

MANUFACTURING

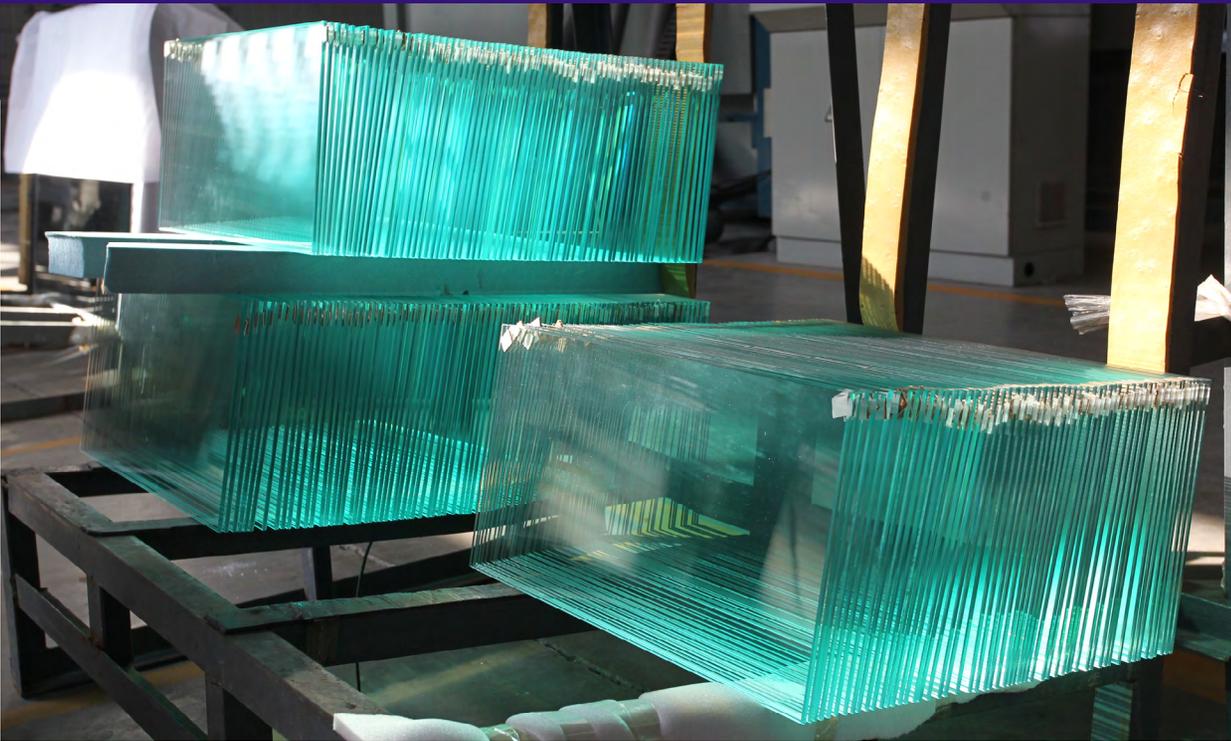
# AWS Gamechangers

How Mendix and glass manufacturer Vivix use generative AI to increase production efficiency



**Raymond Kok**  
Chief Executive Officer  
Mendix

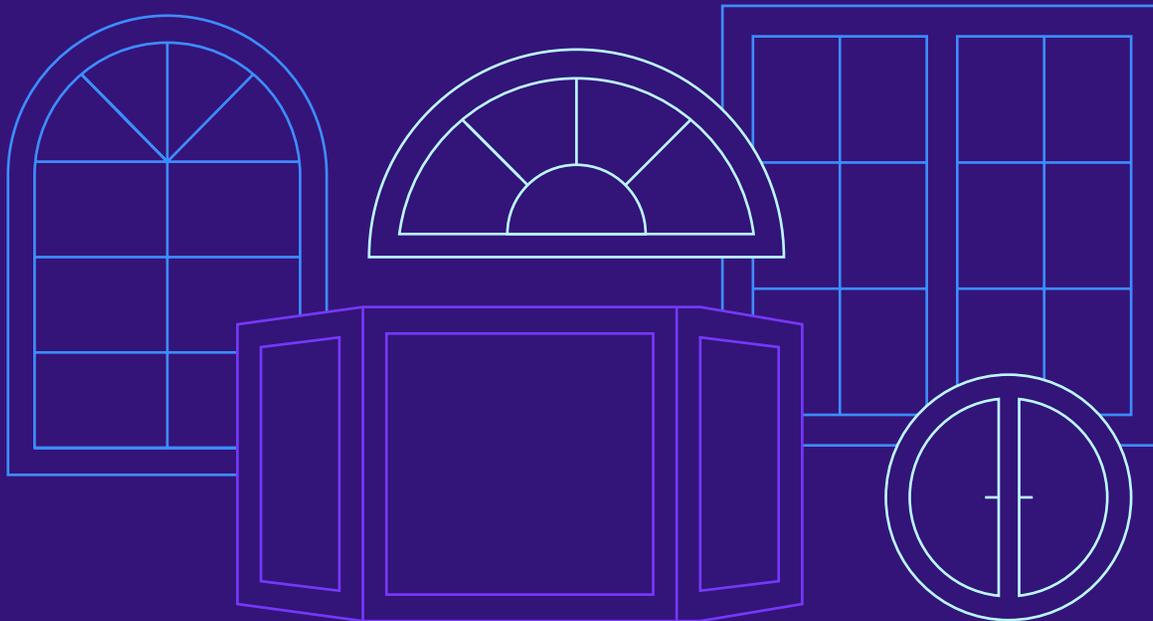
# Glass manufacturing is a complex process constrained by paper records, spreadsheets, and manual data entry.



Generative AI has transformed the manufacturing process at Vivix, a Brazilian manufacturer specializing in float glass, solar protection glass, safety laminated glass, and mirrors. The company fully digitized its production processes with more than 25 apps on the low-code Mendix platform, increasing efficiency and transparency while ensuring that only the highest quality of glass reaches the shelves.

## THE CUSTOMER

Vivix is one of the most modern and sustainable glass factories in the world, producing a variety of glass types for customers in the construction and furniture industries. With a team of 300 employees producing 900 tons of float glass per day, Vivix worked with Mendix to digitize its processes and use generative AI through AWS to reduce costs, increase productivity, and become a data-driven organization.



## OBJECTIVES

Speed up resolution of customer complaints and production issues by automating data collection and analysis.

Make the knowledge and expertise of key employees more accessible across the organization.

Embed generative AI throughout their production process for faster, more reliable insights.

“

**I'm a big believer that generative AI is going to support the human worker. It's not going to be a discussion around AI replacing people. It's about how do we how do we together make smarter decisions and be a heck of a lot more efficient when it comes to doing our work.**

”

**Raymond Kok**  
Chief Executive Officer  
Mendix



## THE SOLUTION

Mendix helped Vivix improve productivity with the Virtual Engineer, a generative AI chatbot powered by Amazon Bedrock and Anthropic's Claude that gathers data on products, production and processes, provides tailored suggestions, and enables teams to proactively address concerns.

The results have been extraordinary:

### Increased efficiency

The Virtual Engineer accelerated resolution of customer complaints from five days to less than one. Internal production issues that used to take four to five hours now take minutes. Now experts can focus on more big-picture issues.

### Better quality control

To analyze batches of glass more accurately for thickness, color, and quality, developers created a Digital Glass DNA application that allows workers to easily monitor quality, promptly address any defects, and continuously adapt the product.

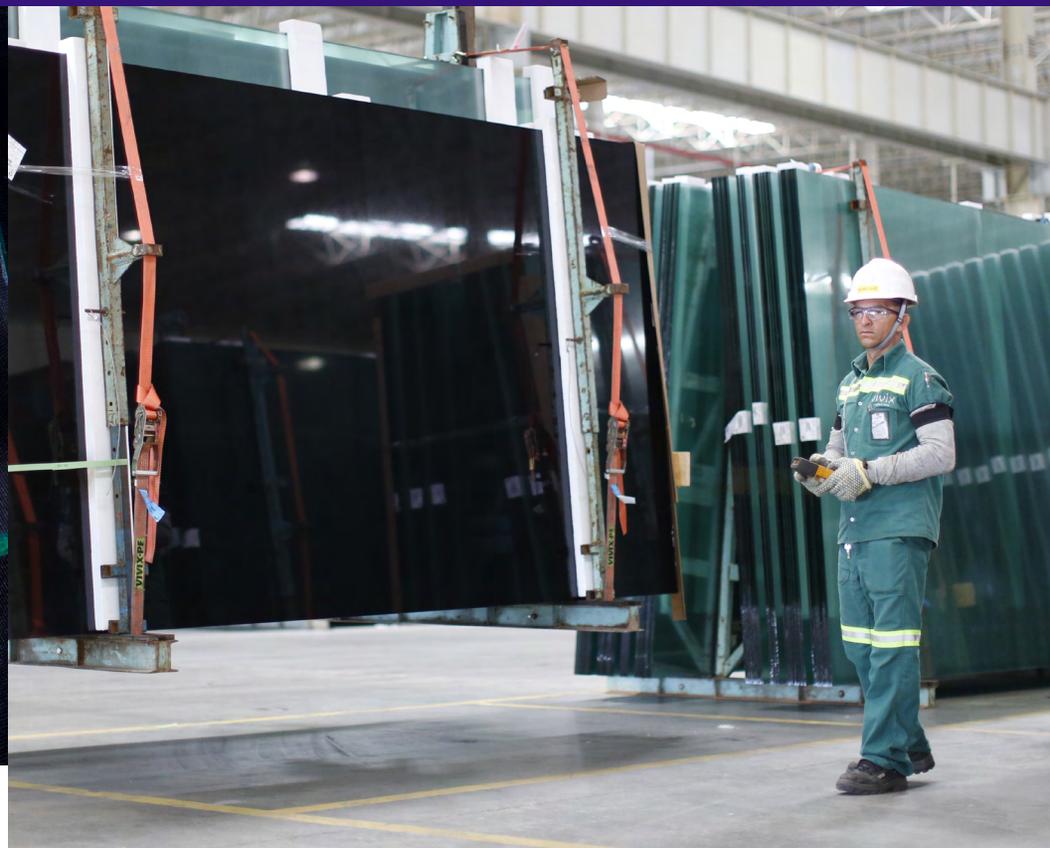
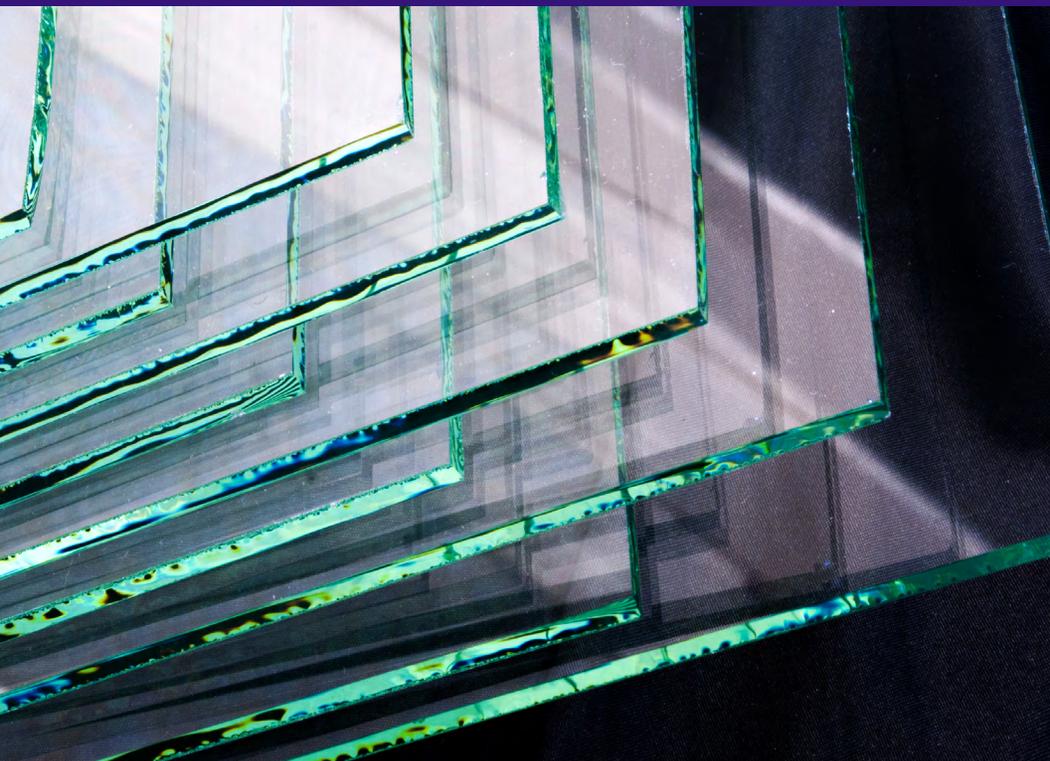


**Bedrock definitely  
made the speed possible.  
It's speed with quality.**



**Raymond Kok**  
Chief Executive Officer  
Mendix

The Virtual Engineer has transformed how Vivix handles customer complaints and production issues. When a complaint is received, the Virtual Engineer generates a detailed report to help the quality specialist develop an action plan. This streamlined process reduced complaint resolution times by 80 percent and turns insights into feedback for improving production resilience.



Vivix plans to expand the Virtual Engineer to additional Mendix applications, and ultimately embed across its entire production process. They are also adding features such as voice interaction to further improve user experience.



“  
**It's not about  
replacing humans.  
It's about efficiency.**  
”

**Raymond Kok**  
Chief Executive Officer  
Mendix

By innovating with cutting-edge generative AI from Mendix and AWS, Vivix has preserved institutional knowledge while rapidly upskilling its workforce, drastically reducing the time required to onboard new employees. By optimizing its operations using low-code Mendix apps, Vivix has positioned itself as a data-driven organization that can sustainably grow.



Mendix is a Siemens business with an industry-leading, all-in-one, low-code application development platform that helps organizations build multi-experience, enterprise-grade applications at scale. The platform is designed to accelerate the entire development lifecycle, from ideation to deployment and operation, while enabling collaboration at each step.

Developers of varying experience levels can create multi-experience applications without writing a single line of code to help address the demand for solutions across the organization.

[mendix.com/aws](https://mendix.com/aws)

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## AWS Gamechangers

AWS Gamechangers showcases partners and customers who are transforming business with generative AI on AWS, featuring world-changing innovators captured through the lens of legendary photographer George Lange.



Explore further at [bit.ly/aws-gamechangers](https://bit.ly/aws-gamechangers)