



# Logistic Warehousing Drones Project

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# Introduction



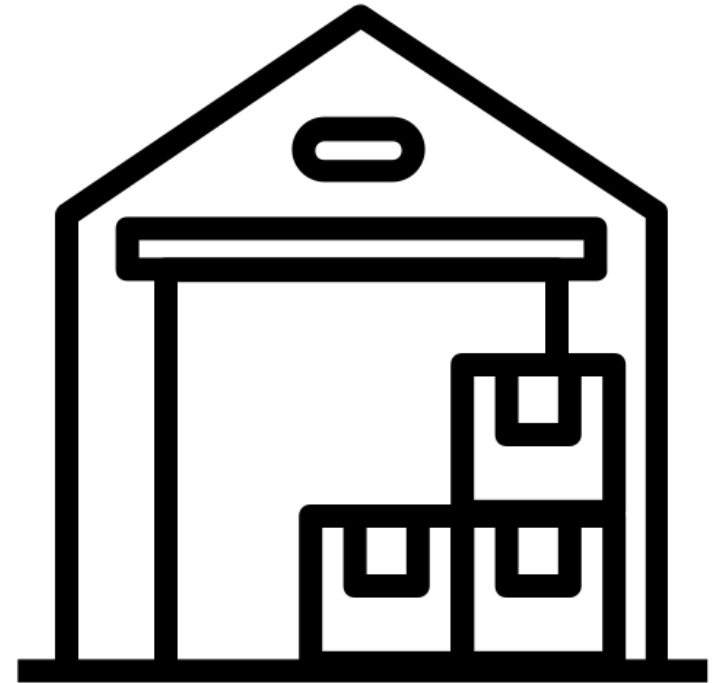
***MyCarrier Logistic  
Solutions***



Project: **Digital  
Warehouse**



Drones may transform  
logistics through  
automation



# Strategic Goals



Capacity and Efficiency Enhancement



Quick Implementation



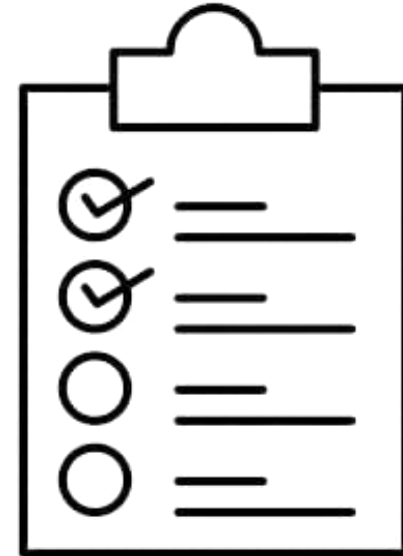
Top Operational Visibility



Competitive Tariffs and Customized Contracts



Less Challenges with Manual Inventory



# Project Management Methodology

SCRUM: An Agile framework

## Why?

- Complexity of the Project
- Accepts adjustments while exploring
- Open to continuous feedback
- Allows extensive testing



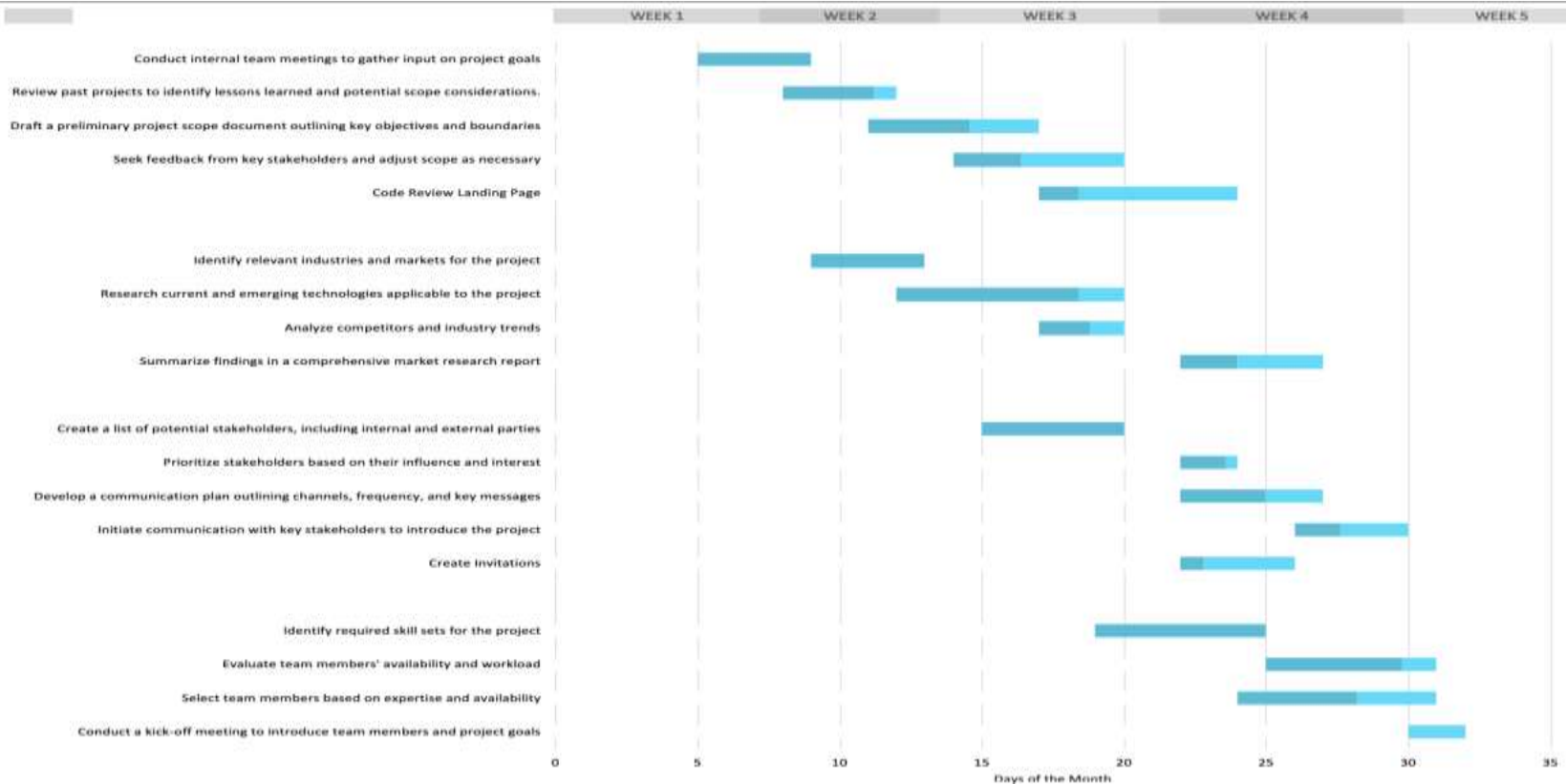
# Vision and Scope: Project Objectives

- MyCarrier Logistic Solutions: Business Context
- Logistic Warehousing Drones: Project Scope
- Technical and Scientific Objectives
- R&D: State of the Art Technological Landscape
- R&D: Uncertainty Resolution
- Methodology
- Expected Outcomes



# Vision and Scope: Gantt Chart

TASK NAME	START DATE	DAY OF MONTH*	END DATE	DURATION* (WORK DAYS)	DAYS COMPLETE*	DAYS REMAINING*	TEAM MEMBER	PERCENT COMPLETE
Define Project Objectives and Scope								
Conduct internal team meetings to gather input on project goals	1/5	5	1/8	4	4	0	Nathan	100%
Review past projects to identify lessons learned and potential scope considerations.	1/8	8	1/11	4	3,2	0,8	Meredith	80%
Draft a preliminary project scope document outlining key objectives and boundaries	1/11	11	1/16	6	3,6	2,4	Brandon	60%
Seek feedback from key stakeholders and adjust scope as necessary	1/14	14	1/19	6	2,4	3,6	Michael	40%
Code Review Landing Page	1/17	17	1/23	7	1,4	5,6	Rachel	20%





# Vision and Scope: Stakeholder Analysis



- **Internal Stakeholders**

- Sponsor
- Project Management Office
- Steering Committee
- Process Owner
- Team

	Sponsor	PMO	SC	PO	Team
Initiation	A	R	R	C	C
Planing	A	R	R	C	C
Execution	A	R	R	R	R
Control	A	R	R	R	R
Close	A	R	R	C	C

- **External Stakeholders**

- Suppliers
- Regulators
- Investors and Shareholders
- Toyota
- Commercial Management
- Key Users

	Regulators	I&S	Toyota	CM	KU
Initiation	C	C	I	C	I
Planing	C	C	C	C	C
Execution	C	C	C	C	C
Control	R	C	C	C	C
Close	C	C	C	C	C

# Vision and Scope: Organizational Structure

- Scrum Master

- Product Owner

- Scrum Team

- Software Engineers
- Business Analysts
- Mechanical Engineers
- Drone Technician
- Data Scientist
- Quality Assurance Specialist
- Supply Chain/Logistics Expert
- Regulatory Compliance Officer





# Risks and Mitigations

- 1) State of the Art Technology Complexity
- 2) Warehouse Diversity and Drone Adaptation
- 3) Extended Project Timeline
- 4) Challenges in Label Reading and Distinction
- 5) Indoor navigation and Autonomy in Drones
- 6) Technological Dependencies and Integration

	High			
Probability	Medium		3 and 4	1 and 5
	Low		6	2
		Low	Medium	High
			Impact	

# Communication Plan

- **Internal Stakeholders**

- Sponsor
- Project Management Office
- Steering Committee
- Process Owner
- Team

- **External Stakeholders**

- Suppliers
- Regulators
- Investors and Shareholders
- Toyota
- Commercial Management
- Key Users



# Jira as a Monitoring Tool

## Sprints

▼ Sprint 0: Project Initiation 1 jan – 8 jan (4 problemas)		0 0 0	Iniciar sprint	...
SCRUM-76	As a project stakeholder, I want to specify the project's goals, objectives, and vision so that we have a clear direction fro...	INITIATION	A FAZER ▼	-
SCRUM-77	As a team member, I want to establish roles and responsibilities so that everyone knows their tasks and contributions.	INITIATION	EM PROGRESSO ▼	-
SCRUM-129	As a project organizer, I want to determine the parties involved and hold the first meetings to kickstart collaboration and...	INITIATION	EM PROGRESSO ▼	-
SCRUM-130	As a developer, I want to set up the development environment and project infrastructure to ensure a smooth workflow.	INITIATION	EM PROGRESSO ▼	-
+ Criar problema				

## Timeline

	JAN '24	FEB '24	MAR '24	APR '24	
Sprints	Sprin... Sprint 1: Phase 1.1	Sprint 2: Phase 1.1	Sprint 3: Phase 1.2	Sprint 4: Phase 1.3	Sprint 5: Phase 2.1
SCRUM-119 Initiation					
SCRUM-120 Planning					
SCRUM-121 Drone Development					
SCRUM-122 Application Development					
SCRUM-123 Preparation					
SCRUM-124 Safety					
SCRUM-128 Close					

## Board

NÃO INICIADO 1	EM PROGRESSO 3	CONCLUÍDO 2
<div>As a project stakeholder, I want to specify the project's goals, objectives, and vision so that we have a clear direction from the outset.</div> <div>INITIATION</div> <div>SCRUM-76</div>	<div>As a team member, I want to establish roles and responsibilities so that everyone knows their tasks and contributions.</div> <div>INITIATION</div> <div>SCRUM-77</div> <div>As a project organizer, I want to determine the parties involved and hold the first meetings to kickstart collaboration and communication.</div> <div>INITIATION</div> <div>SCRUM-129</div> <div>As a developer, I want to set up the development environment and project infrastructure to ensure a smooth workflow.</div> <div>INITIATION</div> <div>SCRUM-130</div>	<div>As a developer, I want to set up the development environment and project infrastructure to ensure a smooth workflow.</div> <div>INITIATION</div> <div>SCRUM-78</div> <div>As a project organizer, I want to determine the parties involved and hold the first meetings to kickstart collaboration and communication.</div> <div>INITIATION</div> <div>SCRUM-79</div>

# Indicators and Metrics

## ➤ During Development

- Task Progress and Completion
- Effort Variance
- Defect Density
- Code Churn Rate
- Burn-down Rate

## ➤ After Development

- Defect Removal Efficiency
- Customer Satisfaction
- On-time Delivery
- Budget Variance
- Post-Implementation Defect Rate



# Conclusion

- **Project Viability and Success:** Our plan ensures robustness and a secure path to success.
- **Methodology as a Success Driver:** SCRUM is crucial for positive outcomes.
- **Critical Components:** Vision Scope, Risk Analysis, and Communication Plan.
- **Operational Efficiency with JIRA:** Streamlining operations and tracking progress