Prompts, Workflow and Method Statements – Making AI Work For Using AHP For Governance Risk Controls Assessment Purposes.

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1. Abstract

The evaluation of management systems presents challenges in ensuring consistency, granularity, and actionable insights across diverse organisational contexts. This paper explores the use of structured prompts and detailed method statements as tools for improving the quality of Governance, Risk, Controls and Compliance (GRC) systems. Drawing on experiences in applying these techniques within the Analytical Hierarchy Process (AHP) framework, we illustrate how structured guidance facilitates data collection, evaluation, and decision-making. Joining AHP/ANP with AI will engender a whole new generation of handling operational performance improvement over time. Clearly, AI moves us from a programmatic-driven mind-set to an insight-driven mind-set. Key findings highlight the role of prompts in driving precision, reducing cognitive biases, and standardising assessments; while method statements ensure alignment with organisational objectives and maturity models. This paper provides practical insights for practitioners and contributes to the growing discourse on enhancing decision-support methodologies through structured AI tools. We are entering an environment more in keeping with philosophy and reasoning than technology AI as simply a 'black box'.

Keywords: Management Systems, AI, Prompts, Method Statements, Workflow, Evaluation Frameworks, Assessment, Judgement Making, Auditing, Governance-Risk-Control, International Standards, Compliance, Conformance, Regulation.

2. Introduction

Evaluating management systems, particularly around compliance (GRC), is a complex task requiring precision, consistency, and alignment with organisational goals. Traditional auditor approaches often suffer from variability in evaluation criteria and susceptibility to cognitive biases, resulting in inconsistent insights and suboptimal decision-making. The need for robust, replicable methodologies is increasingly apparent as organisations strive for operational maturity and compliance in dynamic environments. This paper explores the integration of structured prompts and method statements into the Analytical Hierarchy Process (AHP) framework to enhance the evaluation of management systems. Prompts serve as catalysts for clear and consistent AI interaction, guiding evaluators in reducing ambiguity and ensuring focus on key aspects of the system. Method statements provide a foundational structure, outlining clear metrics for data quality, timeliness, cross-linking, and maturity assessments. Together, these tools create a systematic approach that enhances decision-making and supports the development of actionable insights. The contribution of this work lies in demonstrating how structured tools not only improve evaluation accuracy but also facilitate alignment with strategic objectives and organisational maturity. By sharing practical insights and lessons learned, we aim to provide practitioners with insights that enhance the effectiveness of their GRC and business systems and contribute to the broader discourse on AI enabled decision-support frameworks working with professionals.

<u>Terminology</u>: An AI 'Prompt', is a brief statement as question and activity, using a template or spontaneously, constructed such that an AI can respond to it effectively; 'Method Statement', is a sequence of rules and guidance an AI can interpret to achieve the desired task or analysis (and worth noting they have a different structure to established method or work instruction formats); 'Workflow', is where a non-AI engine uses AI prompts to carry out a collective group of tasks or analyses according to a process or sequence of work and; 'Hybrid,' is some combination of these three techniques to better achieve the desired task or analysis.

3. Literature Review

Overall, the limited literature underscores the significance of method statements and prompts as essential components in the development and evaluation of management systems. Their structured nature aids in mitigating risks, standardising procedures, and enhancing the overall quality of judgement and decision-making processes.

LeanAI: A method for AEC practitioners to effectively plan AI implementations. (2023). ArXiv. Available at: <u>https://arxiv.org/abs/2306.16799</u> This paper introduces the LeanAI method, emphasising structured planning and methodologies for AI projects in the Architecture, Engineering, and Construction sectors.

NIST. (2021). Four Principles of Explainable Artificial Intelligence. NIST IR 8312. Available at: <u>https://nvlpubs.nist.gov/nistpubs/ir/2021/NIST.IR.8312.pdf</u> This publication outlines key principles for creating explainable AI systems, focusing on clarity, transparency, and procedural consistency, akin to method statements in engineering.

Springer. (2022). Explainable AI Methods - A Brief Overview. In Advances in Intelligent Systems and Computing. Available at: <u>https://link.springer.com/chapter/10.1007/978-3-031-04083-2_2</u> This chapter reviews methods for explainable AI, highlighting the importance of transparent and structured approaches to AI system development.

4. Hypotheses/Objectives

"Repetitive prompts and detailed method statements enhance the assessment of management systems by AI by increasing consistency, reducing cognitive bias, and improving data quality. However, the effectiveness of each approach varies depending on the system's complexity and the maturity of its implementation. This research seeks to determine which method—or combination of methods—yields the most reliable and actionable insights for evaluating Governance and Compliance (GRC) systems."

5. Research Design/Methodology

This work represents a structured testing approach to evaluate the effectiveness of prompts, method statements, workflows, and hybrid methods in assessing management systems. The methodology builds on the foundational work of the Supply-Chain Evaluation and Assurance Service (SCEAS), leveraging Aldriven analytics and systematic testing to generate actionable insights. This research involved the creation and application of more than 16 structured test scenarios carried out over 12 months, that mirror real-world challenges in Governance, Risk, and Controls (GRC) systems. These tests assessed the

consistency, granularity, timeliness, usability, and alignment of each method with organisational objectives. Collectively, these broadly tested for the following:

<u>Comprehensibility:</u> How easily professionals across varying expertise levels could apply a method.

Data Quality: The accuracy, richness, progress and granularity of data analysis generated.

Integration: The degree to which GRC risks, controls, and actions cross-linked.

<u>Timeliness:</u> The efficiency of completing evaluations under structured conditions.

Adaptability: The flexibility of each method to handle complexity and variation

Results from these structured tests informed the comparison of the four approaches, highlighting strengths and limitations. The findings resulted from reviewing patterns and outcomes from a SCEAS GRC 'sand-pit' implementation using a GRCOne cloud platform, to ensure alignment with broader insights and principles. This iterative testing framework allowed for the refinement of hypotheses and conclusions, ensuring reasoned and actionable findings.

Exploration of Key Questions:

<u>Effectiveness in Driving Consistency</u>: How do prompts, method statements, workflows, or hybrid methods ensure consistency in data collection and evaluation?

<u>Ease of Implementation:</u> Which approach is easiest to implement across diverse organisational contexts without requiring extensive training or resources?

<u>Comprehensibility to Professionals</u>: Which approach—prompts, method statements, workflows, or hybrid methods—is most easily understood and effectively used by professionals, ensuring clarity and alignment with their expertise?

<u>Adaptability to Complexity:</u> How well does each method handle varying levels of system complexity and maturity?

<u>Data Quality and Granularity</u>: Which method provides the most detailed and accurate analysis for actionable insights? Does a hybrid approach balance granularity with usability?:

<u>Reduction of Bias:</u> Which approach most effectively minimises cognitive biases and subjective decision-making?

<u>Timeliness and Scalability:</u> How do these methods compare in terms of timeliness and scalability, particularly in large, dynamic organisations?

<u>Integration and Cross-Linking</u>: Which method supports the evaluation of cross linked data within a GRC system?

<u>Usability for Stakeholders:</u> How do different stakeholders (e.g., executives, risk managers, auditors) perceive the value of prompts, method statements, workflows, or hybrids?

<u>Hybrid Effectiveness</u>: Do hybrid approaches (e.g., combining prompts with workflows) offer synergistic benefits, or do they introduce added complexity that diminishes overall effectiveness?

<u>Alignment with Strategic Objectives:</u> Which method aligns best with an organisation's long-term goals and facilitates continuous improvement?

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6. Results

Effectiveness in Driving Consistency

Prompts: Enable diverse input but may oversimplify complex scenarios.

Method Statements: Provide detailed guidance for the AI, improving consistency; needs greater testing and validation, can suffer a diminishing return as complexity grows.

Workflows: Analysis is more transparent but may lack flexibility.

Hybrid Methods: Combine structure and adaptability, often offering the best consistency.

Ease of Implementation

Prompts: Simple to deploy but risk oversimplification.

Method Statements: Require more effort to implement due to their detail.

Workflows: Moderate effort but may need customisation for different contexts.

Hybrid Methods: Require initial effort but are highly repeatable and enable tailored solutions.

Comprehensibility to Professionals

Prompts: Highly comprehensible due to their simplicity, but may not provide sufficient depth for experienced professionals working on complex activities.

Method Statements: Comprehensive and detailed, aligning well with the expectations of professionals, but potentially overwhelming for those new to the system or are less specialised. **Workflows**: Intuitive for automating operational tasks and process-oriented professionals, but

their utility depends on how clearly they are designed.

Hybrid Methods: Offer a balance, providing clarity and depth tailored to the professional's level of expertise, making them the most universally comprehensible option. Hybrid methods are particularly effective in presenting structured guidance to experienced professionals while remaining accessible to less experienced users.

Adaptability to Complexity

Prompts: Struggle with complex, nuanced scenarios.
Method Statements: Handle complexity well but can be resource-intensive.
Workflows: Adaptable if designed well but may need frequent updates.
Hybrid Methods: Best suited for adapting to complexity through balanced integration

Data Quality and Granularity

Prompts: Risk superficial or poor analysis and loss of focus unless carefully designed.
Method Statements: Deliver high-quality, detailed data for the effort.
Workflows: Depend on design; can enforce granularity if linked to specific steps.
Hybrid Methods: Offer balance, enabling both granularity and usability.

Reduction of Bias

Prompts: Can standardise inputs but might reinforce existing biases.
Method Statements: Reduce or obviate bias through detailed criteria.
Workflows: Impose structure, limiting subjective decisions.
Hybrid Methods: Combine strengths to reduce bias effectively.

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Timeliness and Scalability

Prompts: Fastest to implement but limited scalability for nuanced tasks.
Method Statements: Scalable but time-intensive.
Workflows: Scalable with automation, efficient for routine tasks.
Hybrid Methods: Balance timeliness and scalability when well-integrated.

Integration and GRC Data Cross-Linking

Prompts: Minimal support for data field cross-linking.
Method Statements: Strong integration potential if detailed.
Workflows: Facilitate cross-linking through predefined steps.
Hybrid Methods: Maximise integration with flexibility.

Usability for Stakeholders

Prompts: Easy for beginners but limited depth for advanced users.
Method Statements: Ideal for detailed analysis, less accessible for non-experts.
Workflows: Intuitive for repetitive tasks, limited flexibility.
Hybrid Methods: Tailorable for diverse stakeholders.

Hybrid Effectiveness

Hybrid approaches leverage the strengths of all methods, balancing detail, usability, and adaptability. However, they require careful design to avoid over complication.

Alignment with Strategic Objectives

Prompts: Align well with tactical goals but less with strategic objectives.
Method Statements: Strong alignment with long-term goals through detailed planning.
Workflows: Depend on the design and processes; alignment may require updates.
Hybrid Methods: Offer the best alignment potential by blending strategic depth and operational clarity.

7. Limitations and Accuracy

The findings of this work are grounded in both qualitative observations and the structured assessments within the SCEAS framework, supported by AI-driven analytics and comparative analyses. While these findings demonstrate strong validity for the tested scenarios, the overall accuracy is estimated at approximately 80%, reflecting the limitations of sample size, contextual variability, and the need for further validation across diverse organisational environments. Broadly, its more likely human error than AI error will confound an analysis. Ultimately, the research highlights that hybrid methods offer the greatest potential for general value. By blending the structure of method statements, the efficiency of workflows, and the clarity of prompts, hybrid approaches strike a balance between precision and usability. However, their effectiveness depends on thoughtful integration and customisation to meet the specific needs of the organisation. This research could further explore the dynamic interplay between these methods, incorporating advancements in AI to optimise their application in real-world management systems.

8. Conclusions

Evaluating the effectiveness of prompts, method statements, workflows, and hybrid methods in assessing management systems reveals that no single approach is universally superior. Each method offers distinct strengths, with their utility varying based on system complexity, organisational maturity, and specific evaluation objectives. The SCEAS research itself ultimately focussed on a 'Method Statement' of 'Method Statements' as the most accessible method for the research for technical reasons.

Prompts provide simplicity and speed, ensuring consistent inputs across basic AI platforms. Method statements excel in handling complexity, offering detailed guidance that drives high-quality and granular data collection. Workflows, when designed effectively, streamline repetitive processes and foster cross-linking, making them valuable for scalability. Hybrid methods combine the strengths of these approaches, providing flexibility, adaptability, and the ability to align with both operational needs and strategic objectives.

Ultimately, the research highlights that hybrid methods offer the greatest potential for specific tasks or objectives. By blending the structure of method statements, the efficiency of workflows, and the clarity of prompts, hybrid approaches strike a balance between precision and usability. However, their effectiveness depends on thoughtful integration and customisation to meet the specific needs of the organisation.

This study underscores the importance of context in selecting evaluation tools. Future research could further explore the dynamic interplay between these methods, incorporating advancements in AI to optimise their application in real-world management systems.

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