



Is skipping automation in testing an option you can really afford?

For more than a decade, we've been at the forefront of developing automated testing tools specifically designed for EFT/POS terminals. This prompts a critical question: Why have we invested so much time and effort in this area?

Let's delve into the dynamics at play.

The Rising Tide of Complexity

The evolution of payment systems in the card industry has been largely driven by a relentless pursuit to streamline the consumer experience. The adoption of contactless technologies and the integration of payment functionalities into mobile applications have revolutionized how we transact, making it smoother and more intuitive. Terminals have evolved from simple card readers to sophisticated devices that support app functionalities and can seamlessly interact with smartphones. This is just the tip of the iceberg in showcasing how payment interactions have been simplified for end-users.

However, this ease of use for the consumer belies the increasing complexity that developers and engineers face on the backend. Each new feature designed to simplify the user experience paradoxically adds layers of complexity to terminal software. Legacy features need ongoing support even as a variety of new functionalities — ranging from diverse payment ecosystems like Alipay to additional services like mobile top-ups or fuel card transactions — continuously integrate into the system.

Gone are the days when a payment terminal would support a straightforward user flow and a singular payment protocol. The modern terminal is a multifaceted device that must juggle a variety of features, languages, and operational flows.

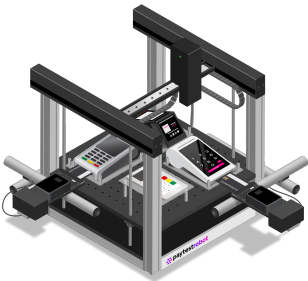
The Vital Link Between Quality and Speed

This growing complexity leads to a substantial rise in the amount of code that must be developed, and as a result, there's an increased demand for comprehensive testing. In a marketplace characterized by intense competition and high consumer expectations, the ability to rapidly adapt and update is paramount. Yet, many terminal software providers find themselves navigating this landscape with a conservative release cadence, such as four updates a year — a pace many in the industry wish could be accelerated. The caveat, however, is the unwavering requirement for quality assurance. It's widely acknowledged that quality is not just a value-add; it's a critical, non-negotiable aspect of product delivery in the payments market.

Customers have little tolerance for errors in transactions or a poor user experience. A significant bottleneck in achieving rapid development cycles is the extensive testing phase. It's not uncommon for a day's worth of coding to necessitate several days or even weeks of testing, especially with the intricate nature of today's terminal software applications. Contrast this with modern software development practices outside the payment terminal sphere, where entire systems can be developed, deployed, and tested in a fraction of that time.

Businesses are thus faced with a stark choice: either accelerate development and live with the uncertainty of quality or maintain a slow, steady pace and risk losing market competitiveness.

The Imperative of Automation



The path forward is clear: the future lies in the automation of testing. While software development at large has embraced automation for some time, the domain of payment terminals has lagged behind. To stay ahead, maintain agility, and ensure the timely release of new features, the shift toward automated testing isn't just advisable; it's essential.

We predict that within a few short years, automated testing for terminals will become the industry standard, relegating manual testing to a niche role for specific scenarios or the development of new test cases.

Our pioneering efforts, including the development of tools like the EFT/POS Terminal Testing Robot, are testament to our belief in the transformative power of automation in testing. These innovations not only streamline the testing process but also elevate the efficiency and effectiveness of quality assurance practices across the board.

So, in reflecting on the initial question — can you afford to not automate your testing? — the evolving landscape of payment technologies and the critical importance of maintaining both quality and speed in product releases suggest that the answer is a resounding no.

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