CS 523: Social, Economic, and Legal Aspects of Security

Cyber Liability
A historical precedent: Autos

• Evans vs General Motors (GM)
  – Evans alleged that GM had been negligent in designing a 1961 Chevrolet without a perimeter frame to protect from a side-impact collision
  – Such rails that were being used in many other cars

• Court ruled against Evans:
  – “a manufacturer is not under a duty to make his automobile accident-proof or foolproof”
  – Court exaggerated Evans’ claim so as to dismiss it
A historical precedent: Autos (cont’d)

- The formulation used in the Evans vs GM case was later rejected in Larsen vs GM case
  - GM tried to frame the issue as it did in the Evans case (that GM was being asked to produce a crash-free car)
  - This time the court rejected GM’s attempt, relied instead on the idea that it was possible for General Motors to have designed a vehicle that would minimize the effect of accidents
Fast forward to a 2011 software case

• Several banks sued their payment processor
  – Payment processing company had suffered a massive data breach that exposed the banks’ customer data

• Court ruled against the banks, relied on the logic of an earlier court decision that stated
  – “a jury could not reasonably find an implied merchant commitment against every intrusion under any circumstances whatsoever”
  – As in Evans vs GM, exaggerate then dismiss claim
Why automobiles and not software?

• How do automobile users prevail in court?
  – Tort law (typically for losses due to negligence); particularly effective because of its lower burden of proof (“preponderance of evidence”, rather than “beyond a reasonable doubt”)
  – Contract law (including implied warranties)
  – Consumer protection laws

• We’ll examine why software users have failed to prevail under all of the above
Legal limits for pure economic losses

• Tort liability for negligence is restricted to cases of bodily injury or physical damage to property
  – Excludes losses that can be seen on a balance sheet but not physically (called “pure economic losses”)
  – Pure economic losses fall under contract law (for defective products, the law of warranty)

• Security breaches give rise to losses that are mainly economic rather than physical
  – Software vendors disclaim warranties, limit remedies
“You did not pay for it” dismissals

• Lawsuits against Facebook, Apple
  – For sharing their users’ data with third parties
  – Both dismissed: Judges ruled consumer protection laws do not extend to the users of free services
• Lawsuit against LinkedIn (also thrown out)
  – Alleged failure to use standard protection tech, in violation of its User Agreement and Privacy Policy
  – Premium customers did pay, but were subject to the same policies as free users of the service
“Hackers are to blame” dismissals

• Focus on hackers, refusal to consider role of the negligent creators of the exploitable environments (who saved themselves $s)

• Lawsuit against Sony after security breach
  – Court rejected “misrepresentation of security” claim (Sony's privacy policy had stated that its security was not perfect)
  – Court rejected “unfair business practice” claim (“Sony did not benefit from breach”)