

# Enhanced Intelligence: AI and Your Legal Analysis

September 30, 2020

Mallory M. Acheson  
Nelson Mullins Riley & Scarborough LLP

| **E**NCOMPASS

# About Me

- Mallory Acheson is head of analytics for Nelson Mullins' e-discovery division, Encompass. Based in Nashville, she is an attorney with multiple years of experience leveraging technology and data analytics tools to guide clients through a variety of challenges across the EDRM and IGRM.
- Acheson was honored as 2020 Nashville's Top 30 Under 30 and is a trustee and contributor of Duke-EDRM projects such as Technology Assisted Review, Artificial Intelligence, Identifying PII & PHI, and FOMO: Documents versus Facts.
- Acheson holds a certification from Georgetown Law's E-Discovery Training Academy and multiple technical certifications such in platforms such as Brainspace & Relativity.

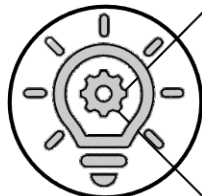


The accelerated adoption and development of legal technology presents attorneys with the opportunity to enhance legal analysis and compliance issues with greater speed, accuracy, and cost savings.

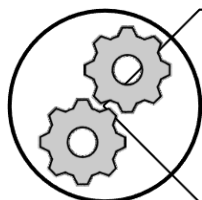
# AI Enhancement Areas



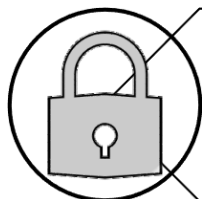
Knowledge Management



Insights



Technology Assisted  
Review



Privacy

# IMPORTANT DEFINITIONS



## ARTIFICIAL INTELLIGENCE

*“Making intelligent machines”*

- John McCarthy

## NATURAL LANGUAGE PROCESSING

*“Language is a uniquely human capability ... but through AI - specifically NLP - we are providing machines with language capabilities...”*

- Harvard Business Review

## MACHINE LEARNING

*“Computer systems that automatically improve with experience”*

- Stanford University

## DEEP LEARNING

*“When machines can do tasks that typically require human intelligence.”*

- Forbes

# Trending Acceptance

“For better or worse, the field of law is tradition-bound and notoriously slow to adopt new technologies and tools. Expect this to change in the years ahead. More than any technology before it, artificial intelligence will transform the practice of law in dramatic ways. Indeed, this process is already underway.”

**Forbes December 2019**

“The case law has developed to the point that it is now black letter law that where the producing party wants to utilize TAR for document review, courts will permit it.”

**Rio Tinto Plc v. Vale S.A., 14 Civ. 3042 (RMB)(AJP) (S.D.N.Y. Mar. 2, 2015)**

# Know your case!

Not all technology is meant for all cases  
and data sets.

# Knowledge Management – Trained Models

These pre-trained models assist with compliance, risk, and e-discovery.

- Educated start
- Models learn with your data set
- Customizable for your issues





# Financial Fraud

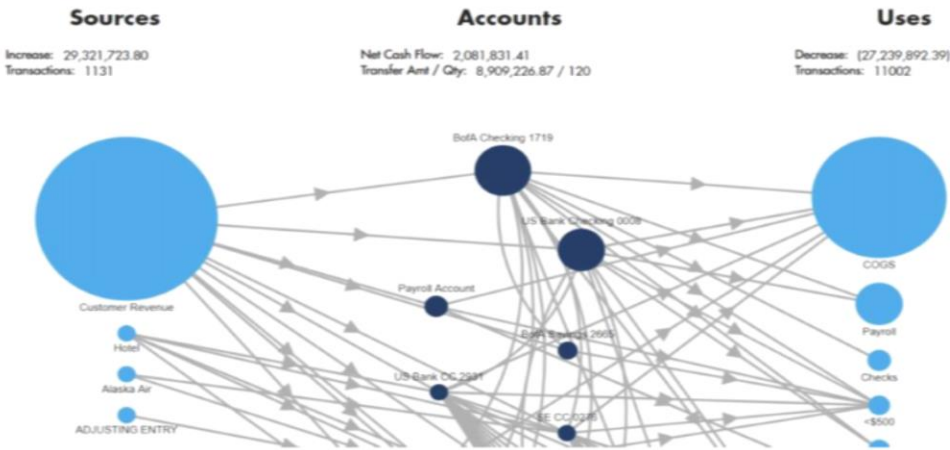
Found 17 Rejected 0 Confirmed 120

Approve All Find New Matches

Approve Page Reject Page

Filter: All Very Likely Probable Possible

ID	Amount	Date	Description	Name	Memo	Account	Acct Name	Acct Type	Institution
1	\$669.47	03/04/2011	03-03 0627440535000050129453...			4003901001351137	RB CC 1137	Credit Card	Bank of America
	(\$669.47)	03/02/2011	CHECK 0303WA353P001850021...			38971719	BofA Checking 1719	Checking	Bank of America
2	\$25.00	07/18/2012	CARD/DEPOSIT RELATIONSHIP			4003901001351137	RB CC 1137	Credit Card	Bank of America
	(\$25.00)	07/12/2012	32133			38971719	BofA Checking 1719	Checking	Bank of America
3	(\$2,086.61)	03/28/2013	813005992014568 32817 813005...			38971719	BofA Checking 1719	Checking	Bank of America
	\$2,086.61	03/31/2013	WA BANKING CENTER PAYMENT			4003 9010 0229 ...	SE CC 0276	Credit Card	Bank of America
4	\$129.30	03/31/2013	PAYMENTS AND OTHER CREDI...			4003901001351137	RB CC 1137	Credit Card	Bank of America
	(\$129.30)	03/28/2013	813009992739547 32814 813005...			38971719	BofA Checking 1719	Checking	Bank of America
							Checking 1719	Checking	Bank of America
							C 0276	Credit Card	Bank of America
							C 1137	Credit Card	Bank of America
							Checking 1719	Checking	Bank of America



Transaction Range:  
(1,500,000.00) - 1,500,000.00

Transactions: 1237  
Increase: 38,230,950.6  
Decrease: 36,149,119.2  
Net Cash Flow: 2,081,831.4

Date Range:  
mm/dd/yyyy  
mm/dd/yyyy

Transaction Size: ABIS

Flow:  
☒ All ☐ Increase ☐ Decrease

Filters:  
v 0 of 16 Accounts  
v 0 of 5 Account Types

# Knowledge Management – Monitoring

Actively learning data set via learned concepts and example data

Monitor and alert when parameters indicate violation or risk

Pull forward risks and violations

# Knowledge Management – Contract Analysis

AI technology pre-trained to find and extract relevant provisions within your contracts for further review, management, and compilation

## Due Diligence

Pricing, Non-Compete/Exclusivity, Termination, Indemnity, Change of Control, Titles, Parties, Dates, etc

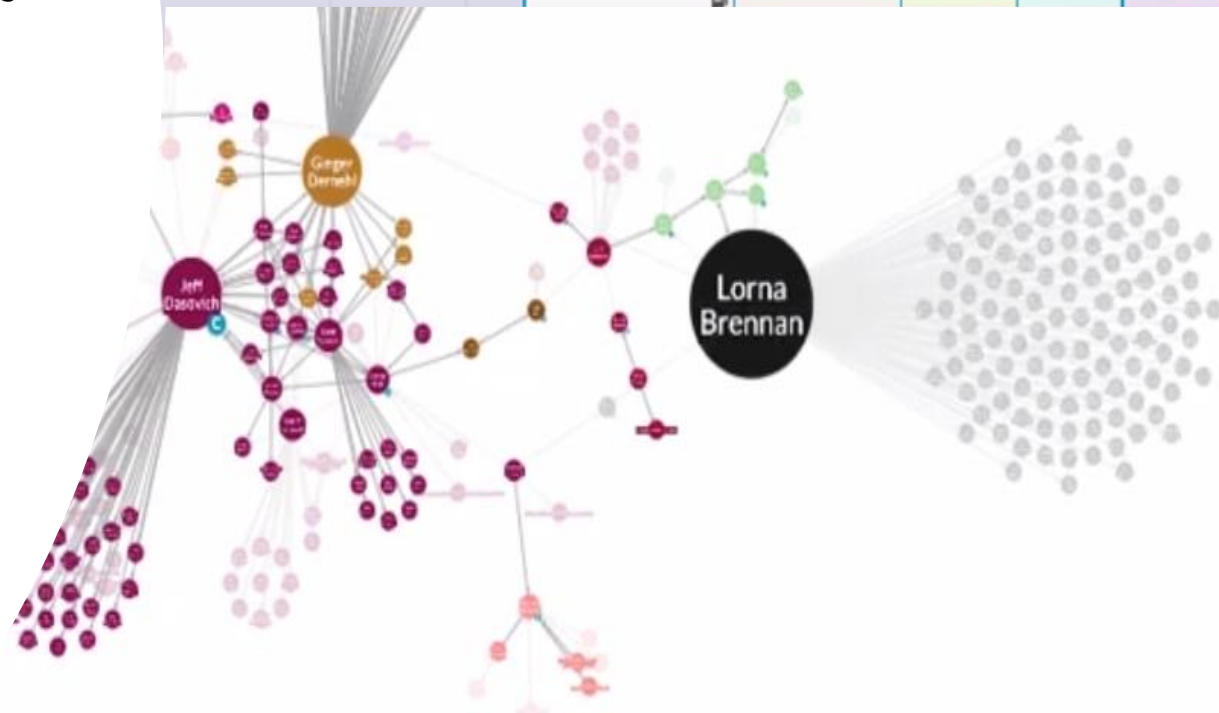
## Lease Abstraction

Rent, Terms & Renewals, Liens, Transfer Fees, Use of Premises, Indemnities, Casualty, etc

# Insights – Case Assessment

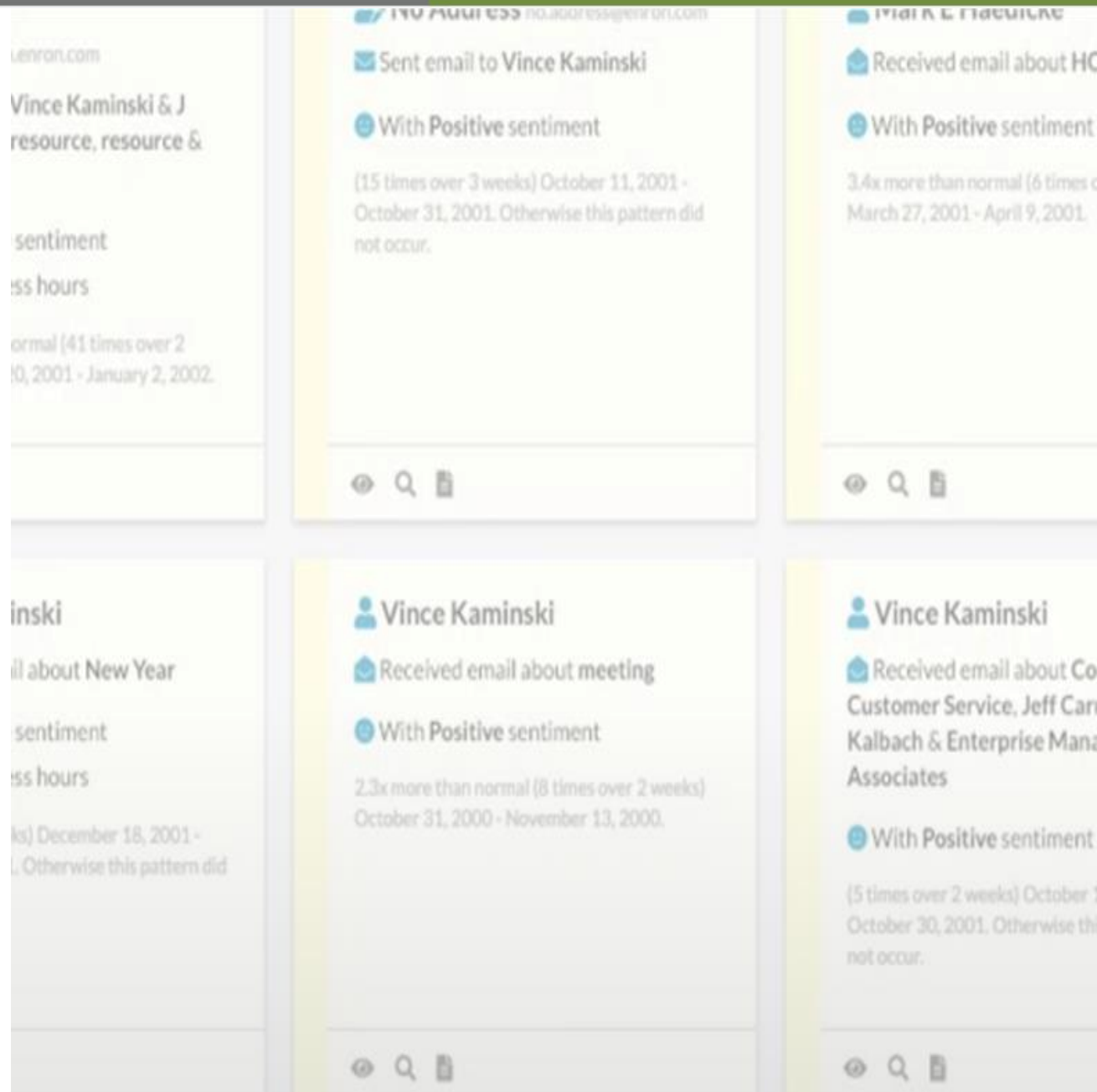
Prior to any significant review, AI offers insights into a data set to enable early strategy discussions and preparation.

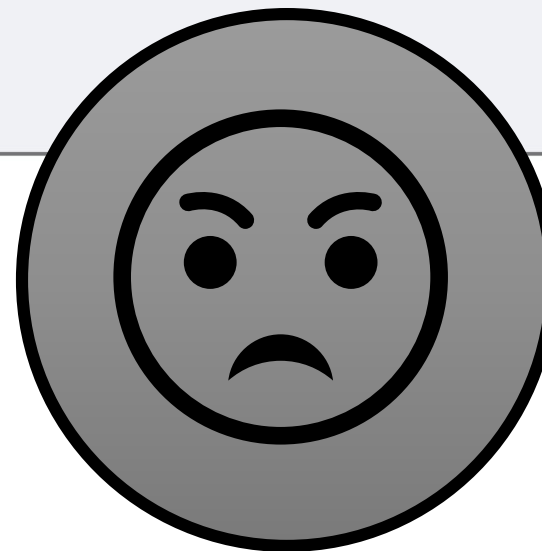
- ❖ Witness/Custodian Identification
- ❖ Key Player Insight
- ❖ Gap Analysis
- ❖ Major Themes
- ❖ Junk Analysis
- ❖ Data Type Analysis



# Insights – Anomaly/ Pattern Detection

After hours  
communications,  
unexpected timelines,  
patterned  
conversations, etc





## Insights – Sentiment Detection

“It Is not about what you say, it is about how you say it.”

# Technology Assisted Review – Population Culling/Organization

A process of having computer software electronically classify documents based on input from expert reviewers, in an effort to expedite the organization and prioritization of the document collection

-EDRM



# Other Technology– Population Culling/ Organization



Email Threading



Textual Near  
Duplicate  
Identification

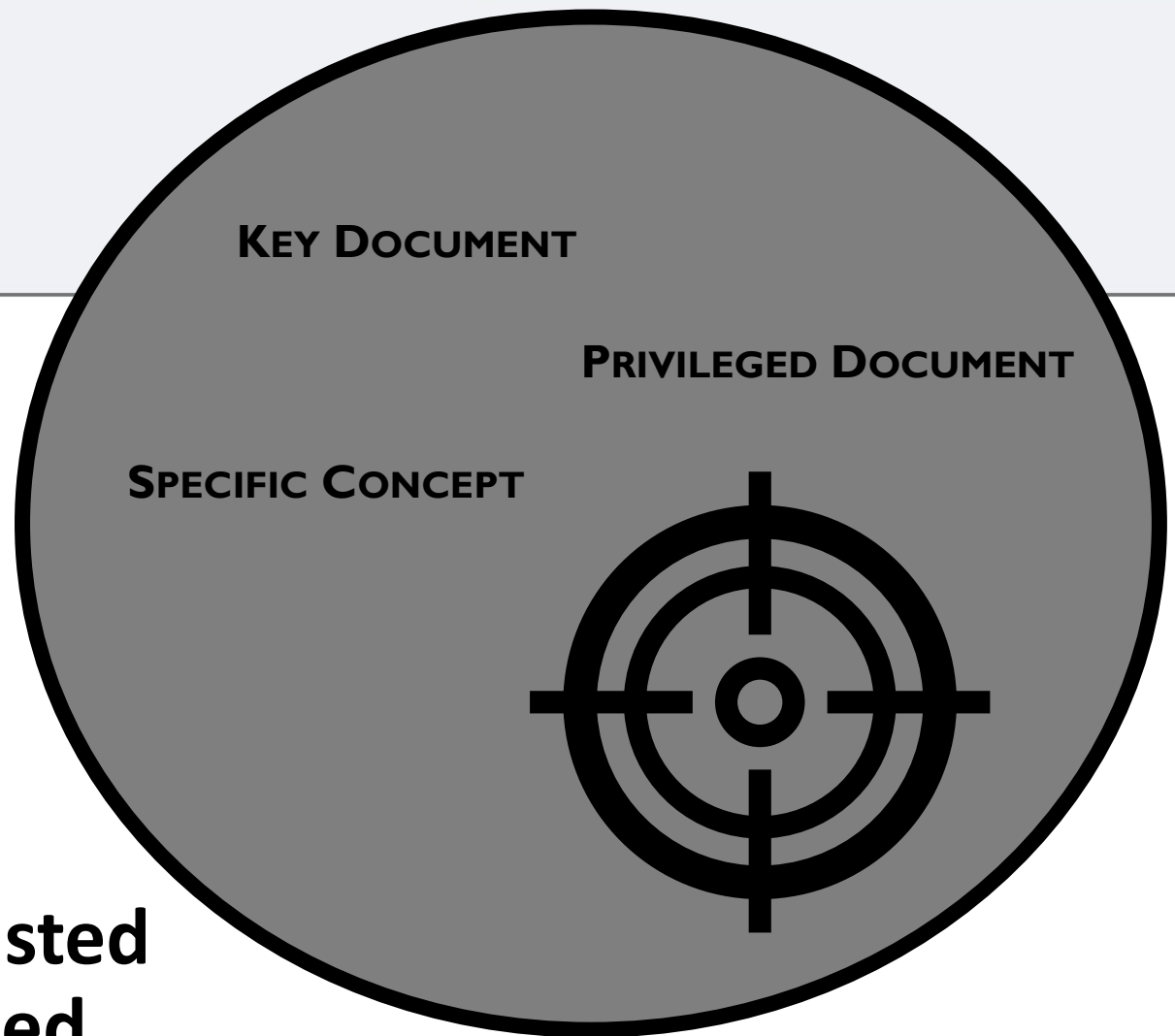


Conceptual  
Organization



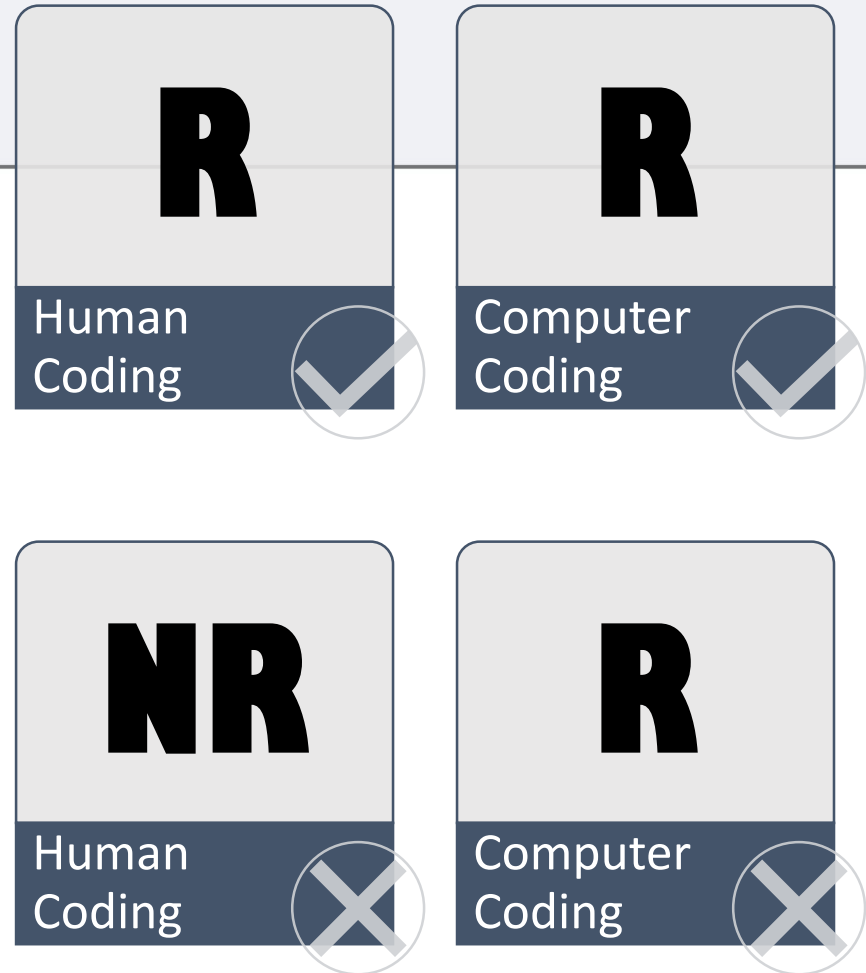
Language  
Identification





## Technology Assisted Review – Targeted Identification

# Technology Assisted Review – Quality Control





Initial Impact  
Assessment



Efficient Review



List Normalization

## **Privacy – Data Breach Response**

# AI Normalization

Pre-recognized review tags & mapping to an automated list of individuals normalized by running AI

ses@hotmail.com **EMAILS** 71439 Megan Extension Suite 157 Coxsh

83-06-0468 **SOCIAL SECURITY** MRN: 987898767 **MEDICAL RECORD NUMBER**

Entity List									
Name, SSN, Doc ID									
<input type="checkbox"/>	Action	Name	Suffix	Prescriptions	Insurance Provider	Email	SSN	Phone	
<input type="checkbox"/>		Aaron	Martinez			noah47@hotmail.com	824-42-8968		
<input type="checkbox"/>		Abigail	Santana			albert75@santana.net	800-89-5764		
<input type="checkbox"/>		Abby	Santana			albert75@santana.net	800-89-5764		

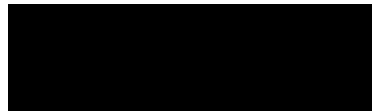
# Privacy – Automatic Anonymization & Pseudonymization

GDPR, Consumer  
Requests &  
Disclosures,  
Litigation  
Productions, etc.

**Anonymization** irreversibly destroys any way of identifying the data subject.

**Pseudonymization** substitutes the identity of the data subject in such a way that additional information is required to re-identify the data subject.

**MALLORY**



**JANE DOE 1**

Account	SSN	Name	Credit Card	Email	2015 Overcharge
VW948936854	653-36-8882	Shanon Caldwell	348690106379828	viverra@ipsum.com	92.00
VW908927994	655-12-8678	Jacqueline Lawson	4918935428230590	condtum@tempus.com	123.00
VW397904264	350-46-6998	Liza Khan	4539307646558950	lectus@non.com	292.00
VW163372238	007-07-3591	Shamika Hale	38797124043818	amet@erat.com	246.00
VW167224923	610-70-1054	Erinn Sawyer	869991168037026	metus@eu.com	357.00
3322635	530-93-2348	Charlotte Ireland	6011632910925250	et@rutrum.com	15.00
828	680-25-8469	Hiroko Duff	4929102841755800	quis@non.com	279.00
429-31-1969		Antonina Hammond	6011495640427680	pellent@udin.com	471.00
07-6234		Damian Haines	214908322561362	eget@pellentesque.com	335.00
82		Lillia Barnett	4024007180748720	arcu@vitae.com	183.00
		Chaquana Rodgers	201496635098020	dolor@arcu.com	439.00
		Field	38597485182068	proin@lorem.com	20.00
		on	5119648043910370	natoque@integer.com	414.00
			379935717612840	purus@adipiscing.com	354.00
			3553727271882120	euismod@id.com	220.00

It has come to our attention that we overcharged your account (acct# VW948936854) in 2015

You will be receiving a refund by check for the amount of \$92.00 in the mail within the

We are sorry for the inconvenience.

Thank you,

## Customer Service

# Privacy – Automatic Anonymization & Pseudonymization

**To:** [REDACTED] email  
**From:** Customer Service  
**Sent:** Thur 4/7/2016 8:49:05 PM  
**Importance:** Normal  
**Subject:** Account Overcharge in 2015  
**Received:** Thur 4/7/2016 8:43:00 PM

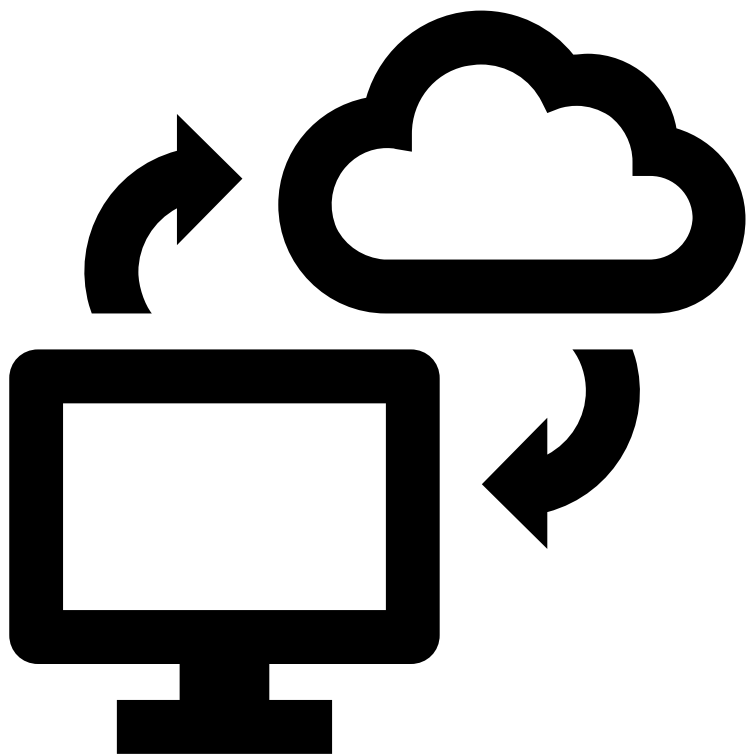
Dear [VW948936854]

It has come to our attention that we overcharged your account (acct# v

You will be receiving a refund by check for the amount of \$92.00 in the

We are sorry for the inconvenience.

# Privacy – Information Governance



**GDPR** - data subjects have the right to ask companies for details of the information companies have on them, as well as demand that the data be handled in certain ways or deleted entirely

**CCPA** - grants California citizens the right to know what confidential information companies collect about them, why and whether and to whom it will be sold or shared.

# Questions?

## Contact Information



**Mallory M. Acheson**

Head of Analytics

Nelson Mullins Riley & Scarborough

[Mallory.acheson@nelsonmullins.com](mailto:Mallory.acheson@nelsonmullins.com)

615.664.5378