

CASE



An individual can spark world changing ideas

Developing the future at CoLab

Innovation with and within Information Technology is at a high speed and it will not slow down anytime soon. Just twenty-five years ago the internet got available for households and merely ten years ago the first smartphones were released. And now we live in an always on and connected society. To spot the trends in technology and imagining the endless possibilities is no longer a task for a few, it has become a responsibility for all of us.

CoLab: learning and inspiring

CoLab is the initiative within ICT Group where we work together on ideation and social innovation since 2017. The ideas we harvest can have any source, like our professionals, customers or online communities. CoLab projects range from doing research to developing a proof of concept, as long as the project is small, manageable and the idea has a learning aspect to it. The aim of the CoLab community is to learn and to inspire. We do this together with 50 students each year who are working on their bachelor or master graduation projects. We also have a great batch of

professionals with us. They work on small projects with them learning new skills and giving us insights into new technologies and ways of working.

With these new skills they extend their toolkit to solve problems, not only for our customers but also on a larger scale. By doing research or writing open source code we share the extended knowledge on cutting edge technologies.



Things get smarter

If everything in our world is connected, we have to work together to develop the future. The 2019 CES gathering (the global stage for innovation) showed the newest consumer electronics and this year one of the most seen new features in all products is the support for digital assistants. Assistants like Google home and Amazon Alexa are becoming more and more accepted within households. This is a trend that is not directly applicable to most of the software that we develop at ICT Group. But behind each assistant are things like artificial intelligence, micro services, user experience and digital transactions which we can no longer neglect. The impact of the digital assistants will be felt within our work. And this is why we are already experimenting with the building blocks of digital assistants within the CoLab projects.

Digital assistants are just an example of how we look at trends and innovations to get inspired to work on ideation and innovation projects. We have asked ourselves the question 'How can we help people with a disability?' which has resulted in a social innovation project '3D Printed and connected prosthetic arm'. Two students have worked on this project for five months and have come up with an open source solution based on generic available hardware. They used a 3D printer to print a prosthetic arm and then added a microcontroller to it. The user of the arm can control a laptop or a tablet by making gestures with the arm. The software within the arm uses machine learning to learn the gestures for each user specifically, so it fits the user's abilities of movement. Using artificial intelligence this project gained a user-friendly way and enabled people the use of laptops and tablets that they did not have before.

Positive impact

Developing the future is learning new skills, developing your own career and also having a positive impact on the quality of life for all people. In the future technology will augment humans and help them do their tasks. We have big challenges in respect to the environment, feeding the population of the world and fresh water distribution. We cannot solve this on a large scale by ourselves, we have to do this together. The combination



If everything in our world is connected, we have to work together to develop the future.

BART LAMOT,

DIRECTOR INNOVATIONS AT ICT GROUP

of our creative potential is needed. Only together we can have a major positive impact and that is what we try to do at ICT Group with the CoLab initiative.

Twice a year ICT Group has a group of about 25 students doing their internship or graduation projects.

Together with customers we explore possible innovations using Design Thinking workshops. During the day an idea gets proto-typed and tested for the first time. Usually these workshops form a foundation for CoLab projects.

Themes we are working on:

- Artificial Intelligence
- Smart Mobility
- Digital twins in IoT
- Smart Contracts
- E-Health
- Smart Assistants

Stay informed about the projects at CoLab via [LinkedIn](#).

At ICT we connect people, technology and ideas. Are you looking for a new challenge as a developer, architect or engineer?

Visit www.werkenbijict.nl