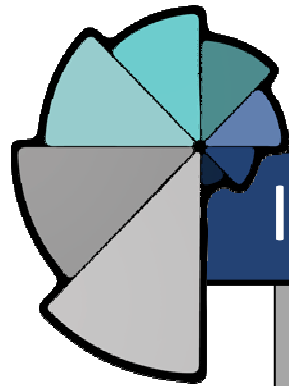


Designing for an ageing pop.

Lab bite



Introduction





Name:
Dr Eddy Elton

Position:
Senior Lecturer

Summary:

- BSc Product Design
- PhD Inclusive Design
- 11 years experience in applying Human Factors (Ergonomics) to Product Design

2013-present

- Senior Lecturer in Product Design & Human Factors at Brighton University

2002-2012

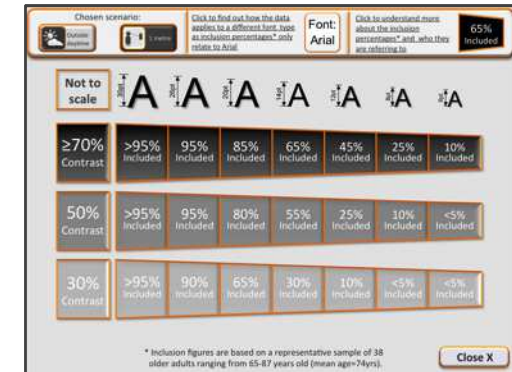
- Human Factors Designer & Researcher at Loughborough University

Experience

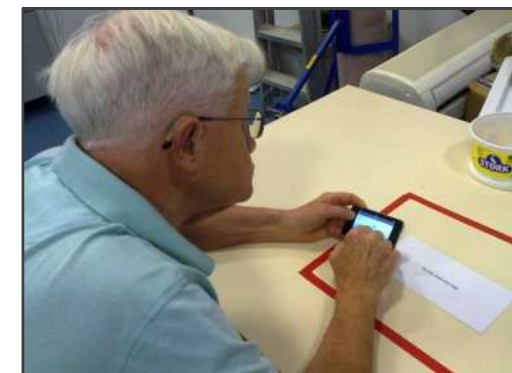
- Tesco, Seymour Powell, Phillips, Unilever, Reckitt and Benckiser, Motorola, DCA Design International

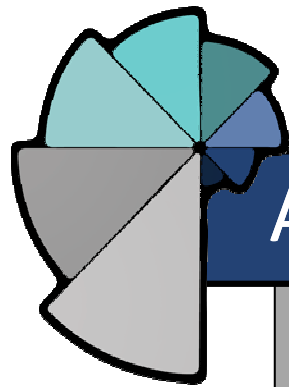
Publications

- 20 commercial reports, 15 research papers and counting...



	N° of journeys	Time taken	Time taken if	Kcal burned	Time taken if	Kcal burned
<1 mile	11	0h 37mins	1h 41mins	590 Kcal	0h 32mins	275 Kcal
1-2 miles	9	0h 43mins	3h 08mins	1100 Kcal	1h 02mins	516 Kcal
2-5 miles	7	1h 37mins	7h 00mins	2400 Kcal	2h 12mins	1070 Kcal
5-10 miles	3	0h 36mins	4h 34mins	1600 Kcal	1h 27mins	725 Kcal





An overview





Changing composition

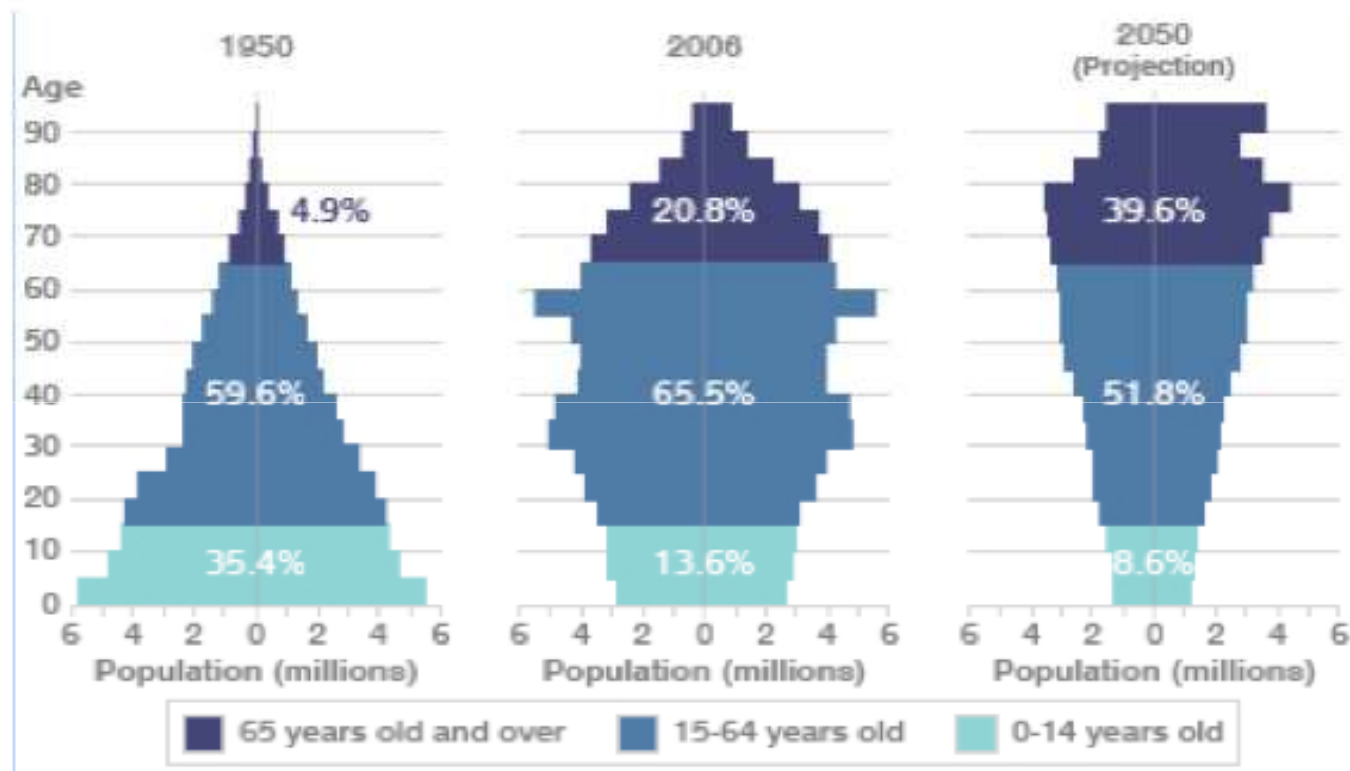
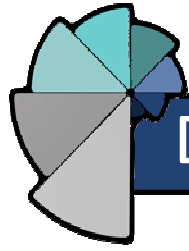


Figure 1.1 Changing composition of the Japanese population (Statistics Bureau MIC, 2010)



Design approaches

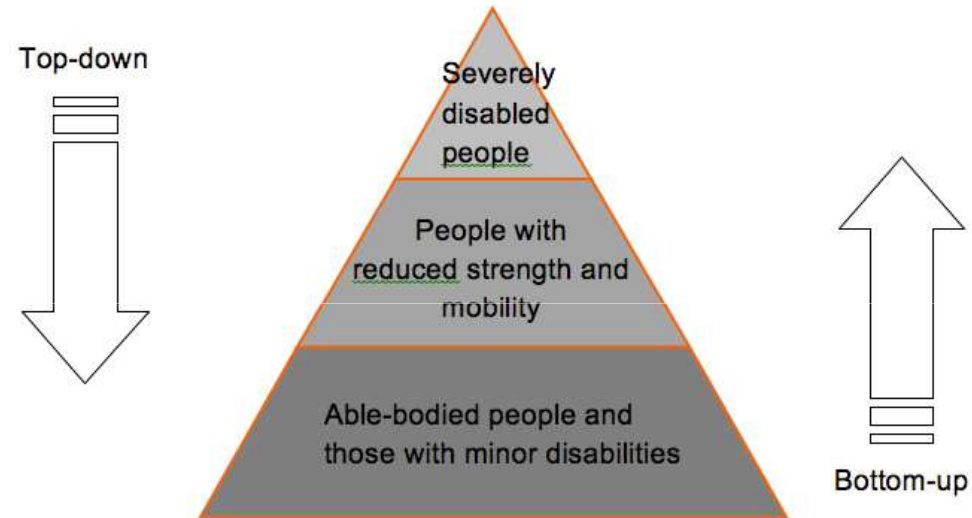
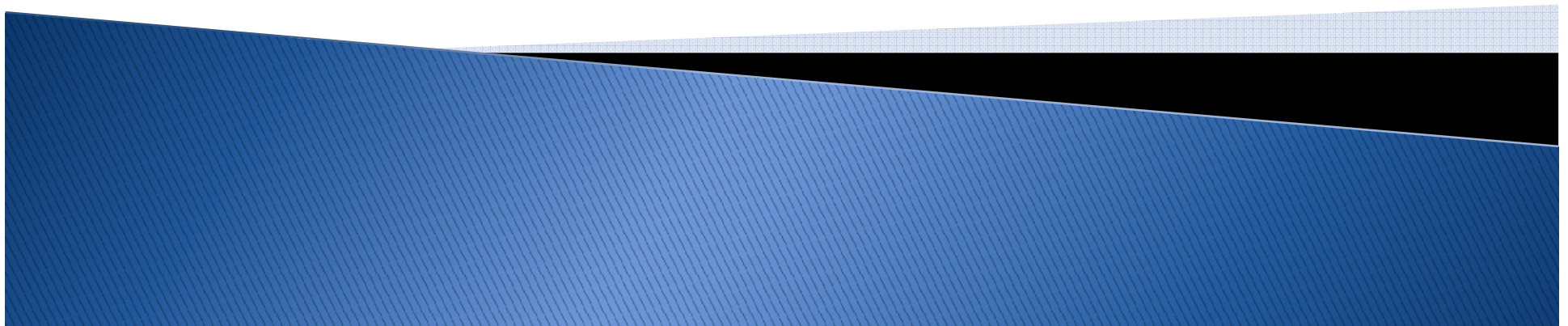


Figure 1.2 The user pyramid – a map of disability across the population (Benktzons, 1993)



Relationship between capabilities and product interaction experience

What we need to know...

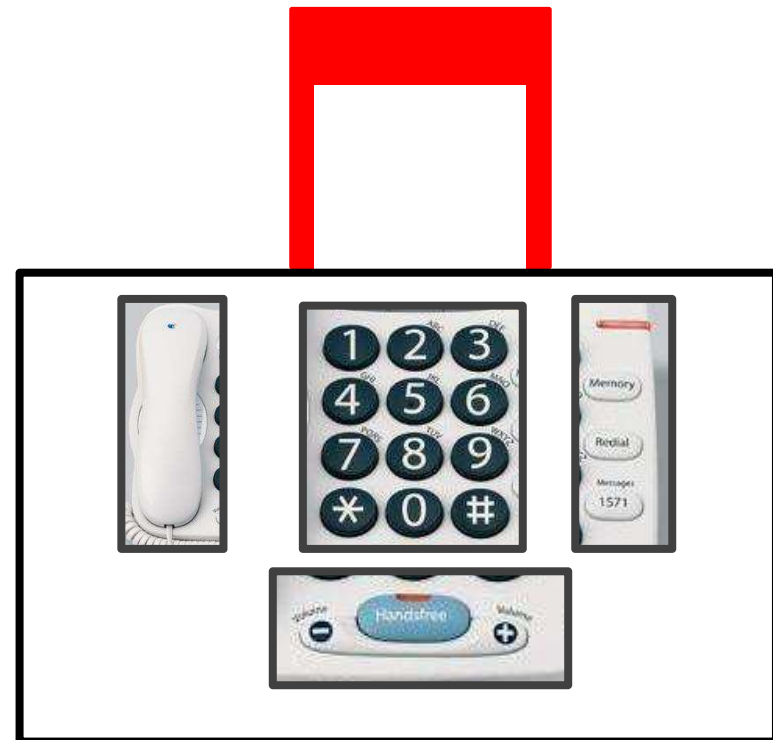


There are 3 things we have to understand

1. Product Demand:

- This is the demand that a product puts on our abilities (THE HURDLE)

Demand



There are 3 things we have to understand

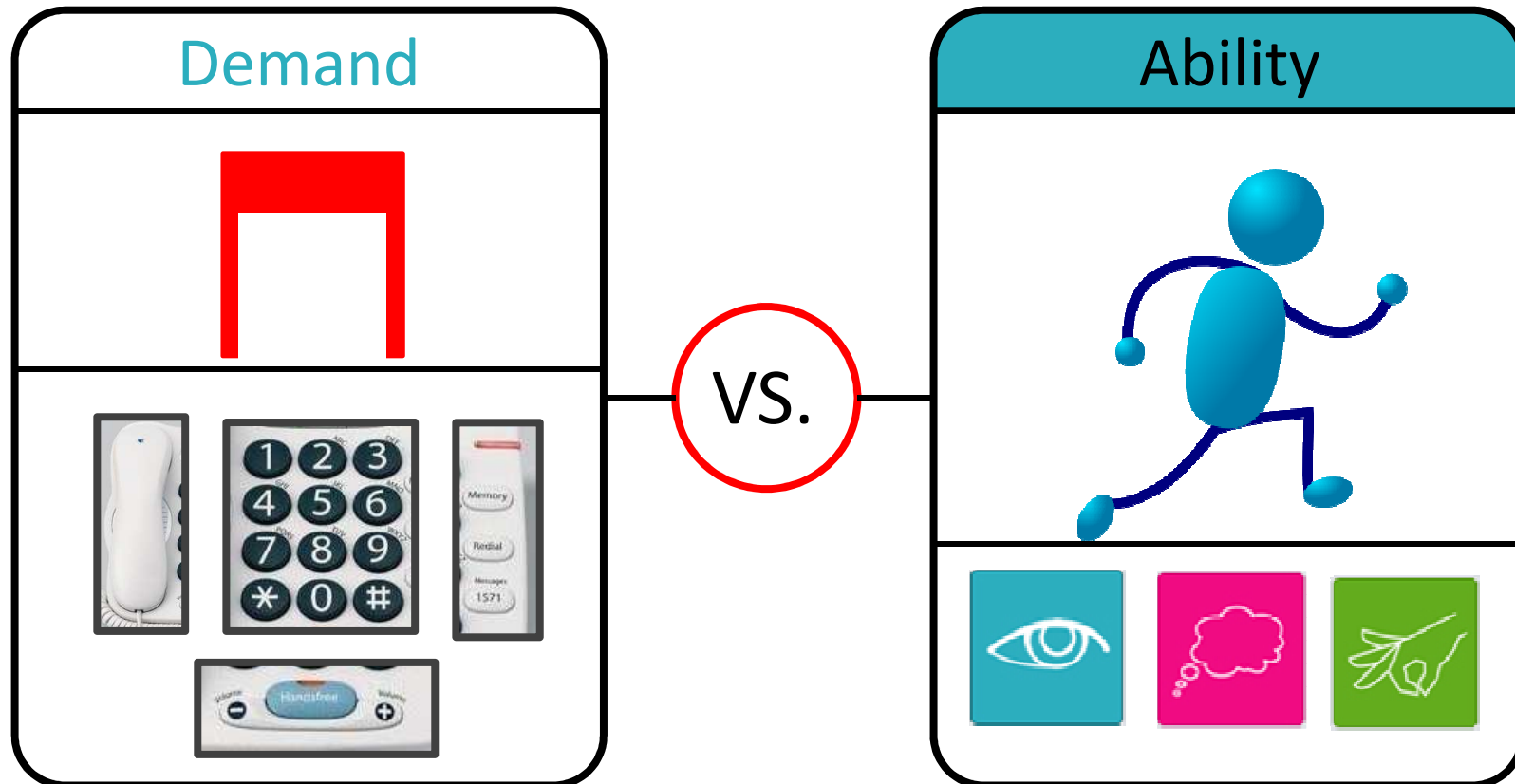
2. Human Ability:

- The performance level of our bodies relating to our vision, dexterity and cognition
(OUR ABILITY TO CLEAR HURDLES)



Ability

Demand vs. Ability

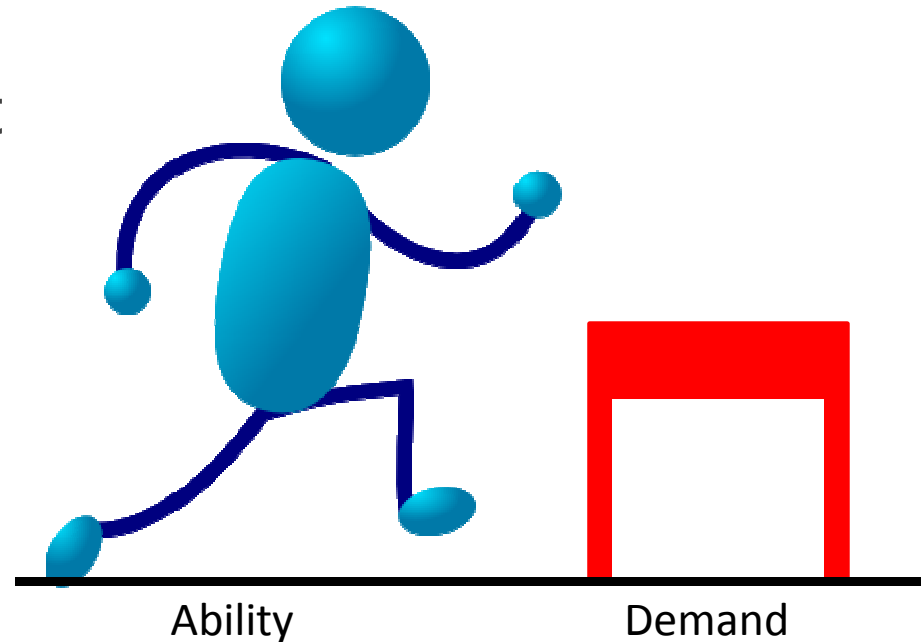


There are 3 things we have to understand

3. Product experience:

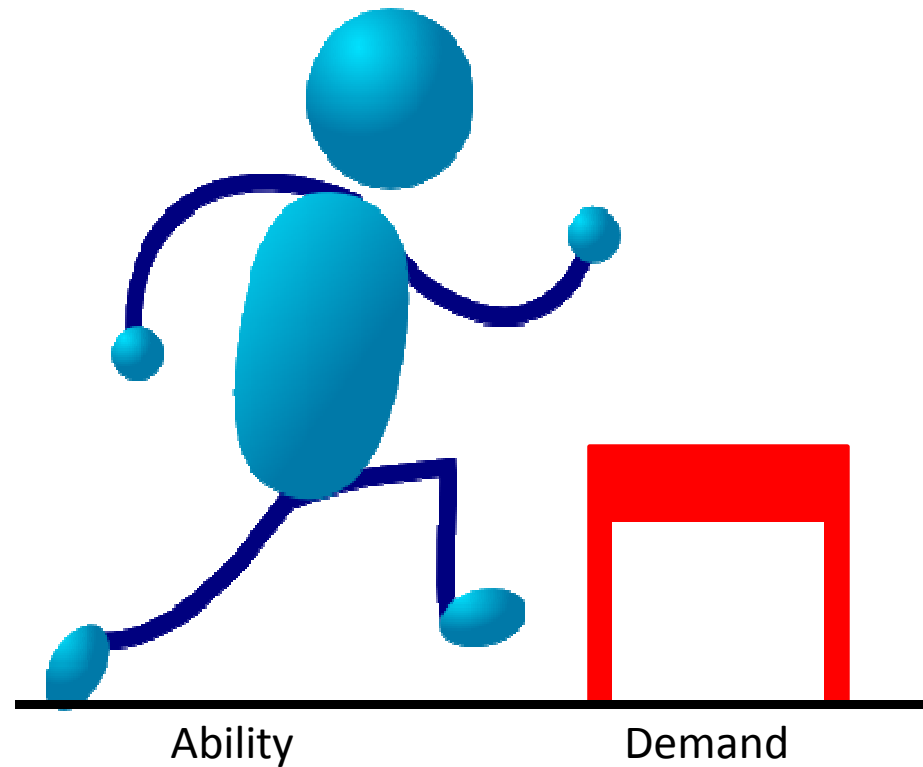
- This relates to the difference between product demand and our human ability

(THE DIFFICULTY IN
CLEARING THE HURDLE)



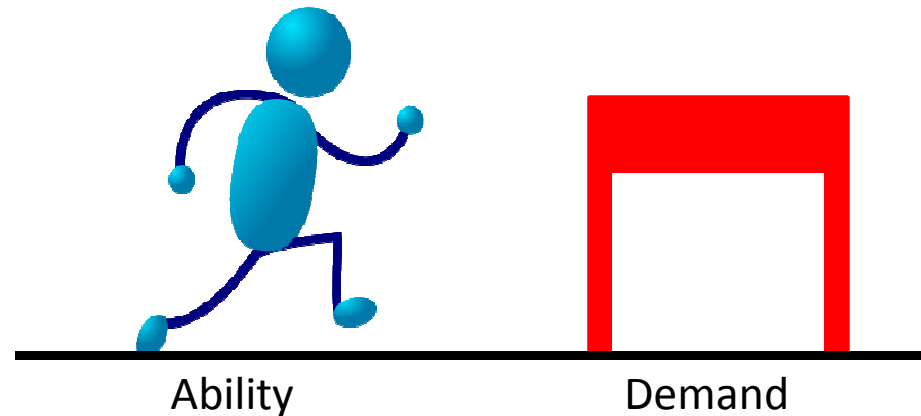
Easy to use

- When our ABILITY is much greater than the DEMAND then a product is easy to use



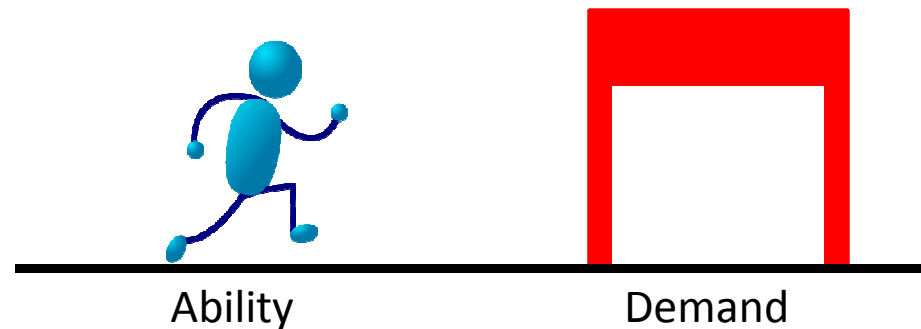
Difficult to use

- When our ABILITY is only just greater than the DEMAND then the product is DIFFICULT to use



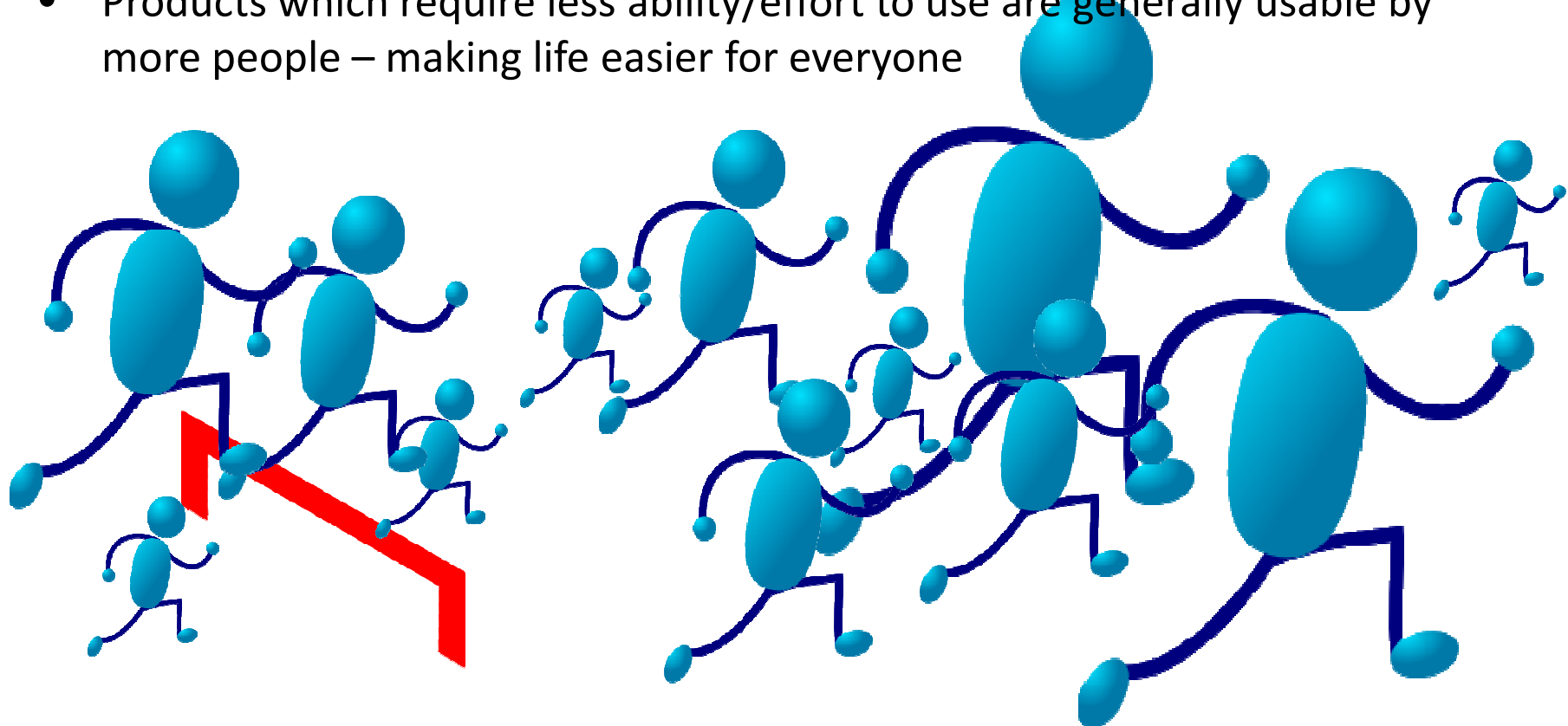
Cannot use

- When our ABILITY is less than the DEMAND then we cannot use the product



Reducing difficulty through design

- As designers/ergonomists we can change the demand (height of the hurdle) through varying the product characteristics
- Products which require less ability/effort to use are generally usable by more people – making life easier for everyone



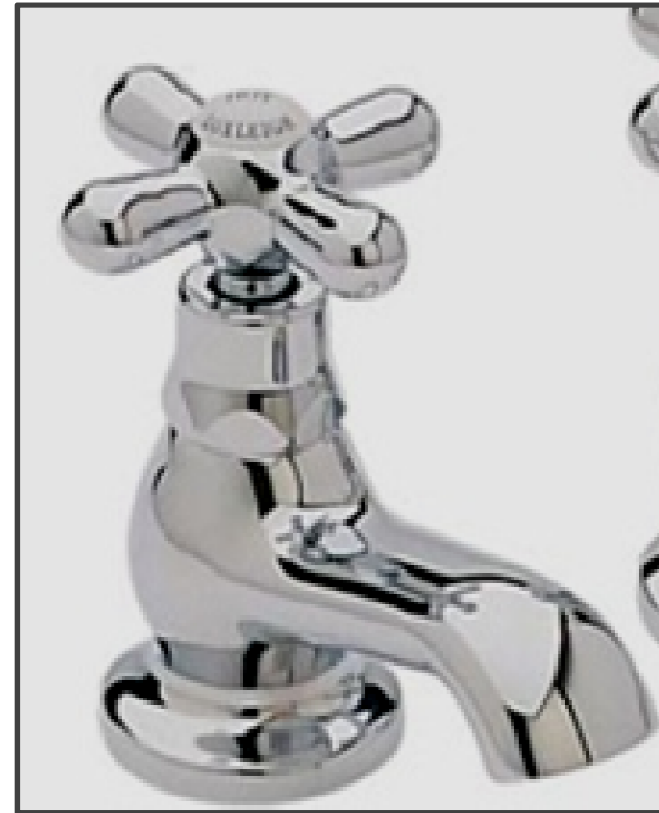
When you think of designing inclusive products think of the dog ball launcher/thrower...



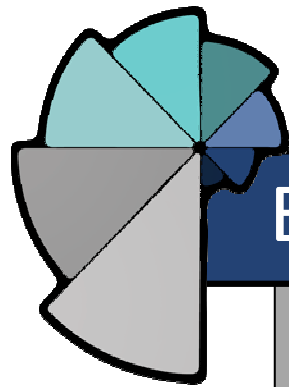
Turning a tap on



A

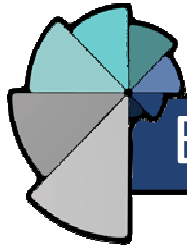


B



Empathic modelling





Empathic modeling tools



www.lboro.ac.uk/lds



<http://www-edc.eng.cam.ac.uk/>





Products





Products



OXO
GOOD GRIPS

