Big Data and Hedge Funds: Current Legal and Compliance Issues

Presenters:

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Summary

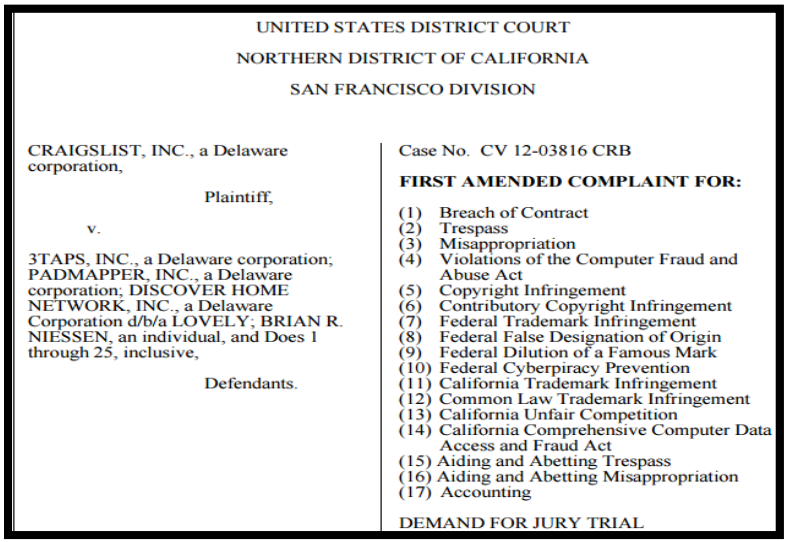
1. Intro
   - Why are we here: Emergence of “Big Data” as an industry trend.
   - Managers can acquire the data themselves and/or commission or otherwise acquire the data from third parties through a variety of different arrangements.
   - Contracts relating to Big Data require special consideration.
   - Violation of laws/agreements could result in civil issues and possibly trigger potential securities law violations.
   - Not Expert Networks 2.0.
2. What is “Big Data?”
   - Different types of data used by fund managers (e.g., consumer info, industry trends, satellite photos, etc.).

Summary *(cont'd)*

3. How does one acquire "Big Data?"
   - Describe the various techniques for acquiring the data (e.g., scraping, crawling, drones, etc.).
4. What are the key legal issues/concerns raised by the use of "Big Data"?
   - An overview of the key legal issues and concerns implicated by the use of "Big Data."
   - Discuss insider trading and other securities law issues and concerns.
5. What are the key takeaways for fund managers?
   - Discuss policies, procedures and practices.
6. Final Remarks/Questions.

Big Data:
A Potential Kitchen Sink of Claims

- Breach of contract (e.g., website terms, EULA, API terms)
- CFAA (and equivalent state computer trespass law)
- Direct and contributory copyright infringement; DMCA
- Common law trespass; conversion
- Unfair competition
- Misappropriation



UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

CRAIGSLIST, INC., a Delaware corporation,

Plaintiff,

v.

3TAPS, INC., a Delaware corporation; PADMAPPER, INC., a Delaware corporation; DISCOVER HOME NETWORK, INC., a Delaware Corporation d/b/a LOVELY; BRIAN R. NIESSEN, an individual, and Does 1 through 25, inclusive,

Defendants.

Case No. CV 12-03816 CRB

FIRST AMENDED COMPLAINT FOR:

(1) Breach of Contract
(2) Trespass
(3) Misappropriation
(4) Violations of the Computer Fraud and Abuse Act
(5) Copyright Infringement
(6) Contributory Copyright Infringement
(7) Federal Trademark Infringement
(8) Federal False Designation of Origin
(9) Federal Dilution of a Famous Mark
(10) Federal Cyberpiracy Prevention
(11) California Trademark Infringement
(12) Common Law Trademark Infringement
(13) California Unfair Competition
(14) California Comprehensive Computer Data Access and Fraud Act
(15) Aiding and Abetting Trespass
(16) Aiding and Abetting Misappropriation
(17) Accounting

DEMAND FOR JURY TRIAL

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Contract Issues

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Enforceable?

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Will the Site Owner Enforce?

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Craigslist, Inc. v RadPad, Inc., No. 16-01856 (N.D. Cal. Final Judgment Apr. 13, 2017)

Computer Fraud and Abuse Act

18 U.S.C. §1030 – Fraud and related activity in connection with computers –

- Provides civil/criminal cause of action for access to a "protected computer" "without authorization or exceeding authorized access," and obtaining information, causing damage or loss, or furthering a fraud, among other things.
- Many states have parallel or similar computer fraud statutes.
- Must show $5,000 in damages
- **Key Question**: What is exceeding authorized access? Is breach of terms of use enough?

Computer Fraud and Abuse Act

- Did you violate the terms of use?
- Did you get a cease and desist letter?
- Are you circumventing technical measures to block access?
  - Did you conceal who you are by manipulating the “User-Agent” in your http call?
  - Did you check the robots.txt file for the site?
  - Did you pay any attention to what is in it?
  - Did you manipulate IP addresses?
  - Did you take any other actions to hide access?

U.S. Privacy and Data Security Law

- A sector-by-sector approach:
  - Medical information
  - Financial information
  - Sensitive personal information
  - Children's privacy
  - School records
  - Communications
  - Computers
  - Cable subscriber information
  - GPS tracking

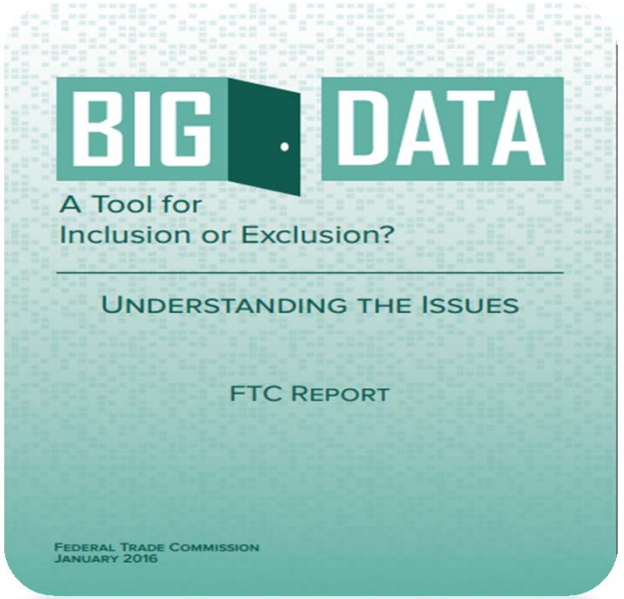
Electronic Communications Privacy Act and the Stored Communications Act

18 U.S.C. §2511; 18 U.S.C. §2701

- The ECPA provides a private right of action against any person who intentionally intercepts any "wire, oral, or electronic communications."
- The Stored Communications Act prohibits certain unauthorized access to stored communications and records.
- The ECPA allows for "*use" and "disclosure*" liability.
  - Liability extends to intentional use or disclosure of illegal intercepted communications, where one knows the information used or disclosed came from an intercepted communication and had sufficient facts that such interception was prohibited.

FTC 2016 Big Data Report

The agency advises companies using big data to consider whether they are violating any material promises to consumers involving data sharing, consumer choice or data security, or whether companies have otherwise failed to disclose material information to consumers. Such violations of privacy promises have formed the basis of multiple FTC privacy-related enforcement actions in recent years.



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Avoidance of Personally Identifiable Information (PII)

- De-identified Information (NIST Definition): “Records that have had enough PII removed or obscured such that the remaining information does not identify an individual and there is no reasonable basis to believe that the information can be used to identify an individual.”
- Anonymized Information (NIST Definition): “Previously identifiable information that has been de-identified and for which a code or other association for re-identification no longer exists.”

Copyright

17 U.S.C. §106; 17 U.S.C. §504

- In certain circumstances, automated data collection may infringe upon a site owner's copyright.
- If web scraping leads to the reproduction of any copyrighted content, such activity may give rise to a claim for copyright infringement.
- Special considerations when it comes to User Generated Content Issues
- Circumvention of technological control measures, such as CAPTCHA "I am not a robot" measures to block automated access, could create the basis for liability under the Digital Millennium Copyright Act ("DMCA").

Trespass

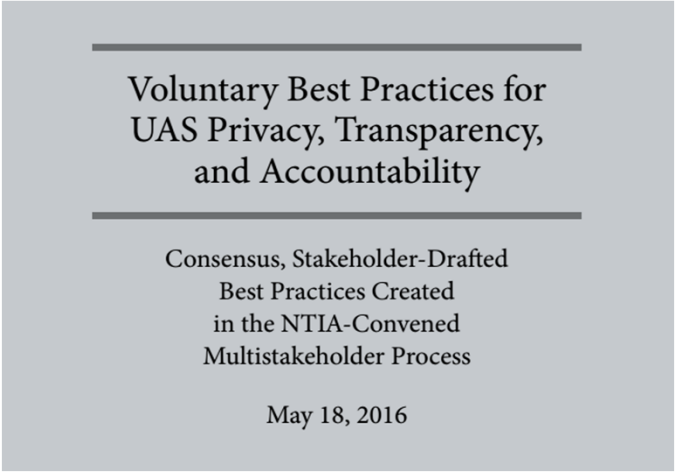
- Excessive automated data collection can interfere with the performance of a site.
- To the extent a site crashes, an end-user experiences delays, or a site's operational capacity is otherwise burdened, the data collector may be deemed to have interfered with the site owner's use of its tangible property
- This could constitute a trespass to chattels.

Data Collection & Drones

- FAA unmanned aircraft regulations (a/k/a drone regs) for recreational purposes invalidated (*Taylor v. Huerta*, No. 15-1495 (D.C. Cir. May 19, 2017).
- Commercial regulations remain in effect and require operators to obtain a drone license, and report the aircraft's intended use, time or number of flights, and area of operation (e.g., away from sensitive areas), among other things.
- There are also state and local laws re: drone usage, with some laws prohibiting surveillance of critical infrastructure or flying over a person's private property where a person may reasonably expect to be safe from observation.

Data Collection & Drones

- The National Telecommunications and Information Administration released best privacy practices for drones:
  1) inform others of your use of drones;
  2) show care when operating drones and storing data;
  3) limit use and sharing of covered data;
  4) secure covered data;
  5) monitor and comply with federal, state and local drone laws.



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Insider Trading: Misappropriation Theory

- Misappropriation theory prohibits:
  - Any person or entity from trading
  - On basis of material, nonpublic information
  - That has been ***misappropriated*** from a party
  - To whom person owes a duty, or whom he/she deceives
- Liability requires a duty of trust or confidence
  - Duty runs to ***source of info***, not to issuer of securities traded
- Under **Rule 10b5-2**, person has a duty of trust or confidence:
  - When a person **agrees to keep info confidential**;
  - There is history, pattern, or practice of sharing confidences; or
  - Information from his/her spouse, parent, child, or sibling.

Misappropriation Theory: Two Examples

- ***U.S. v. Carpenter*** (2d Cir. 1986)
  - *WSJ* columnist provided advance information about contents of his "Heard on the Street" column
    - Tippees traded on information, as did columnist
  - Advance disclosure violated *WSJ* policy that deemed all news materials to be company property and confidential
  - Columnist was convicted of having misappropriated *WSJ*'s property in breach of his duty to his employer
    - But court noted that *WSJ* itself might have been able to use undisclosed info from "Heard on the Street," because *WSJ* owned the information and would not have breached duty to anyone

Misappropriation Theory: Two Examples

- ***SEC v. Huang*** (E.D. Pa. 2016), *aff'd* (3d Cir. 2017)
  - Data analyst for Capital One downloaded and analyzed data re: retail purchases made with Capital One credit cards
    - He used this info to predict revenues of retailers who used Capital One cards, and he then traded retailers' stocks
  - Use of info violated Capital One's confidentiality policies
  - Found liable for insider trading on misappropriation theory
    - Breach of duty to his employer
  - Courts concluded that jury could have found credit-card info material even though Capital One card usage represented an average of only 2.4% of retailers' revenues

Insider Trading: Computer Hacking

- ***SEC v. Dorozhko*** (2d Cir. 2009)
  - Ukrainian programmer hacked into IR company's computer and obtained advance info about earnings reports
    - Hacker traded on MNPI obtained through hack
  - 2d Cir held liability depended on whether hack was "deceptive"
    - *"[M]isrepresenting one's identity in order to gain access to information that is otherwise off limits, and then stealing that information is plainly 'deceptive' within the ordinary meaning of the word."*
    - If deception occurred: potential insider-trading liability
  - If hacker merely exploited weakness in electronic code to gain unauthorized access: perhaps theft, but not "deception"

Insider Trading: Computer Hacking

- ***SEC v. Dubovoy*** (August 2015)
  - SEC and DOJ charged dozens of traders in scheme to trade on hacked news releases
    - Deceptive conduct included hiding intrusions by using proxy servers to mask their identities and by posing as employees
    - Charges: mail & wire fraud, securities fraud, conspiracy, etc.
- ***SEC v. Hong*** (December 2016)
  - Chinese traders charged with hacking into law firm computer networks
    - Deceptive conduct included installing malware, stealing passwords, electronically impersonating IT employee
- Liability when access involved deception/breach of duty

Accessing Nonpublic Information

- Insider-trading liability will depend on whether method of access to MNPI involved breach of duty or deception
  - Was access to information obtained legitimately?
  - Remember *Dorozhko*, the Ukrainian hacker
    - Insider-trading liability depends on whether access was "deceptive"
      - If you *misrepresent* your ID to gain access to computer system, deception occurred – potential insider-trading liability
      - If you merely exploit weakness in electronic code to gain unauthorized access: perhaps no deception involved
        - But might be theft

Accessing Nonpublic Information (*cont'd*)

- Whether access involved deception/breach of duty (cont'd)
  - Violation of website's Terms of Use
    - Is it deception?
      - Will evasions of technological restrictions be deceptive?
        - If user misled website by masking or rotating its IP address, deception involved?
    - Is it a breach of duty?
      - If user agrees to abide by use restrictions, but does not do so?
  - Violation of contract with owner of information
    - Deception or breach of duty if user pays owner for access to information, but uses information in ways or for purposes that contract does not allow?

Contracts with Source/Owner of MNPI

- Contract between would-be user of MNPI and owner of info
  - If usage is in accordance with contract terms/limitations, perhaps no misappropriation, because owner of MNPI has not been deceived/misled
    - Remember *Carpenter*: 2d Cir. noted that *WSJ* or its parent (Dow Jones) might have been able to trade on advance info from "Heard on the Street," because they owned the info – no breach of duty
      - Perhaps Capital One could have traded on credit-card info?
  - But does owner of info have duty to anyone?
    - Any duty to its own customers to keep info confidential and not use it except for certain purposes?
    - If so, does person/company that makes contract w/owner know about this duty and about any breach by owner?

Contracts with Source/Owner of MNPI

- Contract with owner of information (*cont'd*)
  - Even if owner of info does not breach any duty, contracting party might have other risk of liability even if no insider trading
    - NY's Martin Act authorizes NY AG to sue based on unfairness
      - Information disparity suffices; breach of duty/fraud not needed
    - NY AG has threatened to use Martin Act re insider trading
      - Thomson Reuters/U. Mich. settlement: Thomson agreed to stop selling to priority subscribers early access to consumer-confidence survey
      - 18 large B/Ds agreed to stop responding to buy-side firms' surveys seeking analyst sentiment
      - PR Newswire, Business Wire, and Marketwired agreed to require subscribers to certify they would not do high-frequency trading with info received from outlets' direct data feeds

Contracts with Source/Owner of Info

- Contract with owner of information (*cont'd*)
  - Also need to consider EU Market Abuse Regulation
    - EU regulation can apply to transactions anywhere in world
      - Test is whether security is *admitted for trading on EU markets*
      - If security is traded in EU, place of transaction involving MNPI is irrelevant
        - If U.S. trader uses MNPI in transaction with U.S. counterparty on U.S. market, EU Reg applies if security is also traded in EU

Contracts with Source/Owner of Info

- Contract with owner of information (*cont'd*)
  - EU rules on insider trading differ radically from U.S. rules
    - EU prohibits use of material, nonpublic information
      - Applies to anyone who knew or should have known that material information was nonpublic
    - Defenses available in U.S. are not available in EU
      - Irrelevant whether discloser had duty not to disclose
      - Irrelevant whether discloser received a personal benefit
      - Irrelevant whether recipient owed duty to discloser not to use or disclose the information
    - Under EU rules, if you know or should have known you have MNPI, you cannot use it – period

Acquiring Data from Third Parties

Can I reduce my risk by hiring a third party to do this for me?

Acquiring Data from Third Parties – Diligence

- What might be acceptable risk to the vendor may not be acceptable risk for you.
- **Technology and business models are way ahead of the law; creativity is high; "safe" practice standards do not exist and the urge to differentiate and add value is pressing.**
- **Contractual protection may not be enough to shield one from liability. It certainly is not enough to shield from litigation and adverse publicity.**

ONLINE MEDIA DAILY

Spitzer Settles With Datran For $1.1M

by **Wendy Davis** **@wendyndavis**, March 14, 2006

E-mail marketing company Datran Media has agreed to pay $1.1 million to close an investigation by New York State Attorney General Eliot Spitzer into what his office called the largest breach of privacy in Internet history.

The investigation found that Datran obtained e-mail addresses and other information about consumers from companies that had promised on their Web sites not to share such information.

With the settlement, Spitzer's office promised to stop investigating the e-mail marketing company. For its part, Datran agreed to pay $750,000 in penalties, $300,000 disgorgement and $50,000 costs, destroy consumer information that was wrongly collected, and appoint a chief privacy officer.

Acquiring Data from Third Parties – Diligence

- **Trend, led by the FTC, for expanded vendor diligence and oversight.**
- **The "WSJ" Test**
- **Legal "Flow Through" Liability**
- **Agency Relationships**

Acquiring Data from Third Parties

- The Due Diligence Process:
  - Ask the questions in writing; get the answers in writing.
  - Document who is providing the answers and why it is reasonable to accept their responses.
  - Follow up; if it doesn't sound right, it probably isn't.
  - Spot-check the data.
  - Don't use the data other than as provided for in the contract.

Acquiring Data from Third Parties

- The Due Diligence Process: *(cont'd)*
  - Get appropriate contractual reps/warranties/indemnities.
  - Make sure there is at least annual recertification
    - Consider other triggers for recertification as well: Change of control, MAE, etc.
  - Avoid relying on the vendor's legal analysis.

Fundamental Questions

- Who is the vendor? Is it credible, established, respected?
- What are the vendor's data sources?
- Where is the data coming from? Government or private sources?
- What is the nature of the data? What techniques does the vendor use?
- PII? Child PII? Sensitive Information?
- Any MNPI or other "confidential" information? (Spot-check!)
- Is the vendor collecting the same data for anybody else?

Fundamental Questions

- Has there been any litigation involving the vendor or its sources?
- How does the vendor provide the data? Is the vendor a collector, packager, analyzer, aggregator?
- Does the vendor have the right to provide the data to you? Consider requesting documentation and indemnity.
- If using drones, does the vendor employ or contract with drone operators possessing proper commercial licenses acting in compliance with state and federal laws and NTIA best practices?

Fundamental Questions

- Does the vendor spider? If so:
  - Do the targeted websites have restrictive terms of use? Does the vendor check regularly?
  - Does the vendor use technology to simulate the creation of any user accounts?
  - Does the vendor circumvent any “captchas” or similar technologies?
  - Does the vendor respect the “robots.txt” parameters?
  - Does the vendor identify its “User-Agent” in the site logs?
  - How does the vendor structure IP addresses for spidering?
  - Does the vendor throttle/pause/alternate times to simulate human interaction?

Closing Thoughts

- Create and follow policies
- Be clear with all about MNPI – you don’t want it!
- Document your procedures
- Negotiate appropriate contractual provisions
- Vendors: Certify, recertify and recertify again!
- Stay aware of evolving law!

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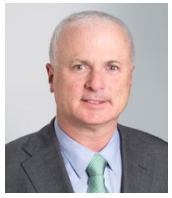

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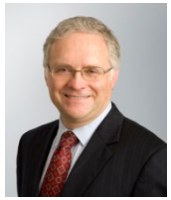

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