

Magic Tilt



Magic Tilt Increases Quality and Accountability with Tulip's No-Code Platform

Industry: Boat Trailer

Website: magictilt.com



About Magic Tilt

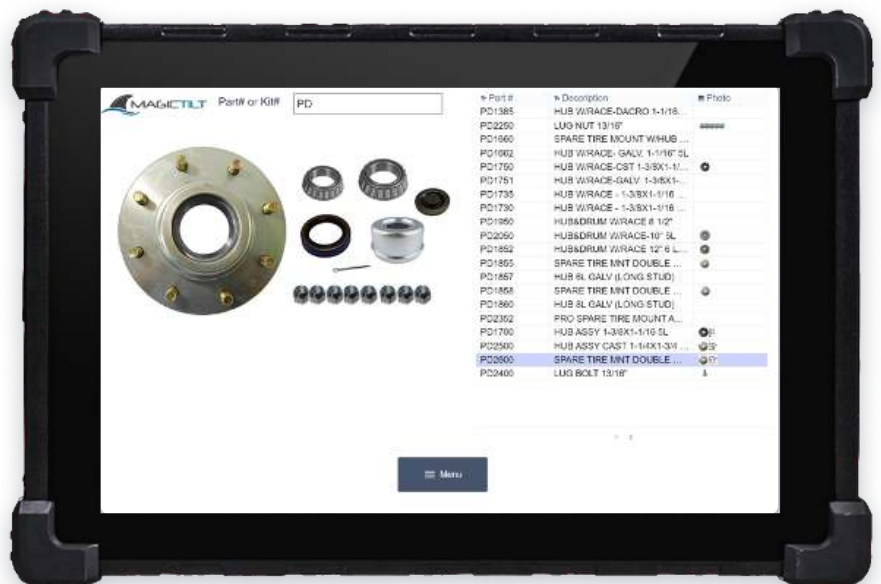
Magic Tilt is a manufacturer of aluminum and galvanized steel trailers designed for saltwater applications. They are based out of Clearwater, Florida, and have a strong business presence in the Southeast US. They are a family-owned and operated business dating back to the 1950s.

The Challenge

One of the first initiatives that came out as a part of Magic Tilt's 2019 Business plan was to improve overall processes, address recent quality issues, and have accessible data across the value stream. They didn't have a structured process in place and were struggling to find the right solution to start with.

Quality Issues

Magic Tilt faced an increase in quality-related complaints from their dealers, such as loose hardware, missing trailers and trailer parts. The operations team wasn't tracking the root cause of these issues and they could only tell their shop floor workers to be more mindful of their work. Magic Tilt needed a systematic way to hone in on quality errors, hold people accountable for their work, and reduce the extra rework that had to be done to remake trailers or trailer parts.



Magic Tilt

Lack of Searchable Data

Since Magic Tilt is a high-mix high-volume shop floor, they do not have standard products. Each trailer differs in size and configuration and the required parts can vary by order. As a result, when part orders or repairs came in, team members had difficulty searching through hundreds of paper documents to find the exact specs for the trailer. They would need to either create 2-3 parts until they got it exactly right, or ask their customers to send in the exact measurements themselves. Magic Tilt needed a better way to document how each of their trailers was being made and pull specific data at any given time.

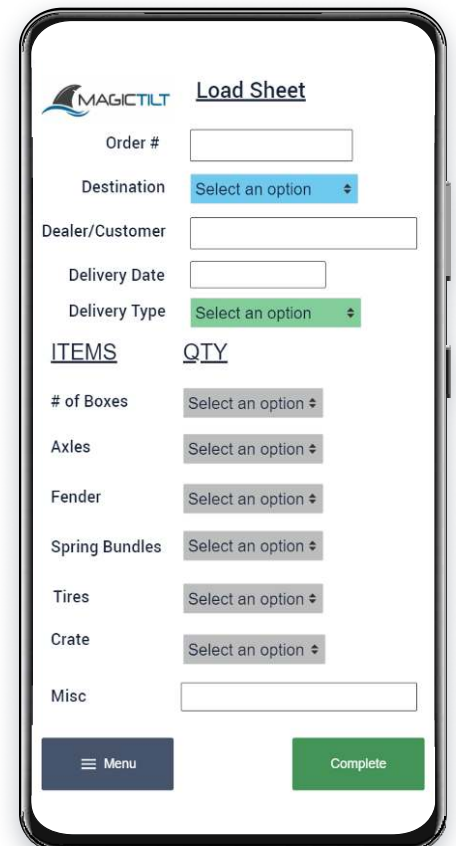
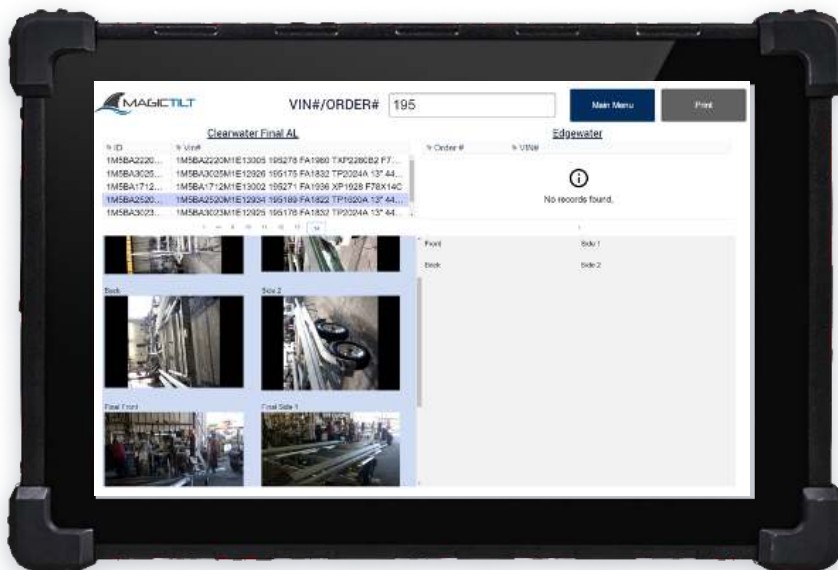
Siloed Data

There had always been a disconnect between outside sales, dealers, and the shop floors. The external stakeholders were isolated from the production process and the lack of visibility created miscommunications across the value chain.

The Solution

Seamless Quality Workflows

Since incorporating Tulip onto their shop floors, Magic Tilt can now check and verify the VIN on their paperwork by scanning QR codes. Then a quality control specialist can visually look at the load, make sure everything is in place and link the trailers to that paperwork. This allows the Magic Tilt team to exactly track which trailers are associated with which shipment load. They now have all of the information together in a way that helps them track product genealogy and increase accountability.



Magic Tilt

Accessible and Searchable Data

Using Tulip, the warranty department at Magic Tilt can pull trailer documentation, including associated images, the precise measurements of brackets, the color of the carpet, and the length of the boards. Instead of guessing or asking their customers to measure their trailers, Magic Tilt is now able to deliver replacement parts correctly the first time, which saves them on scrap and shipping costs.

Production Tracking

Since using Tulip, Magic Tilt has linked tire identification numbers to searchable warranty records that include pictures of finished trailers. Using these data points, they have created a searchable dashboard with Tulip for outside sales reps to easily track the progress of production to stay informed.

The Result

Since being able to track quality issues, Magic Tilt has uncovered that many reported issues did not originate from their production line. Rather, many issues appeared when the trailers were sitting in dealers' yards for months—parts rusted, hardware loosened up, tail lights broken. Now that they have photo documentation of how the trailers exactly left the shop floor, they can identify the root cause and hold both their workers and dealers accountable. Due to this photographic proof, Magic Tilt has seen a significant decrease in disputes over quality issues. They have also reduced the costs of remaking trailers for dealers that have previously claimed that the trailers were not delivered.

In addition, thanks to greater visibility on the shop floor, the mindset of work has changed. Workers report being more cautious and aware of performance because they can review their work progress with their supervisors and improve their performances based on measurable progress.

“

You can take somebody with a very little technological background, like myself, and have them build out apps that make sense and are usable. It's just as easy as operating my cell phone, my computer, or any basic technology.

Heather Wagner, Human Resources Manager

Benefits of No Code

Using the pre-built app templates from Tulip Library, Magic Tilt is able to explore various solutions, quickly testing out which apps work and what data would be crucial for them to collect. Magic Tilt now adjusts its processes over time through trial and error as users get more knowledgeable and more comfortable with the software. Even when the app is deployed onto the shop floor, they are able to make changes based on how that particular line is run or collects data. They can directly take feedback from their end-users on how the apps should be optimized for their operations.

Magic Tilt

Tulip as a Solution during COVID

Magic Tilt had to make several deviations in the last year and a half because of the global disruptions to the supply chain. They weren't able to get supplies in time or any supplies at all, which pushed them to make their own.

To figure out exactly what parts had to be made in-house, they would break down the components of a standard order and list the items they won't be able to source. These process changes were completely different from what they would normally put on the trailers, which meant that those detailed changes had to be well-documented.

Using Tulip, Magic Tilt was able to easily create data entries for part images and measurements, and which trailer those changes attribute to. Because they are now able to pull this information at any given time based on trailer number and production date, they will know exactly how to recreate these one-off unique replacement parts when warranties come in in the future.

The Future

Magic Tilt is currently piloting the integration of Tulip on the receiving end with a dealer in a remote location. By having the dealer take pictures of the loads as they are unloaded, Magic Tilt will document whether any damage occurred during transit with the shipping company.

Back on the shop floors, Magic Tilt is working to build out an inventory ordering system that will allow them to remove the guessing out of what needs to be ordered and when to order it. They are anticipating this build to be easy: create visual identifiers for when to order products and make sure that the right products are ordered with guided images.