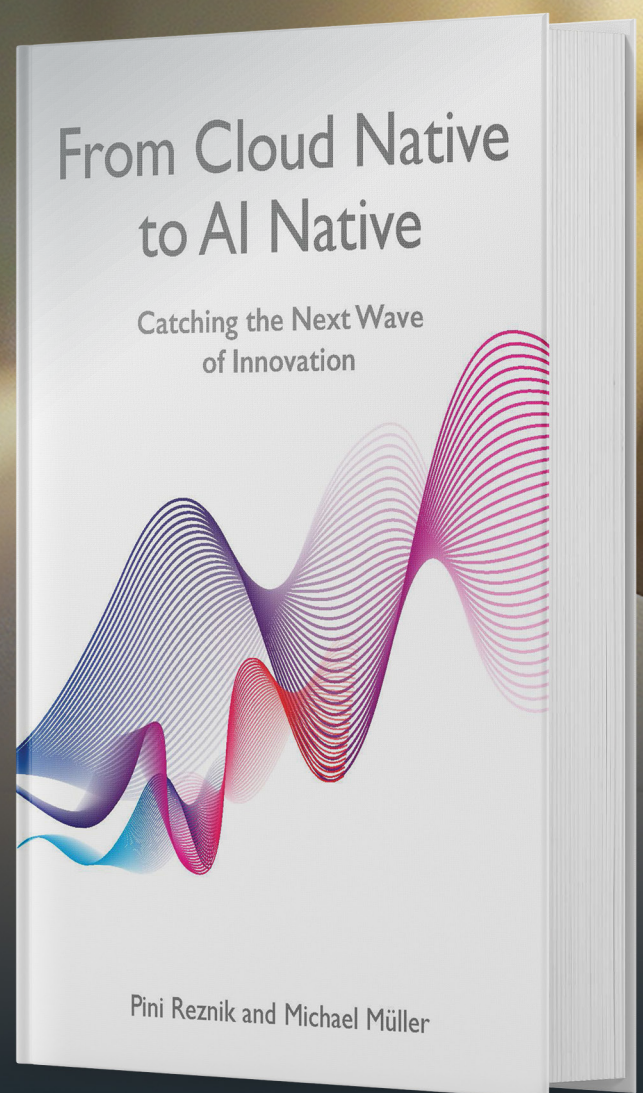


Ortec Finance's Pattern-Driven Transformation

**DON'T JUST ADAPT.
TRANSFORM.**



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This case study was brought to life in the new national #1 bestseller, "From Cloud Native to AI Native: Catching the Next Wave of Innovation" by authors Pini Reznik and Michael Müller.

We are honored to feature the incredible story of Ortec Finance in this book and extend our sincerest thanks for allowing us to share their innovation story.

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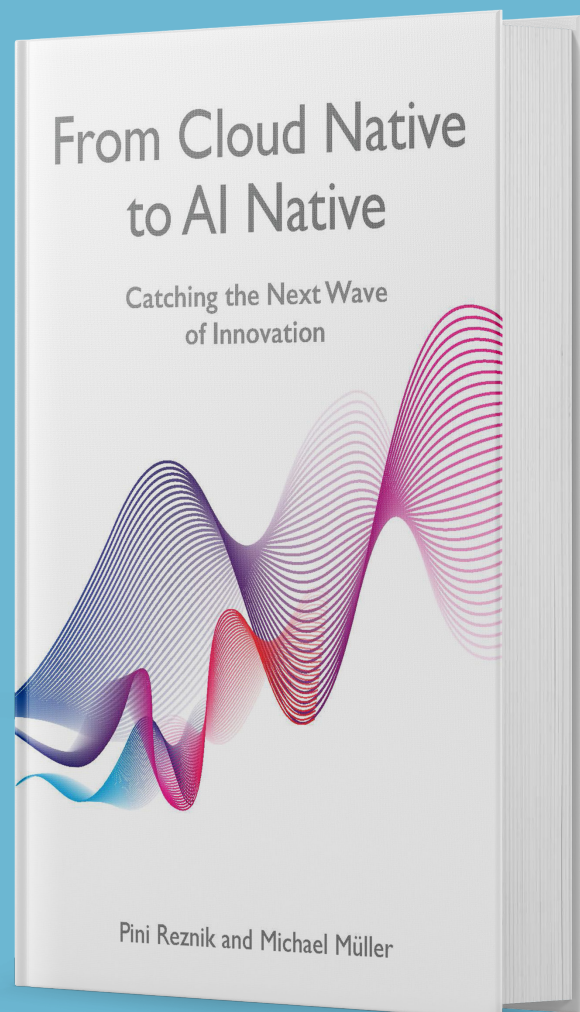


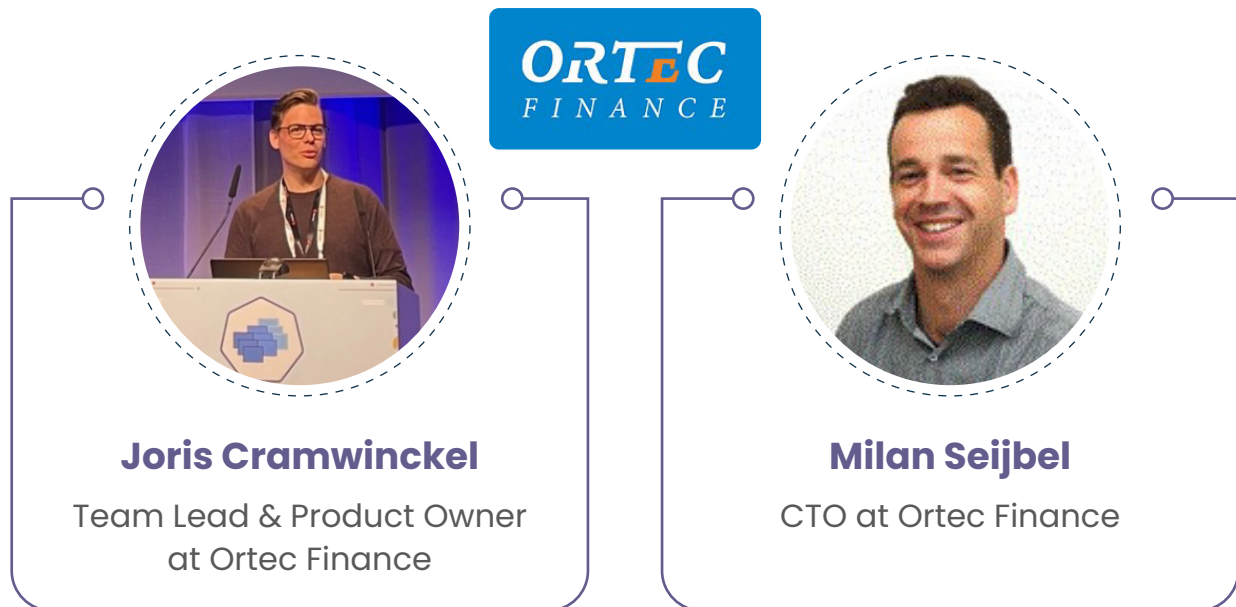
Table of Contents

Case study: Ortec Finance's pattern-driven transformation	04
The "why": recognizing the need for a new wave	05
Steps 0 and 1: From Pioneering to a deliberate decision	06
Steps 2, 3 and 4: Riding the wave – Bootstrapping, Scaling and Optimizing	07
Step 5: A new maturity—the benefits of the Cloud Native shore	08
Step 6: Looking to the next wave – AI Native on the horizon	09
Reflections and advice	10

Case study:

Ortec Finance's pattern-driven transformation

By Joris Cramwinckel and Milan Seijbel



For many established enterprises, the journey from a traditional, proficient operational state to a dynamic, Cloud Native model is fraught with peril. It is a path that demands more than new tools; it requires a fundamental shift in architecture, process and culture. Ortec Finance, a leading global provider of technology and solutions for risk and return management and investment decision-making, stands as a compelling example of an organization that not only were successfully riding this wave but did so by consciously applying a pattern-based strategy, making their story a powerful illustration of the principles outlined in this book.

What makes their journey particularly insightful is that it was guided by the precursor to this work, the 2019 book

Cloud Native Transformation. Their experience provides a real-world validation of a pattern-based approach and offers a bridge from the lessons of the Cloud Native wave to the challenges of the AI Native future now on the horizon.

As you'll see, Ortec Finance moved through the steps of transformation we outlined in Part II, using all six modes of operation in the process to deliver a highly successful Cloud Native transformation.

The lesson is clear and brutal. The future doesn't belong to organizations that gradually adapt. It belongs to those that develop the discipline and courage to deliberately and forcefully abandon the past.

The "why": recognizing the need for a new wave

Founded in the early 1980s by econometricians from Erasmus University in Rotterdam, Ortec Finance has a long history of using mathematical models to help the financial sector make better investment decisions. By 2019, they were not a stagnant, Waterfall-based organization. They had already undergone a significant reorganization to create smaller, more autonomous teams that combined business and software engineering. This enabled a more focused, end-to-end way of working. They had even implemented “Chapters”—groups inspired by the Spotify model—to provide technical leadership and ensure quality across the company, driven by knowledge rather than pure hierarchy.

Despite these forward-thinking steps, significant friction remained. The company’s strategic “big hairy audacious goal” is to become the global standard and double every five years, and it was clear their current operational model had constraints. The primary bottleneck was a classic one: the operations department was still a separate, centralized back office. Development teams had a “build” responsibility, but not a “run” responsibility. They would

throw completed software “over the fence” to an Ops team that was hesitant to adopt new technologies, as they had to service an ever-increasing variety of stacks without having been part of the development process. This left the Ops engineers in a position of high responsibility but low influence, a recipe for burnout and a drag on innovation. The strategic drivers for change were clear: improved growth enablement, faster delivery and holistic quality assurance.



Steps 0 and 1:

From Pioneering to a deliberate decision

Ortec Finance's journey into the new wave didn't begin with a sudden mandate but with a dedicated **Pioneering mode (Step 0)**. As early as 2015, the company began formally investing in technology research beyond its core econometrics, creating a labs function to explore new paradigms. This team, insulated from the pressures of the main "factory", experimented with containerization and new technology stacks, recognizing their potential to increase engineering productivity.

This foundational work culminated in the outlining of a comprehensive Enterprise Tech Strategy (ETS). This strategy, developed jointly, defined clear objectives and the actionable steps required to achieve them, ensuring alignment across the CTO's office, from labs to operations, on the necessity and direction of the impending transformation. This strategic framework was then formalized, providing a clear roadmap before specific Cloud Native elements were piloted in practice.

A key pioneering effort is a greenfield project to build a web portal for monitoring the balance sheet risks of institutional investors. This project served as a perfect example of the *Research Through Action (TF16)* pattern and the first *Proof of Concept – PoC (TF06)*. While the project was ultimately not a commercial success, it was a vital technical and organizational success. It provided a safe-to-fail environment that proved the value of the new technology stack and uncovered real-world challenges without disrupting the core business.

This groundwork laid the foundation for a formal **Decision to Transform (Step 1)**. A crucial enabler was an organizational change that brought the previously separate operations department under the CTO, Milan, creating a unified technology umbrella. Around this time, Joris, then in an R&D role, discovered the *Cloud Native Transformation* book and promoted it within the CTO's office, becoming the initiative's *Transformation Champion (TF12)*.

The book and its patterns resonated deeply. As Milan recalled: "Your book came by, and then we saw that Cloud Native ticks ... at least half of the boxes that we wanted to achieve with our Enterprise Tech Strategy (ETS)." The leadership team used the book's pattern cards to chronologically map out their transformation, creating a clear *Business Case (TF09)* and establishing a guiding *Vision First (TF14)*. With Milan ensuring *Executive Commitment (TF11)*, the company was ready to move from theory to practice.

Steps 2, 3 and 4:

Riding the wave – Bootstrapping, Scaling and Optimizing

With the decision made, Ortec Finance entered the **Bootstrapping & Bridge-Building mode (Step 2)**. A dedicated, *cross-functional Core Team (TF13)* was formed to build the MVP: their internal cloud platform, dubbed “The Orca Platform” (ORtec finance Cloud Application). As the Orca platform was being built, the team began internal advocacy efforts to promote it and generate excitement and anticipation for the improved way of working

As they prepared to move into **Scaling and Retiring modes (Step 3)**, they adopted a strategy of Gradual Onboarding (TF32). Instead of a “big bang” migration, they developed a systematic process to bring teams on to the Orca platform. A cornerstone of this was the “ORCA Academy”, an internal curriculum that served as a Dev Starter Pack (TF26), teaching engineers everything from Kubernetes to GitOps principles.

Their strategy wisely dictated that applications should be modernized before being moved to the new platform, avoiding a pure “lift and shift” approach. The final gate before any application went to production was a readiness assessment covering three areas: Is the platform ready? Is the application ready? And, most importantly, is the team ready? To help and guide teams with these challenges, we created a central onboarding team, formed around the *Transformation Champion*. We labeled it “CAT” (Cloud Acceleration Team).

To answer the last question, they implemented one of their most powerful and effective practices: **fire drills**.³⁶ These multi-day sessions involved intentionally breaking the system in a staging environment to simulate incidents. This was not a grading exercise, but a method to build comfort, expose blind spots and solidify procedures in a low-risk setting. The fire drills helped overcome one of the biggest cultural hurdles: the engineering teams’ fear of 24/7 “run” responsibility. By experiencing the “run” responsibilities in a controlled way, teams gained the confidence and skills needed for the new operational model.

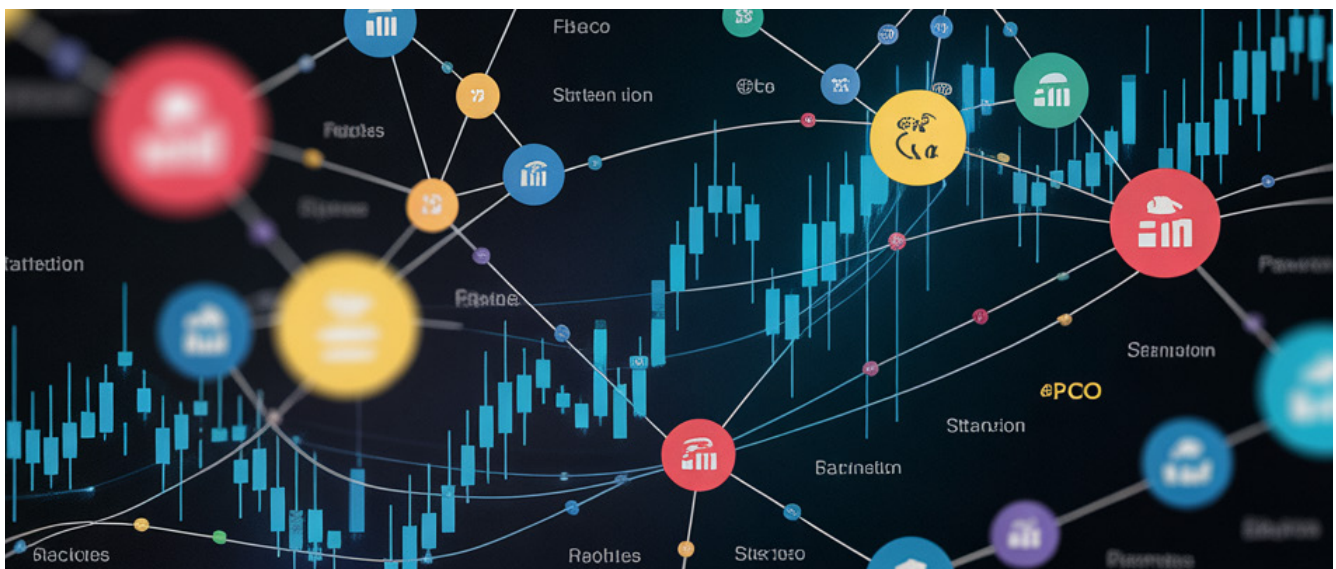
As they entered a broader **Scaling and Optimizing mode (Step 4)**, they formalized a *Platform Team (TF25)* to manage the Orca platform as a product, and the team became a direct report to the CTO. This central team owned the platform, allowing the product-focused engineering teams to concentrate on delivering business value. This structure prevented the *Unmanaged Shadow IT Proliferation (AP07)* pitfall, where multiple teams build their own competing platforms.

Step 5:

A new maturity—the benefits of the Cloud Native shore

Today, Ortec Finance is operating in a state of **Optimizing and Innovating (Step 5)**. While the full transformation is planned for completion by 2027, the benefits are already profound.

Product owners across the company confirm the success of the transformation, though their reasons differ. For one product, the elasticity of the cloud removed resource constraints that had capped their growth. For another, running costs were greatly reduced by optimizing infrastructure choices. For all products, the assured quality provided by the GitOps paradigm has been more powerful than initially expected. Joris noted, “We are about to release features now which weren’t possible at all to think of,” particularly in the AI domain where they now have access to on-demand GPUs and can innovate far more rapidly.



One of the most significant benefits, which they didn’t fully anticipate, was **cost transparency**. The old model of opaque, centralized Ops charging was replaced by a transparent, application-level, variable cost structure. This functionality is not typically offered by suppliers as a standard feature. Significant effort was required to aggregate and fine-tune individual component costs to achieve accuracy at the application and system levels. This empowered product owners, who could now directly see the financial impact of their architectural decisions. This shift forced them to engage with technology choices on a deeper level, moving conversations from “Is it a good idea?” to a more concrete discussion about cost and value. This is a real-world application of the *Measure What Matters (TF36) pattern*, leading to better *Data-Driven Decision Making (TF37)*.

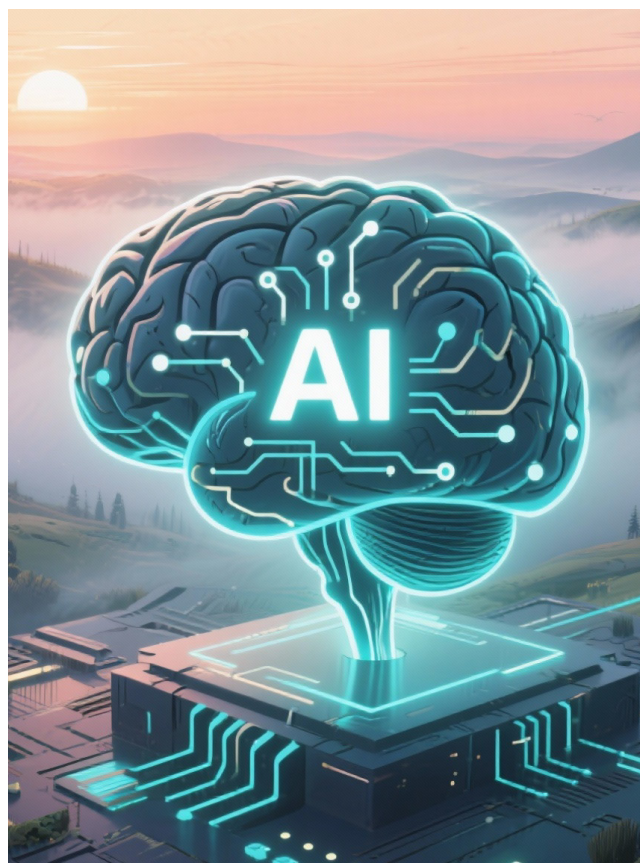
Step 6:

Looking to the next wave – AI Native on the horizon

True to the “Waves of Innovation” concept, Ortec Finance is not resting on its laurels. Having learned how to transform, they are already in **Pioneering mode (Step 6)** for the next wave: AI Native.

Their exploration of AI began in parallel with their Cloud Native research. They are already treating AI models as software artifacts, complete with model registries and MLOps lifecycles. They are building their own AI models, not just using off-the-shelf tools, and are creating interfaces that allow their sophisticated econometric models to be used to train other AI models in a machine-to-machine fashion.

They astutely recognize that the AI Native wave is less mature than Cloud Native was when they began their first journey. “With AI, I have truly no idea ... the possibilities are still wide, while the potential seems huge,” Milan commented, highlighting the uncertainty that defines this new frontier. Their approach is strategic and pragmatic. They have divided their efforts into two streams: **AI to improve productivity** (e.g. office or software development automation) and **AI to enhance our solutions to clients**. This mirrors the balanced approach of a mature learning organization, investing enough to understand the new wave and prepare for it, without making a premature *Bleeding Edge Gamble (AP02)*.



Reflections and advice

Looking back, the team at Ortec Finance offers valuable advice. They emphasize the sheer effort of communication required to keep everyone onboard during a long transformation. They also acknowledge that they would have focused more on cost control and vendor management from the beginning.

Their journey demonstrates that a successful transformation is not a single project but the development of an organizational capability. By using patterns, starting with small, dedicated teams, securing executive buy-in and patiently navigating the cultural shifts, they have remade themselves. Ortec Finance is a company that has moved from one mature state to another. In doing so, it has acquired the skill to ride the waves of innovation, ready for whatever comes next.



Inspired by these real-world transformations? Scan the QR code to access the Waves of Innovation hub for more case studies, in-depth discussions on our podcast and the full interactive pattern library.