2020

Final Report

ITS UWE WEBSITE

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Document Particulars

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Contents

1 - Executive Summary

There are many parts of the website that need correction this is shows within the document, the first thing that I will focus on is the Structure and organisation of the webpages, there are many sections that need to be combined, for example, the "using it at UWE" and "IT resources". The section linked also talks about the problems that occur within the general structure of the website, such as the fact that printing doesn't actually link to its subpage "large printing". Other issues include that the most common searched items are not located on the main page this is reflected by google searches and time spent on pages data.

An Additional part that needs to be fixed is the error in navigation, it is designed in such a way that users have to use different methods of navigation to be able to get through the pages. This needs to be fixed allowing users to be able to use one consistent and logical methodology to navigate.

In regards to features of the page the Hot Topics sections is one of the more problematic areas as only one of the 6 pages it suggests is where the traffic ends up going. This makes this section redundant and even if the links were useful its location is at the bottom of the page meaning people are less likely to see it and use its functionality.

2 - Navigation

2.1 Overview of Navigation

Definitions of Navigation Types:

1. *Global Navigation* – Normally Located in headers and footers they are consistent throughout all pages
2. *Local Navigation* – Sidebars or menus
3. *Contextual Navigation* – Links that are in the main body of the website

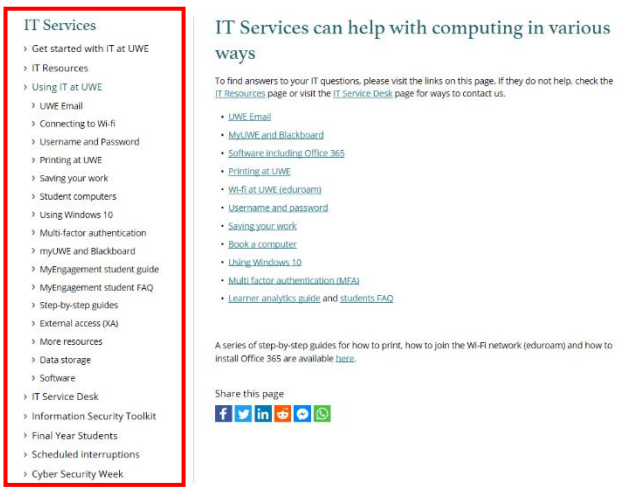
Definitions Sourced From: (Morville, 2007)

The main parts of navigation are the *Global* and *Contextual* navigation, the global sections offers site searches and links to the other UWE main pages as well as, links to other key general UWE information. *Contextual Navigation* is the primary method used particularly on the main page as there is no local navigation. This forces users into trying to use *Contextual Navigation* however as soon as a user lands on the second page they are confronted with a new *Local Navigation* Menu. This creates much confusion as users wont intuitively understand what they should use to navigate through the pages they need, this becomes more apparent when certain pages don't make use of the *Local Navigation* system. Solutions to this are either, the *Contextual Navigation* system needs to be upgraded to be consistent throughout the website making it a fluid and logical experience, or the *Local Navigation* needs to be used throughout the pages and highlight key pages that the user may want to access.

2.2 (Local) Navigation

There is only one example of *Local Navigation* this is located on the subpages that contain the bulk of the information. This section is a side bar that allows users to navigate through the ITS's local pages. The main problem with this section is that it is sometimes the only way of navigating to specific problems. This alongside any *Contextual Navigation* means that labelling is very important. This in turn causes a lot of back tracking.

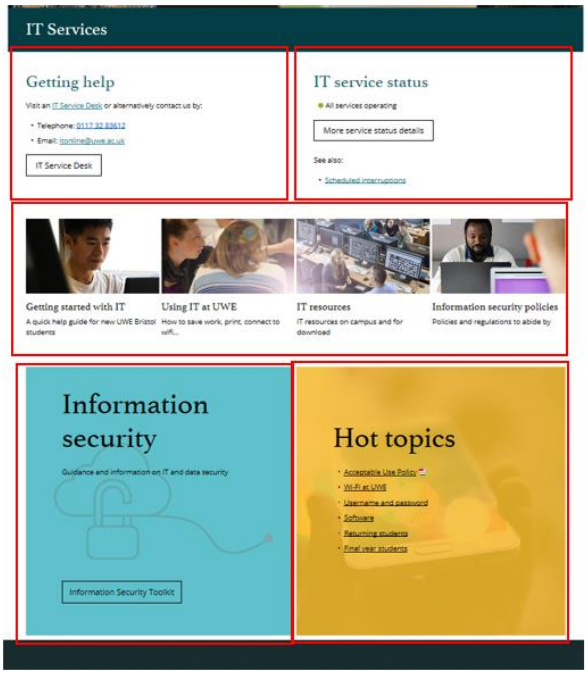
Figure 1 – Local Navigation



2.3 (Contextual) Navigation

There is no use of menus. the main body of this section of the website (Figure 2) and instead sticks to using links on sections of the page this limits the about of links that can be implemented on the main page shown on the side.

Figure 2 - Contextual Navigation



There are only 5 sections to the main page:

- Getting help stores some of the information on the main page and a link to the IT service desk. This section gives Important information on the first page but doesn't offer as much information as it could, such as the information points opening times and locations so that students wouldn't have to know what time to call to be able to get a response.

- IT service status gives a main status warning and a link for more details on the server's status but has a very large section for something that could be presented in a lot smaller and efficient way.

-The third section is links to information sections as talked about below, getting stared with IT and Using it at UWE and IT resources overlap and could be combined into one single page that efficiently redirects uses to their information that they need. The information security policies are offered a very generous section for a very specific destination and could be stored in a menu with other tasks that are needed.

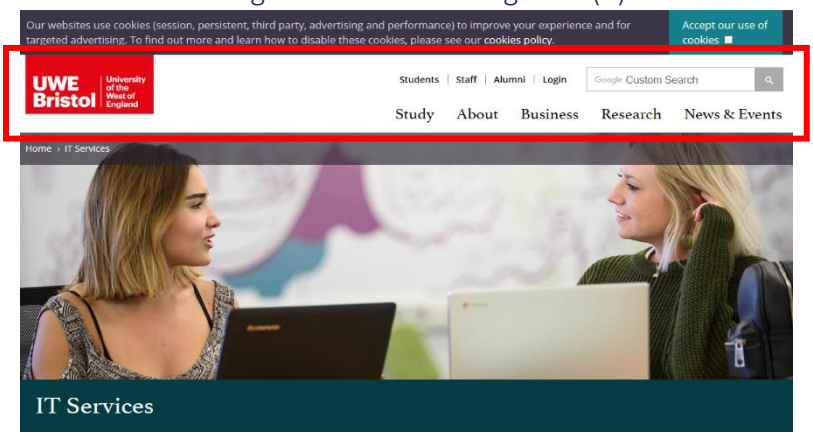
-Information security, this section links people to the information security webpage, but this doesn't have a link to the security week page, even though both have a lot of overlap, both that pages should be combined as discussed in combined internet security.

-Hot topics, this section is meant to highlight the main things that people want to access but it fails to do that as talked about in the section hot topics apart form that this is a large amount of space for only 6 options for hot topics and is located at the bottom of the page meaning people are not likely to click on the links

2.4 (Global) Navigation

There are 4 different sections to the global navigation of the page:

Figure 3 - Global Navigation (1)



- The top section of the page uses google to do a site search as referred in site search section of the document, this also has links to allow people to log in my UWE and other pages on the UWE network .

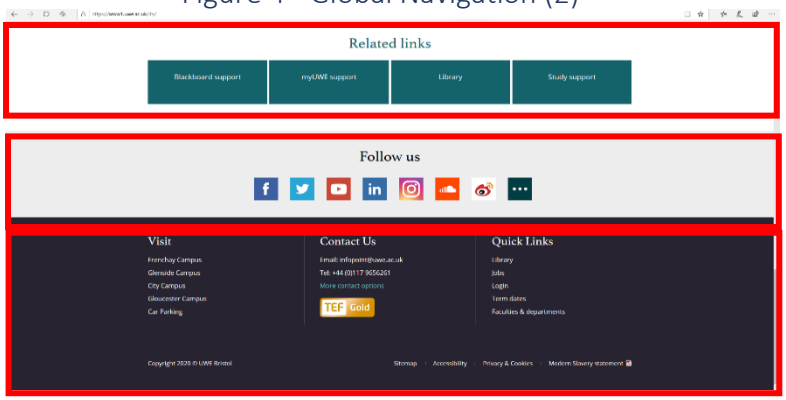
- The upper of the 3 bottom sections is related links this directly links people to pages that are related to this section on the UWE network.

- The follow us section links people to the UWE social media allowing people to find out more information about UWE.

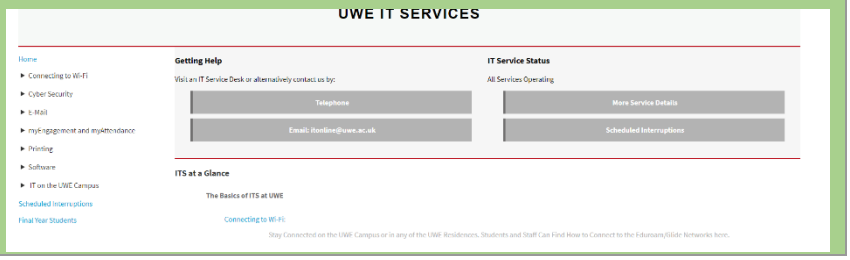
- The bottom section is what I would call a "quick link" section that has key information such as contact details quick links and information about UWE itself.

- Images Sourced from: (University of the West Of England, 2020)

Figure 4 - Global Navigation (2)



2.5 Recommendations

Issue	Solution	Wireframe Implementations
Top bar doesn't have connection to the main pages	Make the global navigation (top menus) have some connection specifically to the its website when the user is on that page.	N/A
Pages lack consistent navigation types	Put local navigation (side menu bar/menu system) on the main page.	Figure 5 – Local navigation implementation 

3 – Searching

3.1 Google Searches

The report (University of the West Of England, 2019) provided data on the most searched terms which are related to the ITS website the searches came from Google and not the internal search engine. In the data provided in the report, the following things were tracked:

1. Impressions: This refers to the number of times that the page was shown on Google Search and hence seen by an individual.
   The report here shows that there was a total of 998,744 impressions.

2. URL Clicks: This refers to the number of clicks which led to the webpage through Google.
3. The report shows that there was a total of 22,608 clicks.
4. URL Click Through Rate: This refers to the percentage of clicks that has been received compared to the number of impressions
   The report shows that there was a total of 2.26%

The five most queries were:

(Figure 6 – Query Table) **Query**	Landing Page	URL Clicks	Impressions	URL CTR
UWE Software	Software Page	947	1,160	81.64%
UWE Printing	Printing Page	890	1,461	60.92%
MyUWE	MyUWE and Blackboard Page	716	103,620	0.69%
UWE Blackboard	UWE Blackboard	577	23,990	2.41%
UWE Wi-Fi	Connecting to Wi-Fi Page	566	678	83.48%

Naturally, the Google results echoed those of the internal searches except for MyUWE and UWE Blackboard and because these are external sites, their low URL CTR can be explained.

3.2 Site Searches

The report provided the most searched terms through the ITS search bar which has been embedded in the site:

(Figure7 – Search Terms Table) **Search Term**	Search Destination Page	Total Unique Searches	% Change
Software	Software Page	141	200%
SPSS	Software Page	126	103.2%
Printing	Printing Page	92	736.4%
Software for Home	Software Page	76	38.2%
Eduroam	Configure Your Device	63	5%

The data indicated that there was a general upwards trend amongst the top twenty most searched terms, meaning that more people have become more likely to use the search bar this year compared to the previous year.

As for the results, it is clear to see that finding the necessary software is a top priority for visitors to the ITS website. In fact, of the twenty most searched terms 40% of these are related to software which the university provides. Yet, while software seems to be listed underneath “hot topics”, it remains in the top searches.

It might be beneficial to see if the site should be re-adapted where the most searched terms are easier to access as opposed to being listed in a placeholder. It should also be investigated if particular phrases such as “IT Resources” – which acts as a heading (link) that holds data on: software, printing, and wi-fi [destination locations for the five most searched terms] could be split into their own separate categories and placed clearly on the home-page, making them easier to access.

Additionally, offering a contextual search option would help students avoid the arduous task of sifting through irrelevant information, and instead ranks search results so the most relevant, current data is shown first. The best search platforms scan all available sources and contexts rapidly increasing the efficiency of the search engine and therefore providing a faster solution for students looking for answers to their problems.

3.3 Recommendations

Issue	Solution
Names of pages are not the same as the terms that are searched	The site should be re-adapted where the most searched terms are easier to access as opposed to being listed in a placeholder. Such as removal of the Page term after each page
The search bar on the website is hugely effective	Offering a contextual search option would help students avoid the arduous task of sifting through irrelevant information, and instead ranks search results so the most relevant, current data is shown first.

4 - Labelling Systems

4.1 Context

In Information Architecture, labelling refers to a form of representation which uses small pieces of text to express much bigger blocks of data on websites. Labels can come in several formats and can also work in different ways, but its main goal is always to communicate information as effectively and efficiently as possible. Essentially, information and meaning should be conveyed without taking up too much space on a website. Good labels should be able to enlighten users about any new concepts while also aiding them in quickly identifying familiar ones.

Most labels which are used through the internet come in the form of Textual Labels which can mostly be seen in one these varieties:

1. Contextual Links:
   These represent labels which are hyperlinks. Such labels either link to chunks of information on other pages or to another location on the same page.
2. Headings:
   These represent labels which simply describe the content which comes after them, much in the same way as print headings do.
3. Navigation System Choices:
   These represent labels which show the options in navigation systems.

4.2 Contextual Link Labels

Naturally, contextual link labels should occur within a body of descriptive text, and this is because such labels greatly rely on the content of the text which surrounds it to provide context, and as such, meaning. If this is not done successfully, then there is a great risk that the label would lose its representational value and any user would be far more likely to experience occasional blunders when clicking links.

4.3 Contextual Link Labels on the ITS Main Page

It is established that the UWE ITS site is one which should be dedicated to giving out information to its users, this makes it even more imperative for any contextual link on this page to be as straightforward and meaningful as possible. The image here shows some of the contextual links labels which can be found on the UWE ITS Main Page.

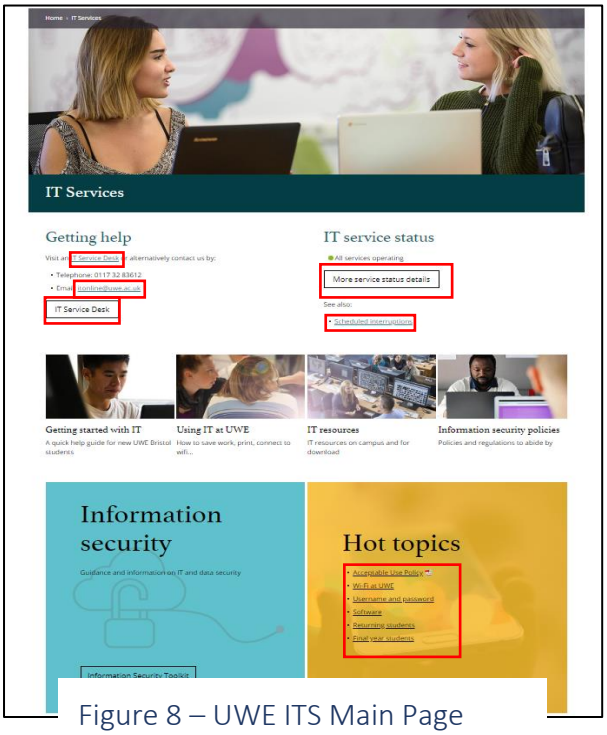


Figure 8 – UWE ITS Main Page

Analysing the first two sections [Getting Help and IT Service Status], we might find that the links do satisfy the criteria of being straightforward and meaningful. This means that even a first-time user of the site would possibly have a vague idea of what lies behind each link without even clicking it. This shows a good use of contextual link label.

However, the section on Getting Help does show that there is a duplicate contextual link label which links to the very same page, as both the IT Service Desk link, which has been displayed as a hyperlink text and the IT Service Desk link, which has been displayed as a bordered link both refer to the same page. While it is not unnatural for there to be two links on the main page that could link to the same content, both of these links are in the same section and it represents a waste of screen-real estate.

On the other hand, the contextual links underneath the Hot Topics label heading are far less straightforward and meaningful. This is largely because they have been placed underneath a broad heading. While there might be no problem with using a broad heading such as Hot Topics, the contextual links must have some explanatory text or risk the user finding problems with the site and this is the case here. One Example is the link for username and password. UWE students naturally hold three usernames [WIFI, E-Mail, myUWE], yet the contextual link label here does not specify which of these it is referring to, though it turns out to be that of myUWE. This means that if the user were looking for the WIFI or E-Mail username and password, they would have to cycle back to the main page and click another link or find the information in the local navigation menu. This might prove to be a rather frustrating experience. On the other hand, if the contextual link had been labelled as "myUWE username and password", then there would be no problems. This same scenario could be applied to all the links there and because of the lack of content surrounding each link, it becomes far more difficult to predict what lies behind each link before clicking. The best solution for such a huge problem would be splitting hot topics down into separate sections with enough text which makes it clear what each link might represent though if hot topics is to be kept, more descriptive text must surround each link.

4.4 Heading Labels

Heading labels are mostly used to emphasize any sort of hierarchy within the body text of a site. These hierarchical relationships – which would show the parent, child, and sibling elements – are mostly expressed visually, in terms of how they are structured within that body. The use of headings labels in sites is very common however many websites do not necessarily use them properly.

4.4.1 Heading Labels on the ITS Main Page

The analysis of the ITS site showed that there are many heading labels which have been used:

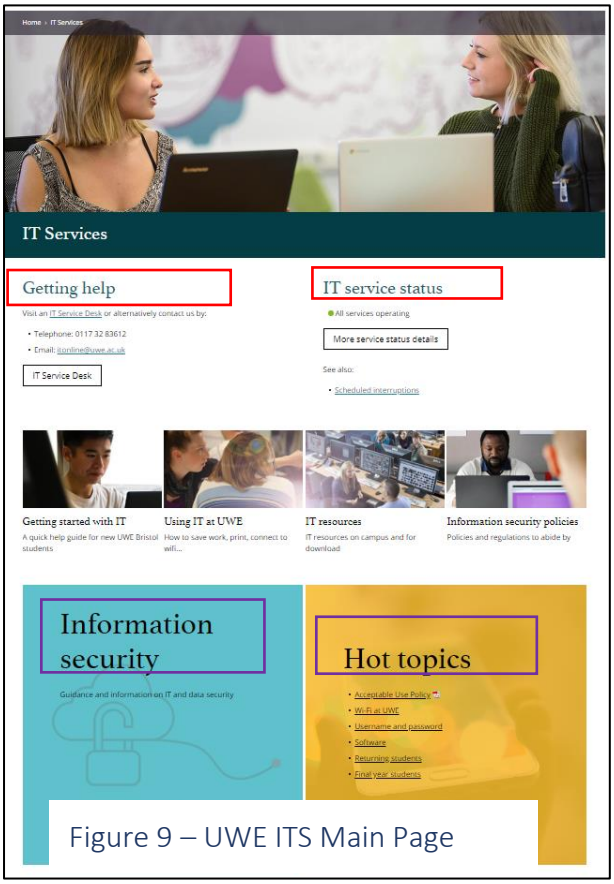


Figure 9 – UWE ITS Main Page

Looking at the ITS main page, we can highlight some of the heading labels which have been used. Generally, when a user opens the ITS site, they might first be drawn to the two main headings:

- Getting Help
- IT Service Status

We can see that there is immediately some consistency in the way both headings have been laid out. They use the same font, in terms of colour and size, and the same capitalization format. This fulfils a main characteristic of good labelling as we find that there is immediately some consistency in the two label types. The user would also then easily be drawn to the body of text underneath [children of the heading]. The labels here use a narrow scope i.e. it is easy for any user of the site, even one who is not technologically-oriented, to limit the possible meanings of what the body of text underneath the heading could possibly mean (even without seeing it). The body of text also use a separate font colour and a smaller font size, indicating that is a child of the heading. In addition to this, there is use of white-space, bulleting and the use of separate styles. All these features aid in creating a sort of visual hierarchy which is easily understandable by the user.

As such, any criticism which could be drawn to the headings would be not criticising the sections individually but when they are placed together. While it would have been the intention to make these headings similar, they lack a key feature of good information architecture labelling which is consistency. While it might be near-impossible to create constant consistency across all sections of the site, labels should be as consistent as possible. Though, in this

case, it is easy to see that consistency has not been chased at all. The first section [Getting Help] has its bullet points right underneath the first paragraph of text before being followed by a bordered link [IT Service Desk]. On the other hand, the second section [IT Service Status] has its bullet points at the bottom of the section while the first paragraph is followed by the bordered link. Fortunately, this could easily be fixed by placing the bordered link [More Service Status Details] at the bottom of the IT Service Status section. The main reason why sites such as this should have good consistency is that it makes the site more predictable to use and such predictable sites are easier to master.

Once again, there are more consistency issues between the two bottom header labels. The section on Information Security does provide a good amount of context about the heading and it does use a smaller font to indicate that the body text is a child of the header text. It also has a clear border link which links to another page. Yet, the main problem is the amount of white-space which has been left in between the body text and the bordered link is far too large – obviously – this was done in a bid to align the text with the other section [Hot Topics] but this has been done in a poor manner and lacks good presentation which is a tenet of Information Architecture Labelling. A better solution might have been to split the two sections into rows instead or apply the format of the two first headings [Getting Help and IT Service Status], to Information Security as it has a similar amount of context and can be presented in that manner much easier.

4.4.2 Heading Labels on the ITS Subpages

Mostly, the ITS subpages do apply good Information Architecture Labelling as the information is mostly laid out in a list-like manner, which allows for good whitespace, different font-styling, and consistent use of indentation. The same type of styles has been applied across most sub-pages and as such shows that there is a healthy amount of consistency in the way the body of text is laid out.

4.5 Labels Within Navigation Systems

Navigation systems are used to traverse through the possible different pages of a site. Because such systems represent the main way of simply cutting through the main pages of a site, consistency in the way which they are laid out pages which use them are key.

4.5.1 Navigation System Labels on the UWE ITS Main Page

The UWE ITS main page mostly focuses on the contextual navigation and has no form of local navigation. This is a clear drawback especially when combined with the heading labels having clear issues. Naturally, this could lead to many first-time users not easily finding the desired information at first try. The UWE ITS site attempts to get around this issue through the use of scope notes – which are the brief descriptions found in the image here:

Figure 10 – Contextual Navigation

However, the main problem is that these scope notes do not have much information for problems that a user might have. For Example, if a user wished to find out information about their UWE-Email there is no obvious place on the main page to go, leaving the user feeling stuck and probably going to another resource [such as Google]. This could also lead to many first-time users clicking on the wrong link. Obviously, the main reason why these scope notes are so vague is due to the lack of screen real-estate which has been administered to them and so an easy work-around could be in using a larger table where one column has the information and another has the heading as opposed to trying to stick all the information in two rows [one for images and the other for text]. However, the best solution would simply be to add a form of local navigation.

4.5.2 Navigation System Labels on the UWE ITS Subpages

The UWE ITS subpages do make use of local navigation in the form of a sidebar and as such this makes traversing the site much easier once the main page has been left. The names of the navigation links are consistent which is indicative of good Information Architecture. This consistency could prove integral in increasing the familiarity of users to the site.

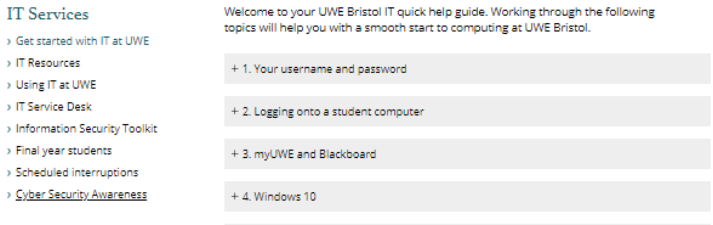
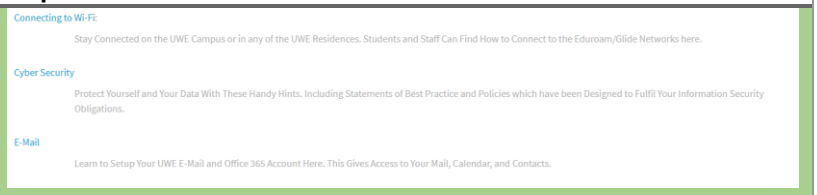
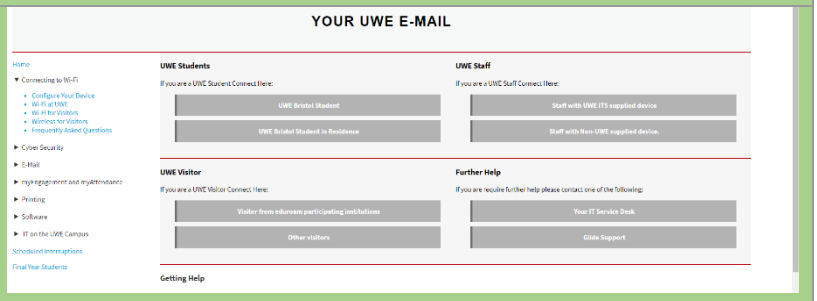
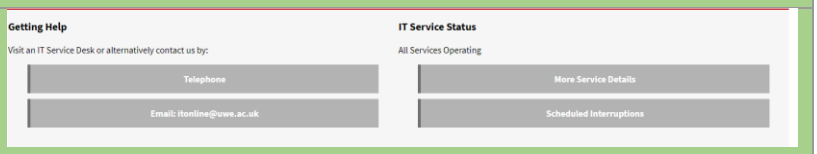


Figure 11– UWE ITS Sub Page

However, this does not leave the system without its criticisms. The first of which is that all navigation label system headings are displayed as though they are drop-down menus when only three of the eight are actually drop-down menus. It could be beneficial to make navigation system links which do not have further sub-pages to have a different style/format from the other links.

Another criticism lies in the way which they headings have been used here. When a link is clicked, the content outside of the sidebar changes and the relevant content is displayed. This happens properly except in the case of cyber security awareness, where a completely new page is loaded and the local-navigation sidebar completely disappears. Once this happens, the only way to get back to the local navigation is through the back button or cycle back to the ITS homepage. This is a serious issue which affects the consistency of the way in which the labels have been used here and has to be rectified in any new solution.

4.6 Recommendations

Issue	Solution	Implemented Wireframe Solutions
Unclear Contextual Links in Hot Topics	Add more descriptive text which add context to contextual links	 Figure 12– Wireframe example of descriptive text
Local Navigation Disappears	Ensure that there is a local navigation sidebar present on any subpage	 Figure 13– Wireframe example of local navigation
Contextual Navigation Headings Not Clear	Add more detail to contextual navigation by adding more space for the description	 Figure 14– Wireframe example of contextual navigation

5 - Structure and Organisation

5.1 Organization schemes

It is important nowadays for a website to categories and label information on that website to prevent users getting lost and not finding what the information they want or just leaving the website entirely. When categorising a website, you will be using schemes. There are many schemes that a website can use, which are (Morville, 2007):

Alphabetical - Information is organised in alphabetical order. For example, all the products on a website are organised in alphabetical order.

Chronological - Information is organised by the date it was created or released. An example would be press releases they would be organised in chronological order of what date they were published.

Geographical - Information is organised by their location. An example would be weather all the information will be organised based on the location.

Topic - Information relating to a topic or a subject will be organised together. An example would be the yellow pages, it is organised by services.

Task - Information relating to a task will be organised together. For example, ecommerce websites are organised by tasks.

Audience - Information relating to that audience will be organised together. An example of this would be the Dell website.

Metaphor - Metaphors are commonly used to help users understand new features or information by relating to something similar.

Hybrids - Hybrids are when multiple schemes are joined together to help to organise information.

Hierarchy Top Down Approach - Information can be organised by hierarchy. Information has been organised by hierarchy from the beginning of time, for example family trees the people who are born first are put at the top and the people who are born after are at the bottom

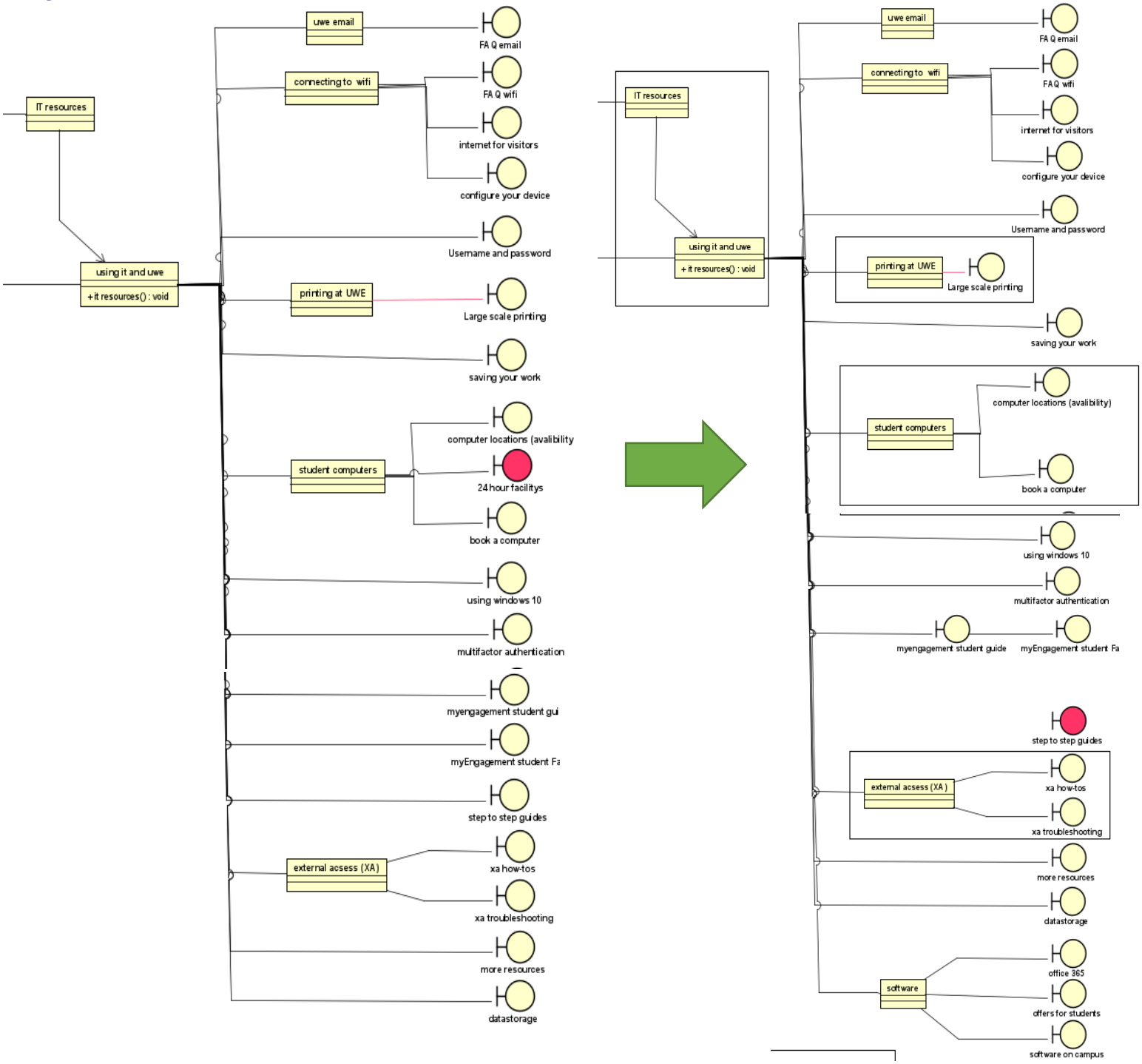
Database Model - Information can be stored in tables. A table can store information based on commonality. For example, a table can store personal information about students. Also, with database you can create relationships between the tables. This allows you to separate information into different tables and link them together. For example, you can have a separate table that stores student personal information and linking it to another table that contains information about what subject that student it is taking.

The IT Support section of the UWE website is using a hybrid. IT Support section is using topics that organise information on topics that students may be interested in or need help on. For instance, Using IT At UWE or IT Resources. When you click on the topic more information about that topic is shown to that user. There are in depth article showing students how to do certain things. Another scheme that the IT Support section of UWE is using is tasks, which allows students at UWE to contact the IT Support.

5.2 Structure overview

This diagram shows the overview of the current website and each page contextually connects to the other pages for the sake of this we have only put contextual connections into the diagram as the local navigation is confusing as spoke about in the navigation section. The diagram uses a class box for pages that link to other pages and the ones considered final destinations are shows as boundaries (circles with a line).

Figure 15 - Structure Overview



5.3 IT resources and using IT at UWE

IT resources is just a better laid out webpage that directly connects to sections of using it at UWE these two pages should be combines into a much more comprehensible webpage that connects to each of the sections. This will help stop confusion on what page to pick and avoid the user having to backtrack if they chose the wrong one.

The other issues I found with this section is:

- largescale Printing is on the main printing section and isn't referred to, large scale printing should be included on the main page for printing so that users don't have to navigate through so many menus to solve their issue.

- "Student computers" has a subpage for both viewing the available computers on the campus and a book computers page I believe these pages should be combined so that you can view what computers and free and book the spaces you want without having to backtrack to the other section making it more useable to students also the 24 facility's should be listed on the student computers page not separately.

- External access have two subpages that aren't big enough to warrant having 3 different pages the three.

5.4 IT service desk

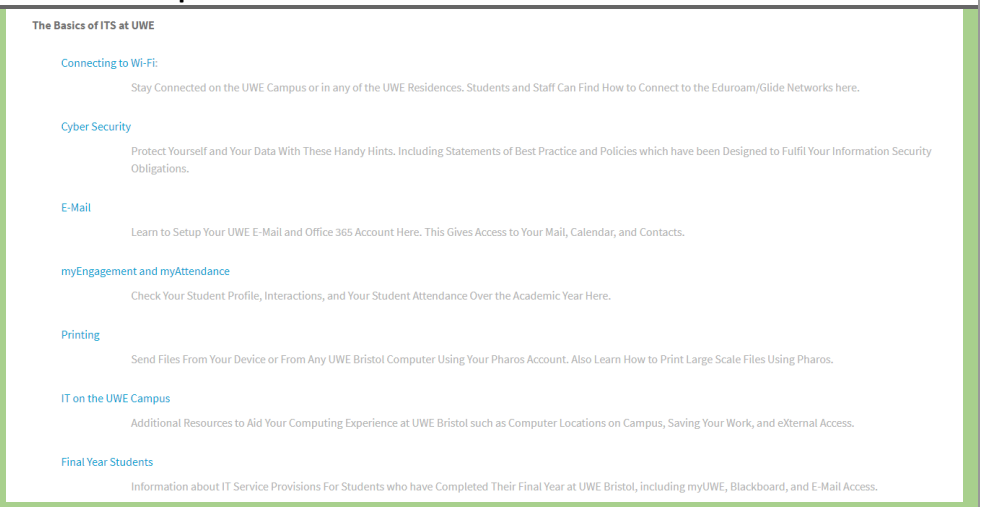
For this section I believe the subpage "support for personal devices" should be combined with the main page as the information could fit on quite easily and get rid of an extra layer on complexity for no reason.

5.5 Combined Internet Security

The cyber security week is a lot better for passing information through to students and staff about internet security while the toolkit just has all the information there but is not as easy to transverse whilst these two pages hold a lot of the same information they are separated meaning people could get confused as to what to pick to solve their issue my suggestion would be to connect these two pages into one and have a cyber security week section on the one page or have the main page connect to the cyber security week not as a separate entity on the same level.

Another section of the cyber security sections is that they have pages that don't link to the sections under them expecting people to use notice the small sidebar options to be able to solve their issue, for these 2 sections called "protect my data and devices" and "secure storage" I have suggested they are combined as the subpages data should really be on the main page as well not be a separate entity.

5.6 Recommendations

Issue	Solution	Wireframe Implementations
Pages aren't always connected contextually	Add links to subpages or combine the two pages	 Figure 16 – Wireframe Example of combining pages

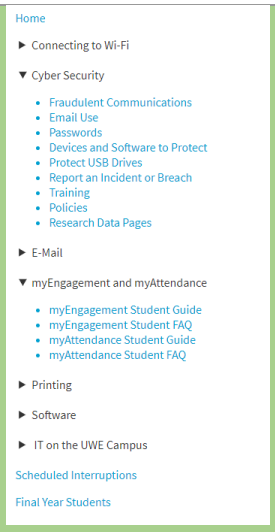
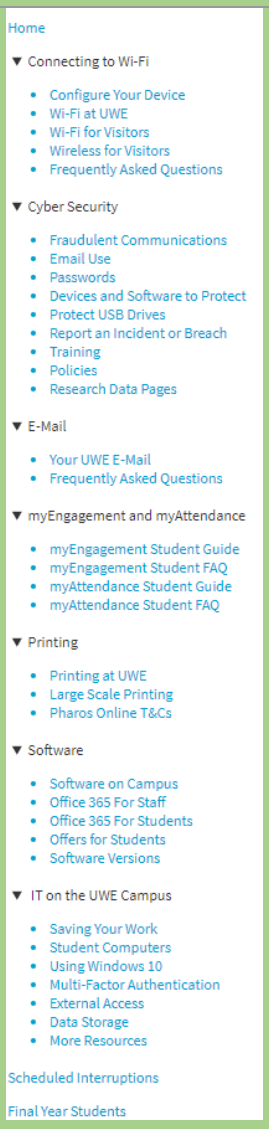
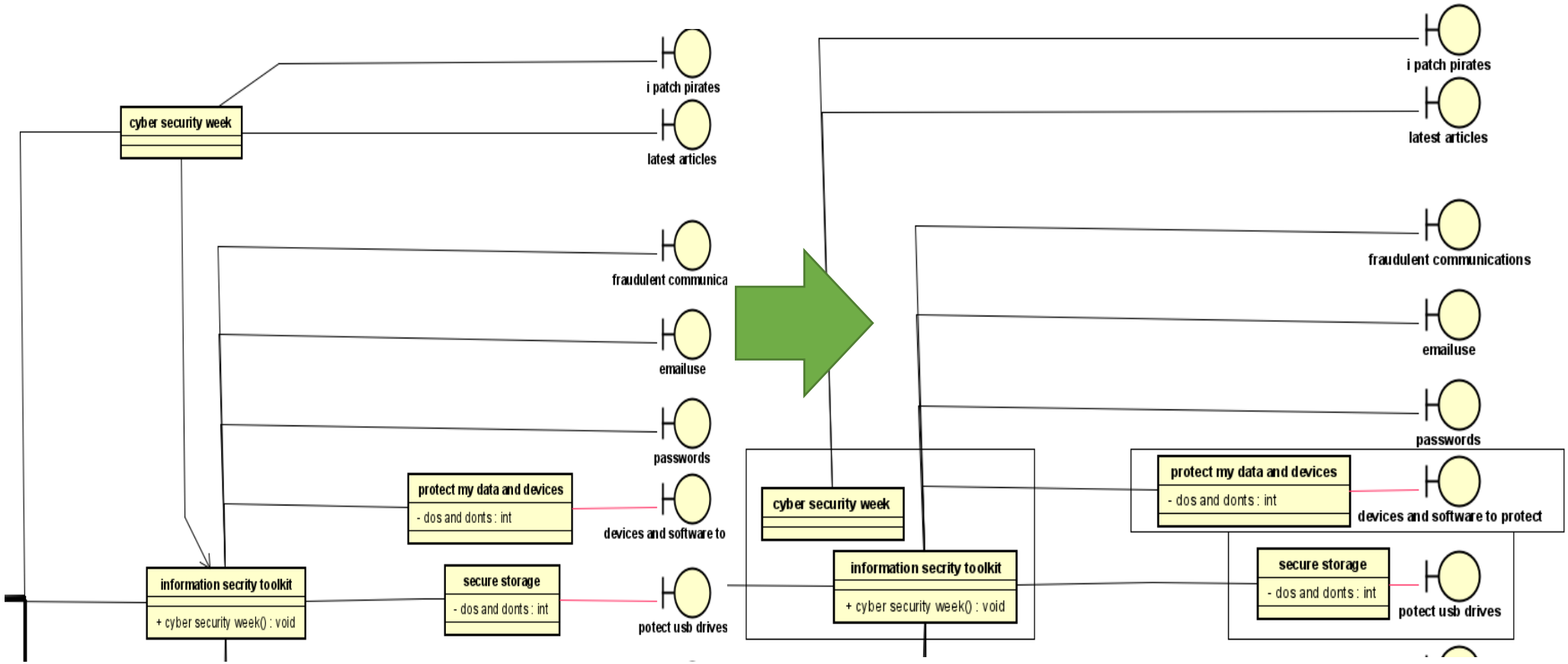
Very similar sections cause confusion as to what one provides the right solution (security week and toolkit) etc	Combine similar sections and make the website automatically change slightly when events are on so that there isn't any confusion year-round and the pages stay consistent.		Figure 17 – Wireframe Example of combining cyber security
Lots of pages between main page and the solution pages	There's a lot of pages in-between the main landing page and the pages that offer solution to issues this should be reduced down to one or two clicks of the main page so that users don't have to load lots of new pages and interact with the server more than needed		Figure 18 – Wireframe Example of simplifying number of steps to a solution

Figure 19 - Combined Internet Security Diagram



6 – Features

6.1 Requests

Looking into the requests sent to the ITS team, I have found that the most highly requested category was request for information from a high number of students and other users.

Count of Ticket #	Column Labels	
Row Labels	Request	Grand Total
Request for Information	27542	27542
Room Check	4063	4063
Weekly Check	2281	2281
Request for Access	1184	1184

Figure 20 – Request Table

There is a huge surge of traffic for information and most university students need to find out key information that is useful for them in there learning. I was able to discover that the main categories that students were requesting information for were to do with Academic and student systems team and Learning and research team. By identifying the main issues from these categories, they can be put into their own categories on the ITS website outlining the key issues. This is known as tagging. Tags are simple pieces of data — usually no more than one to three words — that describe information on a document, web page, or another digital file. Tags provide details about an item and make it easy to locate related items that have the same tag. One of the most common issues found in Academic and student systems team were bug fixing.

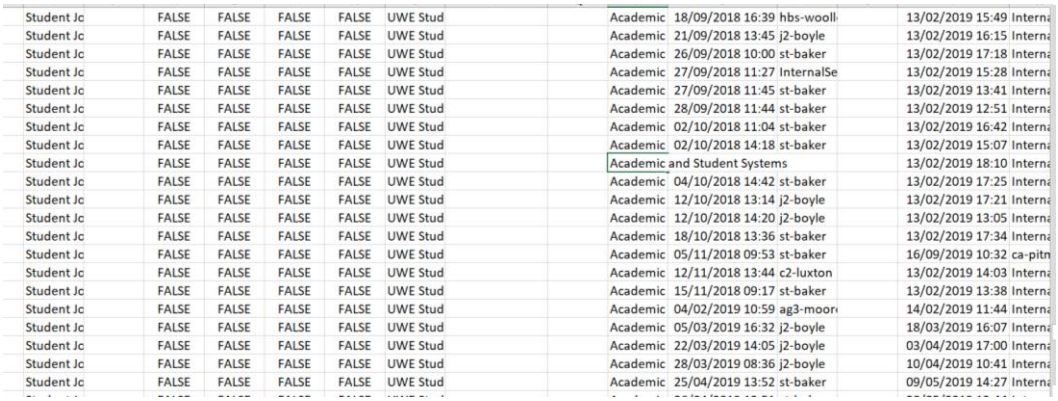


Figure 21 – Bug Log (1)

If we were to add a category on the website called Academic and student systems and within that have a dedicated column on bug fixing and the most common bugs found with ways to fix the bugs, then there would be a lot less traffic on information requests to the ITS team. Software is another issue that is commonly occurring with Uwe students and needs to be addressed. A column for software should be included on the Academic and student systems category so that students can find information on the common issues found with software.

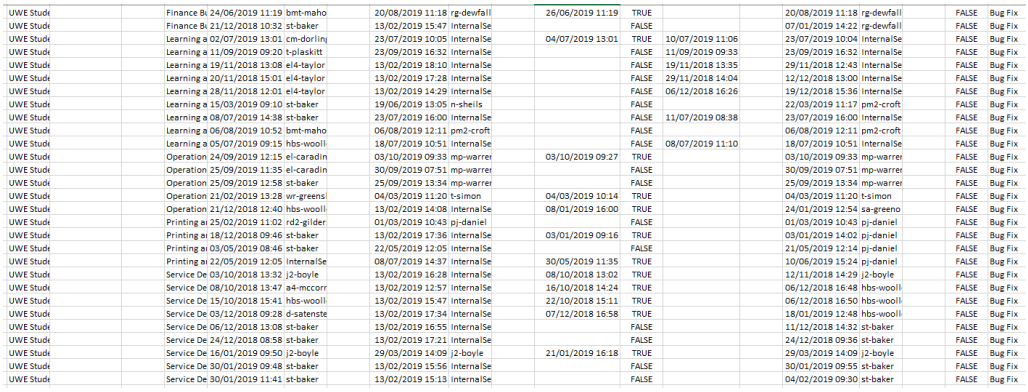


Figure 22 - Bug Log (2)

Password resetting is another major problem for students as it can be forgotten or for other understandable reasons. Many requests for a password reset are done by email and only a few are done through self-service. By implementing a category on how to reset a password it would save people having to email ITS who will have to reset their passwords themselves. This should be added to the webpage as a main category or a subsection to a category so that people can have easy access to it and have more people be able to reset their passwords themselves.

The IT services webpage needs to be updated to contrast with the common issues and problems that UWE members face. By incorporating an entirely new page dedicated to the different issues much of the traffic directed to the ITS team will start to decline due to users being able to figure problems out themselves using the important and useful information on the new webpage. The IT webpage should be pushed more to be used, but the only way for students to be onboard with using it is if there is useful information on the site and that is easily accessible.

6.2 Hot Topics

Below are the current hot topics listed for users and are supposedly the most popular categories users are looking for. Based on the data found we can see that there aren't clear categories to find any of the highly active incidents that are being brought to light and would benefit a change. The top 3 highest incidents should be titled into their own categories on the webpage whether that be on the hot topics list or a clear category as you scroll down the page. The information within the categories should be relevant to the common issues that are faced by the ITS team. The hot topics tab should be based off the common issues found from the data that I have looked through. Currently they are as seen below and don't have much context to them if your trying to find information that is specific to one of the main categories of interest like PC, Mobile and software delivery for example. Teaching and audio-visual support should be a hot topic as many lecturers struggle to find solutions to common problems that could easily be put on the ITS webpage for them to view and fix the problems themselves without having to contact the team. A common problem such as updating or installing new software should be easily available and accessible to users.

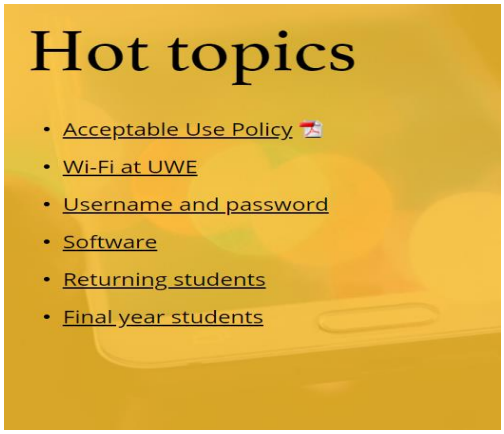


Figure 23 – Hot Topics

6.3 Recommendations

Issues	Solution
Hot topics isn't relevant and isn't useful as it far down the page and takes up a lot of room	Get rid of hot topics all together, or rework it so each topic has a larger space so its clearer for users to see and make it relevant to the most used pages

7 - Further Analysis

The data used in this report (University of the West Of England, 2019) was taken in the period ranging from September 16th, 2019 – October 30th, 2019 where all comparisons done was against data from the same time period in the previous year.

7.1 Landing Pages and Bounce Rates Summary

The report indicates the landing pages of the sites as well as the bounce rates for each page:

(Figure 24 – Bounce Rate Table)

Landing Page	Entrances	% Change in Entrances	Bounce Rate	% Change in Bounce Rates
UWE-Email	7,377	0.6%	21.21%	-1.0%
ITS Homepage	5,806	11.3%	35.2%	11.2%

Software	3,997	12.9%	55.4%	-6.6%
Printing at UWE	3,905	785.5%	64.1%	-14.9%
Configure Your Device	3,557	7.4%	59.7%	-6.2%

Surprisingly, the data shows that the page with the highest entrances is the UWE-Email Page and not the ITS homepage. This means that most people were first linked through to the ITS site by attempting to find information on their UWE-Email (most likely via an organic or direct search).

In terms of the bounce rates, we see that the only page of these most visited pages with an increase in the bounce rate is the ITS homepage. This data here indicates that over a third of individuals left the site after visiting the ITS page without clicking on any further resource, this is an extremely high number for a homepage and is up 11.2% from the previous year. While some of the other pages do have higher bounce rates e.g. software, printing page, these are pages which have information already listed on them and as such are the natural endpoints of sessions.

There could be many reasons for the large bounce rate on the homepage but it should be investigated why more students and staff – compared with the previous year – are now more likely to leave the ITS website after visiting the homepage but less likely to leave other pages which are natural session end-points.

7.2 Data Overview – Channels

The data from the channels shows that 60% of all searches leading to the ITS site had come from organic searches i.e. search engines (of which 51% came from Google and 7.2% came from Bing).

In addition, 34.1% of users visited the site through direct searches. Here, Direct Searches could range from the following though Direct Searches could range from any of the following:

- Bookmarks
- Typing the URL manually
- Links from Microsoft Office Document/PDF.
- A shortened URL

This means that 94.1% of searches either came through either direct searches or through organic searches.

Essentially, this means that the emails, the UWE app, referrals, social media, form sites, paid searches, and other UWE sites only accounted for 5.9% of all channels. This is a very small percentage and while people are less likely to use such means to access such forms of data it might be beneficial if this is investigated in some way.

7.3 Users Summary

In this case, users here refer to the unique visitors that have visited the ITS website. According to the report, the number of users who visited the ITS website over this period was 38,257. This number was down from 17.4% from the previous period.

The report also further split the data into age, gender, and the device used to access, as well as categorizing all users into new or returning users.

Users - Age

Due to the drop-in users, there was a decrease in visitors in all ranges across the board:

(Figure 25 – User Age Table) **Age**	**Users**	**% Change**
25-34	1,574	-891
18-24	1,540	-1,240
35-44	473	-229
45-54	386	-102
55-64	143	-60

Still, we can see that the greatest decrease here is in the age range of 18-24 which was down 1,240 from the prior year. Concurrently, this decrease led to the highest number of visitors now being in the age group of 25-34 despite this value also dropping by 891.

Hence, for focus groups it might be beneficial to investigate this further by adopting members from two or three distinct age ranges and gauge their reactions.

Users – Type

Compared with the year prior, there was also a negative shift in the number of returning and new visitors to the site. However, while the number of new visitors dropped by 978, the number of returning visitors plummeted by 6,912 compared with the previous year.

This is a drastic number which must be investigated as to why less people are returning to the site: as it could be a case of simply knowing all it offers [wi-fi, printing, software] or it could be something entirely different.

Users – Device

At, 72.3%, almost a quarter of all visits to the ITS website came through the means of a desktop computer with only 26.2% of page visits coming from mobile with the remainder 1.5% coming through the tablet.

The data from the report here is expected as majority of the visits to the ITS sites would come from the Desktop PCs in the campus.

7.4 Views

Generally, the ITS website saw decreases in most of its crucial categories. These reductions mostly stemmed from the fact that there was a large drop in the number of page-views over this period compared to last year (a reduction of 25.5%), therefore, this in turn affected the other categories such as sessions, users, and pages per session.

However, the bounce rate[1] also saw a disturbing increase of 18.4% as this reduction does not necessarily correlate to the number of page-views. Still, while high bounce rates are not always a bad thing, the areas which the bounce-rate has increased compared to the previous year proves that it is in this case. The data from the report showed that of the ten most visited sites, the bounce rate increased the most in the ITS homepage. This indicates that more people now visit the ITS site and leave without clicking on any resource or noting down any information and as such this should be investigated in the focus group or survey as the home page is the core of the site.

(Figure 26 – Overview Table) Category	Amount	% Change
Page Views	103, 750	-25.5%
Sessions	42, 248	149.5%
Users	38, 357	-17.4%
Pages per Session	2.5	-1.4%
Average Time on Page	01:35	5.3%
Bounce Rate	41.4%	-18.4%

Here, we find that there have been increases in two major categories. The first of these is the average time which is spent on a page but the data shows that this increase has only been a slight 5.3% which pushed the total number to now be ninety-five second.

On the other hand, there was an enormous increase in the number of sessions[2]. There could be several reasons for the rise of 149.5% but the decrease in page views and pages per sessions and other categories indicate that the

[1] The percentage of single page visits i.e. the percentage of visits in which a person exits the website from the landing page without browsing any further

reason for this increase would likely have resulted in changing the definition of each session's time-frame (probably to a lower number) and as such this would lead to a higher number of sessions and a great increase.

Concluding, the data from the report shows that the site's traffic is down over the period compared to the previous year and the high-bounce rates points and great-reduction in returning users on the homepage indicates the need for change.

7.5 Time spent on pages

(Figure 27 - Time spent on pages) Page	Page-Views	Average Time on Page
ITS Page	10,426	00:01:07
UWE Email Page	9,715	00:00:32
Software Page	9,249	00:02:00
Printing Page	7,060	00:02:42
Configure Your Device Page	4,747	00:05:29

This table shows that even though the its website is meant to be where people are meant to go to solve their issues, this is actually a very low percentage of people who directly go through it this shows that people usually try to avoid it and that it doesn't contain much if any of the information that people want to search for within this data it shows that it takes over a minute to find the option they want to pick this may be because there are many options that look like they may offer the solution and people have to take time to decide what option to pick. This may also show the confusing layout of some of the things, this also shows that UWE email printing and software page are the main things people spend time looking up and mean that they should be on hot topics

8 - Comparison /competitor examples

8.1 Uwe IT Services Compared to Bristol University IT Services

Both Uwe and Bristol University IT services websites have contact information so that users can get more information. Both websites have emails and phone numbers that allow users to get into contact with someone. Another similarity that Uwe and Bristol University IT Services websites have is a live status page of the IT system. The page will tell users whether the IT system is up or down. It also has a maintenance schedule so that users know when the IT system at the university is going to be down. Both Uwe and Bristol University IT services websites also have a section where users can get more information and download software's that is available to them on their personal devices.

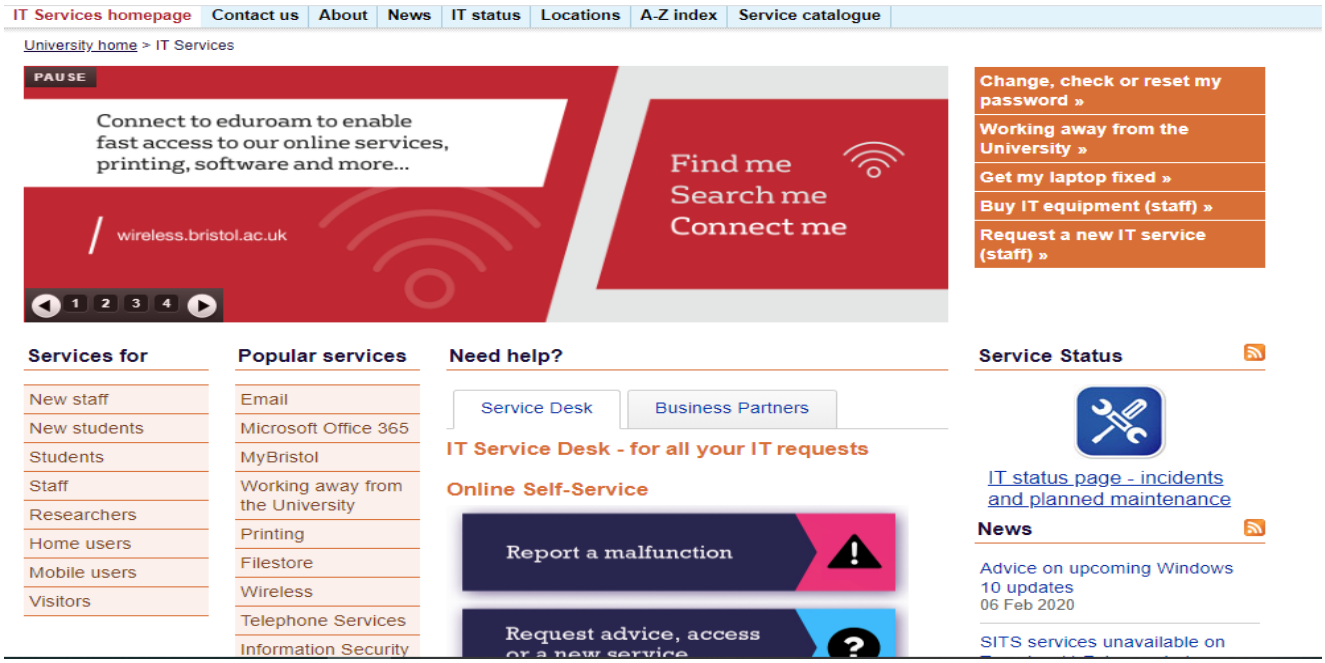


Figure 28 – University of Bristol ITS Webpage

8.1.1 Navigation

For the navigation of this competitor they have a lot of local navigation on their page I believe this makes it more confusing as the local and contextual is mixed up and there are more than one local menu this means that it would take a lot of time for the users to decide what one is relevant to them, although UWE doesn't provide any local navigation on the main page this means that although you might get to the final place about the same speed Uwe's system takes users through more pages but users of Bristol's.

8.1.2 Structure

The underlying pages are all accessible from the main page meaning its possible for the user to get to their page within a short amount of clicks although they will spend longer on the main page as there is too much information and options leading to confusion.

8.1.3 Features

The feature from Bristol University IT Services website that Uwe should consider adding to their website is adding a button that users can report a malfunction or a problem. Instead of emailing or calling someone up. Another feature is that Bristol University has tabs for different kinds of users. For example, they have tabs for Staff, Students, Researchers, Home user, New student. All the information in that tab relates to that user. (See Figure 17) (University of Bristol, 2020) (University of the West Of England, 2020).

8.2 Uwe IT Services Compared to The University of Manchester IT Services

Both Uwe and The University of Manchester IT services websites have guides on printing, how to connect to Wi-Fi, how to reset passwords and more. These guides explain how to do these tasks by images or video. A user can follow these guides and get the task done by themselves. Another similarity is that Uwe and The University of Manchester IT services websites have a page where they talk about data storage. The different types of data storage that the universities offer. Such as online data storage services they use, such as One Drive or Google Drive. They also have guides, which tell users how to save files on the universities system.

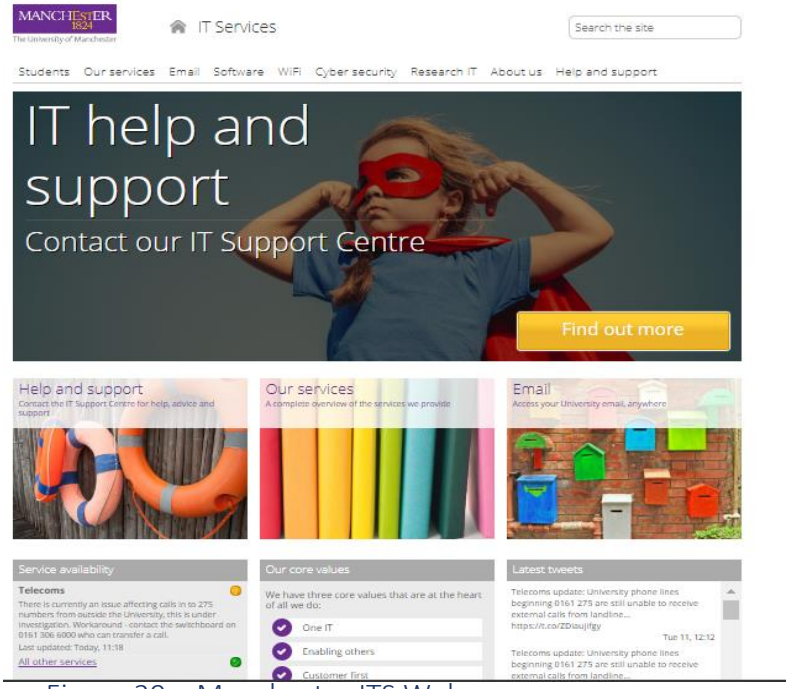


Figure 29 – Manchester ITS Webpage

8.2.1 Navigation

Although the main page looks a lot neater this is still all contextual navigation the same as UWE this means that it still has the same flaws, this makes users must go through a lot of pages and clicks to find their destination.

8.2.2 Structure

The structure is similar to UWE the pages for the support are all connected differently to the main page and you still have to navigate through the different pages to find your destination although this is because there are more functions to this page as spoke about in the features.

8.2.3 Features

The feature from The University of Manchester IT Services website that Uwe should consider adding is a live twitter feed that automatically updates, which allow users to get live updates on the IT Systems at the university. Another feature they should consider adding is allowing students and staff to purchase IT equipment. On the University of Manchester IT Services website staff can put in a request to buy IT equipment from the university. (See Figure 16) (University of Manchester, 2020).

8.3 Recommendations

Bristol university's good features	**Manchester's university's good features**
User report button to report malfunctions and problems	Live twitter feed so they can keep up to date with all issues and new changed or additions, and sell some IT equipment from the page

9 - Student Survey

9.1 Context

The aims of our research are to inform IT support staff of the current use of the IT Support webpages and provide areas which require improvement, and how they may be resolved. Our research questions involve students experience with the IT support webpages and use of other IT systems within UWE. The data was collected using Qualtrics ensuring that all data was stored securely, and participants could not have repeated entries. Additionally, the survey was ethically approved by our supervisor and therefore, the faculty of environment of technology.

9.2 Survey Questions

Q1 – What is your courses name?

Q2 – What faculty do you belong to?
Q3 - On a scale of 1 -10 how integral is IT to your course?
Q4 – On a scale of 1 -10 how would you describe your knowledge of computers
Q5 – On a scale of 1 -10 how would you describe your understanding of the IT systems within UWE?
Q6 – If you encountered an UWE IT related problem how would you attempt to resolve this?

1) Go to an on-site IT Support Desk
2) Google search your problem
3) Attempt to find your problem on UWE's IT support Website
4) Other

Q7 – If you have had an IT related problem please state it?
Q8 – Have you ever had to use the UWE IT Support website to solve a problem?
Q9 – Was the UWE IT Support website easy to find?

1) Very Easy
2) Easy
3) Neutral
4) Difficult
5) Very Difficult
6) Never used the website

Q10 – How would you describe the organisation of the website

1) Very Good
2) Good
3) Neutral
4) Bad
5) Very Bad
6) Never used the website

Q11 – Could you elaborate on your answer to the previous question?
Q12 - How successful was the ITS website at helping you resolve your problem?

1) Very successful
2) successful
3) Neutral
4) Unsuccessful
5) Never used the website

Q13 – Do you think the addition of a site search box would improve your ability to find solutions to IT related Issues you might have?
Q14 – If you have used the ITS website please leave any additional feedback as to how your experience could be improved.

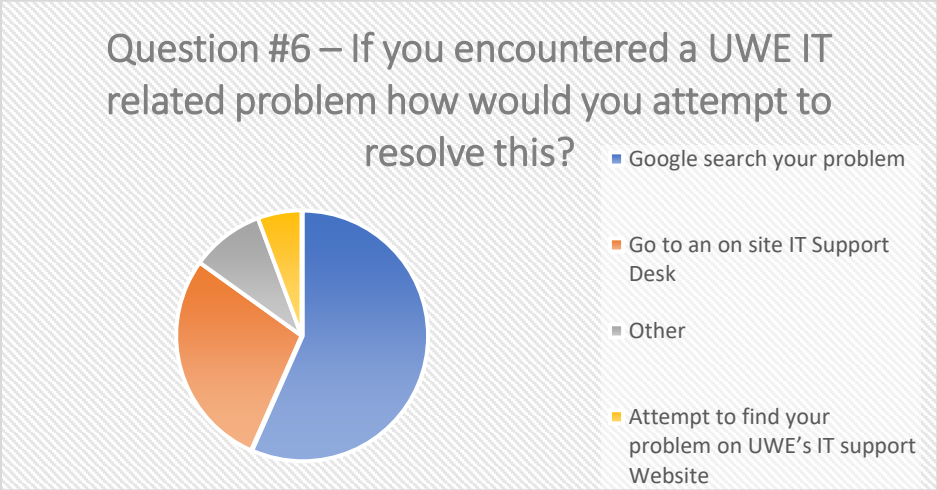
9.3 Survey Data

Q3 – Average Score: 7.1

Q4 – Average Score: 6.2

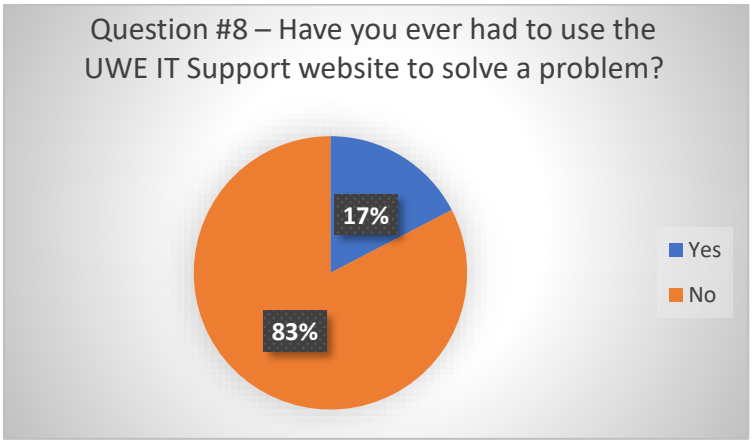
Q5 – Average Score: 5.8

Q6 – Figure 30 – Survey Question 6 Results

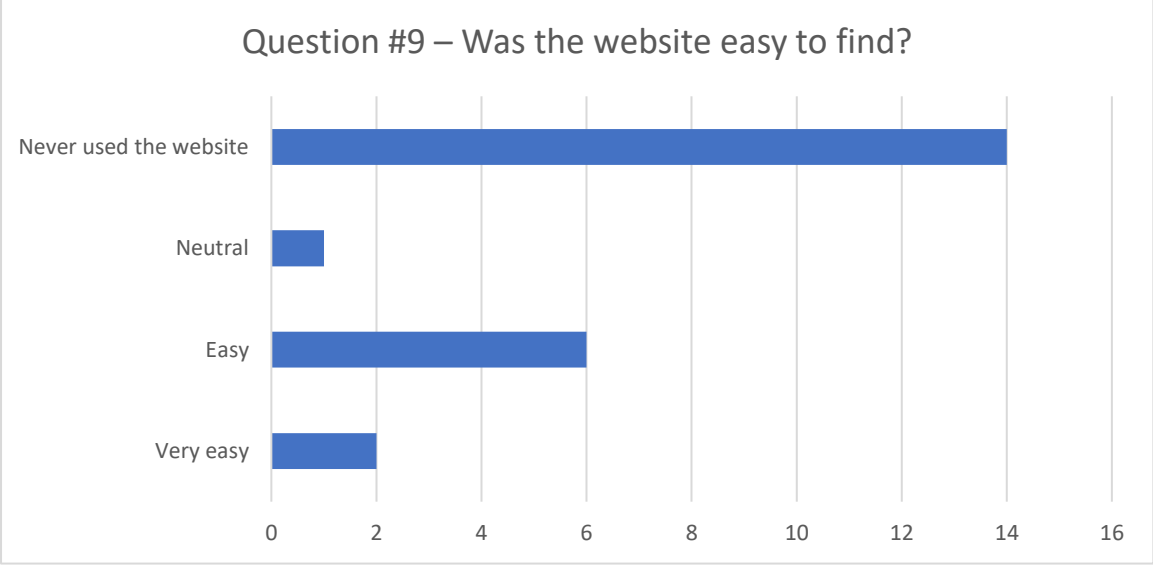


Q7 – *See 9.4 Survey Analysis*

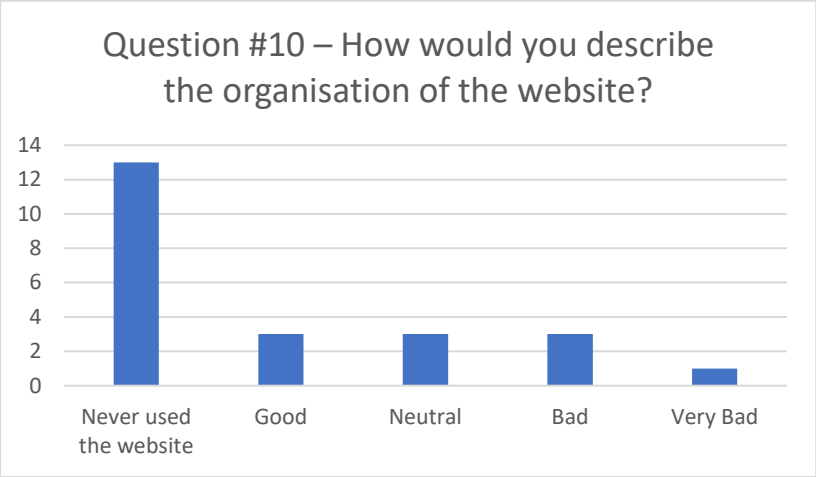
Q8 - Figure 31 – Survey Question 8 Results



Q9 - Figure 32 – Survey Question 9 Results

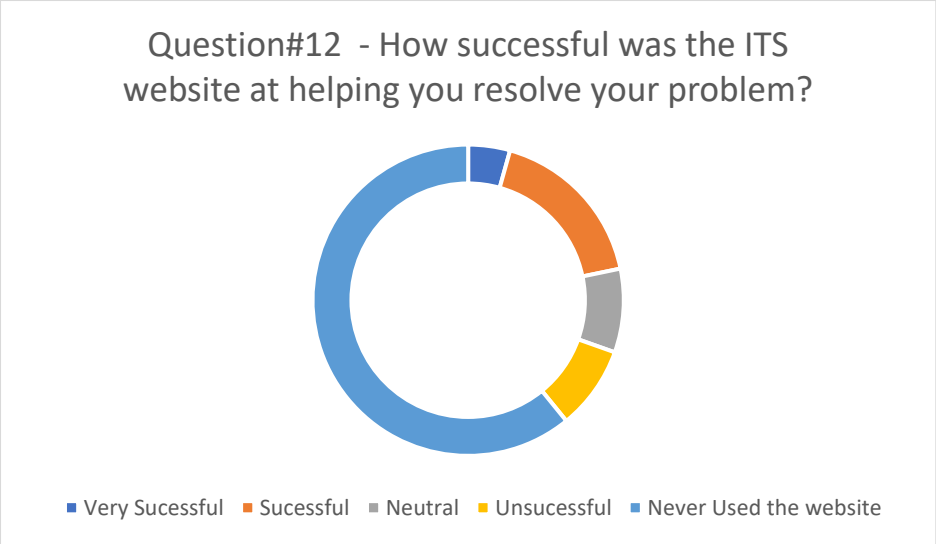


Q10 - Figure 33 – Survey Question 10 Results



Q12– *See 9.4 Survey Analysis*

Q13 - Figure 34 – Survey Question 13 Results



Q14– *See 9.4 Survey Analysis*

Q15– *See 9.4 Survey Analysis*

9.4 Survey Analysis

Q1 - On a scale of 1 – 10 how vital is IT to your course?

Most of the students that took the survey gave an average rating of around 7 for this question therefore IT is integral to most of those who undertook the survey.

Q4 - How would you describe your competence with a computer? (1= Lowest)

Again, most students felt they were competent when it came to the use of computers with an average rating of 7.

Q5 - On a scale of 1 -10 how would you describe your understanding of the IT systems within UWE?

Many of the students were aware of how to use the IT systems within UWE, however there were a few that were giving a 3 rating which meant that they don't have much knowledge of the IT systems at UWE.

Q6 - If you encountered an UWE IT related problem how would you attempt to resolve this?

The main answer for this question was that students would rather Google about how to figure out UWE IT related problems than use the ITS webpage to solve their issues. This is a major issue as the whole purpose of the ITS webpage is for students to find solutions to their IT related problems, but they would rather take an alternate route to solve their issues.

Students also prefer to go into an onsite IT services support desk instead. It would save a lot of time for both students and ITS staff if they were able to search for what they need and have it readily available on the ITS webpage.

Q7 - If you have had an IT related problem, please state it?

Students have had IT related problems with printing, login problems and monitor/screens not turning on. These seem to be the main issues that repeatedly occur for students therefore they should be clearly displayed on the ITS webpage for them to find the solution quickly. These are the kinds of hot topics that people should be finding when on the ITS webpage as they are the most requested therefore this could easily be a change that it implemented.

Q8 - Have you ever had to use the UWE IT Support website to solve a problem?

The majority of responses to this question were no meaning that the ITS webpage isn't accessible enough, students aren't finding what they need to or rely on other forms of support such as google as it is reliable for most students as shown in question 6.

Q9 - Was the website easy to find?

Most replies that we got for this answer were that they have never used the website and those that have used it have found it easy to find. This means that a lot of students either don't know about the ITS webpage or aren't actively seeking to find solutions to their problems. It appears it hasn't been advertised enough to students and should be given more exposure. This could be done by putting it on the front page of all computers at UWE for students to find the page or promote it to students on their inductions.

Q10 - How would you describe the organisation of the website?

Again, the main response was that they have never used the website before so couldn't give us information. Those that have used it before, most said it was bad therefore needs a lot changing.

Q11 - Could you elaborate on your answer to the previous question?

The main reasons that students thought it was bad was because it has a bad structure to it and finding what you need is difficult due to the bad structure as it is 'all over the place'. To fix this issue we need to come up with a solid structure to the website and have all relevant information displayed clearly on the webpage.

Q12 - How successful was the ITS website at helping you resolve your problem?

Answers were varied for this question as some were successful and others were unsuccessful at finding a solution to their problem. However, again most students have never used the webpage.

Q13 - Do you think the addition of a site search box would improve your ability to find solutions to IT related Issues you might have?

Everyone in the survey responded yes to this question therefore will need to be implemented into the new webpage.

Q14 - If you have used the ITS website please leave any additional feedback as to how your experience could be improved.

The main one listed for this question was to improve the layout of the available options. We will investigate this by restructuring the page to make it clear to students where to find the relevant information that they need.

9.5 Recommendations

Issues	Solution
Low knowledge of websites existence.	Have a link on the UWE front page
Overall organisation	Have a fluid experience throughout the webpages ensuring that students have navigating easy. (see figures 16-18)

10 - Student Focus Group

10.1 Context

The aims of our research are to inform IT support staff of the current use of the IT Support webpages and provide areas which require improvement, and how they may be resolved. Our research questions involve students experience with the IT support webpages and use of other IT systems within UWE. The data was collected by using a verbal questionnaire and a time section involving a series of task listed below (see 8.2).

10.2 Focus Group Questions

10.2.1 Section #1 – Verbal Questionnaire

Q1 - What course do you take?
Q2 - What faculty do you belong to?
Q3 - On a scale of 1 – 10 how vital is IT to your course?
Q4 - How would you describe your competence with a computer? (1= Lowest, 10 =Highest)
Q5 - Have you any experience using the Student ITS Webpages?
Q6 - If yes to the previous question, what is your experience?

10.2.2 Section #2 – Timed Section

Within this section students will be asked to locate information on the UWE ITS Webpages.
Q1 - How to do large scale printing at UWE
Q2 - Information regarding username and passwords
Q3 - Cyber security information
Q4 - How to download office 365
Q5 - Information on how to book computers
Q6 - Connecting to UWE's Wi-Fi network (Eurodam)
Q7 - Information as to what software is installed where on campus.
Q8 - Information on MyUWE and blackboard

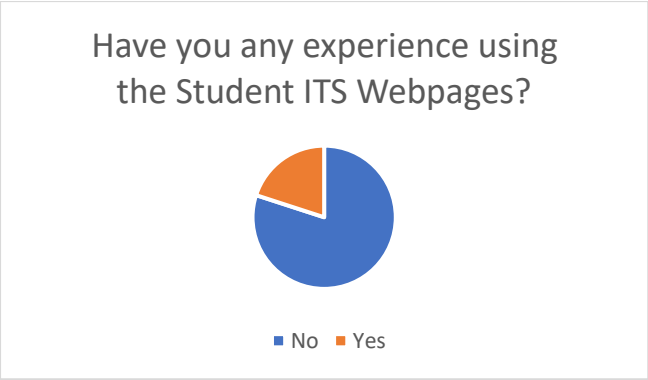
10.2.3 Section #3 – Review

Q1 - In general, how difficult was it to find the information required?
Q2 - Were there any sections that you found more difficult than others?
Q3 - Do you have any recommendations as to how it could be improved?
Q4 - Any additional thoughts relating to this focus group or the ITS webpages?

10.3 Focus Group Data

10.3.1 Section #1 – Verbal Questionnaire

Q3 – Average Score: 7
Q4 – Average Score: 6.2
Q5 – *Figure 34 – Focus Group Verbal Questionnaire - Question 5 Results*



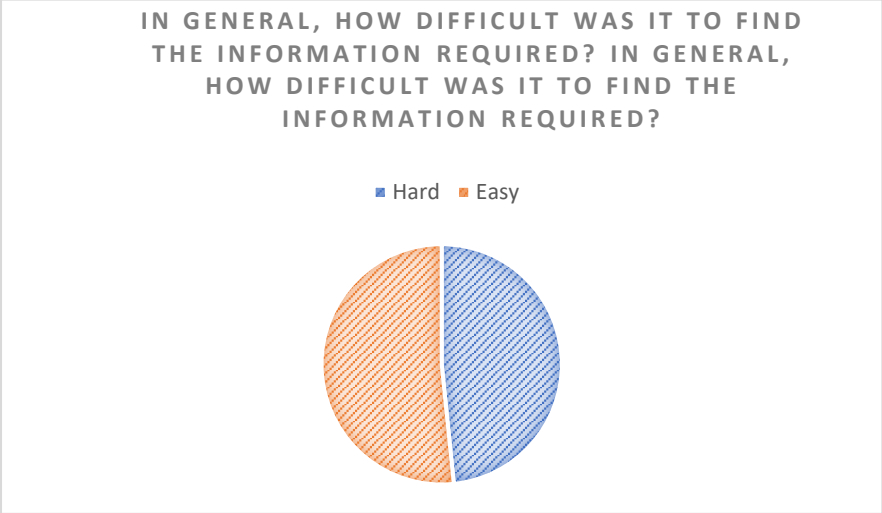
Q6 – See Section 10.4 For analysis

10.3.2 Section #2 – Timed Section

Q1 – Average Time: 41.6 Seconds
Q2 – Average Time: 11.4 Seconds
Q3 – Average Time: 11.6 Seconds
Q4 – Average Time: 43 Seconds
Q5 – Average Time: 31 Seconds
Q6 – Average Time: 10 Seconds
Q7 – Average Time: 17 Seconds
Q8 – Average Time: 8 Seconds

10.3.3 Section #2 – Review Section

Q1 - *Figure 35 – Focus Group Review Section - Question 1 Results*



Q2 – See Section 10.4 For analysis
Q3 – See Section 10.4 For analysis
Q4– See Section 10.4 For analysis

10.4 Focus Group Analysis

10.4.1 Section 2: Timed section - Analysis

Looking at the data the information that students were finding hard to locate were how to do large scale printing at UWE, how to download office 365 and information on how to book computers. Large scale printing at UWE is essential for many group projects and presentations therefore this needs to be better displayed so that students can find how to do this easier. It will be best to add a section of printing at UWE and have it on the top of the drop-down menu so that students can identify it easily. Downloading office 365 is a key piece of software that students need for collaborating on work and being able to produce documents online. This also needs its own section on the drop-down menu to attract students to it as soon as they visit the page. How to book computers will be another heading that will need to be added to the dropdown menu on the page as students may need to book computers if they don't have their own therefore finding the information within two clicks is necessary as they can find what they need efficiently.

10.4.2 Section 3: Review - Analysis

1. In general, how difficult was it to find the information required?

   Most students found it hard to find information that they required on the current ITS webpage, which raises concern as it needs to be a place where students can go to and solve their IT based issues quickly and easily.

2. Were there any sections that you found more difficult than others?

The main area of concern found for this question was that finding software and security information was very difficult for most students therefore we need to make labelling is key to ensure it is easy to find this information.

3. Do you have any recommendations as to how it could be improved?

   The styling, navigation and graphics were the main points brought up for this question and will be addressed in the new webpage by ensuring that the style of the page is neater so that navigating the page and finding information is easier for students to give them a better overall experience. Graphics will be something that could be incorporate for students to identify what they are looking for easier as it will display the section necessary for them.

10.5 Recommendations

Issues	Solution
finding software and large-scale printing	Simpler language, and more fluid overall style
Overall organisation	Have a fluid experience throughout the webpages ensuring that students have navigating easy.

11 - Wireframe Design Choices

11.1 Menu (local navigation)

The reason for adding the menu on the wireframe is so that users can easily interact with it and find their page straight of the main page. This will reduce the number of clicks and pages that they must go through to get to their destination, whilst also providing a clear way to navigate through all the pages clearly

11.2 Dynamic section

The reason for this dynamic section on the main page is so that when you use the local navigation menu you don't have to go to a new page instead the text to the side of the bar will change and show you the details of the section you clicked on, this means that people won't have to go back and forth between pages if they click the wrong section meaning that it will a very effective way for users to read all the details and not be stuck loading different pages, it also allows for the page to be a lot simpler as all the information can still show on the page but instead is event based depending on the menu on the side of the screen.

11.3 Empty design

The reason for the page looking simple and not containing a lot of different sections, is because that it is clear what they should interact with to be able to solve their issues and not cause any stress to users of the page. This should help cut down on backtracking and make it up to date with modern webpages as a good design.

11.4 Summary

The wireframe although basic shows clear solutions to a lot of the old website's issues using this as a template will help reduce time spent finding the destination pages, reduce if not eliminate the need for backtracking to find the destination. Whilst also providing all the needed information in a way that also helps reduce stress on the server.

12 - Conclusion

In conclusion, there are a few key aspects that need to be changed, mainly reducing the number of clicks to get to the destination page, making navigation throughout the pages consistent and easier. Both of these could be achieved by having a local navigation bar on the side of the main page as it would then stay consistent with navigating on the other pages. This would also help reduce the number of clicks as a well formatted menu would be easy to navigate through and find your desired page. The searching data is useful for identifying search trends, however it isn't useful for highlighting problematic areas of the website. From the features section, "Hot topics"

should most likely be removed as it takes up a large space and would require close monitoring. Another reason for this is with a new menu system the website will be a lot easier to transverse. This is due to the fact that people will only have to click once or twice to find their page instead of trying to rely on hot topics. Research of the competitors has identified that there is a distinctive lack of a report button on the website itself, this would be useful for students as well as teachers to easily report issues. similar problems have been reflected in our primary research, key areas include, issues regarding; overall style and structure, complex language and navigation. These issues have been mitigated by revamping the whole structure and creating a new menu system to ensure a more fluid experience throughout the website. The local navigation provides a consistent methodology of navigating through the information. This is crucial in ensuring a smooth experience.

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