

AIGOR

SHARE. CONNECT. GROW.

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EXECUTIVE SUMMARY

The world that we live in all aspects of life are changing at a fast pace. There are significant irreversible changes that take place around us, which impact our lives in the way we behave. This project focuses on addressing two long lasting changes such as the way we work and the world's ageing population at work.

With the advanced technological changes our work habits have evolved quite rapidly. These accelerated changes create more opportunities for creative advancements to better human lives. The new way of working referred as 'work 2.0', in this project, is completely different from the way we have looked at the aspect of work so far. So, how might work 2.0 look like in the future and can these workplaces adapt to the fact that the majority of the workforce are getting older but are a very much active in the day-to-day tasks?

The aim of the project is to explore new possibilities and opportunities that some of the big and inevitable world-wide changes bring to our society. Usually the projects dealing with ageing population try to minimize the problems of old age, but we encourage looking at the ageing of population as an enabling factor and treating it as a positive asset to create positive value in contrast of minimizing the problems.



DESIGN&ENGINEERING

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I - RESEARCH

1.2 AGEING POPULATION IN THE WORKFORCE

“Demographic shift in workplaces.”

- Forbes (2018)

- Demography is a key driving force in the growth of the labour force, and almost all social and economic trends. Compared with the labour force of the past decades, tomorrow’s labour force will be older, more racially and ethnically diverse, and composed of more women. The future dictates that the life expectancy will continue to rise. According to assumption that by 2035, one in five people worldwide will be 65 or older. By 2030, 55 countries are expected to see their 65 and older populations at least 20 percent of their total.

All these statistics show that workforce is ageing, which means the work environment and workforce should adapt to the changes. Right now we have more and more work environments with people in different age groups, which creates demographic shift and generation overlapping. As social expectations increase in terms of technology those belonging to older generations suffer backlash to lack of knowledge in the workplace. The aim of employers is to decrease the gap between multi generations by introducing interaction methods that extend beyond the physical space

Over a period of working in these multi generational workplaces there are bound to be conflicts due to stress. Though many may say that stress at work is not always work related it is definitely a trigger. As employees spend a majority of their day working it definitely contributes to its build up. There is a need to help employees find a work life balance by motivating them to learn new skills, manage work schedules, get familiar with upcoming technologies and network.

1.3 STRESS AT WORK AND TRIGGERS

“Workplace stress factors”

- Mills, H, Ph.D.et al. (Dec 21, 2015)

In daily life, we often use the term "stress" to describe negative situations. This leads many people to believe that all stress is bad for you, which is not true.

What is stress?

Stress is simply the body's response to changes that create taxing demands. The previously mentioned Dr. Lazarus (building on Dr. Selye's work) suggested that there is a difference between eustress, which is a term for positive stress, and distress, which refers to negative stress. The following are those stress types and their individual characteristics:

Eustress

- Motivates, focuses energy.
- Is short-term.
- Is perceived as within our coping abilities.
- Feels exciting.
- Improves performance.

Distres

- Causes anxiety or concern.
- Can be short- or long-term.
- Is perceived as outside of our coping abilities.
- Feels unpleasant.
- Decreases performance.
- Can lead to mental and physical problems.

Stressors are not always limited to situations where triggers lie externally but also internally. These internal triggers such as feelings and thoughts and habitual behaviors can also cause negative stress.

Common internally caused sources of distress include:

- Fears: (e.g., fears of flying, heights, public speaking, chatting with strangers at a party).
Repetitive Thought Patterns.
- Worrying about future events (e.g., waiting for medical test results or job restructuring).
- Unrealistic, perfectionist expectations.
- Habitual behavior patterns that can lead to distress include:
 - Overscheduling.
 - Failing to be assertive.
 - Procrastination and/or failing to plan ahead.

Benefits in terms of age difference at workplace

- Diverse skill sets
- Technology
- Tradition
- Mentoring
- Continuity

1.4 GENERATION OVERLAP VS GENERATION GAP

Cause for generation gap related conflicts:

- Communication skills 30%
- Adapting to change 26%
- Technical skills 23%
- Cross-departmental collaboration 14%
- Undefined 7%

The survey in the 'user studies' explored more on this aspect and can be concluded that communication is key for reducing the stress and discomfort in terms of workplace.

1.5 COMMUNICATION GAP

Communication can be defined as a exchange of information. If we are talking about the communication in workplaces, we can state that the tools used to send and receive a message are different such as verbal, non-verbal, written communication and visualizations.

The communication tool is chosen throughout people's perception and habits. The importance of the communication tool is equivalent than the message. The right message needs to be received to the right people. In communication paradise, people tend to interpret the received information differently.

II - USER STUDIES

[Case Study: Tallinn]

2.1 PRIMARY RESEARCH - INTERVIEWS

If we are aiming to solve issues between different caps, we need to well know how the communication is happening. For this, we created personas based on number of open ended questions asked from our interviewees.

Those questions were:

1. Brief introduction; What is your name, age and profession?
2. What is your highest level of education? (high school diploma, college, associate degree, undergraduate degree, graduate school, none of the above; other_____)
3. What is your field of occupation? Are you also planning to gain some new knowledge from other fields?
4. Are you working (fulltime/parttime/contract/freelance)- How many hours per week are you working? How long have you been working there?
5. What factors were important to you when choosing a new career? (Designation, salary, benefits, flexibility)
6. What motivates you to do work? Do you feel valued at work?
7. How often do you feel stressed at work? Have you had any kind of work-life conflicts?
8. If you have had such a conflict please could you describe?
9. Have you had any conflicts because of the age difference in the workplace? Please could you describe?
10. Do you have methods to de-stress your work day? (hobbies, leisure activities etc.)
11. Do you feel that your knowledge and skills are enough to work in your current position?
12. Do you feel that your current education and skills are enough for future?
13. Would you like to learn new skills?
14. Do you have colleagues in the workplace who are from a different generation? If yes, how would you describe your association with them? (friendly, professional, not approachable etc.)
15. Do you feel that there is a need to improve the balance at work in regards to those with practices learned from different generations?
16. What do you see as advantages of diverse ages in a workplace working together?
17. Have you been involved in collaborations with those from a different generation? Give examples.
18. How have you prepared yourself for retirement?
19. Do you feel that employers have introduced methods to ease the transition to retirement? If so name some?
20. Where do you see yourself in 10 year? (Same workplace but different designation, different job, travelling, etc.

Interviewee 01: Martin Lutt - 51 years

- Taxify - Hiring Manager
- Worked in the current workplace for the 8 years on a full time basis.
- Hiring process have not changed much.
- He feels valued at work but invisible sometimes.
- Do feel stressed during initial hiring phase: quarterly
- Stressful situations happen weekly. Team members are young and quit almost right after probation. So, the senior employees should keep training them often.
- Retraining people repeatedly creates stress within the HR team.
- Misunderstandings at work become official complains and that becomes an HR priority.
- Retirement plan: I have enough savings to travel and plan to settle in a warmer country.
- Communication: face to face, call,

Interviewee 02: Liis Ruhno- 55 years

- AB - Country HR Manager
- Worked in the current workplace for the 2 years - F/T. Work experience in HR 20 years
- Still adapting to the new workplace as the hiring process is different; in-house recruitment through internships.
- Very stressful due to the large number of recruitment sessions.
- Been new but the oldest member in the HR team affects the work balance.
- Difficult to get along with the younger team members. Demotivated to talk about other topics in comparison to discussing work tasks
- Retirement plan: Finish paying home loan and hope to be a freelance consultant.
- Goal: Travel often
- Communication: face to face, call, emails

Interviewee 03: Anna Savi- 67 years

- SMIT - Programmer
- Worked in the current workplace for the 9 months - F/T. Work experience in 2 years
- Still adapting to the new workplace as the assignments are different everyday
- Very stressful due to the datelines and environment.
- Been new in old team.
- Communication in work is difficult because of lack of time and she doesn't want to bother people with her problems.
- Retirement plan: Continue working till she can and always learning new information.
- Goal: Backpacking trip
- Communication: emails, messages, social media

Interviewee 04: Christian Grey- 30 years

- Pipedrive – Product owner
- Worked in the current workplace for the 4 years - F/T. Work experience in 5 years
- Have active social life at work and outside of the work
- Have very calm personality, don't feel stress often
- Have his own team, with whom he have been working together for few years.
- Communication wise easy going and find
- Retirement plan: Continue working till she can and always learning new information.
- Goal: Travel often
- Communication: face to face, call, emails, social media

2.2 PRIMARY RESEARCH - SURVEY & OBSERVATIONS

-SURVEY

To find out what people are thinking about retiring and future work, created general questionnaire to find out what people are thinking. The survey was conducted with the use of social media to gain the insights of the current workforce.

As the direction of the survey was focused on workplace conflicts and their triggers the outcomes highlighted were actions that eventually led to 'communication gap'.

Focused on Topics:

- Work Related questions
- Retirement
- Work-related conflicts
- Age gap work-related conflicts

Survey findings:

- Miscommunication
- Blamed without fault
- Seniority vs competence dispute
- Lack of skills
- Age ≠ Knowledge
- Difficult Work Environment

Stress, its triggers and how the age difference impacts the workplace were highlighted aspects in the survey. The research gave us an overview of the problem while the interviews were based on in depth discussions. Survey conducted included the following personal views:

- “Younger people value less experience and rush into decision making.” - Female, 46-55
- “Different attitudes to work, people, work culture and habits are different. For example, older people tend to communication from the top down, while young people like to be more equal in terms of communication.” - Female, 26-35
- “Seniority vs competence dispute. I was told to do things in a very inefficient way because that's how things have always been done. I just ignored the seniors and did things with modern tools more efficiently. When you do a weeks' worth of work in one day there's really no more disputes.” - Male, 26-35
-

OBSERVATIONS

Observation were made in Tallinn, Estonia in multilevel office space with the focus on employee interactions during to work hours. As the focus of this project was based on improving employee wellbeing through increased social interaction general conclusions were drawn based on how employees communicate with one another.



III - CONCEPT

3.1 CONCEPT AND STAKEHOLDERS

Improve the communication between employees of a multigenerational workplace and limit awkwardness and communication related misunderstandings through a platform, where one can test the situations before the real life interaction in play. The platform also gives information about user schedules and preferences, by eliminating the possibility of misunderstanding between employees who already the stress of intense monotonous workload. It also creates opportunities for employee to encourage one another, build on each others' strengths and improve their workplace network.

Improve peer interaction with the use of a digital extension of yourself as a representative:



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STAKEHOLDERS

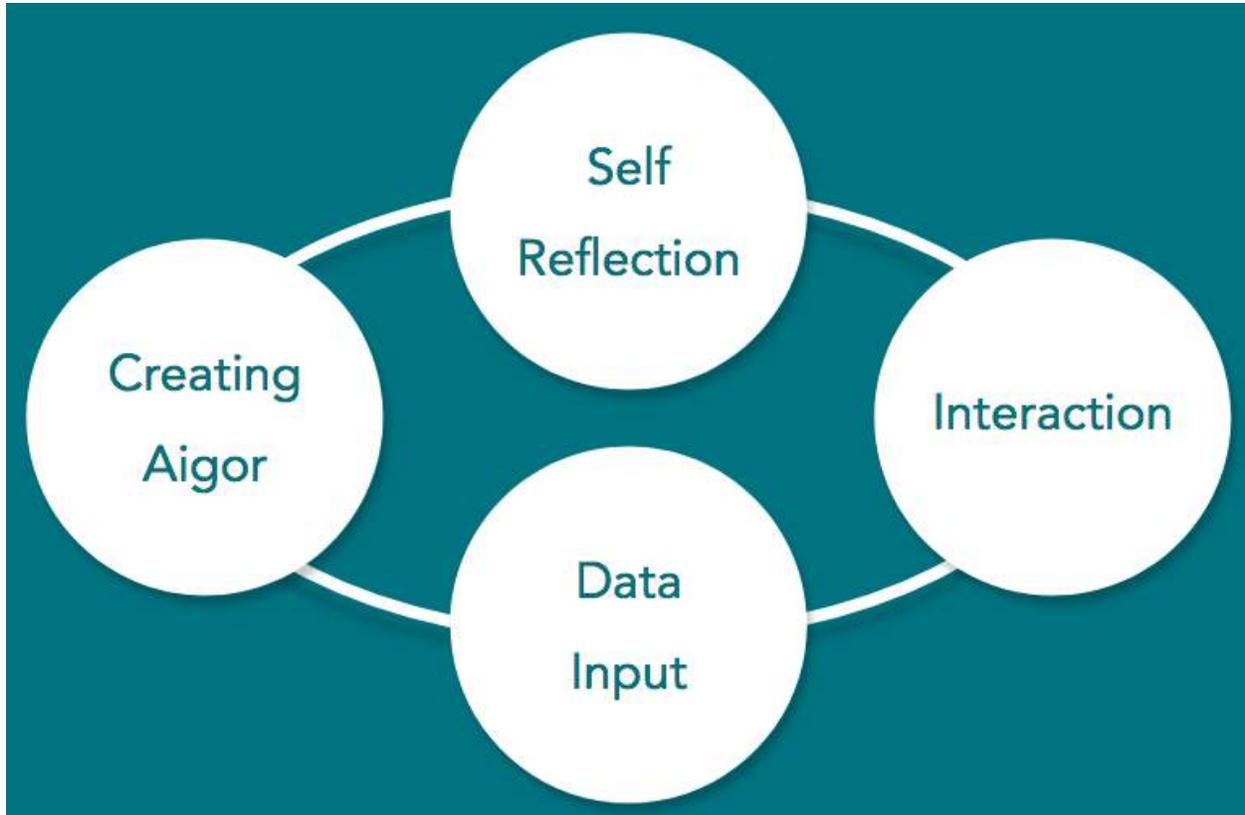


3.2 SYSTEM DEVELOPMENT

- Features Of The Design



- Elements Of The System

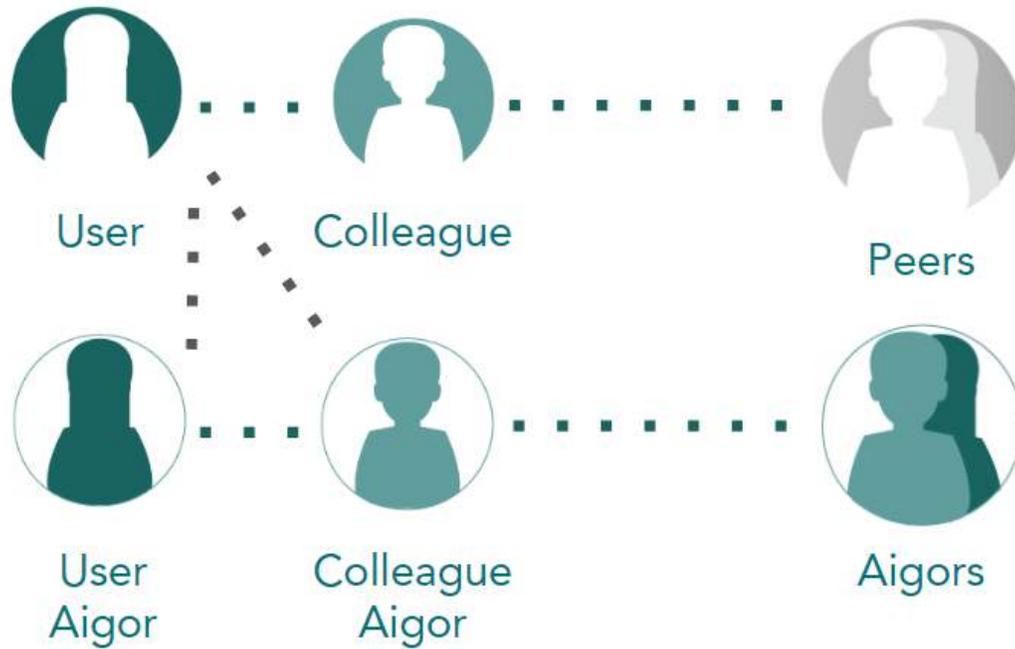


The Process:

The user will create an AIGOR that will represent them in the virtual space. This will create an opportunity not only to network but also review one's actions made throughout the workday, which will be a primary source of feedback.

Data input will take place at the time of inception thereafter information sharing will be handled through 'machine learning'. Interactions are recorded for the benefit of the system users and catalogue for reference. This information will be the suggestions AIGOR will make available to its' users.

THE TYPES OF INTERACTION:



*Aigor: AI extension of the user that will operate within the digital space as a representative of the employee. This will give employees twice more exposure in a large scale workspace to be more present regardless of social barriers.

There will be 4 main types of interactions in this design to create more opportunities for employees to have more wholesome work experience.

Aigor creates interactions between,

- User and User
- User to their own Aigor
- Aigor to colleagues' Aigor
- User to colleagues' Aigor

IV - FINAL SOLUTION

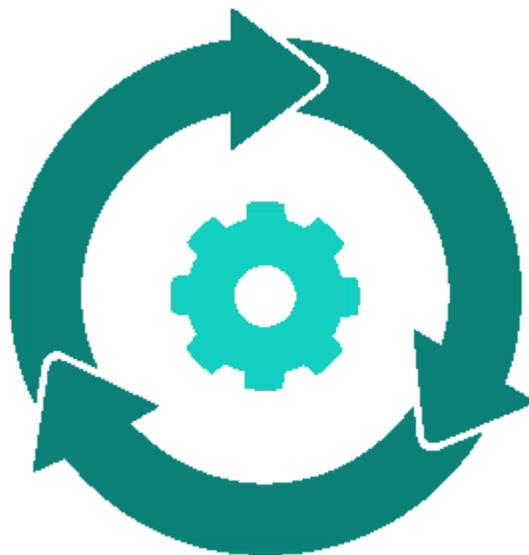
4.1 SOLUTION REAL-TIME DATA COLLECTION & INSTANT RESPONSE

The design concept directed the team towards a solution that will suit two generations with the common need for more fluidity in interaction. A method that is able to adapt according to each one's needs and preferences.

While the one extreme of the generation gap prefers a certain sense of real time interaction, at work it is not always the case. As each one's availability has a large impact on their social structure it is necessary to create a common ground that is available to all.

On the other hand one generation has already experience the slow incremental development of technology and have grown to create their own pace as work within a monotonous work culture.

This creates a situation where fear of change impacts their openness to new technology. That's why this design has an extension that is based on purely learning from its users, which creates trust based rapport between the platform and its users.



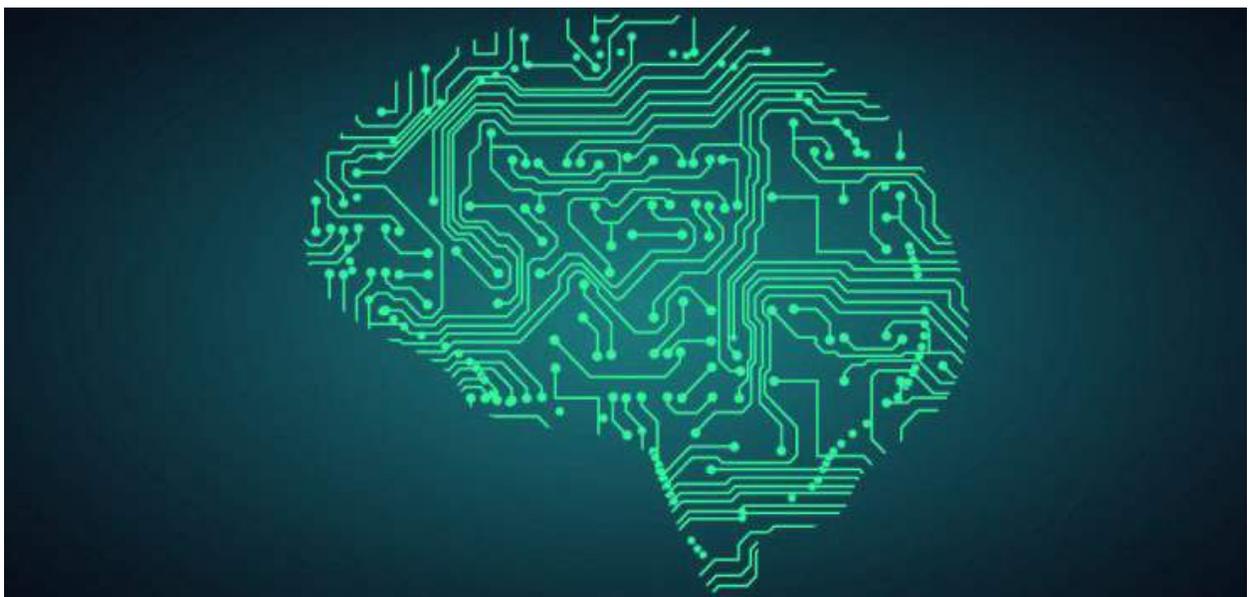
4.2 ARTIFICIAL INTELLIGENCE

AI will be the primary technological driver of this platform as this will be a virtual space which will mainly depend on Aigor to Aigor interaction. AI takes place when a machine mimics human like interactions through simulated cognitive thinking and applying it in significant situations through machine learning in tasks such as problem solving.

4.3 MACHINE LEARNING

This is subdivision of the field of artificial intelligence in the field of IT that uses the method of giving the computer the ability to learn from its users with the data collections. This will be the main customization element of the platform where the initial stages of the system will involve the 'Aigor' learning from its user before interacting with other virtual extensions.

Once the integration period ends the Aigor will serve as a representative in the virtual space by leading communication simulation and assisting employees in their day-today tasks in real time.

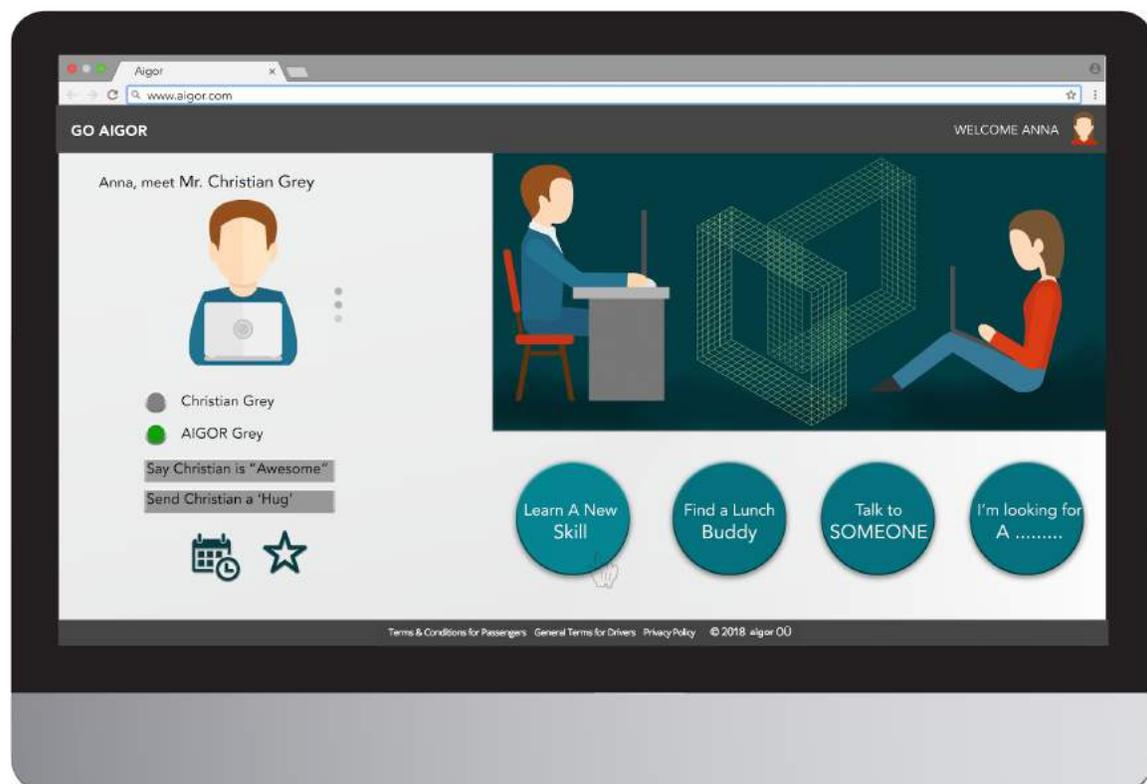


4.4 DESIGN AND SYSTEM

AIGOR is a virtual space for employees to interact with one another by creating an extension of themselves through the integration of artificial intelligence. This platform will be an enhanced communication platform that will act as an alternate workspace breaking social barriers.

This will be an experiential space created by employees for employees to share expertise, resources and network within their company. Your advanced digital workspace is now one click away from been transformed into a interaction simulator to build and grow your network.

AIGOR PLATFORM: USER INTERFACE



4.5 AIGOR: USER JOURNEY



Anna, 67
accountant

Introvert
Socially Awkward

Newbie at work

Finance

Technology



Christian, 30
Product owner

Extravert
Active

Working for +7 years

Technology

Accounting

SELECTED COMMUNICATION PREFERENCE

FACE-TO-FACE MEETINGS & CALLS

VIDEO CALLS & CHATS



Christian would like to ask Anna questions about a new incubator idea...
"How do I approach her"

AIGOR GREY ALERT

Anna prefers 'face-to-face meetings'.

OPTION: Request ANNA for a lunch meeting!!!

AIGOR WHITE ALERT

Christian's usual meeting preference is online meetings, but has made an exception to discuss work. Let's make a new friend at work today !!!



Hi Anna AIGOR here...
You have a lunch buddy request from CHRISTIAN GREY

ANNA accepts request

Confirm



ANNA'S & CHRISTIAN'S NETWORK CONTINUES TO GROW. NOW IT IS YOUR TURN. JOIN AIGOR.

V - OUTCOMES

EXPECTED OUTCOMES OF THE DESIGN

- A real-time digital space interaction.
 - A virtual space that acts as a secondary workspace that is generated through the actions of the employees and capacity is based on machine learning. Therefore it requires a period of integration before reaching its full capacity.
- Increased productivity.
 - The simulation will allow employees to keep track of their work as well as their network.
- Unfiltered communication experience.
 - The system will operate beyond preconceptions about social stereotypes such as age.
- An opportunity to build trust in a team.
 - More opportunities to work with colleagues and learn from one another. By building a rapport over a period of time through simulation will create limited opportunities for misunderstandings that will lead with workplace conflicts.

FUTURE EXPANSION OF THE DESIGN

- Voice calling integration
- Physical features that reflect the AI extension. E.g. morphable surfaces
- Ability to integrate AIGOR to mobile devices. E.g smart phones and smart watches
- Virtual platform for freelancers and students



THE TEAM



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