# UHASSELT KNOWLEDGE IN ACTION

### A Literature Review On Process Mining In Auditing

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#### Introduction

01

By providing a potent set of tools to analyse event logs and transaction data, process mining plays a crucial role in auditing. This increases the efficiency and accuracy of audit procedures by allowing auditors to find insights into processes, identify errors, and increase organisational transparency.

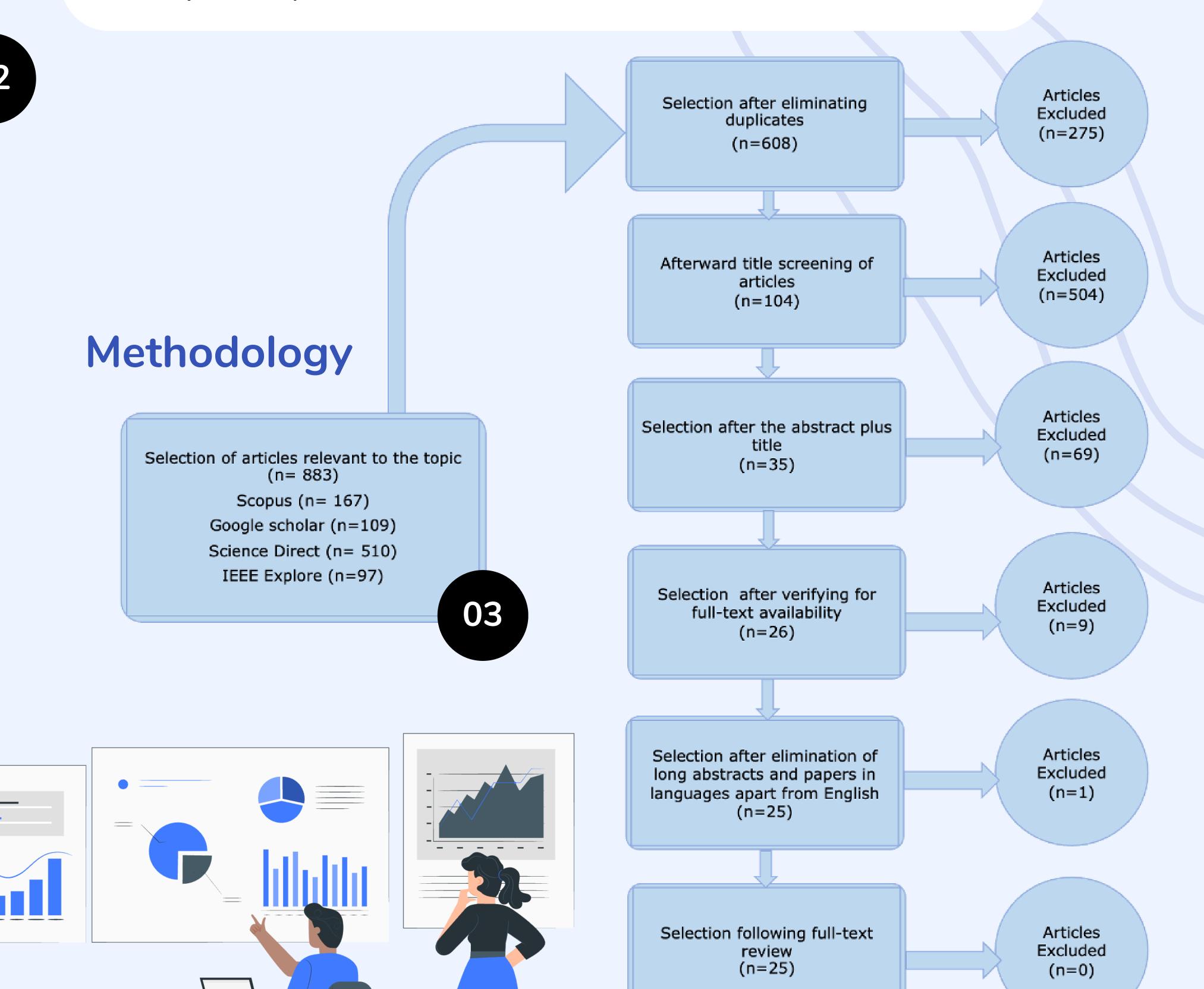
#### Research Questions

**RQ1:** Which types of process mining techniques are frequently reported in auditing research?

RQ2: Which benefits and added value in auditing results can be attributed to process mining use?

RQ3: which difficulties and obstacles have been found in implementing process mining in auditing?

RQ4: which future directions are provided in the literature for process mining's implementation to auditing?



## 04

#### Findings

# Types of process mining techniques

- Conformance Checking
- Process Enhancement
- Performance Analysis
- Social Network Analysis

# Types of process mining techniques

- Enhanced Process Insights
- Process Compliance and Evidence-Based Auditing
- Improved ProcessVisualisation
- Transparency and Risk Identification
- Integration with Advanced Analytics
- Efficiency of Internal Control Audits

# Types of process mining techniques

- Process Complexity and Unstructured Behaviour
- Privacy and Security
   Concerns
- Lack of Generalization and Outliers
- Complex Process
   Environments and Tool
   Limitations
- Interpretation Challenges and Process Maturity

# Types of process mining techniques

- Integration of Process
   Mining into Audit Process
   for Early Detection
- Improvement of Process
   Mining Tools
- Integration with Advanced Analytics and Security Techniques
- Real-time Process Mining and Advanced Analytics Integration

#### Conclusion

- The study explored the synergistic interaction between process mining and auditing, identifying methods, advantages, difficulties, and potential outcomes.
- Reviewing established process mining techniques revealed their potential to improve audit process transparency, risk assessment, and insights from event logs.
- The results highlighted interesting paths, emphasising collaboration for an innovative auditing landscape, including early detection, better tools, enhanced analytics, privacy considerations, and data-driven techniques.