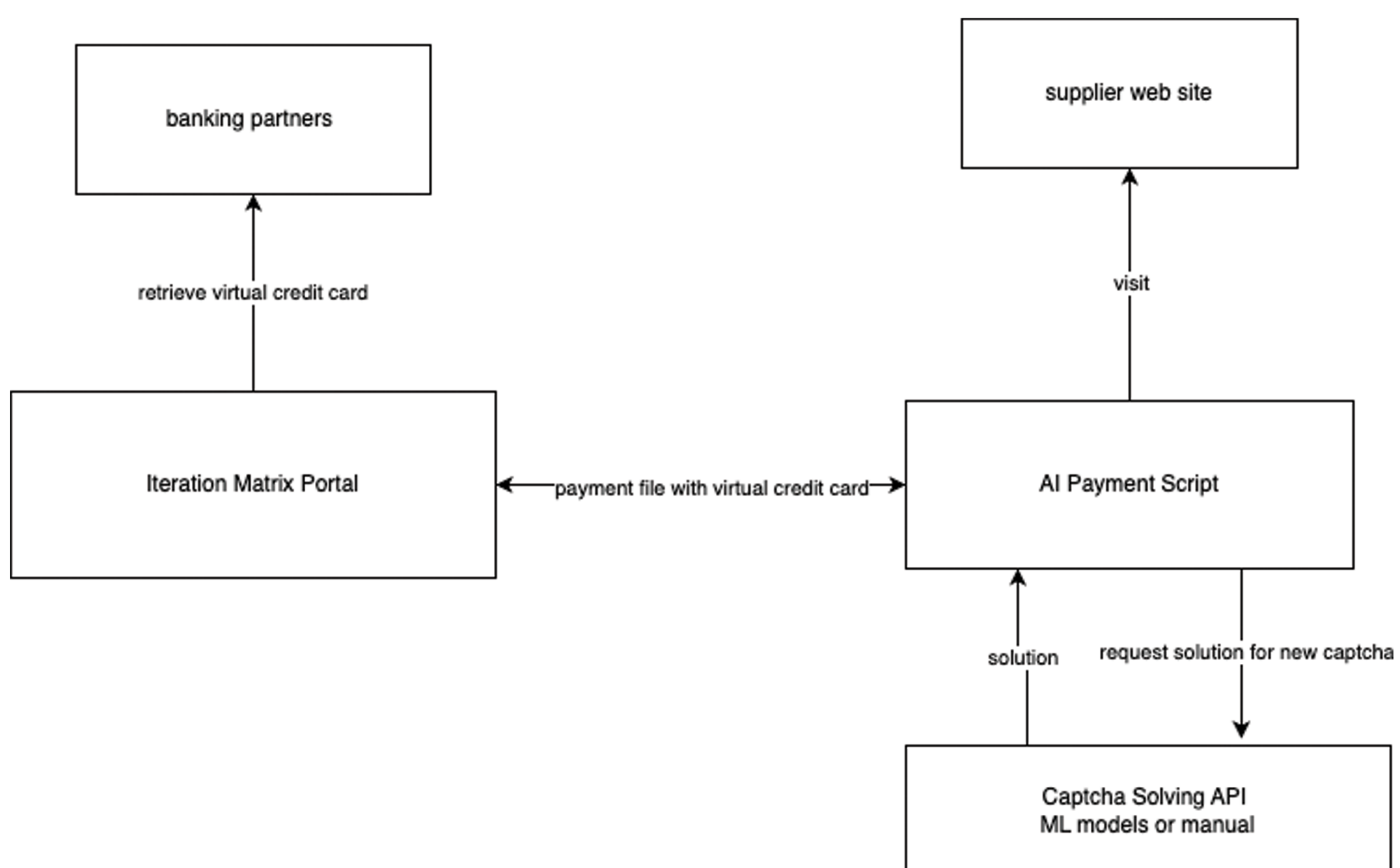# ARIA
## APPLIED RESEARCH IN ACTION

# AI-driven Web Payment Automation

**Efficiently Automating High-Volume, Time-Sensitive Payments with Google reCAPTCHA Overcoming Solutions.**

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## PROJECT SUMMARY

The Iteration Matrix project addresses the challenge of processing a high volume of time-sensitive payments efficiently. This initiative focuses on automating web payment processes while overcoming Google reCAPTCHA V2 tests.

To achieve this, the project is broken down into two key actions. First, it tackles the task of solving image captchas during the payment process. This is achieved through the use of object detection machine learning models such as YOLO and dynamic template matching. Second, the project aims to automate payments with a focus on error resilience from supplier websites, error on payment files etc.

Several frameworks, including Selenium, Selenium IDE and cursor recorder, are proposed and thoroughly analyzed in terms of their advantages and disadvantages. Careful consideration is given to the time constraints involved in payment processing. The results have been remarkable, with a 95.652% success rate in processing payments on a large US telecommunication company. The project has effectively streamlined payment processing, saving time and resources for the organization.

## ITERATION MATRIX