



# 407 ETR Scales Mobile App with Kinvey to Handle up to 2 Million Customers

CASE STUDY



**INDUSTRY**  
Transportation

**PRODUCT**  
Progress Kinvey  
Progress Corticon  
Progress Test Studio

## SUMMARY

Seeking to build a mobile app that positions 407 ETR as a technology leader for potentially two million customers, 407 ETR chose Progress Kinvey for its security and scalability, as well as its flexible backend that could handle multiple disparate backend data sources to speed development.

## Challenge

Encircling the greater Toronto area, Canada's Highway 407 Express Toll Route (ETR) is the world's first barrier free all electronic toll highway. It requires no transponders or cameras photographing license plates – it's customers simply download a mobile app and enter and exit as they please and they are billed accordingly. The business processes driving the app were built with the Progress Corticon Business Rules Engine back in 2011. A few years ago, to improve the UI/UX for its website, 407 ETR used Progress Test Studio to ensure an optimal customer experience was being built.

And now 407 ETR is setting out to build a customer service mobile app like no other – a “new mobile product” that according to 407 ETR Group Architect Ravi Chander, would “leverage existing technologies and embrace new technologies to meet the expectations of the future in-car digital experience as driving continues to get more sophisticated.”

## Solution

Building and deploying such an app is complicated. “A lot needs to come together to make it happen,” Chander said. “We needed a platform that was incredibly scalable, highly available, but more importantly provided critical features out of the box.”

As Chander explained, he had two choices: write all that custom code and adapters and all the overhead it brings, or find a platform that handles data collections, connects device data to backend data seamlessly, and provides app notifications out-of-the-box. He found what he needed in Progress Kinvey.

“Kinvey allowed us to focus on building new features for the customer without having to worry about all the glue that handled everything in the back,” he said. “From the developer's point of view, it went from potentially months of development work down to two lines of code to authenticate and authorize our users.”

**“We've got an enormous amount of data at every layer that must scale. The Kinvey architecture was the solution to handle all our APIs and data collections—crucial to the app's success.”**

Ravi Chander, Group Architect, 407 ETR

## Results

Development of the app is well underway and Kinvey is showing its value. “We are finding that Kinvey is a platform that can readily handle incoming data structures, speeds the connection of device data to backend data, delivers notifications out-of-the-box, and calls our services in a standardized way.”

There are two specific attributes that any backend platform had to deliver in order for the app to succeed: security and scalability to handle potentially more than two million customers.

“Security and privacy had to be as close to perfect as possible and building our own solutions would be asking for trouble,” Chander said. “We need flexibility to choose from multiple industry standard options to authenticate and authorize our users, end-to-end security from the device to every layer, and the ability to audit how all the data was being kept and secured. Kinvey offered all of that which saved development time and gave us peace of mind.”

Given the potential user base, any solution 407 ETR chose had to readily scale.

“We want to get the information we need from our customers in real time and give them services they want in real time,” Chander said. “In order to support that goal,

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Ravi Chander,  
Group Architect, 407 ETR

we’ve got to handle information at scale. We’ve got an enormous amount of data at every layer that must scale. The Kinvey architecture was the solution to handle all our APIs and data collections—crucial to the app’s success.”

The first feature built by 407 ETR is a travel service that is not only highly personalized but learns and adapts to the driver. It’s just the beginning of a new “mobile product” with lofty goals to ensure that technology marvel 407 ETR is also breaking ground in customer service.

“The Kinvey cloud-hosted platform and all it can do for us means that we don’t have to worry about being victims of our own success,” Chander concluded.

## About 407 ETR

Considered a technical marvel, 407 ETR (Express Toll Route) is the world’s first all-electronic, barrier-free toll highway, stretching 108 km around greater Toronto.



[Learn More About the Kinvey Cloud Native Platform](#)

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