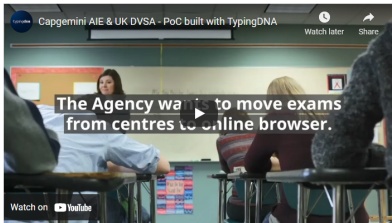# U.K. DVSA brings their driving test into the future with Capgemini and TypingDNA

User experience is critical - 70% of applicants are under 25 years old and it's often their first engagement with the government.

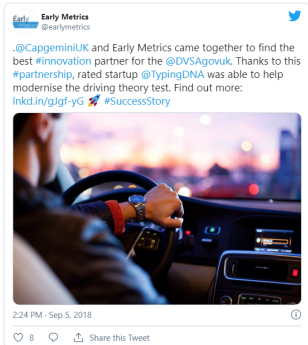Tight time frame - build a proof of concept in five short weeks.

The integrity of the tests is kept, without affecting the applicant's experience, by using TypingDNA.

The challenge

Despite the significant technological advances that have occurred over the last 15 years, drivers today still need to go to a physical testing center in the U.K. to take their driving theory tests.

Seeking to modernize this process, the United Kingdom's Driver and Vehicle Standards Agency (DVSA) turned to Capgemini's Applied Innovation Exchange (AIE) in London to determine whether there were any solutions on the market that would enable prospective drivers to complete these tests from any connected device. The right solution would be needed to ensure that each individual was actually taking the test themselves—and that fraudulent entries weren't submitted. What's more, the solution needed to be able to be implemented quickly while ensuring optimal user experience.

Capgemini's AIE worked with Early Metrics, an organization that rates startups, to identify new technologies that would meet DVSA's needs. Ultimately, Early Metrics suggested that DVSA would be able to accomplish their proof of concept by leveraging several solutions—including one made by TypingDNA that enables organizations to confirm an individual's identity based on the way they type.

Early Metrics
@earlymetrics

.@CapgeminiUK and Early Metrics came together to find the best #innovation partner for the @DVSAgovuk. Thanks to this #partnership, rated startup @TypingDNA was able to help modernise the driving theory test. Find out more: lnkd.in/gJgf-yG #SuccessStory

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The solution

To help the DVSA meet their goals for the new driving test proof of concept, the AIE ended up recommending a number of technologies in addition to TypingDNA, including Amazon Rekognition as facial recognition technology that ensures the same person is taking the test the entire time and Microsoft Azure as AI-based voice verification that prevents someone from impersonating someone else during a test. The AIE also recommended some tools they developed in-house that would prevent a test taker from getting help from someone in the same room or communicating with anyone on their device during the exam.

As a result of working with Capgemini's AIE and exploring TypingDNA's technology, the DVSA enjoyed a number of benefits while investigating their proof of concept, including :

- **Increased integrity of test results.** By using typing biometrics as one of several authentication methods, DVSA would be able to know, with certainty, that real students are taking every test. Both parties—the DVSA and test takers—find out right away whether a student is who they say they are thanks to TypingDNA's typing pattern matching comparison scores. This translates into more educated drivers on the road—and, in theory, fewer accidents.

- **Improved user experiences.** If the DVSA overhauled the driving theory test and forced students to buy a new device or gadget in order to take it, the user experience would be less than ideal. By using TypingDNA, that's not the case. Keyboards are widely available and everyone has one—whether it's a physical keyboard or a touch-based alternative, like what's found on your smartphone. What's more, typing biometrics is a less invasive form of verification and uses something applicants are already doing. Add it all up, and test takers enjoy more favorable user experiences.

- **Fast deployment.** TypingDNA's easy-to-use API allowed Capgemini developers to integrate it very quickly; they were able to build a proof of concept in five short weeks. This helped the AIE division quickly suggest solutions to the DVSA's future driving theory test.

In today's technology-powered world, students shouldn't have to go to physical driving centers to take a short test on a computer. U.K. DVSA understands this perfectly, which is why they contacted Capgemini to figure out how to bring these tests into the palm of each student's hand.

Thanks to TypingDNA's technology, the DVSA would be able to ensure that students can securely take their driving tests at their convenience—and from any location.

About Capgemini

Capgemini is a global leader in consulting, technology services and digital transformation. Founded in 1967 and headquartered in France, Capgemini is at the forefront of innovation to address the entire breadth of clients' opportunities in the evolving world of cloud, digital, and platforms.

One of Capgemini's offerings is the Applied Innovation Exchange (AIE), a platform that helps organizations discover new innovations they can experiment within their specific industries. If they like what they see, the AIE can help organizations rapidly deploy these transformative tools and technologies at scale.

About U.K. DVSA

The Driver and Vehicle Standards Agency (DVSA) the UK government agency tasked with helping everyone stay safe on Britain's roads.

One of the ways they do this is by administering theory and driving tests to gauge a prospective driver's knowledge of traffic laws and prowess behind the wheel. Each year, more than 1 million people take the theory test—making it the world's largest computerized exam.