**Value stream Mapping**

5Ss

         Speed –

o   Agility(Not quantifiable in contain apps, it is for places where apps are being continuously deployed)

o   Ops Productivity

  Day 2

  Upgrades (OS, Software)

         Security

         Patching

  Ops Pipeline

  ISSRs go away

o   Dev Productivity

  Time to deploy

  Time to test

  Quality of application/ Quality of work(rework)

         Stability

o   Planned Downtime

o   Unplanned Downtime(How long does it take to bring it up) - MTTR(Mean time to recover) – Dollar cost per minute lost when application is down (S/w or h/w)

o   Incident Response

o   Service Response

         Scalability

o   Time to scale

o   People to scale

o   Scale to zero (over provisioning stuff)

         Security

o   Frequency of upgrades(hard to quantify, but can be articulated to be done)

o   Advanced / Persistence / Threats

o   3R

  Rotate

  Repave

  Repair

         Savings(Catch All Bucket) – Involves Third party tools , Middleware OS

o   Using third party tools

o   Aggregated logging – this logs can be put in tools like splunk for extra analysis

o   OS- Linux/windows

o   Middleware

Lead Time: Time between end of last process to the next process to start

PT(processing time) : amount of time spent on keyboard while LT in progress

% C/A(Completed)

**Value Stream Mapping after Development**

|  |  |  |  |
| --- | --- | --- | --- |
| **Check-in Build and Deploy in DEV** | Project Build to DEV    LT: 5min    PT: 5 min    %C/A: 95% | Project Deploy to DEV    LT: 5min    PT: 5 min    %C/A: 95% |  |
| **Validate** | Test Case Maintenance    LT: 2 Days    PT:1Day    %CA: 99% | Smoke Test(Anthill Pro)    LT: 10m    PT:10m    %CA: 100% | UTC(Automated)- on Laptop    LT: 10m    PT: 10m    %CA: 98% |
|  | Manual User Test    LT: 10m    PT: 10m    %CA: 98% |  |  |
| **Deploy to QA** | Open Ticket to deploy to QA  Submit Ticket  Kicks of Anthill Pro for QA    LT: 15m    PT: 5m    %CA: 95% |  |  |
| **QA Testing** | QA Testing –QA1    LT: 1week    PT: 2-3 days    %CA: 60%  Email Sign Off | Deploy to QA2 –UAT    LT: 1 Week    PT: 1 day    %CA: 99% | Regression Testing    LT: 2-3 days    PT: 2-3 days    %CA: 95% |
|  | Repeat QA2 Process    LT: 1 week    PT: 1 week    %CA: 99% |  |  |
| **PROD** | Release Players  Web hosting team, App owner, User, Dev | Pre Release    LT: 5 days    PT: 2hours    %CA: 100% | Release    LT: 1Day    PT: 3hours    %CA: 100% |

**Application Information**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | ASA | AC | CRSG | VSA |  |
| # of Environments | 3  D QA P | 4  D QA1 QA2 P | 3  D QA P | 3  D  QA  P |  |
| # of Machines | 1   1   2 | 1     2      2    2 | 1   2   2 | 1    2    2 |  |
| # of instances | 1    1  3 | 2     4      4    4 | 2   4   4 | 2    4    4 |  |
| Releases Per Year | 1 | 6 | 3 | 3 |  |
| Middle ware upgrades | 1-2 | ?? | ?? | ?? |  |
| OS Upgrades | ?? | ?? | ?? | ?? |  |

|  |
| --- |
| **Lever** |
| **Savings** |
| - Operational Efficiency (all) |
| - Infrastructure - Consumption efficiency, environment (This will need to be modeled beyond PoV) |
| - Currency - Patching and Updates (Platform Managed) |
| - Execute patch/update on different components |
| - Reduction of captive multiple lower environments (VM’s, time, storage, management) |
| - Show decommission / reinstantiation of environment(s) |
| - Software Licenses (middleware/app servers/db) |
| - Replace licensed app server/middleware/db with PCF based offering |
| - Extending the useful life of The Hartford assets (potentially applies to replace/retire) |
| - Showcase move of code in lieu of environment/asset replacement |
| **Scalability** |
| - Show scaling of multi-instances of app/service (lead time, people involved, execution) |
| **Stability** |
| - App minimally refactored running on PCF |
| - App/Service automated recovery |
| **Security** |
| - Representative patch of security vulnerability |
| **Speed** |
| - Show agility in ease of production deployment |
| - CF |