

develop as many ideas as possible, evaluate those ideas, and present three final concepts. A more detailed discussion of the experimental timeline is given in Section 2.2. Finally, Table 3 and Figure 1 detail the capture equipment used.

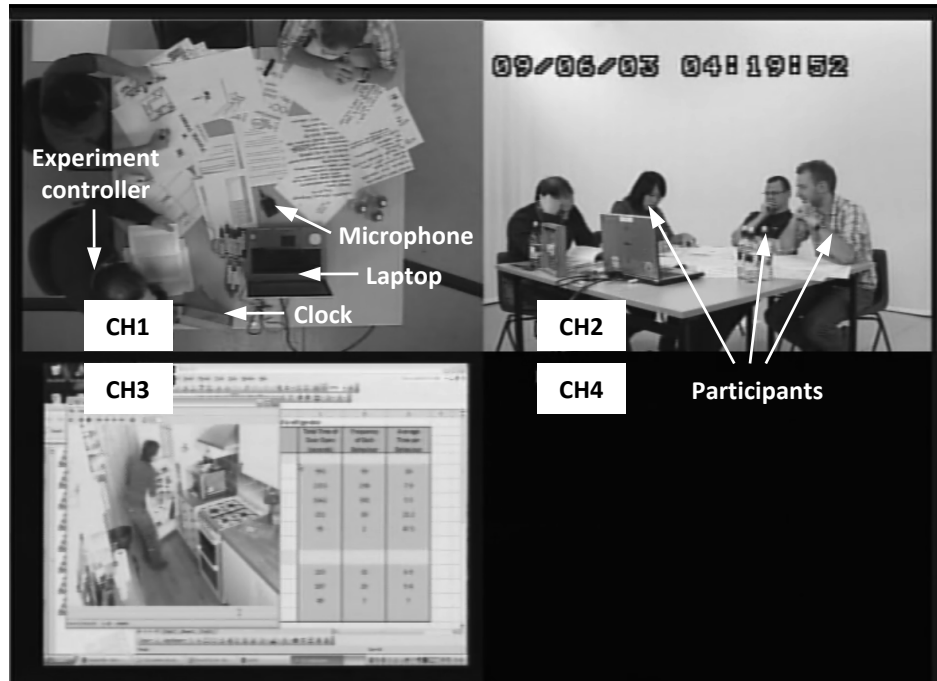


Figure 1. An example screenshot of the experimental video feed in action (CH denotes channel as explained in Table 3)

Equipment	Description
Video	2 cameras (CH1 from above and CH2 from the side, Figure 1)
Audio	1 microphone (in the centre of the Table)
Notes and Drawings	A3 Paper and 4 different colour pens (changed at the start of each experimental phase, see section 5) all collected at the end of each separate stage
Computer	Laptop screen feed (CH3, Figure 1) showing the information being accessed by the participants

Table 3. Breakdown of experimental equipment

The key metrics for the experimental hypothesis (*design teams benefit from having design relevant information presented to them during the early design phases of a product development process*) are outlined below with the success criteria noted in *italics* with several of these metrics being drawn from a similar study by Shah et al. (2003):

- The total number of ideas generated – *an increase in total number.*
- The originality of the ideas generated – *an increased variety and originality of ideas.*

the data gave information such as door opening times. Although the information in both formats emphasises different things video alone is the industry standard and as such part of the experimental aim was to explore the role of additional or alternative information formats.

Team	Title	Description	Comment
Team 1	"Control"	No information, no treatment control team	No additional information provided. No interruption.
Team 2	"Placebo"	15 minute task neutral video, placebo control team	A 15 minute video of two people discussing their kitchens, the appliances they had and general appearance.
Team 3	"Video"	15 minute active video, treatment team	A 15 minute film of the refrigerator being used, including discussion and actions showing details of how and how often it is used.
Team 4	"Data"	Data pages, treatment team	A paper list of different interactions with the refrigerator and their actual energy impacts including real data on which foods/drinks were most commonly taken out of or put into the refrigerator.
Team 5	"Data + Clips"	Data pages and videos, treatment team	Same data as team 4 and a series of eight silent, hidden camera video clips demonstrating each of the behaviours, totalling approximately 13 minutes of footage.

Table 6. Team setup and additional information

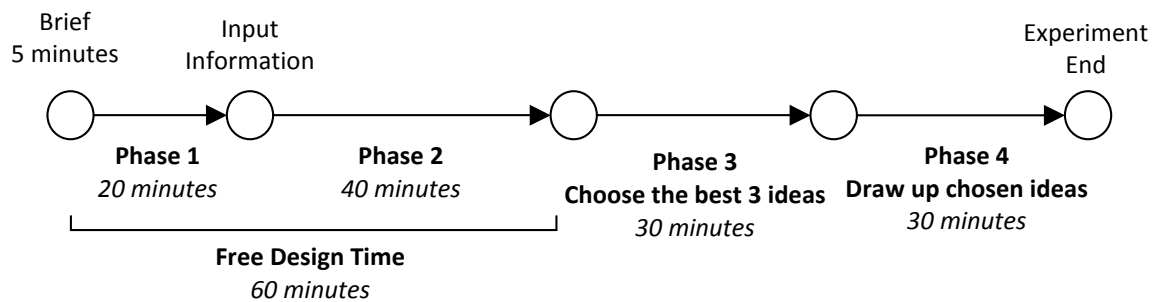


Figure 2. Experimental Timeline

Prior to the study all the participants were given basic information outlining the size of the teams, the length of time involved and the level of personal preparation required (none). Prior to the experiment none of the participants were aware that additional information was to be provided to some of the teams. This prevented teams from becoming expectant of, or simply waiting for the additional information. It also allowed for a 'no treatment control' team, which would receive no additional information – forming a baseline. Thus, the major difference between the teams was the additional

