



Case Study

Nexi Switzerland

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Published: April 2024

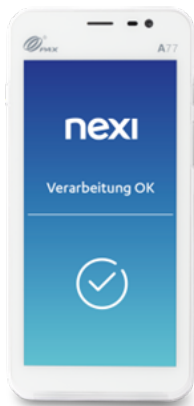
About Nexi Switzerland



Nexi Switzerland, an integral part of the European PayTech Nexi Group, is composed of a team of approximately 100+ dedicated individuals committed to reshaping the financial and payment services sector in Europe. Leveraging the vast resources and expertise of the Nexi Group, Nexi Switzerland stands at the forefront of providing state-of-the-art financial solutions to clients both within Switzerland and internationally. With a specific focus on delivering innovative and secure payment solutions to businesses, Nexi Switzerland utilizes cutting-edge technology and financial knowledge to offer efficient and dependable payment options.

One of the key strengths of Nexi Switzerland lies in its rigorous testing processes. Ahead of each new software release, Nexi conducts meticulous evaluations encompassing both the pinpad and server aspects of their systems. This comprehensive approach ensures robust performance across physical terminals and cloud environments, guaranteeing the highest standards of quality and reliability in their offerings.

The Challenge



Despite its successes, Nexi recognized an opportunity to enhance testing efficiency. Preceding the implementation of automation, their testing procedures relied heavily on manual efforts, consuming significant time and resources. Each new software release necessitated exhaustive evaluations across pinpad and server components, doubling the workload and stretching testing efforts over several weeks. The absence of automation posed a significant challenge, hampering Nexi's ability to expedite testing processes and maintain peak efficiency.

"As we added new releases, the manual testing process became increasingly cumbersome, doubling our workload and stretching our testing efforts over several weeks," explains Tiago Leitão, Configuration, Test & Release Specialist at Nexi.

This manual testing process not only consumed valuable time but also introduced the risk of human error, potentially impacting the reliability and quality of Nexi's payment solutions. Furthermore, the lack of automation hindered Nexi's agility in responding to market demands and technological advancements, posing a significant obstacle to their long-term growth and competitiveness in the industry.

Recognizing the need for a more efficient and reliable testing approach, Nexi embarked on a journey towards automation. By leveraging cutting-edge technologies and strategic partnerships, Nexi aimed to streamline their testing processes, reduce manual efforts, and ensure the robustness and reliability of their payment solutions in an increasingly dynamic and competitive market landscape.

The Solution



In response to these challenges, Nexi embarked on a transformative journey towards automation. Leveraging the PaytestRobot T4 alongside multiplexers, Nexi implemented automated testing, ushering in a new era of efficiency and innovation. This strategic decision not only streamlined workflows but also ensured consistent and reliable execution of test cases, mitigating the risks associated with manual testing processes.

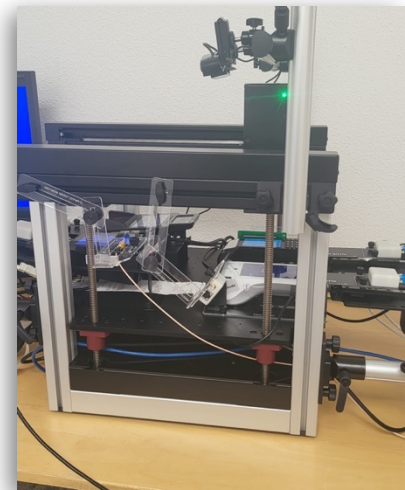
"By utilizing PaytestHub and the PaytestRobot T4, we were able to streamline our testing processes significantly, reducing manual efforts and accelerating our testing cycles," notes Leitão.

With automation at the forefront of their testing procedures, Nexi could now complete tasks that once required hours of manual labor in a fraction of the time, resulting in substantial efficiency gains and empowering their team to focus on value-added activities such as generating additional test cases and refining software.

The Result

Nexi is currently in the exciting initial phase of their project journey. They have enthusiastically embarked on phase one, which involves the deployment of four terminals. Looking ahead, they have ambitious plans to expand their capabilities by incorporating a second robot and a few additional terminals in subsequent phases. This strategic move not only demonstrates Nexi's commitment to innovation but also reflects their proactive approach to enhancing their testing processes.

The time saved through automation in testing can now be directed towards valuable endeavours such as generating additional test cases or focusing on software refinement. One notable advantage of automation is its inherent alertness to any menu or interface alterations. In the event of such changes, automated tests are designed to promptly signal deviations in the software, ensuring Nexi maintains a high level of quality and reliability in their payment solutions. This level of discernment is challenging to achieve with manual testing alone, where the vast array of screens can't be easily memorized, making automated testing a more reliable means of change detection.



Considering the utilization of robots in their testing processes, Nexi holds optimistic expectations for certification timeframes. For phase one, they aim to conclude testing within one week, without examining every PIN pad type with the robot. Looking ahead to phase two, Nexi anticipates even faster results, possibly within two to two and a half days. The automation capabilities allow them to run tests overnight, yielding results by the next morning and enhancing overall efficiency.

Moreover, Nexi anticipates a reduction in errors and a more consistent testing process, resulting in improved reporting. The quality of their reports is expected to benefit significantly from the use of robots, aligning perfectly with Nexi's goal of energy conservation. By minimizing the effort required for new releases, Nexi can now allocate more time to other crucial test cases or tasks, fostering a more streamlined and productive workflow.

Reflecting on the proof of concept, Nexi encountered notable highlights worth mentioning in their case study journey. One particularly appreciated feature was the PaytestHub interface, which significantly facilitated test case management. Additionally, the camera-based OCR (Optical Character Recognition) system, used for recognizing text on the screen, proved to be both helpful and remarkably reliable. This OCR system significantly enhanced efficiency, resolving most text recognition challenges once the correct configuration was found.

Regarding PaytestHub, it represented a significant improvement over Nexi's previous manual test case management system. The primary benefit lay in the real-time visualization of test cases being executed by automated systems, reducing the need for manual intervention. While Nexi had a pre-existing solution for test case management, it was largely manual and couldn't match the efficiency of an automated, online platform like PaytestHub.

Tiago Leitão, Configuration, Test & Release Specialist at Nexi, shared his positive experience with PaytestHub, stating, "Something I have done with PaytestHub was working directly with the robot rather than interacting with the terminal manually. This way I was able to build the test cases directly in PaytestHub and this worked perfectly fine."

A notable advantage of PaytestHub was its ability to work directly with the robot during test execution, streamlining the process by using the robot's robotic arm to simulate button presses and perform test actions. To further improve efficiency, PaytestLab developed a live stream functionality of the Android Debug Bridge, enabling direct access through PaytestHub with one terminal screen. This innovative approach not only improves efficiency but also conserves energy by reducing the manual effort needed for each new release, allowing Nexi to channel their time towards other essential tasks and responsibilities.

About PaytestLab

PaytestLab, a joint venture between Abrantix AG and B2 Payment Solutions Inc, is dedicated to revolutionizing payment software automated testing. Our innovative solutions encapsulate all essential components, providing a seamless testing experience. With a focus on reliability, accuracy, efficiency, scalability, and flexibility, we streamline processes and adapt to businesses of all sizes. Collaborating with clients and industry partners, we prioritize continuous improvement and enhanced quality.

PaytestLab is setting the new global standard in payment software automated testing.



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