The student shows how the ITSM tool could implement the ITIL practice and thus support an information security incident.

The student shows how typical day to day incidents are resolved and how the ITSM tool supports this practice.

The student shows how the ITSM tool can link incidents to a common problem.

The practices, methods, technology and policies that Wintec ITS use to secure its information and operate its IT services

Zendesk:

Support

* Includes an incident ticketing software to ensure all customers problems and queries reach the support staff through intuitive connections to most social media platforms.
* Allows tickets to be assigned different priorities depending on the case severity and the need to solve it quickly. Ensuring cases that might pose security threats are solved quickly to reduce and remove the threat.
* Analytic page to notify of potential problems

Guide

* Self service support page allowing support staff to upload step by step processes that resolve common simple problems (Page navigation for settings ie password change)
* Supports the support service by reducing simple task that the user can complete themselves

Talk

* Call centre that supports further incident and problem management
* Works closely with support and guide

Explore

* Analysis the company’s statistic producing graphs and calculations to ensure the company can continue to support and create values from customers.
* Allows the company to ensure they address problems or bottleneck within their system creating value.

ITIL Practices:

Incident/Problem management

* Web page security threats
* Account problems

Monitoring and event management

* Inferstructure, services, business processes, information security
* Monitoring tool

IT asset management

* System life cycle
* Total cost of IT equipment and inferstructure

Information security management

* Prevention, Detection, correction.
* Confidentiality, integrity, availability.

Continual improvement

* Explore (Zendesk page)
* What is the vision?
* Where are we now?
* Where do we want to be?
* How do we get there?
* Take action
* Did we get there?
* Identifying and logging improvement opportunities
* Planning and implementing
* Measuring and evaluating results of the improvement implementation

Knowledge management

* Guide (Zendesk Page)
* Self-Help
* Internal knowledge (Internal ticket notes)
* Continually revised and reviewed

Service level agreement and management

Service desk

* One point of contact with customers
* Zendesk

The Waikato Institute of Technology or Wintec has about 20,000 students from 52 countries and we employ around 840 staff members. The institute currently provides 10 degree courses, 35 diplomas and 12 postgraduate qualifications.

We have three main campuses here in Hamilton: the main city site, Rotorkauri in north of Hamilton and the Hamilton gardens horticultural campus.

Wintec ITS support these staff and students with their IT services such as: Moodle, Wintec website, SharePoint, and PC and network access on campus and a host of other important applications and support.

I will be explaining the ITSM Tool Zendesk and the interconnections with the ITIL practices we follow. This will include how we support staff and students and ensure the security of our information through our information security management practices.

Value

Is the perceived benefits, usefulness and importance of something like a service. ITIL has the Service Value Chain that outlines aspects of consideration when creating value.  
Service quality is taken into consideration as end user and IT provider are the main stakeholders and this will create value, so I will be talking about functions of the ITSM tool that benefit this relationship.

Zendesk is an IT support management tool used to ensure reliable and effective support for the business’s users. Zendesk offers multiple applications for different environments but I will be explaining the four support, guide, talk and explore. These services support Wintec staff and users providing features to reply, organise and distribute information through the company and its branches.

…

Support:

--Include an image of the ticketing page--

This tool allows support staff to communicate with users having problems through support tickets. Zendesk’s support application allows the gathering of reported incidents and requested support from multiple platforms into one easy to manage location. Supporting the stakeholders request for support and identification of common problems

…

--include and image of the ticket priority setting—

When creating or working on a ticket a priority setting can be placed on it ensuring tickets with a high priority like a security threat can be quickly process and resolved. This allows support staff to ensure users with urgent incidents to be resolved quickly. This could also be used to ensure high priority users like teachers currently in a class are supported first

…

--Include image of the graphing page for support--

Support staff can also view and manage completed or unsolved tickets to identify possible problems and frequent incident support requests. This allow the staff to follow a continual improvement practices solving the problem and releasing patches and submitting a self-support post resolving frequent incident requests reducing support load while increasing customer experience and value.

Basic ticket Navigation:  
if an end-user comes back about a previous ticket they submitted a function can be used to seach for the ticket number, end-user name or ticket title to access their previous ticket or you can view their previous interactions with your support team.

Guide:

Guide allows the support staff to create posts presenting their knowledge of common incidents to users allowing then to resolve simple common issues by themselves reducing the quantity of basic tickets while also increasing value and efficiency of their service. Guide supports the ITIL knowledge management practice by allowing staff to share knowledge with users. Guide also includes a built-in answer bot that replies to support emails with relevant articles on the guide database.

Talk:

Talk integrates a call centre service into the support software allowing users to quickly resolve issues. Zendesk also provides call recording to ensure the all information regarding problems are store for use in expanding your knowledge base and insuring information is gather for future incidents or possible problems.

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Talk is also good for security reasons and allow staff to identify users behind the tickets and authorise their access to something like a locked-out account. This prevents unauthorized access to cause a breach in security.

Explore:

Explore provides features for representation of customer service data allowing you to collect, learn from and act on current trends and opportunities. Explore allows you to personalise, sort by and filter how the data is represented to ensure your graphs benefit your decisions. This application supports the continual improvement practice by supplying an easy to read and manageable source of relatable information, so you can make decisions that improve your service to your stakeholders.

Access restrictions can be put in place to restrict the distribution of confidential information to specific groups and people. This will reduce the likely hood of classified or personal information being stolen or viewed by an unauthorised party.

Example:

A user has been locked out of their account and is requesting a password reset.

Support App:

A ticket is posted and received by the support staff.

A response is written and sent back requesting valid authentication for access.

Valid authentication is received, and the password is changed.

If this problem is frequent

Guide App:

Post a step by step process for changing the account password without support staff intervention

Explore App:

Can be used to verify the frequency of these requests.

Information Security Management:

Information security management is the process to protect information needed or used by the organisation to conduct business with users. Risks towards the information poise threats towards its confidentiality, integrity and availability resulting in unauthorised access. Techniques can be put in place to prevent, detect or correct these breaches without compromising the workflow needed to continue providing services. A balance is crucial to ensure value from the services are not affected by the security becoming too cumbersome for continual use.

Common types of threats for this environment:  
Phishing (Disguising as the login page for Wintec/Zendesk)  
Social Engineering (Impersonating someone to gain access)  
Malware

These sorts of threats are common Zendesk itself can be protected by 2 factor authentications but using this for general student login wouldn’t be beneficial. Being required to access a separate device like a phone for the login key would become a nuisance considering a students account only has access to viewing their own grades so an information leak wouldn’t be critical, and a generic secure password should be sufficient. Not all account will require the best of security due to this reducing the end-users experience but identifying what information the account has access to will allow you to make an informed decision on the required level of security.

Not all accounts can be completely protected from intrusion so implementing a detection solution will allow you to reduce the time they have access to the account for. Common security detection can include Intrusion Detection Software, traffic monitoring like IP location which is used in Wintec laptops and malicious behaviour monitoring which is normally designed for malware detection.

ITIL Practices

ITIL Practices are used to create value for the company. Providing services at adequate levels and supporting the stakeholders and user needs. I have been talking about continual improvement practices and this is where I will go into more detail.

Continual Improvement

Continual Improvement is a practice to ensure the company's services and practices meet stakeholders' expectations. Zendesk supports this practice through multiple means of analyzing and representation of performance including the explore application which graph statistics that have been gathered from its use.

Incident Management  
Is the correction of unplanned interruption to a service.

As you can see this image represents the steps for incident management and include logging, prioritisation, investigation, communication, resolution, review and closure.

Logging:  
Recording the information that is provided by the end user about an incident that is useful for diagnosing the source.

Prioritisation:  
Reviewing the incident what the it entails and effects to assign a priority that dictates the order for resolving issues

Investigation:  
steps taken to identify probable causes for the incident

Communication:  
the contact had between the end-user and the support staff when resolving the ticket

Resolution:  
Identify the cause of the incident and implementing a change

Review:  
Ensuring all changes made result in the solving of the incident and that no issues persist

Closure:  
Wrapping up the ticket ensuring the end-user is notified and all information is gathered for future incidents or problems

Conclusion

ITIL Practices are tightly support and interconnected with ITSM tools to support the growth of efficient and effective business practices and services. Value is commonly associated with ITIL and Zendesk is a very strong tool capable of supporting multiple practices and increasing value.