# Capability Maturity Model Integration with ITIL :

We decided to use CMMI Service Version 1.3 to identify the processes that requires improvements. Then the chosen processes are improved using ITIL methodology.

## Capability Maturity Levels:

0 = Incomplete

1 = Performed

2 = Managed

3 = Defined

4 = Quantitatively Managed

5 = Optimized

## Project Management

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Process area** | **Process goals** | **Current process** | **Improved process** | **Capability Maturity levels** |
| Project Planning | To achieve a HBH plan that utilized all resources well and timings are well planned. | 1. Each member fills in their own task before project manager cross check and finalized with final changes | 1. IT Operations & Support manager will plan out task based on team roles and availability 2. Consult team members on schedule before finalizing 3. Process good ideas and change readily | 5 |
| Project deployment and updates | To achieve a smooth project deployment/updates in the one run without delays. | 1. Each member do their parts remotely 2. Contact each other over telegram when task is completed | 1. Meet up in a room to do the deployment together 2. Problems can be quickly rectified when it arises. | 5 |
| Project Monitoring and Control | 1. To achieve below 1 breakdown per month 2. To response to changes within 3 hours | 1. Ensure alarm is used to restart server when server is down | 1. Ensure one person is looking after server at all times 2. Multiple alarms is used to restart server when server is down 3. Team members are notified when restart alarm is triggered. | 4 |
| Risk Management | To manage risk and problem situations to minimal | 1. Identify possible risks that each team members will face 2. Discuss between team after individual research to come up with the best way to manage all risk | 1. Discuss between team after individual research to come up with the best way to manage all risks 2. Consult and inform CTO and ensure risk management plan is appropriate weekly. | 4 |

## Support

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Process area** | **Process goals** | **Current process** | **Improved process** | **Capability Maturity levels** |
| Configuration Management | To ensure maximum performance and meeting all business requirements | 1. Test on servers to see performance 2. Ensure that documentations are well-documented and kept properly | 1. Test on test server before full deployment on server 2. Documents must be vetted by Quality Assurance, Support and IT Operations Managers before submission 3. Quality Assurance will push documentations to Github once submitted. | 5 |
| Process and Product Quality Assurance | To ensure deployment pass all test cases and meet all business requirements | 1. Run test once to ensure all test cases pass 2. Contact development team to work on problem if test cases are not met. | 1. Run test case multiple times on multiple machines to ensure top reliability and quality 2. Work together with development team to work on problem if test cases are not met. | 5 |
| Measurement and Analysis Causal Analysis and Resolution | To complete report in 2 days after data is collected. | Business analyst will analyse data and come out with a report | 1. Business analyst will analyst data and come out with a report 2. Finalize by discussing with entire team to get multiple perspective of the problems | 5 |
| Decision Analysis and Resolution | To achieve critical decisions within a 2 days period. | Business analyst, IT Operation manager and support manager will come up with a decision after meetings | Business analyst, IT Operation manager and support manager will consult entire team before coming up with a decision | 5 |

## Change

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Process area** | **Process goals** | **Current process** | **Improved process** | **Capability Maturity levels** |
| Team Training | To ensure smooth transition by ensuring that the team are all notified and efficient at using new features or changes | 1. A change log and guide is given on request. 2. If a user requires more guidance, he is to find tier 1 support for help. | 1. Training sessions to educate all relevant stakeholders about the new features can be organized 2. A change log and guide is given on request. 3. If a user requires more guidance, he is to find tier 1 support for help. | 5 |
| Process and Product Quality Assurance | To ensure deployment pass all test cases and meet all business requirements after change | 1. Run test once to ensure all test cases pass 2. Contact development team to work on problem if test cases are not met. | 1. Run test case multiple times on multiple machines to ensure top reliability and quality 2. Work together with development team to work on problem if test cases are not met. 3. Roll back if necessary | 5 |
| Service system transition | To ensure during change no business requirements are affected | 1. All team members will come together to discuss what are the business requirements that might be affected by the updates. 2. QA is to check and ensure all working after update. | 1. All team members will come together to discuss what are the business requirements that might be affected by the updates. 2. QA is to check and ensure all working after update. 3. IT Operations Manager will verify once QA is done. | 5 |

## Disaster

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Process area** | **Process goals** | **Current process** | **Improved process** | **Capability Maturity levels** |
| Service Continuity | To ensure return to peak performance as soon as possible once disaster strikes. | 1. Notify all team members 2. IT Operations manager will contact COO. 3. Tier 3 will work on issue. | 1. Notify all team members 2. IT Operations manager will contact COO. 3. Tier 3 will work on issue. 4. Tier 1 will communicate reason of disaster to users as well as internal stakeholders. | 5 |
| Risk Management | To all risk are well managed and changes of disasters are reduced to the minimum tolerance level. | 1. Team discusses and come up with all possible risks monthly. 2. Each risk is then either avoided, mitigated using strategies or removed. | 1. Team discusses and come up with all possible risks weekly or when a member discovers a new risk. 2. Each risk is then either avoided, mitigated using strategies or removed. | 5 |
| Incident Resolution and Prevention | To complete report and come up with prevention plans in 2 days after data is collected. | 1. Business analyst will analyse data and come out with a report | 1. Business analyst will analyst data and come out with a report 2. Finalize by discussing with entire team to get multiple perspective of the problems . 3. Report is then finalized and submitted to COO. IT Operation Manager and support Manager. | 5 |
| Decision Analysis and Resolution | To achieve critical decisions to fix disaster in 1 day | 1. Business analyst, IT Operation manager and support manager will come up with a decision after meetings. | 1. Business analyst, IT Operation manager and support manager will consult entire team before coming up with a decision . | 5 |