How SPAR is Riding the Digital Tsunami to Reinvent the Customer Experience and Enable New Revenue Opportunities

“Most IT leaders are talking about digital transformation, but SPAR is facing a digital tsunami.”

Andreas Kranabitl, Managing Director, SPAR ICS

SPAR ICS is the dynamic IT service partner of the SPAR Austria group (SPAR, Hervis and SES). SPAR ICS provides solutions for 7,000 users in 3,000 locations with state of the art technology, systems and processes. https://www.spar-ics.com

Everyone has heard that “every company is now a software company” more times than they wish by now. However, with Amazon’s rapidly-expanding role in the grocery retail market, companies such as SPAR are not only transforming into software companies—they are also directly competing with software giants that deploy new code to production on a daily basis.

SPAR has already successfully surfed an initial wave of digital transformation that involved digitizing their existing brick and mortar business for the online era. Now, the oncoming digital tsunami presents opportunities to build new revenue streams and personalized customer experiences that increase both loyalty and euros spent. For example:

- Online expansion through new online food shops across key regions of Austria as well as complete relaunches of the online Non-Food shop and Wine shop.
- Regional expansion through new online food shops in Slovenia and Hungary.
- Customized digital experience that today’s consumers now expect, such as personalized new product alerts, recipe recommendations, reorder reminders, and sales campaigns.
- Seamless omnichannel experiences, such as easy home delivery of items combined with payment & return options at home or in store.

To capitalize on such opportunities, SPAR’s IT department (SPAR ICS) needs to deliver more (and more advanced) innovations to the market faster than competitors—and with a better user experience than competitors. Obviously, this requires transforming the development process towards Continuous Delivery. However, many organizations initially overlook that if you transform development without also transforming testing, you don’t actually accelerate the delivery of innovative features. You simply move the bottleneck from one location to another.

The SPAR ICS Quality Assurance group already recognizes that their existing quality processes and tools were not architect-ed for the speed and scope of IT innovation expected in the very near future. They are taking this opportunity to transform not only their tools and processes, but also the vision of the group itself. Their high-level goal is to make testing a strategic advantage—much like Formula 1 pit stops have evolved from a necessary evil that caused delays, and into a strategic activity for enabling the continued performance/reliability required to win the race.
Common business transactions involve an e-commerce web shop that interacts with SAP, which in turn interacts with a variety of applications such as inventory systems, warehouse management systems, logistic platforms, delivery systems, payment terminals, and so on. Configuring all the associated systems for a single test typically requires a tremendous level and variety of technical expertise—not to mention realistic test data, which commonly takes weeks to obtain.

For a test to successfully complete, all of the involved systems must be available for testing at a single time. This is rarely feasible for one-off manual tests. It is unlikely to be feasible for the continuously-executed tests that would be part of a standard Continuous Delivery process.

Currently, business analysts are tasked with performing testing in addition to their other business-critical duties. This is a slow, mundane process that not only delays testing, but also detracts them from more value-added tasks that cannot be automated.

From a technical perspective, a number of challenges need to be tackled to ensure that the team enables, rather than impedes, accelerated innovation. The top 3 challenges are:

1. **Increasing system complexity:**
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2. **Limited access to test environments:**
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3. **Reliance on manual testing by high-value resources:**
   Currently, business analysts are tasked with performing testing in addition to their other business-critical duties. This is a slow, mundane process that not only delays testing, but also detracts them from more value-added tasks that cannot be automated.

To overcome these challenges, SPAR ICS is working with Tricentis, the leading innovator in software test automation. The ultimate goal is to transform SPAR’s quality process to ensure the rapid release of new functionality that drives revenue and increases customer loyalty. Initial steps towards achieving this goal include preliminary rollouts of test automation and simulated test environments.

Test automation enables anyone in SPAR ICS to rapidly define and execute automated “end-to-end” tests that validate whether core paths through the application deliver the expected end user experience. Now, it is considerably faster to complete a test; what previously took 1-3 days now takes 60 minutes. Additionally, each test created can now be repeated—with no additional time or effort—every time the application changes. If the addition of new features negatively impacts existing functionality, this problem is exposed automatically. For example, if the addition of a new delivery option inadvertently impacts the in-store pickup functionality, the team will be alerted as soon as the automated regression test executes.

Simulated test environments allow testers to execute tests whenever needed, as often as needed. They no longer need to wait days or weeks for access to test environments and test data. In addition, it is easy for them to test many conditions that are difficult to produce with real test environments. For example, they can easily simulate the delivery system being offline so that tests can confirm that an appropriate user message is provided in such uncommon situations.
Based on data from the initial “proof of concepts,” SPAR ICS expects the following benefits from the initial rollout within the first 6 months:

- Overall testing time reduced by 66% – accelerating time to market 3X
- Allowing business analysts to dedicate 40 more days per release to value-added tasks that advance innovation

Additional planned initiatives include:

- Expanding the scope of test automation and test environment simulation to extend the above benefits across the vast (250+ projects) SPAR IT portfolio, as well as increase test accuracy and “shift left” defect detection. Exposing defects when they are fastest, easiest, and cheapest to fix is a well-recognized way to eliminate unnecessary rework and further accelerate time to market.
- Adopting risk-based testing so that the team can
  1) understand how well testing covers SPAR’s top IT-related business risks,
  2) focus their testing time on developing and executing the most efficient set of tests that deliver the greatest risk coverage, and
  3) instantly determine if a test failure is critical to fix before release, or can wait until later.

The digital tsunami is undeniably on its way. However, SPAR ICS understands that if they want to surf it strategically, they need to do more than transform development. They also need to transform testing so all teams are working together towards the rapid release of innovative functionality that truly enhances the user experience. Results from their initial efforts indicate that they are on the right course for harnessing the digital tsunami’s power to the company’s advantage.

About Tricentis

With the industry’s #1 Continuous Testing platform, Tricentis is recognized for reinventing software testing for DevOps. Through risk-based testing, scriptless end-to-end test automation, and the industry’s most extensive technology support, Tricentis breaks through the barriers experienced with conventional software testing methods. Our innovative technologies simplify testing for even the most complex enterprise applications—transforming testing from a roadblock to a catalyst for innovation.