Malware and Mrs Malaprop: what do consumers really know about AV

Are users stupid or just not educated?

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Who is Mrs. Malaprop?

• Character in an 18th century play known for her malapropisms

• “You must forget the man, completely illiterate him from your memory”

• Think SNL’s Roseanne Roseannadanna
But first, some fireworks...
The cause of this massive fail?

• A virus!
  – August Santore, co-owner of New Jersey-based Garden State Fireworks, in an interview with NBC San Diego:
  – “Somehow, some sort of virus must have got into the program”
Why don’t people know better?

We asked consumers: Have you had any security training, ever?

- Yes: 32%
- No: 68%
This was scary because...

Earlier this year we asked employed U.S. adults if their employer had ever given them any security training:

- Yes: 32%
- No: 68%
Two surveys find that only 32% of computer users got security training

• Only 10% had that training in the last 12 months:
But does this matter?

• Do computer using adults “get” security without training?
  • 83% had heard of phishing
    – 17% had not
  • 58% correctly identified the definition of phishing
    – 42% did not
• People with more education in general did better on this question
What do people think about the security of different platforms?

The “safest” platform still considered very vulnerable by 25%
What platforms do people use to access Internet at home?

- Windows, 85%
- Mac OS X, 9%
- iPhone or iPad, iOS, 2%
- Android, 2%
- Other, 2%

People foolishly using a platform they consider vulnerable? Or a healthy sense of vulnerability?
How safe do people think their private information is when banking online?

- Very safe, 41%
- Somewhat safe, 42%
- Not too safe, 6%
- Not safe at all, 3%
- Extremely safe, 8%

Only 9% think PI is not safe when banking.
How safe do people think their private information is when social networking?

- Only 28% think it is unsafe
- Doubt about safety is greater among those who spend more time on social networks.

![Pie chart showing the percentage of people's perceptions of social networking safety.]

- Somewhat safe: 53%
- Very safe: 15%
- Not too safe: 24%
- Not safe at all: 4%
- Extremely safe: 4%
Do they *get* password strength?

Percentage who rate the following passwords as “strong” in terms of Internet security:

- sdfeghuky3dfrr
- Princess584369
- Iwillfearnoevil!
- 87654321
- qwerty
- princess
- football
As used at this super secret base
Chief of Facility’s Password

• Career CIA officer in charge of the base that processes the data feeds from the U.S. spy satellite network
• Password: 87654321
• Why?
  – “Nobody would ever guess that I use something that simple”
• Security Officer:
  – “Please change it!”
  – “No, I use it for everything”
Do consumers use security software?

- 91% say Yes
Why no security software?

- My computer is safe without it
- I can't afford it
- It will slow down my computer
- It conflicts with other programs
- I haven't taken time to install it
- I don't understand set up and use

* Room for improvement in the industry
Other reasons given for not using security software:

- I am using my tablet
- I have a Mac
- I have a MacBook Pro
- I use Linux
- Macs seldom get viruses
- Shuts down too many of my applications.
- There is none available for iPhone
Did you experience a virus infection or other form of attack in last 12 months?

- Yes: 37%
- No: 63%

- Virus infection: 32%
- Theft of information: 6%
- Other type of attack: 3%
- No attacks: 63%
Cost of consumer security failures

- 37% had some loss in last year

![Bar chart showing the percentage of losses in different monetary categories.]

- Under $100: 50%
- $100 - $500: 20%
- $500 - $2,000: 10%
- $2,000 or more: 5%
- Rather not say: 5%
- Unsure: 5%
Does policy drive education?

- Has your employer ever asked you to read and abide by a security policy that applies to computers and/or Internet at work?

* 7 of 8 who took classes had signed a security policy.
An example of policy driving education

- ESET/Harris BYOD survey of employed U.S. adults
- Where employer has implemented a “BYOD” policy to protect company data
- 63% say employer has provided security training related to the use of their device
- Media coverage of a security issue could drive policy and thus training
Observations?

- Even without security training some users can figure out security
- More educated users are likely to be more security aware
- There is an ongoing cost to consumers due to security failures
- AV software could be improved
- Educating the market makes a lot of sense for security vendors
If we don’t do better?

• It’s a win for Michael or Malware, Inc.

**WINDOWS SUPPORT**
Hello, my name is Michael and I’m calling from the Windows Support Center. We see your computer is having 32,539 errors. Please can you go to Event Viewer

**MALWARE, INC.**
Industrialized malware operations, targeting consumers and ripping them off with increasing efficiency by exploiting their lack of security training and awareness
Thank you!

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