



# Intelligent Swarming at Tricentis

Tricentis provides streamlined support on complex products while increasing collaboration and customer and employee satisfaction by removing tiers of support.

## Introduction

Alexander Mundorff, SVP Support at Tricentis, is not afraid of change. Tricentis is growing fast, both in customer base and in employees, but he wants to keep the startup mentality that Tricentis has had from the beginning.

Collaboration with other departments is an essential part of delivering best-in-class customer support. Constantly looking for ways to improve support while staying flexible, Alexander's attention was drawn to Intelligent Swarming<sup>SM</sup>.

## Keeping the Startup Mentality

In 2017, Tricentis was growing fast due to both market expansion and acquisitions. While its customer base was increasing by hundreds, its employee size doubled in 2017 to over 400 people. Tricentis CSO and Founder Wolfgang Platz emphasized that Tricentis must work hard to keep the startup mentality that enabled it to achieve this growth, while recognizing that scaling so quickly came with its own issues.

## Supporting Complexity

Tricentis' main product is Tricentis Tosca, a complex, automated software testing platform that combines multiple aspects of software testing and consists of about 50 different components. Tricentis' additional products, Q-up and qTest, fully tackle all aspects of software test automation and compliments Tricentis Tosca's functional testing focus. More than 800 customers depend on Tricentis to help them consistently deliver innovative, high-quality software to their own clients.

## Support Department

The Tricentis Global Support team was made up of nearly 100 employees spread across offices in Austria, the United States, Vietnam, and India. Before the introduction of Intelligent Swarming, there were three support levels, Level 3 being system experts mostly in the engineering department. With support cases coming from both Tricentis partners and customers, most support tickets were submitted via the website, chat, or email.

## Why Intelligent Swarming?

While there were already changes implemented to improve the workflow at Tricentis' support organization, the following issues remained and were reason to look for additional opportunities for improvement.

### Collaboration

In order to improve collaboration with the engineering team (for Level 3 escalation), an "Expert of the Week" had been installed in the support team. This role was an employee from engineering who joined the support department, rotating weekly, to help out with issues or to help identify the best resource to assist with any individual case. The success of this initiative wholly depended on who the Expert was on any given week, with the best results coming from engineers who had previous support experience, and who therefore could better understand the needs of the support team.

Organizational silos resulted in competition and scapegoating

between departments at Tricentis, and there was hardly any knowledge transfer or sharing between teams.

### Complex Issues

Tricentis Tosca's many components make the product very complex. This means that support issues are also complex, and many times, Level 1 support members were not able to solve an issue. That is when the "ping-pong" of incidents started. An issue was escalated



### Lessons Learned

**Involve all departments.** One of the main lessons learned is to involve all internal departments as early as possible. Intelligent Swarming should not be a "Support thing." It's about collaboration within and across teams. Therefore, those teams should be involved in designing the process from the beginning.

**Include support agents early.** Support agents are the ones doing the work, and should be active participants in the Intelligent Swarming design process.

**People first.** Human behavior is as important as the tooling. Getting the perfect tools for your team is critical for success, but it can take up a lot of time. In the end, collaboration has more to do with the behaviors and attitudes of the people involved.

to Level 2, and then to engineering. Then, it was back to Level 1 for more information. This back and forth increased time to resolution, and while customers weren't complaining, the support team felt the pressure when the SLA reached breach time. Unclear responsibility for tickets made teams blame one another for delays, and it wasn't long before the CSAT started trending down.

### Employee Satisfaction

"Happy employees make happy customers," is one of Alexander Mundorff's core beliefs. Attracting—and retaining—talented employees can be a challenge, especially for a fast-growing company. It was therefore a great concern for Oliver Allabauer, Tricentis' Director of Global Support, when trends in employee satisfaction went down and employee attrition went up.

Mundorff realized that drastic changes were needed in the way collaboration and work was

done, not just in the support department, but company-wide. Intelligent Swarming seemed to be the answer.

### Design Sessions and Pilot

Allabauer contacted the Consortium for Service Innovation to get help on introducing Intelligent Swarming at Tricentis. In a weeklong workshop, the Tricentis Intelligent Swarming Design Team got a better understanding of Intelligent Swarming and how it could benefit their own organization. The Design Team was a mix of support agents, team leads, and engineers. They designed draft versions of the process, the new way of working, and people profiles for the support agents.

After the Design phase, it took about eight weeks to prepare the infrastructural changes and the training materials for the Vienna team. The pilot started in EMEA and after 12 weeks, swarming was rolled out to the US team. After that, introducing

Intelligent Swarming in India was considered a piece of cake. The recently acquired support teams in Atlanta and Vietnam will implement Intelligent Swarming shortly.

### **How Does Intelligent Swarming Work?**

When Intelligent Swarming is in place, an incoming incident will, ideally, only be visible to the support agents who are best able to solve it. To make this a reality at Tricentis, there were several things needed, including the creation of expertise profiles of each agent, and a mechanism to direct incidents to the correct people.

During the Design session, 17 domains of expertise were identified, based on product groups. Each support agent indicated his or her areas of expertise, and these areas were also used as tags in the ITSM.

A so-called Triage team was installed. Consisting of three support agents rotating on a weekly basis, the Triage team tags incoming incidents. In the future, this step will be automated. The tagged tickets are now only visible by the support agents who have similar areas of expertise in their profiles. The support agents can choose their next ticket from the list, and when they do so, they own that ticket until it is resolved. Support Levels 1 and 2 no longer exist; all support agents operate at the same level.

If the support agent isn't able to solve the issue, they ask for help from colleagues in support and engineering who have the

ability to opt-in to offer their assistance. This "finding of collaborators" is mainly done through enterprise social media channels that have the same tags as the earlier-mentioned expertise domains.

### **Results**

The Tricentis support team soon started to see results of the Intelligent Swarming initiative, and positive changes spotted in the pilot phase were noted in the team's KPIs. At first, Oliver Allabauer wasn't sure if these were due to the Intelligent Swarming initiative, as there were changes occurring before the pilot started. While Intelligent Swarming was a rather large change in the way the team worked, it didn't hinder existing positive trends. The image on the previous page shows some of the KPI changes after 12 weeks.

### **Next Steps**

The entire Tricentis team is always looking for ways to improve their service. Intelligent Swarming now needs to be rolled out at the newly acquired support teams in Atlanta and Vietnam. The Triage team's incident classification work needs tuning and will preferably be automated with AI and machine learning. Data transparency processes and tools need further improvement. Finally, a reputation system will be introduced and connected to the existing Tricentis incentives.

Whether it's introducing Knowledge-Centered Service (KCS®), the expansion of Intelligent Swarming, or

continuing to streamline collaboration, the Tricentis Global Support team knows that their offering must always evolve right alongside the evolution of the product and the customer needs they serve.

## About Tricentis

Tricentis offers the leading continuous software testing platform which provides automated insight into the business risks of software releases. It is headquartered in Vienna, Austria and has a global presence. The company was founded in 2007 by Wolfgang Platz and Franz Fuchsberger.

## About the Consortium for Service Innovation

The Consortium for Service Innovation is a non-profit alliance of organizations focused on innovation for the support industry. The Consortium and its members have developed the KCS methodology over the last 25 years, and are committed to developing innovative ways to deliver customer support.

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