



A CASE STUDY

*On*

**User Experience(UX) project for understanding gaps in the training  
delivered to the Customer Service Team at the University of York  
Library**

## 1 Project Overview:

The project involved the implementation of different User Experience(UX) methodologies to unveil any dissatisfaction or frustration of the customer service team on the aspect of the training they receive and recommending suggestions for a consolidated training framework based on the research data.

## 2 Project timeline:

The entire project timeline is being illustrated here:



## **3 Methodology**

### **3.1 Contextual Inquiry:**

Contextual inquiry is a widely used UX methodology, where the researcher observes the user in the natural context of their workplace. For example, if you're developing an efficient user experience of a cash machine, you can observe actual users interacting with a cash machine and fill in the observations with detailed notes and questions. It can be simply thought of as a three-step process:

- a. Observe
- b. Inquire
- c. Document

Contextual Inquiry was used to better understand the varied roles of Information Assistants(IA) and Customer Service Assistant(CSA) to generate Mind Maps(to be discussed in the following sections).

The key point of contextual inquiry is to avoid the memorability effect, which is essentially the fact that people don't exactly remember what they do, hence you'll observe things about a person in the context that they themselves might not be aware of.

Two different contextual inquiry sessions were held, one with an IA at the help desk solving user queries and the other with a CSA, going through the main four core aspects of their job: book sorter, post-delivery, patrolling and reception. Separate inquiries were made of the van delivery training and the delivery to other libraries, but there wasn't any contextual inquiry done on those parts owing to limitations of the current project.

Detailed notes were taken during these sessions which were used to generate mind maps and in time helped in formulating the questions of the semi-structured interviews which constituted the main part of our project.

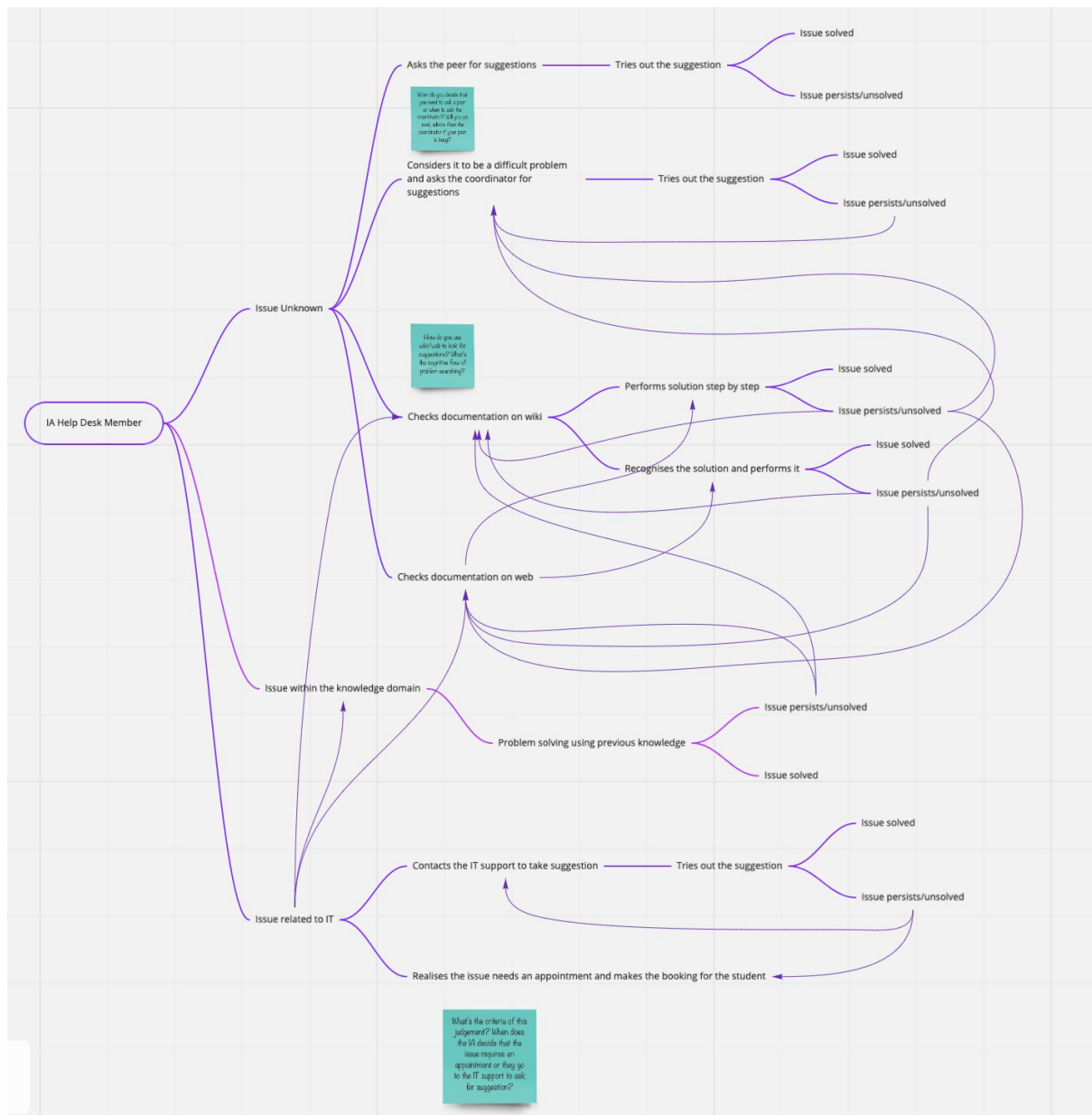
### **3.2 Mind Maps**

One of the vigorous methods used by UX designers to better understand, define and disseminate an idea or a role is a mind map. A mind map is a visual representation of a sequence of thoughts or activities in a system or process. Depending on the context of the

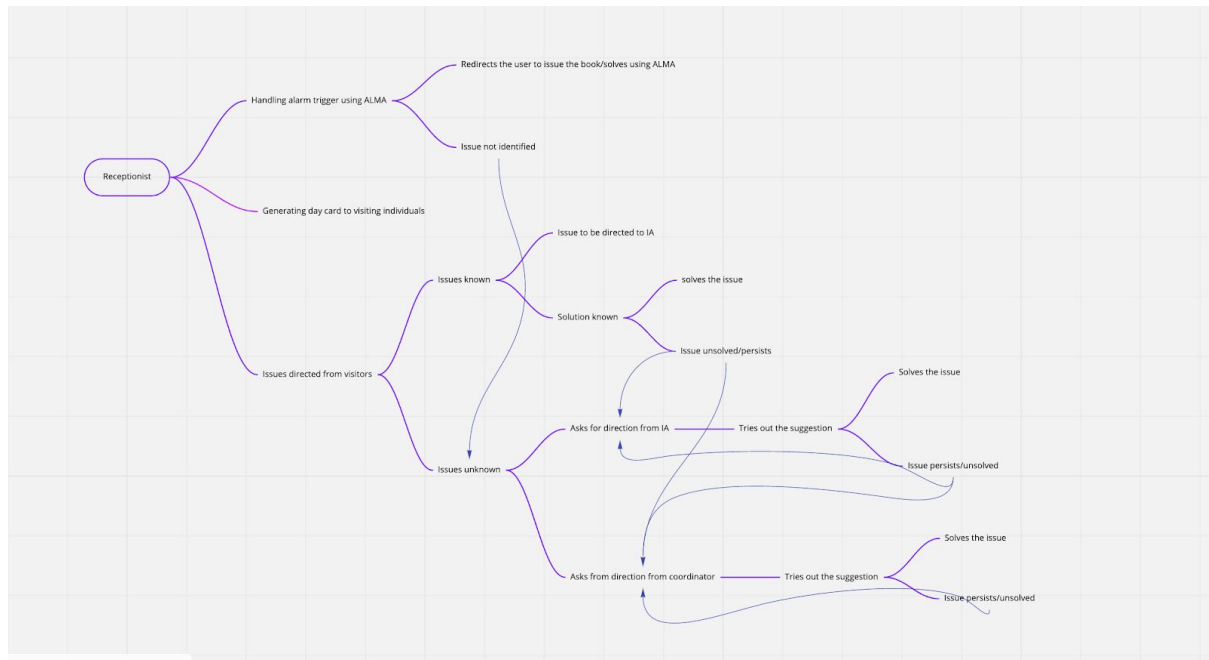
work, the visual representation comprising of boxes that represent different states/activities and lines interconnecting these states signifying transitions from one step to the other.

There are several models for the visual representation of the mind map, the one that is used here is called the Graph Model. In the Graph Model, any object/state can be interconnected to any other object/state and the connecting lines can have a direction or basic codification. The tool used to generate these mind maps is Miro.com.

The notes from the contextual inquiry were used in crafting the mind maps. Comments were left in the form of questions over areas which were used later on during the semi-structured interviews.



**Fig: Mind map of IA(observation at Help desk)**



**Fig: Mind Map of CSA(Observed at the reception)**

A separate question-board was contrived from these two mind-maps which were used in the semi-structured interview described in the following section.

### 3.3 Semi-structured Interviews

A semi-structured interview is one of the three types of interviews broadly used in the domain of user study. In the case of a semi-structured interview, the interviewer has a basic script for guidance but can probe the interviewee until no relevant information is forthcoming. It can substantially be thought of as a combination of both open and closed-end questions. Prompts are useful to make the interviewee recall forgotten terms or names to keep the interview flowing.

#### 3.3.1 Informed Consent

In the case of an interview, consent is of utmost importance. Our study aimed at exploring sensitive data which involves a lot about the learning process and learning preferences, hence maintenance of anonymity was a key point of highlight. Permission for capturing audio, informing the interviewee about their voluntary participation were other points of highlights that needed to be put forth in the consent form.

### **3.3.2 Interview questions:**

In the case of semi-structured interviews, probes are being made to drive an interview to uncover underlying reasons. There's a fixed set of questions that serve as a basic foundation but the interview is steered by the interviewer as per the responses of the interviewee.

The following are the set of questions that were formulated from the first phase of contextual inquiry and mind maps to serve as the backbone of the interviews.

#### **Questions formulated for the IA Interview:**

##### **Introduction:**

---

1. Can you please define your role in one minute?
2. How long are you working in this role?
3. How long do you feel it took you to build up expertise in your work domain?

##### **General:**

---

1. Could you please explain your usual day at work in 2-3 minutes?
2. What's the best part of the job/the part of the job that excites you?
3. What is/are the part/parts of the job you think can be improved through a proper training framework?
4. What is/are the part/parts of the day to day job that you think can be done in a better way?
5. How do you think your work at the collection affects the IA work? (Split post)

##### **Training Oriented:**

---

1. Can you please provide us with a brief description of your induction process?
2. How do you think your training at the collection influenced your IA training, if at all?  
(Split post exclusive)

3. What did you think were the good parts of the training process that helped you to gain the knowledge?
4. What did you feel were the frustrations/missing parts of the training process?
5. When did the peer-based training start-in? How did that go?
6. How helpful do you think peer-based training is?
7. How do you think the current peer-based training can be improved?
8. Do you think mandatory peer-based training will be helpful?
9. Were you directly thrown out at the help desk, in the sense that right after your training in week 1, were you put in the help desk in the following week?
10. How do you find using the wiki? How helpful was it?
11. If there's a formal training on using and editing documents on the wiki, do you think that'll be helpful?
12. What kind of format of training works best for you? Any reasons behind the preference? (*Priority Mapping*)
13. Are there any existing feedback process for the training you receive?
14. Do you think a formal evaluation/feedback leading to iterations in the training process will help?
15. Is there any evaluation of the training you receive? How does it take place?
16. How do you raise a training concern/any issues you feel you need some training on?
17. What are your thoughts on the weekly training session? Do you think it can be made better in any way to increase efficiency?
18. Do you self-train on the training you receive during the induction process? If so, what is the aspect you train yourself on?
19. What are the difficulties faced in the documentation of queries at the help desk?
20. What are the thoughts on the feasibility of the documentation during busy hours?
21. Do you receive any separate training on the most documented queries?
22. After the induction process, do you self-train at any moment? If so, explain the process and resources you use.

### **Tech Oriented:**

---

1. Do you receive any training related to IT? If so, can you explain the process?



2. In case of an IT issue, what are the criteria of your judgment about whether it requires an appointment or whether you solves the issue? In which case do you ask the IT contact point for suggestions?
3. How do you think your familiarity with technology influences your IT training?
4. Does your familiarity with technology affect the motivation to self-train?
5. Do you think peer-based training happens in IT training too?
6. Do you use any external sources to address IT related queries like the web/university website?

### **Work oriented :**

---

1. What's your approach to a situation where you need to know something/the issue raised isn't within the knowledge domain? (Cognitive Map)
2. How do you use the wiki to look for solutions? Can you briefly draw the cognitive map of the problem searching? (cognitive Map)*(eliminated after the first interview as considered irrelevant to the aim of the study)*

### **User-oriented:**

---

1. A lot of cases pop up where the user's knowledge related to technology is limited, how do you deal with that? Do you receive any special training related to this aspect?
2. A lot of cases pop up where you have to make the user understand the solution, do you receive any training related to that?
3. What's the training you receive to deal with the user's and users' perspectives?

### **Weekend team-oriented**

---

1. How does the training process differ from the weekday stuff?
2. Do you receive any separate training for the weekend process(to be asked to someone who works both weekdays and weekends)?
3. How do you think peer-based training works on the weekend?

4. Do you feel there's any frustration/difficulties faced during the weekend(to be asked to someone who works both weekdays and weekends)?

## **Conclusion**

---

1. Looking back to the time of induction, have your priorities of sources to gain knowledge changed over time? How do you approach your work now?
2. Have your methods of self-training changes over time?
3. Regarding IT training and Library training, do you think there should be a balance or there should be more focus on one of them compared to the other?
4. Do you think similar differences between the focus of training should be there between the help desk and comms training?
5. If you could change anything at all about the training experience, what would you change and why?

## **Questions formulated for CSA Interview:**

### **Introduction:**

---

1. Can you please define your role in one minute?
2. How long are you working in this role?
3. How long do you think it took you to build up expertise in your work domain?

### **General:**

---

1. Take 5 minutes to explain your usual day at work.
2. What's the best part of the job/the part of the job that excites you?
3. What is/are the part/parts of the job you think can be improved through a proper training framework?

4. What is/are the part/parts of the day to day job that you think can be done in a better way?

### **Training Oriented:**

---

1. Can you please give a brief walkthrough of the induction process?
2. According to you, what are the good training practices currently in use?
3. Did you face any difficulties in the learning process through the current training you receive? How helpful do you think peer-based training is?
4. How do you think the current peer-based training can be improved?
5. If there's a formal training on using and editing the wiki, will you think that'll be helpful?
6. Do you think a formal peer-training will be helpful? Any reasons behind your choice.
7. What kind of format of training works best for you? Any reasons behind the preference? (*Priority mapping*)
8. Are there any existing feedback process for the training you receive?
9. Is there any evaluation of the training you receive? How does it take place?
10. Do you think a formal evaluation/feedback leading to iterations in the training process will help?
11. How do you raise a training concern/any issues you feel you need some training on?
12. After the induction process, do you self-train at any moment? If so, explain the process and resources you use.
13. Does your familiarity with technology affect the motivation to self-train?
14. Looking back to the time of induction, have your priorities of sources to gain knowledge changed over time? How do you approach your work now?

### **Work-oriented**

---

1. Cognitive Map of unknown issue.
2. Is there any documentation provided to you on ALMA as a part of the training process? If so, do you use and go through the document?
3. Do you think the CSA comm log is helpful? Do you face any difficulties regarding communicating through the comm log?

4. What're the main issues faced during patrolling?
5. What do you think are the advantages and disadvantages of peer-based training regarding patrolling?
6. How do you think the work during the weekend is different from the weekdays?

### **Overnight team-oriented**

---

1. What's the approach in handling issues not within your knowledge domain when there's no coordinator on duty?
2. Do you receive any additional training just over overnight purposes (to be asked to someone who works both shifts)?
3. How does the peer-based training works when there are more than one new inductees?
4. How do the day-shift members assist the overnight team members in the peer-based training process?

### **Conclusion**

---

1. Looking back to the time of induction, have your priorities of sources to gain knowledge changed over time? How do you approach your work now?
2. Regarding Reception training and Library services training, do you think there should be a balance or there should be more focus on one of them compared to the other?
3. If you could change anything at all about the training experience, what would you change and why?

### **Questions for the CSC Interviews:**

#### **Introduction:**

---

1. Can you please define your role in one minute?
2. How long are you working in this role?

3. How long do you think it took you to build up expertise in your work domain?

**General:**

---

1. Take 5 minutes to explain your usual day at work.
2. What's the best part of the job/the part of the job that excites you?
3. What is/are the part/parts of the day to day job that you think can be done in a better way?

**Training Oriented:**

---

1. Can you please provide a brief overview of the training process currently in practice for the IA and CSA.
2. Do you feel anything was missing in the training that is delivered?
3. According to you, what are the good training practices currently in use?
4. What do you think are the advantages and disadvantages of the training matrix?
5. Briefly explain the difference in the training method implemented for the IAs and CSAs?
6. In the case of IAs, there's a considerable difference in the learning curve between weekdays and weekend staff, owing to exposure to more tasks during the weekdays. Do you think there should be a separate training framework for these two groups(maybe a more rigorous training for the weekend team)? If so, what are the challenges?
7. In the case of the CSAs, the overnight members don't get any scenario-based training. How do you think a better training framework can make their process more efficient?
8. How helpful do you think peer-based training is?
9. How do you think the current peer-based training can be improved?
10. Do you think a formal peer-training will be helpful? Any reasons behind your choice.
11. What kind of format of training do you think works best for the team? Any reasons behind the preference?
12. Have you ever tried different training methods like video tutorials or formal training of wiki documentation?

13. Are there any existing feedback process for the training you deliver?
14. Is there any evaluation of the training you deliver? How does it take place?
15. Do you think a formal evaluation/feedback leading to iterations in the training process will help?
16. How do you deal with a training need/concern raised by IAs and CSAs?
17. On several occasions, the IAs ask their buddy/peer for suggestions, and in difficult cases ask the coordinator for confirmation of the suggestion, which, at times, lead to the direction towards the wiki documentation. Do you think there are ways to make this process more efficient?
18. Segregation of tasks - Comment on focused training approach, where certain members would expertise in the training of IAs and certain members will focus on the training of CSAs. On this aspect, how do you think we can best tackle the training of weekend staff?
19. Why do you think there's no formal training on the wiki documentation?
20. Do you use any external sources to train your team? What do you think will be the opportunities that might possess?

## Conclusion

---

1. Looking back to the time of induction, does the scenario-based training change with time?
2. If you could change anything at all about the training experience, what would you change and why?
3. Are there any final comments you'd like to make in order to form a consolidated training framework?

### 3.3.3 Interview transcription

The interviews were transcribed manually(auto-transcription software like Voicea was used, but owing to a two-way flow of conversation, the transcription took longer than manual transcription and hence the method was rejected). However, due to lack of time, some of the interviews underwent key-point analysis, a method where the researcher notes key-points from the interview which are relevant to the project in hand. It has to be noted here that the key-point analysis is only varied in this case since our study isn't exploratory.

In the case of exploratory studies, it is a mandatory process to transcribe all of your interviews recorded.

### 3.3.4 Thematic analysis

Thematic analysis is a method of deriving patterns or themes from the interview data. This process can be complex or simple, according to the amount of data collected, the aims of the study as well as the complexity of the data itself. In the case of a huge amount of data collected, software like NVivo is usually used to generate patterns with codes or queries. Since the amount of data collected in our study was diverse in the sense of coming from different resources (in our case it's the different teams), the themes were assumed to be less repetitive and the analysis was carried out in the following way.

- a. **Familiarization with the data:** After the interviews were done, this step involves making yourself comfortable with the data collected. This is done through the transcription which is manifested in the previous section.
- b. **Generating initial codes:** Codes can be viewed as keywords of a section that is relevant to the research question in hand. It has to be remembered that code is a description and not an interpretation. This stage aims to group your data into meaningful groups. A section can be assigned multiple codes or can be given a 'descriptive code' if the study is a broader aspect of understanding a specific topic. The coding also depends on whether your study is an exploratory analysis or a deductive analysis. An exploratory analysis is where the themes shape up and form the data whereas a deductive analysis is where the researcher is specifically searching for themes to look for the answer to a specific problem.
- c. **Searching for themes:** In this phase, you start segregating your codes and assemble them into groups called 'themes'. Drawing a map of your themes to visualize the different themes and codes can help accelerate the process.
- d. **Reviewing themes:** This is an iterative process where you've to go back and forth through all the themes, codes and extracts with the aim of refining and reviewing the themes until they form coherent and distinctive groups. An extract can belong to multiple themes, or a theme can be divided into subthemes.
- e. **Defining and naming themes:** This phase marks naming each theme so that the essence is reflected and the link to the overall research question is maintained. At this point, a methodological and consistent story can be derived from all the themes generated.

- f. Producing the report:** The final report depends on the project and the aims of it, in our case, the final report aims to be the starting point of the design sprint session and is crafted in that way. While presenting the report, quotations from the participants are used to elaborate on the themes and provide a foundation to better understand the analysis.

The report of the thematic analysis is summarized with the emergent of the following issues: (Please note that this isn't how a formal thematic analysis report should be represented. To incorporate in our case study a very succinct version is presented with a lucid representation of the key problems/issues faced).

#### **For Information Assistants:**

##### Peer-peer training

- a. Lack of a formal peer-based training leading to misconceptions among team members
- b. Difficulties in gaining knowledge about why and how certain things work

##### Lack of adequate hands-on training

##### Weekly training sessions

- a. Lack of a mission/outcome of a particular session
- b. Lack of relevance to the role:

##### Wiki

- a. Too text-heavy explains a lot of stuff that is background material: when the customer is there you don't need to know the background of the task, you just need to know how it can be done (eg walk-in access card)
- b. Problematic structure with no phrase-based search
- c. Lack of options between succinct and elaborate mode

##### Lack of formal and anonymous feedback on the training imparted

##### Lack of efficient training on IT

##### Lack of Training framework based on most-documented queries at the help desk

##### Lack of formal training on using Wiki

##### Lack of refresher training courses on seasonal queries.



Lack of different training formats and a tailored training framework:

Lack of working knowledge of the role among the coordinators.

Bridging the gap in the learning curve of weekend IAs through brief/catch-up sessions

#### **For Customer Service Assistants:**

Lack of understanding of the shift patterns of different shifts.

Effect on shadowing when there's a lack of interest for the job at the end of the person the new inductees are shadowing.

Wiki

- a. Complicated search and lack of formal training
- b. Lack of responsive search option (phrase-led)

Working knowledge of the 'why' behind the tasks.

Lack of feedback on a project-to-project basis, or day-to-day basis or week-to-week basis.

Lack of FAQs on training issues.

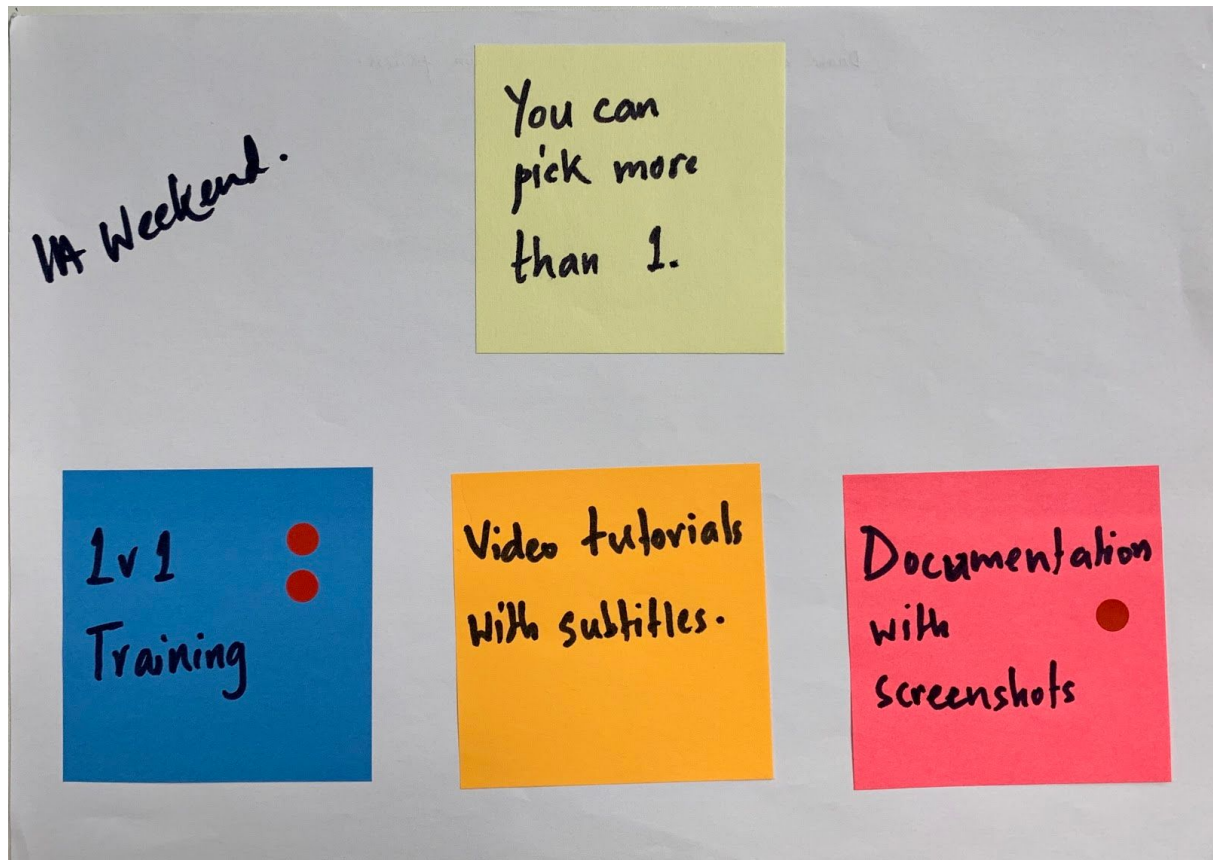
Lack of working knowledge of how other departments work.

Improvement of team integrity and team chemistry.

### **3.3.5 Quantitative Analysis**

There was a small amount of data for quantitative analysis generated from the priority mapping. Priority mapping is a process where the interviewees were asked to rank training methods according to their priorities and preferences. There were three formats of training placed in front of an interviewee, they had the liberty to add any more if they wanted so.

They were given some sticky dots and asked to put as many dots as they want, the more are the dots the more their preference towards that particular format. It looked something like this:



**Fig: Priority mapping for training format preferences**

In the example, it would mean that the interviewee prefers 1v1 training the most, so it gets the 1st place of priority whereas the 2nd place goes to documentation and video tutorials receive no preference.

Based on the collected data, descriptive statistics were performed which led to the following summations:

- a. For the IAs, 100% of the participants opted for 1v1 training as their 1st choice of training format. 66.67% of the participants voted for documentation with screenshots.  
as their 2nd choice of training format, the rest opting for video tutorials with subtitles. Video tutorials got 33.33% of participants' 3rd preference, whereas documentation receiving just 16.67% of the votes, the rest of the participants didn't opt for the 3rd choice of format. Thus, it can be said that 1v1 training along with documentations is the most preferred format of learning opted for by the IA, though in certain cases the interviewees, when asked about the reason of their preferences,

suggested that video tutorials can come really useful in the case of IT training since IT is a bit more complex domain, and documentation doesn't always work best. The recommendation is to use video tutorials for the training of IT and other related software which the users can learn from while performing it at the same time, but a note to be kept on this is that the tutorials must be updated with time. Screen recording software with a voice direction and subtitles can be used as an effective method of training, as it's quite popular in the domain of IT and technology, and many official courses across the University runs the same form of training proving to be quite efficient. In the case of the documentation, the thematic analysis report highlights the problems faced with the wiki, which needs to be addressed before declaring it as a valid learning tool.

- b. In the case of CSAs, the 1v1 takes the majority of 1st priority with 75% voting for it, whereas for the 2nd and 3rd place, documentation and video tutorials receive equal votes. This is interesting in the context of exploration through the interview, since the interviewees described that since the job of the CSAs is mostly practically based, manifestations of different scenarios through a good video will always help new inductees learn the job quickly and will also eliminate one of the 'personality effect' of the peer-to-peer training currently in place (since in case of a video, you can actually identify people who are happy and invested in their jobs). Interviewee response also evinced that documentation isn't particularly preferred for the CSA role since the documents are largely extensive and not suited for an efficient learning process.

### **3.3.6 Cognitive Mapping**

In UX, cognitive mapping is a technique used as a manifestation of a user's mental model of a process/concept. A cognitive map largely aids in segregating research questions or to add clarification to existing abstract concepts.

Cognitive mapping is best suited for:

- a. An exploratory study: The fact that people think differently from each other contributes to cognitive maps being distinctively different, and hence it aids the generation of new themes or patterns which is beneficial in the case of exploratory research.
- b. Research on complex and specific research topics

- c. Participatory Action Research(PAR): PAR is a collaborative research method that is gathering the information that addresses future changes. In some cases, it helps the participants get a better understanding of the subject of research.

Cognitive Mapping Interview is usually carried out by the following steps:

- a. Brief the participant
- b. Prepare and practice: A cognitive mapping interview is usually different from a traditional interview, and hence preparations are required. A good rule of thumb is to begin the interview with some word-associating exercises or general idea-generating questions just to get the interview started.
- c. Figure out logistics: In a very in-depth session, there's a facilitator, a notetaker and a remote observer. The role of the facilitator is basically to drive the interview as well as keep the user flowing along with the mapping process. The in-room notetaker has a fair number of activities apart from taking notes on the user's explanation including noting down when the participant is unsure about something, how and where participants place something on the map, what physical gestures does the participant make during the interview and whether the gestures relate to certain content? The remote observer watches the live-stream of the interview and takes in-depth notes. A Google sheet is usually used to enable simultaneous notetaking by both the in-room and remote notetaker.
- d. Facilitate the session: Once the logistics are figured out, the facilitator can shoot an initial trigger question that is usually an open-ended question. This is just to build up a rapport and prepare the participant for the mapping session. After the initial trigger question, the facilitator acts as a prompt as the user builds up the map. The unstructured interview is usually done while the user maps out the process. The facilitator might keep a few probing questions about the topic ahead of time just to ensure the smooth flow of the session. The facilitator should offer simple prompts in the cases where the participants are reluctant to write and are reverting to speaking. Make sure to close the session by asking whether the participant has anything more to add to the interview.

The analysis of a cognitive mapping session is usually done in a couple of steps:

- a. The single-session analysis: The single session analysis is done similar to a regular interview analysis. Establish some priori codes, use grounded theory to code the data, analyze the data using the set of descriptive codes and finally form themes

grouping them by subject or topics, and then looking at the similarities in actions, thoughts, motivations, and emotions.

- b. Multiple session analysis: After the single-session analysis, the key is to combine all the themes across all the sessions to discover similarities drawing conclusions and insights.

The possible outcomes of the multisession analysis are:

- A Rough Agreemental model: This is the outcome when the users produce roughly similar cognitive maps leading to a consistent existence of themes across all the sessions. A stereotypical model is produced as a deductive analysis.
- Bimodal(or multimodal) model: Here the users fall into two groups(or a small number) and each group has a rough agreement within their own group. Apart from generating the stereotypical map for each of the groups, it's also essential to point out the unique distinctions that make the groups different.
- Strong Variability Model: In this case, the users largely vary across their ways of developing the maps. However, slight agreements might be found in some parts of the maps which can lead to some bimodal or multimodal models.

In our study, owing to the limitation in time as well as the lack of a notetaker and technological insufficiency of live streaming the session, the cognitive mapping was imbibed in the semi-structured interviews with a slot of 15 minutes. The session mainly looked after how the IAs and CSAs approach a task which they are not trained for. The goal of this cognitive map is to bring out how and where inside the map of solving an unknown issue, improving the training framework will help in easing the process and make it more efficient.

For example, if we have a look at point #2 in the thematic analysis report for the CSAs, there's a point of consternation brought out on the way 'personality effect' hampers the peer-to-peer training. In the cases where the peer isn't really interested in the job or is stringent in the way of getting a certain task done in their own way rather than understanding that different people have different methods of performing the same task, links to the part of the cognitive maps generated by users where they are 'asking for help from a colleague or a peer' (this step is present across all the cognitive maps produced by the CSAs). Hence, solving the issue of personality affecting the training is a way of

improving that part/step in the map. Similar deductions and analysis have to be done which is stated in section 3.5 of the report.

### **3.4 Design Sprint**

Members of the Sprint Team - 4

Decider - 1

Facilitator - 1

A Design Sprint is a 4-day process for the expeditious solution of big challenges, in crafting new products or even improving existing products. In simple terms, it is used to identify a problem worth the efforts of solving it and rapidly generating possible solutions for the particular problem.

The first day of the sprint process involves identifying the problems and defining them, but since this project involved a large 5-week ideation phase involving semi-structured interviews and cognitive maps, the results of the ideation phase were brought in and hence the first day was no longer needed. Also, in the case of a customer service team of a library, it's really hard to bring people together, so a compromise had to be made in compressing the day2&3 of the sprint into a single day. This compression involved modification of a few phases, elimination of the dedicated coffee-breaks, and additional stress which can definitely not be left out.

The following is a brief report of the sprint session conducted to improve the training of the customer service team in the Library of the University of York.

#### **3.4.1 Day 1**

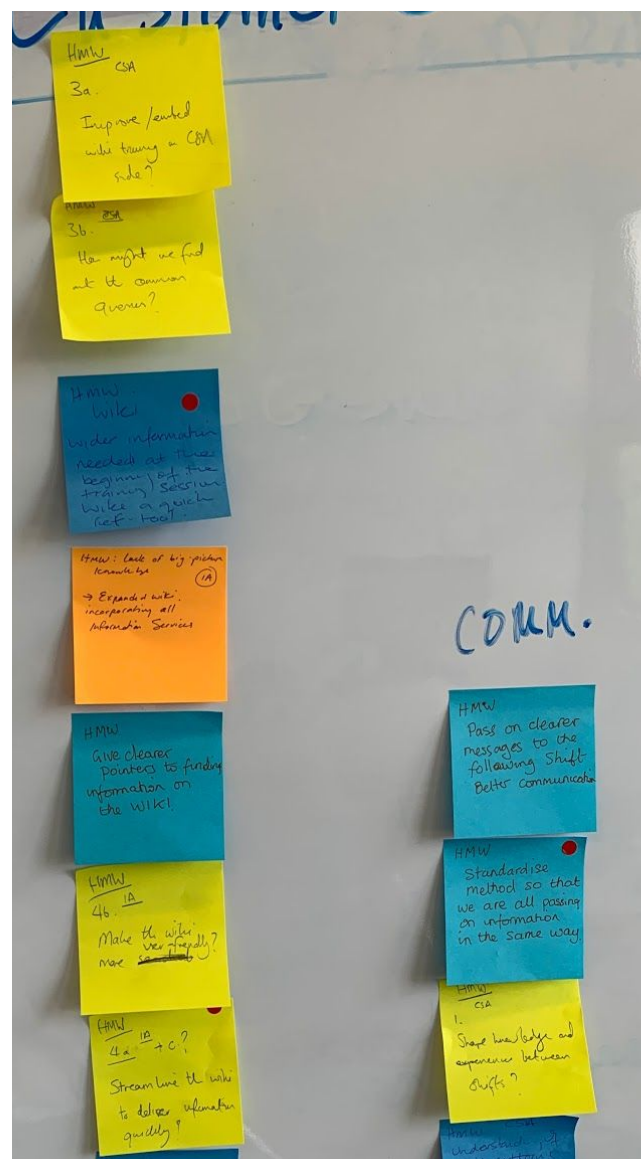
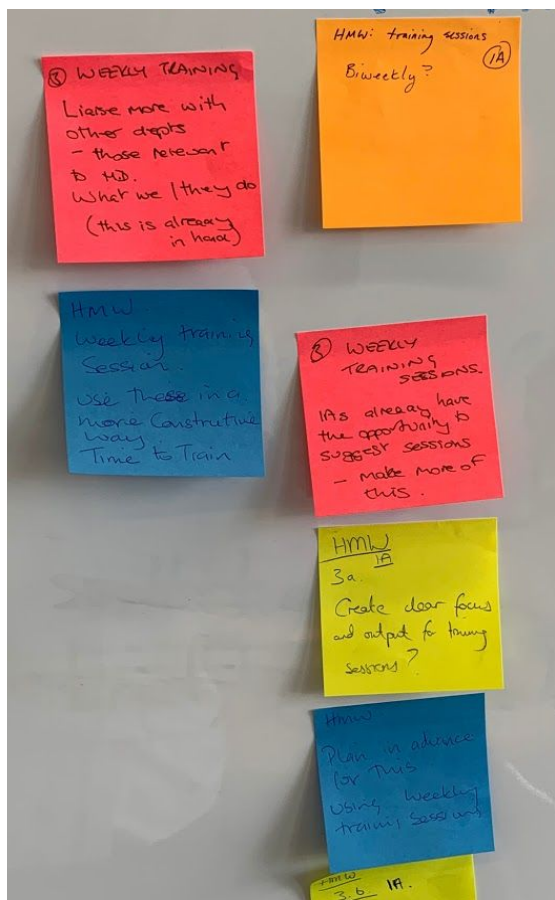
##### **1. Introduction to the Sprint Session(5 mins):**

All the participants of the sessions(hereby termed as the sprint members) are briefed about the session and what the session aims for. This is followed by giving out handouts to all the members which included the results of the qualitative analysis which consisted of semi-structured interviews using thematic analysis method, to uncover existing themes as

gaps in the current training process. All the members are thereby asked to give a rough glance to the handout.

## 2. HMW Statement Generation(15 mins):

The qualitative report analysis handed out to all the participants stated the different themes emancipated from the thematic analysis of the interview data, along with quotations from the interview to explain the context. The facilitator explained how to phrase a 'how might we' statement from an example problem picked at random from the report. The sprint members were given 15 minutes to form as many HMWs they can formulate from the problems defined by the report. The HMWs were collected from the members and put up on the whiteboard, which was then grouped according to the categories/themes they are based on. The ones that didn't form any group were placed separately as miscellaneous. Two of the members were then asked to walk up to the board and check whether the grouping(also known as affinity mapping) was done correctly, and the expert evaluation completed the first stage on the Sprint.





# MUST DO

7.  
Record most frequently asked queries or H.D.

HMW

9. IA

Identify seasonal queries to deliver training on?

HMW

7. IA

Construct a relevant framework that delivers knowledge to IA on common queries?

# FEEDBACK

5. HMW.  
Feedback.

Introduce feedback process for training sessions.

HMW  
5. IA

Embed feedback into all training sessions?

HMW  
IT training.

Staff as part of their induction.  
Shadow IT appointments.

HMW: IT training

(IA)

→ More detailed & consolidated documentation on how to answer common queries (info ATM is spread out over ITSD wiki & can be hard to find).

HMW

6. IA

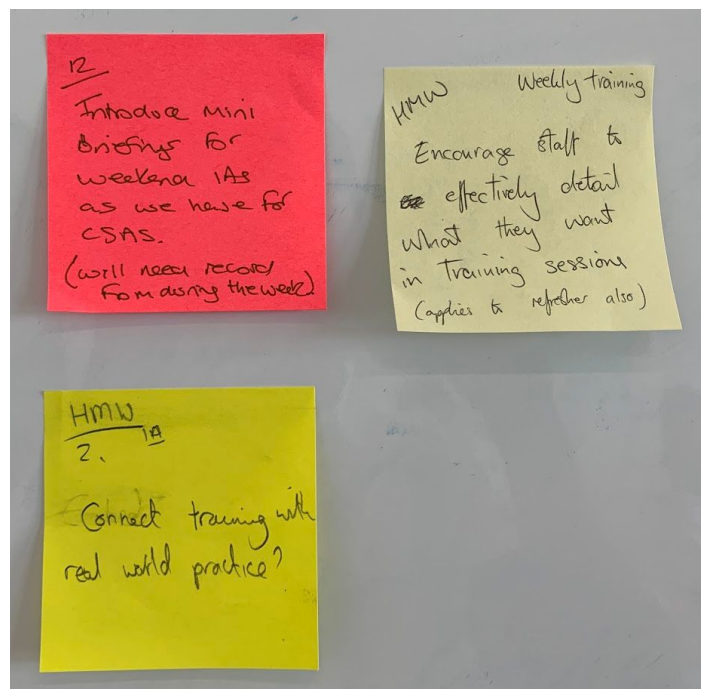
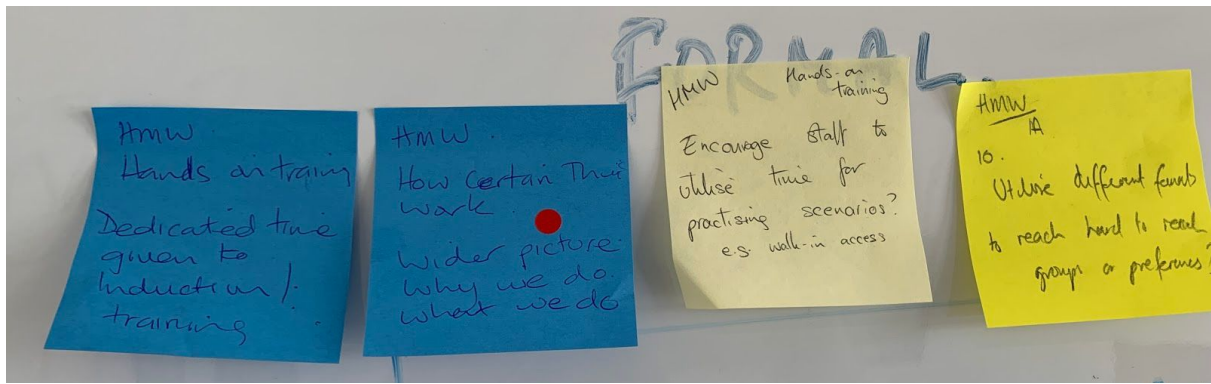
Involve IT Staff more directly in training?

HMW.

IT training framework

Re-introduce regular IT Q&A sessions.





**Fig: HMWs generated from the problem-generation session**

### **3. Vote on HMW statement(5 mins):**

All the members are given two votes, which they can cast on any two HMWs, however, the members also have the option to vote for a particular group, in which case, the member opting for the particular group will exhaust both of his/her votes in the single selection. After the members are done with casting their votes, the Decider walks up to the whiteboard. The Decider has only one vote (often called the Supervote) and has the liberty to select a particular group or a single HMW. The group/single HMW chosen by the Decider will be the one analyzed further in this sprint session. The winning group is kept on the Whiteboard and all the other HMWs are removed for ease of focus.

The winning group and the HMW board elected for this sprint session is shown below.



**Fig: HMW board for the sprint session**

#### **4. Three-step Sketch (45 mins) :**

- a. **Idea Generation (15 mins):** Everyone on the team is asked to privately jot down some rough ideas, this won't be shown to everyone, so being messy is okay. You can write down as many ideas as you want, you can look up to the internet or use

your own ideations. You can use your phones/laptops/any devices. Circle the ideas you think is important. This period marked the members going across the room using computers/phones/resources to write down ideas that can be generated as possible solutions in the next steps.

- b. **Crazy 8s (15 mins):** Each member is given a piece of A4 paper folded into 8 segments, and asked to draw a rough sketch of one of your ideas in each frame taking 1-2 minutes per sketch. Each sketch/idea can vary in a single/multiple aspects, or might be entirely different from one another. The crazy 8s can be messy, the main principle of this phase is to generate as many ideas as possible as an agile development process. This paper won't be put up/shown to anyone, so it's okay to use acronyms/wordings don't have to exactly right.
- c. **Sketch (15mins):** The members are asked to create a final storyboard on a sheet of paper, take your best ideation or mix up from the variations, make it anonymous and self-explanatory. Ugly is okay. Give it a catchy title and proper wordings.

After this round, the sketch from each of the members is put up on the whiteboard.

## **5. Sticky Decision (45 mins) :**

### **A. Speed Critique (15 mins) :**

The facilitator discusses each solution sketch, calling out the standout ideas. Concerns/questions were reviewed by the creator. The standout ideas were written down on sticky notes and put up beside each sketch. The creator can review concerns or point out any missing ideas from the sketch. This is done with all the sketches. Remember it's 3 minutes per sketch, so things were really fast.

### **B. Heat Map (10 mins) :**

The members were asked not to discuss among themselves, to look at a solution sketch and put dot stickers beside the parts/ideas they like. Each member was given three dot stickers to cast their votes. They can put as many as dot stickers as they want, more dots means its more exciting/innovative. However, if they voted for an entire sketch, they'd exhaust all their three votes in that single selection. If they had a concern/question, they were asked to write it on a sticky note beside each part.

### **3.4.2 Day 2**

#### **C. Supervote (5 mins) :**

The Decider walks up and reviews the board. Since the decision of the team is up front, it's easier for the decider to decide. He can go with the one with most votes, or choose according to his own will. Note that the decider's vote is the super vote and he gets to decide which idea is worth trying. The decider has three special votes, so the winner might be more than one sketch or one idea, or the decider can cast all three votes to a single sketch or part/idea. In this case, the Decider's votes have 'N' written on top of the dots just to segregate the votes from the rest of the dots.

#### **6. Storyboarding (45 mins) :**

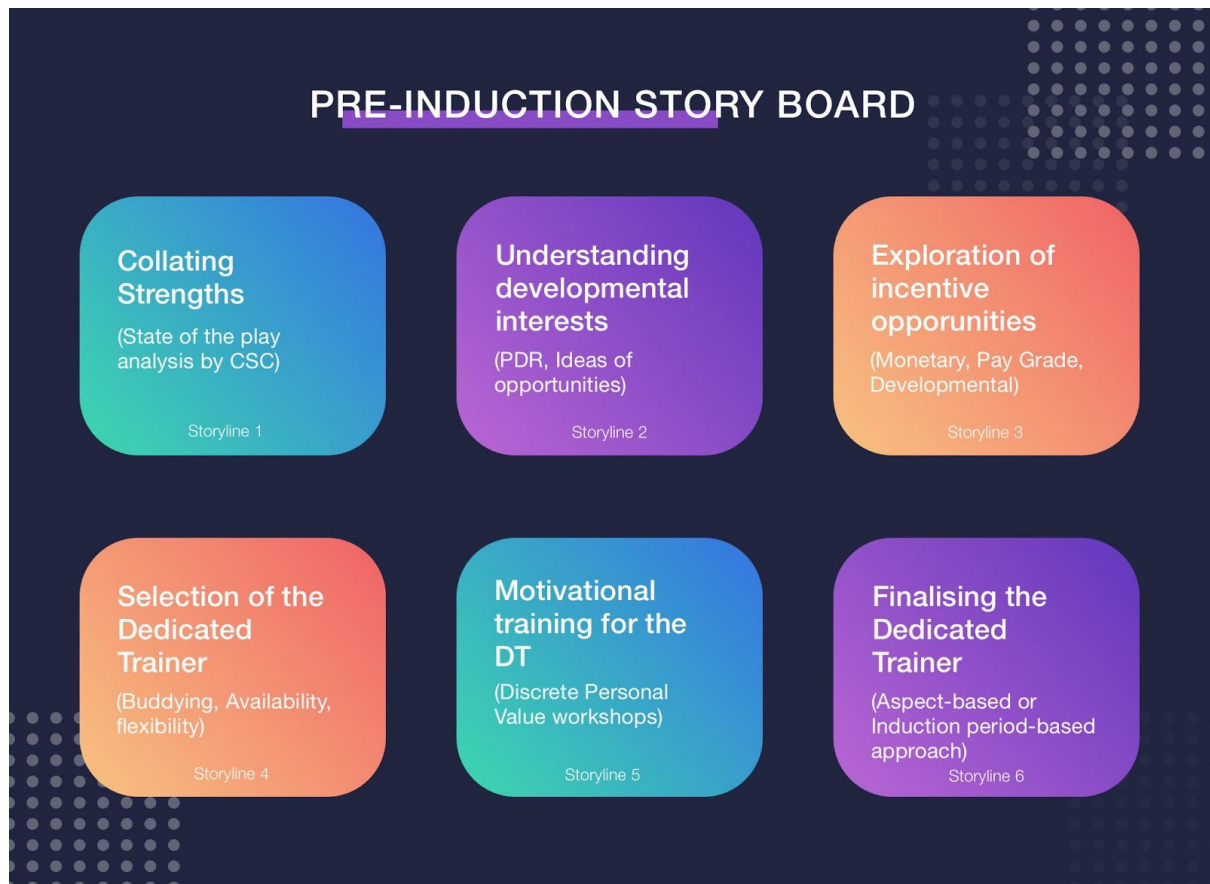
On a whiteboard, a grid with 15 boxes are drawn, the winning sketches/ideas are drawn and reflected as a story on the storyboard.

This is probably the most time-consuming part of the entire sprint session. The storyboard consists of storylines, each storyline, in this aspect, represented a particular phase of the training/induction process. The winning idea/sketch consisted of a 'dedicated trainer' approach, which needed a pre-induction phase that will explore possible frameworks for electing the 'dedicated trainer' hence the induction storyboard was reduced to 9 storylines. The facilitator along with the decider discussed on how to formulate each of the storylines. Some of the storyline ideas can be taken from the runner-up sketches/can be filled with the general flow of the storyboard, but all of the winning sketches/ideas must be incorporated in the storyboard.

At the end of this session, we have the entire idea of a working prototype, which looks like this.



The election of the dedicated trainer, however, requires a distinct storyboard that was fabricated over another session with the Decider. It was named as the 'pre-induction storyboard' and it consisted of the remaining 6 storylines. This storyboard is more towards a conceptual approach and further explorations are needed to determine the exact method of implementation of the storyboard. The pre-induction storyboard mainly unveiled the ways of electing a 'dedicated trainer' which was the basis of the winning sketch/idea of the design sprint.



**Fig: The pre-induction storyboard**

### **3.4.3 Future steps on the line of this Sprint session:**

Note that the design sprint is incomplete without testing the prototype/framework, which leads to further identification of areas of improvement. Owing to time constraints and the fact that this training framework involves a considerable amount of time to put into place as well as can only be applied in the case of new recruitments when the situation arises, limits the sprint up to the stage of formulation of the storyboard.

Nonetheless, it should be recalled that sprint is an agile process of identification of the most important problem and developing a solution idea, which usually takes weeks to achieve if done using other techniques.

The principle of 'working alone, together' is the key to a design sprint. Usually, team meetings are marked by dominant individuals who are expert in pitching their ideas, and it's

those ideas which customarily gets executed. The idea of a sprint is to eliminate that issue and involve the dexterous as well as agile product design ideas to formulate a working prototype in a short period of time with contributions from all the stakeholders, or at least a representative sample of them.

The future work will involve implementing this framework and evaluating it based on the feedback which will help in identifying a particular storyline that might need modifying. Also, work needs to be done on Storyline 5 in developing the feedback survey, Storyline 4 in generating the ideas for the practice/role-play sessions(which might utilize the most-documented queries recorded at the help desk and comms), survey/Performance Review to screen out the trainers based on their domains of expertise, on storyline 7 in formulating the feedback survey on the weekly Q&A sessions and further issues that might crop up during the planning of the implementation phase.

A huge thanks to all of the Customer Service Coordinators, the member of the Information Assistants Team, the member of the Customer Service Assistants team, and the Decider to take part in this Sprint.

### **3.5 Future Work and Limitations**

#### **3.5.1 Limitations of the project:**

Despite the fact that the project had a well-organized timeline, the time constraint was one of the major setbacks for this project. Though it's been a 10-week long project, with only 15 hours a week conducting all the contextual inquiry sessions, interviews with cognitive mapping and the sprint session was a hectic and agile timeframe. Owing to the shortage of time there might be some aspects which call for future improvements:

- Refining the thematic analysis: The thematic analysis done on the interview data was aimed to lay the foundation for the sprint, not to form a consolidated report. With more time in hand, it'll be worth analyzing the data with proper priority codes, setting up the descriptive codes and fine-tuning the grounded theory approach in the formulation of the themes/patterns. The report produced as a part of this project is largely highlighting the key-points or issues aroused across the interviews rather than specifically targeting the process of generation of themes and patterns. Future work can look in producing a more structured report which will lead to designing

implications of the training framework and might help in the testing of the recommended training framework.

- Analysis of the cognitive mapping interviews: Though this report highlights the methods of analyzing cognitive mapping sessions, the time constraint coupled with the limitation provided by the aim of the project, prevented the analysis of these cognitive maps. Future work might look into generating a stereotypical model from the maps and linking the issues reflected by the thematic analysis into different parts of the model enabling the development of an efficient and consolidated framework of solving an unknown issue.
- Implementation and iteration to the recommended training framework: The five stages of Human-centered design are Ideate, Define, Prototype, Test and Iterate. For the scope of this project, we successfully reached the prototype stage. Future work should involve implementing the prototype, testing it with further UX methodologies, and iterating the framework to incorporate the test results.

### **3.6 Conclusion**

The aim of this project was to identify key issues that are present in the current training process through different UX methodologies. After assessing the report, it can be fairly said that the project thrived in fulfilling its objectives as well as went a further step forward towards the prototyping phase which was achieved through the design sprint. Dealing with UX involving learning outcomes is a sensitive topic and special accommodation of an empathetic approach is essential to carry out UX research in this field. It's indispensable to put forth the value of anonymity while conducting the interviews, to keep in mind not to drive the interview away from the research question in hand, and putting empathy as the emotional viewpoint while conducting and analyzing research. The curtailments involved in certain aspects of the project owing to time constraint was a setback which was solved with several modifications to the methodologies over the course of time. Nevertheless, this entire project was a learning experience for me, and I hope that it made an important contribution to the customer service team in the University of York library by investigating the gaps in the training delivered to the staff and reflecting the issues worth exploring in future.