AI-Powered Business Intelligence System Proposal

Prepared for: Magnate Ventures Limited

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Date: 12th August 2025

1. Executive Summary

This proposal outlines an AI-powered system designed to optimize Magnate's advertising campaigns and streamline operational workflows. The solution integrates **Dynamic Creative Selection**, **AI-Driven Scheduling**, and **Automated OCR Processing** into a unified platform. The aim is to boost marketing ROI, improve operational efficiency, and enhance decision-making with minimal manual intervention.

2. System Overview

The proposed system consists of **three core modules**, each targeting a specific business challenge:

1. **Dynamic Creative Selector** – Optimizes ad creative selection to maximize engagement.
2. **Greedy Scheduler** – Efficiently schedules campaigns based on priority, availability, and performance.
3. **OCR Demo** – Automates extraction of key information from invoices and purchase orders.

These modules work independently but can be integrated into Magnate's existing campaign management and operational systems.

3. Detailed Module Descriptions

3.1 Dynamic Creative Selector

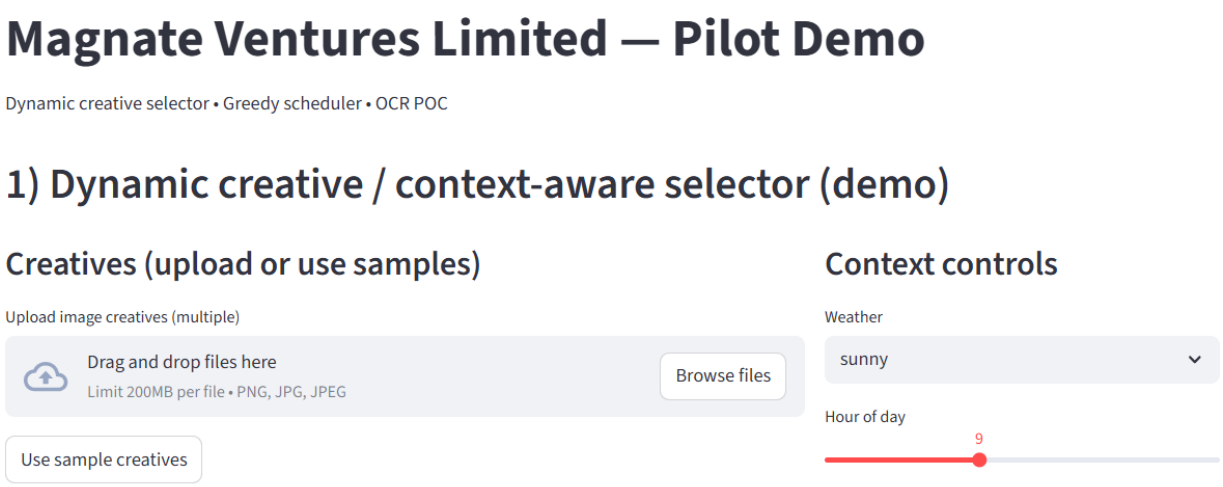
Purpose:
Automatically selects the highest-performing creative for a given campaign and audience context, using AI-driven prediction models.

How It Works:

- The user uploads or lists multiple creatives (images, videos, banners).
- The system evaluates past performance data, audience preferences, and contextual factors (e.g., time of day, platform type).
- The top-performing creative is selected in real time and pushed for deployment.

Key Benefits for Magnate:

- Improves campaign ROI by delivering the right message to the right audience.
- Reduces manual A/B testing time.
- Increases engagement rates with data-backed decisions.



3.2 Greedy Scheduler

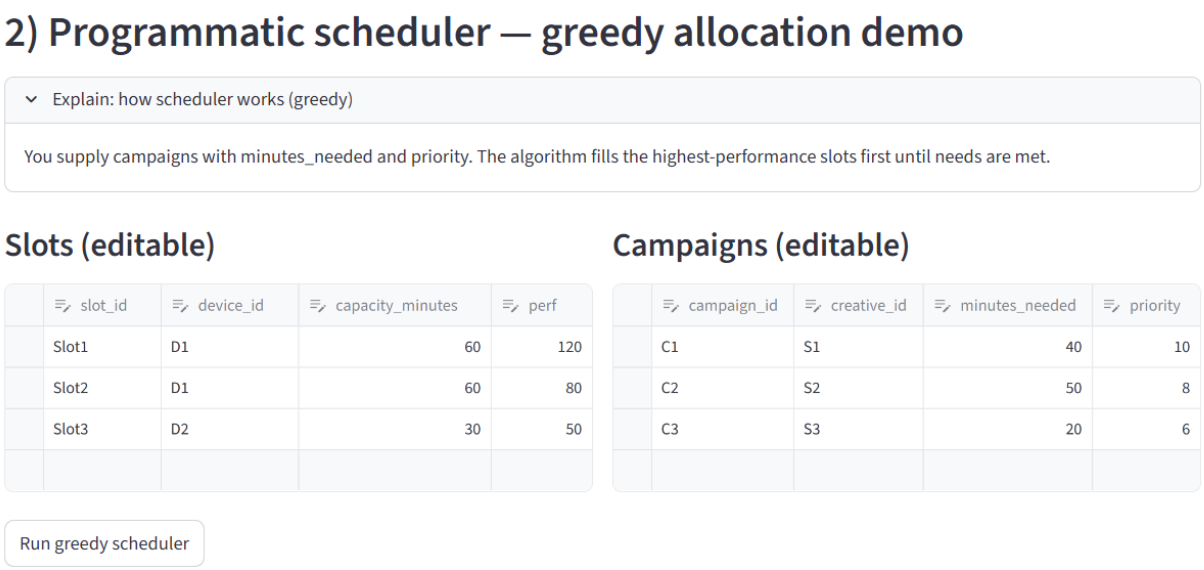
Purpose:
Optimally schedules campaigns into available time slots to ensure maximum efficiency and visibility.

How It Works:

- Users input campaigns and their requirements (priority, duration, constraints).
- The greedy scheduling algorithm allocates campaigns to slots that maximize value without overlaps.
- Results are displayed in a clear, visual timetable.

Key Benefits for Magnate:

- Maximizes ad inventory utilization.
- Prevents scheduling conflicts.
- Simplifies complex scheduling into a one-click operation.



3.3 OCR Demo

Purpose:
Automates the reading and processing of invoice and purchase order documents to reduce manual data entry and errors.

How It Works:

- Users upload scanned invoices or POs.
- The OCR engine extracts relevant fields (e.g., invoice number, vendor name, amount, date).
- Extracted data is displayed, verified, and exported for further use.

Key Benefits for Magnate:

- Cuts down manual data entry time.

- Reduces human error in financial operations.
- Accelerates document processing and record-keeping.

4. Implementation Plan

- **Phase 1:** Requirements gathering & system design.
- **Phase 2:** Development of Greedy Scheduler & OCR modules.
- **Phase 3:** Integration with Magnate's systems.
- **Phase 4:** Testing & training of staff.
- **Phase 5:** Deployment & performance monitoring.

6. Technical Details

- **Tech Stack:** Python, Streamlit, OCR libraries (Tesseract), scheduling algorithms.
- **Data Handling:** Secure upload and processing, encryption for sensitive invoice data.
- **Integration Points:** Ad management systems, CRM, financial software.

7. Expected Benefits

- 60%+ reduction in scheduling time.
- 70%+ reduction in document entry time.
- Improved ad slot utilization and campaign ROI.
- Reduced human error.

8. Conclusion

Adopting this solution will streamline operations, reduce manual inefficiencies, and enable faster, data-driven decision-making. By delivering personalized and timely client experiences, it will boost satisfaction, strengthen loyalty, and create a competitive edge. Ultimately, these improvements will drive consistent revenue growth and optimize resource utilization.