# MULTIMEDIA PIONEER CHANNELS IN ON APPLICATION PERFORMANCE WITH APPDYNAMICS



APPDYNAMICS | CASE STUDY



#### **INDUSTRY: ENTERTAINMENT**

#### **KEY BENEFITS**

- Streamline typical troubleshooting process from six hours to 10 minutes
- Eliminate the need for late-night fixes of application performance issues
- Handle a rapidly increasing development workload without hiring more developers
- Free up development staff to write more code for strategic new projects

#### WHY APPDYNAMICS?

- Non-disruptive product fit right into company's app support workflow
- Speedy, cost-effective implementation process required no complex configuration
- Product gives developers real-time feedback as they write code
- Detailed diagnosis allows operations staff to resolve performance problems quickly
- Engineers carefully consider customer needs and release new code regularly

Founded in 1997, TiVo created a brand-new product and service category by developing the world's first digital video recorder (DVR). Today, the company continues to revolutionize the way consumers watch and access home entertainment by making the TiVo DVR the focal point of the digital living room. The TiVo DVR is a center for sharing and experiencing television, movies, video downloads, music, photos, and more. Headquartered in Alviso, California, TiVo has more than 500 employees and annual revenues of \$238 million.

TiVo is powered by hundreds of individual Java and proprietary applications, designed to work together to deliver service to its customers. To keep the system running smoothly, TiVo recently selected AppDynamics to replace its manual, error-prone application performance monitoring process. With AppDynamics, TiVo has shaved hours off its troubleshooting process, eliminated emergency performance issues, and dramatically improved its code development process.

# **COMPLEX JAVA APPS REQUIRE ONGOING MONITORING**

Thanks to years of innovation, TiVo customers can download music, view photos, explore web content, and stream Netflix movies on their TiVo boxes. What's the secret behind this multimedia marvel? Hundreds of proprietary Java applications that run on TiVo boxes to let customers access their favorite interactive services. Until recently, TiVo monitored application performance manually.

"We used to spend hours troubleshooting issues," recalls Richard Rothschild, Senior Director of IT, TiVo. "If a service was running slowly and we didn't know the cause, finding the cause was like looking for a needle in a haystack. We needed something fast and automated."

### SPEEDY INSTALLATION, INSTANT FEEDBACK CONVINCE SKEPTICS

Rothschild first met with AppDynamics in April 2010. Weeks later, he launched a product trial and watched in awe as the solution made an immediate impact.

"We're usually pretty skeptical about sales pitches, but AppDynamics is one of the few products we've demoed that has made both our developers and operations staff say, 'Wow, we need to buy this right now,'" says Rothschild. "That tells you how much value we saw in getting instant feedback on application performance."

Once TiVo decided to purchase AppDynamics, implementation took just hours—in stark contrast to solutions that require days or weeks of implementation and configuration.

"With AppDynamics, you just load the program, it injects into the Java code, you restart the server, and it's working," Rothschild explains. "Our staff hasn't had to adjust at all—this is a completely non-disruptive solution."

# APPLICATION ISSUES NOW SOLVED IN MINUTES, NOT HOURS

TiVo's operations staff uses AppDynamics to maintain total visibility into performance problems. Engineers can monitor performance down to the class and method level, enabling them to diagnose problems more quickly.

"With AppDynamics, we've reduced the time to find the root cause of significant application problems from six hours to 10 minutes," says Rothschild. "There's no more trial and error—and very little overhead added to our technical environment."

Hard-to-define performance issues used to leave TiVo's engineers overworked and frustrated. With AppDynamics, TiVo has eliminated this problem.

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"Before, it wasn't uncommon for five or six engineers to work well into the night to resolve a performance issue," Rothschild explains. "We would then see a major decrease in their productivity the next day. With AppDynamics, we either prevent these issues, or assign one developer to fix them within minutes."

# **PINPOINTING PROBLEMS SAVES HOURS OF CODING TIME**

Before AppDynamics, TiVo developers had to check in, compile, and run code to find out how it performed. And when performance issues came up with code in production, the operations team would have to dig through the code to find and fix problems.

Today, TiVo developers use AppDynamics within a development sandbox on their desktops. As they write code, AppDynamics' application mapping feature provides feedback on how their additions will affect performance. By showing developers the exact lines of code that are causing performance issues such as memory leaks and slow thread processing, AppDynamics streamlines code fixes.

"AppDynamics helps us prevent many problems from entering our applications in the first place," says Rothschild. "This makes a huge difference in our ability to produce higher quality code faster."

# **DEVELOPMENT TEAM BOOSTS OUTPUT WITHOUT INCREASING HEADCOUNT**

No longer hamstrung by elusive code issues, TiVo's development team now spends more time working on the company's strategic initiatives. TiVo is forming partnerships with other multimedia companies around the globe, and each one has its own series of aggressive deadlines for new code. The development team has been able to meet deadlines easily—without hiring more people—thanks to AppDynamics.

"AppDynamics helps us deliver better software on time and keep it running well, which makes our partners happy," says Rothschild. "We've already seen a big improvement in the reliability and uptime of our services. Anything that simplifies our job in this complex environment makes us feel much more confident about signing new deals."

TiVo occasionally makes requests for changes in the AppDynamics product. Rothschild is consistently impressed by the responses his team receives.

"AppDynamics is a great business partner," Rothschild concludes. "Not only do they never force us to buy things we don't need, but they also listen to our suggestions and turn around code changes within a few weeks. I have complete confidence that if we need something in the future, they're going to make it happen."

With AppDynamics, we've reduced the time to find the root cause of significant application problems from six hours to 10 minutes. There's no more trial and error.

# **Richard Rothschild**

Senior Director of IT TiVo

# HOW TO GET STARTED

Take the 30-Day Trial www.appdynamics.com

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