

# H&R Block Canada Provides Trouble-Free Online Tax Filing With Help From New Relic



**INDUSTRY**  
Financial Services



**LOCATION**  
Calgary, Alberta, Canada



**EMPLOYEES**  
5,001-10,000

It's exactly a week before Tax Day—the date many people dread above all others. This year, however, you've got it covered: You've used free online-filing software to complete your forms with a full week to spare. So imagine your surprise—and horror—when you hit the button to file, and the government's site rejects your form.

This is a nightmare scenario—and not just for the customer. Tax preparation firms live and die by a single day out of the year, and they get just one chance. If a customer isn't able to use their service to file accurate, *on-time* returns, they will go elsewhere—and there's no amount of marketing that will win them back.

It was with this knowledge that **H&R Block Canada** turned to the **New Relic Digital Intelligence Platform** to monitor the performance and user experience of its DIY online tax-filing software.

## Goal: market disruption

It was back in 1955 when brothers Henry and Richard Bloch founded H&R Block in Kansas City, Missouri, after realizing that the tax-preparation service they had been providing to their bookkeeping clients represented a sound business venture on its own. The company has since grown into the world's largest tax-preparation firm, generating just over \$3 billion USD in revenue in FY2017. Its outposts are located across North America and in 13 foreign countries.

One of those countries is Canada, where the company has been operating for over 50 years, and currently has more than 1200 offices. With tax experts ready to prepare every type of return (from personal and small business returns to corporate, farm, trucking, fishing, rental, and estate returns), H&R Block Canada is serious when it says it can serve Canadians no matter where they are.

### USE CASE

Optimize performance and improve customer experience for do-it-yourself (DIY) tax-filing application

### PRODUCTS USED

New Relic APM, New Relic Browser, New Relic Infrastructure, New Relic Insights, New Relic Mobile, New Relic Synthetics

### WHY NEW RELIC

Provides an easy-to-use solution for monitoring performance and user experience provided by DIY online tax application

### HIGHLIGHTS

- Delivered complete visibility into front and backend performance of online tax filing software
- Improved acceptance rate of returns filed using the software
- Freed up DevOps for more strategic tasks and empowered workforce to monitor meaningful metrics through customized New Relic dashboards



In 2014, H&R Block Canada aimed to disrupt the market by launching an online DIY application for people who wanted to be guided through the tax return preparation and filing process but didn't want to come into an office or interact with a tax specialist.

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**Dave Falkenberg**

Director, Product Development & Compliance,  
H&R Block Canada

Although the U.S. arm of H&R Block had launched a DIY online filing application several years prior, H&R Block Canada decided to launch its own online application differently when Dave Falkenberg joined the company. As Director of Product Development, Falkenberg was charged with managing, guiding, and maturing the new DIY software side of H&R Block Canada's business.

"When we brought our own tax product to market, we tried doing things differently," explains Falkenberg. "One of our strategies was to offer the product free of charge—no catches. Today, we've started putting in some monetization initiatives. However, none of this would be possible without a significant user base. And if the software isn't working properly, we can't give it away, much less find ways to monetize it."

That's why from the get-go, Falkenberg was eager to take advantage of New Relic monitoring. With H&R Block Canada already using **New Relic APM** to track its production and development environments, Falkenberg knew he wanted to dig even deeper using New Relic's help.

## Testing, testing, testing

Falkenberg's early days with the company were also early days for the DIY tax filing application, which was in constant flux as the team worked to perfect it. "We rebuilt just about everything along the way, so when I inherited New Relic, I immediately began applying its monitoring to all of our test environments," he says.

This proactive strategy worked, and by the second year the product was much improved. While monitoring continued to focus squarely on the application's Java-based backend, that focus broadened as more employees began using New Relic and H&R Block Canada deployed additional New Relic solutions.

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The H&R Block DevOps team appreciates the analytics around load balancing that New Relic provides. And no wonder—for a business that revolves around a single, all-important deadline and the months leading up to it, the flexibility to accommodate huge spikes in user traffic is crucial.

Explains Falkenberg, “As a tax preparation firm, our milestones and deadlines never move; we never get a day back. So we’re always load testing to make sure that everything can scale appropriately. With New Relic running in both the load test environment and in production itself, it’s easy for us to get to the bottom of things if we’re not achieving our test loads.”

## From rejection to acceptance—in real time

With backend monitoring firmly in place, Falkenberg and team next turned to [New Relic Insights](#) and [New Relic Browser](#) to gain a view of frontend business performance. One of the first items they focused on was *acceptance rate*—the number of returns filed through H&R Block Canada’s DIY software that the government actually accepts.

“The first place we started using custom attributes in New Relic was around the NETFILE API,” says Falkenberg, referring to the online filing system that allows customers to send their tax return directly to the Canada Revenue Agency (CRA). “Was the transaction successful? Did we communicate with the government and attempt to transmit? Was that transmission accepted or rejected, and if it was rejected, what was the response and what was the error code coming back?”

By using New Relic to build a dashboard that tracks the software’s NETFILE system, H&R Block Canada was suddenly able to get answers to all of those questions in real time. This was in stark contrast to the pre-New Relic days, when Falkenberg and team could see when returns were rejected but had to wait at least a week to receive the government report detailing why.

“This year, we got a bunch of rejections within 15 minutes of opening the system for filing,” says Falkenberg. “But unlike in past years, we were able to resolve the issue immediately. With the data provided by New Relic Insights dashboards, our compliance team spotted the problem, put the DevOps teams on it, and by the end of a 30-minute phone call they had identified and fixed the bug and restarted the servers with no disruption to users.”

## Monitoring a mobile user base

No DIY app can exist these days without a mobile component, and though H&R Block Canada’s mobile tax app is still in its infancy, the company is already using



**New Relic Mobile** to monitor it. Says Falkenberg, “I’m not a developer, but I wrote much of the code for the mobile app, and with a little help from New Relic Support, I was able to plug in New Relic Mobile and see what was going on with the app.”

In addition to monitoring internal builds and simulator builds, and accessing back traces for errors that have crept in during the app’s development, Falkenberg and team are looking forward to using New Relic Mobile to collect and analyze all kinds of metrics around mobile, including what devices and OS versions its customers are employing, where users are dropping off the application, conversion statistics, and more—and rolling all of these metrics into a single Insights dashboard.

## Freeing up teams for strategic tasks

Three years after the initial release of its online filing software, H&R Block Canada continues to evolve the application. “Thanks to New Relic,” he says, “our compliance team is now able to fix NETFILE rejections as they happen rather than wait a week to get information from outside parties about the bug, and then another week to redeploy the application.”

As a result, the company was able to improve its NETFILE acceptance rate by more than 10% within a single week last tax season—a process that in previous years had taken more than three months to yield similar results. This is important because the Canadian government bases its certification process on NETFILE acceptance scores—meaning the higher the score, the easier the certification process is for the company.

The thing that Falkenberg may be most pleased about, however, is how readily users from across the company have adopted New Relic. “Individual contributors have started building their own New Relic dashboards so that they can report on the things that matter to them,” he says. “That goes a long way toward freeing up our DevOps team for more strategic tasks and a long way in helping H&R Block Canada meet its ultimate goal of helping the most people file their tax returns successfully.”