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

Are users stupid or just not educated?

Stephen Cobb, CISSP Security Evangelist, ESET



Who is Mrs. Malaprop?

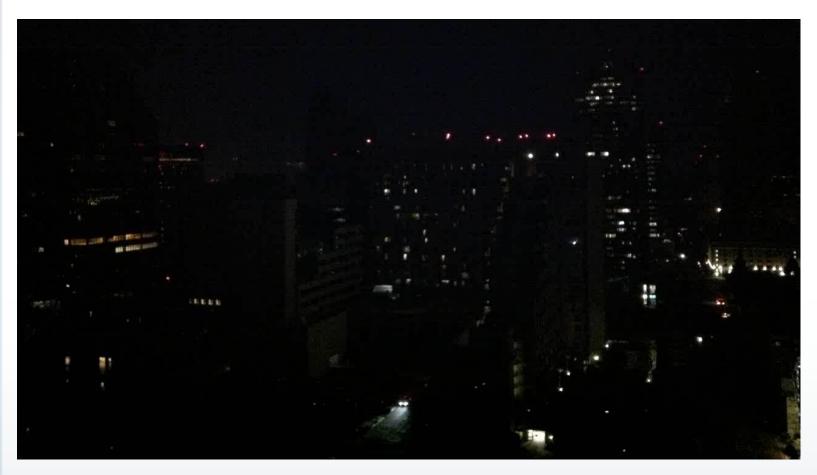
- Character in an 18th century play known for her malapropisms
- "You must forget the man, completely illiterate him from your memory"
- Think SNL's Roseanne Roseannadanna







But first, some fireworks...

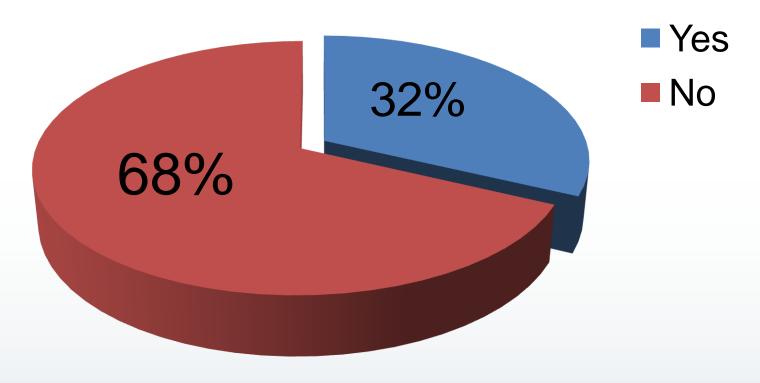


The cause of this massive fail?

- 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?

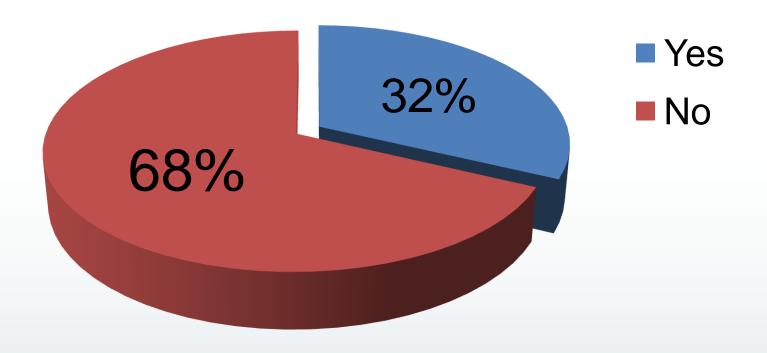
We asked consumers: Have you had any security training, ever?





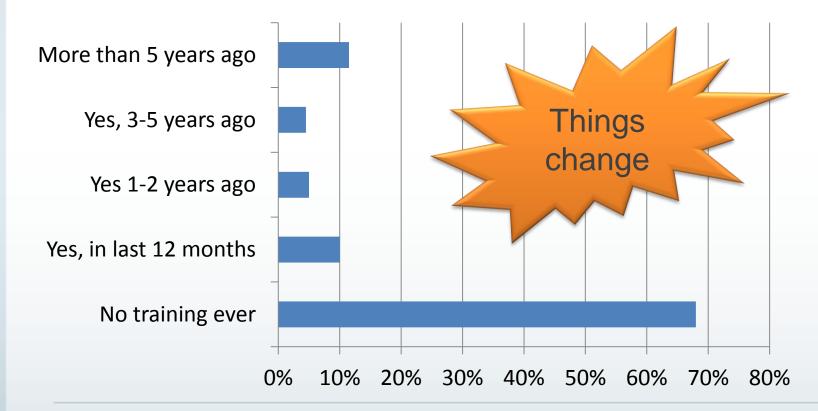
This was scary because...

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



Two surveys find that only 32% of computer users got security training

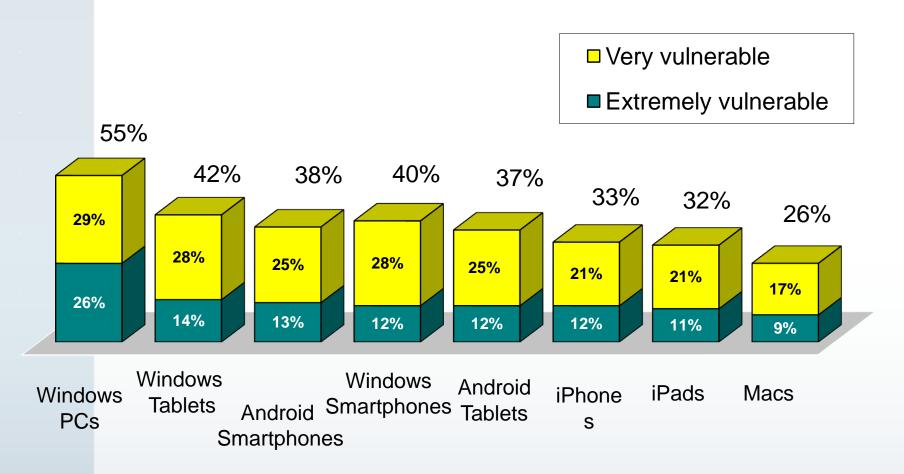
Only 10% had that training in the last 12 months:



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

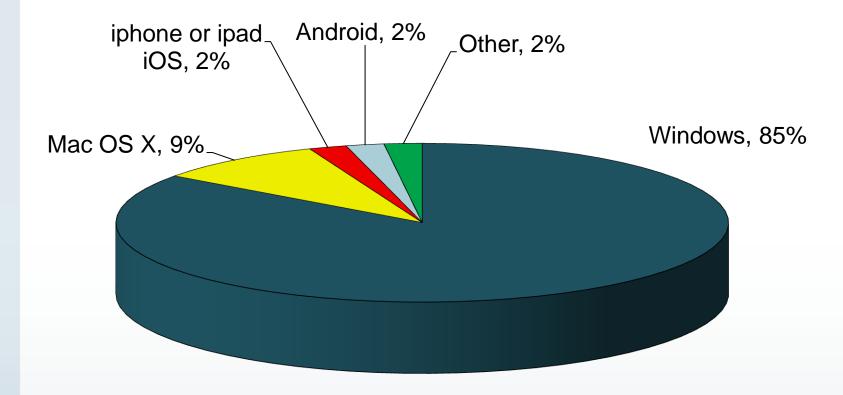
What do people think about the security of different platforms?



The "safest" platform still considered very vulnerable by 25%



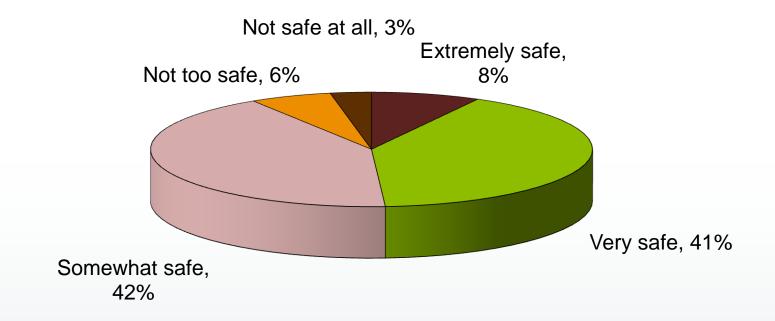
What platforms do people use to access Internet at home?



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?

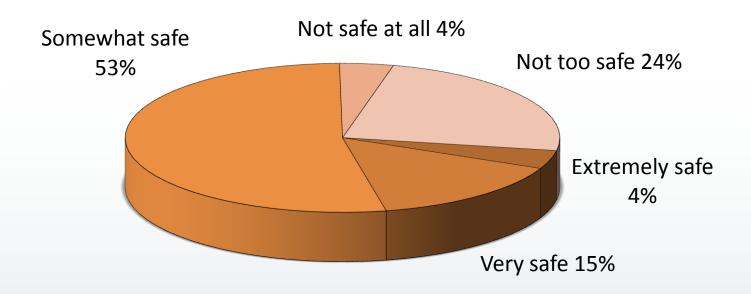


Only 9% think PI is not safe when banking



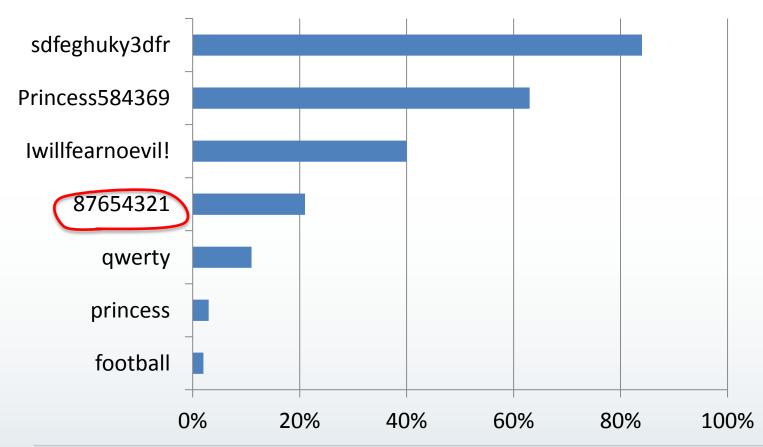
How safe do people think their private information is when social networking?

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



Do they get password strength?

Percentage who rate the following passwords as "strong" in terms of Internet security



As used at this super secret base



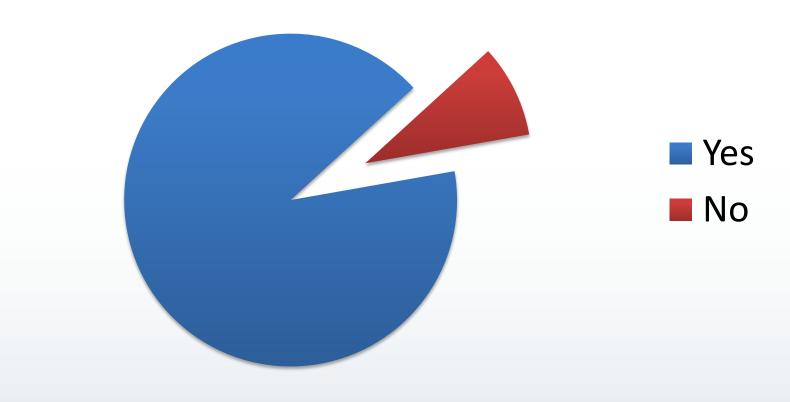
Chief of Facility's Password

- 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"

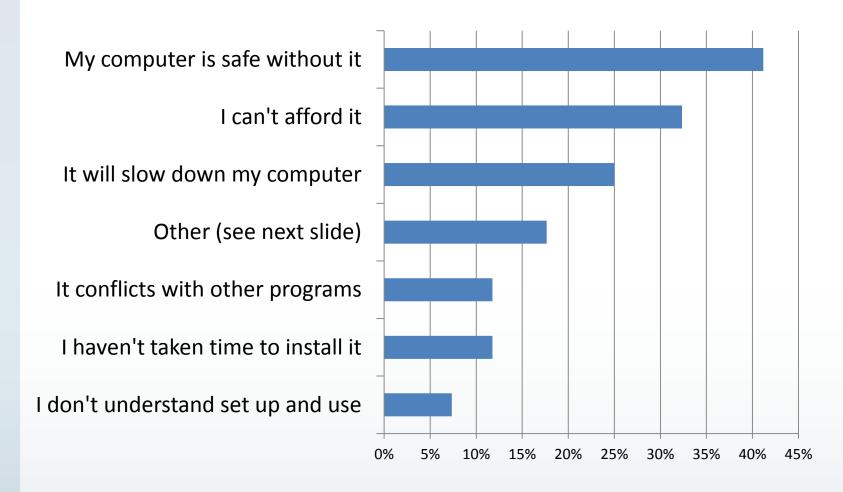


Do consumers use security software?

91% say Yes



Why no security software?



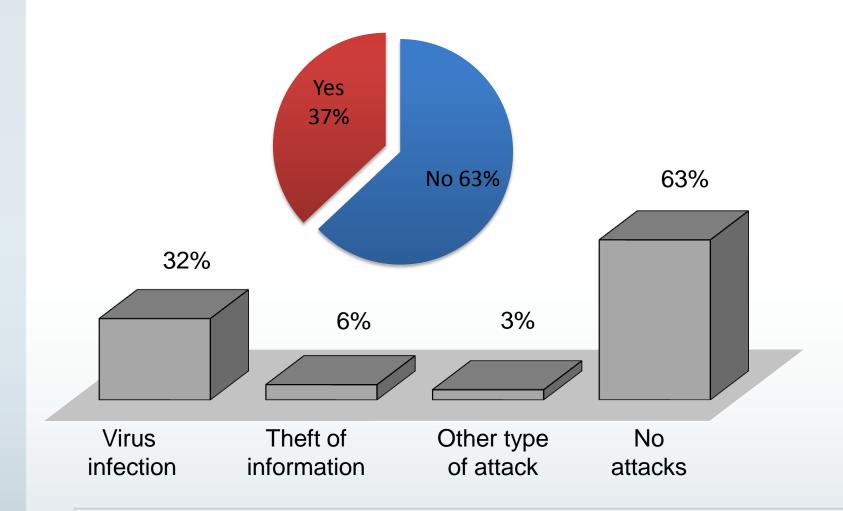
^{*} Room for improvement in the industry



Other reasons given for not using security software:

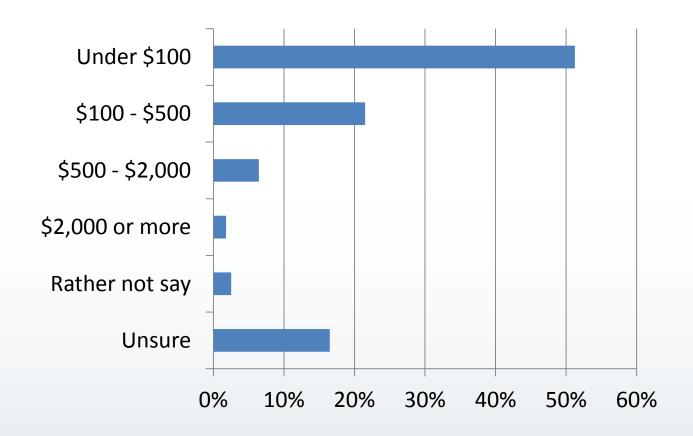
- I am using my tablet
- I have a Mac
- I have a MacBook Pro
- I use Linux
- Macs seldom get viruses
- Shuts down too many of my applications.
- There is none available for iPhone

Did you experience a virus infection or other form of attack in last 12 months?



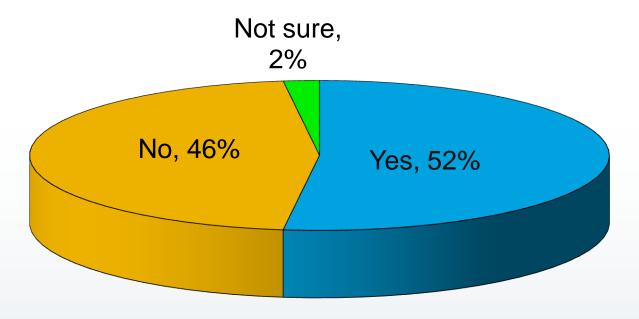
Cost of consumer security failures

37% had some loss in last year



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!

- Stephen Cobb
 stephen.cobb@eset.com
- blog.eset.com
 @ESETNA

