THE NATIONAL ROBOTARIUM

PEOPLE CENTRED :: INTELLIGENCE DRIVEN

Robotics for Health


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Primary Focus Areas

Industry Adoption

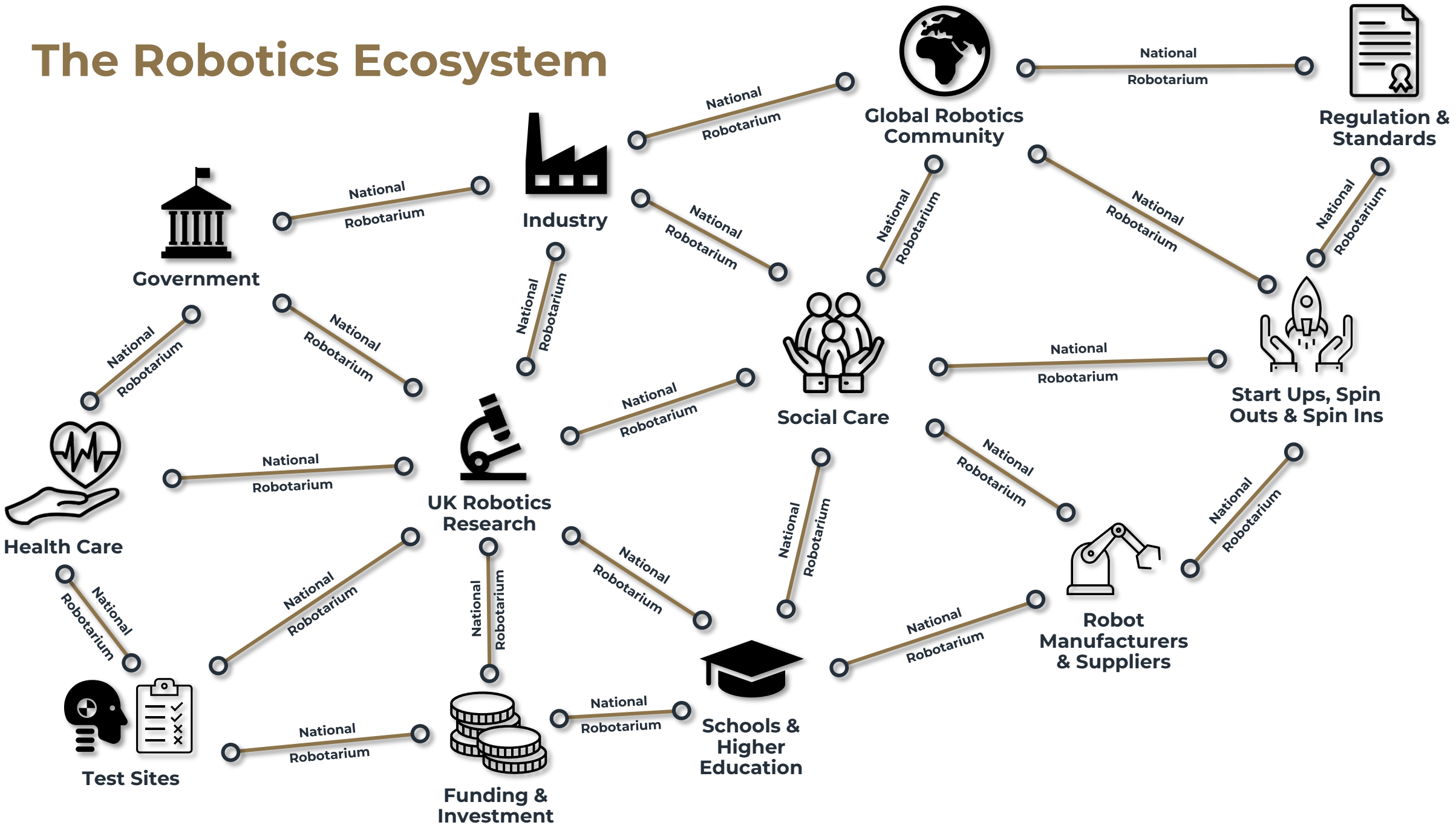
Research Acceleration

Multiplier Effect

Start Up support

Talent and Skills Development

The Robotics Ecosystem



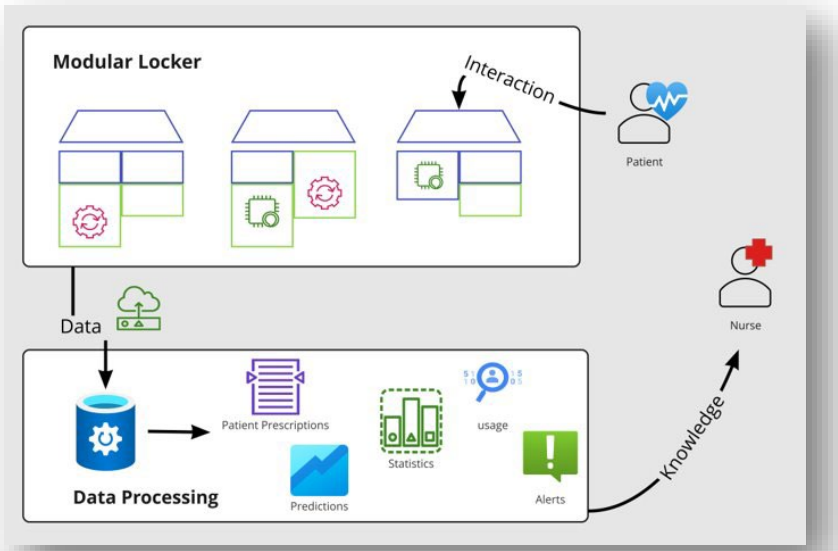
Roadmapping, an example

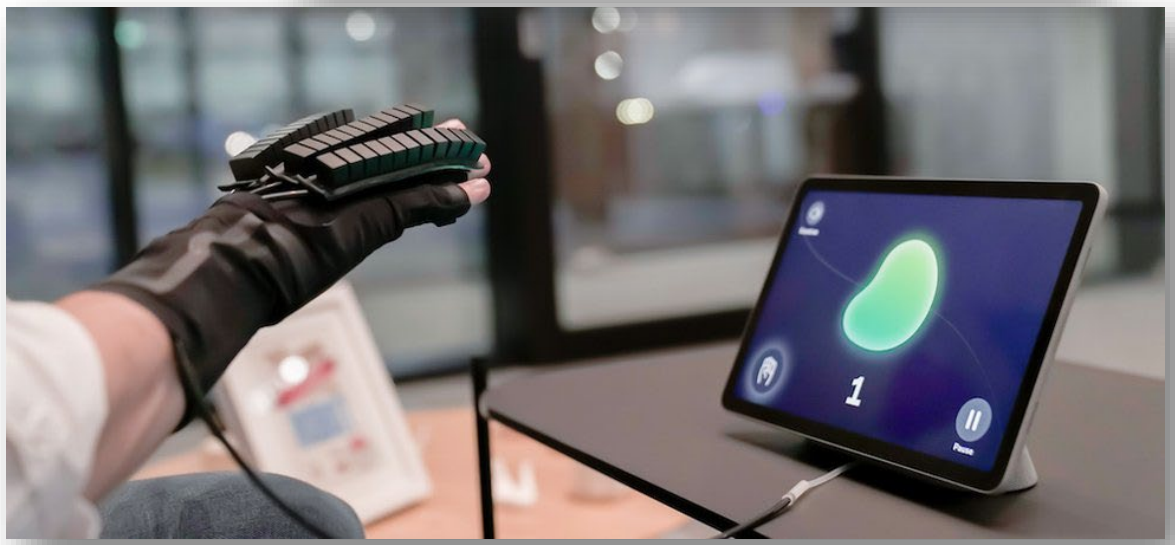
Based on impact, the top-eight opportunities were…

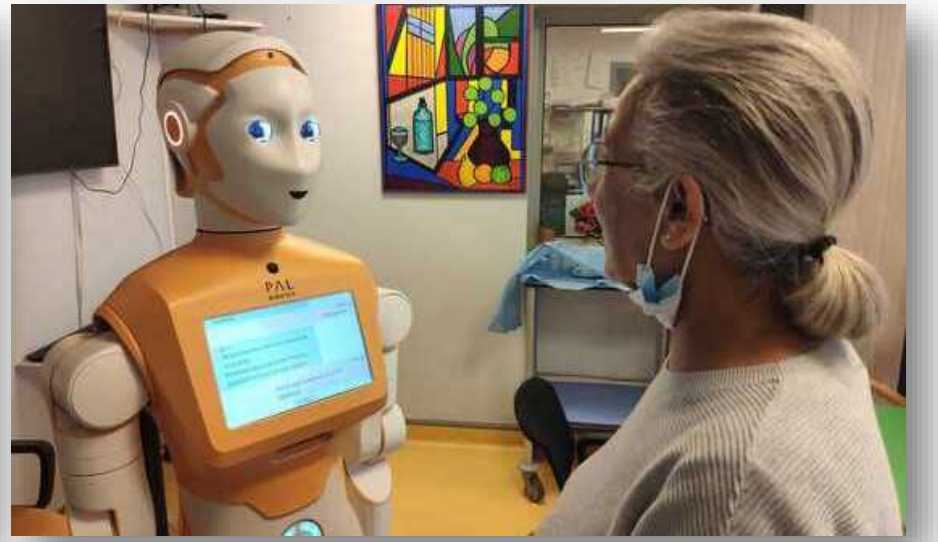
Rank	Opp.	Description	Safety	Quality	Cost	Time	Space	Total
1	43	Raw material dispensing	7	12	11	13	9	**52**
2	36	Pouring of slopes	12	11	10	13	4	**50**
3	21	Visual inspection of FGs	3	15	15	11	3	**47**
4	28	Goods in to warehouse	10	5	13	14	5	**47**
5	17	Weight checks on-line	4	14	13	12	3	**46**
6/7	32	Proactive trans. of goods	8	2	12	12	11	**45**
6/7	37	Packing automation	10	3	11	12	9	**45**
8	6	Labelling/weighing eBMR	1	15	14	13	1	**44**

Typical Scoring Matrix for a roadmapping collaboration

However...







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Social care and their supply chain. Care robotics companies.

Healthcare. Hospital and primary. Suppliers. Robotics companies.

Life Sciences

Secondary; construction and housing, finance, training providers, manufacturers, policy, research.

Suppliers to NHS challenged to innovate to win tenders

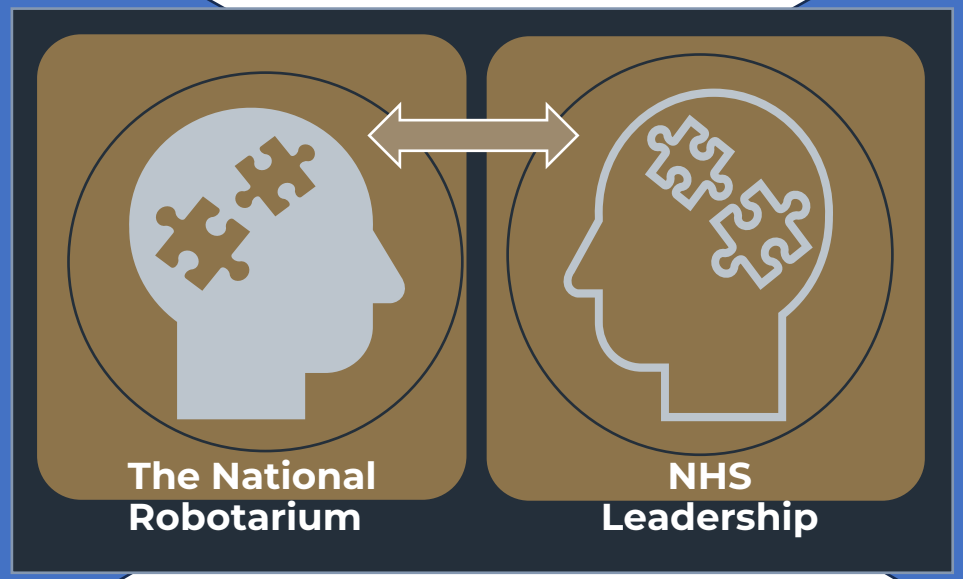
Disruptive start ups fast tracked into NHS

Robotic and AI companies access test bed

NHS intrapreneurs pushing innovations

University research with NHS

SUPPLY



DEMAND

Health care challeng addressed

Ageing population and comorbidities addressed

Workforce retention and recruitment, shortages plugged

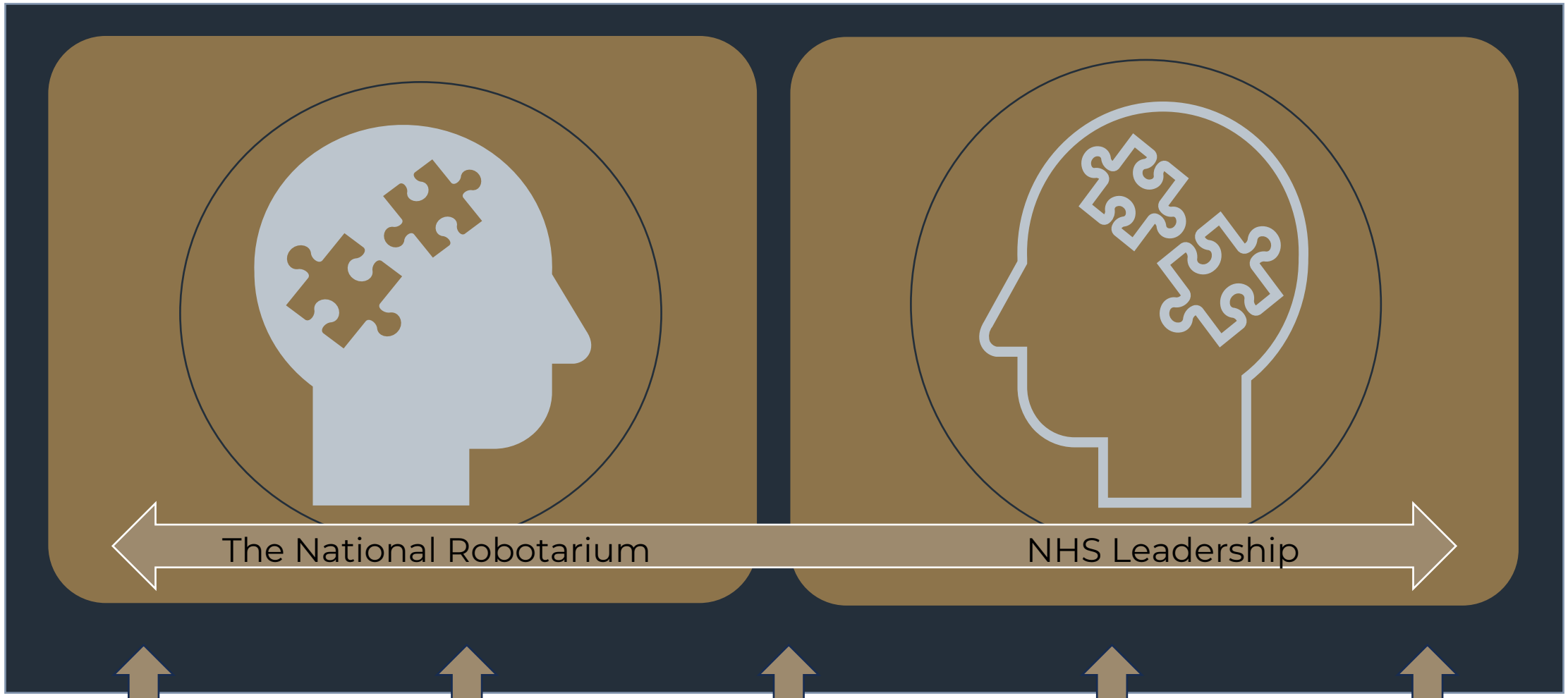
Intrapreneurs engaged

Preparedness for potential pandemics

Life Sciences; AI and robotics solutions for discovery, manufacture and supply chain

Healthcare; Patent flow, Community based care, Infection control, Labour shortage, Clinical/ non clinical

Social care; Reduce delayed transfer of care, ageing population



Intrapreneur Gateway- NHS employees with ideas; triaged, piloted, administered

Attraction, vetting and oversight of industry sponsored pilots and purchases

Tailored Test and certification

'Which best buy' and horizon scanning, links to research base

Training, skills development and recruitment

Intrapreneur Gateway

NHS and robotics expert panel assess innovations

Establish pot of funding for pilots, through to implementation.

NHS employees wanting to implement trials from industrial partners would have a trusted, independent ‘critical friend’ to assess veracity of outcomes and business cases.

Industry gateway:

Current suppliers and innovative companies of all sizes would have a facilitated pathway to test and develop solutions specific to NHS needs.

Innovative start-ups would have a viable future within the UK, with domestic talent answering domestic needs.

The NHS would act as an economic enabler of a robust robotics sector.

Horizon Scanning

The most innovative and impactful technology- regardless of geography or current application- could be transferred into the health care service efficiently.

Impartial advice on best technology and support systems for the task.

Access to early stage, blue-skies research.

People

Training, re-training and recruiting personnel to adopt and work alongside robotics.

Stakeholders across clinical and non-clinical teams, as well as the future workforce.

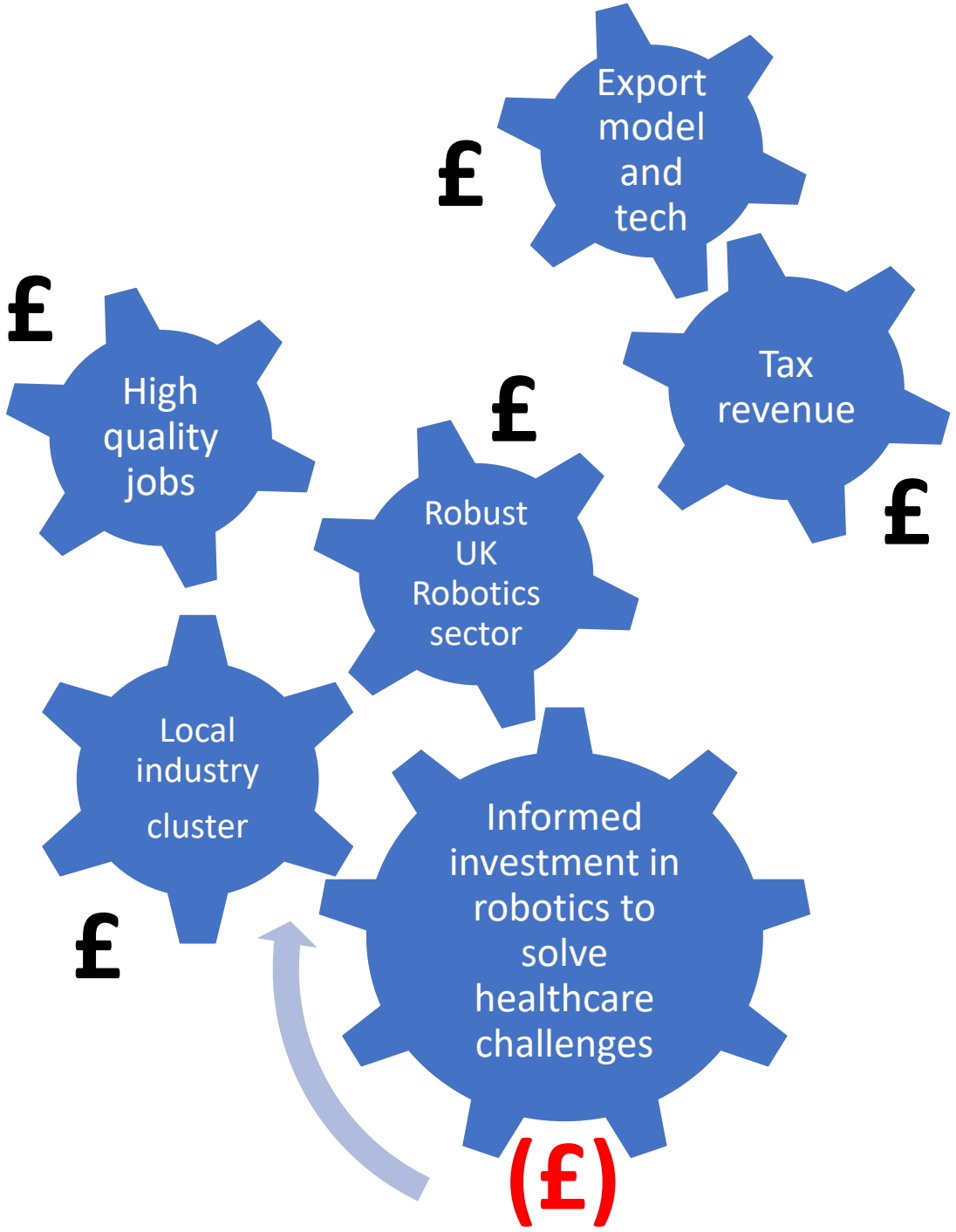
Outreach programme and embeddedness in higher education

Tailored test and certification

Dedicated resource for necessary test and checks for new technologies and services

Stakeholder engagement and acceptability testing

Economics and business case support for efficient deployment



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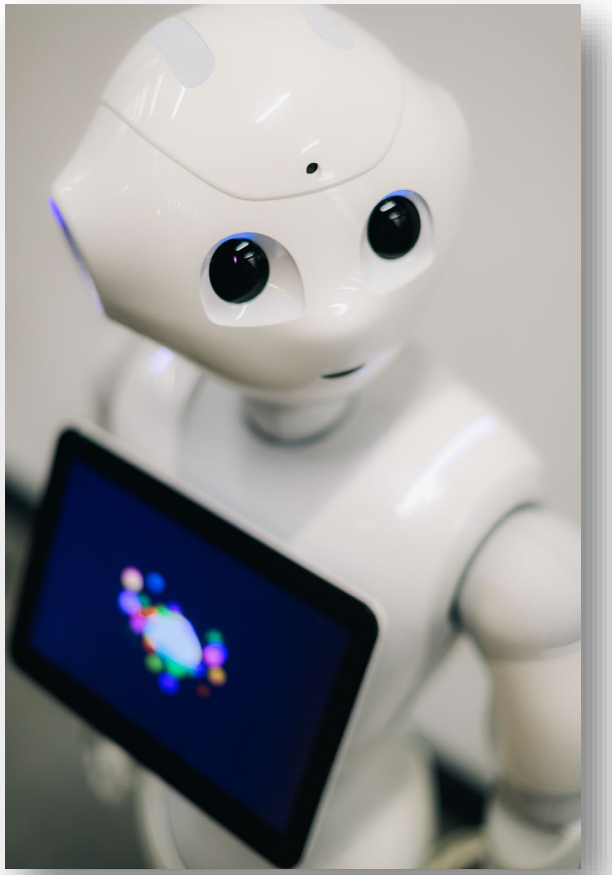
Potential for Tax revenue reinvested in robotics for healthcare

NHS goes from cost centre to economic driver

Robotics for Health: Objectives

1. Enhance Patient Care
2. Increase Efficiency
3. Promote Innovation
4. Support Workforce
5. Care for an Ageing Population
6. Drive Economic Development
7. Informed Procurement



Robotics for Health: Our Vision

We envision a National Health Service at the forefront of the healthcare revolution globally, where staff teams are seamlessly supported by robotics and artificial intelligence. The NHS would be in a strong, informed position to procure services & supplies and staff teams would be empowered to implement technology that would make a real difference to the health, and wealth, of the nation.

People Centred: Intelligence Driven

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