




It's on My Phone


Social Media Evidence in Child Support
Patti Ratekin, San Diego Superior Court
Jackson Lucky, Riverside Superior Court



ESI

Electronically Stored Information

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Forms of ESI

- Printing
- Photographing
- Email or fax
- Every recording
- Any form of communication or representation
- Letters, words, pictures, sounds, symbols
- Recorded in any manner
- Evid. Code §250, "Writing"

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Types of ESI

- Cloud data storage
- Operating system data storage
- Emails
- Instant messaging
- Social media
- Search queries
- Productivity/office software
- Digital photos and reproductions

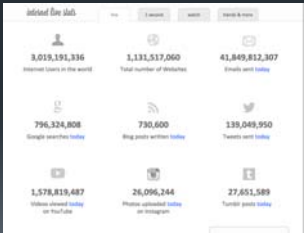
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Sources of ESI

- Phones and tablets
- Computers
- Operating systems
- Internet service providers
- Cloud storage providers
- Email providers
- Search engines
- Hospitals
- Just about any source

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Ubiquity of ESI



3,019,191,316 Internet users in the world	1,131,517,060 Total number of devices	41,849,812,307 Emails sent today
796,324,808 Google searches today	730,600 Blog posts written today	139,049,950 Tweets sent today
1,578,819,487 Videos shared today on YouTube	26,096,244 Photos uploaded today on Instagram	27,651,589 Tumblr posts today

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From Top 100 iOS/Android Apps

- [Facebook Messenger](#)
- [Facebook](#)
- [YouTube](#)
- [Instagram](#)
- [Snapchat](#)
- [Pinterest](#)
- [Twitter](#)
- [Tinder](#)
- [Gmail](#)
- [WhatsApp](#)
- [Vine](#)
- [Skype](#)
- [Viber](#)
- [Tango](#)
- [GTranslate](#)
- [Dropbox / Gdrive](#)
- [Find Friends](#)
- [Uber / Lyft](#)

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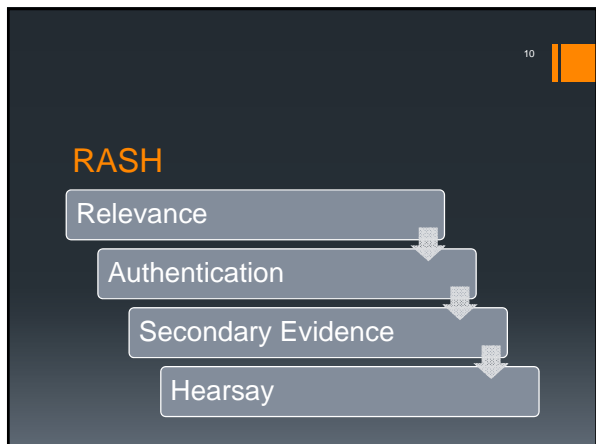
Data v. Metadata

Data = content	Metadata = !content
<ul style="list-style-type: none">▪ Document▪ Photograph▪ Email▪ Instant message▪ Video▪ Audio	<ul style="list-style-type: none">▪ Author▪ Date and time▪ Location▪ File format▪ Received/sent▪ Modifications made▪ Headers

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Examples of Metadata

- File ... Properties
- [PDF properties](#)
- [Email headers](#)
- [HTTP headers](#)
- [Operating system log files](#)
- [Metadata extraction software](#)



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Relevancy

- Having any tendency in reason to prove or disprove any disputed fact that is of consequence
- Evidence Code §210

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Relevancy

- What is the evidence?
- What is it offered to prove?
- Does it do so?
- How?

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Relevancy and Authentication

- When the object sought to be introduced is a writing, this preliminary showing of relevancy usually entails some proof that the writing is authentic--i.e., that the writing was made or signed by its purported maker.
 - People v. Goldsmith

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General Rule

- A writing must be authenticated before the writing or secondary evidence of its content is admitted.
 - Evidence Code §1401

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Threshold Requirements

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graph TD; A[What is the nature of the item of electronic evidence (ESI)?] --> B[Does the ESI fairly and accurately depict its contents?]; B --> C[Is the content of the ESI information attributed to the owner or the individual uploading the ESI?];
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Accurate Depiction

- Authentication means the item is what it claims to be.
 - Evidence Code §1400
 - People v. Valdez

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Sources of Authentication

- Reliability
- Experts
- Percipient Witnesses
- Circumstantial Methods of Authentication
 - Reply/Acknowledgment
 - Content
- Statutory Presumptions
- Judicial Notice

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Reliability

- Method of preservation
- Method of collection
- Chain of custody

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Chain of Custody

- It is reasonably certain that there was no alteration?
- It is as likely as not that the evidence analyzed was not the evidence originally received.
 - People v. Catlin

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Self-authentication

- A writing may be authenticated by evidence that the writing refers to ... matters that are unlikely to be known to anyone other than the ... author of the writing.
 - Evidence Code §1413

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Witness authentication

- "the testimony of a person who was present at the time ...that it accurately depicts what it purports to show"
 - People v. Beckley

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Expert authentication

- Experts can establish
- Based upon their examination
- Or examination of metadata

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Photographs 1948

- Photographs found in apartment, depicting the apartment.
- Expert testifies
 - pictures themselves are not characteristic of composite photographs
 - are either genuine or a contact print of the photograph
 - People v. Doggett

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Photographs 2010

- Photo of party flashing gang signs downloaded from MySpace
- Witness testifies to downloading photo
- Recognizes party
- No expert testimony

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Excluded

- No expert testified that it was not composite or faked
- Expert testimony critical to prevent manipulated images
 - People v. Beckley
- But there's a contrary view

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When is an Expert Needed?

- Sufficiently beyond common experience
- Opinion would assist the trier of fact
 - Evidence Code § 801(a)

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Who is an Expert?

- One who has special knowledge, skill, experience, training or education
- On the subject matter to which his/her testimony relates
 - Evidence Code §720

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Competency of the Expert

- Preliminary foundation is judicial determination
- Finding not necessary unless objection
- Competency dependent upon facts of the case and the expert's background
- Degree of expertise is relevant to weight, not admissibility

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Basis for Opinion

- It must be "of a type that reasonably may be relied upon" by similar experts
 - Evidence Code § 801(b)

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Forensic Expert Authentication

- Photographs
- Systems Experts
 - Metadata
 - Email protocols
 - Data Storage
- Written Documents
 - Embedded data
 - Alteration of
- Data Recovery Experts
 - Cellebrite
- Cellphone Systems Experts

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Photographs 2011

- Photo of party flashing gang signs from MySpace
- Photos include moniker "TLF" from party's MySpace.
- No forensic expert
- Witness testifies
 - only the creator or someone with password
 - can upload or manipulate the contents

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Admissible

- Circumstantial evidence of authenticity was sufficient
- Factors:
 - Restricted access to site
 - Consistent content
- People v. Valdez

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Qualified User Testimony

- Detective used "voice print system"
- Retrieved time-and-date-stamped 911 calls
- Familiar with process
- But not familiar system maintenance or accuracy

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Admissible

- Computer systems that automatically record data in real time are presumed to be accurate.
- Issues regarding the accuracy of a computer printout affects the weight not admissibility.
 - People v. Dawkins

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“That’s her baby’s daddy”



DA introduces series of text message from pimp to victim in pandering case. In messages there are references to sender as “Poppy”, their relationship and that they have a child together, Oscar. Victim refuses to testify but DA presents victim’s mother who knows D as “Poppy” and that he is father of Oscar.

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Authentication by Content

- A writing may be authenticated by evidence that the writing refers to or states matters that are unlikely to be known to anyone other than the person who is claimed by the proponent of the evidence to be the author of the writing.
 - Evidence Code §1421

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Authentication by Circumstantial Evidence

- Site is password protected
- Subject in photo is identifiable
- "Pervasive consistency of content"
 - Numerous personal photographs
 - Communications to and from the subject
 - Other details tending to show identity and ownership
- Lack of motive on the part of others to adulterate content
- Timing of the posting
 - People v. Valdez



Other Forms of Authentication

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Scenario 1

DA introduces both a photograph depicting D flashing gang signs downloaded from a webpage from codefendant and rap lyrics from the D's MySpace page. D acknowledges to his girlfriend that he wrote the lyrics and that that is his photo.

Scenario 2

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In an undercover child sex sting operation, detective sends an email to D pretending to be 13 years old and asks for a photo of D. In response the D forwards a photo of his private parts.




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Scenario 3

P seeks to introduce D's, trucking company, records of employee mileage. After employee inputs mileage, D prints out mileage record on a monthly basis to calculate expenses.


D claims custodian is needed to establish authenticity and accuracy of records.



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Statutory Forms of Authentication

- Admission of authenticity
- Express or implied
 - Evidence Code § 1414
- Authentication by Evidence of Reply
 - Evidence Code § 1420



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"It's not exactly right"

DA seeks to introduce still photos taken from surveillance videotape through Det. Brown. Det. Brown testifies that he viewed videos at the store but only a portion of the video appears in the still and the heads of the suspects were not visible in the photos due to the capture equipment.

D objects that since the photos only depicted part of the video, photo lacks foundation.

People v. Chism

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Admit

Rebuttable presumption that the printed still photos of images stored on a video or digital medium are accurate.
Evidence Code §1553

What if the photo is enhanced?

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“But no one saw me”

In red light case, officer testifies that he issued citation based upon the result of a red light camera (ATES). He knows how the ATES works and how the photos are generated. Photos were introduced which depicted both a vehicle and imprint of the date and time.

Aware that the ATES company falsified records in other jurisdictions, D objects that there is a lack of foundation.

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Admit

- “Printed representation of computer information ... is presumed to be accurate”
 - Evidence Code §1552
- “Printed representation of images stored on video or digital medium is presumed to be accurate”
 - Evidence Code §1553

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More may be needed

- Even where the statutory presumptions apply, the presumptions by themselves may be insufficient to establish foundation.
 - People v. Rekte

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Standard

- "The proponent's threshold authentication burden for admissibility is not to establish validity or negate falsity in a categorical fashion, but rather to make a showing on which the trier of fact reasonably could conclude the proffered writing is authentic."
 - People v. Valdez

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Thousands of People Use the Site

- P requests the court to take judicial notice of several websites of both a newspaper and the D company pursuant to EC §452.
- D objects that this is not proper subject matter for judicial notice.

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Judicial Notice

- "Facts and propositions that are of such common knowledge.....that they cannot reasonably be the subject of dispute."
- "Facts and propositions that are not reasonably subject to dispute and are capable of immediate and accurate determination by resort to sources of reasonably indisputable accuracy"
 - Evidence Code § 452(g) & (e)

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Secondary Evidence

- There is no best evidence rule
- Content of a writing may be proved by:
 - Original (EC 1520, EC 255)
 - Secondary evidence (EC 1521(a))
 - (Rarely) oral testimony (EC 1521(b), EC 1523)

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Original

- The writing itself
- Photographic negative or print
- Any accurate printout of computer data

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Secondary Evidence

- Not defined by statute
- Proof of document's content that is not oral
 - Duplicates
 - Handwritten transcriptions

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Secondary Evidence Exceptions

- Genuine dispute about content— EC 1521(a)(1)
- Admission would be unfair— EC 1521(a)(2)
- Not authenticated—EC 1521(c)
- If no opportunity to see original— EC 1522
 - Unless a duplicate under EC 260
 - Not closely related to controlling issues
 - Public entity has copy
 - Public records
 - Motion to exclude cannot be in front of jury

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Oral Testimony of Writing Content

- Generally inadmissible—EC 1523(a)
- Unless original is legitimately lost or destroyed
- Proponent does not have original and
 - Cannot be reasonably procured, or
 - Not closely related to controlling issues
- Documents are voluminous and oral testimony is summary of a whole

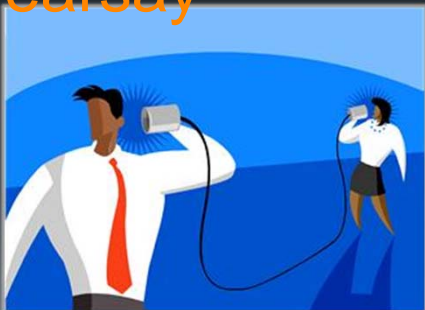
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How Do You Rule?

- Prosecutor has submitted a duly certified prior mailed from another state
- Second certified prior was not received in time
- Prosecutor has other jurisdiction email, a scanned copy of the second certified prior
- Prosecutor presents the printed scan
- Certification and form of mailed prior is identical to certification and form of PDF prior

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Hearsay

An illustration showing two men on a beach. The man in the foreground is wearing a white shirt and a red tie, holding a walkie-talkie to his mouth. The man in the background is also wearing a white shirt and a dark skirt, also holding a walkie-talkie. They are connected by a blue line representing the walkie-talkie signal. The background is a simple blue landscape with a horizon line.

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Hearsay

- Evidence of a statement
- Made other than by a witness while testifying
- OTMA
 - Offered for the Truth of the Matter Asserted
- Evidence Code § 1200 et seq.

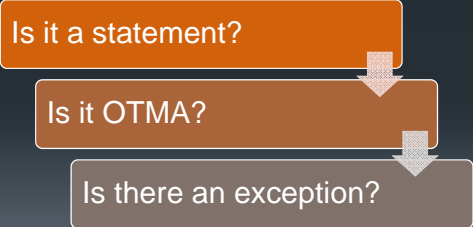
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Hearsay Primer

Is it a statement?

Is it OTMA?

Is there an exception?



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Nature of the Speaker

- Only a person can make a statement
- Machines can't
- Dogs can't

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Timing of the Statement

- Out of court
- Doesn't matter if it's the testifying witness

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My computer is my best friend

- D charged with criminal misappropriation of trade secrets. DA offers computer printouts from D home computer to show that he accessed his employer's computer and its source code.
- D objects that the time and date listed on the print out is hearsay and its only purpose is for the truth of the matter asserted.

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Admit

- "The Evidence Code does not contemplate that a machine can make a statement."
- The printout of the results of the computer's internal operations is not hearsay evidence. It does not represent the output of statements.
 - People v. Hawkins


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But does it make a difference?

The diagram consists of two rectangular boxes side-by-side. The left box is purple and contains the text "Information generated by internal operations of computer". The right box is green and contains the text "Storage of documents and information entered by humans". A grey curved arrow points from the top of the purple box to the top of the green box. Another grey curved arrow points from the bottom of the green box back to the bottom of the purple box, creating a circular flow.

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Hearsay Exceptions



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“The records tell me”

- Custodian of records of cell phone company
- Spreadsheet compilation of call data.
- Custodian testifies how company
 - maintains and collects its records,
 - cell site information and text messaging
 - they are kept in regular course of business.
- D objects that this is hearsay because the spreadsheet is a compilation produced by a human query for use at trial.
 - People v. Zavala

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Admit

- “[A] printed compilation of data produced by human query for trial falls within the business records exception.”
- Documents which are “necessarily produced by human query does not render the data inadmissible because the underlying data itself was not produced by human input”
 - People v. Zavala
 - But is this really a secondary evidence problem?

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Business Record Exception

- Regular course of business by someone who had duty to do so
- Made at or near the time of the act, condition, or event;
- Qualified witness testifies to its identity and the mode of its preparation; and
- Sources and method and time of preparation indicate trustworthiness.
 - Evidence Code §1271

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"I found the card"

- Photos taken by ATM camera at time of transaction
- Later extracted by bank investigators
- Investigator testifies as to how the ATM records transactions
- D objects that it is hearsay
 - People v. Peyton

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Admitted

- Machine generated and a statement
- But distinguish between machine-generated
 - Photo and time
- And people-generated
 - Account information

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Official Record Exception

- The writing was made by and within the scope of duty of a public employee;
- The writing was made at or near the time of the act, condition, or event;
- The sources of information and method and time of preparation were such as to indicate its trustworthiness.
 - Evidence Code §1280

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“What accident?”

- In license revocation action, DMV seeks to introduce evidence of the SR1 report filed by party involved in accident with D to prove existence of accident. SR1 are filed in a DMV database and the particular SR1 was retrieved by employee who is familiar with how the record is maintained.
- D objects that the SR1 is hearsay.
 - Daniels v. DMV

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“Happens all the time”

In tort action against restaurant, P attempts to introduce 911 records to show citizens called in prior reports about assaults at the business. P calls the police department’s custodian of records to establish an official records exception. Defense objects that these records are hearsay.

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Admit/Exclude

- Multiple hearsay
 - Record of the 911 call's time and date
 - Content of the call
- "The chief foundation ... is the requirement that they must be based upon the first-hand observation of someone whose job (or duty) it is to know the facts recorded."
 - Alvarez v. Jacmar

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"I don't remember taking that test"

- DMV seeks to introduce copy of BAC lab report
- Report was entered into DMV computer by arresting officer
- A week after the arrest.
- D objects that this does not fall within the hearsay exception.
 - Molenda v. DMV

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Exclude

- The writing must be completed "at or near the time of the act, condition or event" reported
- The issue is whether the time span between the transaction and the entry was so great as to suggest a danger of inaccuracy by lapse of memory
 - Molenda v. DMV

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"We rely on this all the time"

- Wrongful death suit from juvenile tossing rocks at cars
- D calls expert
 - foreseeability that based upon review of the data
 - National Crashworthiness Data System
 - the occurrence of an injury from a thrown rock was .003 per billion vehicle miles
- Expert says data is accurate, compiled from police reports, and commonly relied on by safety experts.
- P objects that expert's testimony is hearsay.

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Admit

- Statement must be stored in a "compilation"
- Compilation must be published
- Compilation used in the course of business
- Compilation relied upon as accurate
- Statement must be one of fact not opinion
 - Evidence Code §1340

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"This is one of our tools"

- Witness testifies that phone number belonged to D
- Witness determined based upon "Entersect" web site
- Compiles data from LE sources linking individuals to phone numbers.
- D objects that this is inadmissible hearsay.
 - People v. Franzen

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Inadmissible

- "Published" contemplates an organized edited presentation in a "fixed form"
- Investigative databases less reliable
- No evidence that Entersect was generally used and relied upon as accurate in the course of business

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Final Analysis

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graph LR; A[Relevant?] --> B[Authentic?]; B --> C[Secondary Evidence?]; D[Hearsay?] --> E[Hearsay exception?]; E --> F[Evidence Code §352];
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Standard of Review

- Abuse of discretion
 - People v. Bryant, Smith, and Wheeler

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Concluding Remarks

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