Abstract

Transitioning into university can be a time for new beginnings and new friendships whilst for others it can be a time that is experienced more challenging. The aim of this study is to increase student situational awareness when transitioning into higher education, and thereby promoting health and improving the student's overall wellness.

The information flow and how the students experience this have been investigated using theories to analyse how they experience situational awareness. Qualitative methods and methods from service design and have been used to map the students and the involved stakeholders' interests and needs. The theories used are field studies, service safari, document analysis, interviews, goal directed task analysis, and service blueprint. In the-sis uses empiric and service design methods. Qualitative methods have been used to find the student' information requirements. There have been found several weaknesses in the information provided to the students and the timing of them. Many of these are to do with not being aware of the information and information overload. Suggestions on how to resolve this has been done based on principles in situation awareness and the students themselves. The situational awareness requirements the students have were compared to the student 10 sustainability Goals developed at Sit Labs NTNU, Trondheim.

Acknowlegdement

First, I want to thank all the students, professors, student's advisors, Sit Gjøvik and Samordna Opptak who have been so kind and offered their valuable perspective and knowledge to me. A special thanks to the Division of Communication at Gjøvik, NTNU for providing me with all the information I asked for and beyond.

Thank you to Gunn Strø, from Sit for believing in me and for encouraging me to follow my passion for student welfare, and for generously sharing your experience and knowledge with me.

I want to give a big thank you to my supervisor, Frode Volden, for many enlightening conversations and for challenging me and also being patient with me.

I also want to thank my boyfriend and best friend, Francesc Dominguez Carrasco, for always being there by my side through my ups and downs. Thank you so much for being so loving and calm, for believing in me and for simply being who you are.

Thank you so much to my parents for believing in me and always being there for me. I also want to thank you so much for encouraging me to follow my dreams and showing me the importance and value of higher education. You taught me to approach life from a curious point of view, to be creative, and be open to the opportunities in life. I cannot thank you enough.

I also what to say a big thank you to my friend, Hedda Schistad Bøgseth, for her endless support.

Thank you, the rest of my friends, my study group, my family, and my community for believing in me and being there for me. This master's thesis would not have been a reality without you.

Table of Contents

1. List of Figures

2. Terminology

"*Stakeholder:* "A person, group or organisation that is somehow connected to or has an interest in a project, organisation, or product (including everyone listed here)" (Stickdorn *et al.*, 2019, p. 59)

Pain points: "Pain points are problems that occur at the different levels of the customer experience: interaction level, customer-journey level, or relationship level" (NN Group, 2021)"

Silo: "Whole organizational units (we often say "silos") have been constructed around work functions that make sense to the company, with a dedicated collection of business tools set up to understand, track, and manage these functions and optimize them within the silo and from the company's perspective – not the customer's" (Stickdorn *et al.*, 2019, p. 7).

3. List of Abbreviations

H.E. Higher education

S.A. Situational Awareness

I.R. Information Requirement

B.W. Buddy Week (translated from Norwegian: "Fadderuke" during orientation week)

GDTA Goal directed task analysis

NTNU Norwegian University of Science and Technology

1. Introduction

Transitioning into higher education is for many a period of time associated with anticipation, big transitions, belonging, and new friendships. Young, soon-to-be, students have their own set of dreams, aspirations and expectations about the future. The dreams, aspirations and expectations can take students to widely different places and destinations in life, both at home and abroad. Wherever the student begins their studies, the transitioning into higher education often brings a period of many changes.

In the autumn of 2021, 61,675 students transitioned into Higher education in Norway (Samordna Opptak, no date) When students start university in Norway, the transition from high school to university is "associated with social, structural and behavioural changes". (Diehl *et al.*, 2018) How one experiences the unexpected is different from one individual to another. For some it can also be associated with frustration and loneliness (Eikeland and Manger, 1992)(Hughes and Spanner, 2019)According to doctor of medicine Kari Lussie Lønning, in addition to finding a new social network, being a student also introduces many challenging factors such as having a low or reduced income, taking more and bigger decisions, pressure to perform on many different levels, and taking more responsibility. (*NRK*, 2016)

1.1.   Research question

The research question and sub-questions to be addressed in this Master's Thesis are the following:

> 1. How do students experience the information flow during the transition into their first year of undergraduate studies at NTNU, Gjøvik?
> a) How does the information provided before one starts university affect the experience after one arrives?
>
> b) How does the timing of what is communicated affect the student's situational awareness?
>
> 2. How do the S.A. information requirements affect the students' need for health promotion?
>
> a) If so, how can it be improved to promote health and wellbeing amongst first-year students?

1.2.   Justification, motivations and benefits

Many students transition into higher education every year, but according to the recent SHOT survey were the goal is purpose is to map how the students' health and well-being on in two students suffers mentally. This number has increased from one in four in 2018.(2021)

Most students find the friends they keep for the rest of their university career or even longer in the first year of study (Myrtveit *et al.*, 2017) (Klaiber, Whillans and Chen, 2018) The opportunities for finding new friends are highest, particularly at the beginning of the first semester, and is a great window of opportunity for forming new friendships. (Van De Bunt, Van Duijn and Snijders, 1999)

Studies done on retention and completion of study have shown that the start-up-process is crucial for hindering retention and for strengthening the chances of completion (Tinto, 1993, Pascarella and Terenzini, 2005)Tinto found that the first three weeks of study are the most crucial when it comes to hindering retention.

Looking at this from the perspective of health promotion, the motivation for writing this thesis is to investigate if anything can be done to prevent students from experiencing unnecessary stress and confusion in a period which, for many, is disruptive in the first place. The aim is to give students more clarity and ease around the information provided. Hopefully, the information provided can act give more situational awareness and predict-ability so that the student health can be promoted.

It is, therefore, important to find out how the amount of information leading up to the start of study and during the first weeks is perceived to form a solid understanding on where intervention can be made. Investigating how the students experience the transi-tion with reference to health promotion covers a knowledge gap in the exiting literature.

1.3.   Presentation of the case

At the beginning of the Autumn semester, most institutions of higher education, together with the student welfare service and the students, organise a Buddy Week. This is an orientation week. Many students are young and have left their hometown, families and network and are new and alone in town.

Norwegian Buddy Weeks (Fadderuka) are organised to help students get to know their fellow classmates, find new friends, get to know the locations in and around the university. Is organised by volunteer students in year 2 and above, usually from the same faculty as the 1st year students. The matriculation of the students and the orientation week run by the university happens alongside the Buddy Week.

The process of transitioning into higher education in Norway, in this case NTNU Gjøvik, involves multiple institutions and stakeholders, also called silos. Those are The Norwegian Universities and College Admission Service (Samordna opptak), NTNU, and SIT. The focus is mostly on what is communicated to students and what effect this has on their situational awareness. The findings are evaluated against SIT's ten sustainability goals for students (that strive to work for health promotion). The evaluation against the sustainability goals is the contribution of Sit Labs, where I have been working doing research for the last 6 months.

The students 10 sustainability goals

The students 10 sustainability goals are developed by Sit Labs

STUDENT SUSTAINABILITY GOALS
FOR A MEANINGFULL STUDENT LIFE

1 SOCIAL AFFILIATION
2 GOD MENTAL HEALTH
3 STUDYING SAFELY
4 CLOSENESS AND LOVE
5 GOOD PHYSICAL HEALTH
6 SAFE ECONOMY
7 ACKNOWLEDGEMENT
8 GOOD SEXUAL HEALTH
9 STUDENT CULTURE
10 SELF-REALIZATION
11 ADEQUATE REST
12 SOUND HOUSING

"The student's sustainability goals were created through Sit Labs, a subsection in Sit (the student organization in Trondheim, Ålesund and Gjøvik). Throughout the summer of 2021, twenty student innovators worked to create social services and initiatives for students, with a special focus on strengthening everyday life in the corona pandemic."(SIT)The goals will be described further later in this thesis.

1.4.   Background

Health promotion

In the Ottawa agreement it says that health promotion needs to be mediated

> *"The prerequisites and prospects for health cannot be ensured by the health sector alone. More importantly, health promotion demands coordinated action by all concerned: by governments, by health and other social and economic sectors, by non-governmental and voluntary organization, by local authorities, by industry and by the media. People in all walks of life are involved as individuals, families, and communities. Professional and social groups and health personnel have a major responsibility to mediate between differing interests in society for the pursuit of health.* "
> *(WHO | The Ottawa Charter for Health Promotion, no date)*

Health promotion at the universites

"Health promotion action builds upon the Ottawa Charter for Health Promotion, which emphasizes the interconnectedness between individuals and their environments, and recognizes that "health is created and lived by people within the settings of their everyday life: where they learn, work, play and love." (…)Health is viewed holistically, reflecting "physical, mental and social well-being and not merely the absence of disease or infirmity."(Charter, 2015)" (Fox, AM, 2020)

Health promotion at NTNU and SIT

In a Norwegain context there are many laws and regulations that has an impact on the role in the health promotion which is offered. (Ursin *et al.*, 2017)

The Public Health Work Act (30) aims to contribute to a societal development that promotes public health. Public health work must be long-term and systematic, and is based on five basic principles: the principle of levelling out social inequalities in health, "health in all policies", sustainable development, precaution and participation (31). The Public Health Act is aimed at municipalities, county municipalities and state authorities. (Ursin *et al.*, 2017)

> "(…) Everyone at NTNU takes independent responsibility for contributing to an inviting, health promoting environment for work and study, and to a workday in

which staff and students experience challenges, development, and joy in their work." (NTNU, 2018)

In the law it says that, "The educational institution has the overall responsibility for the students' learning environment. The management of the educational institution shall, I cooperate with the student organization, create the conditions for a good study environment and work to improve the overall learning environment at the educational institution." (Lovdata, 2012)

In NTNU's strategic plan for 2018-2025 there are several priority areas under work environment and student welfare.

"Contribute to an excellent context for learning, through welfare services and voluntary activities on our campuses."

"We focus on students' well-being and achievements. The student welfare service, the student welfare association, is our main partner in taking care of student welfare."(SIT, No date)

1.5.   Scope

This thesis will focus on the youngest students, aged from 19-24. There are several reasons for why. Firstly, they are more vulnerable to psychological ill-health. Secondly, the students are a more homogeneous group of people.

The focus is on how and when information is communicated from Samordna Opptak, though SIO and NTNU. This includes web pages and social media; however information communicated though Twitter, Instagram stories is outside of this scope, so is information provided by acquaintances and other institutions and organisations.

1.6.   Planned contributions

Through this Master's Thesis, the researcher hopes to contribute to the understanding of how the first year students experience the information provided to them, and the timing of if it during their transition into higher education.

The planned contribution is to give a comprehensive and holistic understanding of the students' experiences during the transition with a service blueprint. By using qualitative research methods and theory from S.A the study will also provide what the students' information requirements are. These will be compared to the student's ten sustainability goals recently developed by Sit Labs. Looking at the backstage and front stage processes in the student's user journey contributes to making suggestions on how the S.A can be improved.

2. Theory

2.1. Situational awareness

Situational awareness is a term used in human factors. Ensley describes situational awareness (S.A.) as "the perception of the elements in the environment within a volume of time and space, the comprehension of their meaning, and the projection of their status in the near future" In other words, situational awareness is an individual's awareness on "what is going on" within ones environment. The theory is used to determine what has happened, what the situation is now and what will happen in the future.

The model was initially developed in the mid-1990s to help armed forces in the aviation field. The research was limited. It integrates both basic cognitive psychology and applied science of human factors with its approach on mental models. Since then, it had been used extensively and tweaked to also be implied in other disciplines such as health care and environmental safety robotics, and anaesthesiology to mention a few.

Endslay made a diagram to illustrate this theory where perception, comprehension and projection are three levels of situational awareness. See Fig. 1 below.
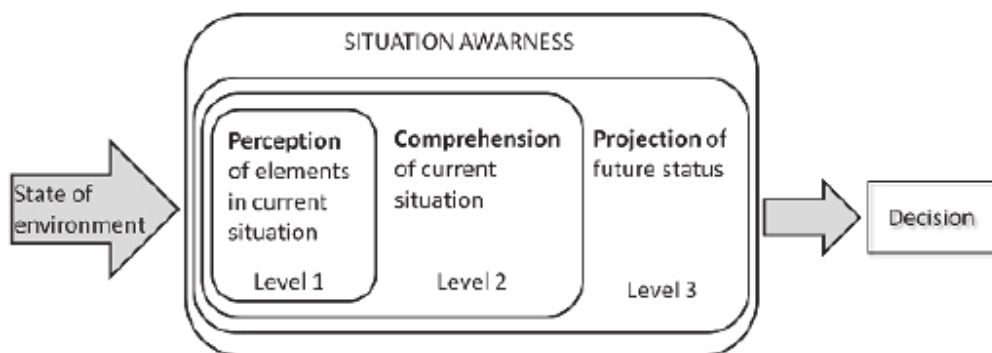
Figure 1. Endsley's model of situation awareness (adapted from [Endsley, 1995])

The first part of the diagram is called "perception". Situational assessment can be achieved by using perception and attention.. It starts at Level 1 and is called "Perception", which is done by perceiving elements in the current situation. It leads to awareness of situational elements such as events, people, systems, environmental factors. It also lead to their current states such as locations, conditions, modes, actions.

Level 2 of the diagram is called "comprehension" and it is the interpretation of the situational assessment in the first part of the diagram. It is the understanding of the scenarios in relation to the task goal.

Level 3 is called is called "projection", and it anticipates how the situation is likely to evolve and predicting future states and events.

From the projection, one can move to the fourth stage which is "decision", meaning deciding on what to do. The fifth state is taking action.

Situational awareness is important because having a good overview of "what is going on" helps us understand and interpret what is happening around us. Good situational awareness helps us make the right decision according to the situation and environment we are in.

Designing for complex systems

Mika Endlaay and Debra has written the Book "Designing for situational aware-ness"(2012). Here different Information that is used to support the same goal needs to be centralised on a common display so that users are not required to search across mul-tiple systems derive the SA needed(…) "(Endsley and Debra, 2012, p.144).

3. Methodology

This chapter will explain how the methods will be used to answer the research questions.

1. How do students experience the information flow during their transition into the first year of undergraduate studies at NTNU, Gjøvik?

   a) How does the information provided before one starts university affect the experience after one arrives?

   b) How does the timing of what is communicated affect the student's situational awareness?

2. How does the S.A information requirements affect the students needs for health promotion?

   a) If so, how can it be improved to promote health and wellbeing amongst first-year students?

This thesis uses the mixed-method design called exploratory design. It is typically split into phases. The first phase in this thesis used qualitative methods with the purpose of understanding and getting a "sense of the characteristics of phenomena" (Leedy and Or-mond Ellis, 2014, p. 270). The methods used in the first phase are observations, and qualitative interviews, which will be described in-depth in the next paragraphs. The re-sults are then used as the basis for the next phase of the process.

The methodological framework of this thesis is explorative case-study. A case- study is used when investigating themes that are complex and previously unexplored. (Leedy and Ormond Ellis, 2014, p. 143) Transitioning into higher education is complex as it involves different institutions which revolve around different channels of communications from dif-ferent silos.

The field study, the unstructured interviews and the diary study were gathered during the Autumn of 2020, Spring, and Summer of 2021. The findings from phase two were used to systematically elaborate on phase one to develop a service blueprint. The next phase started with a more systematic collection of data with the aim of iterating the ser-

vice blueprint, but also to evaluate the planning of the onboarding period up to S.A theory. This is described more in detail below. The goal was to capture a holistic understanding of the user's situational awareness, their goal directed information requirements, and also to understand the underlying processes "behind the scenes". The methods were then used to determine which sustainability goal they meet, and how the information communicated could be altered to promote health and wellbeing.

3.1. Research design

The method used in this explorative case study uses an iterative process, commonly used in the field of design, called the "double diamond".

The double diamond consists of four phases and is used to answer the research questions. The four phases are: Discover, define, develop and deliver (Stickdorn *et al.*, 2019, p.89). Much like the explorative case study, the design process, which in this case is not only explorative, but also iterative because it adapts as new data comes in. It is building on it and going forwards in explorative loops called iterations (Stickdorn *et al.*, 2019, p.92). In the figure below (Fig.1), the various methods used to answer the research questions are plotted into the double diamond. The specific type of iterative design process used in this thesis is called service design and is described in the next paragraph.
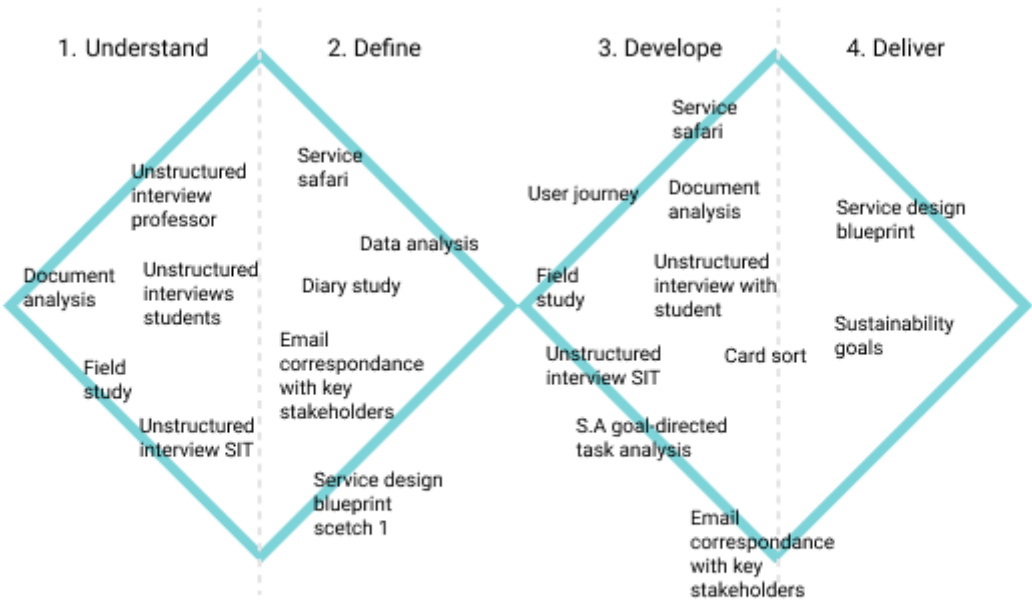
Figure 2. The different methods plotted into the double diamond

Drawing accurate conclusions is important to increase the internal validity of the study. Therefore, the data was triangulated from multiple sources of the collected data (Leedy and Ormond Ellis, 2014, p.103-104) (Stickdorn *et al.*, 2019, p. 106).

First the iterative design process will be described. Then the different methods and how they are used will be presented

3.2.   The iterative design processes

The first part of the diamond which, is called "understands", and seeks to understand the problem's complexity and uses field study, unstructured interviews and a diary study.

"Service design" is a process in which the designer focuses on creating optimal *service experiences*. This requires taking a holistic view of *all* the related *actors*, their *interactions*, and supporting materials and infrastructures.

Service design often involves the use of customer journey maps, which tell the story of different customers' interactions with a brand, thus offering deep insights."

To gain an understanding of where the main pain points are, it was necessary to ascertain what students and stakeholders need from the different institutions working with them.

A series of qualitative methods were used such as a participatory design process with semi-structured interviews and testing of the final prototype on users. The process was broken down into three periods; research, ideation, and prototyping (Stickdorn *et al.*, 2019, p.332-334).

Several studies were conducted to gather as much varied and representative information about the population as possible. The different methods used will be presented in this chapter.

3.3.   Field study

To get an overall understanding of the first period of the students meeting with the stakeholders, two different field studies were conducted at the beginning of the semester. One field study was conducted during the buddy week, and the second during the first day of school in a classroom situation.

It's worthwhile mentioning that this was particularly important to me, the researcher, because I did my undergraduate sties abroad and had not previously experienced a buddy week in Norway. Neither did I attend the buddy week at Gjøvik NTNU at the beginning of my master's degree, so the opportunity to see how it was organised with my own eyes was particularly important in my case.

The type if observation chosen is autoethnography. It is a method used at the beginning of a project to help interpret behaviours when conducting interviews later in this study (Stickdorn *et al.*, 2019, p. 119, 339). It was important that the field study kept its internal validity. Therefore, the least intrusive kind of field study was chosen which is called "deep hanging out".

In this kind of field study, the researcher tries to merge as much as possible into the environment to be as anonymous as possible, but still to be able to gather data.

3.4.   Sample and data analysis

When the key stakeholder was identified and behaviours were interpreted from the field study. Three different types of users were sampled to gather insights from the transition from the early start when applying for university in January until one has taken part of in the buddy week in August.

Sample one consisted of one high school student who was applying for higher education in January 2021, (Sample 1). Sample two consisted of five undergraduate 1st year students who had been taking part in the buddy week at two different faculties at the NTNU, Gjøvik. They had in common that they all had taken part in the onboarding process and buddy week in the Autumn of 2020. Sample three consisted of and staff working at the university, both at SIT and NTNU, (Sample 3).

Sample 1 took part in a diary study, and Samples 2 and 3 took part in semi-structured interviews. The results from the diary study were compared with the results in the semi-structured interviews. The goal was to answer the research question 1 a): "How does the information provided before one starts university affect the experience after one arrives?

The participants were selected with non-probability sampling techniques. Sample 1 was selected with judgement sampling, whilst Samples 2 were selected with snowball sampling. Here the students were invited by class representatives, student unions and student advisors, within group chats and were recruited by self-selection. Samples 3 were selected with convenience sampling based of their importance the student, and based on new data found during the explorative process.

The results were analysed and triangulated with document analysis, email correspondence with Samordna Opptak, service safari and staff working at SIT Gjøvik and Trondheim. All the findings were later plotted onto the service blueprint to get a holistic overview of the findings.

The methods used, and how the data analysis was conducted, is described below.

3.5.1 Data analysis

The qualitative data were analysed using a method established by the Norwegian researcher called Aksel Tjora. In Norwegian it is called "stegvis-deduktiv induktiv methode", and in English it would be translated to a "step-by-step deductive induction method"(SDI) (Tjora, 2021).

Firstly, the interviews and were transcribed, made anonymous and coded using an inductive empirical close-to-code method with a computer aided programme called NVivo. Then the codes were established based on what the participants was saying and the communalities and themes in the data were established afterwards. This was done to create a code structured empirical data where the goal is to develop new insight and understanding by staying close to the empiric data itself.

Then the unstructured interviews with the students where coded.(Samples 2) This resulted in approximately 325 codes that was later designated to 19 different groups of codes. 5 of these codes was taken forwards to form the basis for establishing new possible theories. The pain-points were established from the theories and plotted in on the timeline in the service blueprint. Then they were analysed using the goal directed task analysis and afterwards matched with the 10 sustainability goals.

The data from the diary study (Sample 1) with the student applying for higher education was later processed in the same manner. Since the research design is explorative and consistently trying to understand a phenomena, the data was coded in rounds. If there were new codes that added value and meaning to the existing 5 groups of codes these were placed in sub-groups under these, so that it was possible to form a basis for some reliable theories. The same process was done with rest of the qualitative data (Samples 3) from the Samordna Opptak, the staff at the university, SIT. The relevant data was then plotted into the "front stage" and "backstage" processes in the timeline inside of the service blueprint.

3.5.   Semi-structured in-depth interviews

The semi structured in depth interviews with the students, professors and staff at SIT were held after the initial document analysis and field study. The method used from the very beginning when interviewing staff at SIT who is part of planning the Buddy week and later with the students taking part in it. According to Baxter, Courage and Caine it is a good method for gathering good insight into a culture which otherwise is hard to understand from the outside (2015, p. 110)

In this thesis the goal for the interviews was to first answer research question 1, 1a) and 1b) to understand the information flow, the timing of it and the situational awareness when the students transition into undergraduate studies.

The method used to answer these questions so that the students could feel at ease about opening about a topic that for many can feel very personal. Also, it was used to be able to ask more in-depth questions were asked on the fly when the students and staff at NTNU Gjøvik and SIT touched upon subjects that could give information to the timing of the information they received and the experiences and needs around of these.

Later on the semi structures interview was held with a student with the goal to inform and triangulate the findings from the goal-oriented task analysis. The overall goal with this was to answer understand if the needs of the studies was interpreted correctly and to answer research question 2: How does the S.A information requirements affect the students needs for health promotion?

3.6.   Diary study

A diary study was conducted with a High School student. The longitudinal study lasted for 8 months and lasted from January 2021 and ended in August 2021.The process of looking for where and what to study, going through the application process, waiting and transitioning into a often new study town and university takes time. The length of time this

takes, the large amounts of time one process during this period is the reason a diary study was included as a method.

Diary studies are used to collect thoughts, and needs *in situ* as they go about with their daily activities (Baxter, Courage and Caine, 2015, p.100). And the aim was to answer the research question 1a if the information one receives before one arrive affect the situational awareness after one have arrived. And 1b if the timing of what is communicated affects the situational awareness.

High school student was asked to regularly document when in touch with the different stakeholders to inform the touchpoints in the user journey in the service blueprint, (described below). This was done to give more depth and understanding of was to overall process of finding and applying for a place to study. Since S.A is affected by the surrounding experiences therefore he was asked if there were other stressors and demands that was effecting this process.

The diary prompts were structured, but with room for adding additional information that was thought to be interesting for the study. Afterwards the student took part in a post-study semi structured interview to ask some clarifying questions about data and debrief him and hear how he felt the experience had gone. The prompts is found in the Appendices (I will insert this here) .

3.7.   Document analysis

Document analysis is used by go analyse the content of different documents (Sander, 2019). The collected content was analysed into categories using the data analysis tool NVivo.

It was also used to collect information in social media, websites, documents and to deeper investigate the possible challenges students were facing in the service safari described below. Lots of the information that was gathered in the interviews was purely based on recall from memory, it was therefore important to triangulate this information using a document analysis see if it was reliable.

E-mail correspondence with the information department at NTNU and their "communication plan for study start" was particularly interesting to use. This in turn was informed deeper questions about the background processes in the service blueprint.

3.8.   Service safari

Service safari is a an auto ethnographic research method which is used to understand how a service experienced first-hand(Service design tools, no date) It is done by pretending to be the user the researcher and to seek out new insight (Stickdorn *et al.*, 2019, p.22) It is cost-and time effective since one don't have to involve external participants.

This methos was used to further investigate the different pain points in the timeline and to seek new insight about the challenges and possibilities the students were experiencing. The data was later used to inform the goal-oriented task analysis.

Together with the document analysis this method was used in the beginning of the project to create a tentative timeline for the service blueprint.

3.9.   Goal directed task analysis

A particular cognitive task analysis, called a goal directed task analysis, was conducted to understand what could support SA in the pain points found in the service blueprint when transitioning and onboarding into NTNU, Gjøvik. A goal directed task analysis (GDTA) is a cognitive task analysis done to understand the user's SA information requirements (Endsley and Debra, 2012, p.63). According to Mika Endsley, the GDTA "… focuses on the goals the operators must accomplish in order to successfully perform a job, the decisions he/she must take to accomplish the goals, and the information requirements that are needed in order to make appropriate decisions" (2012, p.63). Making appropriate and informed decisions is essential, and knowing the student's SA information requirements makes it more manageable to further develop the service. The information requirements are later matched up with the most suitable sustainability goal. The choice of goal was later verified by SIT health in Trondheim.

Instead of the user having to adapt to and understand the existing system requirements, better SA is obtained by designing the service around the needs of the user.

The GDTA consists of hierarchical steps with goals and decisions that were found from the results in the diary and interviews. This was done to find the SA requirements. The initial GDTA was then created by combining the results with additional sources such as service safari, document analysis and the service blueprint. Questions that are typically used to make a GDTA were used as prompts in the diary study to find the SA information requirements. Typical questions are:

In the end the SA information requirements goals were verified with a first year under-graduate student. When the information requirements were found, the results were matched to the student's sustainability goals.

3.10.   User journey map Service blueprint

The Norman Nilsen group defines the a service blueprint as "a diagram that visualizes the relationships between different service components — people, props (physical or digital evidence), and processes — that are directly tied to touchpoints in a specific customer journey." (NN Group, no date) The goal of making a service blueprint is to improve the user's experiences, to discover weaknesses in the situational awareness and to understand the processes behind the different silos. (NN Group, no date) The goal of making the service blueprint was to get a comprehensive and detailed understanding of the students' goals, mental load, deadlines, and life events. It also was also done to ascertain where and why the SA errors occurred and what the information requirements could be.

The service blueprint was created by plotting the gathered data onto frontstage processes which in turn informed the backstage processes. With the help of a service safari and document analysis, the different deadlines were plotted in the timeline alongside the needs and the feelings of the users. Once a pain point in the frontstage was a revealed, a service safari and a document analysis were held. This was done to understand more

about the exchange of information between the student and the different institutions and stakeholders.

3.11. Cardsort

Many students had challenges with a particular experience, so it was important to get to know their thoughts and feelings around this experience. An open cardsort was cardsort is used "… to inform or guide the development of the information architecture of a product."(Baxter, Courage and Caine, 2015, p. 101).

The card sort was conducted in the online real time design tool called Miro alongside a videoconferencing tool, so it was possible to see and talk with the user. All the data from the powerpoint from the Orientation day, together with some notes from the observation, were written down on cards prior to the meeting. Then the first-year student was asked to prioritize the cards into numbered categories after how important the student thought content. The student was also asked to add categories she wanted to add. Afterwards, the student was asked to explain the choices that were made. This was done to verify the findings from the empirical data and to deepen understanding about certain topics. The first-year student was asked questions such as "what would you ideally like to know?" "What would be a good example of S.A here?" These questions were also used when finding SA information requirements. See appendices for card sort guide.

After the card sort some questions were asked to understand more about how the student had experienced different findings from the interviews.

3.12. Ethics

Gjøvik NTNU has a small student community where many people know each other. The interview subjects, especially the students where asked how they experiences cetain interventions, such as how they felt they were welcomed. Many people, including staff at NTNU and SIT have put in enormous amounts of effort into making it the best experience possible. At the same time this study tries to investigate how it can improve and that involves looking for areas that is perceived as challenging. According to The Norwegian National Research Ethics Committees good research "(…)should not cause unintended and undesirable consequences"(no date). This is the reason why all names of participants, faculties are made anonymous.

All the gathering of data and the methods used were approved by NSD – Norwegian Centre for Research Data. (Norsk senter for forskningsdata AS) See appendices and Regional Committee for ethical research (REK) said it was not necessary to apply for approval. See appendices

In the diary study the researcher and the High School Student meet monthly. This as to give the student a debrief about how it was experiences and to ask clarifying questions about the data from the diary study. If there was anything the student felt so frustrating that he could not find information about that the researcher considered it could potentially affect the student's future negatively, information was were given.

All participants were also thoroughly informed what the study was about and that they could end the participation at any moment without an explanation.

4. Results

In his chapter the results will be presented

The codes that emerged from the different qualitative methods using SID, the step-by-step deductive induction method thought the different phases as explained in the methods chapter. As the codes emerged

First first phase of how the results was found is observations, and qualitative interviews, which will be described in-depth in the next paragraphs. The results are then used as the basis for the next phase of the process.

An empiric structured, groups of coding, and the development of the concepts. The final concepts will be formed as painpoints a normal terminology used in Service design in the next chapter

4.1. Fieldstudy results

Observation during the Buddy weeks Activity Day. As mentioned in the methods chapter observation was made to get an overall understanding of the first period of the students meeting with the stakeholders. One observation during the buddy week and one during class.The fist observation was held during the Activity Day, one of the days of the buddy week arranged in Gjøvik. From the observation guide the following results were found.

Each buddy group are consisted of people from the same faculty with 5 new students and one buddy from year 2 or above. Because of covid the students didn't mingle with students outside of their groups and held distance to each other. At each station there were representants from the student organizations, the local gym and different organisations in Gjøvik. The buddy group were also given different tasks and challenges to complete at each station. The different stands represented Sit, Nito, #stoltavgjovik, Universitetsbyen Gjøvik, Red Cross, Start Gjøvik, "Jobbe på Huset" , Tekna, Bua, NTNTUi. Flyers were given out on some of the stand. They all had an introduction to what they could offer the student and usually had a physical or mental task for them to complete. The introduction varied from very short to quite lengthy. In some cases the students could not hear the person talking, or they were looking around and not paying too much attention. Why it was so it not easy to know.

Since it was observed that the students where happy but sometimes seem to lose interest. The tentative hypothesis was that the students might have felt a bit overwhelmed with information.

4.2. Interview results from (sample 1 and sample2)

The students were recruited with the nonprobability sampling technique snowball sampling. The invitation was shared by the Higher executive officer at one of the department in a chat group. From there the students recruited each other.

The participant were in an age between 20 and 24. There were 4 women and 2 men. Ideally it should have been equal amount of women of men for it to represent the general population but it was not possible to get hand of more men.

 4 of them moved out from their parents place for the first time to when they moved to Gjøvik. One was from Gjøvik whilst the other 5 where from different places around Norway. 2 people moved from a larger city, whilst the remaining 4 moved from smaller towns that Gjøvik.

One student programme leader and one person of staff at Sit health was also interviewed. The interviews were transcribed with the step-by step deduktiv analyse. And the following group of codes were taken forwards:

- Finding a place to live late
- Not finding the directions to the Orientation day
- (Non-organized information from students in 2nd and 3rd year)
- Heavy start (A lot of information from teacher)

4.3. Diary study

There were many students that complained over issues that seemed could have been prevented before they even arrived. The fact that several students said they did not find a place to live before a couple of days before study start or during Buddy week lead to a conduction a diary study with a High School student. The tentative guess was that it was hard for

The results was that

- It was hard to know when to apply for student housing whilst applying for a study place in several different towns at the same time
- It was also hard or the students to know how to afford to pay the deposit to secure student housing, (and to know when to apply for work)
- It was hard waiting and not knowing where one where one was granted a place to study.

4.4. Service safari and document

In the beginning of the study the service safari was held once. This was done to make a tentative timeline for the service blueprint

After the diary study a service safari was conducted. In practice this meant that when several students in the interviews and this had become a pain point to go forwards with the research tried to experience the service "in the students shoes"

The service safari most often ended in a document that needed to be was analysed to understand where the root cause of the problem was.

4.5.   Goal directed task analysis

The goal directed task analysis was used find different information requirements. The results can be seen in the figure 4. below. The different pain-points what were analysed where Finding a place to
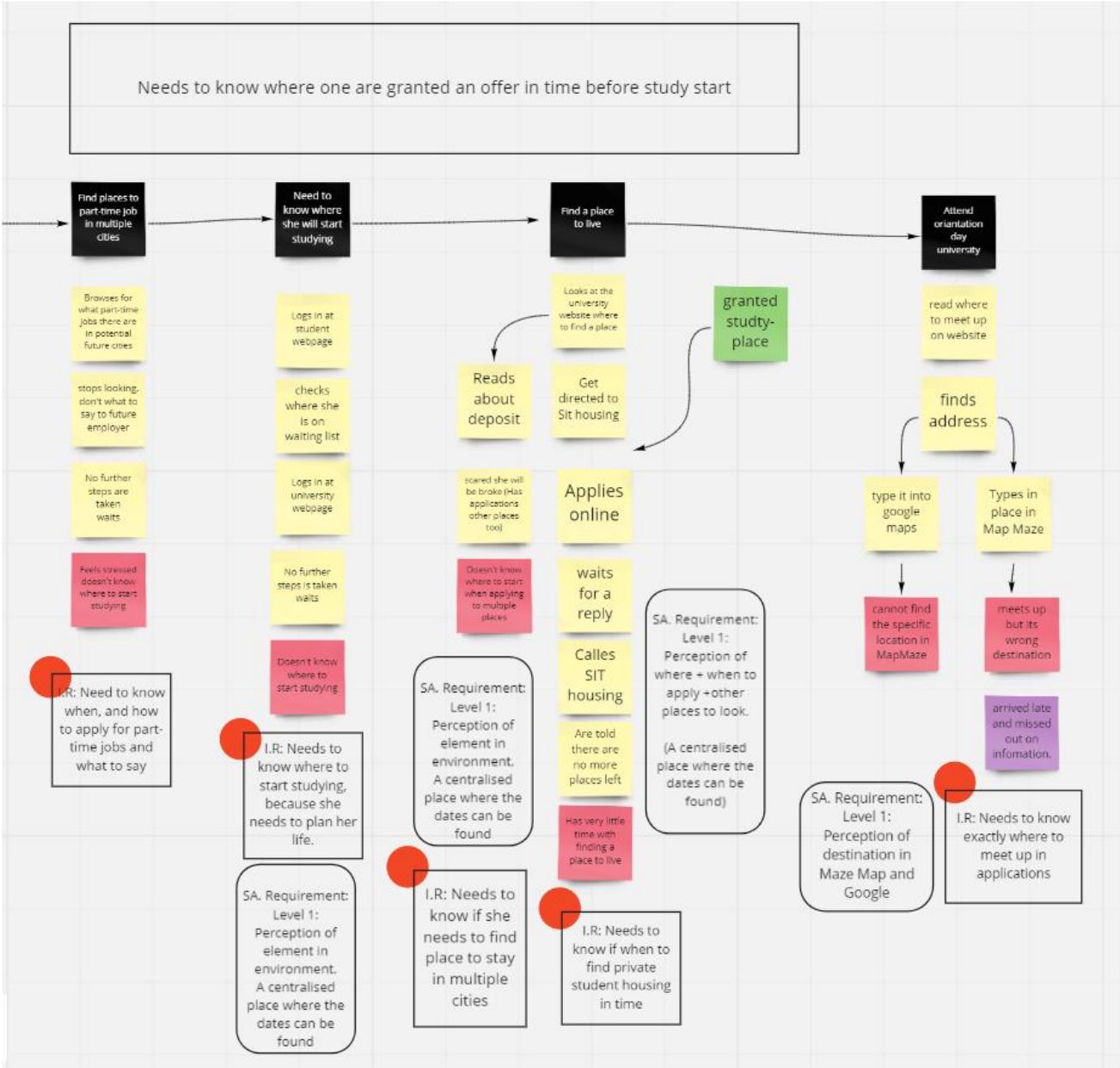

Figure 3. Goal directed task analysis and the S.A requirements and the IR requirements

The overarching goal of 3 of these are placed on the top: "Need to know where one are granted access in time before study start."

4.6.   Service blueprint.

Information from Samordna opptak was gathered and plotted on the timeline alongside the deadlines from SIT housing and NTNU. (See appentices)

The diary study started in January, although many students start applying for higher education earlier. timeline starts when in January and follows the student leading up to the study start and in the first period of their study and zooms more in timeline zoom in at the Buddy Week.

Uncertainty about the application for housing

Information about when application for housing opened at the 1st of January and ends at the 15th of May. 4 of 6 students didn't know that the application for student housing opened at 1.st of January and ends at the 15th of May. From the diary study shows that in January the student was unsure on what to study and where, but as the time passed and the application deadline for where to study the 15. of April had passed and the student didn't talk about the application for student housing coming up the researcher had to let the student know of ethical purposes.

On the 24. Of April the researcher was forced to let the student know that the houses were being filled on a first come first serve basis, and in addition to this the deadline for applying was on the 15 th of May. The student's reply was filled with frustration:

> If applying already now in April when will I find out if I will have home to live in or not? Can I somehow let it go if of the other houses if I'm not going to study there? I want a place to live before I start. Nobody says anything like this!!

The diary study shows that the period from the 24.th of April until the 15th of July was filled with frustration around the difficulty deciding what to do because the lack of clear and direct advice.

The information requirement if the student is: Knowing if she can let go of the different houses in multiple destinations, when she finds out that she is not going to study there.

It does not seem that the deadlines made by the institutions consider the difficult situation the students are in. The deadline opens the 1.st of January, but from the diary study the student doesn't even know what to study by this time. Time is occupied by doing homework, school assignments, trying to make a decision on where and what to study. She did look at student housing in the end of April, but how they looked like to make picking a study place easier.
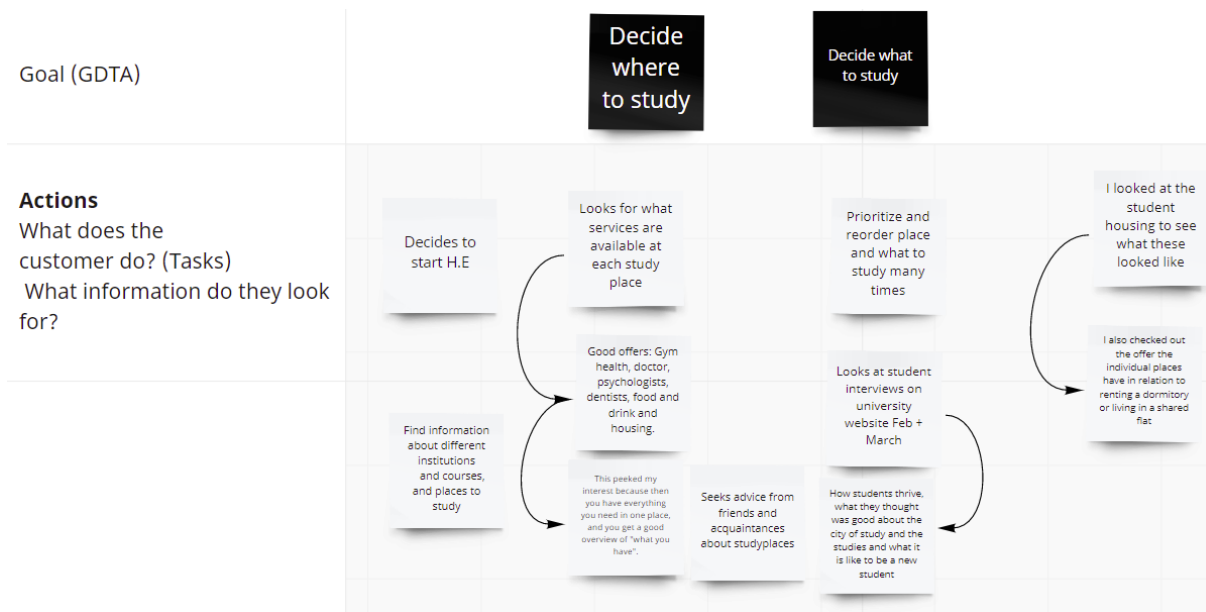
Figure 4 Priorities between 1st of January and 1st of April from Service Blueprint

If one know what to study already then and that one have the grades to be granted a study place

Using the document analysis on what to do in this situation was found at NTNU's page, nor the Instagram channels or Samordna opptak.

When trying to find why though the document analysis the deadline was stated down-loadable document packed with text. The complexity was too high and the deadline for when Sit housing accepts applications is only written with small text in the student on page 4 in a downloadable pdf. About the "Regulations for allocation."

The student is not made aware clear enough about the element in the current situation and the SA. Level 1 of Perception is not fulfilled. The reasons for this is having to look for information many places made it hard to find, and the deadline on when to apply is too complex to find. The information requirement is knowing when to apply and a clear date when the dates are closing in a place available to the student, preferably in one place.

The deadline to apply for student housing is 15th of May, but this information is only available on in an a heavy text document "Finally revised allocation regulations from Sit Bolig" which only is downloadable through a pdf.

Studies shows that the closer one live to campus the less transitional challenges one are likely to experience. The communising time negatively impact the ability to the students have to engage in college and extra curriculum activities and social activities. (Pennington *et al.*, 2017, p.23) The fact that Sit housing first of all prioritise the youngest students is very beneficial for the students.

It is however possible to find a central place to live, also together with other students before study start. Here is what the students said about the application process:

> "I sent the application when I knew that I was moving to Gjøvik, about a month before. It was too late. I thought I would get a message where I was granted a place as I thought they had many more houses. The clock was ticking, and then it was a week before school started. I did not have a place to stay.
>
> They were quite slow with answers and a bit of unpredictable, so frustrating, but they were very friendly and helpful when I contacted them directly"
>
> "I had to go for private student housing, because SIT didn't reply me on email"
>
> "I applied for a student dormitory when I was accepted as a student, but then I asked how I was doing. They told me I was number 60 on the waiting list, so I found something at Finn.no, and drove up to Gjøvik for a flat viewing before study start."

Here one can see that the students waited with applying for housing until he was granted a place by Samordna opptak around the 21. Of July. Some of they said that they knew they waited until the last minute with applying, and regretted that, whilst other students said they didn't know. The students who didn't know lacked Level 1 SA.perception of this and was not aware that he had missed the deadline with over a month. Using the usability heuristics by Jacob Nilsen (1994) to interpret this the user anticipated feedback (that he was granted an offer), but since Heuristic 1- "visibility of the system status", and SA.1 was lacking he couldn't know the outcome and plan what to do next. If the student knew he could have used his time differently.

When the students where asked if they had any advice for a the coming students next year? (about the whole transition process)

> "There it is, I think I would say search for student housing and find a place to stay as early as possible, Even if you do not know if you have been granted a study place"
>
> "Apply for dormitory early!!"
>
> "Apply early for SIT housing", it would have been a little nice to know in advance, but otherwise I think all information is given. pretty good

The advice is a strong indication that the applying early is under communicated.

In the Goal number 12. It says that the student should have "Sound housing" and "a safe and good home that is suitable for those who live there" and "a place that is not exceptionally expensive or disappointed for a student to live"

The High school students says:

> "Do not know where I will be granted a study place!! The deadline for applying is April 15 and then I will know where I will start studying on the 21th of July."

> "Should one find housing before that time or should I find housing all the places or should I find housing in NTNU Gjøvik, Lillehammer and Oslo and then renounce the places where I did not get accepted afterwards? I am scared if I will have home to live in or not?"

A stress moment for applying to studies at Sit housing is not having the assurance about how they can afford to pay the deposit and start paying rent in in several towns they have applied for student housing at until and if they are granted an study place. The student has a two months' notice if they are granted the place. (*Boligsøker? Spørsmål og svar | Sit*, no date) However if they are not granted a study place and the student have moved into the student house they need to send a notification to SIT by 21. of July. When looking at the dates provided by Samordna opptak that are plotted into the Service blueprint this is one day after student have gotten the answer.

At SIT bolig New students can get a contract start already at 1.st of July. The contract start is the day which they start to pay rent meaning they have to sign a lease and deposit before entering their studies.

One of the students interviewed in 2020 lost their place on the waiting list for student housing because they were not aware of this.
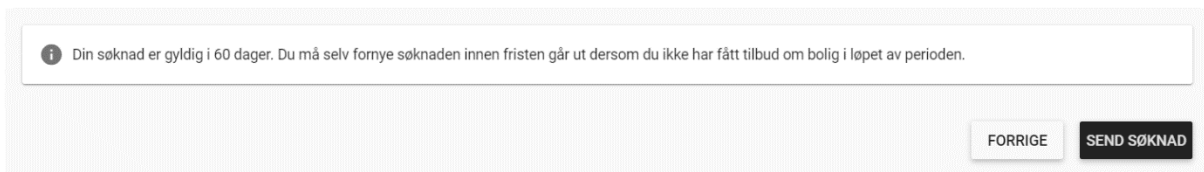
Figure 5 Screenshot from the housing application that one have to renew every 60th day

From the service safari and the document analysis it was however found that it was still hard know the fact that the application expires if one do not renew before 60 days has passed. It was written in a only written in small text at the bottom of the page after one had made a user,- selected preferred town, institution and student housing.

The students need for information on a basic human need as shelter and having to pay several deposits to secure student housing at several different student towns leads to stress unless on are wealthy. This leads to goal number 6 which is "Secure economy"(SIT, no date)

> "To be able to find a sustainable living support that covers more than basic needs not to be dependent on extra income, extra loans, or savings having employment of students who are adapted to being a full-time student" (SIT, no date)

Goal 6: secure economy

If one are accepted a study place at a late stage, one are not granted. The student is then in higher risk of having to live further away from university which

This makes it hard to be a part of a bigger community which is goal number 9. (SIT, no date)

Goal 9: student culture

Read More

> Being a part of a bigger community, that is social and awakes commitment programs that are open to everyone to participate in, or which provides volunteer work to feel that you have a place where you can operate with activities outside your studies.

When having to tame for complexity Endsley to group information at a central display according to the goals of the users. She also writes that " Information that is used to support the same goal needs to be centralised on a common display so that users are not required to search across multiple systems derive the SA needed(...) "(Endsley and Debra, 2012, p.144)

A suggestion to how this could be resolved is illustrated in the figure below. The first illustration shows how the student experience it today. Here they have to actively seek out information not visible to them. The SA. Level 1. Perception is faulty.
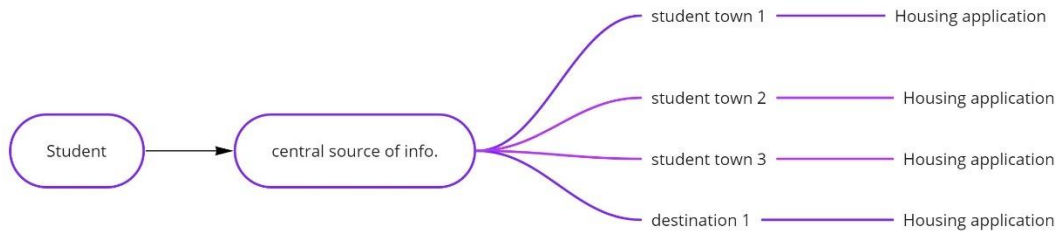
Figure 6 How students experience looking for a place to stay
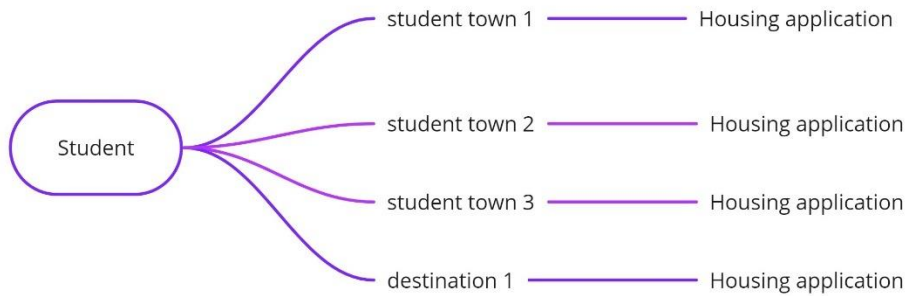
Figure 7 Suggestion to having a central place where all the information can be gathered.

Wayfinding: Trouble with wayfinding first days of school

Over half of the students interviewed complained about trouble finding the direction to the location of meeting first day of school.

3 students thought they knew the direction but ended up in the wrong location. They both received help from someone who showed them where to go. First of all it was a problems getting to the destination using public transportation app that NTNU recommended on their website.

For navigation at campus the students are recommended to use a navigation map called Map Maze. This is communicated to them in the Welcome letter. It turned out to be problems with getting to the destination.

> When I downloaded the app Map Maze and tried to find my way I found very confusing because there was no information about which building or entrance I was supposed to go.
>
> The app showed a dot between two buildings indicating I was supposed to meet up outside between two building. Luckily the door stood open when, but I wish the information was there so that I didn't get that nervous about it being the wrong or not

On the question to how she wishes this was solved she said she wished the classroom was properly marked up in the map inside of the Maze Map app. And that links to both Google and Map Maze was provided. Since this was a pain point many found challenging this was taken a GDTA was made which can be seen in

Appendices xx Level 1: Perception of correct destination in Maze Map and Google Information requirements and the information requirement is to know exactly where to meet up in the two applications.

3 students also said they found the website "Innlandstrafikk" that NTNU recommends using for public transportation was too hard to use. All of them ended up They ended up using the app "Din Tur" instead. The suggestion they have for change is to rather recommend the students "Din tur" instead.

4.7.   Observation, interview and cardsort

Informational needs during Information Day

All the students that was interviewed in research phase 1 said they thought there was too much information given on the Introduction day. In the interviews they said the following:

> "This with lecturers' presentations. I think the lecturer has a lot they want to say. But I think it is important to only include the most important things. And that it is written down and sent to us. Because it thinks it eases a good deal of our stress."

> " Information that is clear and not so much at once is important. when the school state, in the beginning. In the first week everything was very overwhelming because much happened. It was such a tight program. It was like a program all day. "

> «The first week when we met for the first time. It was both professional. Information and practical information. it was so packed. It was such a tight program. "

To get a better understanding of what was happening in class that they an observation was held in in the Authmn of 2021. During the observation in the classroom a lot of valuable information was presented. However sometimes it was observed that many students were yawning, twitching and looking away.

 A card sort was conducted to understand how the information was perceived. All the information that was given in the power point presentation and presented vocally was written onto yellow cards. When the card sort started the student was asked to place the cards after importance, from number 1 (most important) to 8 (the least importance). No cards were placed in categories from 5 to 8. The green cards are explanations done by the student.

The results are visible in figure 6 below. The top priority was "The most important is to get to know the other people". This shows in how the cards are categorised where all the information that had to do with that was placed in the top categories.

Prioriter lapper fra mest viktig å vite til minst viktig
Finnes ikke riktige eller gale svar

viktigste er å bli kjent med lærere
bli kjent med de i klassen
studiet vet mange hva går ut på men fint med en oppdatering
vite hva interaksjonsdesign handler om ?

1
Vite hvilke fag jeg har i 1. studieåret | vite lærers bakgrunn | bli kjent leker | å presentere ditt navn foran klassen | vite hva de i klassen heter | Presenter din bakgrunn foran klassen | vite hvor de andre er fra i landet/verden | Vite hva studenter gruer / gleder seg til | Presentere dine hobbier og interesser | vite hva min studieprogramled er heter | vite hva studieprog. leders hobbier | vite hva studie programleder gleder seg til ved semester

hadde 1. dagen med faddergruppa man kan det en gang til
Vite hva slags hobbier og interesser andre studenter har
Peker på et kart hvor i landet du er født
hva du gruer/ gleder deg mest til?
Sit har pusteøvelse og smile til sidemannen og sier hei

2
presentasjon fra studentsams kipnaden (sit) | Sit presenterer at du kan prate med dem om du trenger støtte | Studentrådgiver presenterer seg permisjon, karriereveiledning, CV, fremdrift | Vite hva du kan spørre stuedntprest en om | Vite hvem førstekonsule nt er? | Vite hvem fagfaddere er? | Vite hvem studierådgive er | Vite hvem du skal kontakte for tilrettelegging | OM det er noe dere glemmer av hva dere har hørt kan dere spørre Nan | Vite hvilke fakultet du tilhører | dette er info som kommer man har blitt kjent med de i klassen

3
sit presentere kurs om studieteknikk | Sit pesterer foreninger | info jeg kan få etter når jeg begynner å studeren | foreleser kan gi tips eller de kommer tilbake

4
Vite hvem som er dekan for fakultetet | Vite hvem som er institutleder institutt for design | vite hvem som er nestleder for institutt for design | Se video om student demokratiet og å være tilitsvalgt | Info om at dere må velge tillitsvalgte | har ikke forhold til dette | mange forvirrende ord, ord jeg ikke har forbindelse til | instittleder og dekan folk jeg ikke skal forholde meg til

kan komme når man har blitt litt bedre kjent

Figure 8. The cards sorted after importance

The cards that were placed as the least important (Figure 6.) was information about the subjects, teachers, and professors they have in 2nd and 3rd year. The suggestion on how he wished it was solved. The student said he that instead of getting to who all the professors and teachers are in 1 and 2 years time he rather wanted an overview of the program for the next couple of weeks. (The suggestions can be seen in Figure 8).

kanskje instiutt vil vite det
relevant senere
når det er sagt blir det glemt

ikke relevant 1.skoledag | Hvordan du fikk vite om studiet | Hvilke fag jeg har 3. studieåret | Info om hvilke lærere du har 2. året. | Hvile fag jeg har 2. studieåret | Info om hvilke lærer du har 3.året? | man får vite om det når man kommer til 2.året 3. året

Figure 9 The least important cards

"How the student got to know about the course" was also not relevant, but the student said it might be that the teacher wanted to know this. More suggestions that can be seen in the figure below on the blue post it notes.

Figure 10. The different suggestions for S.A could be

The student also said that he had to contact a person of staff to find who to talk to, and that he wished he didn't have to do that. When asked the "What kind of information he ideally would like to know?" (Used when measuring GDTA). The students wished there was a place to find back to the information that was given afterwards. This could poster in the classroom with an overview of the staff at the faculty with picture of their face. He also wanted a leaflet at home. This he said, would give less resistance for reaching out when they needed something.

In interview with the professors that was in charge of the Orientation day one said:

> I present what is relevant, but the psychosocial things, like icebreakers is not my job. That is a job for the Student Advisors, and the Student chief executives.

Anther professor said:

> The student sets on the dormitory get bought in what one needs and resources, but also to get into the data solutions that that NTNU has. And there are a number of computer systems that you have to quickly register before you have to register as a student. You have to get a student card, and you have to log in so as not to miss information in some systems. The systems here are in a way a list of systems that the students do not get past and, and the first is in a way that they must. Register yourself as students and pay the student fee. The it is the system Student Web and The first 9 step to complete.

It seems like the professor goal is that the students quickly get integrated into the computer systems system.

Finding back to the information given

Other students missed having central place to find back to information. During the interviews of the students 4 of them said they felt that the information was communicated in too many channels.

> It is quite upsetting, a lot of info is scattered around. On Innsida and Blackboard

Another student said:

> Navigating to and from blackboard is difficult, and then you somehow get information from absolutely all directions as well. There is no such thing as one central place.

The student representative of the institute has the responsibility of communicating the students' needs further. On question to what was issues was raised from the 1st year students who had just started 1st year? He said that they miss a place where all information is gathered.

> The feel information is spread across different platforms, and it can be difficult to know what important information is and what is less important.

The students 4 students from the first interview were asked what an example of good situational awareness would be. Their wish everything was gathered at a central place.

> It would have been nice to read about and see about the brochure here and a poster. Just to be able to gather all that information in just one such guide. It had been so nice.

Another student who suffered from a cognitive disability said she would love this or something sent elecronically

The teacher also complained that the students had the same questions about where things were placed and wished they used time reading it all:

> Yes, I wish they had read more so that we somehow escaped for instance the clarification of expectations, and what is expected of them in each subject…which is written on the NTNU page and not on Blackboard. But in practice, there are also a good number who have not read anything, and we must take everything from start.

When Mika Endsley recommends the following for taming complexity and that is to group information at a central display. The information should be grouped around the goals of the users. She also writes that " Information that is used to support the same goal needs to be centralised on a common display so that users are not required to search across multiple systems derive the SA needed(…) "(Endsley and Debra, 2012, p.144)

The suggestion on how to solve this is therefore to collect all the information at the same place, just like in the suggestions about the housing application.

4.8. Backstage processes

After the interviews with the students and staff at the university it seemed that there was a slight mismatch between what was communicated from the NTNU what the students wanted.

It has been showed that there seemed to be too much information that was presented in the classroom. Using the document analysis it turned out that many of the different institutes and even professors within each institute had their own PowerPoint at the information day. Each institute also have their own programme with different plans. In conversation with The department of Information it turns out that sometimes there is a program-specific reason for this, but other times there is no particular reason at all.

The department of communication at NTNU has a Communication plan for study start (*Kunnskapsbasen - NTNU*, no date). The plan is communicated with Student Advisors and staff in a meeting about the student reception in springtime. See backstage processes in

the service blueprint, (Appendices). Later it is communicated in the "Innsida" version for teachers at the 21st of June and 2nd of August. In the "Communication plan for study start" it says that:

> The way NTNU receives the new students is important for the first impression, and for the experience of what it will be like to be a student at NTNU. Information students receive in advance of the start of studies and in the first period after matriculation is very important for the student reception and has a lot to say for experiences of NTNU as a professional organization and experience of being wanted and well taken care of as an NTNU student.

> Communication with new students involves very many people and concerns most units at NTNU.

If something is wrong, it is up to the students to let someone know. But this is a period of time when the students are new and it is unlikely that they will feel confident enough to give this feed-back. They can let the class-representatives know, but this doesn't ensure change.

The suggestion is that more can be done to ensure that the Plan of Communication is being followed by the staff, also during Orientation Day. Students can be asked how they perceive the information provided during the first few weeks. Teachers also can ask for feed-back on the information they provide and/or create it together with the students. Here it is important to be aware of the totality of information provided and not just look at each teacher individually.

Communication with new students involves many people and concerns most units at NTNU. There are constantly new people involved in the reception work, and many find it difficult to familiarize themselves with what the other units at NTNU do.

Each institute and each teacher can share presentations, and Introduction week program with each other and let the students be part deciding how it should be altered. Today higher executive officers and senior advisors psychosocial work are in charge of the

psychosocial work at the institutes. The Student welfare service Sit, and takes care of welfare. The role of promoting health should not only be a role designated for certain people, but be a responsibility for all staff. Even though much there is much valuable work being done fields today. It seems like it would be beneficial if the students psychosocial wellbeing is a field that more people took an active role in.

5. Discussion

This chapter will explain how the results answer the research questions and discuss the findings. The first research question is "How do students experience the information flow during their transition into the first year of undergraduate studies at NTNU, Gjøvik?"

In communication with staff at the university on student advisor said that it can also be a good can't find all the information they need online. He said that by asking they are also forced to speak to each other, and thereby get to know each other by things. This is a good point at the same time there is a balance. When students are new it takes a great level of courage to ask for the help they need, and this master thesis shows that

oftentimes that they feel less stressed when they have a good overview of what is going on. For instance, having a poster in the classroom with an overview of who the staff at the faculty are and having this leaflet at home gives less resistance for reaching out when they need something.

The sub research question 1a) is "How does the information provided before one starts university affect the experience after one arrives?"

Finding a place to liv was definitely a topic that many had difficulty sorting out. The study indicates that since SIT Bolig, and the other Student Welfare association the student applied did not give sufficient information about when to applications opened, how to apply for several places to live, and information about what number they were in the line-up. For two students this resulted in them rushing with finding a place to stay, and one even had to move during Buddy week. This in turn ended in the student feeling stressed because they lacked the information they needed

The next sub research question is 1b) How does the timing of what is communicated affect the student's situational awareness? The timing of what is being communicated affected during the transition affects the student in many ways.

The observation in the classroom and the card sort could give an indication that there was not that much need for information for some of the information that was given during the orientation day. The students wanted more icebreaking activities and get to know each other better. 2 a) If so, how can it be improved to promote health and wellbeing amongst   first-year students?

The information requirements found that the students needs for safe economy, sound housing and student culture are needs that needs to be meet in the students transition.

5.1.   Evaluation of the methods

Field study

The observation during Activity day in BW It is difficult to know whether what was ob-served is representative to reality. Meaning the observation held might have been done on a day that was unusual to the standard. During the B.W of 2020 the Covid restrictions were higher than in 2021. In hindsight more observations could have been done in the 2021, especially of the day of matriculation.

Observation

The observation could have been paired with an interview short time after the observa-tion where one could ask the student for a quick verbal protocol. One could ask ask the student "what was going on" and "what information where you missing". When trying to find SA. information requirements on normally ask the operator questions S.A infor-mation requirements *in situ* (Endsley and Debra, 2012) (Endsley, 1988) However this was not done in this study as there was a risk that the interference of the of the re-searcher asking the students questions would give them even more to think about. This would not capture the authentic experience of the Buddy Week and in turn affect the in-ternal validity of the study.

Diary-study

During the diary interview regular follow-up conversations were held to make sure the participant was feeling okey with the study. During the follow-ups it became evident that there was a lot of frustrations about not knowing when to apply for student housing. There was a fine line between influencing the results by letting him know and thereby and decreasing the internal validity of the study. After a week the frustration had exalted substantially and the researcher let the student know that when the deadline for applying for student housing opened and that he should apply for housing as soon as possible.

Service safari

Since the scope of this project was quite big, using the service safari and together with the document analysis saved a lot of time. It was good about this method was that it didn't involve using external participant. It also gave the possibility to experience the service in the perspective of the user.

Card sort

After the S.A information requirements are identified they are supposed to be validated by many experts, however in this study they were only validated by one student. This effects the internal validity of the study and future work should include more participants. The same student also did the card sort of the content in the presentation, however a card sort should have 15 participants for it to give valid results. Future studies should therefor also include more participants

.

2. Limitations

In the iterative design process it is important with feed-back from the users on ones findings and this could have been done more frequently during the design process. There should also been follow ups on what the professors thought about the findings.

The interviews with the students and stakeholders (professors and advisors) took place many months after the actual event of the onboarding process the results from the interviewer might most likely been affected negatively from that.

3. Further work

Not many studies have been done on transitioning between institutions and thre is a great amount of work that is recommended done on the subject.(Knapstad *et al.*, 2021)

More studies need to be done on how the students S.A and experience is when travelling from a different side of the country versus, students not moving home towns. Afterall health promotion stive to include all.

This thesis has looked at a young homogenious group of students and further studies should include a broader range of different students. These should include studens of marginalized groups, different religious and cultural background, students with psychological and physical disabilities. older students, students who are parents and students who of vasious reasons abstrain from alcohol have a lower participation during Buddy week.

It should also include students how the different students experience the transition based on factors such as grades, and personality types and information seeking behaviour.

Further research should include marginalized groups such as students of colour, students with physical disabilities, in addition off-campus students and international students, and alcohol abstainers.

For future studies it is recommended to investigate how information is shared in spoken words. This included information shared by the Buddies during Buddy Week, but also how students share information with each other. As explained, students prefer receiving information from other students.

For further work it is also recommended to base all the interviews with the stakeholders with the goal to measure situational awareness using the Endslays goal directed task analysis to verify the different steps.

Reflections around the study and the process.

This study started out with investigating loneliness and belonging can be prevented, but this was quickly transformed to S.A instead. To the knowledge of the researcher, there has not been any studies conducted on the student's S.A whilst transitioning into Higher Education before. On top of this, not in the combination with using service design methods. This has been challenging, but the learning curve has been steep.

Working in healthcare whilst working with my masters has a challenge as well. It has led to periods where I had to put this thesis aside for longer periods of time. But if it was not for the pandemic I, the researcher would not have been hired by Sit Labs in Trondheim. The collaboration and support have made this a much easier task.

6. Conclusion

In this master thesis the methods fom service design and GDTA cognitive task analysis was used to understand the S.A informational requirements. The service blueprint gave an overall understanding of what the students needs thoughts and informational requirements were. The information the students were missing mainly due to S.A, 1 that had to had to do with not being aware of the information existing. Also, the students found it hard to find back to the information they had been presented since it is located at the stakeholders' various silos, websites and applications. The recommendations made by the researcher and the students are to gather the information in one place, but also make important information available early on. There are many issues with not knowing

when and how to apply for housing alongside applying for study places at various destinations. This has led to a lot of stress for the students that could have been avoided. In addition to letting the student be part of giving their feedback to the information they are presents it is also recommended to improve the following sustainability goal.

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A. Appendixes

A1. Observation guide

Observation during Buddy week : Activity Day

1. What do I see?
2. What do I not see?
3. How does people interact?
4. Do they arrive with people or alone or in groups?
5. What kind of information do they receive
   - o   Written / spoken /
6. How do the students respond to the information ?
7. Do they collect info, seem interested ?
8. Are marginalized groups represented?
9. Are anyone left out?

Observation during information day in classroom
1. Number of students
2. Age of students

3. How do they react to the information given.
4. What do I see?
5. What do I not see?
6. Who else are in the classroom?
7. Are the students introduced to each other? How?
8. Who are they asked to ask about which information?
9. Do they ask the teacher / fellow students/ others about what they want to know

A2 Dairy prompts

Dairy prompts about process of applying for H.H

1. Please write down when you were in contact with websites / people / advisors / institutions.
2. It can also be about things you were wondering about
3. Which website have you visited (with a view to starting higher education) ?

Date / month	Website / service	Goal	Number of times	Level of stress 1-10	What other things related to school occupied you at this time?	housing

If time think about:

4. How do you use that information?
5. What do you need to know to make that decision?
6. What would you ideally like to know?
7. How do xx do this badly? What do they typically fail to consider?
8. What made you switch study?
9. What is your goal now?
10. What information do you miss?
11. What did you think about the degree of information you receive from the study places?

A3 Interview guide

Interview with professor working with 1st year students

1. What work position do you have at NTNU, and what is your role?
2. Which classes do you lecture?
3. Are there classes where there is groupwork
4. Are there guidelines on how students introduce each other in the classroom?
5. Is there any information you wish they knew before they came?
6. Are there other things in terms of clarifying expectations that you wish they knew?
7. What interaction opportunities did the students at the faculty have before Corona?

8. Are the student associations introduced to the students by you lecturers? if so, how?
9. Do you introduce social events to students?

10. Are any student companies introduced to the students by you lecturers? if so, how?
11. Is SIT counselling introduced by you lecturers? if so, how?

Interview guide with students
1. Questions for students
2. Age:
3. Where did you live before you moved to Gjøvik?
4. Why did you apply to NTNU Gjøvik?
5. Special reason why you chose Gjøvik as a city?
6. What did you think the information you received in the period before you arrived?

The reception

7. What did you think of the process of becoming part of the study environment at Gjøvik?
8. What did you think of Buddy week?
    o What was good?
    o What could have been better?
9. What did you think about the amount of information you received in Buddyweek?
10. What did you miss?
11. Other stuff?
12. When you think of the process it was to become part of the study environment at Gjøvik,
13. How did you feel about way you were welcomed by the faculty and the your teachers the first day?

14. How did you think you were received by teachers when you met the class on the information day?
    o What was good?
    o What could have been better?
15. How was it to find the location the first day of school?
16. What do you think could have been done differently in the first period?
17. Are social things advertised in the classroom?
18. What did you think of Gjøvik as a study city?
19. Are there thing(services) that you miss?
20. What could you wish you knew before you arrived?
21. If you were to give advice to students who come to you what kind of advice would you give?

Interview guide for staff working with social work SIT

1. Can you describe the kind of job you do

2. What is being done today to prevent loneliness in Gjøvik among the 1st year student?

   - Advice
   - Associations / volunteering
   - Housing
   - Food

3. What is done to the new 1st year students when they come to Gjøvik?

4. (In what situations do you see that students struggle most with loneliness?)

5. What is being done to promote good mental health and how?

6. When is volunteering introduced?

7. When are the associations introduced? And how

8. Are associations introduced done before the students arrive, if so how?

10. Do you collaborate with the various faculties with advisers and professors, those who?

11. What do you think could have been more to help the students?

Sponsors

12. I did not attend the seminar for sponsors? What is the focus there? Possible to see recordings

Follow-up of sponsors

12. What do you look for when looking for sponsors? What are they learning?
13. Do they make their own plan in which case it is followed up?
14. In an ideal world where money and rules did not stand in the way, how do you imagine Sio Health could be?

Interview guide for staff working with social work at SIT (NSD)

1. What do you think are the main factors contributing to loneliness in the first period when the first-year undergraduate students are new to the university?

2. How do you think the university can prepare the students for life and culture at university?

3. What do you think can make the transition easier?

4. When a student get notified that they have granted access at the university, what kind of information do they receive?

5. In what order do they receive the information? (Point on a timeline and make the person point)

    - Example

        o Grant of access

        o Information about the course

        o Information about accommodation

        o Information about the introduction week / buddy week

        o The student organisations and life at NTNU Gjøvik?

        o Any other information not mentioned?

6. If you think of the students who don't

7. Do you cooperate with other types of staff to reduce loneliness? (Professors, cleaners, student housing, learning assistance, buddies in the buddy week)

Social media

How can the students learn about student life trough social media?

Buddyweek

1. What are the requirements for becoming a buddy at the buddyweek?

2. What do the buddies learn before the buddy week?

About maintaining interests and hobbies

1. How can the students continue with their favourite activities from their hometown when they arrive here?

2. How do you think the students can find new hobbies and activities to do "after school hours"?

3. What do you think the students can do to prevent becoming lonely at the university?

A6 Consent from interview

Informed consent university staff

Vil du delta på forskningsprosjektet

"Inkludering av 1.års bachelor studenter ved NTNU, Gjøvik "?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt som handler om inkludering av 1.års studenter ved NTNU, Gjøvik. Jeg lurer på om du vil delta i et intervju om dette temaet og i dette skrivet gir jeg deg informasjon om målene for prosjektet og hva deltakelsen går ut på.

Formål

Dette er et spørsmål til deg om å delta i et forskningsprosjekt som handler om inkludering av 1.års studenter ved NTNU, Gjøvik. Jeg lurer på om du vil delta i et intervju om dette temaet, og i dette skrivet gir jeg deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål

Formålet med masteroppgaven min er å finne ut hvordan studenter inkluderes ved NTNU, Gjøvik.

Noen av mine problemstillinger er: Hva slags tilbud og tiltak finnes for studentene i dag? Hva er typiske utfordringer du opplever at studentene møter når det kommer til inkludering og utenforskap? Hvilke informasjon og derav forventinger hadde studentene før de startet studiet og hva kan eventuelt endres her?

Hvem er ansvarlig for forskningsprosjektet?

Jeg, Anna-Marie Fox er ansvarlig for forskningsprosjektet som er en del av min masteroppgave på NTNU, Gjøvik. Frode Volden er medansvarlig som studieveiledere.

Hvorfor får du spørsmål om å delta?

Jeg henvender meg til deg fordi du jobber med studenter. I første omgang trenger jeg også å prate med 3 andre mennesker som jobber med studentenes velferd, og 3 professorer.

Hva det innebærer å delta

Hvis du velger å delta i prosjektet, innebærer det at du deltar i et intervju. Det vil ta deg 45-60 minutter. Du vil bli stilt spørsmål om hvilken praksis NTNU har i dag når det kommer til inkludering av studenter, og om du har noen tanker rundt hva som skal til for å inkludere studenter på universitet.

Dine svar vil hjelpe meg å få innsikt i hva din rolle er overfor studentene slik at jeg kan finne ut av hva som skal prioriteres. Dine bidrag vil være til god hjelp for oppgaven min.

Informasjonen du gir blir registrert gjennom, notater og lydopptak. Det tas også lydopptak av workshopen fordi jeg kun er én person som holder denne, og må forsikre meg om at jeg får med meg alt som blir sagt. Jeg ønsker å få vite hva som er vanlige problemstillinger når det kommer til studentenes hverdag. Dette for at jeg kan lage en tjeneste som

er tilpasset fremtidens brukere av tjenesten. Du vil ikke kunne identifisere eller bli gjeng-itt i masteroppgaven. Informasjonen som er samlet inn vil lagres på en server som drif-tes av NTNU og slettes ved prosjektets slutt, den 31. mars 2022.

Det er frivillig å delta
Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet, og det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger
Vi vil bare bruke opplysningene om deg til formålene jeg har opplyst om her. Kun jeg vil ha tilgang til informasjonen og behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Navnet og kontaktopplysningene dine vil erstattes med en kode som lagres på egen navneliste adskilt fra øvrige data, og datamaterialet vil være kryp-tert, lagret på en innelåst server som driftes av NTNU.

Skulle det dukke opp noe i som kan identifisere deg i lydopptaket vil disse bli anonymi-sert. Det vil ikke være å mulig å kjenne deg igjen i masteroppgaven min.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Alle opplysningene, og lydopptak vil slettes når prosjektet avsluttes den 31. Mars 2022. Alle signerte samtykkeerklæringer vil bli oppbevart og innelåst til denne datoen og maku-leres når prosjektet er ferdigstilt.

Dine rettigheter
Du vil ikke kunne identifiseres i datamaterialet, men du har du rett til å:

-   Innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene,
-   Å få rettet personopplysninger om deg,
-   Å få slettet personopplysninger om deg, og
-   Å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?
Vi behandler opplysninger om deg basert på ditt samtykke. På oppdrag fra NTNU har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysning-er i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?
Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:
- NTNU student: Anna-Marie Fox: annamarf@stud.ntntu.no /
  annamariefox@gmail.com
- Veileder: Frode Volden frodv@ntnu.no

- Vårt personvernombud på NTNU: Thomas Helgesen, thomas.helgesen@ntnu.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:
- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:
- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Med vennlig hilsen

Anna-Marie Fox
(*Prosjektansvarlig*)

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet *Inkludering av 1.års bachelor studenter ved NTNU,* og har fått anledning til å stille spørsmål. Jeg samtykker til:

- ☐ å delta i et intervju.
- ☐ å delta i *[sett inn flere metoder, f.eks. spørreskjema] – hvis aktuelt*
- ☐ *at Anna-Marie Fox kan gi opplysninger om meg til prosjektet*
- ☐ *at mine personopplysninger lagres 2 måneder etter prosjektslutt. Til og med 31.mars 2022*

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

----
(Signert av prosjektdeltaker, dato)

Informed consent student

Vil du delta på forskningsprosjektet

"Inkludering av 1.års bachelor studenter ved NTNU, Gjøvik "?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt som handler om inkludering av 1.års studenter ved NTNU, Gjøvik. Jeg lurer på om du vil delta i et intervju om dette temaet og i dette skrivet gir jeg deg informasjon om målene for prosjektet og hva deltakelsen går ut på.

Formål

Formålet med denne masteroppgaven er å finne ut hva som kan gjøres for at fremtidens 1. års studenter kan føle på mer samhold, tilhørighet og inkludering ved NTNU, Gjøvik.

Jeg ønsker derfor å finne ut hva som funger for 1.års studentene og hvor det må gjøres endringer.

Dette innebærer også hva som kan gjøres for studenter som av ulike årsaker ikke kan møte opp fysisk og delta på arrangementer og forelesninger på universitetet.

Hvem er ansvarlig for forskningsprosjektet?

Jeg heter, Anna-Marie Fox er ansvarlig for forskningsprosjektet som er en del av min masteroppgave på NTNU, Gjøvik. Frode Volden medansvarlig som studieveileder.

Hvorfor får du spørsmål om å delta?

Jeg henvender meg til deg fordi du er student i 1.året ved Gjøvik, NTNU. Å være 1. års student ved NTNU, Gjøvik er kriteriet for å delta i studien. I første omgang trenger jeg å prate med 6 studenter i din målgruppe. Jeg har fått tips om å ta kontakt gjennom en bekjent eller kontakter på NTNU, blant annet linjeforeningen XXX(anonymisert)

Hva innebærer det å delta?

Hvis du velger å delta i prosjektet, innebærer det at du deltar i et intervju. Det vil ta deg alt fra 10 minutter til 60 minutter alt ettersom hvor mye tid du har. I intervjuet trenger jeg hjelp til å få svar på hva du tenker kan bli gitt ut av informasjon og hva som kan gjøres for å få fremtidens studenter til å føle seg mer inkludert og føle på mer tilhørighet til studiestedet. Det jeg legger særlig vekt på er informasjonsflyten. Dine innspill og bidrag vil hjelpe meg å kartlegge og vite hva som bør prioriteres, og finne nye løsninger som forhåpentligvis kan bidra til endring.

Informasjonen du gir blir registrert gjennom notater og lydopptak. Lydopptak blir tatt av intervjuet fordi jeg kun er én person som jobber på prosjektet og må forsikre meg om at jeg får med meg alt som blir sagt. Dette slettes med en gang alt har blitt skrevet ned, innen 25.april.2021 Jeg vil også spørre om alder, om du er heltids student og om du har kommet til Gjøvik fra et annet land for å studere. Dette for å tilpasse tjenesten så mye som mulig til alle studentene som skal bruke tjenesten i fremtiden. Du vil ikke kunne identifisere eller bli gjengitt i masteroppgaven og all øvrig informasjon som er samlet inn vil lagres på en server som driftes av NTNU og slettes ved prosjektets slutt, den 31. mars 2022.

Det er frivillig å delta

Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg. Det vil heller ikke påvirke ditt forhold til universitet eller medstudentene dine. Som en takk for tiden din og informasjonen du har bidratt med vil du være med i trekning av et gavekort på 200 kroner og alle som bidrar vil få informasjon om de vant eller ikke på melding.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger

Jeg vil bare bruke opplysningene om deg til formålene jeg har opplyst om her. Kun har tilgang til informasjonen og behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Navnet og kontaktopplysningene dine vil erstattes med en kode som lagres på egen navneliste adskilt fra øvrige data, og datamaterialet vil være kryptert, lagret på en innelåst server som driftes av NTNU.

Skulle det dukke opp noe i som kan identifisere deg i lydopptaket vil disse bli anonymisert. Det vil ikke være å mulig å kjenne deg igjen i masteroppgaven min.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Alle opplysningene, og lydopptak vil slettes når prosjektet avsluttes den 31. Mars 2022. Alle signerte samtykkeerklæringer vil bli oppbevart og innelåst til denne datoen og makuleres når prosjektet er ferdigstilt.

Dine rettigheter

Du vil ikke kunne identifiseres i datamaterialet, men du har du rett til å:

- Innsyn i hvilke personopplysninger som er registrert om deg, og å få utlevert en kopi av opplysningene
- Å få rettet personopplysninger om deg,
- Å få slettet personopplysninger om deg, og
- Å sende klage til Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?

Jeg behandler opplysninger om deg basert på ditt samtykke. På oppdrag fra NTNU har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?

Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:

- NTNU student: Anna-Marie Fox: annamarf@stud.ntntu.no / annamariefox@gmail.com
- Veileder: Frode Volden frodv@ntnu.no
- Vårt personvernombud på NTNU: Thomas Helgesen, thomas.helgesen@ntnu.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:

- NSD – Norsk senter for forskningsdata AS på epost (personverntjenester@nsd.no) eller på telefon: 55 58 21 17.

Tusen takk for at du deltar

Med vennlig hilsen

Anna-Marie Fox
(Prosjektansvarlig)

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet *Inkludering av 1.års bachelor studenter ved NTNU,* og har fått anledning til å stille spørsmål. Jeg samtykker til:

- ☐ å delta i intervju
- ☐ å delta i *[sett inn flere metoder, f.eks. spørreskjema] – hvis aktuelt*
- ☐ *at Anna-Marie Fox kan gi opplysninger om meg til prosjektet*
- ☐ *at bidrag fra med i form av ideer kan gjenkjennes (kryss av om det som passer for deg)*
- ☐ *at bidrag fra meg i form av ideer anonymiseres. (kryss av om det som passer for deg)*
- ☐ *at mine personopplysninger lagres 2 måneder etter prosjektslutt. Til og med 31.mars 2022*

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

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(Signert av prosjektdeltaker, dato)

A7 Consent from diary study

Vil du delta på forskningsprosjektet

"Hvordan oppleves det å søke på høyere utdanning og flytte til

en ny studie by"?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt som handler om inkludering av nye søkere til høyere utdanning. Jeg lurer i en dagbokstudie og i dette skrivet gir jeg deg informasjon om målene for prosjektet og hva deltakelsen går ut på.

Formål

Formålet med denne masteroppgaven er å finne ut hva hvilke prosesser man går gjennom når man søker seg til hører utdanning.

Jeg ønsker derfor å finne ut hva som funger for søkere og hvor det må gjøres endringer.

Dette innebærer også hva som kan gjøres for søkere som av ulike årsaker ikke kan møte opp fysisk og delta på arrangementer og forelesninger på universitetet.

Hvem er ansvarlig for forskningsprosjektet?

Jeg heter, Anna-Marie Fox er ansvarlig for forskningsprosjektet som er en del av min masteroppgave på NTNU, Gjøvik. Frode Volden er medansvarlig som studieveileder.

Hvorfor får du spørsmål om å delta?

Jeg henvender meg til deg fordi du er over 18 år og søker deg til Bachelor utdanning i Norge høsten 2021. I første omgang trenger jeg å prate med 6 studenter i din målgruppe. Jeg kontakte deg fordi jeg kjenner deg litt fra før.

Hva innebærer det å delta?

Hvis du velger å delta i prosjektet, innebærer det du dokumenterer dine opplevelser i møte med de forskjellige tjeneste når du søker deg til høyrer utdanning. Det vil ta deg alt fra 10 minutter til 60 minutter i uka alt ettersom hvor mye tid du har. I dagbokstudien trenger jeg hjelp til å få svar på hva du tenker om informasjonen du mottar og hva du tenker at kunne vært gjort annerledes. Det jeg legger særlig vekt på er informasjonsflyten. Dine innspill og bidrag vil hjelpe meg å kartlegge og vite hva som bør prioriteres, og finne nye løsninger som forhåpentligvis kan bidra til endring for fremtidens studenter.

Informasjonen du gir blir registrerer du gjennom et tekstdokument som er lokal lagret på din mobil. Lydopptak blir tatt av intervjuet fordi jeg kun er én person som jobber på prosjektet og må forsikre meg om at jeg får med meg alt som blir sagt. Dette slettes med en gang alt har blitt skrevet ned, innen 1.november.2021. Jeg vil også spørre deg om hvilke studiesteder du øsker å søke på og andre ting som gjør prosessen å søke lettere eller vanskeligere. Dette for å tilpasse tjenesten så mye som mulig til alle studentene som skal bruke tjenesten i fremtiden. Du vil ikke kunne identifisere eller bli gjengitt i masteroppgaven og all øvrig informasjon som er samlet inn vil lagres på en server som driftes av NTNU og slettes ved prosjektets slutt, den 31. mars 2022.

Det er frivillig å delta
Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykket tilbake uten å oppgi noen grunn. Alle dine personopplysninger vil da bli slettet. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg. Det vil heller ikke påvirke ditt forhold til universitet eller medstudentene dine. Som en takk for tiden din og informasjonen du få et gavekort på 500 kroner.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger
Jeg vil bare bruke opplysningene om deg til formålene jeg har opplyst om her. Kun har tilgang til informasjonen og behandler opplysningene konfidensielt og i samsvar med personvernregelverket. Navnet og kontaktopplysningene dine vil erstattes med en kode som lagres på egen navneliste adskilt fra øvrige data, og datamaterialet vil være kryptert, lagret på en innelåst server som driftes av NTNU.

Skulle det dukke opp noe i som kan identifisere deg i lydopptaket vil disse bli anonymisert. Det vil ikke være å mulig å kjenne deg igjen i masteroppgaven min.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?

Alle opplysningene, og lydopptak vil slettes når prosjektet avsluttes den 31. Mars 2022. Alle signerte samtykkeerklæringer vil bli oppbevart og innelåst til denne datoen og makuleres når prosjektet er ferdigstilt.

Dine rettigheter
Du vil ikke kunne identifiseres i datamaterialet, men du har du rett til å:

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- Å få rettet personopplysninger om deg,
- Å få slettet personopplysninger om deg, og
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Hva gir oss rett til å behandle personopplysninger om deg?
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Hvor kan jeg finne ut mer?
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- NTNU student: Anna-Marie Fox: annamarf@stud.ntntu.no / annamariefox@gmail.com
- Veileder: Frode Volden frodv@ntnu.no
- Vårt personvernombud på NTNU: Thomas Helgesen, thomas.helgesen@ntnu.no

Hvis du har spørsmål knyttet til NSD sin vurdering av prosjektet, kan du ta kontakt med:
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Tusen takk for at du deltar

Med vennlig hilsen

Anna-Marie Fox
(Prosjektansvarlig)

Samtykkeerklæring

Jeg har mottatt og forstått informasjon om prosjektet *Inkludering av 1.års bachelor studenter ved NTNU,* og har fått anledning til å stille spørsmål. Jeg samtykker til:

- ☐ å delta i dagbokstudien
- ☐ å delta i *[sett inn flere metoder, f.eks. spørreskjema] – hvis aktuelt*
- ☐ *at Anna-Marie Fox kan gi opplysninger om meg til prosjektet*
- ☐ *at bidrag fra med i form av ideer kan gjenkjennes (kryss av om det som passer for deg)*
- ☐ *at bidrag fra meg i form av ideer anonymiseres. (kryss av om det som passer for deg)*
- ☐ *at mine personopplysninger lagres 2 måneder etter prosjektslutt. Til og med 31.mars 2022*

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet

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(Signert av prosjektdeltaker, dato

A8 NSD privacy notice

NSD NORSK SENTER FOR FORSKNINGSDATA

Vurdering

Referansenummer

410947

Prosjekttittel

Helping students feel more included and integrated at university amongst in first-year students

Behandlingsansvarlig institusjon

Norges teknisk-naturvitenskapelige universitet / Fakultet for arkitektur og design (AD) / Institutt for design

Prosjektansvarlig (vitenskapelig ansatt/veileder eller stipendiat)

Frode Volden , frodv@ntnu.no, tlf: 93227262

Type prosjekt

Studentprosjekt, masterstudium

Kontaktinformasjon, student

Anna-Marie Fox, annamarf@stud.ntntu.no, tlf: 45255414

Prosjektperiode

07.09.2020 - 31.03.2022

Vurdering (2)

02.12.2021 - Vurdert

restriction of processing (art. 18), notification (art. 19), data portability (art. 20). These rights apply so long as the data subject can be identified in the collected data.

NSD finds that the information that will be given to data subjects about the processing of their personal data will meet the legal requirements for form and content, cf. art. 12.1 and art. 13.

We remind you that if a data subject contacts you about their rights, the data controller has a duty to reply within a month.

FOLLOW YOUR INSTITUTION'S GUIDELINES
NSD presupposes that the project will meet the requirements of accuracy (art. 5.1 d), integrity and confidentiality (art. 5.1 f) and security (art. 32) when processing personal data.

To ensure that these requirements are met you must follow your institution's internal guidelines and/or consult with your institution (i.e. the institution responsible for the project).

FOLLOW-UP OF THE PROJECT
NSD will follow up the progress of the project at the planned end date in order to determine whether the processing of personal data has been concluded

Good luck with the project!

Data Protection Services for Research: +47 55 58 21 17 (press 1)

A9. Service blueprint

Link to Miro Borad: https://miro.com/app/board/uXjVOZ00VP8=/?invite_link_id=580314678775
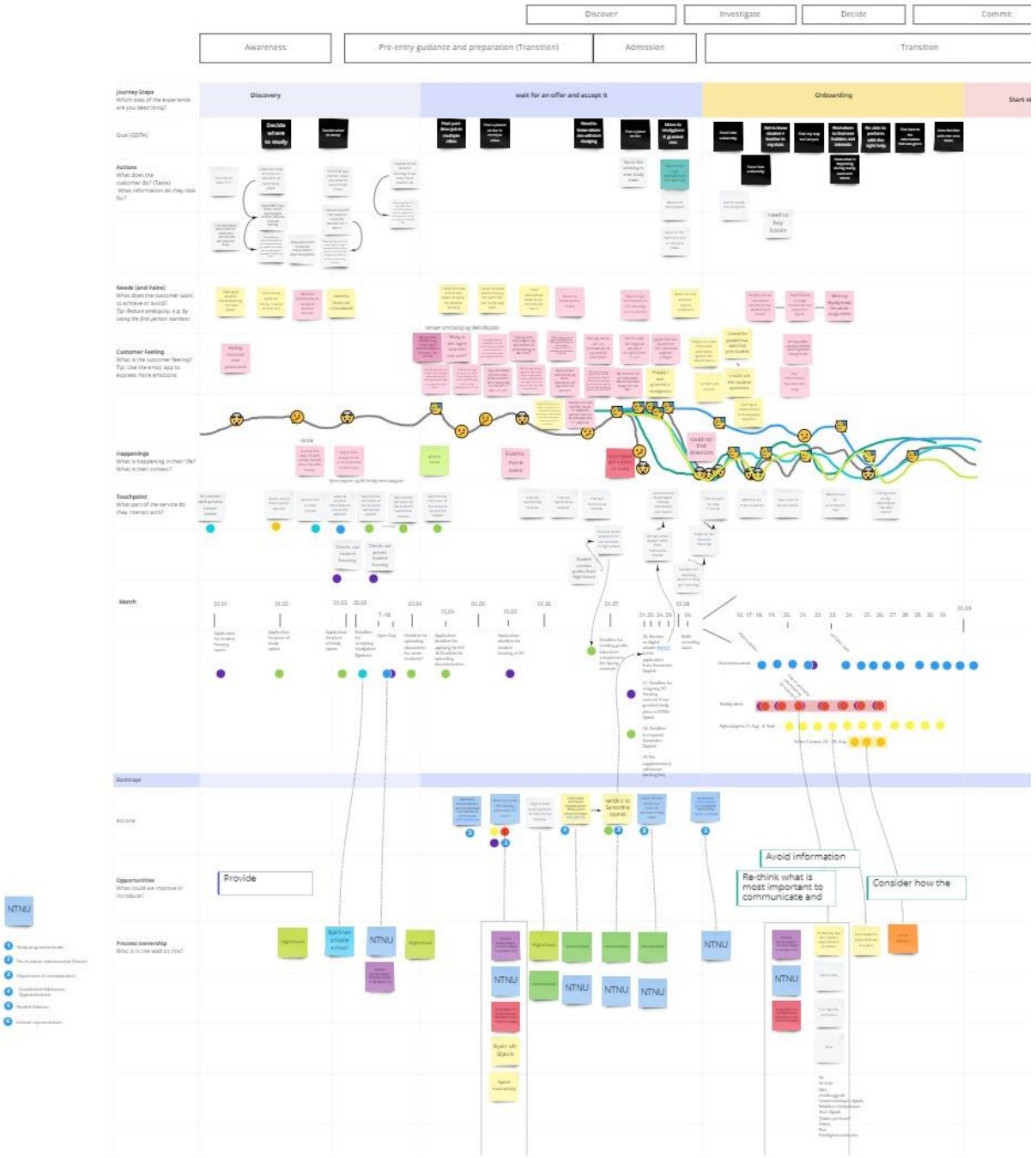
Boardbackup of Miro file in Google Drive:
https://drive.google.com/file/d/15V2w5ffpxNz7Ec84aNPLo2bqgxguPWko/view?usp=sharing

Picture in large scale:
https://drive.google.com/file/d/1OiWBbeKiMyFeu_mvsnPxoobYOBcNNHRB/view?usp=sharing