



A Review of Human-Centred Design according to ISO 9421-210

CO6210 – Design Thinking for
Innovation



Introduction:

In this report I will be talking about the human-centred design lifecycle, software innovation. I will also be talking about ISO 9421-210 which is a process Within the human-centred lifecycle.

Discussion:

Human-centred lifecycle:

I am going to start and talk about the human-centred lifecycle as this is an approach that helps to make systems that are going to be developed more suitable and usable for the things that they are needed and required for. There are also many examples about human-centred lifecycle, there are a lot of ways to go about completing this.

One of the ways to do this is a four step method that allows the person to understand how to use this method efficiently and effectively, the first step is the understanding part as this will let the person know what they need to do in order to complete the task that they are set with.

The understanding part of the cycle is where the task will be explained and then the person will need to figure out who the target audience for the product/project are, this will allow the person to make the right choices when it comes to how to show what is happening with the design for the product/project.

The second part of the human-centred lifecycle is defining, this is where the person/group will start to look at how they are meant to tackle this task properly as they will need to start thinking about how they should design the product/project. This means that they need to think about what needs to be included within the product/project as this will allow them to get a better idea of what they should be thinking about so that it makes it easier to know how to create the idea for the product/project.

The third part of the human-centred lifecycle is designing, this is when the person/group has decided on the appropriate details that are going to be included within the product/project. This means that after they have looked over all of the ideas that they have decided to implement, they are able to have a clear idea of what they want the product/project to look like. This means that they have included everyone that may use this and have added features to the product/project that won't hinder anyone that may have some sort of disability may it be hearing, sight, cognitive or motor.

The final part of the human-centred lifecycle is evaluating, this is where the design that has been created has to be evaluated so that it can meet the standard that has been expected of it. This will also allow the product/project to be tested thoroughly, so that it can be tested for any faults that may appear, this will allow the testers to see if anything needs to be corrected in the product/project. If anything needs to be re-done, then it will go back to the design part as this will allow them to rethink the design of the product/project.

Origins of human-centred design:

Human-centred design has been going on for over a hundred years and has been built on the concepts of sociology, cognitive psychology, and ethnography. This idea can be traced all the way back to the 1950's as someone called Buckminster Fuller had described the idea as ^[2]“effective application of the principles of science to the conscious design of our total environment in order to help make the Earth's finite resources meet the needs of all humanity without disrupting the ecological processes of the planet”^[2].

There is the terminology that was used by Mike Cooley “Human-Centred Technology” in a book that he wrote called “Human-Centred Systems”, shortly after this book had been released there was a company called IDEO that was founded which was mainly used and had popularized the process called “Human-Centred Design”.

ISO 9421-210:

The ISO 9421-210 is a part of the process as this will be mainly aimed at the people who are in charge of the designing part, this will show that the overview for this product/project has been at a high level which means that it will be recommended to be used for human-centred design. There was a standard that was called ISO 13407 but this had to be updated and re-issued so that no one was using an old outdated ISO, this was updated so that it can be brought up to normality with the ISO usability standards.

There are 6 key principles that are needed so that your design will be user-centred, the first one is that the design needs to be based upon an understanding of tasks, the environment and the users themselves. The second one is that the users are needed to be involved with the process so that they are able to say that is needed for them to use the product/project.

The third one is that the design has to be refined and driven so much that it is able to be user-centred evaluated, the fourth one is that the process needs to be iterative which means that it is consistent throughout the design. The fifth one is that the design will address the whole experience for the user. The final one is that the design team will include multiple perspectives and a variety of skills used throughout the process.

Conclusion:

In conclusion, this shows that Human-centred design is severe so that this will allow people to view designs from different perspectives and allow people that have different disabilities to have an influence on how the designing process takes place so that they are included within the process.

This will also mean that each stage of the process is needed to be looked at properly to ensure that there are no mistakes and is done effectively so that there are features that are needed within the design of the product/project.

References:

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2. Nemeth, A. (2020). An Introduction to Human-Centered Design. Retrieved 16 October 2020, from <https://blog.movingworlds.org/an-introduction-to-human-centered-design/#:~:text=History%20of%20Human%20Centered%20Design&text=Human%2Dcentered%20design%20has%20roots,%2C%20sociology%2C%20and%20cognitive%20psychology.&text=As%20for%20the%20terminology%2C%20In,his%20book%20Human%2DCentered%20Systems>