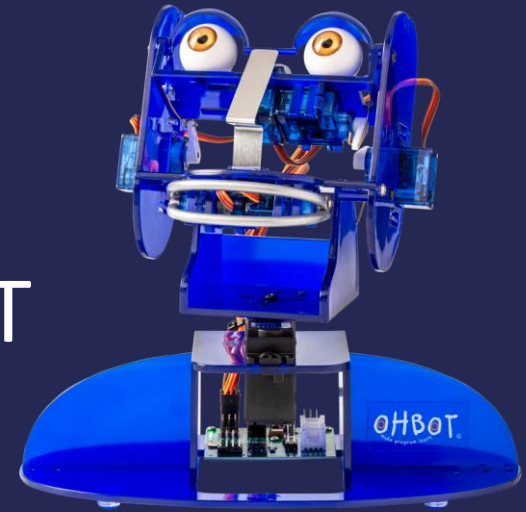


OHBOT
make program learn

AWARD-WINNING SOCIAL ROBOTS THAT
PREPARE A NEW GENERATION FOR THE
WORLD AHEAD

2023



What's the Problem?

***“Robots will take over 20 million jobs by 2030”* OXFORD ECONOMICS**

Robots and AI systems are becoming integral to our lives and decision-making but there is very little public understanding of how they work.

We need new and better tools to understand the next generation of technology.

Technology education

Current school resources fail to engage and don't teach human/robot communication.

Consumer products

Robot and personal assistant offerings for the 'technically curious' are black box units without any explanation of the AI behind them.

Ohbot modernises programming education

Our first product, 'Ohbot' enables children to learn **computational thinking skills** and understand how code can be used to control a physical device.

Ohbot is targeted at supporting learners in upper primary and secondary schools and has also been used in higher education. It is **engaging, fun, and easy to program.**

Ohbot is a social robot. Children can program the robot to move its eyes, face and lips and to speak to them. Ohbot is used as a creative tool **across the educational curriculum** as speech and language are such important elements in all subject areas.



Picoh demystifies AI and robotics



Kickstarted in 2019, 'Picoh' **extends our appeal** in secondary schools and the consumer/hobbyist market.

A 10cm (4") tall, **fully enclosed robot** with moving neck and lips and expressive eyes.

Picoh can be programmed as **an interactive personal assistant** that connects to Artificial Intelligence services, responds to voice commands and reacts to its environment.

OhbotAI takes it further



We were awarded an Innovate UK SMART grant in 2019 which has funded the development of 'OhbotAI'.

OhbotAI adds a colour screen for more expressive eyes, a powerful new AI "brain", a head roll movement, additional sensors and the option to run as a standalone unit, programmed remotely through a laptop or tablet.

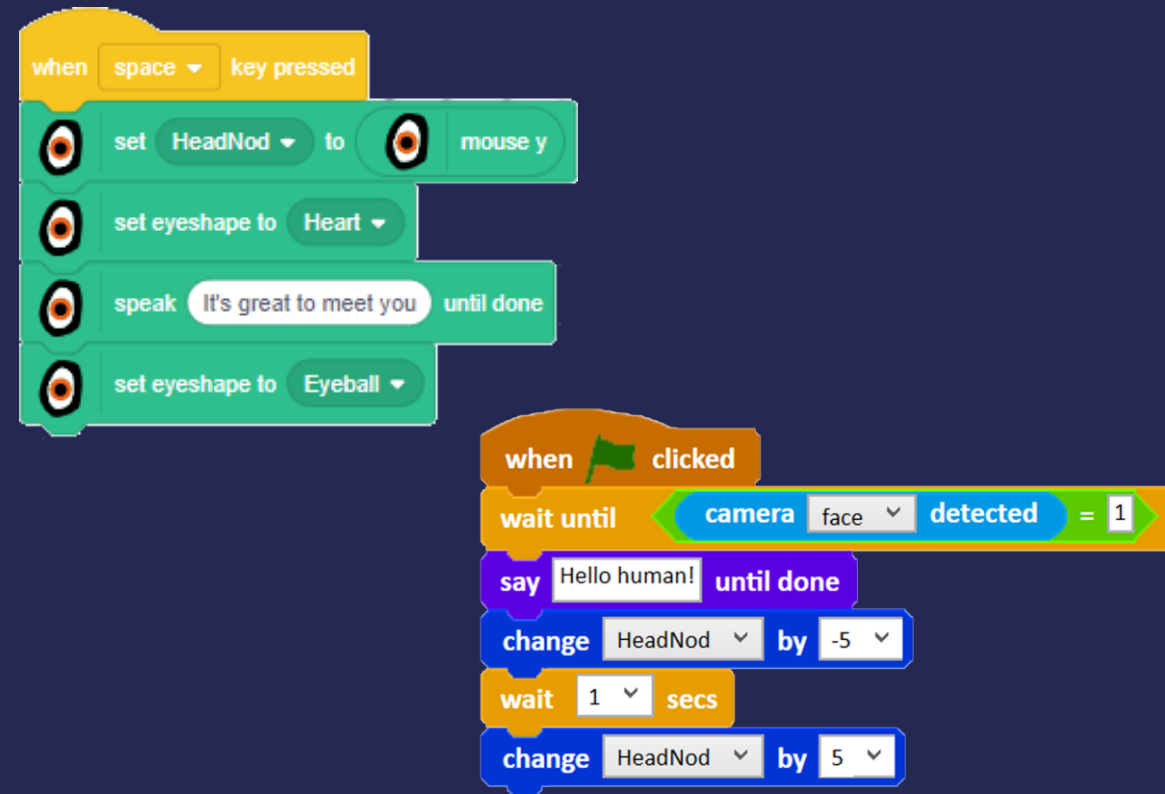
Software developments and extensive new resources focus on getting inside the "black box" of AI.

Our Resources

Block programming software: Our Windows app applies block programming skills to connect to Artificial Intelligence (AI) services, speech recognition and camera image processing. Our online Scratch environment provides a simple, online entry point for programming movement and speech.

Open Source Python library: allows control with the text-based Python language on Windows, Mac or Raspberry Pi.

Full scheme of work based on the National Curriculum for England : supporting educators and home learners to facilitate learning through following a carefully structured sequence of progressively challenging activities.



```
#start up sequence resets to mid position
ohbot.reset()
ohbot.eyeColour (0, 0, 10)
sleep(1.0)
ohbot.eyeColour (0, 0, 0)
ohbot.move (ohbot.HEADNOD, 0)
ohbot.move (ohbot.LIDBLINK, 0)
sleep(2.0)
#close to turn the motors off
ohbot.close()
```

Traction

Over 7,000 robots sold

Distribution through two major **UK distributors** and a **network of international distributors**

Direct sales to **52 countries**

60% of last year's sales were to **export markets**

An established relationships with suppliers of key components and companies for injection moulding and PCB manufacture

Strong brand growth


3 successful crowdfunding campaigns

Track record in **disruptive marketing** (BBC coverage of when we put an Ohbot into near space)

Loved by users

"The children treat them as if they were alive and take especial care when carrying them around the school, where they are regarded as celebrities." Bryher Pennells, teacher at Charlton Park Academy (specialist SEN school)



A man in a grey suit jacket and light-colored shirt is looking at a laptop. On the desk in front of him is a Raspberry Pi with various sensors and wires attached. The background is a dark wall with the Microsoft logo.

Microsoft

Supported by Microsoft

“Some of the most exciting stuff we're seeing plugged into Windows...”

Terry Myerson, Executive Vice President of Windows and Devices Group Microsoft

Featured in the launch of Windows 10S

Used in all Microsoft stores as part of the Techspark summer program

Presented at the Microsoft Education Summits in Washington and London

Recognised as leading innovators

Innovate UK Grant Winners

Successful in the UK government's highly competitive Smart Competition for ground-breaking technology projects.

Awarded 70% funding for our £191,000, 18 month programme of innovative R&D.



Business Model

Our price scale is competitive with other school STEM resources, such as Wonder Workshop and Makeblock, and with consumer and hobbyist robots such as Sphero.

Ohbot

Single assembled unit with software sold for £199 (\$253)

Self-assembly kit sold for £155 (\$197)

Extra accessories and class packs sold

Picoh

Single unit sold for £110 (\$140)

Partnerships with 11 global distributors covering 14 countries



Target Market - Education

UK

20,806 primary and 4,190 secondary schools (2021 besa.org.uk)

Total addressable market

The UK educational robotics market was valued at £18.7 million in 2019 and is expected to reach £105.4 million by 2027 (ResearchAndMarkets.com via ChatGPT)

£15.5m/\$19.3m (5% penetration, over 5 years)

Global

1.5 billion learners (UNESCO Institute for Statistics via ChatGPT)

Total addressable market

The global educational robotics market was valued at approximately £541 million in 2020 and is projected to reach £1.35 billion by 2026 (marketsandmarkets.com via ChatGPT)

£337.5m/\$423.5m (5% penetration, over 5 years)

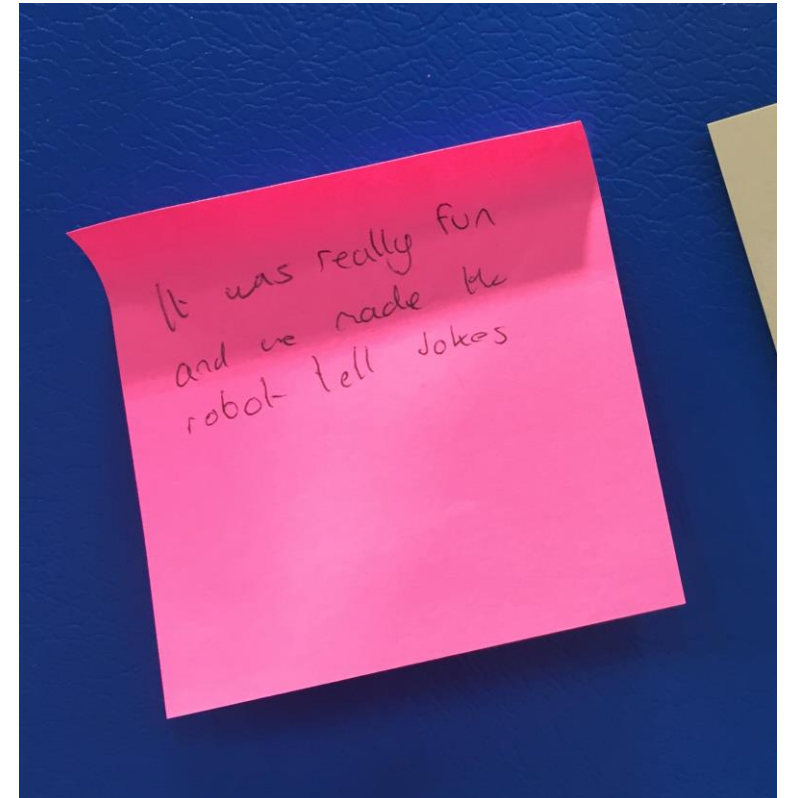
Target Market – Hobbyist/Consumer

Raspberry Pi has sold over 40m units globally (cam.ac.uk, 2022) at £27/\$30 per unit constituting a market of £1.08bn/\$1.34bn.

Future Strategy

We are seeking a partnership with an investor to help us with business development, fund sales and marketing and capitalize on our leading position on the use of AI in education.

We plan to increase global sales by employing a full time experienced educational sales specialist, a part-time sales assistant and a part-time digital media and social networking expert. Funding will also allow us to promote Ohbot at more events and launch a marketing campaign.



Founding Team

Mat Walker

Masters degree in Mechatronics

Programmer and roboticist who created the Inkha robot which ran for 10 years on the reception of King's College, London and is now in the London Science Museum collection.

Ran a software consultancy working on highly innovative projects for clients in finance, music and media.

Dan Warner

PGCE

Extensive practical and strategic experience of the education sector as a teacher, School ICT lead and Local Authority ICT Adviser.

Led on the introduction of a Managed Learning Environment across 70 primary and secondary schools and contributed to shaping an offer of online content.

Editorial Board of the London Grid for Learning.



Investment

Ohbot was self-funded for seeding. We grew our initial prototypes through successful Crowdfunder and Kickstarter campaigns.

Our fully operational prototype of Ohbot AI was funded with the help of a Smart grant from Innovate UK.

We are seeking equity investment to employ staff and launch a marketing campaign.

We would love to talk to anyone that could help with the growth of an ambitious company that holds environmental ethics, kindness, honesty and fair trading as dear principles.

