2015 Mobile Payment Security Study
Global Results

September 2015
www.isaca.org/mobile-payment-security-study
Number of respondents (n) = 901

Respondents are business and IT professionals who are members of ISACA.

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1. What is your preferred method of payment for personal purchases? (n = 899)
   a. Cash…………………………………………………………………………………......9%
   b. Check…………………………………………………………………………………1%
   c. **Credit card**…………………………………………………………………………………59%
   d. Debit card……………………………………………………………………………...24%
   e. Mobile payment (using a mobile device for in-person or online purchase)……..……...5%
   f. Other………………………………………………………………………………..…1%

2. For purchases you make, do you think each of the following transactions is secure (i.e., personal information is safe from being stolen or misused): (n = 899)

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Secure</th>
<th>Not Secure</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>89%</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>Check</td>
<td>37%</td>
<td>43%</td>
<td>20%</td>
</tr>
<tr>
<td>Credit card</td>
<td>47%</td>
<td>41%</td>
<td>12%</td>
</tr>
<tr>
<td>Debit card</td>
<td>42%</td>
<td>44%</td>
<td>15%</td>
</tr>
<tr>
<td>Money order</td>
<td>46%</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>Mobile payment</td>
<td>23%</td>
<td>47%</td>
<td>30%</td>
</tr>
</tbody>
</table>

3. In 2015, have you used mobile payment to make a purchase? (n = 896)
   a. Yes…………………………………………………………………………………......42%
   b. **No**…………………………………………………………………………………...57%
   c. Unsure…………………………………………………………………………………1%
4. Do you expect to see an increase in mobile payment data breaches over the next 12 months? (n = 900)
   a. Yes.................................................................87%
   b. No.................................................................5%
   c. Unsure............................................................8%

5. What do you think is the most significant security vulnerability with mobile payments? (n = 899)
   a. Weak passwords.............................................13%
   b. Lost or stolen devices.......................................21%
   c. Use of public WiFi...........................................26%
   d. User error.....................................................7%
   e. Phishing/shmishing (phishing attacks via text messages)..............................18%
   f. There are no security vulnerabilities..............................................0%
   g. Other............................................................14%

6. Which of the following is the most important action consumers can take to improve security
   associated with mobile payment? (n = 897)
   a. Require two ways to authenticate their identity (two-factor authentication).......66%
   b. Require a short-term authentication code..............................................18%
   c. Install phone-based security apps.......................................................9%
   d. They do not need to do anything to improve security............................1%
   e. Other.............................................................6%

7. What additional tip(s) would you give to consumers to make mobile payments as secure as
   possible? (n = 489)
   Frequent answers to this open-ended question included:
   a. Make passwords complex and strong, and change them frequently.
   b. Use two-factor or biometric authentication.
   c. Don’t use public WiFi when making mobile payments.

8. At what age do you think young people should be taught about keeping mobile phones
   secure? N = 899)
   a. Under 10 years old.................................................31%
   b. 10-13 years old......................................................41%
   c. 14-17 years old......................................................20%
   d. 18-24 years old......................................................6%
   e. I don’t think this subject needs to be taught........................................1%
9. What is the youngest age you think it is acceptable for a child to be given his/her own smartphone? (i.e., mobile phone with Internet connectivity) (n = 899)
   a. Under 10 years old ................................................................. 8%
   b. 10-13 years old ................................................................. 40%
   c. 14-17 years old ................................................................. 46%
   d. Never ........................................................................ 3%
   e. Unsure ........................................................................ 4%

10. What are the top three steps adults should take to improve the security of a child’s smartphone? (Please select three.)
   a. Require a PIN code or password to access the phone.................. 72%
   b. Install parental control software ............................................ 58%
   c. Install mobile security software ............................................. 53%
   d. Ensure the phone doesn’t automatically connect to public WiFi networks .................. 37%
   e. Ensure the ability to track the phone’s location ......................... 38%
   f. Ensure the ability to remotely wipe or shut down the device ....... 53%
   g. Other ........................................................................ 6%

11. In what country do you live? (n = 875; responses are rounded to the nearest tenth)
   a. Albania ........................................................................ 0.1%
   b. Argentina ....................................................................... 0.8%
   c. Armenia ......................................................................... 0.1%
   d. Australia ....................................................................... 4.3%
   e. Austria .......................................................................... 0.3%
   f. Bahrain .......................................................................... 0.5%
   g. Belgium ......................................................................... 1%
   h. Bosnia and Herzegovina ..................................................... 0.1%
   i. Brazil ........................................................................... 1.1%
   j. Bulgaria ......................................................................... 0.3%
   k. Canada ......................................................................... 6.2%
   l. Chile ........................................................................... 0.2%
   m. China ........................................................................... 0.1%
   n. Colombia ....................................................................... 0.7%
   o. Costa Rica ..................................................................... 0.2%
   p. Cote d’Ivoire .................................................................. 0.1%
   q. Croatia .......................................................................... 0.7%
   r. Cyprus .......................................................................... 0.2%
   s. Czech Republic ................................................................ 0.6%
   t. Denmark ......................................................................... 1.3%
   u. Dominican Republic .......................................................... 0.1%
   v. Egypt ........................................................................... 0.2%
   w. Finland ........................................................................... 0.7%
   x. Germany ....................................................................... 2.7%
   y. Ghana .......................................................................... 1%
<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greece</td>
<td>0.7%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1.8%</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.3%</td>
</tr>
<tr>
<td>India</td>
<td>3.6%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.2%</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.8%</td>
</tr>
<tr>
<td>Israel</td>
<td>0.5%</td>
</tr>
<tr>
<td>Italy</td>
<td>1.5%</td>
</tr>
<tr>
<td>Japan</td>
<td>1%</td>
</tr>
<tr>
<td>Kenya</td>
<td>1.6%</td>
</tr>
<tr>
<td>Korea, South</td>
<td>0.1%</td>
</tr>
<tr>
<td>Kuwait</td>
<td>0.1%</td>
</tr>
<tr>
<td>Latvia</td>
<td>0.3%</td>
</tr>
<tr>
<td>Lebanon</td>
<td>0.1%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0.5%</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>0.3%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>0.5%</td>
</tr>
<tr>
<td>Malta</td>
<td>0.1%</td>
</tr>
<tr>
<td>Mauritius</td>
<td>0.1%</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.3%</td>
</tr>
<tr>
<td>Morocco</td>
<td>0.1%</td>
</tr>
<tr>
<td>Nepal</td>
<td>0.1%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.4%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1%</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>0.2%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1.5%</td>
</tr>
<tr>
<td>Norway</td>
<td>0.3%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.3%</td>
</tr>
<tr>
<td>Panama</td>
<td>0.3%</td>
</tr>
<tr>
<td>Peru</td>
<td>0.9%</td>
</tr>
<tr>
<td>Philippines</td>
<td>0.6%</td>
</tr>
<tr>
<td>Poland</td>
<td>0.5%</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.6%</td>
</tr>
<tr>
<td>Qatar</td>
<td>0.1%</td>
</tr>
<tr>
<td>Romania</td>
<td>0.3%</td>
</tr>
<tr>
<td>Russia</td>
<td>0.5%</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>0.8%</td>
</tr>
<tr>
<td>Serbia</td>
<td>0.2%</td>
</tr>
<tr>
<td>Singapore</td>
<td>1.3%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>0.3%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.1%</td>
</tr>
<tr>
<td>South Africa</td>
<td>2.6%</td>
</tr>
<tr>
<td>Spain</td>
<td>2.5%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>0.1%</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.3%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1.7%</td>
</tr>
</tbody>
</table>
ttt. Taiwan………………………………………………………………………….0.2%
uuu. Tanzania………………………………………………………………….0.1%
vvv. Thailand……………………………………………………………………0.1%
www. Togo…………………………………………………………………………0.1%
xxx. Trinidad and Tobago…………………………………………………….0.3%
yyy. Turkey………………………………………………………………………0.7%
zzz. Ukraine……………………………………………………………………0.2%
aaaa. United Arab Emirates…………………………………………………0.7%
bbbb. United Kingdom…………………………………………………………5%
cccc. **United States**………………………………………………………….32%
dddd. Uruguay……………………………………………………………………0.1%
eeee. Venezuela………………………………………………………………..0.1%
ffff. Vietnam…………………………………………………………………0.1%
gggg. Zambia………………………………………………………………….0.1%
hhhh. Zimbabwe………………………………………………………………0.3%

12. In what region do you live? (n = 897)
   a. Asia-Pacific……………………………………………………………………13%
   b. Europe………………………………………………………………………29%
   c. Middle East…………………………………………………………………3%
   d. Africa…………………………………………………………………………8%
   e. Latin America (Mexico, Central America, South America)……………7%
   f. **North America**…………………………………………………………..38%
   g. Oceania (Australia, New Zealand, Papua New Guinea)………………3%

13. In what industry do you work? (n = 899)
   a. Financial/Banking……………………………………………………………26%
   b. Insurance……………………………………………………………………4%
   c. Public accounting…………………………………………………………2%
   d. Transportation………………………………………………………………1%
   e. Aerospace……………………………………………………………………0%
   f. Retail/Wholesale/Distribution……………………………………………..2%
   g. Government/Military………………………………………………………9%
   h. **Technology Services/Consulting**………………………………………31%
   i. Manufacturing/Engineering………………………………………………4%
   j. Telecommunications/Communications…………………………………5%
   k. Mining/Construction/Petroleum/Agriculture……………………………2%
   l. Utilities………………………………………………………………………2%
   m. Legal/Law/Real Estate……………………………………………………0%
   n. Healthcare/Medical…………………………………………………………3%
   o. Pharmaceutical……………………………………………………………..1%
   p. Advertising/Marketing/Media………………………………………………1%
   q. Education/Student…………………………………………………………2%
   r. Other (please specify)………………………………………………………5%
14. How many people are employed in your enterprise, including all branches, divisions and subsidiaries? (n = 895)

- Fewer than 50…………………………………………………………..……………...14%
- 50-149……………………………………………………………………….…………..6%
- 150-499…………………………………………………………………….…………...7%
- 500-1,499………………………………………………………………………………13%
- 1,500-4,999…………………………………………………………………………….14%
- 5,000-9,999…………………………………………………………………………….10%
- 10,000-14,999…………………………………………………………………………...5%
- **15,000 or more**…………………………………………………………….32%

15. Which of the following is closest to your job title? (n = 900)

- Student……………………………………………………………………………...…...0%
- External consultant…………………………………………………………………….14%
- Professor/teacher……………………………………………………………………….1%
- Practitioner……………………………………………………………………………….11%
- Supervisor……………………………………………………………………………….5%
- **Manager**…………………………………………..…………………………………32%
- Director…………………………………………………………………..……….……11%
- Vice president……………………………………………………………………….…..4%
- CIO/CISO/CAE…………………………………………………………………..……10%
- President/CEO…………………………………………………………………………..3%
- Other (please specify)………………………………………………………..………….9%

16. Please indicate your gender. (n = 886)

- Female………………………………………………………………...……………….14%
- **Male**…………………………………………………………………………………86%

17. Please select your age group. (n = 890)

- 18-24…………………………………………………………………………………….0%
- 25-34……………………………………………………………………………….…..12%
- **35-44**……………………………………………………………………………………34%
- 45-54……………………………………………………………………………….33%
- 55-64………………………………………………………………………………...…19%
- 65-74………………………………………………………………………………......2%
- 75 or above…………………………………………………………………………..0%

About ISACA’s 2015 Mobile Payment Security Study
The 2015 Mobile Payment Security Study reflects the insights of more than 900 ISACA members on the security-related aspects of mobile payment. The online survey was conducted in August 2015. Full results are available at [www.isaca.org/mobile-payment-security-study](http://www.isaca.org/mobile-payment-security-study).