Enterprise-Grade Performance at Scale:

A Quality Management Platform Success Story

Wai Technologies is a software company based in India. Here, Head of Product Innovation & Technology Kirti Kulkarni shares a client success story powered by Syncfusion® components.

The background

In the competitive landscape of quality management software, our development team faced a challenge that would define the trajectory of our client's flagship product, a quality management platform (QMP). We were working on modernizing the QMP, a comprehensive platform serving organizations across healthcare, manufacturing, and professional services throughout the European region.

This QMP was a critical business application, the central nervous system for organizations managing ISO 9001:2015 compliance, process excellence, and risk mitigation. Our client's customers depended on it daily to maintain quality standards, ensure regulatory compliance, and drive continuous improvement across their operations.

However, the QMP was struggling under the weight of complexity. The End users had to navigate tediously through thousands of interconnected processes, documents, and risk assessments. The hierarchical relationships were intricate, the data volumes were massive, and the user experience was... well, it wasn't winning any awards.

The challenge: Building for scale and complexity

As we explored the requirements, the scope of the challenge became clear. This wasn't about making something "look pretty"—it was about solving fundamental problems in how users interact with complex organizational data.

The Core issues

End users weren''t dealing with simple lists, ; they were managing organizational process hierarchies that could nest seven, eight, or even ten levels deep.

For example, a manufacturing company’s quality process might start with production quality control, branch into assembly line processes, subdivide into station-specific procedures, and continue drilling down through department-specific workflows and individual task specifications. Other customers had domain-specific processes, but the complex hierarchies were very much part of the application.

Very We soon, we realized that traditional UI approaches simply couldn’t handle this elegantly. Users either got lost in endless scrolling, suffered through slow page loads, or both.

What we needed

In the competitive landscape of quality management software, our development team faced a challenge that would define the trajectory of our client's flagship product, a quality management platform (QMP). We were working on modernizing the QMP, a comprehensive platform serving organizations across healthcare, manufacturing, and professional services throughout the European region.

Some key requirements we needed to address on the UI were:

• Complex Data data Visualizationvisualization: The Users needed the ability to display multi-level organizational processes with truly unlimited nesting—not just three or four levels, but as deep as real-world organizational structures demanded.
• Performance at Scalescale: Super-fast rResponsiveness was required, especiallyven when handling 1,000+ processes with countless sub-processes and related documents.
• Intuitive Navigationnavigation: Users needed to be able to find what they needed in seconds, not minutes.
• Modern UI Standardsstandards: Our client was competing against well-funded SaaS platforms with polished interfaces.
• Rapid Developmentdevelopment: Market pressure meant we couldn't spend a year building custom components, and our client was looking at an early launch.

The dilemma

We explored the obvious options first. Open-source component libraries like Material-UI and Ant Design great for standard business apps, but they buckled under our hierarchical data requirements. The performance wasn't there, and we realized that the customization needed to match our requirements would have consumed months of development time.

We also considered custom- building everything, which would give us complete control, but at what cost? Our estimates showed it would add four to six months to the timeline and require ongoing maintenance resources we couldn't afford to allocate.

We needed a different path forward.

The solution: Finding the right partner

We had used Syncfusion® components for a couple of customers in the past, but not everyone opted for it. We explored the Syncfusion® React component suite, and what caught our attention wasn't just the individual components—it was the comprehensive ecosystem designed specifically for enterprise applications like ours.

Our foundation: The TreeView

The TreeView component became the cornerstone of our solution, and it delivered in ways that exceeded our expectations. This wasn't just a hierarchical list. it was a sophisticated navigation system that could handle complexity while maintaining the responsiveness the QMP's end users demanded.

With the TreeView component, we implemented color-coded categories that immediately and concisely communicated process types. Leadership processes appeared in distinctive highlighting, value creation processes in another color scheme, and support processes in their own visual language. Users could instantly understand what they were looking at.

The load-on-demand functionality was transformative. Instead of crushing the browser with thousands of nodes on initial load, the TreeView component intelligently loaded only what users needed, precisely when they needed it. If users Clicked to expand a parent node, its children appeared instantly. The performance improvement was dramatic.

Custom node templates allowed us to pack critical information directly into the tree structure—process codes, status badges, timestamps, user assignments—all without cluttering the UI. Every node told a story at a glance.

Building the complete experience

We started out with the TreeView, which was just the beginning. Later, we leveraged the full Syncfusion®'s full component suite to create a cohesive, powerful platform:

- DataGrid: Transformed dense process details and document management into scannable, sortable, filterable tables that made data analysis effortless.
- Chart Componentscomponents: Brought process status and performance metrics to life with visual dashboards that executives wanted to look atsee.
- Dialogs: Created smooth, intuitive workflows for data entry and user interactions.
- TimePicker: Enabled precise time selection for audit scheduling and deadline management.
- Kanban Board: Gave teams visual task management that made workflow states immediately obvious.
- Gantt Chart: Provided a crystal-clear visualization of audit timelines, task dependencies, and project schedules.
- Calendar: Made audit planning and schedule management feel natural and intuitive.

The integration story

Syncfusion® offered comprehensive documentation, which became our best reference. Our developers, working with the ABP.IO backend framework, found integration patterns that...simply worked. The React-native architecture meant no awkward adapters or compatibility layers—just clean, maintainable code.

The component extensibility was the final piece of the puzzle. We weren't locked into out-of-the-box functionality. We extended components to match our exact requirements, creating custom node templates and specialized views that felt native to the QMP's unique workflows.

The results: Transformation in action

Six months after launch, we gathered metrics and user feedback. The transformation wasn't incremental—it was fundamental.

Performance Revolutionrevolution

- The iInitial load times dropped by up to 75% through intelligent load-on-demand implementation. What once took 8 to 10 seconds now happens in under 2 seconds.
- Navigation efficiency improved significantly. Tasks that previously required multiple clicks, and page loads, now flow naturally through the TreeView interface. Users feedback showed that they finally felt in control of the data.
- The system handled 1,000+ processes without breaking functionality. As more tenants added more processes, the QMP scaled effortlessly. Performance remained consistent whether managing 100 processes or operating at peak load.

Development wins

Our development velocity increased by 60% compared to custom component development. The pre-built, enterprise-ready components allowed us more time on business logic, not reinventing UI wheels.

The project timeline compression was significant. We delivered ahead of schedule, which translated directly to a faster launch for the tenants and resulting revenue generation for our client.

UI development costs decreased while functionality increased. The Syncfusion®'s licensing model proved far more economical than the FTE costs of building and maintaining custom components.

Maintenance overhead was also minimal. The Syncfusion®'s workflow assured that updates, bug fixes, and improvements arrived regularly, and our developers referenced the latest documentation whenever questions arose.

Business impact

The competitive advantage that our customer received was immediate and visible. Instead of sluggish interfaces, now they could showcase a smooth, professional- grade demo. Customer felt more confident about their conversion rates. Users were finding what they needed without help.

The client's perspective

Post-production feedback from our client revealed the human impact behind the metrics. Quality managers reported completing daily tasks faster. Even the audit teams coordinated more effectively with visual timeline management.

The QMP's professional, modernized appearance signaled ongoing innovation and investment—exactly the message our client wanted to send.

The takeaway: Strategic technology choices matter

Looking back, the our decision to use Syncfusion® decision components was a turning point. It wasn't just about UI components—it was about our recognition that some problems have already been solved by specialists who do it better than we could in-house.

What we learned

The right component library doesn't limit your vision—. It accelerates it. Syncfusion®'s components didn't constrain our design; provided a foundation we could build on, customize, and extend.

Why It it worked

Syncfusion® obviously understands enterprise requirements. Their components weren't toys dressed up for demos; —they were battle-tested solutions designed for real-world complexity.

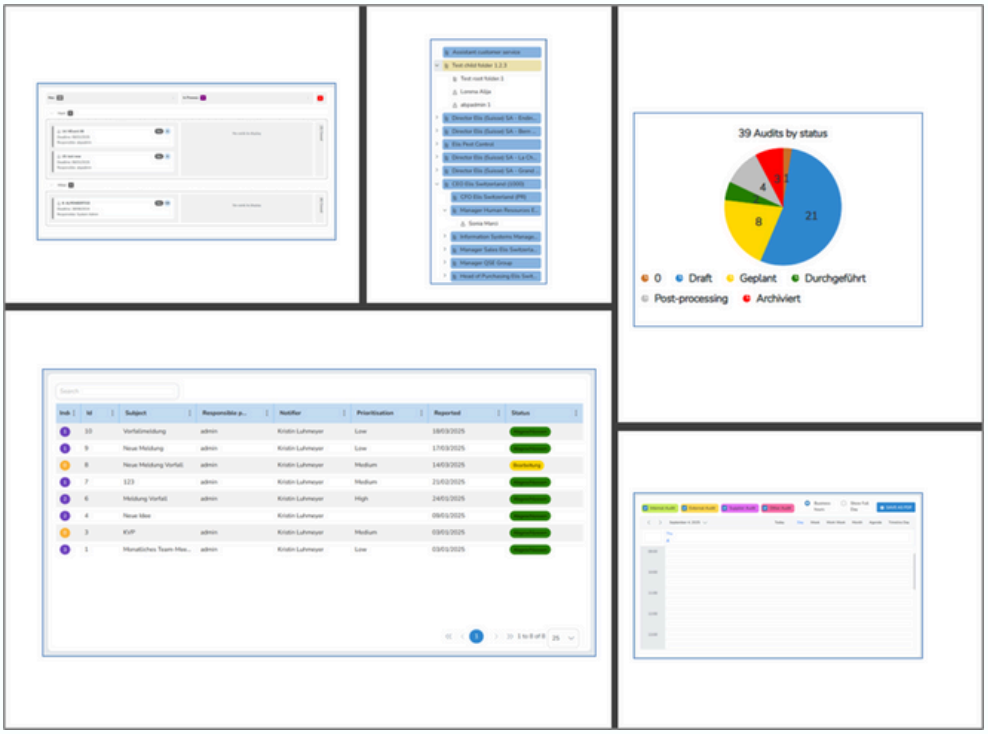
The documentation and support ecosystem saved us countless hours, even when edge cases appeared. Patterns were already documented, and the ROI was clear from the beginning.

The question isn't whether to use sophisticated component libraries. The question is: can you afford not to?

About Syncfusion® Essential Studio® - Enterprise Edition

This project was built using Syncfusion®'s Essential Studio®, providing access to the complete component suite, priority support, and licensing for team development.

Key metrics summary



Performance improvements include:

- Up to 75% reduction in initial load time.
- Improved user navigation efficiency.
- Seamless handling of 1,000+ processes.

Development benefits include:

- 60% faster development compared to custom components.
- Reduced project timeline.
- Decreased UI development costs.
- Minimal maintenance overhead.

Business impacts include:

- Stronger client retention.
- Improved user productivity.
- Enhanced platform usability.