



Security Risks and Solutions in Emerging Payment Channels

**Federal Reserve Bank of Chicago
2008 Payments Conference
Payments Fraud: Perception versus Reality
June 6, 2008**

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Javelin is the leading independent provider of nationally-representative, quantitative research focused exclusively on financial services topics. Based on the most rigorous statistical methodologies, Javelin conducts in-depth primary research studies to pinpoint dynamic risks and opportunities.





Topics and Agenda

- Introduction and Overview
 - Identity Fraud: Perception and Reality
 - Who is at risk and what losses are they suffering?
 - How do attitudes towards fraud affect behavior?
 - Specifics to Mobile Banking and Contactless
- How may the risk dynamic change with the emergence of new technologies/products?



Topics and Agenda, Continued

Panelist Sessions – Examples of Technologies and Products that are Changing the Dynamic:

- Check Imaging
- Decoupled Debit
- RFID

- Initial Q&A
- Audience Q&A



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Identity Fraud Data



Identity Fraud Continues to Decline, Dropping 12% to \$45 Billion

Overall Measures of Impact

		← Survey Report →				
	Trend	2008	2007 ¹	2006	2005	2003
US adult victims of identity fraud ²	↓	8.1 M	8.4 M	8.9 M	9.3 M	10.1 M
Fraud victims as % of US population	↓	3.58%	3.84%	4.00%	4.25%	4.70%
Total one year fraud amount ³	↓	\$45 B	\$51 B	\$58 B	\$57 B	\$56 B
Mean fraud amount per fraud victim	↓	\$5,574	\$5,920	\$6,497	\$6,203	\$5,503
Median fraud amount per fraud victim	=	\$750	\$750	\$750	\$750	\$750
Mean consumer cost	↑	\$691	\$554	\$446	\$711	\$582
Median consumer cost	=	\$0	\$0	\$0	\$0	\$0
Mean resolution time (hours)	↑	26 hrs.	25 hrs.	40 hrs.	28 hrs.	33 hrs.
Median resolution time (hours)	=	5 hrs.	5 hrs.	5 hrs.	5 hrs.	5 hrs.

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¹ Past years dollars figures have been adjusted for inflation using the Consumer Price Index (CPI-U) issued by the Bureau of Labor Statistics, <ftp://ftp.bls.gov/pub/special.requests/cpi/cpiat.txt> accessed 11/14/2007.

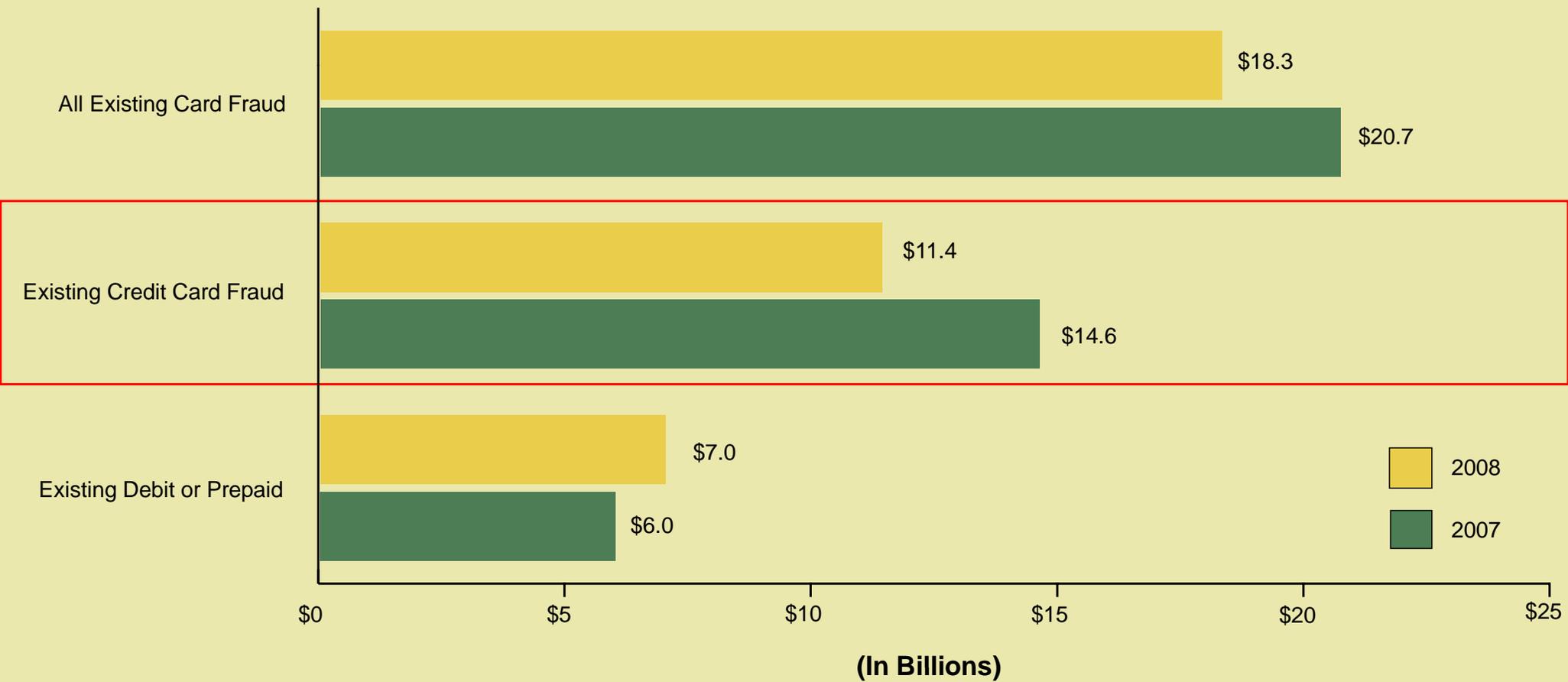
² Based on US population estimates (age 18 and over), <http://www.census.gov/popest/estimates.php> accessed 12/19/2007.

³ 2006, 2007 and 2008 dollar cost estimates have been smoothed using three-year averaging—refer to Methodology Section for details.



2008 Existing Credit Card Fraud Recovers \$3.2 Billion over Prior Year

Total Dollar Fraud Amounts for Existing Card Fraud by Type



Q32: What is the approximate total dollar value of what the person obtained while misusing your information? by Q6: Was the existing card or card number a credit, debit, or prepaid card (such as a gift card)?

October 2007, n = 354, 360
Base: Existing card fraud victims
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Average Fraud and Consumer Costs for Debit, Credit and Prepaid Cards

Existing Card Fraud by Type: Mean and Median Fraud and Consumer Costs

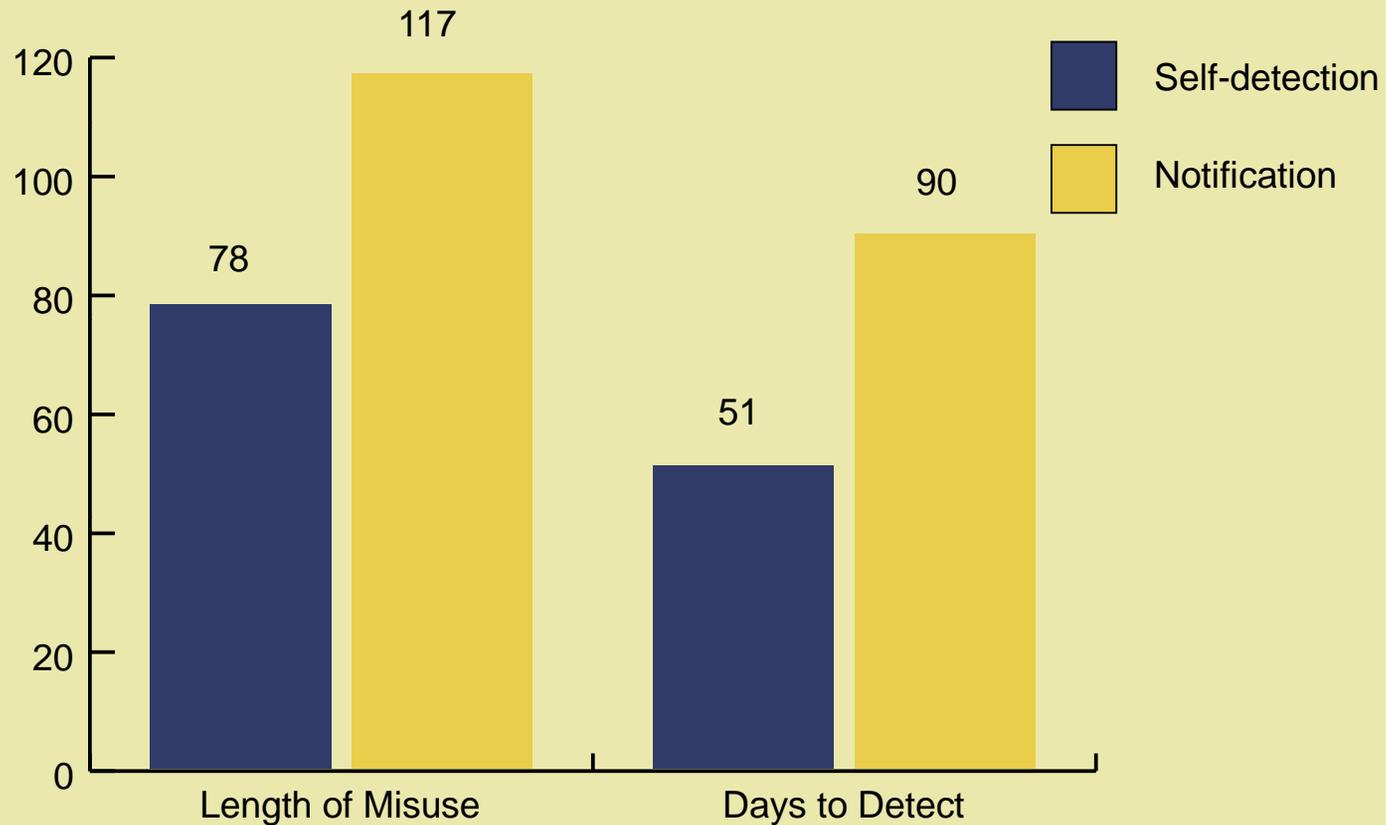
Existing Card Type	Mean Fraud Amount	Mean Consumer Cost	Median Consumer Cost	Mean Resolution Hours
Credit	\$6,172	\$696	\$0	25
Debit	\$4,367	\$739	\$0	26
Prepaid	\$2,776	\$532	\$13	7
All Existing Card	\$4,914	\$642	\$0	23

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Self-detection Leads to Faster Discovery of Fraud

Average Fraud Duration and Detection Time by Self-and External Detection



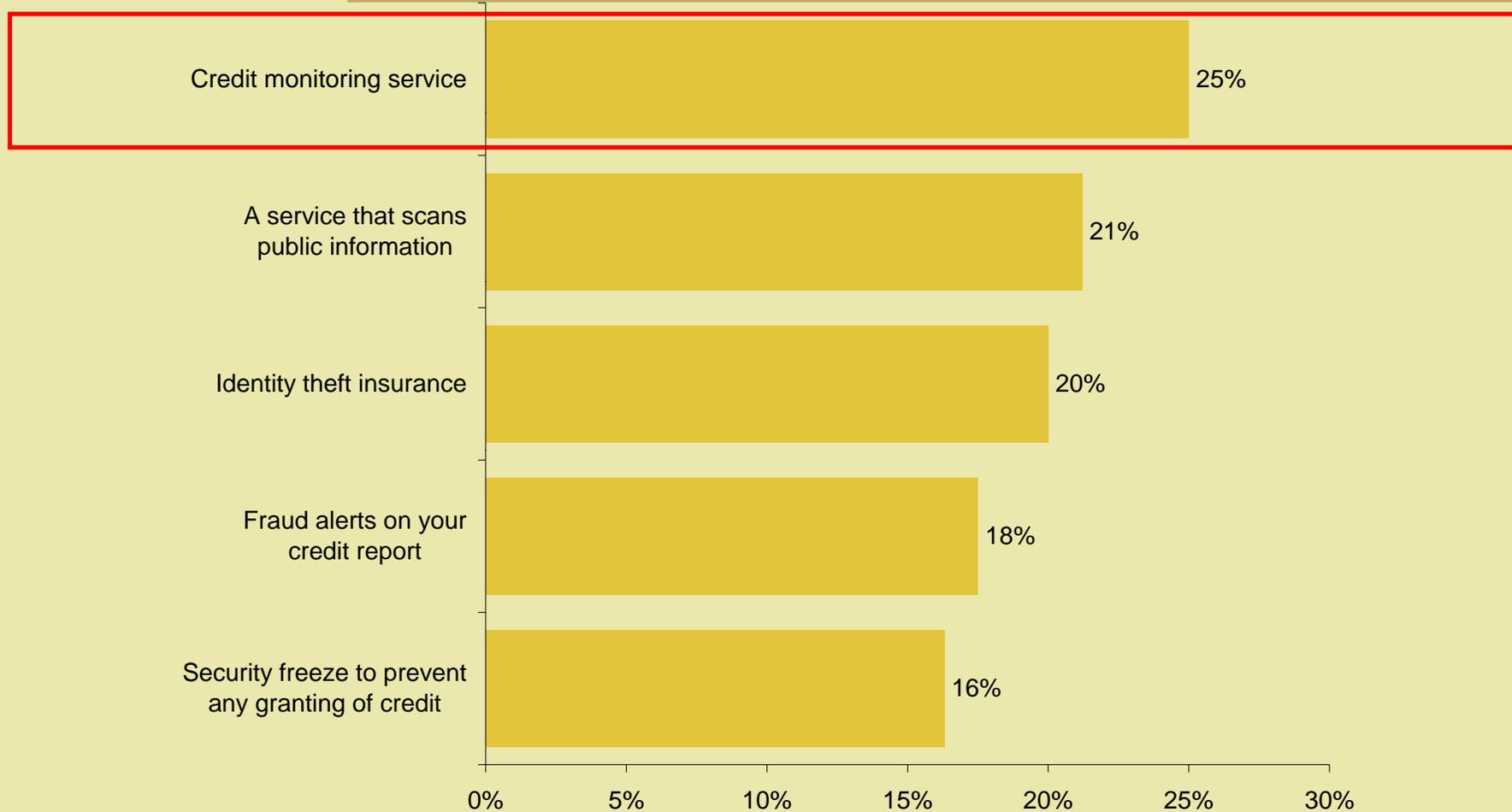
Q23: How did you first discover you were a victim of identity theft? Was it... by
Q24: From the time the misuse of your information first began, how long did it
take you to discover it had been misused? Q16: Over what period of time was
your information misused?

October 2007 n = 445
Base = All Fraud Victims
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Consumers Express Strong Liking for New Data Mining Services

Fraud Protection Services that Consumers Are Most Likely to Purchase



Q46: When thinking about protecting yourself against identity fraud, which service would you be most likely to purchase? (Select one only)

n = 6,000

Base: Online consumers

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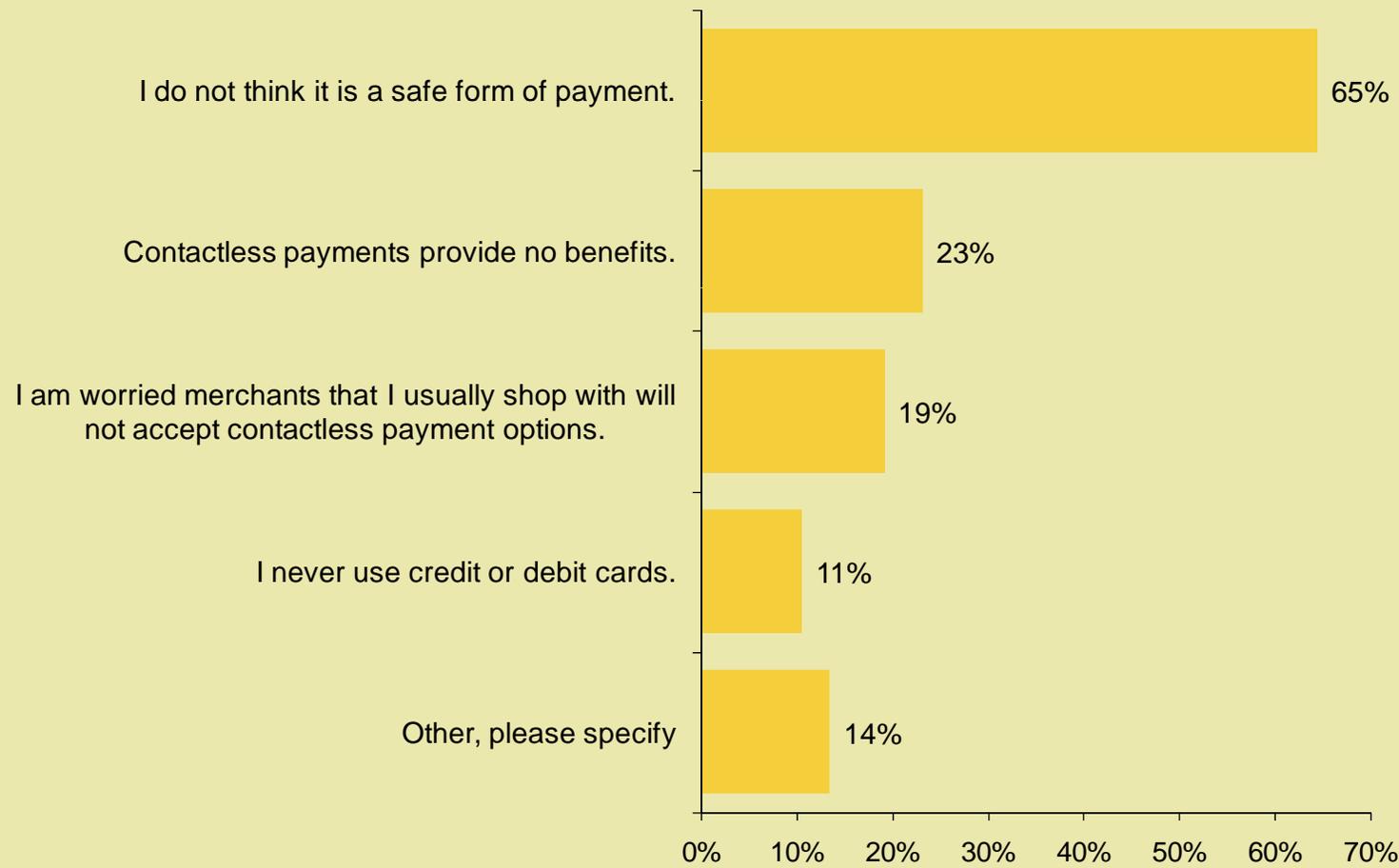


Contactless and Mobile Attitudes and Adoption Prospects



Safety Is Highest Concern Among Consumers Regarding Contactless

Concerns among Consumers Unlikely to Use Contactless



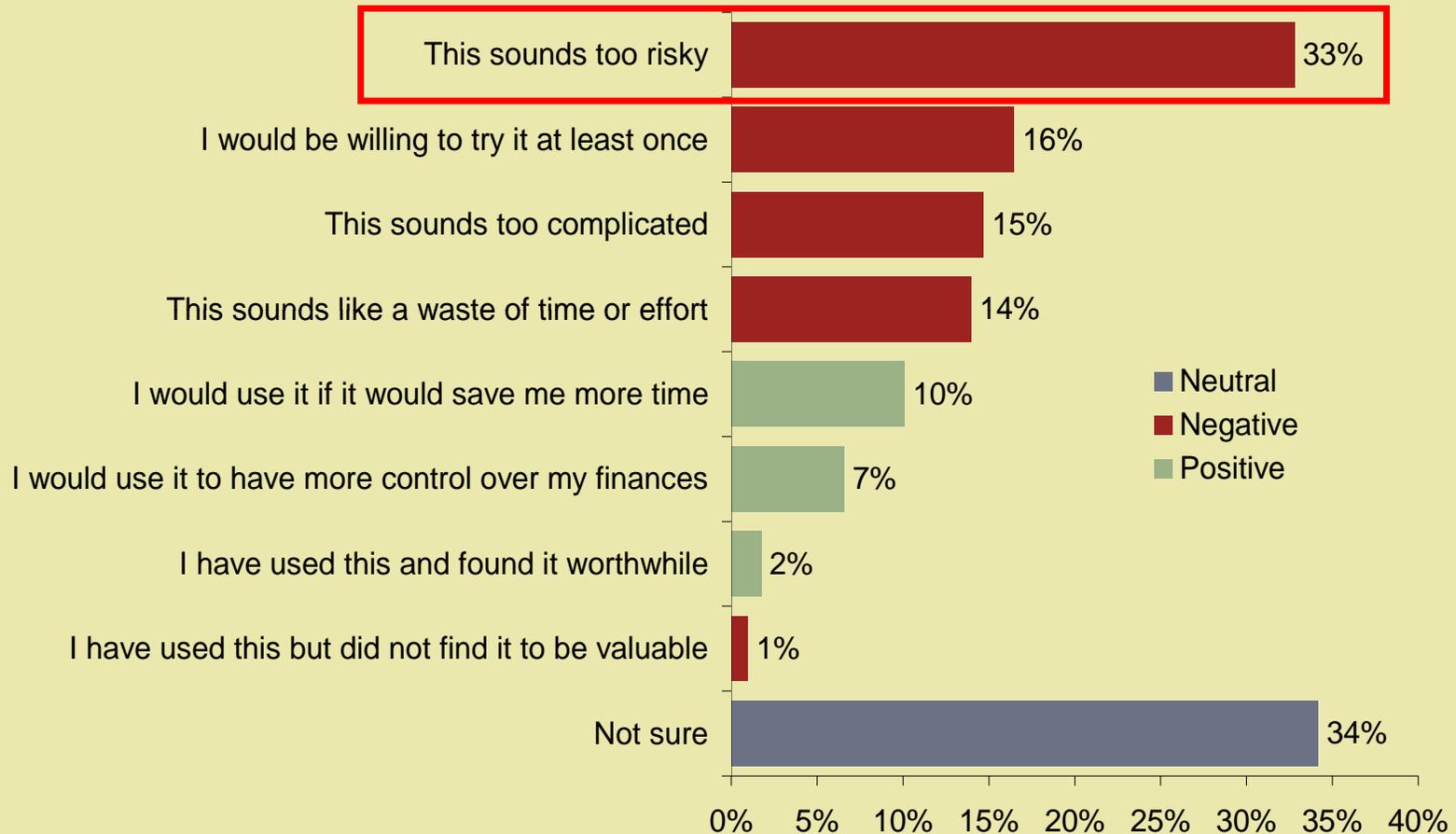
Q23: You responded that you are not likely to use a contactless-enabled card or device. Please select the reasons why. (Select up to three)

September 2007, n = 1132
Base: Respondents unlikely to use a contactless-enabled card or device
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Consumer Outlook on Mobile Banking Centers on Uncertainty and Distrust

Mobile Banking Deemed as “Too Risky” by One-Third of Consumers



Q29: Some institutions believe that personal financial capabilities should be offered through portable devices such as advanced mobile phones or handheld computers. What is your opinion on this? (Select all that apply)

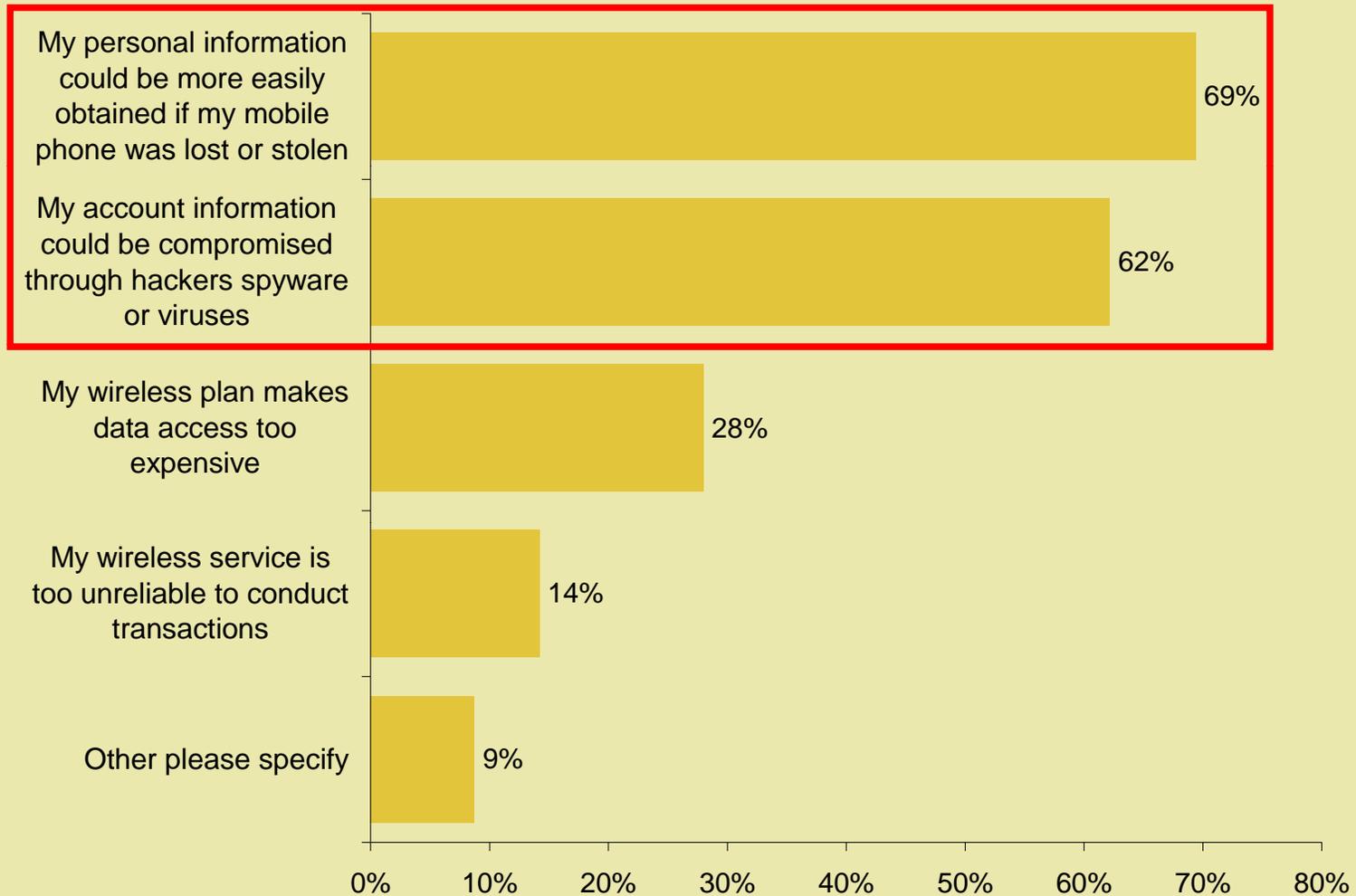
n = 2,230
Base: All consumers

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The “Reality” of Mobile Security: Mobile Viruses and Other Imminent Threats

Identity Theft Dominates Consumers’ Mobile Banking Concerns



Q40: What are your main concerns surrounding mobile banking? (Select up to three)

n = 2,230

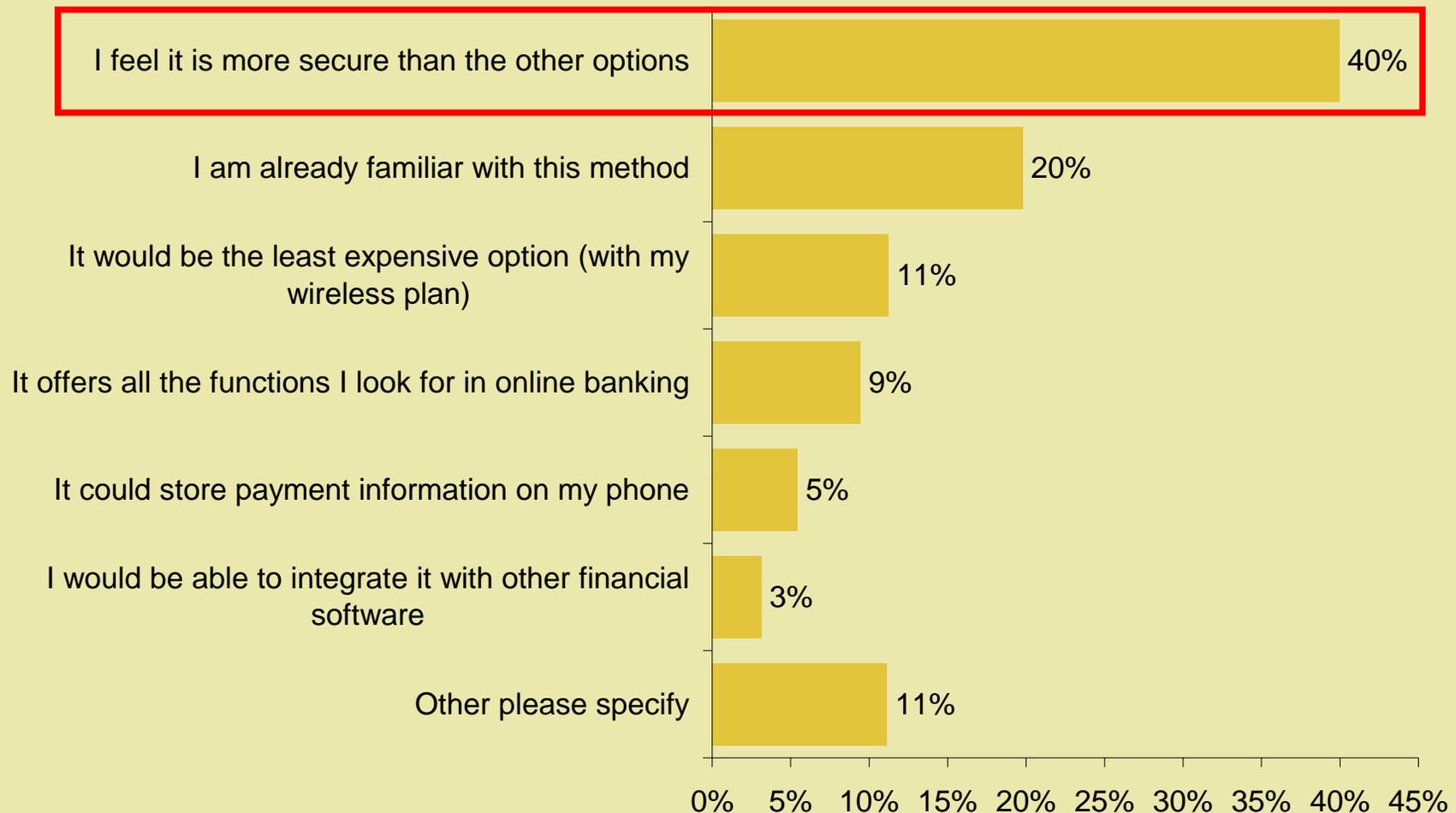
Base: All consumers

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Security Is the Primary Driver of Platform Preference

Two out of Five Consumers Will Select a Platform Based on Security



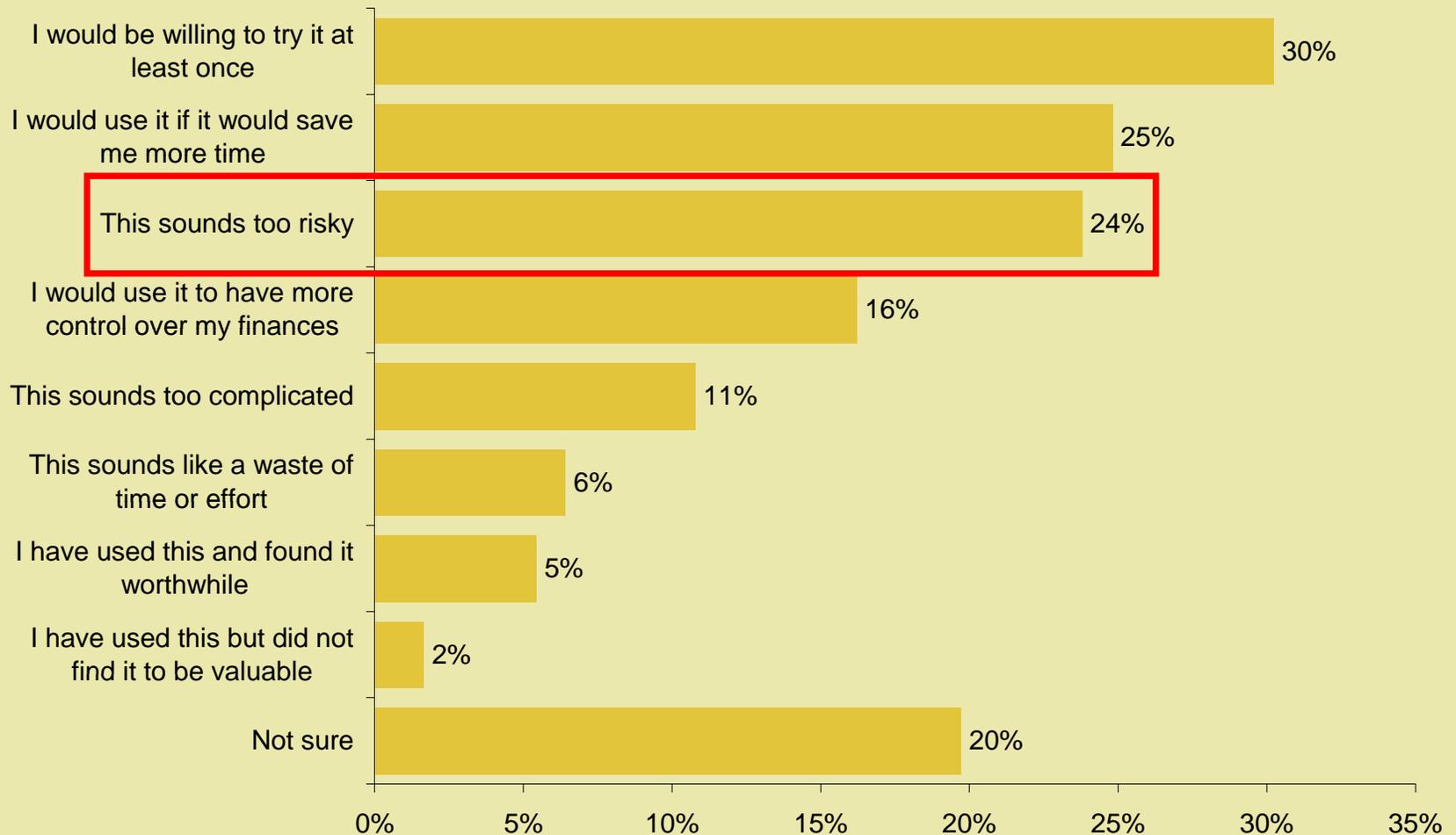
Q33: What was your primary reason for choosing the option you selected above? (Select one only)

n = 2,230
Base: All consumers
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Mobile Internet Users Are Less Hindered by Security, More Focused on Time-Saving Capability

Security Is Less of a Concern among Mobile Internet Users



Q29: Some institutions believe that personal financial capabilities should be offered through portable devices such as advanced mobile phones or handheld computers. What is your opinion on this? (Select all that apply) by Q26: Which of the following mobile phone features do you use?

n = 2,230
Base: All consumers
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