KEY TAKEAWAYS

The Infrastructure and Technology Team (I&T Team) for the American Society for Clinical Pathology made an investment in agile ways of working to improve the delivery of solutions to their internal customers and external constituents. By adopting agile ways of working, they were able to:

- Improve delivery predictability
- Reduce production rollbacks
- Establish the habits of continuous improvement
- Boost I&T Team member engagement (and satisfaction)
- Reduce key person dependencies

As a result, the internal customers of the I&T Team reported a dramatic increase in satisfaction.

INTRODUCTION

The American Society for Clinical Pathology (ASCP) is a professional association with an over 100-year history. With more than 100,000 members, ASCP is the world’s largest professional membership organization for pathologists and laboratory professionals. The ASCP mission is to provide excellence in education, certification, and advocacy on behalf of patients, pathologists, and laboratory professionals.

THE CHALLENGE

When CIO Mark Moen joined ASCP in January of 2021, he inherited a technology organization with strong technical skills as well as a history of delivery challenges that included:

- Inconsistent quality and reliability
- Manual development processes
- Significant reliance on custom application development
- Inconsistent use of tooling
- Unpredictable delivery to internal customers
- Key person dependencies
Further details of each of these challenges is provided below.

**Inconsistent Quality and Reliability** - New releases of code to production often broke the existing applications because of the lack of effective version control and inconsistencies across development and test environments. As a result, the I&T Team frequently found themselves rolling back the solution, fighting fires, and cleaning up old code. This reduced the time available for thinking strategically or focusing on improvements.

**Manual Development Processes** - Development was conducted in a waterfall-style approach. The Team Lead served as both business analyst and project manager. The Team Lead was also the only person who collaborated with the internal business stakeholders. They met with stakeholders to gather requirements and then created a business requirements document (BRD) which was then stored in SharePoint and eventually handed off to a technology I&T Team member.

Most of the development work was completed in individual silos. The work was assigned to a specific developer based on their unique skill set. Once created, the requirements documents were not updated, and most were quickly out of date. When development was complete, a tester would review the solution and frequently find many issues which caused a lot of back and forth between team members and overall slow progress.

To track progress, the Team Lead conducted a daily standup meeting that took an hour and was a one-to-one status update discussion between the Team Lead and each I&T Team member.

**Reliance on Custom Application Development** – The I&T Team was responsible for maintaining more than 70 custom applications. All development was custom, and the use of packaged software was minimal.

**Inconsistent Use of Tooling** - The I&T Team had access to Microsoft Teams but did not take full advantages of the MS Teams capabilities to collaborate, coordinate their work and make things transparent.

The Team Lead was the only one using Microsoft Team Foundation Server (TFS) tool to track the Product Backlog and sprint work items. Each I&T Team member worked separately and tracked their work and progress individually on a medium of their choice (OneNote, spreadsheet, their memory, emails, etc.) and often did not share the details with other team members. As a result, the I&T Team did not have visibility into each other’s work progress or issues other than those shared during the Daily Status meetings.

**Unpredictable delivery to internal customers** – Because each developer worked independently, there was little predictability in terms of delivery and little consistency in terms of quality. Items took as long as they took and ‘promised’ or ‘required’ dates were sources of anxiety. Though they used the term sprint
from the Scrum Framework, they did not timebox work into those sprints or produce completed backlog items at the end of each sprint.

**Key Person Dependencies** – The I&T Team was highly specialized. Few of the members understood the entire list of custom applications. This caused key person dependencies and created bottlenecks in those areas that required the most development.

### ASSESSING THE SITUATION

Moen had a strong background in agile ways of working and began discussing his preference with the I&T Team who were curious about adopting something new. He collaborated with Vitality Chicago on various ways to assess and improve the situation.

Vitality Chicago recommended that ASCP conduct several assessments to get a better view of the state of technology development and the ways of working. The assessments included a review of current approaches, team observations, and interviews with key I&T Team members and internal stakeholders. These were complemented by the Comparative Agility Assessment.

Vitality Chicago also completed a high-level value stream analysis to tie key business functions to the inventory of custom applications. Vitality Chicago worked closely with the internal business stakeholders to document the value streams and link them back to the more than 70 custom applications.

Finally, an investment was made in compiling a Team Skills Inventory to highlight strengths in the I&T Team skills as well as any skill gaps. The skills assessment showed areas where skills were needed as well as what was available. Making this analysis visible provided encouragement for I&T Team members to develop new skills that were needed.

### ASSESSMENT FINDINGS

The findings from the assessment supported the challenges that the I&T Team identified when Moen first started. The assessments showed that the team members had good working relationships with each other and with the business units. The team members also demonstrated “whatever it takes” and “can do” attitudes to serve the needs of the business units.

The findings also uncovered a desire for the I&T Team to use modern development practices. These areas directly connected to the challenges in delivering high quality solutions in a timely manner and meeting the expectations of the business stakeholders.

Some of those findings included:
1. Ineffective Daily meetings
2. Backlog items that were not well documented
3. Ineffective use of user stories and a lack of acceptance criteria
4. Lack of a Definition of Done
5. No central repository to track/update progress on the work performed
6. Lack of collaboration with internal customers
7. A manual and time-consuming deployment process

As a result of the findings, Vitality Chicago recommended Agile and Scrum Training and Coaching to support the I&T Team to adopt the Scrum Framework and continuously improve their ways of working.

AGILE TRAINING AND COACHING

Vitality Chicago provided Agile and Scrum Training for the I&T Team. This included a brief overview of agile ways of working followed by a two-day, in-depth Agile for Teams Training Course which covered the Agile Principles and Mindset, the Scrum Framework, User Stories, Estimation and Forecasting.

ASCP followed up the training with coaching. Jonathan Lee served as both the team Scrum Master and Agile Coach. The coaching focused initially on how to effectively use the Scrum Framework and to self-organize. Over time the support shifted to the adoption of an agile tool (Azure DevOps), predictable delivery, quality, and continuous improvement.

RESULTS

The I&T Team made great progress in just one year. In addition to having more transparency within the team, they’ve been able to see the following:

- More consistent and predictable delivery
- Reduced production rollbacks
- Reduced key person dependencies
- Increased customer satisfaction
- Establish the habit of continuous improvement
- Improved team engagement

“We brought in Jonathan Lee from Vitality Chicago to help our delivery team. Before he did any coaching or training, he did a baseline assessment using the Comparative Agility tool. He also created a team skills inventory baseline and value stream map for the organization. Then he delivered training and supported it with coaching for the team and Product Owner. When we completed our second assessment 9 months later, I was impressed with how far the team had grown together on both the strengths as well the improvement areas. One of the intended benefits of working and serving in an agile way is ‘better code faster’ – and this is happening. The team continues to learn, grow, and improve.”

Mark Moen
Chief Information Officer
• Clarity on business priorities

In addition to those benefits, the culture of the technology organization has shifted to one of transparency and collaboration. Team members feel engaged and empowered. And the team’s overall agility has improved as measured by the Comparative Agility Assessment.

**Engaged Team Members** – Team member engagement is measured each year using the Gallup Q12 survey. The results are shared openly across the organization. The engagement level for the I&T Team increased each of the first two years, coinciding with the introduction of agile ways of working.

**Empowered Team Members** – Agile teams are designed to be self-organizing and to take responsibility for how the work gets done and this has been the case with ASCP. The I&T Team plans their sprints based on the Product Owner’s priorities and team members decide amongst themselves how the work will be completed.

**Transparency** – The technology team used Microsoft Teams to set up an Information Radiator for their progress which is available for anyone to view. Team members also use Microsoft Teams and Azure DevOps to streamline communications and reduce email traffic between team members. Team members work together to plan the work for each sprint; their sprint backlog is available to all interested parties. During their short Daily Scrum meetings, team members collaborate, discuss the Sprint goals and impediments, and identify any support needed.

**Comparative Agility Assessment Improvements**

The technology team has conducted the Comparative Agility Assessment three times at roughly six-month intervals. The Assessment uses the team’s responses to 66 different questions to assess the relative agility of the team.

As shown in the chart on the right, the team has improved dramatically since the first assessment, in the areas of Planning, Outcomes and Knowledge-Creating. In the most recent assessment, a few areas had lower scores which indicates additional room for improvement.
Customer Satisfaction Surveys

A real test of agile effectiveness is whether it improves customer satisfaction. After all, the first Agile Principle reads, "Our highest priority is to satisfy the customer with the frequent delivery of valuable solutions".

Vitality Chicago conducted customer satisfaction surveys six months after the start of the engagement and then surveyed again six months later. The trend from one survey to the next was positive as shown in the chart on the left.

Some of the positive comments from internal customers included:

"I appreciate your service mindset and focus on the needs of members, as well as internal and other external stakeholders. Thanks for your continued partnership!"

"I have witnessed a greatly improved level of communication and collaboration with the I&T team during the past year. The enhanced level of transparency is also very much appreciated"

"The entire team is great and fast on resolving issues/projects."

Benefits to the Organization, I&T Team, and CIO

The transition to agile ways of working has provided a boost to key stakeholders, the I&T Team and CIO Moen. As CIO, Moen doesn’t dole out work or make sure everyone is staying busy. Instead, he sets expectations with business stakeholders, collaborates strategically, and focuses on recruiting and retaining talented team members. He has added key new hires in the first two years to this high-performing team.

The new agile ways of working is a key catalyst for the culture of proactive customer service excellence. The journey is rewarding for the ASCP I&T Team, their internal customers, and external constituents.

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