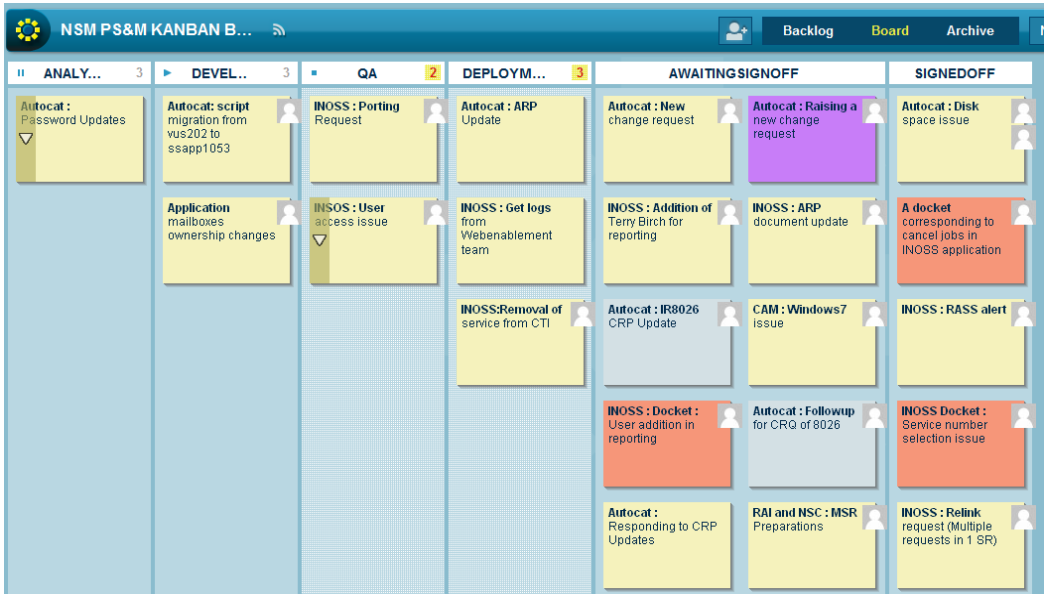
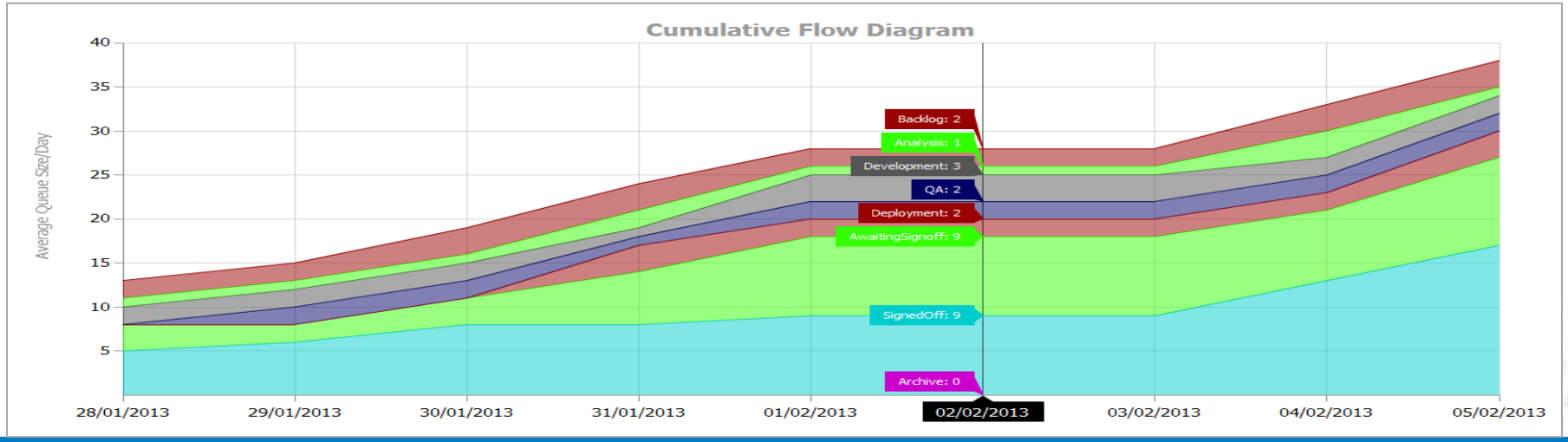
Practicing Kanban & Lean With PS&M teams

- PS&M Teams have dynamic workflow and constantly changing priorities
- Kanban is lean agile approach to visualize workflow and remove any lags between workflow stages.
- Started execution of Kanban using physical (Kanban) wall and later on moved to Leankit Kanban tool.
- Measuring lead time and plotting Cumulative Flow diagram (CFD) to Analyze the Workflow bottlenecks for smooth flow of work items is in progress

NSM PS&M Kanban Board



NSM PS&M Cumulative Flow Diagram (CFD)



FSDC I Project– Kanban execution using Lean Tool Leankit

Overview

- FSDC1 portfolio has a total of 10 applications (including 2 business critical applications).
- Production Support and Maintenance (PS&M) activities form a key area in FSDC1 portfolio with major focus on incident resolution and responding to service requests as well as infrastructure events.
- iTAM tool is used for monitoring the time invested in response and resolution of dockets logged using iTAM.
- Additionally, for all of the 10 applications the team also handles various requests (that are not requested via iTAM tool) by Level2 and end users

Challenges faced

- **Change:** Kanban brought about a complete change in the team's approach towards tracking the activities. To adapt to this change was a challenge faced by the team initially
- **Disruption:** There was a disruption in between corresponding to the lack of usage of the tool, especially from the perspective of reporting requirements.
- **Training/Coaching:** The members of the team required to be trained on various aspects of tool. A particular challenge being training oneself to regularly use the tool.

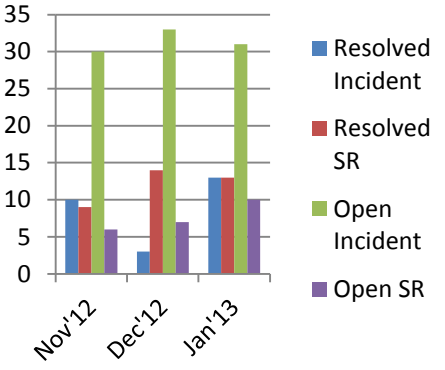
Learning

- Leankit tool has been used to implement KANBAN into the existing PSnM process framework
- WIP limit was breached on around 8-9 occasions earlier, but later when team got more experienced gradually, WIP limit was stabilized for all the work flow stages
- Minimizing conflicts in picking tasks by immediately prioritizing the activities as and when they come for action.

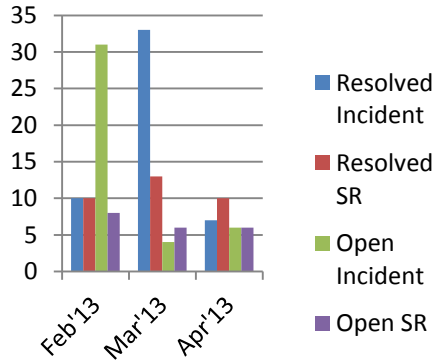
Benefits Delivered

Certain improvements were observed by utilizing the KANBAN methodology, primarily because of;

- Engaging people more closely with assignments through the tool
- Monitoring of tasks within the team with assistance of tool, which also increased visibility of work within team.
- It is clearly seen from the trend chart, **~47% improvement** (Considering the average percentage improvement of open dockets in the stated period) in Efficiency/Productivity as far as docket resolution activity is concerned



Before Kanban



After Kanban

STS Team – Experiencing Kanban and Lean Principles

Overview

- STS is PSnM project that has main focus on incident resolution and attending service requests.
- iTAM tool is used for monitoring the time invested in response and resolution of tickets logged using iTAM.
- Additionally, the team takes care of infrastructure issues and test support to other hosts in end-to-end testing that are not requested via iTAM tool

Execution challenges

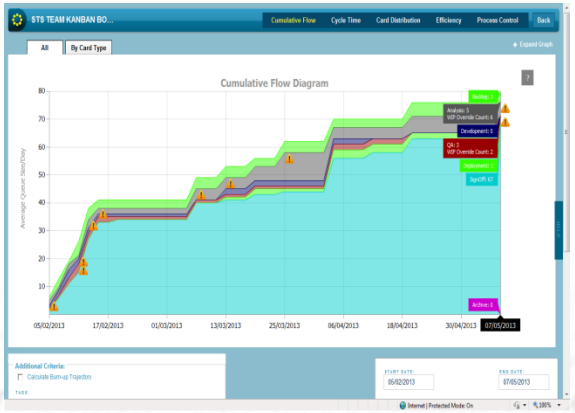
- All the requests are not logged via iTAM , some come via email or phone call . The time invested in such request was not tracked.
- If the resource was blocked for any request over substantial period , a lapse in response was induced
- Effort spent on minor test support request was also not tracked separately

Benefits Delivered

- Effort invested in every non-iTAM request can now be tracked.
- If the resource is stuck/blocked on any issue, regular follow-ups are taken since it comes up in daily stand-ups.
- Small requests for test support can be tracked and reported in milestones reports.

Delivery highlights

- Using Kanban to visualize the workflow, limit WIP and measure the lead time.
- CFD-Cumulative Flow diagram came in handy for taking stalk of LC stage for each of the tickets at hand.
- Planning became easier by limiting work in progress depending upon the limited number of work items per LC stage.
- Efforts spent on adhoc service requests(via email from client/Onsite) for which efforts were spent, could be accounted because of KANBAN wall.
- Daily stand-up helped in regular follow-up with the stakeholders on blocked issues.
- Tool helps to capture and analyze the dynamic issues faced by the team.
- Initially physical KANBAN wall was used and later we switched to the Lean kit Kanban Tool



NSA Netcool Project for Large Telco – Kanban execution

Team Overview

- NSA Netcool is part of Networks/F2R portfolio and has has a total of 10 applications (including 5 business critical applications).
- Production Support and Maintenance (PS&M) activities form a key area in Netcool portfolio with major focus on incident resolution and responding to service requests as well as infrastructure events.
- There has been a spike in adhoc requests and with dynamics , which has resulted in activities which are tracked outside iTAM, but of higher priority to direct and indirect stakeholders.

Challenges faced& addressed

- **Change:** KanBan brought about a complete change in the team's approach towards tracking the activities. It was started from onshore team , extending to offshore team. To adapt to this change was a challenge faced by the team initially
- **Adoption and optimization :** The plain board is difficult to be synced up across location. A simple innovative practice was put in place by developing a Virtual KanBan using Microsoft OneNote.

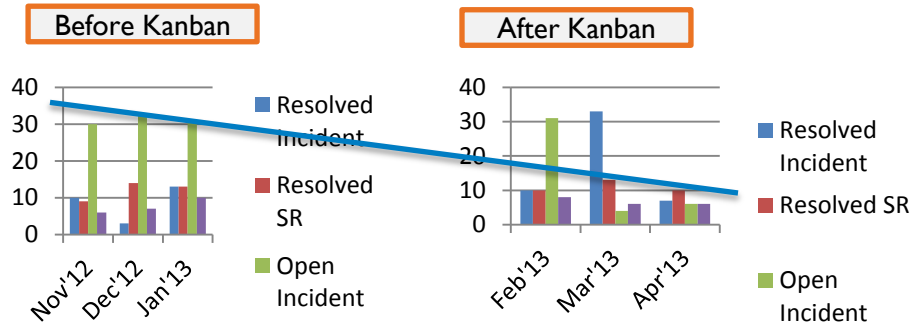
Learning

- KanBan practices are implemented to streamline the adhoc tasks and prioritize these items.
- With people across onshore and offshore , the KanBan (with Virtual online KanBan) provide better visual view across locations on key items.
- KanBan is applied to track items which are not historically tracked in iTAM.
- Provides a better streamlining and task item sharing between the team.
- Transparency with customer has helped in ensuring correct priority and focus on items.
- Minimizing conflicts in picking tasks by immediately prioritizing the activities as and when they come for action.

Benefits Delivered

Certain improvements were observed by utilizing the KANBAN methodology, primarily because of;

- Engaging people more closely with assignments through the tool
- Monitoring of tasks within the team with assistance of tool, which also increased visibility of work within team.



The Network Service Assurance team conducted a day at Client Global Operations Centre at Clayton.

Team worked closely with the operations (NAO team) to discuss, understand and appreciate the key operational focus area.

This visit included the client's application managers and Infosys development and support team. Follow up visits are planned and improvement areas are taken for further discussions and analysis. The visits enable team to adapt better to the agile nature of work and help them in appropriately prioritizing the activities. The end users also get a forum to talk directly to the support engineers and enable better synergy between the groups.

DevOps with Kanban

Overview

Client online applications operations team offers round the clock bug fix services. Ops team adopted lean Agile methodology Kanban for responding to changes faster and optimize end to end workflow for each work item. Team started with traditional Ops activities , prioritized them and later on expanded to take up non-support work.

PS&M team of 10+ works on 4 application in close collaboration with application replatforming Dev team and is distributed at onsite and offshore.

Need for DevOps

- **Urgency in releasing changes** to production
- **Utilise lean time in Operations team** for New Development activities.
- **Trade low priority operations activities** with high priority business initiative activities.
- **Provide complete transparency** on the activities done by operations team.

Delivery Highlights

- **Brought Agile Practices into Operations team** by working on activities with high priority and most business value first.
- **Increased Customer Collaboration** through clear prioritisation and regular communication, weekly dashboard updates shared.
- **Provide best value** by combining Operations and Development activities into single stream of work which can be prioritized. Mingle ALM tool is used for this.
- Ops team started using **Kanban** for adopting and leveraging lean Agile principles
- **E2E CI, test automations, deployment automations**, OPS team are now leveraging the CI test cases

Benefits Delivered

- **~ $ 58K AUD cumulative savings** achieved
- **Utilization of operation SME's** in BI's resulting in increased delivery excellence

- **Enabled customer to prioritise activities** based on need, resulting in **increased business satisfaction**
- **Reduction in overhead** of handover between Dev and Ops team as the OPS team are already across the development changes
- **Reduced post production defects** by leveraging Ops team RCA.
- **Reduced effort** in post verification test activities due to CI and automation.