**Proposal for Drop Truck AI Agent for Order Management**

**Project Overview**

The Drop Truck AI Agent project aims to develop an intelligent system that automates logistics order management through incoming and outgoing calls. The current system suffers from manual dependencies, leading to delays and missed opportunities, which limits the company's ability to scale and improve operational efficiency. By leveraging advanced AI technologies, we intend to create a seamless communication channel that enhances the order lifecycle from initiation to fulfillment.

Centralized order tracking for improved data accuracy

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| **Benefit** | **Description** |
| Reduce manual effort | Decrease the time spent processing orders. |
| Improve conversion speed | Convert potential customers to orders 30% faster. |
| Accuracy of recording | Ensure 100% accuracy in order entries. |

**Problem Statement**

Drop Truck faces several challenges in order management, including reliance on manual processes that require personnel for call handling and order creation, resulting in delays. The lack of a centralized tracking system leads to data loss and inaccuracies, further exacerbating the issue. Additionally, the inability to quickly follow up with potential customers hampers revenue growth and operational scalability. Addressing these issues is crucial for enhancing overall productivity and maximizing business opportunities.

Delays in following up with potential customers

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| **Challenge** | **Impact** |
| Manual dependency | Loss of business opportunities and increased processing time. |
| Lack of centralized tracking | Data loss and inaccuracies in reporting. |
| Delays in follow-up | Slow conversion of potential customers to orders. |

**Vertical Technical Architecture**

The following VERTICAL diagram shows the proposed system architecture with layered design:



Note: The diagram is designed VERTICALLY to clearly show different system layers and top-to-bottom data flow.

The following vertical diagram illustrates the proposed system architecture with top-to-bottom data flow showing system layers.

System layers and external integrations

**Objectives & Goals**

The overarching objectives of the Drop Truck AI Agent project include automating both incoming and outgoing calls to enhance operational efficiency, ensuring 100% accuracy in order recording, and improving the speed of converting potential customers into actual orders by 30%. Key performance indicators (KPIs) will be established to measure the success of these objectives, ensuring a structured approach to project implementation and evaluation. This strategic focus will facilitate a transformative impact on the order management process.

Increase conversion speed by 30%

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| **KPI** | **Target** |
| Percentage of calls handled by AI | 80% |
| Speed of converting potential customers | 30% faster |
| Accuracy of order recording | 100% |

**Functional Requirements**

The core functional requirements for the Drop Truck AI Agent include the development of an incoming AI client capable of managing incoming calls and understanding delivery requirements, an outgoing AI client designed to contact potential customers and log orders, and an order creation engine that efficiently registers order data in the CRM system. Additionally, seamless integration with existing CRM systems is crucial to synchronize customer data and enhance overall operational workflows.

Order creation engine to record data in the CRM

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| **Feature** | **Description** | **Priority** |
| Incoming AI Client | Handle incoming calls and understand customer requirements | Essential |
| Outgoing AI Client | Contact potential customers and record orders | Essential |
| Order Creation Engine | Record data in the CRM system | Essential |
| CRM Integration | Synchronize customer data | Essential |

**Technical Requirements**

The technical requirements for the Drop Truck AI Agent encompass ensuring that the system can process audio inputs from customers and data fields from the CRM system. Customer data will include essential information such as name, phone number, and location, along with order details like pickup and delivery locations, types of goods, and timing. Access controls based on roles will be needed to maintain data security and integrity throughout the system.

Role-based access controls for security

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| **Requirement** | **Description** |
| Data Inputs | Audio inputs from customers and CRM data fields |
| Data Requirements | Customer data and order details |
| CRM Integration | Support for Zoho/Salesforce |

**System Workflow**

The system workflow for the Drop Truck AI Agent involves structured processes for both incoming and outgoing calls. For incoming calls, the customer will connect, prompting the AI client to capture the details and subsequently create an order, which is then confirmed via WhatsApp or SMS. In the case of outgoing calls, potential customers will be fetched from the CRM, called by the AI client, and their orders will be logged in the system with confirmation sent. This streamlined workflow ensures efficient order management and enhances customer interactions.

Outgoing calls: Customer fetched from CRM -> AI calls -> Order captured -> Logged in system

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| **Workflow** | **Steps** |
| Incoming Calls | Connect -> Capture details -> Create order -> Confirm |
| Outgoing Calls | Fetch customer -> Call -> Capture order -> Log |

**Timeline & Milestones**

The project timeline outlines critical milestones that will guide the development of the Drop Truck AI Agent. Each milestone marks an essential phase in the project, starting with designing the AI voice flow, followed by setting up systems for handling incoming calls and recording orders, and implementing the outgoing AI calls with CRM synchronization. Additional milestones will include integrating the control dashboard and WhatsApp functionalities, concluding with thorough testing and deployment. Each step is interdependent, ensuring a cohesive project trajectory.

Implement outgoing AI calls and CRM synchronization

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| **Milestone** | **Description** | **Duration** |
| M1 | Design AI voice flow | 3 days |
| M2 | Set up incoming calls + order recording | 5 days |
| M3 | Set up outgoing AI + CRM sync | 5 days |
| M4 | Integrate dashboard + WhatsApp | 4 days |
| M5 | Final testing and deployment | 3 days |

**Testing & QA**

Testing and quality assurance are critical components of the project, ensuring that the AI system meets performance standards and functions as intended. The accuracy of the AI speech recognition must exceed 85%, with manual tests conducted to validate correct and incorrect order flows, WhatsApp confirmations, and CRM synchronizations. Load testing will be performed to ensure the system can handle 100 concurrent voice sessions. A quality plan will include regular reviews at each project phase to maintain the required standards.

Load testing with 100 concurrent voice sessions

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| **Test** | **Objective** |
| Speech Accuracy | > 85% |
| Manual Tests | Validate order flows and confirmations |
| Load Testing | 100 concurrent voice sessions |

**Support & Maintenance**

A robust support and maintenance plan is vital for the ongoing success of the Drop Truck AI Agent. Initial support will be provided for three months post-launch, during which feedback will be collected to make necessary adjustments. Regular updates will include bug fixes, minor upgrades, and dashboard enhancements. The commitment to quality will involve continuous performance monitoring and user support to ensure that the system remains reliable and effective.

Continuous performance monitoring

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| **Support** | **Description** |
| Initial Support | 3 months free |
| Updates | Bug fixes and minor upgrades |

**Risk Management**

Risk management is an essential consideration for the successful implementation of the Drop Truck AI Agent. Key risks include potential inaccuracies in speech recognition models, discrepancies in CRM data, and API failures that could disrupt system functionality. To mitigate these risks, strategies such as a confidence threshold for directing calls to human agents when necessary and establishing an audit trail for CRM synchronizations will be employed. These proactive measures will help ensure a smooth operational flow and reliability.

API failures leading to system outages

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| **Risk** | **Mitigation Strategies** |
| Speech Model Errors | Use confidence threshold |
| Inaccurate CRM Data | Regular data audits |
| API Failures | Backup system in place |

**Conclusion**

This initiative represents a strategic step for Drop Truck towards enhancing operational efficiency and increasing competitive capacity in the market. By implementing an AI-driven system for automating order management, the company can achieve significant performance improvements while reducing operational costs. We believe this project will greatly contribute to meeting the company's goals and enhancing customer experience, paving the way for sustainable growth.