CASE STUDY

Using Sapience data for Sprint Retrospectives

sapience

Background

Agile software development – the use of a set of methods and practices where solutions evolve through collaboration between self-organizing, cross-functional teams – has become very popular in recent years. According to the VersionOne 2019 State of Agile Survey, 97% of respondents were practicing Agile. Though the survey participants were mostly from North America and Europe, Agile development is popular all over the world, including in India.

The Scrum management framework and its variants are by far the most popular agile methodology. A key aspect of Scrum is the Sprint Retrospective, the final event of each Sprint during which teams reflect on their contributions and work approach then make an actionable plan for future improvements. It is a key component of Agile which focusses on inspection and adaptation.

The challenges

Sprint Retrospectives can prove to be invaluable. However, often the Retrospective is the most dreaded of all meetings. There are very few committed participants. Often, it becomes a gripe session where managers and senior managers vent on how things didn't go as planned and how fewer stories than planned were completed. The list of "what didn't go well" is long compared with "what went well". And sometimes it's a mere formality to check off this item in the Scrum guidelines, with little or no actionable goals and improvements.

Even when the team has put in significant effort, the Sprint Retrospective meeting may indicate inadequate performance, and fewer completed stories than planned. Developers may blame this on bug backlog, customer issues, and other unplanned effort, reducing the time available for new stories. At times, the stories are not well-defined resulting in re-work and more meetings to clarify the specs. There is a cascading effect on the quality assurance team, which gets multiple low-quality builds to test. These complaints fall on deaf years as senior management and the customer are largely focused on the end results. The blame game can have an adverse effect on a team's morale. After all, it's only natural to feel bitter and resentful when three to four weeks of hard work are undervalued and/or considered to be inadequate.

The findings

Sapience data analysis of the activities in each Sprint can identify the root cause and provide continuous inspection and improvement to help achieve more productivity and completed stories in your teams' Sprints.

- Correlating 'work' time with Sprint achievements
- Root cause analysis of a poor Sprint based on time on various activities
- Reviewing estimates and fine tuning them
- Setting actionable commitments for future Sprints
- Continuous inspection and improvement

The solution

With factual data, you obtain valuable insights in assessing the true reality and underlying factors behind why user stories are not being completed.

Sapience provides a feature that enables managers to define 'phases' for a project. A phase can be anything, such as 'development' or 'design' in the case of a traditional waterfall model, or the successive Sprints in the case of Scrum. Each phase has a start and an end date, which, in this the example, will correspond to the Sprint start/end dates:

Phase	Start	End
Sprint 1	July 1	July 22
Sprint 2	July 28	Aug 17
Sprint 3	Aug 25	Sept 7
Sprint 4	Sept 15	Oct 5

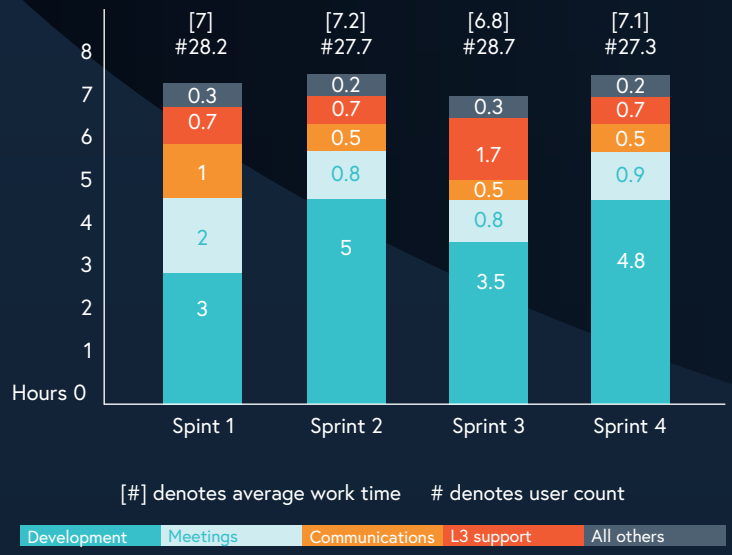
Sapience trends related to work effort break-down across purposes and activities can then be viewed in terms of phases. The Purpose tab will show the team's daily average work time (on-PC and off-PC in meetings, etc.) on the project and any other company work for each of the Sprints. The Activity tab will show the break-down across key activities in each of the Sprints. During the Sprint Retrospective meeting, these insights can be valuable in assessing the true reality and underlying factors behind why user stories are not being completed.

The phase-wise analysis in Sapience is retrospective, though you can also compare the trend for a partial Sprint.

The example

The chart below shows the activity break-down trends for four successive Sprints. The overall work time is reasonable – approximately seven hours per person per day). However, in some Sprints, their stories aren't completed. An analysis of the activities in each Sprint can identify the root cause.

Phase-wise analysis of dev team



SPRINT 1 – TOO MUCH TIME ON COMMUNICATION AND MEETINGS

In this Sprint, though an average of seven hours was spent on work each day by the team, the time spent on development was only three hours, compared to two hours in meetings and one hour spent on communication (emails and chats). This may have been because it was the first Sprint, and the team took a lot of time to understand the requirements and discuss the specifications and design in detail, which led to stories remaining incomplete. This underscores the importance of being conservative when planning the stories in the initial stage.

SPRINT 2 – REASONABLE EFFORT, YET STORIES NOT COMPLETE

Learning from the first Sprint, the team appears to have spent much more time on development. Time spent in meetings and communications was modest. Despite good quality of effort, a few stories were not finished. This could be that the estimates for completing the stories were inaccurate. Since the team is new and still learning, the complexity of the stories may not have been gauged properly.

SPRINT 3 – REWORK/SUPPORT TIME FOR PREVIOUS FEATURES HAD AN IMPACT

In this Sprint, the development time again dropped. While time in meetings and communications was not excessive, there is more effort (1.7 hours logged) on Level 3 (L3) support by the developers. It may also be that the team spent some time on correcting certain features from the previous Sprint since by now they have a better understanding of the final objectives. The latter can be confirmed by cross referencing data from the defect tracking tool (how many carry-forward defects and feature change requests from the previous Sprints were resolved). Consequently, the time spent on development of the new stories remained low, and a few were not completed.

SPRINT 4 – HIGH QUALITY OF EFFORT ENSURED GOOD RESULTS

In the fourth Sprint, everything seems to have come together well. Time in development, communication, meetings and Level 3 support was modest and reasonable. This resulted in all the stories scheduled for the Sprint getting completed.

Typically, as the team gets more experienced, it starts accomplishing its goals for the Sprint. This may be despite inefficient time allocation or reduced average work time. Without the work activity visibility enabled by Sapience, the team may never realize this. With Sapience, leaders can see opportunities for improvement so that even your best team is capable of scaling to higher performance levels. Team members will realize the capacity to accomplish more. Collectively, goals can be set for improved Sprint velocity.

Sapience analysis fits very well in the tenets of Sprint Retrospectives. It focusses on the team and not the individual, which is very important while conducting a Retrospective. Teams and individuals can assess where they went wrong – perhaps in the amount of work effort itself, or the time spent on core activities such as development and testing. They can set a specific goal, such as average x hours on work, and at least y hours on development and testing in the implementation phase. This is a clearly measurable goal that everyone can aspire to meet.

About Sapience Vue

Sapience Vue is our automated Enterprise Work Activity Analytics, Insights and Productivity product that accurately captures effort data in a contactless manner and provides actionable insights for fact-based decision making by keeping employee privacy at its core. Sapience Vue is a SaaS based product built from the ground up with latest technology stack and best-in-class security.

The Sapience Vue product measures and analyzes work activity, effort and time productivity. It focuses on improving the revenue, profitability, and overall delivery capabilities of organizations. It is a truly domain and function agnostic product that is delivering value to +90 clients in 18 countries and with over 1 trillion work hours analyzed to date.

With our actionable insights, self-reporting, and predictive analytics, you can build your new Way of Working (WoW) by streamlining:

- Remote working
- Workforce productivity and analytics
- Outsourcing governance
- IT software management and
- End-user experience management
- Sales Workforce Productivity

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