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Main Goal: To ideate an opportunity that's aligned with the company goals and challenges

Project: [REDACTED]

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🎯 Opportunity

The Vision



What are your [company/department/team/personal] goals?
(e.g., for the next 3-5 years).

Being present in
all Brazilian
municipalities

The Bottleneck

What is preventing you from achieving those goals?



Manual scanning of
boxes leads to high
workload (lack of
scalability) and errors

Missing information
creates bottlenecks
with high operational
costs and delays.

The Enabler

What piece of information would allow you to reach that goal?



Identify core
information of the
package: sender,
recipient.

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Main Goal: To define the predictive model we want to build

Project: [redacted]

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Prediction (1/2)

Given

The image shows two cards from a digital tool. The left card is titled 'Product' and features a red circular icon with a hand holding a product. Below it, under 'Examples', are three items: 'Customer', 'Refraction Service', and 'Contract'. To its right is another card titled 'Revenue Channel' with a red circular icon showing a hand holding a coin. Below it, under 'Examples', are three items: 'Contract', 'Relationship', and 'Subscription'. Both cards have a small 'Data Ignite' logo at the bottom.

Predict

Product information:
sender and recipient
ZIP code

Matching
package (bar
code as a proxy)



To fill this tool use:

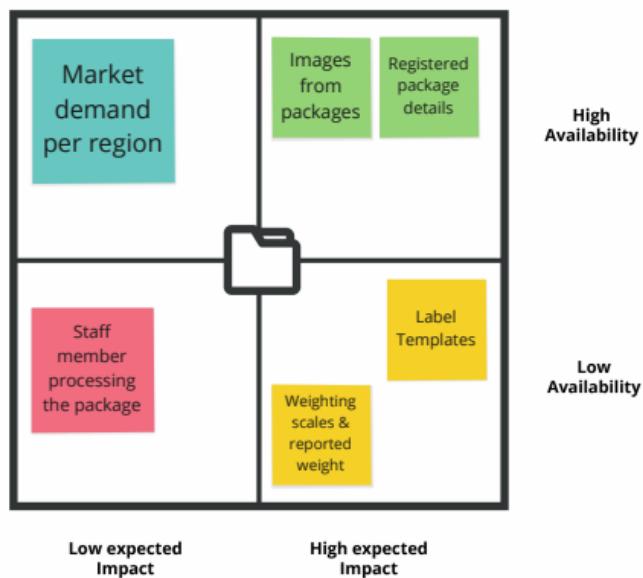
- The Entities from the Predictions' cards (think twice before skipping a card!)
- "The Enabler" from the opportunity tool.

Example: Given a customer, her contract and consumptions; predict if she will renew the subscription.

3 Main Goal: To identify the most relevant data sources to explore

Project: [redacted]

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Criteria for high data availability include: volume, entity and time coverage, automated/organic acquisition, and fine granularity.

Criteria for having a high expected impact include: a vast and diverse set of past experiences, deep internal knowledge, and a reported impact on other internal use cases or competitors.

4 Main Goal: To align your success criteria

Project: [redacted]

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Key Performance Indicators (1/2)

The Hero



Avg. package processing time

The Villain



Wrong delivery rate %

Accuracy
Delivery distance
Dice coefficient (balanced)



The Sidekick

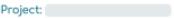


The Hero: The business KPI you expect to improve.

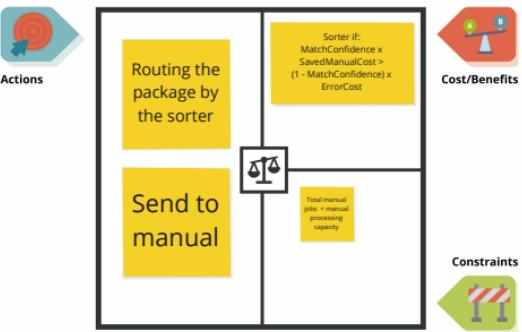
The Sidekick: The technical KPI that will assist your model.

The Villain: The business KPI that could be negatively affected by The Hero.

5 Main Goal: To move from predictions to decisions

Project:  Data Ignite powered by 

Decision Making (1/2)



The diagram illustrates the decision-making process across three main categories: Actions, Cost/Benefits, and Constraints. The central area represents the logic or conditions for each action.

Actions	Cost/Benefits	Constraints
Routing the package by the sorter	Sorter if: MatchConfidence x SavedManualCost > $(1 - \text{MatchConfidence}) \times$ ErrorCost	Total manual and automated processing capacity.
Send to manual		

Actions: Routing the package by the sorter, Send to manual.

Cost/Benefits: Sorter if: MatchConfidence x SavedManualCost > $(1 - \text{MatchConfidence}) \times$ ErrorCost.

Constraints: Total manual and automated processing capacity.

 What are the potential set of **decisions/actions** that be made?

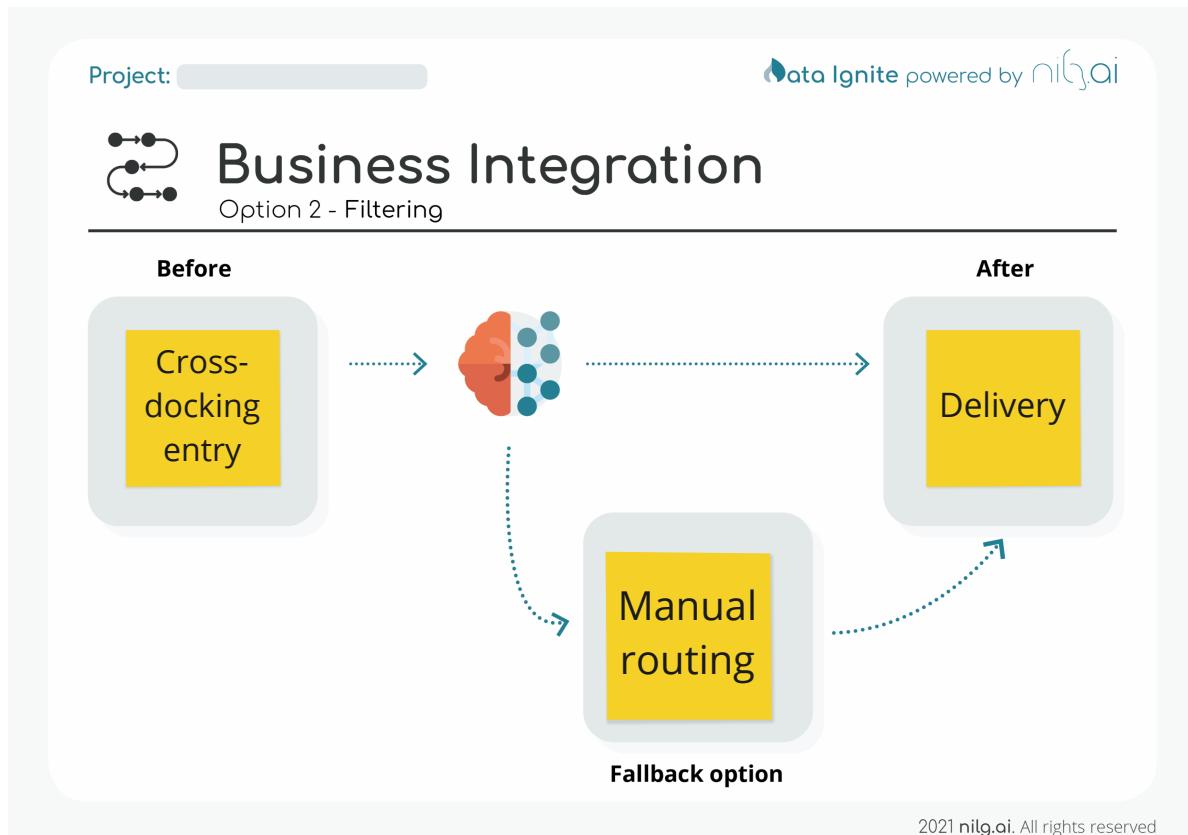
How do the predictions support the **selection** of the best action?

What **constraints** limit the set of eligible actions?

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Main Goal: To understand how the model will change the business processes



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Main Goal: Discover what will chain in the chain that needs to be re-balanced

Project: [redacted]

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/// Consequences



Cause



Effect



Action Plan

Since...

Automation
of most
packages
through AI

Then...

Idle time of
manual
human
scanners

Higher
throughput
of packages

We will rebalance by...

Increase
sales
Reduce
shifts
Reducing
scanning
team
Swap
functions

Increase
delivery
capacity

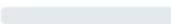


A business only works if it's perfectly balanced.

Your AI model will disturb that equilibrium. Meditate about the potential changes in the business and the processes that come before and after the AI model. Now that you know what changes, think about what has to be done to restore the balance.

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Main Goal: Making a bulletproof project

Project: 

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Risks

Risk	Prob (1...5)	Loss (1...5)	Mitigation Plan (Prevention & Recovery)			
Poor Performance			 			
Data isn't available in production	2	5		Some sorters do not have cameras		
Live data doesn't look like train data	3	5		Different sorters may have different types of images. Some sorters are more likely to be compromised. New sorters with different labels.	Mitigate manual capacity by threat sorters, train the best ones.	Train with data from all kind of sorters
Business changes	5	3		New label layouts not recognized by the model	Mitigate manual capacity by threat sorters, train the best ones.	
Work-flow bottlenecks						
Knowledge obsolescence	1	1		What happens if the model fails? Do we still have capacity for manual processing?	Mitigate manual capacity by threat sorters, train the best ones.	
Accountability	1	1		Legal consequences for non-compliance. How to mitigate risk for unprepared entities?	Already exposed to this problem.	Automate only cases with high confidence
Regulatory & Compliance	2	4		Data privacy (names & addresses)	Process all data locally and securely without sharing sensitive information	
Reputation, Fairness and ethics	1	2		Wrong decisions, potential problems with explainability, fairness, reliability, etc.	Post-decision checks by a human, log history, audit trail of validation	



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Main Goal: Is it worth it?

Project: [redacted]

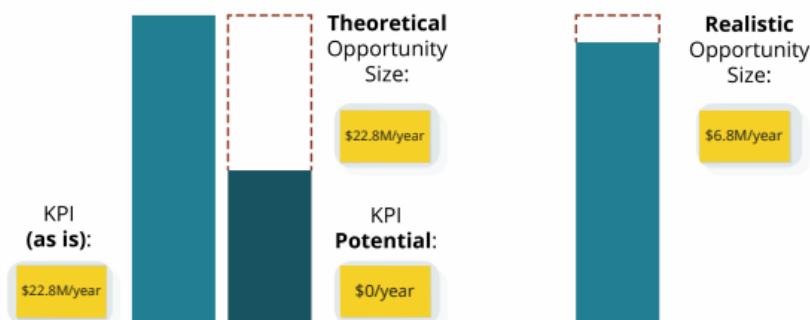
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Opportunity Size

Minimizing a KPI

Improvement (30 %) →



Justify your numbers:

Disclaimer: Sensitive information.
I'm just doing a guessing game

5M deliveries/day

\$12.5 per 1k packages

1.2k packages/hour/person

\$62.5k/day

\$15/hour employee cost

\$22.8M/year



To use this tool:

Define the minimum improvement percentage that would make the project viable.

 Prediction	 Decision Making	 Opportunity	 Business Integration	 Consequences
<p>Given a package photo, find the most likely package entry in DB</p>	<p>Automated routing when expected manual cost is higher than expected delivery error costs</p>	<p>Increase scalability by reducing manual workloads and uncertainty while scanning packages</p>	<p>Filtering. Automate sorter when high confidence. Otherwise, filter to manual.</p>	<p>Increased throughput will require more delivery capacity and less staff members on scanning section</p>
<p> Data</p> <p>Images from packages</p> <p>Registered package details</p>				<p> Risks</p> <p>Having new labels may invalidate the process</p> <p>LGPD = Brazilian GDPR</p>
<p> Key Performance Indicators</p> <p>Avg. package processing time</p> <p>Wrong delivery rate %</p>		<p> Opportunity Size</p> <p>Disclaimer: Sensitive information. I'm just doing a guessing game</p> <p>\$6.8M/year</p>		