAL BANKS

Assessing Customers' Willingness To Try Digital Banks

Highlights

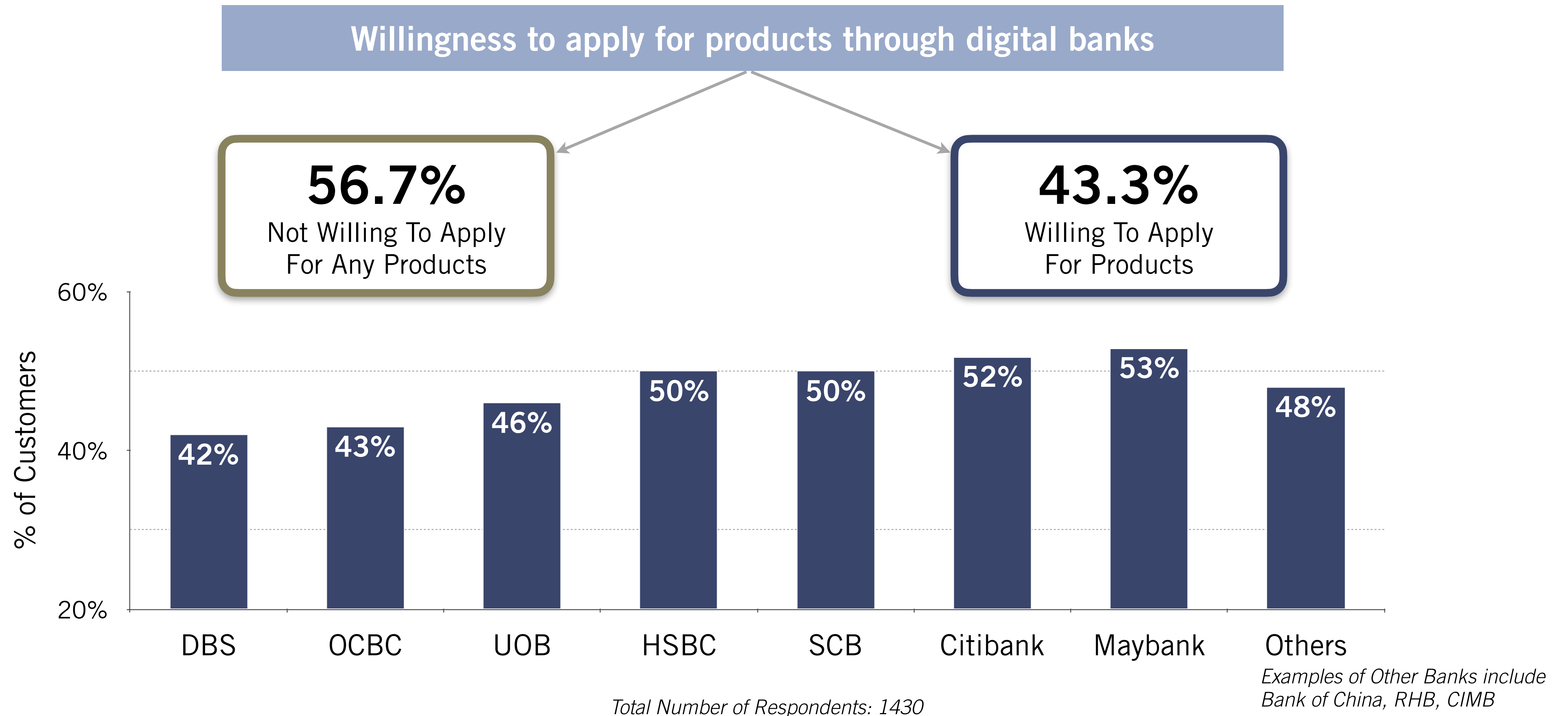
- A high proportion (43.3%) of current banking customers willing to try digital banks.
- Foreign banks customers slightly more willing to try digital banks.
- Digital bank customers likely to already be existing users of online banking services, young, and with monthly incomes between \$3K to \$10K.
- Loyal banking customers tend to be those willing to try out new digital banks.

Full digital bank license — Shortlisted applicants

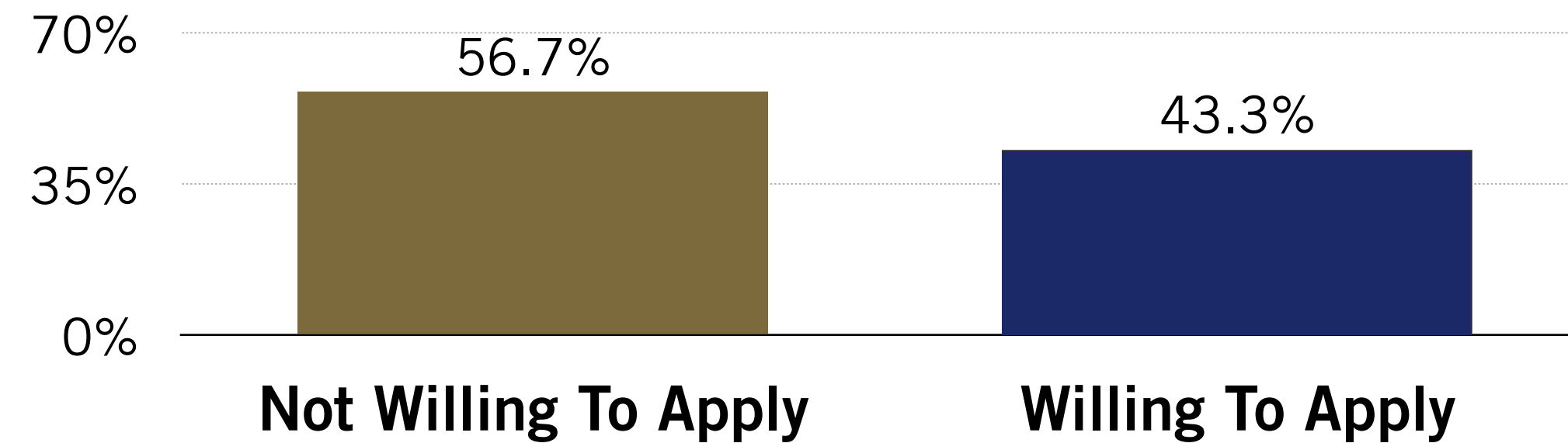


Willingness To Apply for Products Through New Digital Banks

While a significant proportion of banking customers were willing to try applying for products on digital banks (43.3%), customers of local banks seemed less willing to do so, compared to foreign banks' customers.

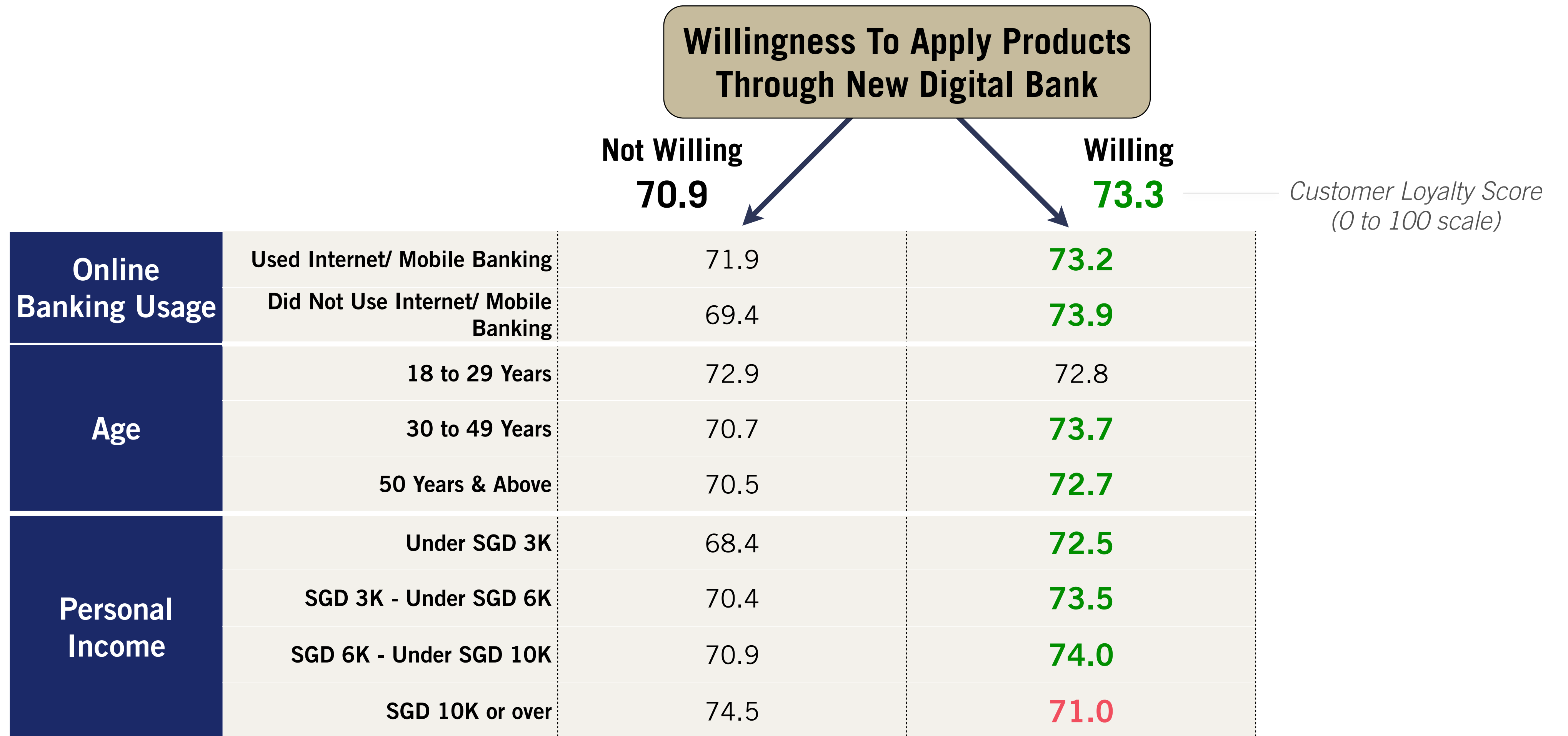


Potential Profile of Customer of New Digital Banks: Existing User of Online Banking, Young, Income 3K to 10K



		Not Willing To Apply	Willing To Apply
Online Banking Usage	Used Internet/ Mobile Banking	48.5%	51.5%
	Did Not Use Internet/ Mobile Banking	77.9%	22.1%
Age	18 to 29 Years	43.8%	56.2%
	30 to 49 Years	48.4%	51.6%
	50 Years & Above	76.5%	23.5%
Personal Income	Under SGD 3K	53.2%	46.8%
	SGD 3K - Under SGD 6K	46.6%	53.4%
	SGD 6K - Under SGD 10K	45.2%	54.8%
	SGD 10K or over	65.1%	34.9%
		% Within Each Demographic Sub-Group (Row Percentage)	

More Loyal Banking Customers Also Tend To Be Those Willing To Apply for Product Through Digital Banks



GREEN/RED indicates that the loyalty scores of Willing To Apply segment is **HIGHER/LOWER** than the scores of those Not Willing To Apply with statistical significance.

**WHY ARE PEOPLE WILLING
TO TRY DIGITAL BANKS?**

Assessing Why Customers Are Willing To Try Digital Banks

Highlights

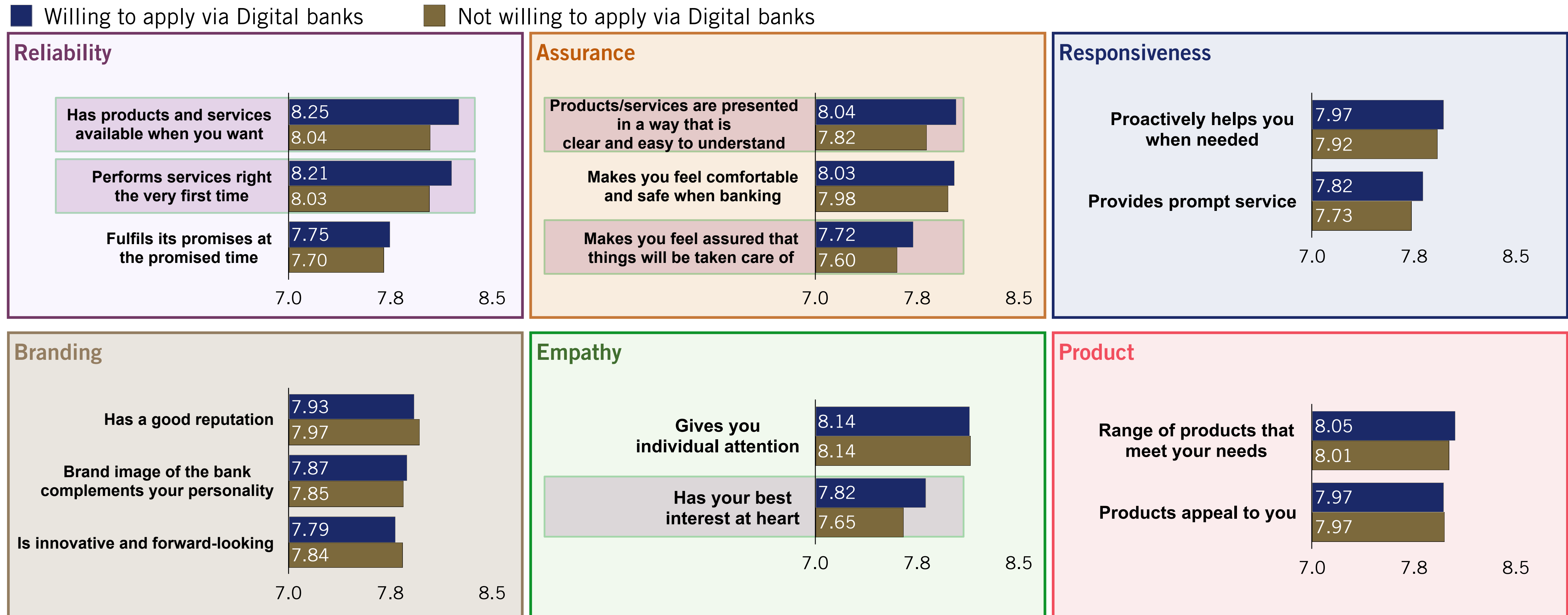
- Poor customer experience was not a reason for a customer's Willingness To Try Digital Banks.
- In fact, in rating their current banks, customers willing to try digital banks rated 5 out of 15 measured banking attributes significantly higher than customers who were not willing. Expectations of the quality of service by this group was also exceeded by their current banks.
- Customers that had multiple banking relationships (between 2 to 4), and Customers with CASA plus 1 other product with their bank, tended to have a higher willingness to try digital banks.

Full digital bank license — Shortlisted applicants



Poor Customer Experience Not a Key Reason Try Out Digital Banks

- **Most Attributes Rated Higher:** Customer willing to apply products via digital banks rated most attributes higher than those who were not willing to try out digital banks.
- **Branding:** Brand-based attributes however were rated marginally lower, though the differences were not statistically significant.

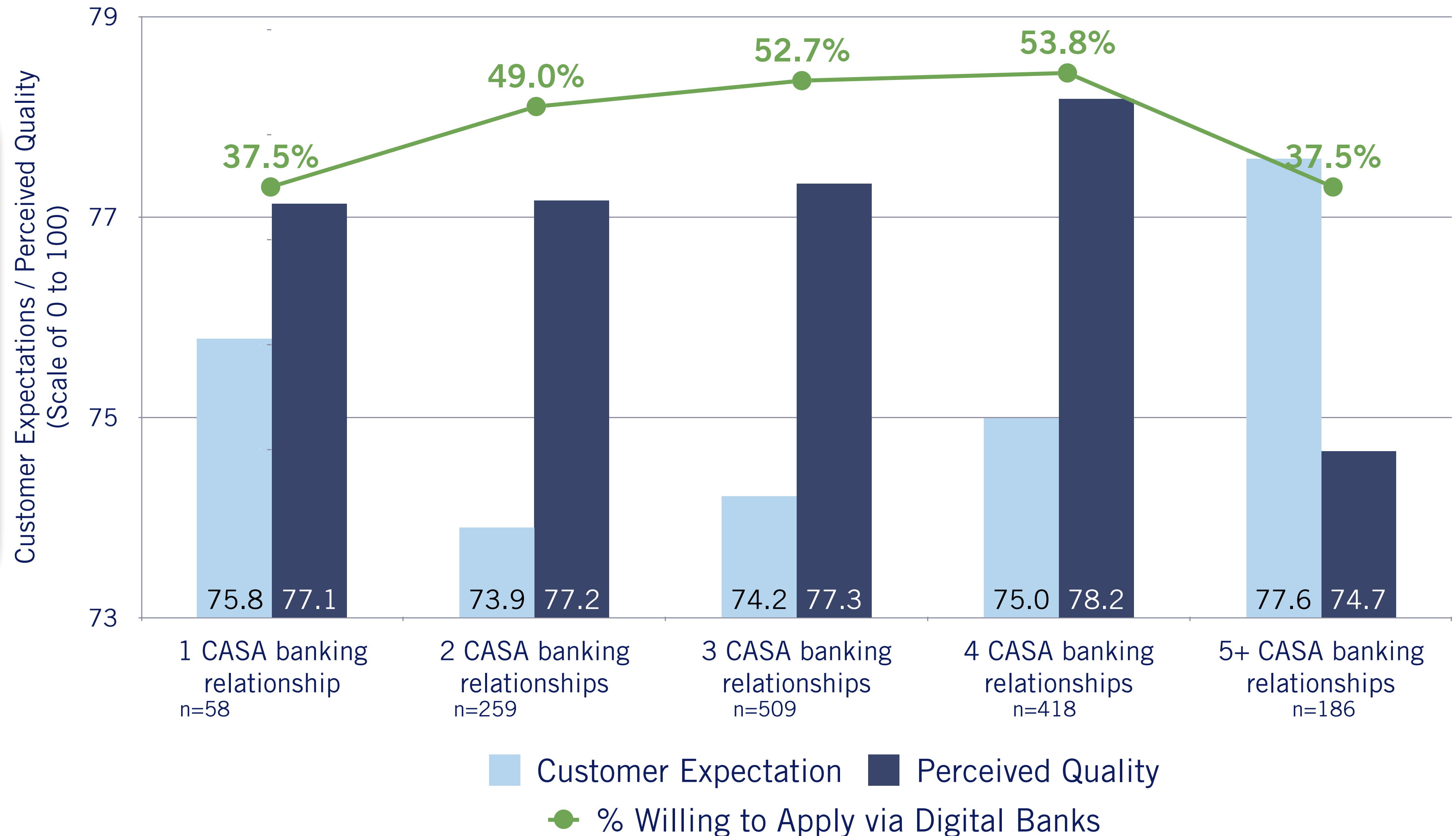


■ Indicates statistically significant higher/lower ratings between the two groups at 90% confidence

Rating (Scale of 1 to 10)
Total no. of respondents: n=1430

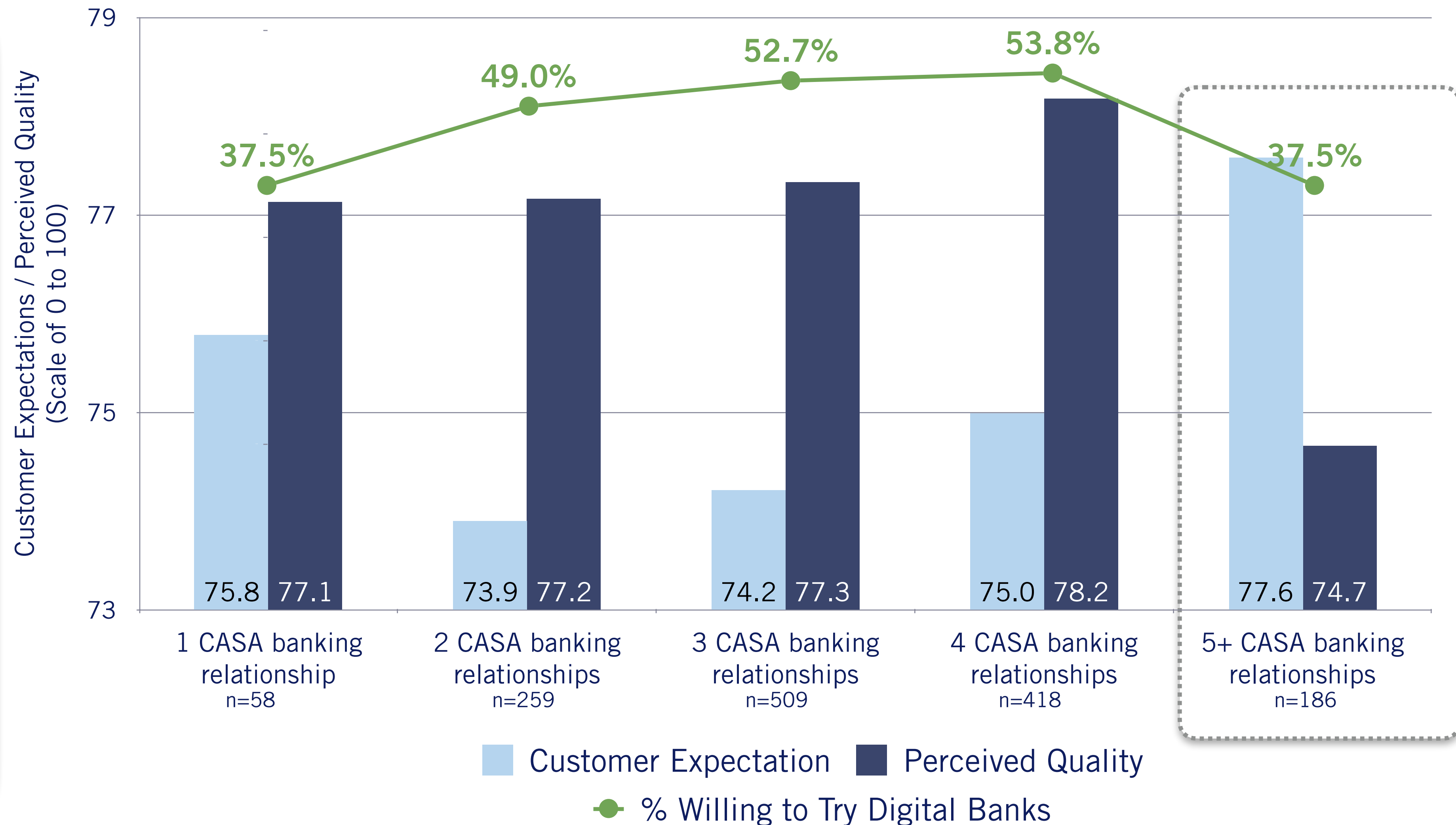
Generally, the More Banking Relationships Customers Have, The More Willing They Are To Apply Products via Digital Banks

- **More banking relationships, higher willingness to try:** Customers who have accounts with more banks tended to be more willing to try digital banks.
- **Of note, at the tail ends,** customers with only 1, or 5+, banking relationship(s) tended to be less willing to try digital banks.



Customers With 5 or More Banking Relationships Are Less Willing To Try Digital Banks Despite Having High Customer Expectations

- **More banking relationships, higher expectations:** Apart from customers with only one bank, customer expectations tended to increase with more banking relationships. These expectations were generally met or exceeded (i.e., Perceived Quality score was higher than Customer Expectations score).
- **Customers with 5+ relationships:** Notably, despite having higher expectations that exceed the quality of service they received, willingness to try digital banks was lower among this group.

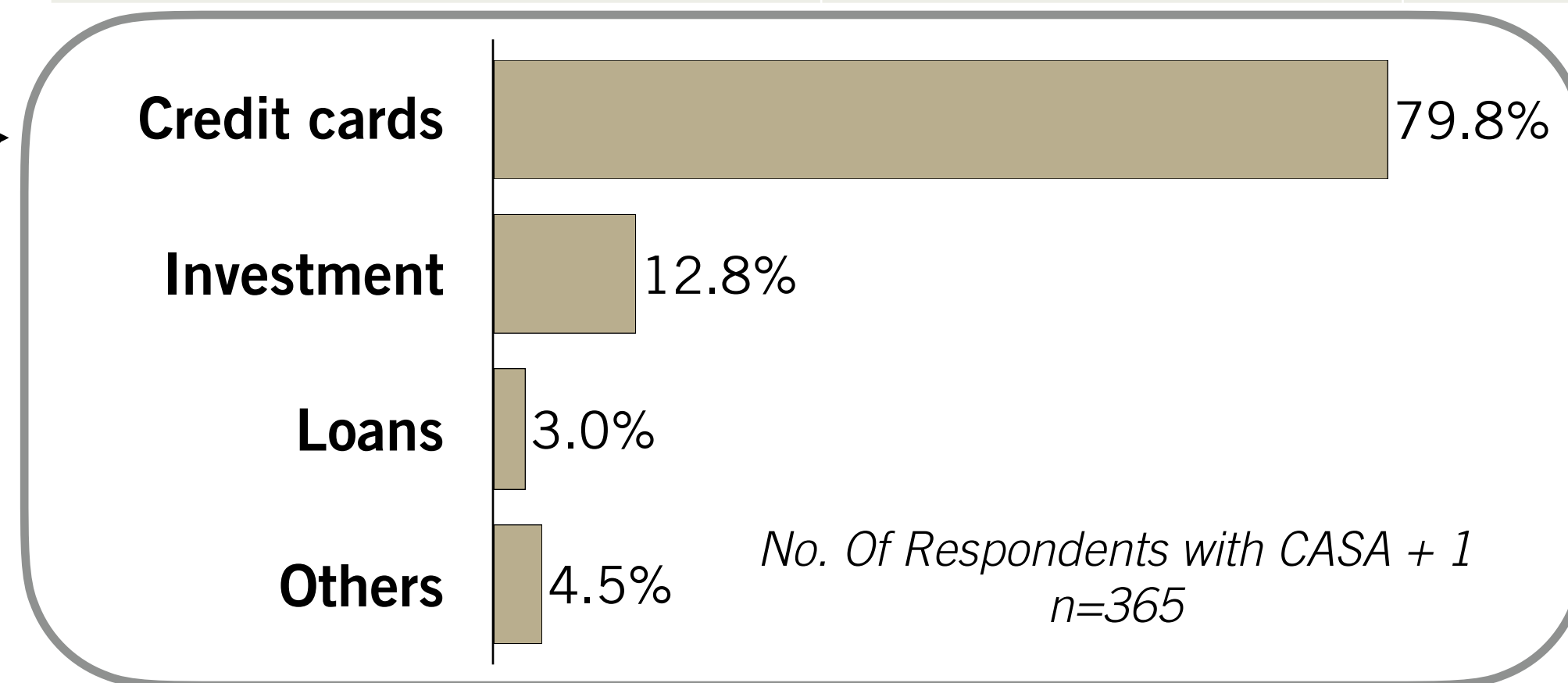


Willingness To Try Out Digital Banks Higher Among Customers With Only 1 Additional Product Type With the Same Bank

- **Product types & willingness:** The majority of customers with only a Current Account/Savings Account (CASA) and one additional product at the same bank appear more willing to try new digital banks.
- This is despite the quality of service they received exceeded their expectations.

	Willingness to apply via Digital Banks (%)	Expectations	Perceived Quality
CASA Only	40.5%	73.6	77.2
CASA + 1	55.3%	75.7	77.9
CASA + 2	30.1%	77.7	76.8

Products held by CASA+1 respondents



Total Number of Respondents: 1430
 CASA+3 has small sample size, hence not shown

DEFENDING AGAINST DIGITAL BANKS

Assessing How To Defend Against Digital Banks

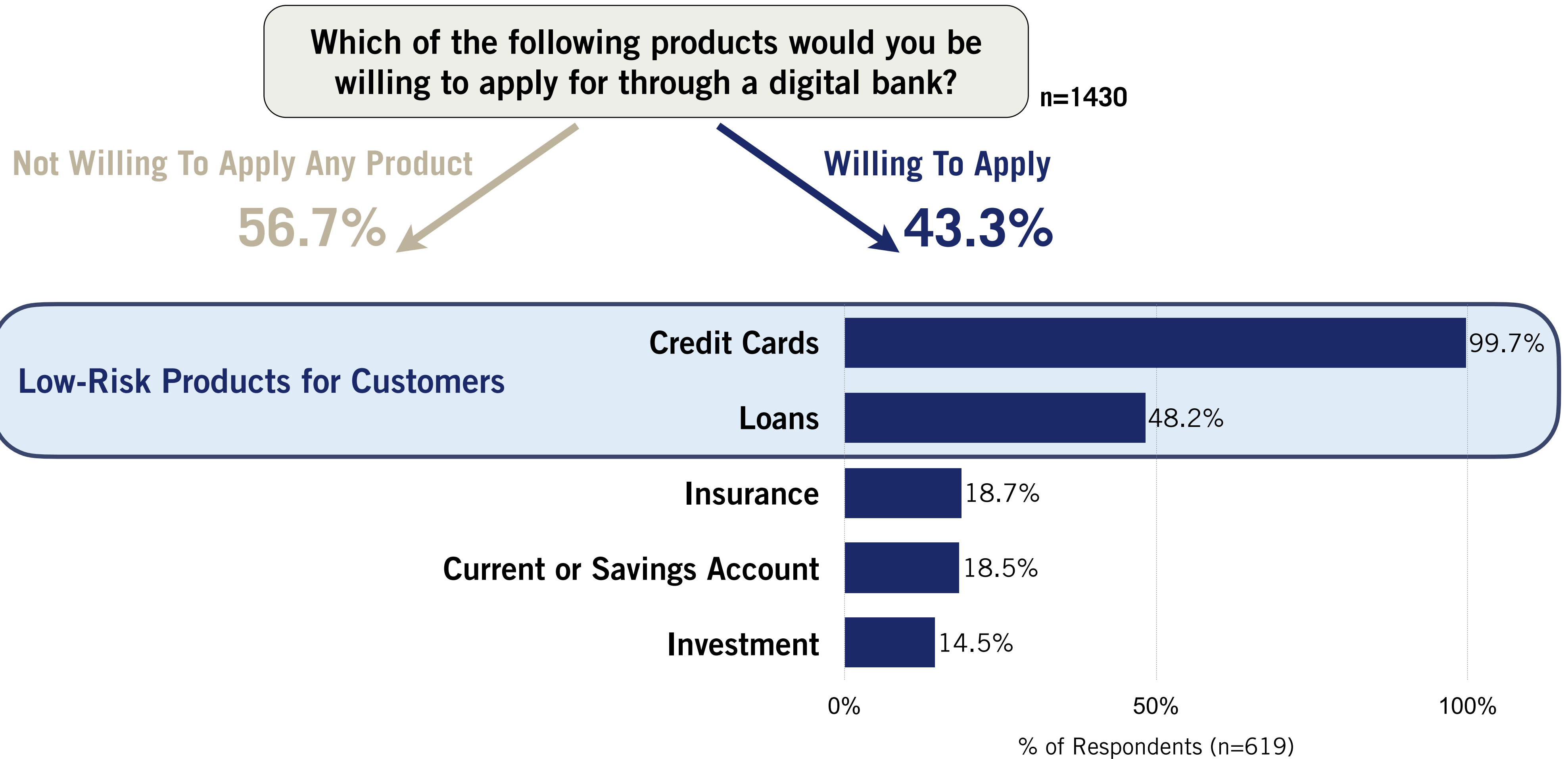
Highlights

- Banks were most likely see the fiercest competition in their credit cards and loans businesses, as these were the top 2 products customers were willing to try.
- The loyalty of customers willing to try digital banks was driven by availability/ accessibility and efficiency of services. Both incumbent banks and digital banks should leverage on these drivers.
- Incumbent banks should also work on improving the clarity of products and services offered and their brand reputation. These areas were key drivers of loyalty regardless of the customers' willingness to try digital banks.

Full digital bank license — Shortlisted applicants



Almost Everyone Who Was Willing To Try New Digital Banks Would Sign Up for Credit Cards With Loans Being a Popular Choice Too



Multiple responses allowed, hence percentages may not add up to 100%

Familiarity With Branch Visits and Security Concerns Were Key Reasons for Not Wanting To Try Digital Banks

Which of the following products would you be willing to apply for through a digital bank?

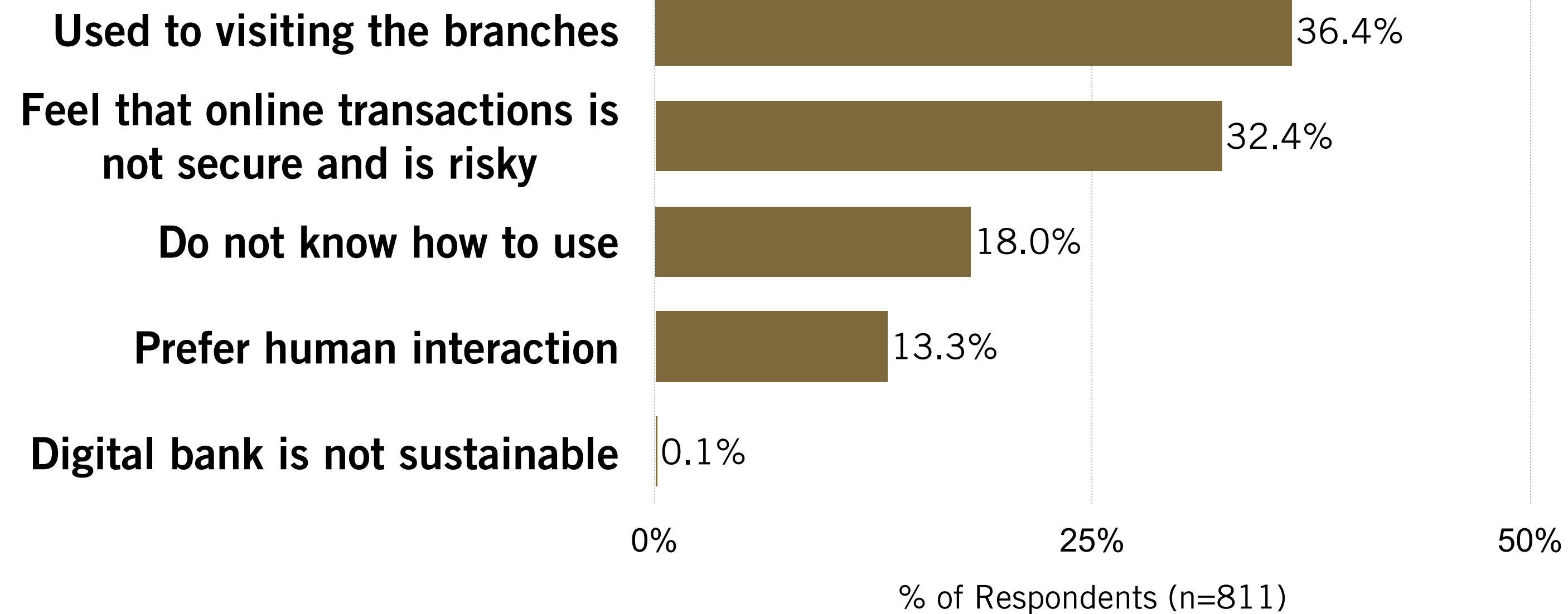
n=1430

Not Willing To Apply Any Product

56.7%

Willing To Apply

43.3%

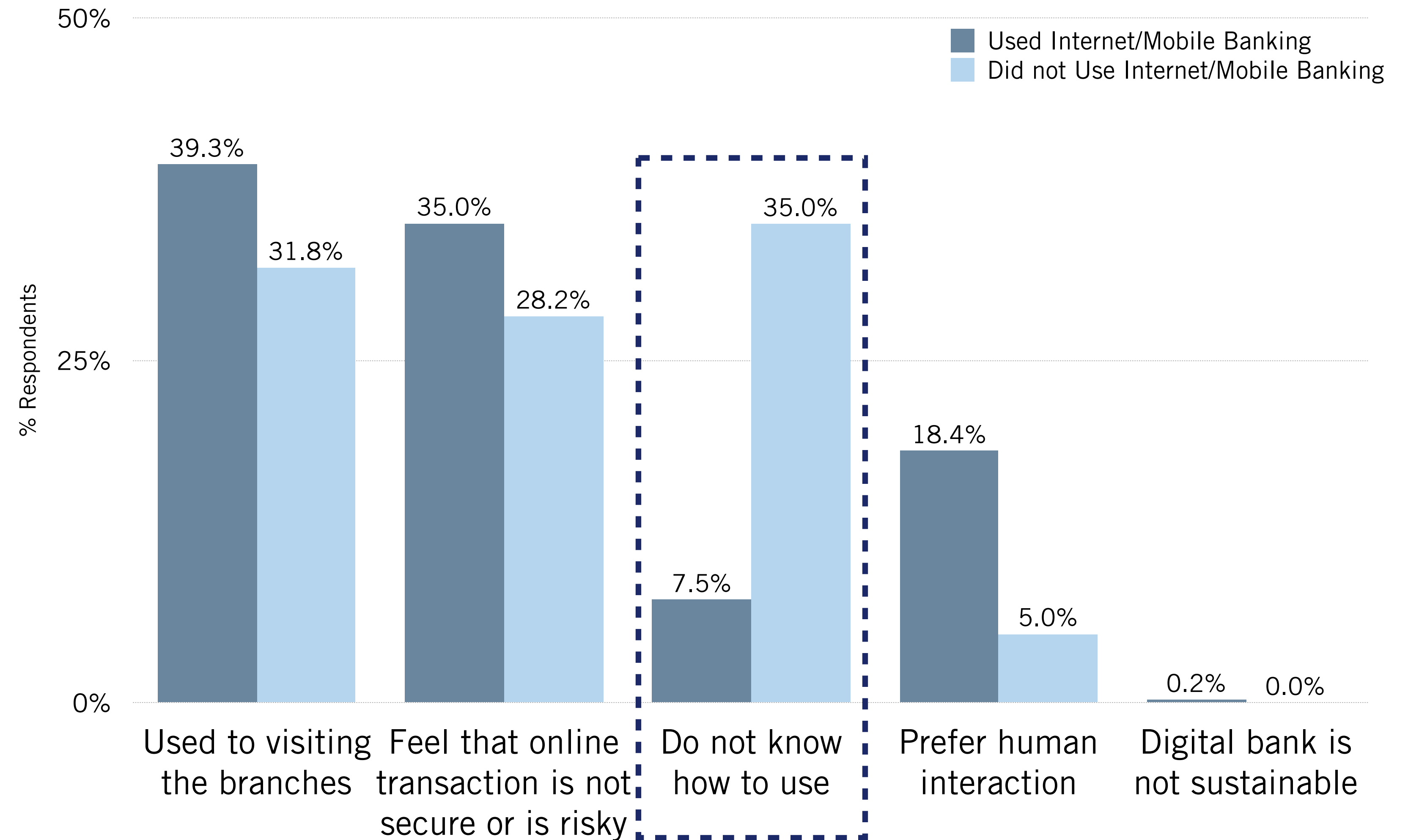


Multiple responses allowed, hence percentages may not add up to 100%

Why Not Try Digital Banks: Familiarity With Branches & Security

Key Reasons for Unwillingness To Try New Digital Banks

- **Among those who used i-banking/m-banking:**
The habit of visiting branches was supported by the perception that online transactions are risky.
- **Among those who do not use i-banking/m-banking:**
Given the fact that this group does not use i-banking or m-banking, not knowing how to use Digital Banks was the key reason for not wanting to try Digital Banks.



Loyalty Drivers: Clarity of Product & Service Offered and Brand Reputation Were Key Regardless of Willingness To Try Digital Banks

- **Common Drivers:** A good branding strategy and clear communication was key to loyalty regardless of their willingness to try digital banks.
- **Willing to try Digital banks:** Apart from the common drivers, this group appeared to appreciate the accessibility and efficiency of banking services.
- **Not Willing to try Digital Banks:** This group was driven by individual attention and innovation.

Increasing Impact on Customer Loyalty

DRIVERS OF LOYALTY FOR CURRENT BANK	
Customers <u>Not Willing</u> To Apply for Products Through Digital Banks	Customers <u>Willing</u> To Apply for Products Through Digital Banks
Products and services are presented in a way that is clear and easy to understand	Has products and services available when you want
Is innovative and forward-looking	Has a good reputation
Gives you individual attention	Performs services right the very first time
Has a good reputation	Products and services are presented in a way that is clear and easy to understand

Total no. of respondents: n=1430

Defending Against Digital Banks: Customers Willing To Try Digital Banks Were Driven by Availability and Efficiency

Increasing Impact on Customer Loyalty

DRIVERS OF LOYALTY FOR CURRENT BANK	
Customers <u>Not</u> Willing To Apply for Products Through Digital Banks	Customers <u>Willing</u> To Apply for Products Through Digital Banks
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What Willing Customers Want

Among the key drivers of loyalty for customers willing to try Digital banks, reliability related issues, namely (1) availability, and (2) services being executed right, feature among the top five.

Incumbent banks should note that these are potential areas digital natives like digital banks may have a competitive advantage in, and work on improving these areas to defend their market share.

DIGITAL BANKS IN OTHER MARKETS

Digital Banks in Other Markets

Highlights

- Established Digital Banking companies appear to focus on (1) convenience, (2) simplicity, (3) targeting of digital natives, and (4) providing competitive rates through cost savings from digitisation.
- Digibanks may still need to leverage on some physical touchpoints to increase (1) customer engagement, (2) brand awareness, and (3) last-mile servicing.
- Leveraging on government digital initiatives for identity management could further improve service processes.



KAKAO Bank: Customer Centricity Key

Background

- KAKAO bank was the first digital bank launched in South Korea. It shook up traditional banks when it acquired 5% of the digitally savvy adult population within 2 weeks.
- KAKAO bank focused on its mobile app to make banking simple and convenient by redesigning the entire process in which customers bank.

Learnings

- **Customer centricity in digital banking**
KAKAO bank made things simple and convenient for customers by revisiting the online account opening process and shortened it down to 5mins from 30mins.
- **Passing on Digital benefits to customers**
KAKAO's focus on Mobile-only offerings meant that costs could be kept down. This allowed them to launch attractive offers on deposit interest rates, remittance fees, and loan interest rates.
- **Targeting the right segment**
KAKAO targeted 30-50 year olds with unsecured loan products offers. This segment was more educated, had higher earning potential, and a greater ability to service the loans.
- **Traditional banks had to adapt**
With KAKAO dominating the mobile platform, traditional banks had to reinvent how value was delivered to customers via face-to-face interactions, particularly for complex products and financial advisory.



Kakao Bank in Numbers



Digibank: Using a Phygital Strategy & Government Digitalisation

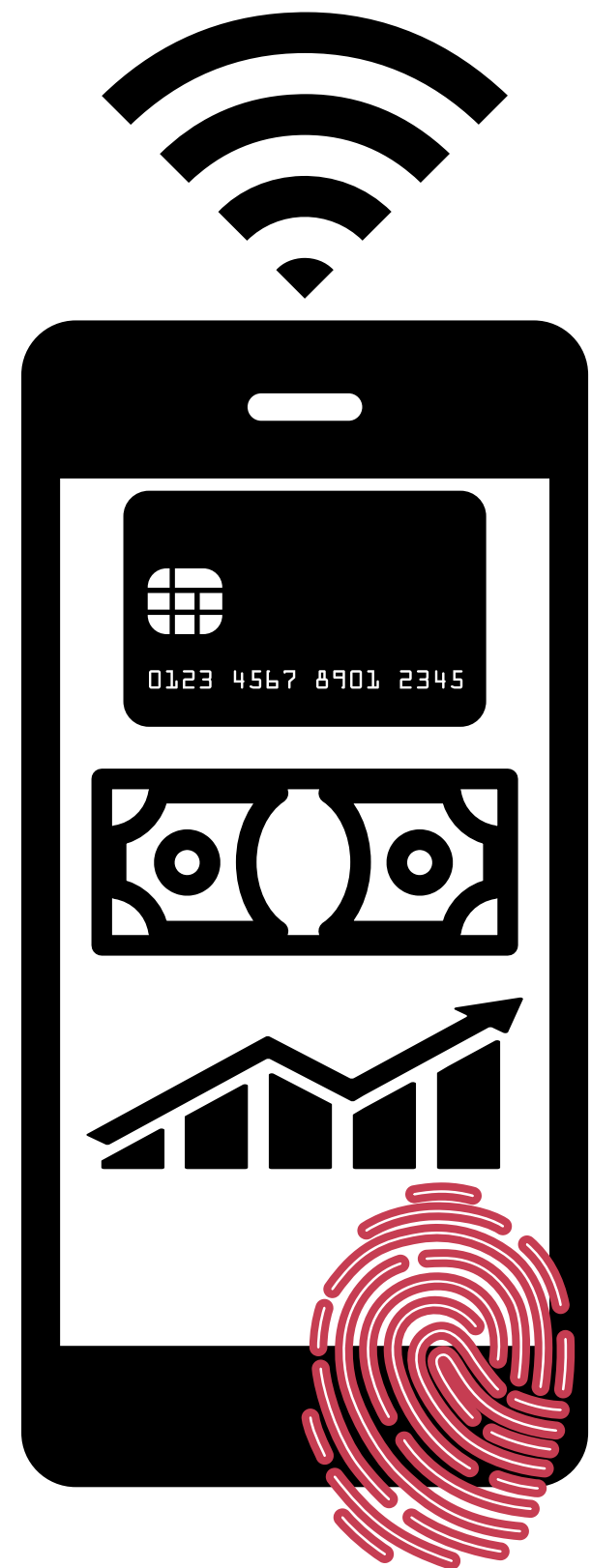


Background

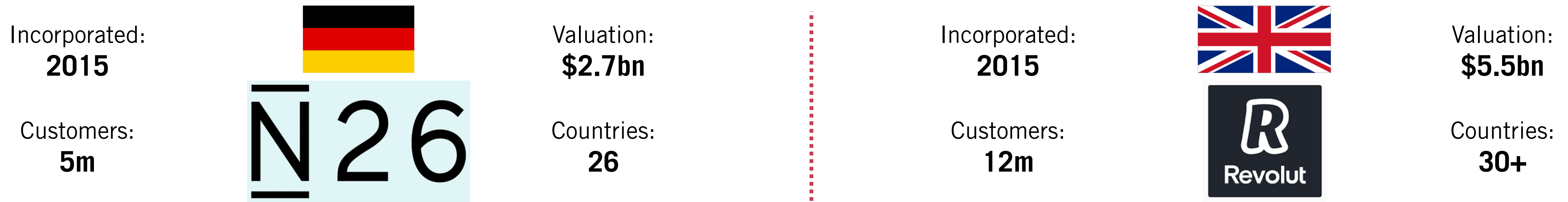
- India's banking industry added 50% of its first time banking account holders between 2011 and 2015. With the digital revolution, customer experience and interactions have been redefined with an influx of digital banks into the market.
- Digibank by DBS is one of the main players in the Digital Banking space with over 2.6 million customers as of 2020.

Learnings

- **Digital Bank Complemented by Physical Network**
After launching a digital-only platform in 2016, DBS embarked on establishing a physical network of over 100 touchpoints, including branches, as well as manned and unmanned e-kiosks and ATMs across various cities. The network was aimed at complementing the digital platforms by (1) increasing engagement, (2) brand awareness, and offering (3) last-mile servicing requirements.
- **Leveraging on government digitalisation initiatives**
The Indian government introduced a biometric identification system (the Aadhaar) in 2016. Leveraging on the system, Digibank was able to allow users to open a banking account within 90 seconds.
- **Passing on benefits to customers**
With a lower cost per transaction due to the use of digital technologies, Digibank was able to offer customers highly competitive interest rates.



Digital Banking in Europe & America: Convenience & Simplicity:



Background

- There are well over 60 Digitised Banks in Europe with Revolut and N26 being the 2 biggest, with presence stretching across the Atlantic.
- Both N26 and Revolut did not start out with the goal to become global financial institutions; N26 started as mobile app for parents to monitor their kids expenses while Revolut began as a service to help travellers avoid hefty foreign exchange fees.
- European banking consumers believe that the biggest advantages of Digital Banking are time savings and the ease of use, with 6 out of 7 customers using Digital Banking solutions at least once a month.

Learnings

- With convenience being the biggest driver of Digital banks, both N26 and Revolut introduced the simplicity of opening an account online via video verification.
- By not having physical branches, both N26 and Revolut passed on the savings to customers in the form of lower transaction fees, mainly in foreign exchange.
- Both N26 and Revolut mastered the mechanics of cross-selling by having all banking needs like account, credit card, insurance, and investment in a single app, again emphasising their focus on customers' convenience.

KEY TAKEAWAYS

Key Points

- The Threat:** A high proportion (43.3%) of banking customers were willing to try digital banks, especially among foreign bank customers. Competition will be stiffest in the Credit Cards and Loans business as most of these respondents indicated they were willing to apply for these products with these new banks.
- The Profile:** Customers willing to try digital banks tend to be (1) online banking users, (2) young, and (3) have multiple banking relationships.
- Not Underserved:** Those willing try digital banks rated their current banks well, and in fact had higher loyalty scores. This segment of customers are likely to be more profitable and are also willing to try something new.
- Defending Market Share:** Customers willing to try digital banks were driven by (1) availability of products and services and (2) reliability. Those not willing to try were used to human-based service interactions.

Full digital bank license — Shortlisted applicants



Conclusion

Gaining Market Share: The high proportion of customers willing to try digital banks and increasingly digitally-savvy demographic, suggests a market very much ready to accept these new players. A high level of competitive action with various deals/promotions/offers, especially in the Credit Cards and Loans space was to be expected. Digitally-savvy, young, mass-market customers are most likely the first to start moving some of their business away from their incumbent banks. To further establish themselves, especially in the affluent market space, digital banks may need to augment their services with some form of physical network, as evidenced by Digibank by DBS.

Defending Market Share: Traditional banks' success in defending their market share will be dependent on their ability to (1) ward off the promotional offers by digital banks, (2) improve their digital channels to meet the convenience demanded by customers, and (3) leverage their existing physical-based touchpoints to create a differentiated experience that meet customers' needs.

Full digital bank license — Shortlisted applicants

				
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APPENDIX A

**PROFILE OF CUSTOMERS WILLING TO TRY DIGITAL BANKS BY
CURRENT INCUMBENT BANK**

Willingness To Apply Products Through New Digital Banks

Willing To Apply - Summary

	TOTAL	DBS	OCBC	UOB	HSBC	SCB	CITI	MAYBANK	OTHER
Online banking usage[#]									
Used Internet/Mobile Banking	51.5%	51.1%	53.2%	55.8%	50.0%	48.0%	49.3%	56.2%	50.0%
Did not use Internet/Mobile Banking	22.1%	20.3%	17.5%	<i>24.2%</i>	<i>50.0%</i>	<i>66.7%</i>	62.5%	33.3%	37.5%
Age									
18 to 29 years	56.2%	56.1%	59.5%	56.8%	<i>71.4%</i>	<i>50.0%</i>	<i>58.3%</i>	<i>57.9%</i>	<i>30.0%</i>
30 to 49 years	51.6%	51.1%	49.1%	59.1%	52.4%	46.3%	54.7%	54.7%	52.8%
50 years and above	23.5%	20.0%	21.1%	25.3%	43.3%	57.7%	46.0%	46.7%	42.9%
Household Income									
Under SGD 3K	46.8%	45.2%	53.3%	58.8%	NA	NA	NA	47.6%	NA
SGD 3K - Under SGD 6K	53.4%	54.0%	53.1%	53.5%	56.1%	52.3%	64.1%	42.9%	41.7%
SGD 6K - Under SGD 10K	54.8%	<i>57.7%</i>	<i>54.8%</i>	<i>44.4%</i>	59.2%	48.2%	48.3%	<i>51.7%</i>	46.2%
SGD 10K or over	34.9%	<i>18.2%</i>	<i>61.5%</i>	<i>52.4%</i>	34.4%	53.5%	45.8%	72.7%	55.0%

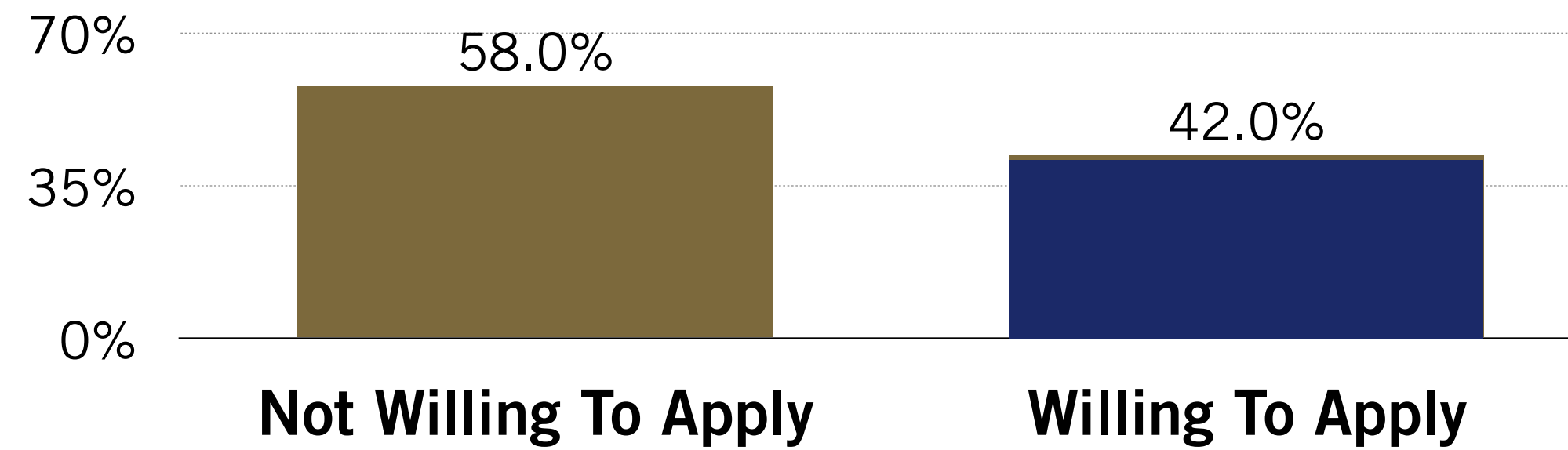
Willingness To Apply Products Through New Digital Banks

Not Willing To Apply - Summary

	TOTAL	DBS	OCBC	UOB	HSBC	SCB	CITI	MAYBANK	OTHER
Online banking usage#									
Used Internet/Mobile Banking	48.5%	48.9%	46.9%	44.2%	50.0%	52.0%	50.7%	43.8%	50.0%
Did not use Internet/Mobile Banking	77.9%	79.7%	82.5%	75.8%	<i>50.0%</i>	<i>33.3%</i>	<i>37.5%</i>	<i>66.7%</i>	<i>62.5%</i>
Age									
18 to 29 years	43.8%	43.9%	40.5%	43.2%	<i>28.6%</i>	<i>50.0%</i>	<i>41.7%</i>	<i>42.1%</i>	<i>70.0%</i>
30 to 49 years	48.4%	48.9%	50.9%	40.9%	47.6%	53.7%	45.3%	45.3%	47.3%
50 years and above	76.5%	80.0%	79.0%	74.7%	56.7%	42.3%	54.0%	53.3%	57.1%
Household Income									
Under SGD 3K	53.2%	54.8%	46.7%	41.2%	NA	NA	NA	52.4%	NA
SGD 3K - Under SGD 6K	46.6%	46.0%	46.9%	46.5%	43.9%	47.7%	35.9%	57.1%	58.3%
SGD 6K - Under SGD 10K	45.2%	<i>42.3%</i>	<i>45.2%</i>	<i>55.6%</i>	40.8%	51.8%	51.7%	48.3%	53.8%
SGD 10K or over	65.1%	<i>81.8%</i>	<i>38.5%</i>	<i>47.6%</i>	65.6%	46.5%	54.2%	<i>27.3%</i>	45.0%

Willingness To Apply Products Through New Digital Banks

DBS

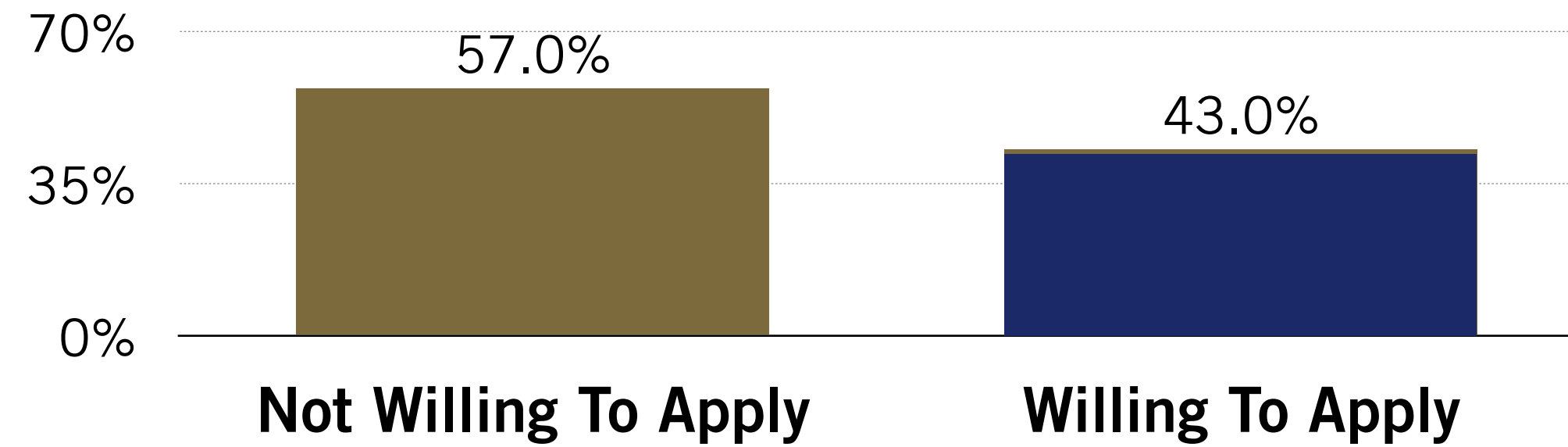


Online Banking Usage	Used Internet/ Mobile Banking	48.9%	51.1%
	Did Not Use Internet/ Mobile Banking	79.7%	20.3%
Age	18 to 29 Years	43.9%	56.1%
	30 to 49 Years	48.9%	51.1%
	50 Years & Above	80.0%	20.0%
Personal Income	Under SGD 3K	54.8%	45.2%
	SGD 3K - Under SGD 6K	46.0%	54.0%
	*SGD 6K - Under SGD 10K	42.3%	57.7%
	*SGD 10K or over	81.8%	18.2%

% Within Each Demographic Sub-Group
(Row Percentage)

Willingness To Apply Products Through New Digital Banks

OCBC

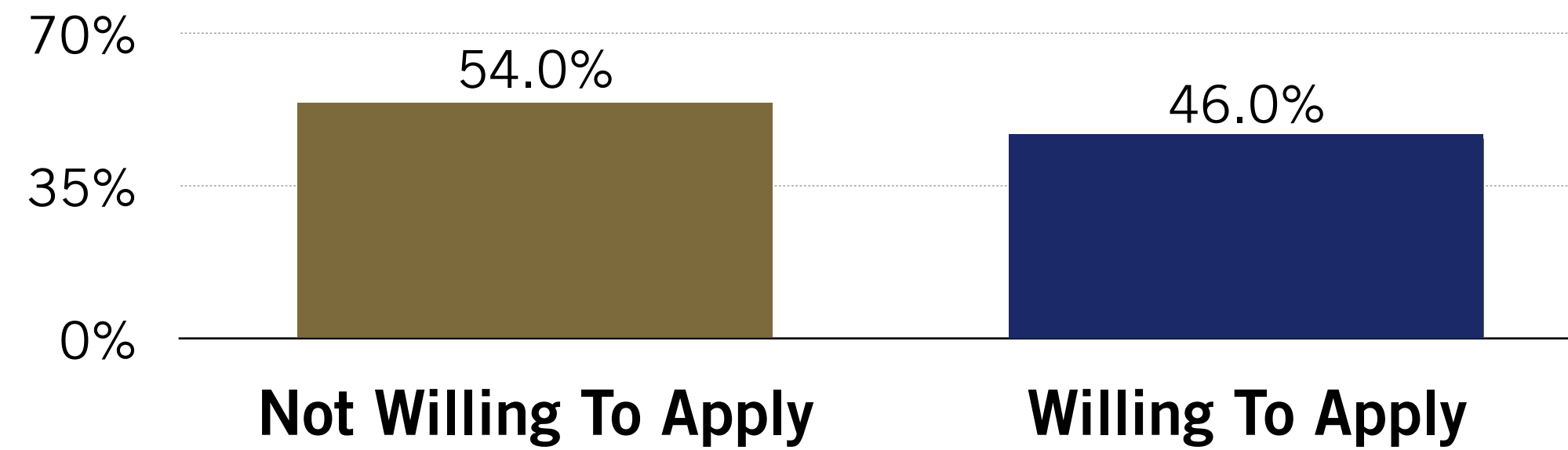


		Not Willing To Apply	Willing To Apply
Online Banking Usage	Used Internet/ Mobile Banking	46.9%	53.2%
	Did Not Use Internet/ Mobile Banking	82.5%	17.5%
Age	18 to 29 Years	40.5%	59.5%
	30 to 49 Years	50.9%	49.1%
	50 Years & Above	79.0%	21.1%
Personal Income	Under SGD 3K	46.7%	53.3%
	SGD 3K - Under SGD 6K	46.9%	53.1%
	*SGD 6K - Under SGD 10K	45.2%	54.8%
	*SGD 10K or over	38.5%	61.5%

% Within Each Demographic Sub-Group
 (Row Percentage)

Willingness To Apply Products Through New Digital Banks

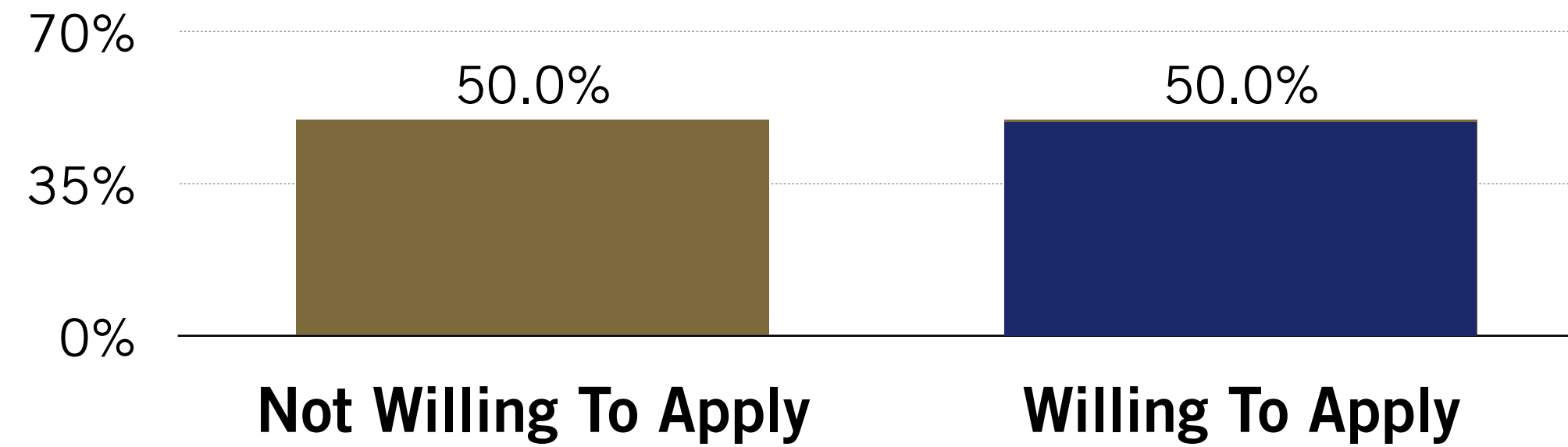
UOB



Online Banking Usage	Used Internet/ Mobile Banking	44.2%	55.8%
	Did Not Use Internet/ Mobile Banking	75.8%	24.2%
Age	18 to 29 Years	43.2%	56.8%
	30 to 49 Years	40.9%	59.1%
	50 Years & Above	74.7%	25.3%
Personal Income	Under SGD 3K	41.2%	58.8%
	SGD 3K - Under SGD 6K	46.5%	53.5%
	*SGD 6K - Under SGD 10K	55.6%	44.4%
	*SGD 10K or over	47.6%	52.4%

% Within Each Demographic Sub-Group
 (Row Percentage)

Willingness To Apply Products Through New Digital Banks HSBC

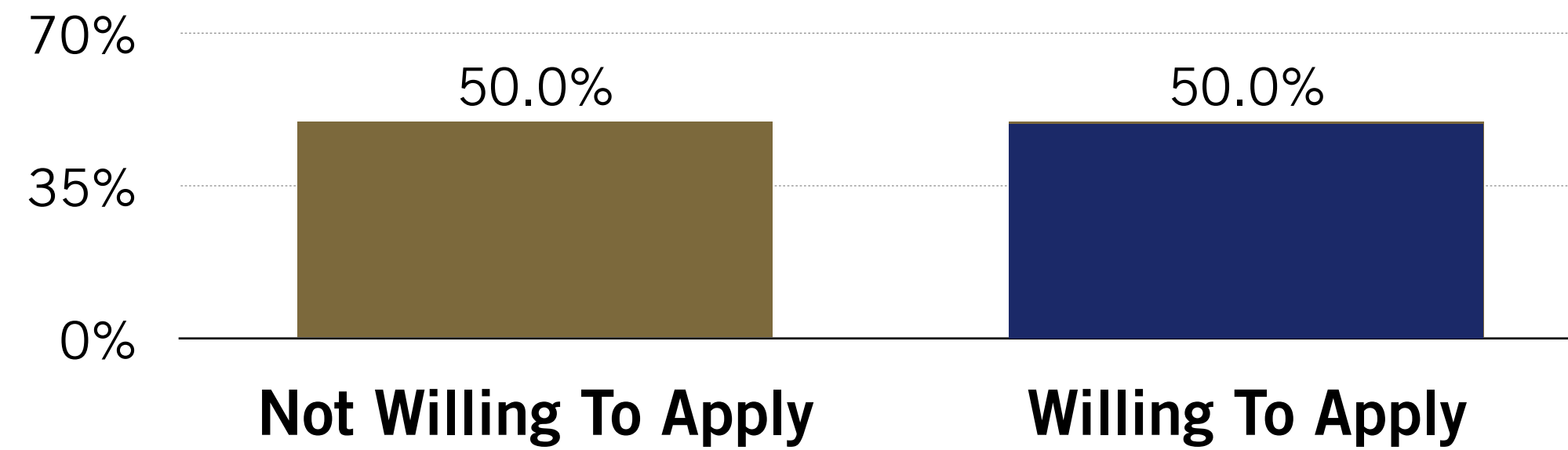


Online Banking Usage	Used Internet/ Mobile Banking	50.0%	50.0%
	<i>*Did Not Use Internet/ Mobile Banking</i>	50.0%	50.0%
Age	<i>*18 to 29 Years</i>	28.6%	71.4%
	30 to 49 Years	47.6%	52.4%
	50 Years & Above	56.7%	43.3%
Personal Income	Under SGD 3K	NA	NA
	SGD 3K - Under SGD 6K	43.9%	56.1%
	SGD 6K - Under SGD 10K	40.8%	59.2%
	SGD 10K or over	65.6%	34.4%

% Within Each Demographic Sub-Group
(Row Percentage)

Willingness To Apply Products Through New Digital Banks

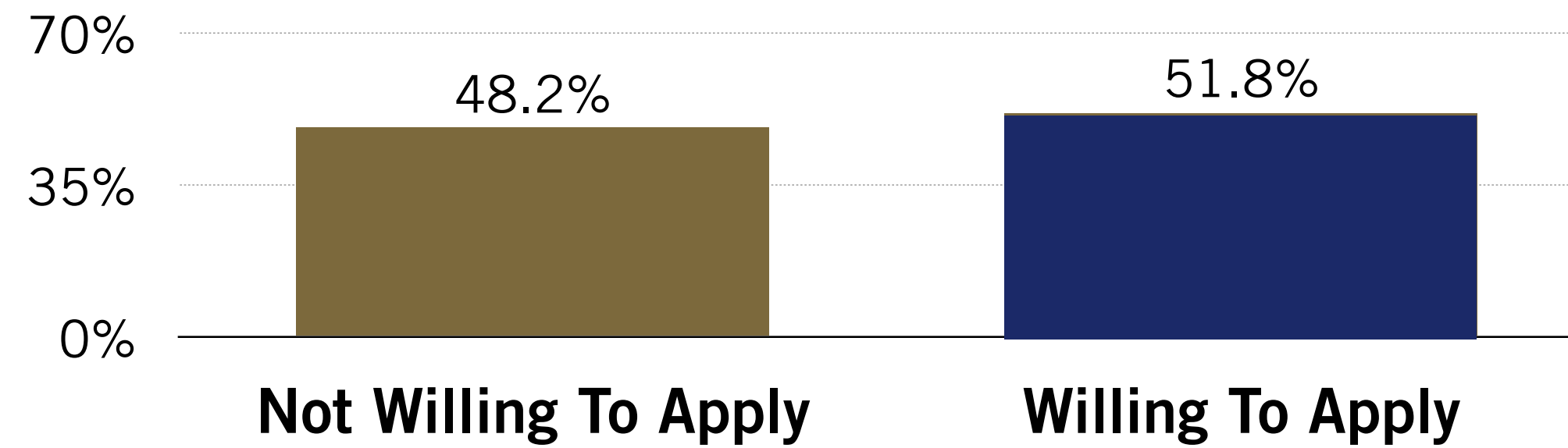
Standard Chartered



Online Banking Usage	Used Internet/ Mobile Banking	52.0%	48.0%
	<i>*Did Not Use Internet/ Mobile Banking</i>	33.3%	66.7%
Age	<i>*18 to 29 Years</i>	50.0%	50.0%
	30 to 49 Years	53.7%	46.3%
	50 Years & Above	42.3%	57.7%
Personal Income	Under SGD 3K	NA	NA
	SGD 3K - Under SGD 6K	47.7%	52.3%
	SGD 6K - Under SGD 10K	51.8%	48.2%
	SGD 10K or over	46.5%	53.5%

% Within Each Demographic Sub-Group
(Row Percentage)

Willingness To Apply Products Through New Digital Banks Citibank

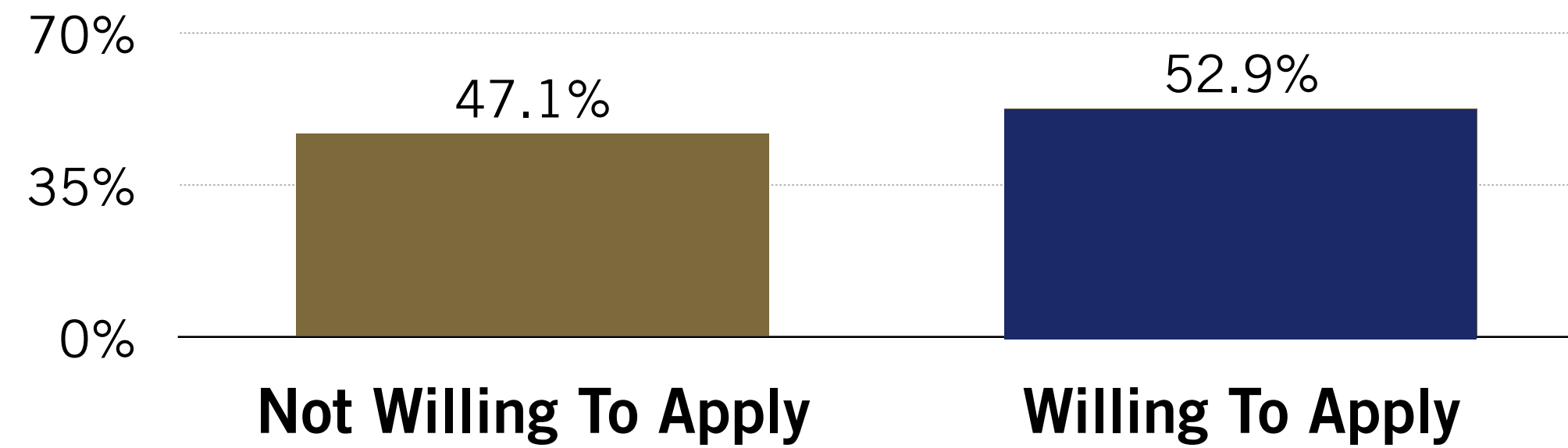


Online Banking Usage	Used Internet/ Mobile Banking	50.7%	49.3%
	Did Not Use Internet/ Mobile Banking	37.5%	62.5%
Age	<i>*18 to 29 Years</i>	41.7%	58.3%
	30 to 49 Years	45.3%	54.7%
	50 Years & Above	54.0%	46.0%
Personal Income	Under SGD 3K	NA	NA
	SGD 3K - Under SGD 6K	35.9%	64.1%
	SGD 6K - Under SGD 10K	51.7%	48.3%
	SGD 10K or over	54.2%	45.8%

% Within Each Demographic Sub-Group
(Row Percentage)

Willingness To Apply Products Through New Digital Banks

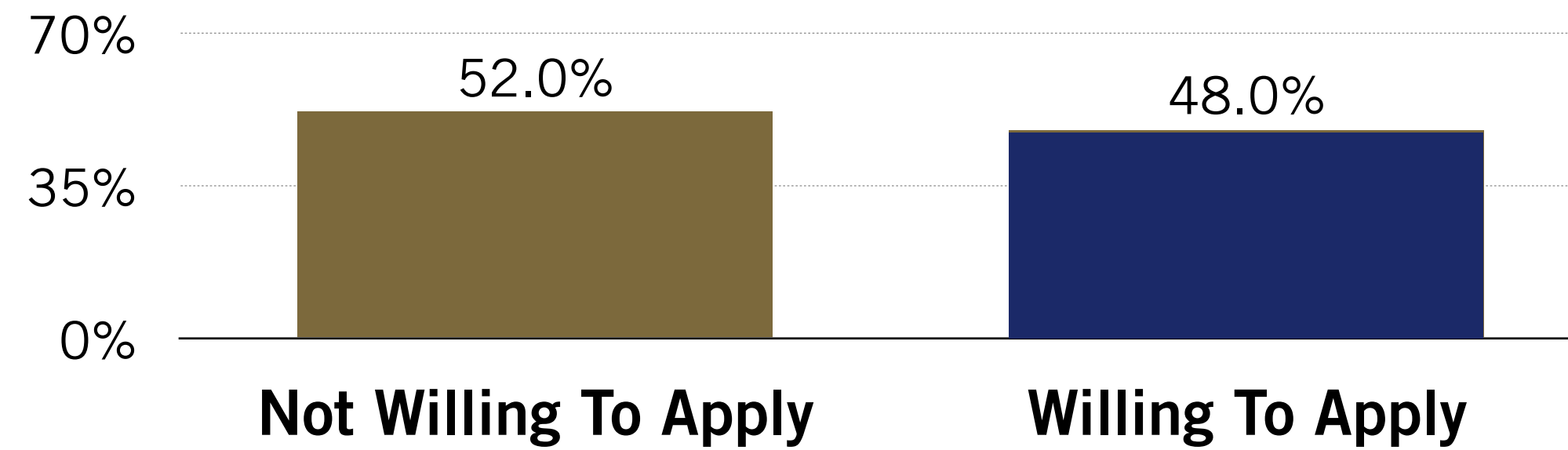
Maybank



		Not Willing To Apply	Willing To Apply
Online Banking Usage	Used Internet/ Mobile Banking	43.8%	56.2%
	<i>*Did Not Use Internet/ Mobile Banking</i>	66.7%	33.3%
Age	<i>*18 to 29 Years</i>	42.1%	57.9%
	30 to 49 Years	45.3%	54.7%
	50 Years & Above	53.3%	46.7%
Personal Income	<i>*Under SGD 3K</i>	52.4%	47.6%
	SGD 3K - Under SGD 6K	57.1%	42.9%
	<i>*SGD 6K - Under SGD 10K</i>	48.3%	51.7%
	<i>*SGD 10K or over</i>	27.3%	72.7%

% Within Each Demographic Sub-Group
(Row Percentage)

Willingness To Apply Products Through New Digital Banks Other Banks



		Not Willing To Apply	Willing To Apply
Online Banking Usage	Used Internet/ Mobile Banking	50.0%	50.0%
	<i>*Did Not Use Internet/ Mobile Banking</i>	62.5%	37.5%
Age	<i>*18 to 29 Years</i>	70.0%	30.0%
	30 to 49 Years	47.3%	52.8%
	50 Years & Above	57.1%	42.9%
Personal Income	Under SGD 3K	NA	NA
	SGD 3K - Under SGD 6K	58.3%	41.7%
	SGD 6K - Under SGD 10K	53.8%	46.2%
	SGD 10K or over	45.0%	55.0%

% Within Each Demographic Sub-Group
(Row Percentage)

APPENDIX B

**LOYALTY SCORES OF CUSTOMERS WILLING TO TRY DIGITAL BANKS
BY CURRENT INCUMBENT BANK**

Loyalty vs. Willingness To Try New Digital Banks

Willing To Apply - Summary

	TOTAL	DBS	OCBC	UOB	HSBC	SCB	CITI	MAYBANK	OTHER
Online banking usage#									
Used I/ M Banking	73.2	74.0	70.7	72.3	71.4	71.7	72.0	71.4	71.2
Did not use I/ M Banking	73.9	74.4	72.1	72.8	73.8	71.1	73.3	71.7	73.0
Age									
18 to 29 years	72.8	73.2	71.1	71.2	70.5	80.2	70.3	73.8	69.1
30 to 49 years	73.7	74.5	71.0	73.1	72.2	70.4	71.4	72.6	71.2
50 years and above	72.7	73.6	70.0	71.7	71.0	72.1	74.2	67.2	72.3
Household Income									
Under SGD 3K	72.5	73.0	67.9	72.0	NA	NA	NA	75.8	NA
SGD 3K - Under SGD 6K	73.5	74.3	71.1	71.8	70.1	74.1	73.2	71.2	71.9
SGD 6K - Under SGD 10K	72.5	75.2	70.3	75.5	72.6	69.1	70.5	71.5	72.4
SGD 10K or over	73.5	67.4	77.0	70.7	71.9	71.8	72.8	70.7	70.1

Loyalty vs. Willingness To Try New Digital Banks

Not Willing To Apply - Summary

	TOTAL	DBS	OCBC	UOB	OTHER	HSBC	SCB	CITI	MAYBANK
Online banking usage#									
Used I/ M Banking	71.9	71.7	72.6	71.6	71.3	72.2	72.4	73.5	71.7
Did not use I/ M Banking	69.4	69.5	68.1	70.1	67.4	72.3	76.2	69.9	70.7
Age									
18 to 29 years	72.9	72.8	74.7	71.4	76.3	72.7	72.0	73.3	70.7
30 to 49 years	70.7	70.1	73.0	70.9	70.4	72.1	72.8	72.5	71.9
50 years and above	70.5	70.8	66.7	70.9	69.3	72.3	72.4	73.6	71.0
Household Income									
Under SGD 3K	68.4	67.6	73.9	74.3	NA	NA	NA	NA	71.2
SGD 3K - Under SGD 6K	70.4	70.0	71.2	68.4	72.8	74.0	70.6	72.6	72.4
SGD 6K - Under SGD 10K	70.9	70.0	73.2	73.0	70.2	72.8	72.6	72.3	69.1
SGD 10K or over	74.5	74.5	78.9	80.7	69.8	71.2	74.6	74.4	75.8

Loyalty vs. Willingness To Try New Digital Banks - DBS

		Not willing to apply products via Digital Banks 70.8	Willing to apply products via Digital Banks 74.0
Online Banking Usage	Used Internet/ Mobile Banking	71.7	74.0
	Did Not Use Internet/ Mobile Banking	69.5	74.4
Age	18 to 29 Years	72.8	73.2
	30 to 49 Years	70.1	74.5
	50 Years & Above	70.8	73.6
Personal Income	Under SGD 3K	67.6	73.0
	SGD 3K - Under SGD 6K	70.0	74.3
	*SGD 6K - Under SGD 10K	70.0	75.2
	*SGD 10K or over	74.5	67.4
Loyalty Within Each Demographic Sub-Group			

Loyalty vs. Willingness To Try New Digital Banks - OCBC

		Not willing to apply products via Digital Banks 70.8	Willing to apply products via Digital Banks 70.9
Online Banking Usage	Used Internet/ Mobile Banking	72.6	70.7
	Did Not Use Internet/ Mobile Banking	68.1	72.1
Age	18 to 29 Years	74.7	71.1
	30 to 49 Years	73.0	71.0
	50 Years & Above	66.7	70.0
Personal Income	Under SGD 3K	73.9	67.9
	SGD 3K - Under SGD 6K	71.2	71.1
	*SGD 6K - Under SGD 10K	73.2	70.3
	*SGD 10K or over	78.9	77.0
Loyalty Within Each Demographic Sub-Group			

Loyalty vs. Willingness To Try New Digital Banks - UOB

		Not willing to apply products via Digital Banks 71.0	Willing to apply products via Digital Banks 72.3
Online Banking Usage	Used Internet/ Mobile Banking	71.6	72.3
	Did Not Use Internet/ Mobile Banking	70.1	72.8
Age	18 to 29 Years	71.4	71.2
	30 to 49 Years	70.9	73.1
	50 Years & Above	70.9	71.7
Personal Income	Under SGD 3K	74.3	72.0
	SGD 3K - Under SGD 6K	68.4	71.8
	*SGD 6K - Under SGD 10K	73.0	75.5
	*SGD 10K or over	80.7	70.7
Loyalty Within Each Demographic Sub-Group			

Loyalty vs. Willingness To Try New Digital Banks - Other Banks

		Not willing to apply products via Digital Banks 70.6	Willing to apply products via Digital Banks 71.4
Online Banking Usage	Used Internet/ Mobile Banking	71.3	71.2
	<i>*Did Not Use Internet/ Mobile Banking</i>	67.4	73.0
Age	<i>*18 to 29 Years</i>	76.3	69.1
	30 to 49 Years	70.4	71.2
	50 Years & Above	69.3	72.3
Personal Income	Under SGD 3K	NA	NA
	SGD 3K - Under SGD 6K	72.8	71.9
	SGD 6K - Under SGD 10K	70.2	72.4
	SGD 10K or over	69.8	70.1
Loyalty Within Each Demographic Sub-Group			

Loyalty vs. Willingness To Try New Digital Banks - HSBC

		Not willing to apply products via Digital Banks 72.2	Willing to apply products via Digital Banks 71.7
Online Banking Usage	Used Internet/ Mobile Banking	72.2	71.4
	<i>*Did Not Use Internet/ Mobile Banking</i>	72.3	73.8
Age	<i>*18 to 29 Years</i>	72.7	70.5
	30 to 49 Years	72.1	72.2
	50 Years & Above	72.3	71.0
Personal Income	Under SGD 3K	NA	NA
	SGD 3K - Under SGD 6K	74.0	70.1
	SGD 6K - Under SGD 10K	72.8	72.6
	SGD 10K or over	71.2	71.9
Loyalty Within Each Demographic Sub-Group			

Loyalty vs. Willingness To Try New Digital Banks - Standard Chartered

		Not willing to apply products via Digital Banks 72.7	Willing to apply products via Digital Banks 71.6
Online Banking Usage	Used Internet/ Mobile Banking	72.4	71.7
	<i>*Did Not Use Internet/ Mobile Banking</i>	76.2	71.1
Age	<i>*18 to 29 Years</i>	72.0	80.2
	30 to 49 Years	72.8	70.4
	50 Years & Above	72.4	72.1
Personal Income	Under SGD 3K	NA	NA
	SGD 3K - Under SGD 6K	70.6	74.1
	SGD 6K - Under SGD 10K	72.6	69.1
	SGD 10K or over	74.6	71.8
Loyalty Within Each Demographic Sub-Group			

Loyalty vs. Willingness To Try New Digital Banks - Citibank

		Not willing to apply products via Digital Banks 73.0	Willing to apply products via Digital Banks 72.3
Online Banking Usage	Used Internet/ Mobile Banking	73.5	72.0
	Did Not Use Internet/ Mobile Banking	69.9	73.3
Age	<i>*18 to 29 Years</i>	73.3	70.3
	30 to 49 Years	72.5	71.4
	50 Years & Above	73.6	74.2
Personal Income	Under SGD 3K	NA	NA
	SGD 3K - Under SGD 6K	72.6	73.2
	SGD 6K - Under SGD 10K	72.3	70.5
	SGD 10K or over	74.4	72.8
Loyalty Within Each Demographic Sub-Group			

Loyalty vs. Willingness To Try New Digital Banks - Maybank

		Not willing to apply products via Digital Banks 71.5	Willing to apply products via Digital Banks 71.5
Online Banking Usage	Used Internet/ Mobile Banking	71.7	71.4
	<i>*Did Not Use Internet/ Mobile Banking</i>	70.7	71.7
Age	<i>*18 to 29 Years</i>	70.7	73.8
	30 to 49 Years	71.9	72.6
	50 Years & Above	71.0	67.2
Personal Income	<i>*Under SGD 3K</i>	71.2	75.8
	SGD 3K - Under SGD 6K	72.4	71.2
	<i>*SGD 6K - Under SGD 10K</i>	69.1	71.5
	<i>*SGD 10K or over</i>	75.8	70.7
Loyalty Within Each Demographic Sub-Group			

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