# ITIL at Celanese

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## Executive Summary

*This report contains a basic reflection of Celanese's current IT operations inside the business. Throughout the report it will highlight key faults in the current IT operations and a standard analysis of a new tool and the current operations at Celanese. Along with that there are suggestions and recommendations to get a new IT service management tool to improve the IT operations so that it can run efficiently in all areas of IT. It also includes advice to the CIO of Celanese regarding their current ITSM state and how to improve the companies ITIL as a whole. The main things that Celanese need to improve on and focus on are change management, problem management, release management and configuration management.*

## 1. Introduction

At the current moment at Celanese the ITIL set in place is not doing its job correctly or efficiently. Back in 2007 Hawlett Parkard commented that he thought that Celanese's IT operations were below average and that their process were at level 2 on his 5-point process maturity model. The suggested recommendations for improvement included specific ITIL processes such as the Service-Level Management, Problem, Change, Configuration management and release. Celanese Corporation was one of the world's largest producers' intermediate chemicals used in nearly all major industries. Due to lack of resources and IT management, Celanese was faced with a lack of cost transparency in 2001 where the IT was estimated to spend a total of 64 million but ended up spending twice that and was only limited to common contracts with SAP and Microsoft and the network. During the assessment of Celanese IT service management Hawlett Parkard that their current lack of process integration and standardization were poor and he also explained that Celanese's overall ITIL maturity rating was 2 on most processes. Celanese achieved an IT service management score of 45.6% which is low in comparison to the other companies Parkard had assessed. Along with that the service level, problem, change, release, configuration and availability management were found weak. The only strong point was that the financial, security and supplier management were well developed. As part of the efforts Celanese took regarding their organizations infrastructure they globally implemented a single instance ERP system. A single-instance ERP system is a strategy where a company creates a single system that a business can use for multiple planning and management systems instead of all the systems being separate. Doing this enabled Celanese achieve a 3-day close in the transaction system and another 2-day close in the consolidation system. Due to the single system eliminating resources and duplication the IT organization had cut its costs in 2005.

# 2. Analysis

## 2.1 ITSM Tool

An IT service management's (ITSM) purpose is to manage IT services to its full potential easily and efficiently. It reduces stress and redundancy for businesses to run efficiently and have good customer satisfaction. The ITSM tool selected and recommended is Freshservice by Freshdesk.

## 2.2 Tools features

Some of the features that Freshservice offers include availability, change, configuration, contract, incident, problem and release management. All done in the cloud for easy accessibility.

Freshservice has many features when it comes to ticketing. Some of these include:

- You can manage what tickets specific agents (workers) can view and set the agents into groups for more organizational benefit.
    - This can be used to assign different groups of people to different sections and restrict certain workers from different types of tickets.
- Bulk actions where the user can send everyone who submitted a ticket a message or information. This also works for tickets that are already grouped.
    - Saves time and is efficient.
- Easy way to reply to tickets with a simple interface.
- Ticket Properties – When an agent receives a ticket there are several things the ticket properties can be used for, some of these include:
    - Priority – Set a priority to how important the ticket is.
    - Status – The current status of the ticket.
    - Source – The location from where the ticket is located.
    - Type – What type of ticket it is eg, Incident Report, Service Report.
    - Group – What group of workers the ticket will be assigned to fix the current problem or assist in it.
    - Assigned to – This is where the agent can assign specific workers inside the group to fulfill the ticket request.
- Assigning specific agents to individual tickets and also put a due date along with it

The service desk type of Freshservice is counted as a Service Desk which is  where they receive and resolve incident reports, service requests and requests for information. Service Desk's cover any tickets until sucessful resolution such as service or incident tickets.

## *2.3 Service level agreement*

This agreement is made between Freshservice and Celanese.

The agreement covers the provision and support of the Freshservice service which helps better the organizations ITIL framework at Celanese.

This agreement remains valid for 12 months from (date) to (date). The agreement will be reviewed every year.

Signatories:

Name........................................ Position........................................ Date........................................

Name........................................ Position........................................ Date........................................

**Service Description**

Freshservice consists of many ways to improve ITSM at Celanese. There are many management processes that can be done using Freshservice such as;

- Availability Management
- Change Management
- Configuration Management
- Contract Management
- Incident Management
- Problem Management
- Release Management

All these will help Celanese's current situation which is currently at level 2 according to the HP assessment. This service will help specific ITIL processes including service level management, change management, configuration management, release management and service asset which are the main problems that were identified at Celanese.

**Scope of the agreement**

The agreement covers:

- Service Hours
- Functionality
- Service availability
- Reliability
- Service performance
- Service continuity
- Security
- Customer support
- Contact points and escalation
- Responsibilities
- Service reporting and reviewing
- Amendment sheet

## Service Hours

Service hours are from 8am to 5pm from Monday to Friday. There are also services available for the customers on Saturday from 10am to 4pm but no services will be conducted on a Sunday. Public holidays the service will be unavailable unless urgent. Specific services which are urgent have to be submitted two days prior and will be completed if necessary on any day including public holidays but excluding Sunday.

## Service availability

The service availability should be frequent due to the organization of staff being high where people don't have to wait constantly for the service they are after. If it is organized properly people on lunch break that are unavailable should always have someone else covering them so that the service is frequent and always there for customers.

## Reliability

The maximum number of services breaks that will be agreed upon during the duration of the agreement will be five per year. During the breaks there will be an update if necessary of the necessary equipment and software. If failures occur during the break they will be fixed during the time of the break as well.

## Service performance

The service performance should be almost instant unless there is a lot of congestion on the line or if a big amount of customers are wanting assistance at the same time with limited amount of workers. This shouldn't be an issue due to the amount of people working at once and should happen very rarely.

## Service continuity

If a disaster occurs during the period of this SLA there will be another SLA ready to fix and resolve the situation as soon as possible.

## Security

The security that Freshservice offer is a simple email and password combination that can include however many letters or numbers that the user provides in the sign up. Freshservice can only go so far when it comes to security due to it being in the cloud. Celanese would have to make sure that all their firewalls are protected and all their computers have antivirus on then so that everything is secure. Along with that the users of the Freshservice accounts would have to be trusted so that they wouldn't give out their account credentials to other people.

## Customer support

Customer support is one of the best things that Freshservice can offer. This include a call period which you can find on the website which is active and available during the business hours when the service is open which are business hours and Saturdays in between 10am to 4pm, more information above in the service hours heading. Another way a user can get support is from the Freshservice website where there are multiple forum and FAQ's located within the website to help users.

## Contact points and escalation

An email and contact numbers will be given out between Freshservice and Celanese as the main contact points. Anything that needs in person discussion would be arranged through those points of contacts between both parties.

**Responsibilities**

Freshservice's responsibilities include keeping their servers and service up to take and online during the business hours. They also should make sure that their website and information in the cloud is safe and secure that so no information gets leaked. Celanese's responsibilities include the correct usage of the Freshservice and that no user login information would be passed around to people who shouldn't contain that information. They also need to know how to use the Freshservice service in order to ticket and do other IT management properties within thee service and cloud.

**Service reporting and reviewing**

Reporting and reviewing will happen once a month and will contain information and statistics gathered from the Freshservice database such as ticketing problems and incident problems.

## 2.4 *High level self-assessment for overall IT service management*

A high level maturity self-assessment is a way to determine how well the IT processes of the current organization are performing. There are five evolutionary levels in a maturity model and as an organization passes through it becomes more IT competent.

The first level of maturity is the least organized and very chaotic. It is when there is evidence that the organization has found the issues that exist but do nothing about them to fix it. In the first level there are no standardized procedures or process management activity. Instead there are approaches that intend to work for case by case situations which cause redundancy in an organization.

The second level of maturity's process or functions follow a regular pattern. They have come to a stage where similar procedures are done by different employees undertaking the same task which is redundant. There is no communication of standard procedures and the training is also informal. Activities related to the function or process are unorganized and directed towards efficiency or process.

The third level of maturity is when the process of function has been recognized. The procedures have been standardized, documented and communicated through training. The procedures are the formalization of existing practices. The process contains a process owner, formal objectives and targets with recourses. It is focused on both effectiveness and efficiency. Activities become less reactive and more proactive.

The fourth level of maturity is that the process or function has been fully recognized and accepted throughout the IT of the organization. It is mostly service focused and has objectives and goals that are the same goals with their business objectives and goals. Procedures are carefully monitored so that nothing out of the ordinary occurs to keep it running effectively. Along with this the functions and processes are constantly improving and also demonstrates good practice.

The fifth and final level of maturity. This is where leading practices are followed and automated. Its where there is a continuous process of improvement which has resulted in a pre-emptive approach. IT is used effectively and is integrated within the business to create and improve quality and effectiveness.

Some of the issues that occurred which resulted Celanese to get an overall rating of level two include:

**Change management**

Change management reached a total score of level 2.5 where it failed. IT passed the pre-requisites of level one which meant that there are at least some change management activities established in the business. Along with the change management activities which were assigned to specific individuals or areas. Along with this the purpose and benefits of change management were disseminated and the responsibilities for various change management activies were assigned. The procedures for initiating change were always adhered to along with the procedure that approved, verified and scheduled changes. Where the assessment failed was question 16 which is how all changes at Celanese didn't go through an agreed change management channel. All changes in the organization was reacted and never proactive.

## ITIL Service Support Self Assessment: Change Management

| | | (Y)es or (N)o | |
|---|---|:---:|:---:|
| | **Level 1: Pre-requisites** | | |
| M | 1. Are at least some change management activities established in the organisation, e.g. logging of change requests, change assessments, change planning, change implementation reviews? | y | 2 |
| | 2. Are change management activities assigned to specific individuals or functional areas? | y | 1 |
| | 3. Is there a procedure for raising and issuing requests for change? | | 0 |
| | Minimum score to achieve this level: "Y" for all mandatory ("M") questions + 1 other answer "Y" | PASS | 3 |
| | **Level 1.5: Management Intent** | | |
| M | 4. Has the purpose and benefits of change management been disseminated within the organisation? | y | 2 |
| | 5. Has the scope of change management activity been established within the organisation? | y | 1 |
| | 6. Does the organisation have standards or other quality criteria for the raising and registering of changes? | | 0 |
| | Minimum score to achieve this level: "Y" for all mandatory ("M") questions + 1 other answer "Y" | PASS | 3 |
| | **Level 2: Process Capability** | | |
| M | 7. Have responsibilities for various change management activities been assigned? | y | 4 |
| M | 8. Are the procedures for initiating change always adhered to? | y | 4 |
| M | 9. Is there a procedure for approving, verifying and scheduling changes? | y | 4 |
| | 10. Are the business and technical impacts of changes always assessed? | n | 0 |
| | 11. Is change progress monitored adequately by Change Management? | y | 1 |
| | 12. Is the successful implementation of a change confirmed by Change Management? | y | 1 |
| | 13. Is there a procedure for the review of all changes? | | 0 |
| | 14. Are adequate change management reports produced? | | 0 |
| | Minimum score to achieve this level: "Y" for all mandatory ("M") questions + 2 other answer "Y" | PASS | 14 |
| | **Level 2.5: Internal Integration** | | |
| M | 15. Are all changes initiated through the agreed change management channels, for example a Change Advisory Board? | y | 3 |
| M | 16. Are changes planned and prioritised, centrally or by common agreement? | n | 0 |
| | 17. Are change records maintained to reflect the progress of changes? | | 0 |
| | 18. Are the reasons for change failure explicitly recorded and evaluated? | | 0 |
| | 19. Are successful changes reviewed against the original business needs? | | 0 |
| | Minimum score to achieve this level: "Y" for all mandatory ("M") questions + 1 other answer "Y" | FAIL | 3 |

**Problem Management**

In problem management the assessment did not pass level 1. There were at least some problem management actives that were made by the organization and they were assigned to specific individuals or areas. Where Celanese failed was due to the organization not having the purpose and benefits of problem management disseminated within the business.

## ITIL Service Support Self Assessment: Problem Management

| | | (Y)es or (N)o | |
|---|---|---|---|
| | **Level 1: Pre-requisites** | | |
| M | **1.** Are at least some problem management activities established in the organisation, e.g. problem determination, problem analysis, problem resolution? | y | 3 |
| | **2.** Are problem management activities assigned to specific individuals or functional areas? | y | 1 |
| | **3.** Is there a procedure by which significant incidents are escalated by incident management? | n | 0 |
| | **4.** Are potential problems formally assessed and identified prior to disruption occurring? | n | 0 |
| | **Minimum score to achieve this level: "Y" for all mandatory ("M") questions + 1 other answer "Y"** | PASS | 4 |
| | **Level 1.5: Management Intent** | | |
| M | **5.** Has the purpose and benefits of problem management been disseminated within the organisation? | n | 0 |
| | **6.** Does the organisation have procedures for the registration of problems and their resolution? | | 0 |
| | **7.** Is there management commitment to support staff allocating sufficient time for structural problem solving activities? | | 0 |
| | **8.** Is the organisation committed to reducing the total number of problems and the number of incidents that interrupt the conduct of business? | | 0 |
| | **9.** Is there management support for problem management staff only accepting support requests from authorised sources? | | 0 |
| | **Minimum score to achieve this level: "Y" for all mandatory ("M") questions + 2 other answers "Y"** | FAIL | 0 |

### Release Management

Release management received a total assessment rating of level 1. There were some release management actives that appeared within the organization along with the change management being established within the organization in the first place. Celanese failed at 1.5 due to the purpose and benefits of release management not being disseminated within the organization.

## ITIL Service Support Self Assessment: Release Management

| | | (Y)es or (N)o | |
|---|---|---|---|
| | **Level 1: Pre-requisites** | | |
| M | **1.** Are at least some release management activities established within the organisation, e.g. procedures for the release and distribution of software? | y | 3 |
| | **2.** Is there a release policy which has been agreed with customers? | n | 0 |
| | **3.** Has change management been established within the organisation? | y | 1 |
| | **4.** Is there an up-to-date inventory of software and hardware configuration items (CIs)? | | 0 |
| | **Minimum score to achieve this level: "Y" for all mandatory ("M") questions + 1 other answer "Y"** | PASS | 4 |
| | **Level 1.5: Management Intent** | | |
| M | **5.** Has the purpose and benefits of release management been disseminated within the organisation? | n | 0 |
| | **6.** Has the scope of release management activity been established within the organisation? | | 0 |
| | **7.** Have sufficient resources and time been made available for building, testing and implementing releases? | | 0 |
| | **Minimum score to achieve this level: "Y" for all mandatory ("M") questions + 1 other answer "Y"** | FAIL | 0 |

**Configuration Management**

Configuration management at Celanese was nonexistent in the case study due to not having enough information on configuration management. There were no signs of configuration management actives established within the Celanese.

| | ITIL Service Support Self Assessment: Configuration Management | | |
|---|---|---|---|
| | | **(Y)es or (N)o** | |
| | **Level 1: Pre-requisites** | | |
| M | **1.** Are at least some configuration management activities established within the organisation, e.g. registering Configuration Items (CIs)? | n | 0 |
| M | **2.** Have you identified some of the CI attributes, e.g. location, current status, service component relationships? | | 0 |
| | **3.** Is there existing configuration data held in hard copy, local spreadsheets or databases? | | 0 |
| | **4.** Is there a high level configuration management plan? | | 0 |
| | **Minimum score to achieve this level: 'Y' for all mandatory ('M') questions + 1 other answer 'Y'** | FAIL | 0 |

# 3 Advice

One of the main problems at Celanese is that the Application and Infrastructure groups had similar processes that were resolved in totally different ways. This is due to the bureaucratic perfection of IT that they have at Celanese and lack of commitment from senior leaders that only focused on short term results instead of long term. Currently the only positives that came from Hawlett Parkards assessment was that the company pe3rformed well on security, financial and supplier management.

The recommendations from Hawlett Parkard is what the companies needs to improve its ITIL, these include:

- Formalize the service-level management process to include a service-level agreement (SLA for every current service.

- Move to a federated or single tool solution.

- Create a standard documentation process.

The current highlighted problems regarding the relatively low maturity level that Hawlett Parkard pointed out were:

- Lack of formal service-level management that ensures alignment to business requirements

- Poor transparency of the product environment which include poor collection, reporting and distribution of information

- Lack of tools which include documentation, ITIL processes and integrated processes such as change and release management

## 3.1 The value of increasing ITIL process maturity

ITIL is a collection of best practices for managing IT operations. It is a comprehensive set of processes that completes goals, task checklists and procedures that supported the work of managing the IT infrastructure. The ITIL Maturity model has been developed to help businesses improve their IT service management within the ITIL framework. There are five levels of maturity levels. From level 0 to level 5. Level 0 being chaos and level 5 being optimized.

The value of increasing ITIL process maturity is that it will benefit the business's IT service management within the ITIL framework. The more optimized it is the better the IT service management in the business functions.

# 4  Conclusion

Overall the IT currently at Celanese is under average at an overall maturity rating of 2. My advice is to relook most aspects in IT service management, more specifically change management, problem management, release management and configuration management. What Celanese needs to do is to integrate ITIL into the business side of things to reduce redundancy and have a more organized organization. Along with this the lack of formal service level management that aligns to business requirements. Most of all these can be fixed by training staff to use ITIL properly and using the appropriate ITSM tool to create a fast efficient and effective way of running the business in the IT section of the organization.

# Reflective Learning Journal

I chose this current tool because I used it in a previous weekly workshop assessment and that I believed it fit the criteria of the assignment. The ITSM software included all the basic management processes which were; availability. Change, configuration, contract, incident, problem and release management.

This topic is hard due to how big and wordy the reading material is. If it was shorter and summarized a bit better the assignment overall would have been easier to understand and work through. I found that it was hard to remember how to do some parts of the assignments and in some parts I had no clue what I was doing until I researched elsewhere. One of the things that really helped me with finding information on what to do was looking back through learning at Griffith to find previous workshops or lectures to help finish the assignment. When making the assignment headings and subheadings it was simple due to how straight forward the assignment sheet was. The only thing that wasn't that clear was the problem which you had to find yourself in the 18 long page document online.

Motivation is hard for me because I currently don't have an interest in IT service management or this course at all. Especially when I can barely take in the information after a lecture or looking over the documents from the workshops. All of it is really complicated and very theory based which is why I am not motivated currently. I feel that ITSM is a difficult topic to learn in such a short amount of time especially when the person isn't motivated due to currently seeing no use of it.

I have learnt how important an ITSM is to a big business to run them efficiently and without fault. ITSM reduces stress and redundancy in a business so that they receive a positive customer satisfaction and stable business. As read in the case study, if there isn't a structured system in a big company things can go wrong which costs quite a bit of money and time for organizations. Along with that when transitioning ITIL into a company, the company must give full concentration and efforts to it so that it is not done wrong or half done.