



Data Protection : Cinderella of the software industry?

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Starting points

- Concept “code regulates” Lessig
Reidenberg, Shah, Kesan et al
- Enterprise software automates a lot of key
business functions
- Lots of research in DRM and patent,
(Zittrain, Burk, Camp, Cockfield,
Samuelson, Hossein, Cohen, Froomkin,
Dreier et al)
- but not much in enterprise software and law



Lots of law, lots of code

- DRM
- Sarbanes-Oxley (6 billion \$ spend 2006)
- Basel II
- Payroll



Who makes code and why?

- Not just 3 geeks in a garage
- Software companies
- For a profit, market driven
- (some exceptions)



What is a computer...?

- As a machine of the most general nature. Whatever formula it is required to develop, the law of its development must be communicated to it by two sets of cards....Every set of cards made for any formula will at any future time recalculate that formula with whatever constants may be required.
 - Babbage



Software is an industry

- Big money, big margins
- Rapid consolidation (psft-orcl; ibm-pwc)
- Interesting economics (Network effects etc - Varian)
- Speed of change (Moore)
- Strengthening political clout (patents)



But most code is relatively poor

- Immature rules and procedures
- Few standards
- Lots of errors (Humphrey etc)
- “Craft” not “production” (Thomas, Buhrer)



Software is not regulated (well hardly)

- Anyone can write and sell it
- Anywhere
- With almost no restrictions or controls
- Lurks between service and good (at least in UK law)



Market failures

- Privacy
- Security
- Simplicity
- Quality
- Portability
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Externalities

- Pollution metaphor (Hirsch)
- Weak security (Anderson)
- Bugs
- Spam
- Loss of privacy
- Lock-in



Lots of law, little code

- Data Protection Law
- Law exists to “project us from the power of technology to erode privacy”
Lloyd, Younger,
- Yet largely ignored in application development



Not new

- Recent inventions and business methods call attention to the next step which must be taken for the protection of the person, and for securing to the individual what Judge Cooley calls the right "to be let alone" Instantaneous photographs and newspaper enterprise have invaded the sacred precincts of private and domestic life; and numerous mechanical devices threaten to make good the prediction that "what is whispered in the closet shall be proclaimed from the house-tops."
- 1890 Warren & Brandeis



Fairy godmother? embed privacy into commercial applications?

- Huge public disquiet?
- Research breakthrough?
- Cost reduction?
- Commercial drivers?
- Direct legislative pressure?
- Industrialization of software development?



My hypotheses

- **There is a significant market for software solutions that aid compliance with certain laws. For other laws there is not.**
- **When moved to do so, the software industry can quickly deliver solutions that aid compliance.**
- **The software industry can create externalities that undermine relatively significant laws. Software is built to make a profit, not obey the law. Instances of market failure abound in the software industry.**
- I'm comparing the software industry (market) reaction to SOX and DP especially to highlight market failure and the externality.



Questions?