SPARQ

Schreiber Label Comparator

July 24, 2024

OVERVIEW

Schreiber is a global food production and distribution company specializing in dairy products such as cheese, yogurt, and cream. With a presence in several countries, its food division works closely with business partners to offer safe, innovative, and high-quality solutions designed to meet the needs of end consumers.

PROJECT

Conduct proofs of concept for the subsequent development of a system that allows comparing dairy product labels to verify their compliance with official and internal guidelines and proceed with their authorization for printing.

REQUIREMENTS

The solution must be able to analyze a high volume of labels and will verify:

- Font sizes
- Proportion of elements relative to the total label size
- Nutritional content according to FDA standards

PROJECT DELIMITATIONS AND SCOPE

- To perform this automated comparison, AI-based technologies must be implemented.
- Only use AI tools authorized by the client.

DELIVERABLES

- Proof of concept demonstrating feasibility before development
- Results should be presented in a dashboard for user decision-making
- Technical proposal for implementation by development

PROCESO DE UX UI

First, I conducted user research to gain more insight into the current tag comparison processes.

These user interviews also serve as the basis for creating user profiles and process maps.

User Persona

User Persona - Business Analyst - Labelling comparator

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Susan's Vital Statistics

- Susan is 29 years old, lives in Green Bay Area USA.
- She is a mother of one 6-year-old son
- She is a Business Analyst Her job is essentially remote.
- She is a pet lover.

"I have a very busy life, I spend time on my housework, children and work."

Susan's Goals and Needs

Do my job in a more agile way and be able to dedicate more time to other activities related to my responsibilities at Schreiber.

We need a system that supports us to carry out our activity faster without being complex to use, but at the same time we can monitor what is happening inside it.

I need something easy to use that doesn't break my workflow, supportive but doesn't require a lot of time on my side.

Susan's Motivations and Personality

Her main motivation is her family, She has a great sense of belonging.
She likes to work on complex things.
She likes to have activities related to compliance rules and procedures.
She has great concentration capacity and attention to detail.

Susan's Frustations
(Just talking about her work activities)

We spend a lot of time measuring elements of the label. Although it may seem like a minor task, but if we multiply the time invested in each one, it adds up a large part of our time.

At the end of the day, this time could be dedicate to other activities.

Perhaps I would only change something in the workflow related to the status of the "recommendations" in the system, I would say that they should not be restrictive, in order to continue with the following stages of the process.

Susan's Everyday Activities

I wake up early in the morning to get my son ready for school. While my husband gets ready for work, I take my son to the school and then go back home to start working, I usually start reviewing my work schedule to dedicate time for priority activities.

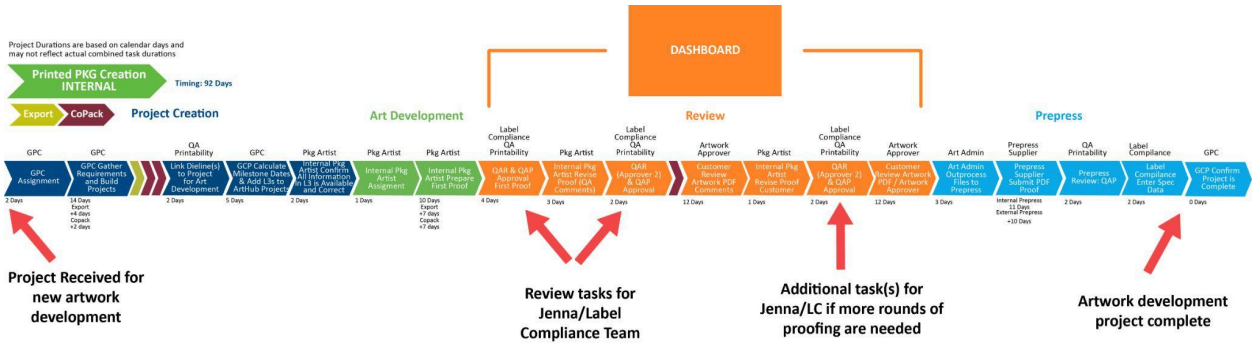
When my work time is over, I spend some of the time on housework. After that, it's time to dedicate to family activities, relax a little by watching movies or baseball games.

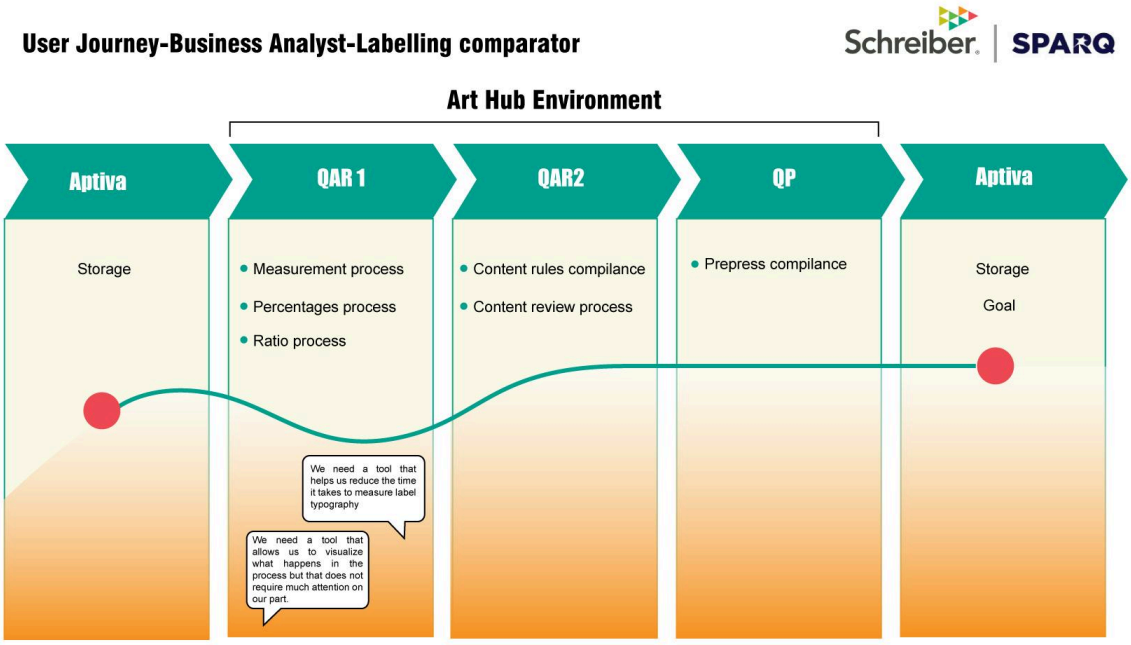
Susan's Device and Internet Usage

She uses her mobile device most of the time, except for work. Her internet use is moderate and she only uses it for online searches and shopping.

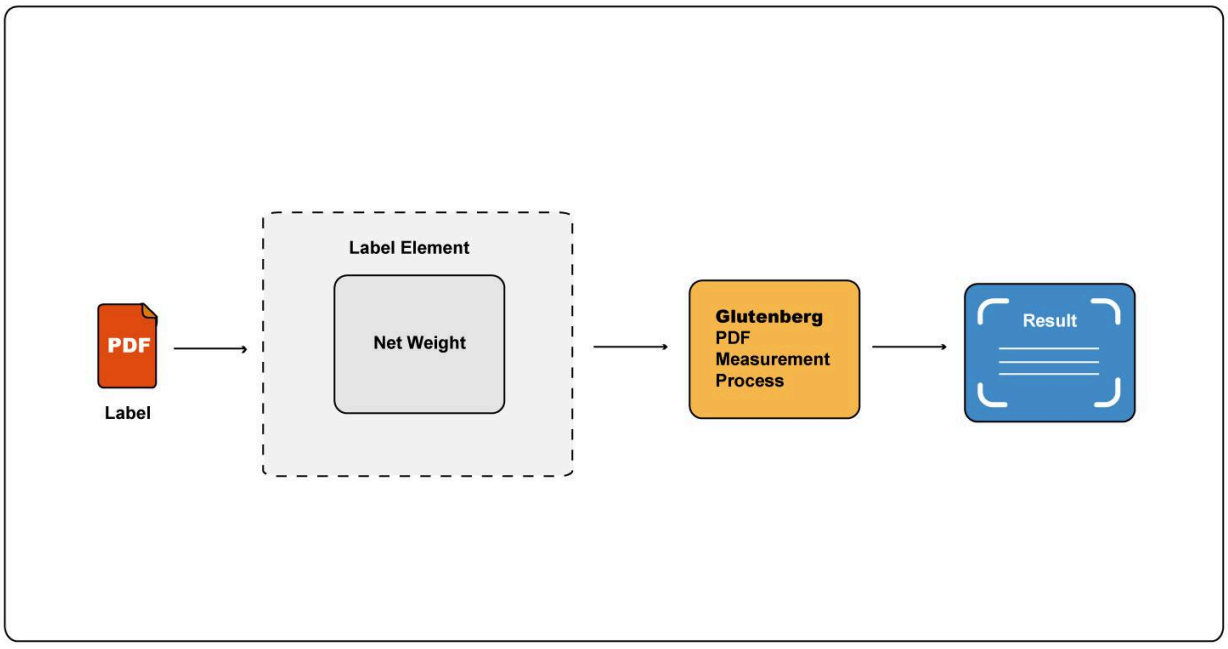
However, at work she spends most of her time connected to the network for her work activity.

Actual Process to compare labels

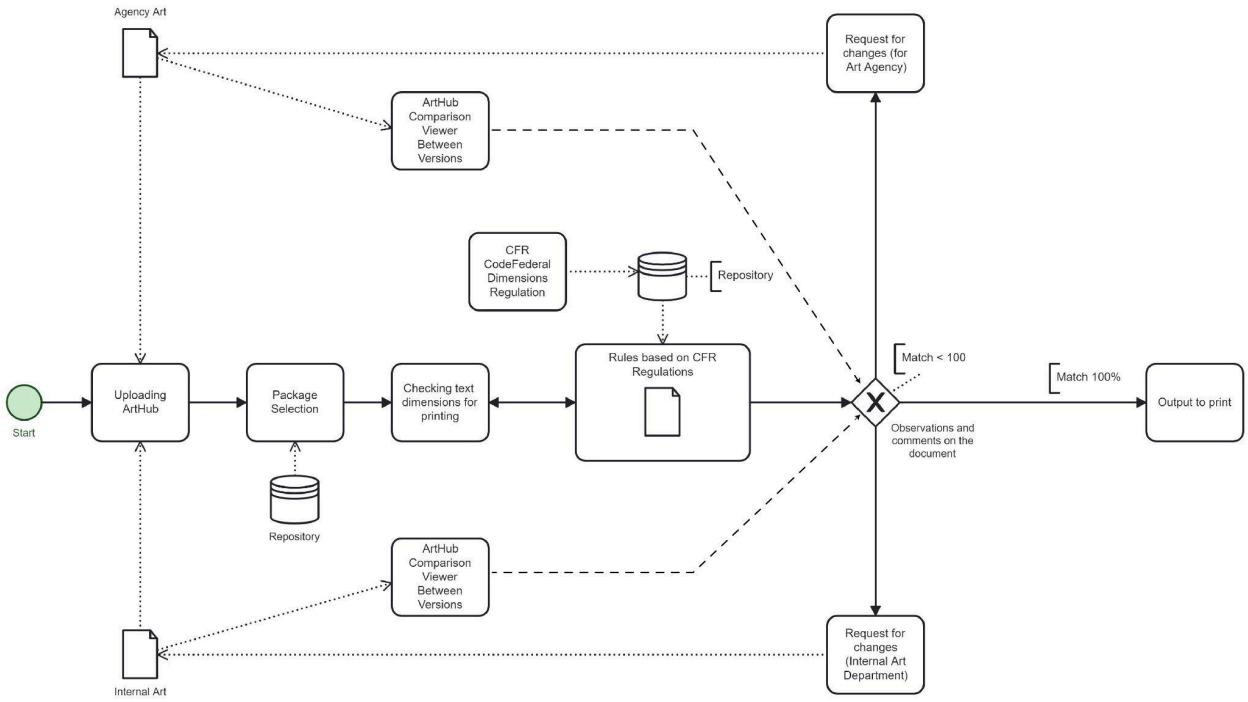




Workflow to be developed



Actual Workflow



Result in Technologies used

Platforms Analyst-Labelling comparator

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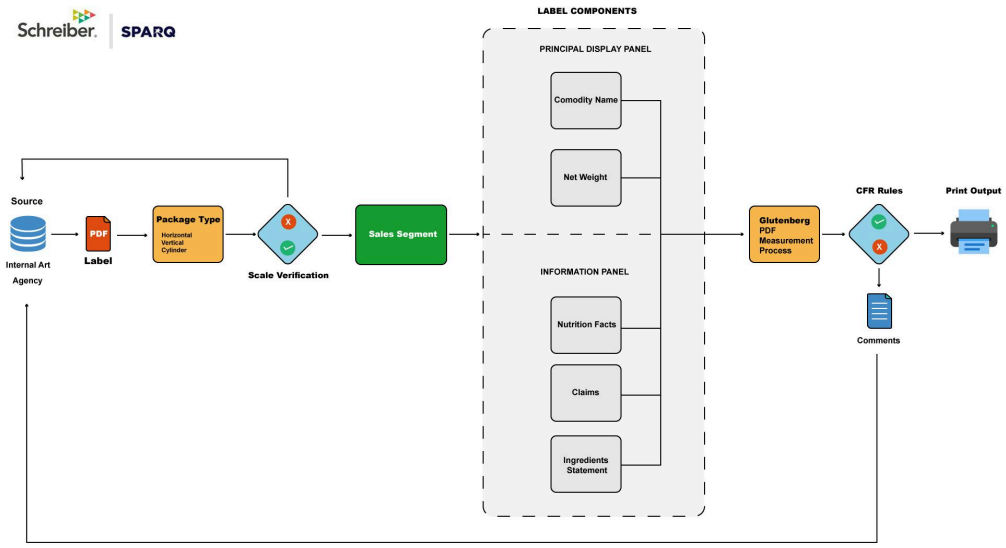
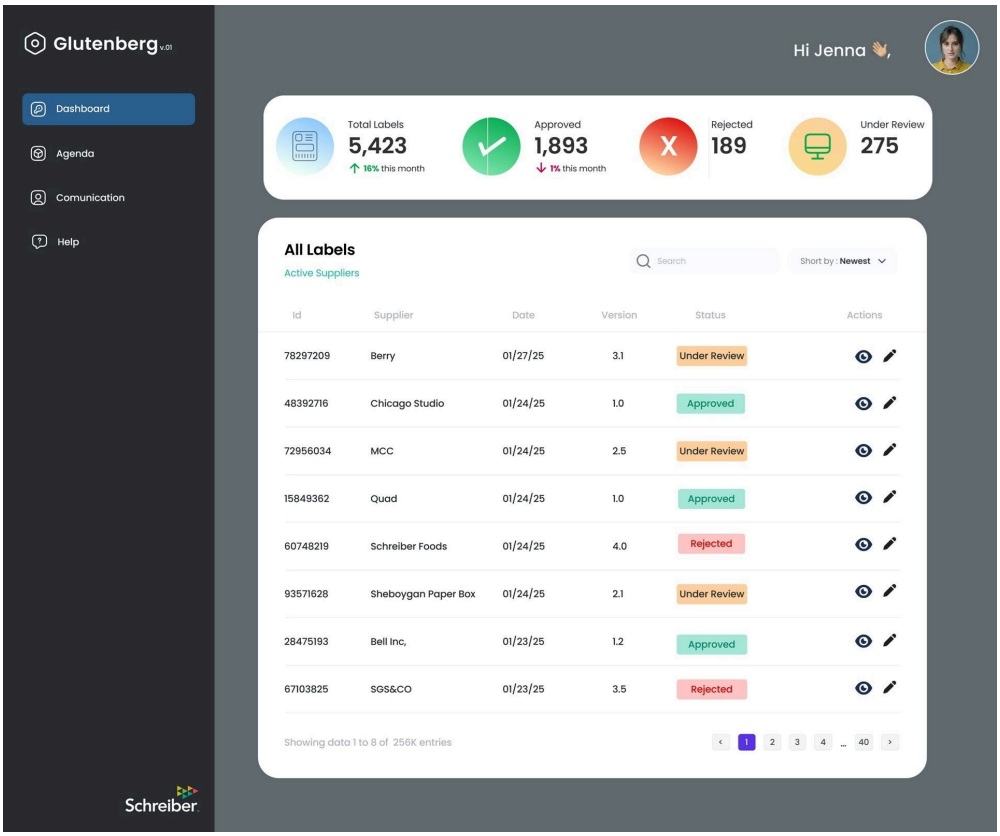
Effectiveness %

		Measurement	Ratio / Percents	Content
Python	**Open CV**	**99.90 %**	**99.90 %**	**In progress**
Google	**Cloud Vision**	**75.8 %**	**X Fail**	**75.8 %**
	Document Ai	**X Fail**	**X Fail**	**75.8 %**
	Vertex	**75.8 %**	**No tested**	**X Fail**
Amazon	**Rekognition**	**No tested**	**No tested**	**No tested**
Microsoft	**Azure Ai Vision**	**In progress**	**No tested**	**No tested**

Ideal Solution Diagram



Dashboard



Important: This document only presents excerpts from the design process; the final solution is protected by the company for privacy reasons and is not publicly accessible.