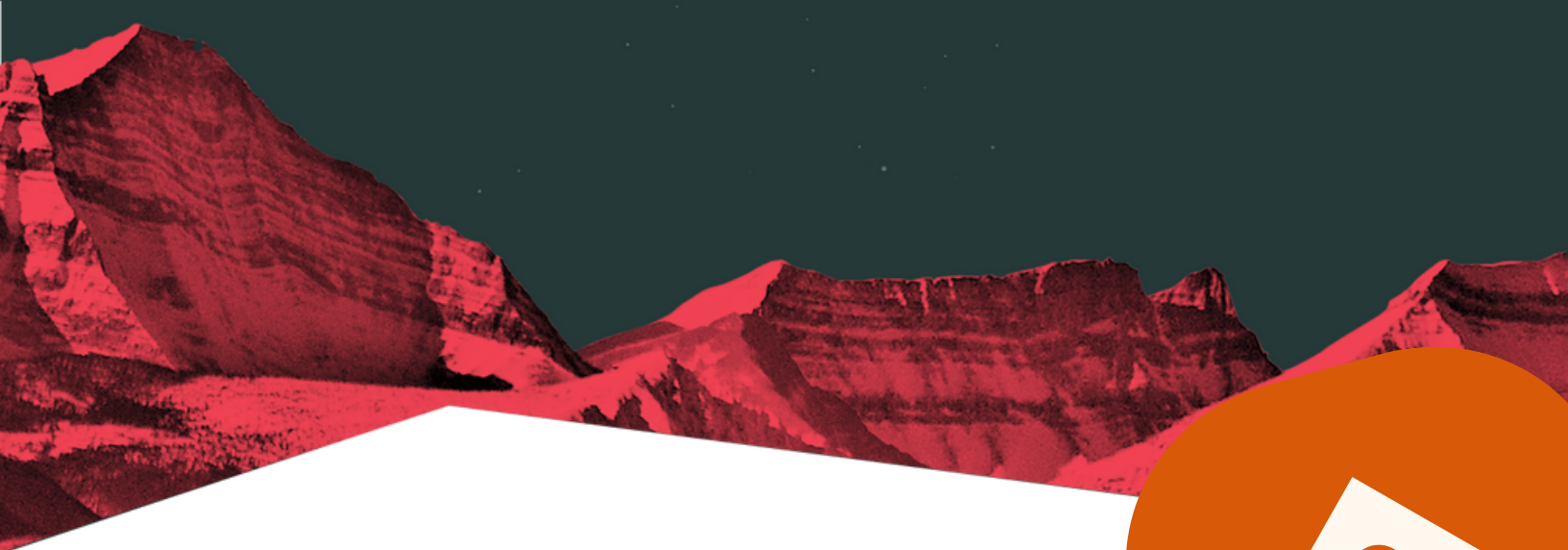


Discovering opportunities for large-language models and generative AI for legal, compliance, risk, and surveillance functions

A stylized, red-tinted image of a mountain range with jagged peaks and layered rock formations, spanning the width of the page.

A handbook for analytics and
innovation leaders at financial
institutions.



DISCOVERING OPPORTUNITIES FOR LARGE-LANGUAGE MODELS AND GENERATIVE AI FOR LEGAL, COMPLIANCE, RISK, AND SURVEILLANCE FUNCTIONS

A HANDBOOK FOR ANALYTICS AND INNOVATION
LEADERS AT FINANCIAL INSTITUTIONS

Discover business opportunities with large-language models	3
Seven use cases for large-language models	5
1. Summarizing rules	5
2. Routing rule changes to the appropriate compliance function	6
3. Tracing rules to policy documents	7
4. Detecting potential risk and policy loopholes from cryptocurrency	8
5. Automatically generating draft reports and correspondence	9
6. Answering questions about policies	10
7. Identifying people, places, organizations, and relationships in documents	11
Appendix: ChatGPT 4.0 Prompts	12
Prompt: Summarizing rules	13
Prompt: Routing rule changes to the appropriate compliance function	14
Prompt: Tracing rules to policy documents	15
Prompt: Detecting potential risk and policy loopholes from cryptocurrency transactions	18
Prompt: Automatically generating draft reports and correspondence	19
Prompt: Answering questions about policies	20
Prompt: Identifying people, places, organizations, and relationships in documents	21



DISCOVER BUSINESS OPPORTUNITIES WITH LARGE-LANGUAGE MODELS

AUTOMATION IN LEGAL, COMPLIANCE, RISK, AND SURVEILLANCE IS NOW POSSIBLE

Historically, most back-office business processes at financial services institutions have not been automated due to the inability of computers to effectively process unstructured data such as emails, PDFs, and images. Consequently, most legal, compliance, risk, and surveillance (LCRS) functions have relied on tedious, human-driven processes supported by basic IT workflows.

This obstacle has now been overcome. Business applications based on large-language models (LLMs) like OpenAI's GPT can perform basic reasoning tasks and process unstructured data.

IDENTIFYING THE BEST OPPORTUNITIES REMAINS CHALLENGING

Unfortunately, pinpointing the most advantageous opportunities for leveraging LLMs in LCRS business functions is not an easy task. Business customers (e.g., lawyers, compliance officers, risk managers) and technologists often employ incompatible language when discussing potential projects.

For instance, a compliance officer with deep expertise in regulation and policy may not understand how natural-language processing (NLP) capabilities, such as entity extraction and semantic search, are relevant to their work.

In our experience, most business customers only recognize opportunities for innovative technology when they see relevant examples based on their data.

ABOUT THIS HANDBOOK

This handbook is designed for analytics leaders at financial services companies tasked with bringing innovative solutions to LCRS business problems. We have created use case examples based on real business problems and solutions we have deployed at the world's largest regulators and financial services companies.

These examples are generated using publicly available data and OpenAI's ChatGPT 4.0 model. We provide the prompts in the Appendix, so you can modify and run them yourself on this or other models.

DISCOVERING BUSINESS OPPORTUNITIES FOR LLMS

Use these examples as conversation starters with your constituents. Each use case starts with a question for spurring conversation. We recommend casual face-to-face conversations where you show them examples and ask whether the solution is relevant to their work. In most cases, they will respond with, "Not exactly, but can the technology do...?" This exchange will initiate the process of winning over skeptical business partners and identifying your best opportunities. You can then use LLMs and prompt engineering to generate more relevant examples and probe for challenges.

DISCOVERING BUSINESS OPPORTUNITIES FOR LLMS

Of course, identifying potential opportunities is only the first step. To build a business case, you will also need to answer numerous other questions, such as:

1. Can we gain access to the data for the solution?
2. Do we have the team to build and support it?
3. Do our policies permit us to use a hosted solution like OpenAI's GPT models, or do we need to develop an internally-managed solution?
4. How can we create generalized capabilities instead of one-off solutions?

Prolego has years of experience addressing these and many other AI questions. Feel free to contact us; we'll be happy to provide some advice during a 30-minute call.

SEVEN USE CASES FOR LARGE-LANGUAGE MODELS

1. SUMMARIZING RULES

Question: Would you find it helpful if we could automatically summarize rules, proposed rules, or other large documents into a few concise sentences?

Regulators continuously release proposed and actual rule changes, and managing this constant stream of complex legal content can be overwhelming for compliance organizations. Rules often come with limited summary information, resulting in experts evaluating documents that turn out to be irrelevant to their business operations.

LLMs can help summarize rules or proposed rules, enhancing compliance operational efficiency. Here's an example of condensing a proposed SEC rule into just a few sentences.

EXAMPLE

Here is a summary of SEC proposed rule [Electronic Submission of Certain Material Under the Securities Exchange Act of 1934; Amendments Regarding the FOCUS Report.](#)



The SEC has proposed amendments to modernize its information collection and analysis methods by requiring electronic submissions of certain forms, filings, and materials on EDGAR, replacing the current paper-based system. The proposed changes would impact national securities exchanges, associations, clearing agencies, broker-dealers, security-based swap dealers, and major security-based swap participants, aiming to save both registrants and the Commission time and resources.

2. ROUTING RULE CHANGES TO THE APPROPRIATE COMPLIANCE FUNCTION

Question: We understand you receive many notifications about proposed rule changes, findings, interpretations, and other information from regulatory bodies that impact compliance and policies. Would it be helpful if we automatically identified the appropriate audience for these notices?

This example was created using a description of general compliance functions. You can make a more powerful example by modifying the prompts with the actual functions in your institution and use actual regulatory notices.

Here is the suggested group to review SEC proposed rule [Electronic Submission of Certain Material Under the Securities Exchange Act of 1934; Amendments Regarding the FOCUS Report.](#)



The Policy Enforcement Group should review this proposed rule change for action, as they are responsible for developing standardized, consistent, and legally sound protocols to address non-compliance issues. The proposed amendments involve changes to the filing and submission process, which may require the Policy Enforcement Group to update existing guidelines and ensure that they remain compliant with the new regulations. Additionally, the Regulatory Reporting Group should also be involved, as they define data collection procedures related to compliance and would need to adjust their procedures to align with the proposed electronic filing requirements.

3. TRACING RULES TO POLICY DOCUMENTS

Question: Would it be helpful if we could automatically map rules or rule changes directly to the most relevant parts of our policies?

We promise you they will say, “of course”! Tracing rules to appropriate locations in policies is an extremely tedious process and inconsistencies between the two create risk. You should also expect your business customers to be extremely skeptical.

In this example we trace a rule to appropriate policy sections using only the table of content of a Written Supervisory Procedures policy document. In practice a technique called “semantic search” is required to connect rules to the most appropriate sections within every policy document, many of which contain hundreds of pages.

Developing a solution to automatically trace rules to policies takes several months of engineering work, but the efficiency and risk reduction is so valuable that many firms are developing custom solutions. In time every firm will need this capability to avoid regulatory scrutiny.

In this example we ask the LLM to trace the contents of [FINRA Rule 3320](#) to the most appropriate sections of the Policies at a fictitious company called OrangeInvestors.



The most relevant 3 sections of the Policy for the Rule are:

1. 2.5 Gifts and Business Courtesies
2. 2.5.1 Gifts to Others
3. 2.5.2 Receiving Gifts

4. DETECTING POTENTIAL RISK AND POLICY LOOPHOLES FROM CRYPTOCURRENCY

Question: Would it be useful to have AI automatically review and identify potential policy loopholes that could be exploited by bad actors?

This is fun exercise—and one that will likely spur conversations about the future of your firm's risk program. You can use the LLMs to automatically identify potential loopholes in policies. In practice, the technology will be most useful for surfacing potential issues that require additional discussion.

In this scenario, we asked the LLM to identify ways an employee could use cryptocurrency transactions to violate potential policies.



Scenario:

An unscrupulous employee at OrangelInvestors, Inc. may attempt to break the rules on rebating commissions and offering personal loans to customers through a series of complex and anonymous cryptocurrency transactions.

The employee could use privacy-focused cryptocurrencies like Monero (XMR) or Zcash (ZEC) to obfuscate their transactions. These cryptocurrencies offer enhanced privacy and anonymity features, making it difficult to trace transactions back to the individual parties involved.

The employee could create multiple anonymous digital wallets to further hide their activities. They might use wallets like MyMonero or Cake Wallet for Monero, or ZecWallet for Zcash. These wallets are known for their privacy features and user-friendly interfaces, allowing the employee to manage their transactions discreetly.

To further complicate the trail, the employee could use decentralized exchanges (DEXs) like Uniswap or SushiSwap to swap between different cryptocurrencies. This step could help to obfuscate the source and destination of funds. Additionally, they could utilize mixing services like Tornado Cash or Wasabi Wallet to further enhance the privacy of their transactions.

In this scenario, the employee would set up a scheme to rebate commissions to customers using the anonymous wallets and privacy-focused cryptocurrencies. They could also extend personal loans to customers by transferring these cryptocurrencies to customers' anonymous wallets, violating the company's policy.

Why It Will Be Difficult to Detect:

1. Privacy-focused cryptocurrencies: Monero and Zcash both use advanced cryptographic techniques to ensure transaction details are obfuscated. Monero uses ring signatures and stealth addresses, while Zcash employs zero-knowledge proofs called zk-SNARKs. These features make it extremely difficult for Compliance to trace transactions back to the employee or the customers involved.
2. Anonymous wallets: Wallets like MyMonero, Cake Wallet, and ZecWallet do not require the user to provide any personal information or undergo a KYC (Know Your Customer) process. This anonymity makes it challenging for Compliance to associate wallet addresses with specific individuals.
3. Decentralized exchanges and mixing services: Utilizing DEXs and mixing services, the employee can further obfuscate their transactions by swapping cryptocurrencies and mixing their coins with other users' coins. This makes it difficult for Compliance to track the movement of funds or identify any wrongdoing.

As a result, it would be extremely challenging for Compliance to detect this violation of company policy. This is due to the use of privacy-focused cryptocurrencies, anonymous wallets, and tools that obfuscate the transaction history, making it hard to link specific transactions to the unscrupulous employee or the customers involved.

5. AUTOMATICALLY GENERATING DRAFT REPORTS AND CORRESPONDENCE

Question: Would it be helpful to automatically draft correspondence such as memos, reports, and letters?

Generating and reviewing correspondence is a tedious, time-consuming task in LCRS functions. It also carries high-risk: an error or mistake in correspondence can expose the firm to litigation or other risks. Managers must often invest significant time reviewing correspondence of new employees to mitigate this risk.

LLMs can generate draft correspondence if the models are trained on the firm's specific products, services and past correspondence. The results would still require human review, but it can serve as a starting point.

In this example a compliance officer generates a memo to the Chief Compliance Officer at a firm summarizing and SEC investigation: [Two Former Wells Fargo Employees Charged With Insider Trading in Advance of Research Reports Containing Ratings Changes.](#)



Subject: SEC Case 2014-221 Summary and Compliance Assurance

Dear [Chief Compliance Officer],

I am providing a summary of the SEC case 2014-221 involving insider trading at Wells Fargo and emphasizing two primary reasons why such incidents are unlikely to occur at OrangelInvestors, Inc.

Case Summary:

The SEC charged former Wells Fargo research analyst Gregory T. Bolan Jr. and trader Joseph C. Ruggieri with insider trading. Bolan allegedly tipped Ruggieri with nonpublic information about upcoming ratings changes, leading to over \$117,000 in illicit profits for Ruggieri.

Reasons for Unlikelihood at Our Firm:

1. Robust policies and procedures: OrangelInvestors, Inc. enforces strict policies prohibiting trading ahead of published research and maintains a clear separation of duties between research analysts and traders. Our guidelines mandate strict adherence to these policies, ensuring compliance and minimizing the potential for unauthorized information sharing.
2. Effective monitoring and surveillance: Our firm employs advanced surveillance systems to monitor trading activities and communication channels in real-time, mitigating the risk of insider trading. This technology allows us to promptly identify and investigate any unusual or suspicious trading patterns, ensuring the integrity of our operations.

In conclusion, our firm's comprehensive policies and vigilant surveillance measures significantly diminish the likelihood of similar incidents occurring at OrangelInvestors, Inc.

Please feel free to reach out if you have any questions or require further information.

Sincerely,

[Your Name]
Compliance Officer
OrangelInvestors, Inc.

6. ANSWERING QUESTIONS ABOUT POLICIES

Question: Do you find that employees don't read policies? If so, would it be useful to create a chat interface so they could ask questions about what is and isn't allowed?

LLMs can do more than chat - they can provide answers to questions and give context. Here is an answer to questions about gifts and behaviors outside the company.



Question 1: Do I have to report work I do for my church?

Answer: No, you do not have to report work you do for your church, as long as you do not receive compensation for your involvement. According to the policy, charitable activities are exempt from the requirement to disclose outside business activities, unless the employee receives compensation for their involvement.

Question 2: Someone wants to give me Yankees game baseball tickets. Can I accept them?

Answer: You can accept the Yankees game baseball tickets only if the total value of the tickets is less than \$100. The policy states that employees may not solicit or accept gifts from customers or vendors without written approval from Compliance, unless the gift is of nominal value (less than \$100) or constitutes customary business lunches, entertainment, or promotional items.

7. IDENTIFYING PEOPLE, PLACES, ORGANIZATIONS, AND RELATIONSHIPS IN DOCUMENTS

Question: Would it be helpful to extract entities (people, places, organizations, etc.) and identify relationships across different documents?

Surveillance programs often need to track behavior and relationships across a number of different sources, what data scientists call entity extraction and relationship reconciliation. Here is an example of extracting names and relationships for importing into a graph database.

This example is taken from this F-1 filing, <https://secfilings.nasdaq.com/filingFrameset.asp?FilingID=16161094&View=html>



Person: Ming Hung "Matthew" Lai

Title: Chairman & Director

Organizations: University of Southern California, PwC Hong Kong, Nespresso (Division of Nestle H.K. Limited), Millennium Printing International Limited

Relationships: Ming Yan Lai - cousin, Yau Fai Lai - uncle, Yee Cheong Lai - grandfather

Person: Ming Yan "Ray" Lai

Title: CEO & Director

Organizations: University of the Arts London, Millennium Printing International Limited

Relationships: Ming Hung Lai - cousin, Yau Fai Lai - uncle, Yee Cheong Lai - grandfather

Person: Yau Fai Lai

Title: Director

Organizations: University of Warwick, Dearden Farrow Chartered Accountants, PwC

Relationships: Ming Hung Lai - nephew, Ming Yan Lai - nephew, Yee Cheong Lai - father

Person: Yee Cheong Lai (DECEASED)

Title: Founder

Organizations: None

Relationships: Ming Hung Lai - grandson, Ming Yan Lai - grandson, Yau Fai Lai - son

Person: Hok Han Ko

Title: Independent Director Nominee

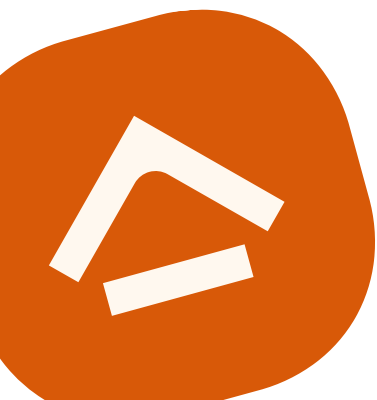
Organizations: City University of Hong Kong, DHL International GmbH, Li & Fung (Trading) Limited, S.F. Express Company Limited

Relationships: None

APPENDIX: CHATGPT 4.0 PROMPTS

COPY AND PASTE THESE PROMPTS DIRECTLY INTO CHATGPT 4.0. YOU WILL GET SIMILAR–NOT IDENTICAL–RESULTS IN THE USE CASES WE SHARED.

MODIFY THE PROMPTS (A TECHNIQUE CALLED PROMPT ENGINEERING) TO GET RESULTS MORE RELEVANT FOR YOUR BUSINESS CUSTOMERS.



PROMPT: SUMMARIZING RULES

Read this proposed SEC rule and summarize it in 2 sentences:

SEC Proposes to Modernize the Submission of Certain Forms, Filings, and Materials Under the Securities Exchange Act of 1934

FOR IMMEDIATE RELEASE

2023-58

Washington D.C., March 22, 2023 —

The Securities and Exchange Commission today proposed amendments designed to modernize its information collection and analysis methods by, among other things, proposing that a number of filings be submitted to the Commission electronically on EDGAR using structured data where appropriate.

Under current rules, registrants are required to file or otherwise submit many Exchange Act forms, filings, or other submissions in paper form. During the COVID-19 pandemic, many submissions were made in electronic rather than paper form, which was generally well received. As part of its efforts to modernize the methods by which it collects and analyzes information from registrants, the proposed amendments would require registrants to make these submissions to the Commission electronically.

“We live in a digital age. In 2023, one might think that all filings to the Commission already could be made electronically. That’s not yet true,” said SEC Chair Gary Gensler. “Today, we have the important opportunity to require electronic filing for nearly all of the remaining paper filings required under the Exchange Act. I believe the proposal, if adopted, would save both registrants and the Commission time and resources.”

Specifically, the proposed amendments would require the electronic filing, submission, or posting of certain forms, filings, and other submissions that national securities exchanges, national securities associations, clearing agencies, broker-dealers, security-based swap dealers, and major security-based swap participants make with the Commission. The proposed amendments would also make certain amendments regarding the Financial and Operational Combined Uniform Single (“FOCUS”) Report to harmonize it with other rules, make technical corrections, and provide clarifications. In addition, the proposed amendments would require withdrawal of notices filed in connection with an exception to counting certain dealing transactions toward determining whether a person is a security-based swap dealer in specified circumstances.

PROMPT: ROUTING RULE CHANGES TO THE APPROPRIATE COMPLIANCE FUNCTION

Below is an SEC proposed rule change. Which compliance function should review this proposed rule change for action?

The Internal Audit Group periodically examines all company practices to ensure that they are adhering to defined internal and external policies, laws and regulations. The Internal Audit Group then reports its findings to management and business unit leaders to ensure that all parties are aware of areas in need of regulatory adjustments.

The Policy Creation Group is responsible for examining and researching risk areas and then drafting corporate governance policies that will mitigate the identified risk areas. They are also responsible for training employees on compliant processes and procedures.

The Policy Enforcement Group sets guidelines to handle issues of non-compliance. They develop standardized, consistent, legally sound protocols to address each possible situation of non-compliance.

The Regulatory Reporting Group defines data collection procedures (related to compliance), then compiles and files reports for management and government institutions. Regulatory reports deal with issues such as environmental friendliness or food/drug safety.

The Risk Management Group evaluates regulatory and non-regulatory risk and formulates responses and plans of action to mitigate and respond to those risks. They prioritize certain risks based on consequences (monetary or other), set risk tolerance levels and create procedures based on the level of risk involved.

Proposed rule change below

Washington D.C., March 22, 2023 —

The Securities and Exchange Commission today proposed amendments designed to modernize its information collection and analysis methods by, among other things, proposing that a number of filings be submitted to the Commission electronically on EDGAR using structured data where appropriate.

Under current rules, registrants are required to file or otherwise submit many Exchange Act forms, filings, or other submissions in paper form. During the COVID-19 pandemic, many submissions were made in electronic rather than paper form, which was generally well received. As part of its efforts to modernize the methods by which it collects and analyzes information from registrants, the proposed amendments would require registrants to make these submissions to the Commission electronically.

“We live in a digital age. In 2023, one might think that all filings to the Commission already could be made electronically. That’s not yet true,” said SEC Chair Gary Gensler. “Today, we have the important opportunity to require electronic filing for nearly all of the remaining paper filings required under the Exchange Act. I believe the proposal, if adopted, would save both registrants and the Commission time and resources.”

Specifically, the proposed amendments would require the electronic filing, submission, or posting of certain forms, filings, and other submissions that national securities exchanges, national securities associations, clearing agencies, broker-dealers, security-based swap dealers, and major security-based swap participants make with the Commission. The proposed amendments would also make certain amendments regarding the Financial and Operational Combined Uniform Single (“FOCUS”) Report to harmonize it with other rules, make technical corrections, and provide clarifications. In addition, the proposed amendments would require withdrawal of notices filed in connection with an exception to counting certain dealing transactions toward determining whether a person is a security-based swap dealer in specified circumstances.

PROMPT: TRACING RULES TO POLICY DOCUMENTS

Here are two documents. Rule: an excerpt from FINRA's rules. Policy: The table of contents of the employee guidelines at a fictitious company called OrangeInvestors. Identify the most relevant 3 sections of the Policy for the Rule.

Rule:

(a) No member or person associated with a member shall, directly or indirectly, give or permit to be given anything of value, including gratuities, in excess of one hundred dollars per individual per year to any person, principal, proprietor, employee, agent or representative of another person where such payment or gratuity is in relation to the business of the employer of the recipient of the payment or gratuity. A gift of any kind is considered a gratuity.

(b) This Rule shall not apply to contracts of employment with or to compensation for services rendered by persons enumerated in paragraph (a) provided that there is in existence prior to the time of employment or before the services are rendered, a written agreement between the member and the person who is to be employed to perform such services. Such agreement shall include the nature of the proposed employment, the amount of the proposed compensation, and the written consent of such person's employer or principal.

(c) A separate record of all payments or gratuities in any amount known to the member, the employment agreement referred to in paragraph (b) and any employment compensation paid as a result thereof shall be retained by the member for the period specified by SEA Rule 17a-4.

Policy:

OrangeInvestments, Inc. Supervisory Procedures Manual

Table of Contents

2.0 EMPLOYEE GUIDELINES

2.1 Code of Conduct

2.2 External Business Activities

2.3 Personal Securities Transactions

2.4 Staff and Staff Related Accounts

2.4.1 Staff and Staff Related Accounts Defined

2.4.2 External Accounts

2.4.3 Evaluation of Transactions

2.4.4 Insider Trading

2.4.5 Participation in Accounts

2.4.6 Limitations on Purchases of New Issues

2.4.7 Research Limitations

2.4.8 Investments in External Securities/Financial Services

2.5 Gifts and Business Courtesies

2.5.1 Gifts to Others

2.5.2 Receiving Gifts

2.6 Media Interaction is Restricted to Authorized Employees

2.7 Inquiries from External Sources

2.8 Mandatory Notifications to the Firm

2.9 Forbidden Activities

2.9.1 Utilization of Firm Name

2.9.2 Aggressive Sales Techniques

2.9.3 Tax Advice Not Allowed

2.9.4 Commission Rebates

2.9.5 Resolving Complaints or Errors with Customers Directly

- 2.9.6 Personal Loans Involving Customers
- 2.9.7 Personal Funds in Customer Accounts
- 2.9.8 Prohibition of Guarantees
- 2.9.9 Fees and Miscellaneous Charges
- 2.9.10 Customer Signatures
- 2.9.11 Gossip
- 2.9.12 False Statements
- 2.9.13 Illicit Payments
- 2.9.14 Operating without Registration
- 2.10 Electronic Records, Equipment, and Software
- 2.11 Digital Communications
 - 2.11.1 Internet Usage
 - 2.11.2 Employee Communications Are Subject to Monitoring
 - 2.11.3 Firm Oversight of Internet Communications
- 2.12 Marketing and Publishing Activities
- 2.13 Employment of Titles
- 2.14 Yearly Certification
- 2.15 Onboarding Procedures
 - 2.15.1 Interview Protocols
 - 2.15.2 Background Verification
 - 2.15.3 Compliance Assessment
 - 2.15.4 Rules and Procedures
 - 2.15.5 New Employee Survey
- 2.16 Targeted Supervision
 - 2.16.1 Overview
 - 2.16.2 Identifying RRs for Targeted Supervision
 - 2.16.3 Factors for Identifying Candidates for Targeted Supervision
 - 2.16.4 Targeted Supervision Memorandum
 - 2.16.5 Extent of Possible Targeted Supervision
 - 2.16.6 Confirmation by Designated Supervisor
 - 2.16.7 Targeted Supervision of Statutorily Disqualified Personnel
- 2.17 Concurrent Registration
 - 2.17.1 Overview
 - 2.17.2 FINRA Rule 3270
 - 2.17.3 Appropriateness of Transactions
 - 2.17.4 Additional Supervisory Measures

PROMPT: DETECTING POTENTIAL RISK AND POLICY LOOPHOLES FROM CRYPTOCURRENCY TRANSACTIONS

2You are a compliance officer for OrangeInvestors, Inc. and an expert in cryptocurrency transactions. You are competing with other compliance officers to identify the most creative and complex way an unscrupulous employee could use complex cryptocurrency transactions to break your policies. Review this policy and suggest a scenario where an employee could violate rules on rebating commissions and offering personal loans to customers. Additionally, suggest specific cryptocurrency tokens, wallets, and exchanges that will make it most difficult for Compliance to detect the problem, and explain why it will be difficult

OrangeInvestors, Inc. has set forth a number of important policies for its employees to adhere to. Employees are not allowed to use the company's name in a way that could imply a connection between OrangeInvestors and their personal activities. High-pressure sales tactics, such as excessive phone calls or misleading customers about limited supplies or changing prices, are strictly prohibited. Employees of OrangeInvestors are not permitted to provide tax advice to customers, as the firm is not engaged in tax advisory services. Instead, customers should be referred to their personal tax advisers for any tax-related guidance.

Employees of OrangeInvestors are prohibited from rebating any commission or compensation received to others. Additionally, they may not make payments to customers in order to resolve errors or complaints; such matters must be brought to the attention of their designated supervisor. The firm also prohibits employees from engaging in personal loans with customers, and exceptions to this rule must be reviewed and approved by Senior Management and Compliance.

It is also against company policy for employees to deposit or withdraw funds or securities in customers' accounts, or to deposit or withdraw customers' personal funds or securities in employee accounts. Any exceptions to this rule must also be reviewed and approved by Senior Management and Compliance. Moreover, OrangeInvestors and its employees are not allowed to guarantee customers against losses in any securities transaction. Supervisors are responsible for identifying such prohibited guarantees in written communications with customers. However, options or written agreements that establish future transaction prices, such as repurchase agreements, are not included in this prohibition. Finally, employees are not permitted to charge fees or assess other charges to customers or their accounts.

PROMPT: AUTOMATICALLY GENERATING DRAFT REPORTS AND CORRESPONDENCE

You are the compliance officer for OrangeInvestors, Inc. Generate a draft memo for your Chief Compliance Officer summarizing this SEC case and describe why it is unlikely to happen at your firm.

FOR IMMEDIATE RELEASE

2014-221

Washington D.C., Sept. 29, 2014 —

The Securities and Exchange Commission today announced insider trading charges against two former Wells Fargo employees involved in an alleged scheme to profit by buying or short selling a stock before research analyst reports were published containing a ratings change.

Research analysts typically produce reports with a recommendation or rating of a stock or other security they've reviewed. When an analyst alters a prior view on the prospects of a security, a new report is issued with a ratings change. The SEC's Enforcement Division alleges that while Gregory T. Bolan Jr. worked as a research analyst at Wells Fargo, he tipped a trader at the firm, Joseph C. Ruggieri, in advance of several market-moving ratings upgrades or downgrades that he made in certain securities. The tips enabled Ruggieri to generate more than \$117,000 in profits.

"Instead of abiding by firm policies that specifically prohibited trading ahead of published research, Ruggieri used information obtained from Bolan to make profitable trades in advance of six separate research reports," said Sanjay Wadhwa, Senior Associate Director of the SEC's New York Regional Office. "The repeated nature of these violations demonstrates an utter disregard for our insider trading laws."

According to the SEC's order instituting a litigated proceeding before an administrative law judge, Bolan also tipped a close friend with nonpublic information about his upcoming ratings changes. The friend, who is now deceased, generated approximately \$10,000 in profits in a personal brokerage account by trading ahead of three ratings changes.

"Bolan gave two traders a sneak preview into his upcoming ratings changes and provided them an unfair and illegal advantage on the rest of the markets," said Daniel M. Hawke, Chief of the SEC Enforcement Division's Market Abuse Unit.

The SEC's Enforcement Division alleges that after receiving Bolan's tips, Ruggieri either purchased the relevant company's stock ahead of Bolan's upgrades or sold the stock short ahead of Bolan's downgrades. Ruggieri closed his overnight positions in those securities for a profit shortly after Bolan's ratings changes were made public and the stock prices had moved. From April 2010 to March 2011, Bolan published a total of eight research reports with a ratings change or initiation of coverage with an "outperform" or "underperform" rating. Ruggieri traded profitably ahead of six of these reports in a manner that did not fit in his typical trading pattern. Aside from this trading ahead, Ruggieri had only a handful of overnight positions in securities that had been rated within the six months prior to his trading.

PROMPT: ANSWERING QUESTIONS ABOUT POLICIES

Review this policy and then answer these 2 questions from an employee:

1. Do I have to report work I do for my church?
2. Someone wants to give me Yankees game baseball tickets. Can I accept them?

In your reply, restate the question and provide the answer using this format:

Question:

Answer:

Policy:

OrangeInvestors, Inc. has set forth a number of important policies for its employees to adhere to. Employees are not allowed to use the company's name in a way that could imply a connection between OrangeInvestors and their personal activities. Employees must disclose any outside business activities (OBAs) in writing before engaging in them, and the firm will evaluate whether such activities interfere with the employee's responsibilities or could be viewed as an extension of the firm's business. Charitable activities are exempt from this requirement unless the employee receives compensation for their involvement.

Employees are required to adhere to restrictions on gifts and gratuities. Gifts given in relation to the firm's business must not exceed \$100 per year per person, excluding reasonable business entertainment where the employee hosts the event. Employees may not solicit or accept gifts from customers or vendors without written approval from Compliance, unless the gift is of nominal value (less than \$100) or constitutes customary business lunches, entertainment, or promotional items.

High-pressure sales tactics, such as excessive phone calls or misleading customers about limited supplies or changing prices, are strictly prohibited. Employees of OrangeInvestors are not permitted to provide tax advice to customers, as the firm is not engaged in tax advisory services. Instead, customers should be referred to their personal tax advisers for any tax-related guidance.

Employees of OrangeInvestors are prohibited from rebating any commission or compensation received to others. Additionally, they may not make payments to customers in order to resolve errors or complaints; such matters must be brought to the attention of their designated supervisor. The firm also prohibits employees from engaging in personal loans with customers, and exceptions to this rule must be reviewed and approved by Senior Management and Compliance.

It is also against company policy for employees to deposit or withdraw funds or securities in customers' accounts, or to deposit or withdraw customers' personal funds or securities in employee accounts. Any exceptions to this rule must also be reviewed and approved by Senior Management and Compliance. Moreover, OrangeInvestors and its employees are not allowed to guarantee customers against losses in any securities transaction. Supervisors are responsible for identifying such prohibited guarantees in written communications with customers. However, options or written agreements that establish future transaction prices, such as repurchase agreements, are not included in this prohibition. Finally, employees are not permitted to charge fees or assess other charges to customers or their accounts.

PROMPT: IDENTIFYING PEOPLE, PLACES, ORGANIZATIONS, AND RELATIONSHIPS IN DOCUMENTS

Identify and extract 5 names, titles, organizations, and relationships in this text. Include Yee Cheong Lai. Organize it in a way that would be easy to import into a graph database using the following structure:

Person: Joe Smith

Title: CEO

Organizations: Pepsi, Stanford

Relationships: Amy - cousin, Susan - wife

Person: Sandy Smith (DECEASED)

Title: CFO

Organizations: Pepsi, Stanford

Relationships: Amy - cousin, Susan - wife

Ming Hung "Matthew" Lai, Chairman & Director, holds a BSc in Accounting and Business Administration from the University of Southern California and has over 11 years of experience in financial management and accounting. He worked at PwC Hong Kong and Nespresso, Division of Nestle H.K. Limited before joining Millennium Printing International Limited as a manager in 2013.

Ming Yan "Ray" Lai, CEO & Director, graduated from the University of the Arts London with a BA in Print Media Management. With over 15 years of management experience, he joined Millennium Printing in 2007, serving in various roles before becoming the CEO.

Wing Wai "John" Au, CFO, has a Bachelor of Economics from Monash University and over 28 years of financial management experience. He held various positions at C.W.T. Textile Supplies Co., Ltd, C.T. Enterprises International Company Limited, Magician Industrial Company Limited, and CN Innovations Holdings Limited before joining Millennium Printing International Limited in 2007.

Yau Fai Lai, Director, holds a BSc with honors in Management Science from the University of Warwick and has over 37 years of experience in financial management and accounting. He worked at Dearden Farrow Chartered Accountants, PwC, and various Hong Kong companies before joining the Company.

Hok Han Ko, Independent Director Nominee, has a BBA in Quantitative Analysis for Business and a Juris Doctor degree from the City University of Hong Kong. With over 17 years of business management experience, he worked at DHL International GmbH, Li & Fung (Trading) Limited, and S.F. Express Company Limited, among other companies.

Sun Wai But, Independent Director Nominee, holds a BA in Economics with honors from the University of Warwick and an LLB from the University of London. He has over 35 years of legal experience and was admitted as a solicitor of Hong Kong and the United Kingdom.

Hon Wai Ku, Independent Director Nominee, has over 23 years of professional experience in accounting and auditing. He has a bachelor's degree in Business Administration (Honors) in Finance from the Hong Kong University of Science and Technology and has served as CFO and company secretary for various listed companies.

Hung Leung "Alan" Tsang, Independent Director Nominee, holds an accounting degree from the City University of Hong Kong and is a certified public accountant. He has extensive experience in financial reporting and treasury management, working at Eastern Glory Financial and Investment Services Limited, Combine Will International Holdings Limited, and China Resources Enterprise Limited.

Family Relationships: Ming Hung Lai (Chairman) and Ming Yan Lai (CEO) are cousins. Yau Fai Lai (Director) is their uncle, and the deceased founder, Yee Cheong Lai, is their grandfather.