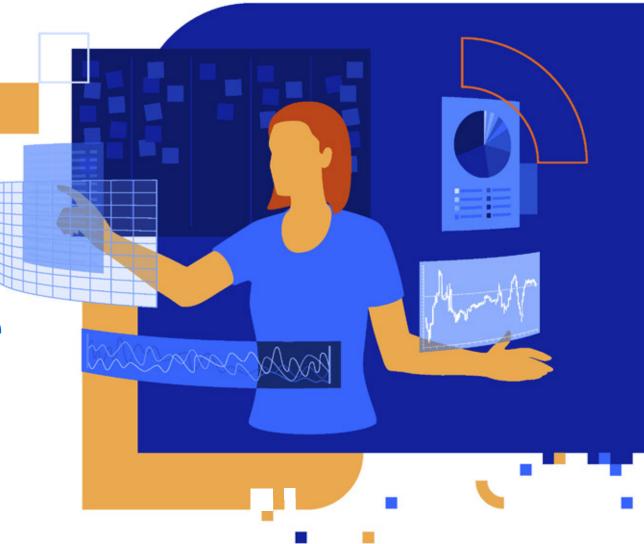# Objectivity

Art of the possible in AI workshop

Leonard Cheshire

Case Study

Supporting people with disabilities through Artificial Intelligence

Art of the possible — an AI workshop for Leonard Cheshire

Objectivity's involvement in the Microsoft's AI for Accessibility programme led to us being introduced to Leonard Cheshire. Leonard Cheshire is an international charity and works in communities to support people with disabilities into employment. It wants to explore the potential of artificial intelligence to reach more people with its life-changing programmes.

Leonard Cheshire

The challenge

What could be better than using AI to extend the reach of Leonard Cheshire's ambition and enable more people with disabilities to earn a living?

The UN estimates that 80% of working age people with a disability in developing countries do not have their own income. Candidates lack the confidence to pursue their careers, there is often no route map for success, and employers often don't give them a chance.

The organisation has grown into one of the world's largest disability networks and works with the World Bank, ILO and UNESCO. For over a decade, the Leonard Cheshire charity has run programmes in Africa and Asia, getting people with disabilities into employment. As a result, 38,000 people have got jobs or started selfemployment and a further 83,000 have had vocational training.

But how can Leonard Cheshire scale this up significantly with only a limited number of offices, partnerships and support on the ground?

To consider this challenge we held an Objectivity 'Art of the possible in Artificial Intelligence' workshop to examine the client's pain points and see how AI mightprovide the solution.

Our action

We started with a discussion about the current pain points in Leonard Cheshire's work. We wanted to focus the following parts of the workshop on solutions that could bring the greatest social value. We have learned that one of the key challenges is to scale Leonard Cheshire's operations and one of the most effort consuming processes is the recruitment for people with disabilities. Also, many other pain points were listed, where AI could potentially help.

Four aspects of AI were identified:

- Natural Language Processing such as voice recognition and generation, chatbots and translation
- Recommendation Systems that could help match candidates with vacancies

- Computer Vision that recognises faces, barcodes and analyses pictures
- Advanced Data Analytics providing anomaly detection and forecasting.

We gave practical examples for each of these technologies and explained how Objectivity has used them to solve particular client problems. We also inspired the group by talking about future trends.

The workshop

To solve Leonard Cheshire's key challenges the team split into groups and brainstormed on the ways to apply AI. The groups have generated dozens of valid applications of technology to everyday problems.

In just 20 minutes three groups came up with the ideas and potential solutions on how to apply AI technologies into Leonard Cheshire environment and processes. The ideas were grouped and analysed together. We have discussed the business or social value each idea may bring, the difficulty to implement it and how this could be supported by the existing data.

From this creative session we eventually decided to choose an AI candidate profiling tool that suggests to an individual the best career path. This tool would help Leonard Cheshire to reach to many more people with disabilities, without involving a lot of internal and partner resources.

In order to develop this idea to a concept, we used the Product Canvas technique to analyse the chosen idea. This technique enabled us to define the solution at a high level, establishing its major goals, target groups and the roles of the users who will interact with it.

The self-assessment tool captures the person's skills, abilities, experience, education, motivation and aspirations. Based on these findings, the recommendation engine will propose a career path.
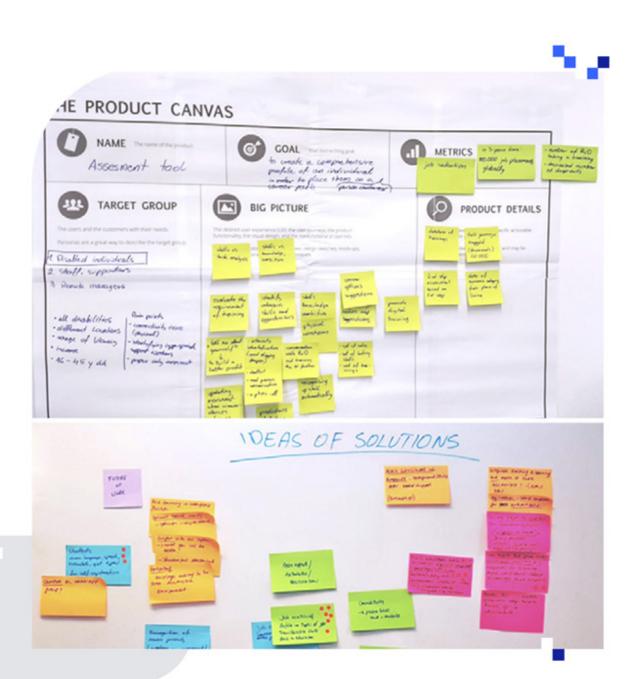
We helped Leonard Cheshire to create a business case (including the cost estimate) and to write a successful grant application.

Key achievements

- Inspired the client in what way Artificial Intelligence can help their business.

- Collectively with the client came up with a number of ideas on how technology can improve the lives of people with disabilities.

- Selected the top idea and supported the client in applying for the Microsoft AI for Good grant within deadlines.

The result of the workshop was a business plan that has received a grant with funding for its implementation.

Goals

- To understand the current capabilities of AI.

- To discover potential AI solutions that could improve your business.
- To validate ideas existing in your organisations.

- To define the most valuable Proof of Concept to be delivered.

The workshop is geared towards big and mid-size companies

Participants: 4-6 attendees

- Business people accountable for their business unit (e.g. product or process owners).

- Head of Innovation.

- Head of Digital Transformation.

- Business representatives (professionals responsible for data, process, operation).

- Key stakeholders and data experts from your organisation.

Our workshop will help you define areas of potential AI solutions through hands-on projects and case studies.

We have expertise in multiple industries.

Become a leader and innovator of business and AI

Implementing AI into business can be challenging. Our workshop will help you on that journey. No matter the industry, our workshop is tailored to suit your most challenging issues. The goal is to help you find the most profitable business cases to take advantage of your data.

There is often a lot of data already existing in a company but simply not being used or connected. Data science is a very exciting and powerful method, but it requires patience, up-front preparation as well as skills and analytical minds of data scientists.

We are a Microsoft Partner and we can deliver a full day, tailored workshop at your premises.

Leverage AI, data science and machine learning to scale your business.

Contact us to learn more

Register now and one of our AI experts will reach
out to schedule a workshop.

Michal Zgrzywa
Director, AI

mzgrzywa@objectivity.co.uk

Marta Markiewicz
Head of Data Science

mmarkiewicz2@objectivity.co.uk

Objectivity Ltd

9 Westwood House,
Westwood Business Park
Coventry, CV4 8HS
United Kingdom
+44 (0)2476 420000
www.objectivity.co.uk

Objectivity GmbH

Neue Mainzer Str. 75,
60311 Frankfurt am Main,
Deutschland
+49 160 95667774
www.objectivity.de

@objectivityltd