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MA Digital Experience Design 2018

02. Part 1

Understanding People

A research debrief of a human-centred
research challenge

Word count: 1640

Introduction

As part of an 'Understanding People' module on the Digital Experience Design program at Hyper Island, Manchester, a team of five designers used a human-centred approach to uncover insights and opportunity areas for the BBC's R&D team. The BBC posed the crew this question: "How might we used Object Based Media to design hyper personalised BBC experiences?"

This academic paper will debrief the team's design research process and outline the insights gained through primary and secondary research, one-to-one interviews, conversations with experts and an analogous experience.
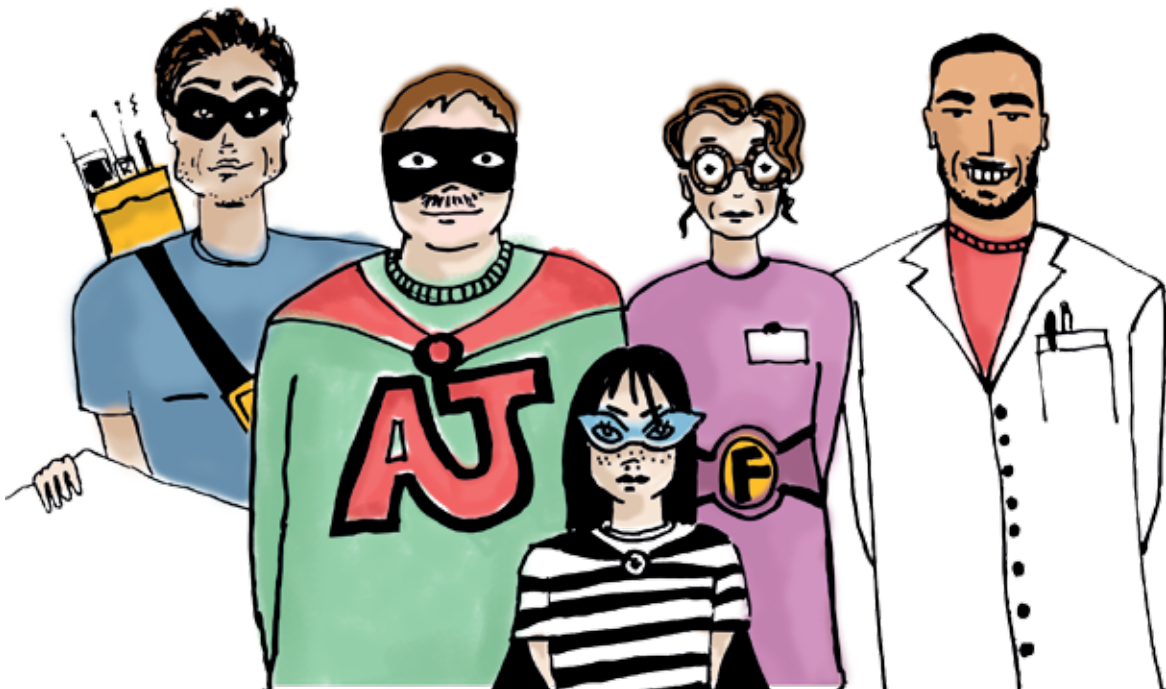

Fig 1. 'Team Divide'. Illustration: Georgia Byron.

Design Process and Relevant Methodology

To get a better understanding of the brief, the team looked at the requirements of the BBC's brief and chose to work towards helping the BBC understand future audiences and their needs while ensuring that any ideas would need to be empathetic to the users. The IDEO human-centred design process (2015) (see Fig. 2) was chosen as the model to use because "Human-centred design is concerned with incorporating the user's perspective … in order to achieve a usable system." (Maguire, 2001, p. 588). The team knew that most of the work would be conducted within the 'Inspiration' phase, while the last stretch of the project would dip into 'Ideation' based on insights. From there, a quick group brainstorming session helped identify areas to focus the research on (see Fig. 3).

Having a visual representation of what the opportunities available were helped define the working "How might we…?" question: How might we make consuming media a more social experience again for young UK families? The team dot-voted to aim their research on families aged between 30 and 40 years old with young children up to 12 years old.
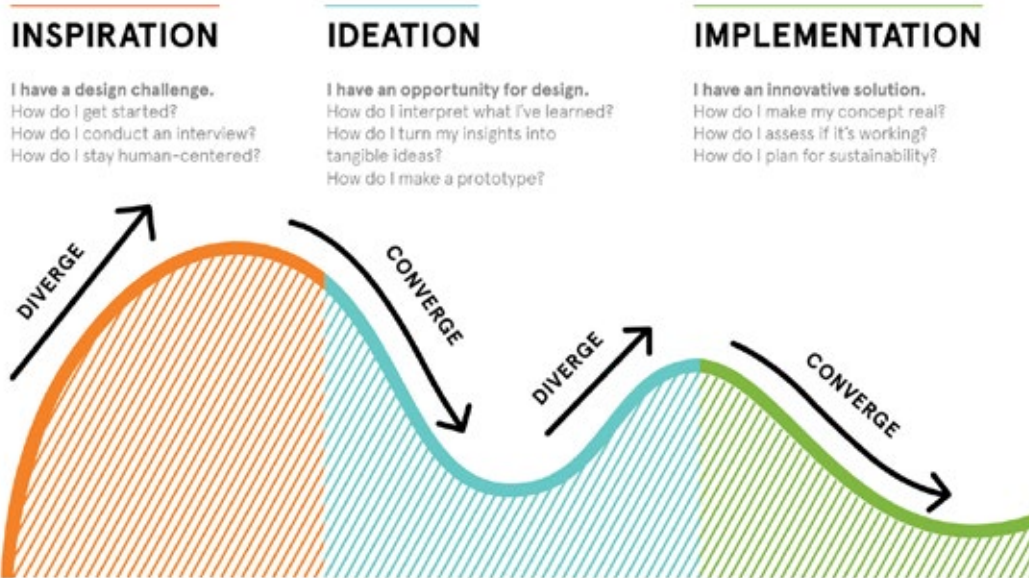
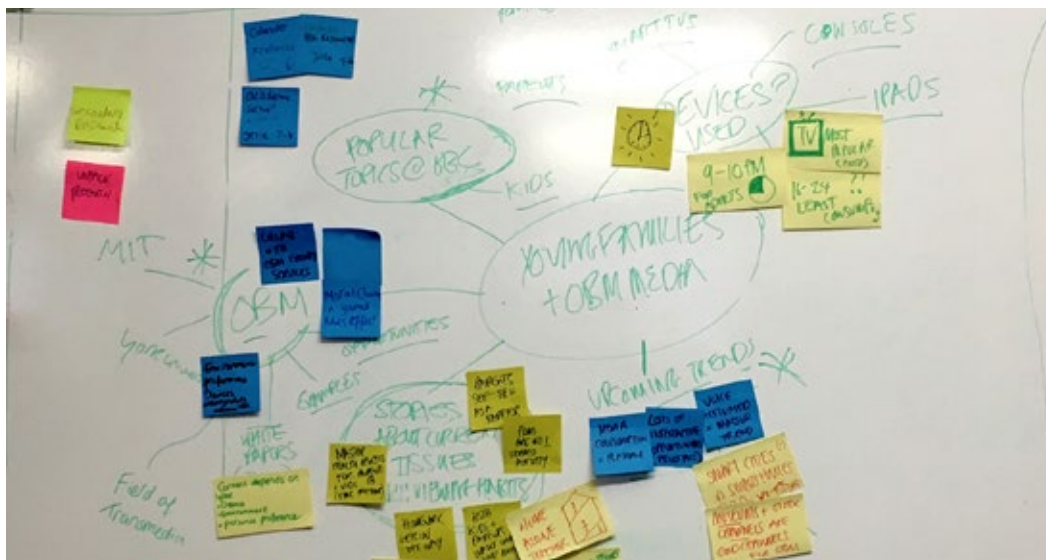*Fig 2. IDEO's Human Centred Design model.*

Fig 3. Group brainstorming session.

Summary of Primary and Secondary Research

Secondary Research

Once the group had a focal point, it was decided that secondary research would be able to give the team more of a steer in which areas they wanted to look further into, as well as the people needed to be interviewed at a later stage in the process. The team divided up areas of research and looked through online articles, videos, case studies, academic reports and anything else that would back up their initial assumptions. To really understand behavioural psychology and to help prevent the team falling into the trap of including their own biases, an assumption map was drawn up (see Fig. 4). This four-way chart ranked the team's assumptions by known, unknown, important and unimportant. Throughout the rest of the project, the team would repeatedly refer to this map and update their assumptions accordingly, based on any research or insights uncovered, and work towards making those assumptions actionable. This map ensured that any ideas or opportunity areas would not be contaminated by things the team thought the user needed, rather than using data that had been uncovered through primary research.

To get a better understanding of which technologies could be used with object-based media now and in the future, the team set to identifying experts to interview. A range of industry areas was explored, including gamification, nudging techniques, smart cities and homes, and the future of augmented reality (AR) and virtual reality (VR). The team sent out emails to experts, and families in the hope that some progress would be made, but this exercise turned out to be a slow process. Many of the people the team contacted would never respond, but the first two families that fitted the team's criteria agreed to conduct an interview over Skype.
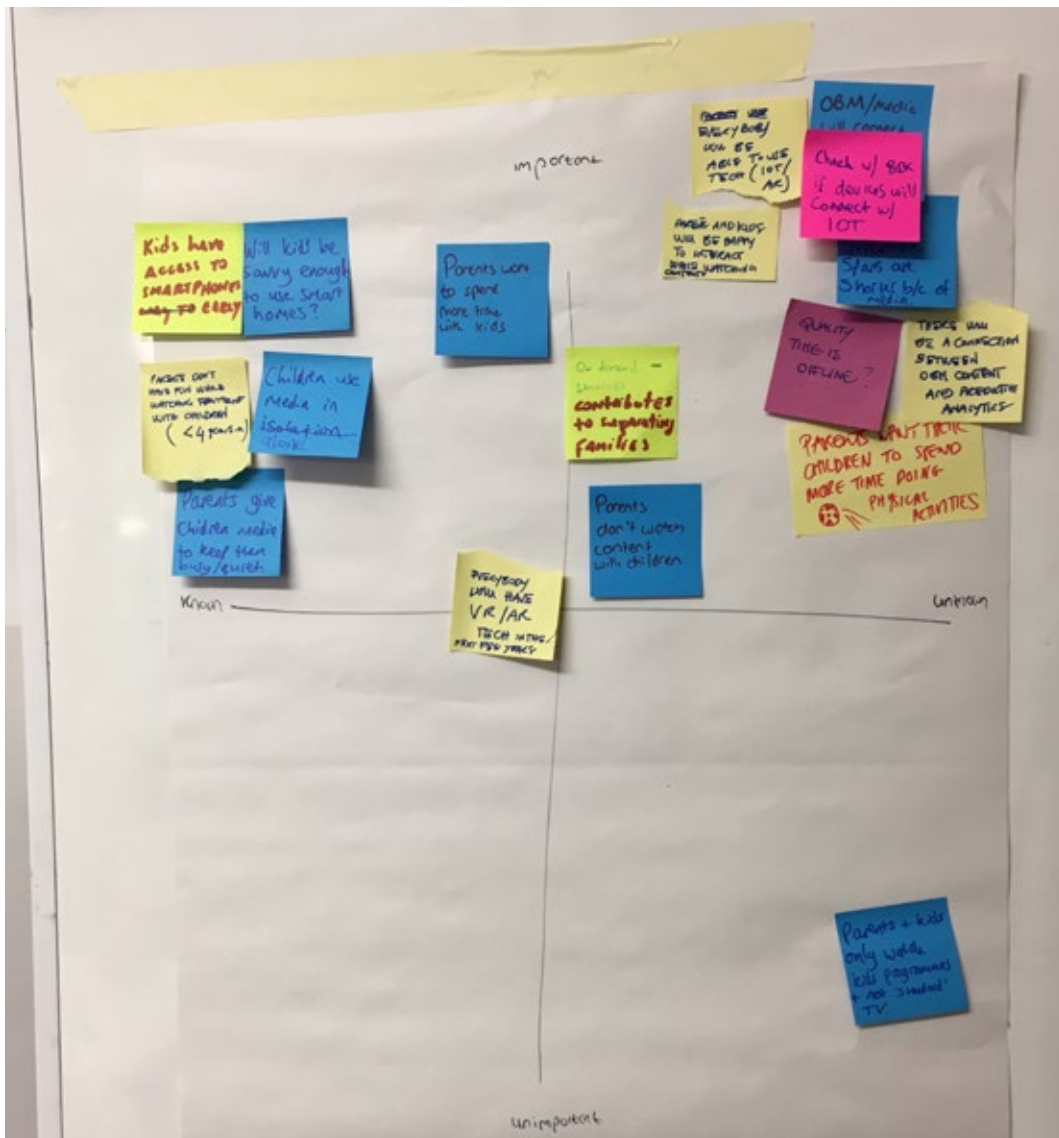
*Fig 4. Assumption map, used to prevent the team including
any biases they might have had.*

Primary Research

In total, the team managed to interview eight families through a mixture of
Skype calls, face-to-face talks, phone calls and an 'in-context' interview at
the interviewee's home, two expert interviews and an analogous experience.
"By interviews, we mean face-to-face verbal exchanges in which one
person, the interviewer, attempts to acquire information from and gain an
understanding of another person, the interviewee." (Rowley, 2012). Before

any interviews were conducted, it was agreed that a 'discussion guide' would be the best way to document the questions to be asked and the interviewee's answers. This meant the team had some structured questions to ask but allowed the interviewer to ask further questions based on the answers the interviewee gave.

As early as possible after each interview, the information was downloaded to the team where the key points or 'gems' were noted down and clustered into five areas: observations, insights, opportunities, ideas and quotes. Then, the important insights from there were divided up into categories that were more suited to the team's target research: devices used, time spent with family, media consumption and interesting findings. The team used this framework for another three or four interview downloads, but it was agreed that it would be quicker to simply transfer our gems straight to the whiteboard as it was just doubling the work the team did.

By clustering the key insights from each interview, it was easy to see the patterns that were beginning to emerge. Looking at the patterns allowed the team to start to narrow their scope a little more and the team were able to tweak their questions for the expert interviews. The first expert interview with Cassie Taylor, a senior associate at Ideas42 and an expert on behavioural economics, while useful, did not uncover as much as the team might have hoped. The second expert interview, however, bore much more fruit. Davide Bianca, Head of VR, AR and Animation at LA-based Unit9 spoke at length about the trends that were beginning to emerge that would ultimately shape the future of technology. The insights gained had a hugely positive effect on the ideas the team took forward into the pitch to the BBC.

Summary and Analysis of Fieldwork

Field research, or ethnography, 'is a social science approach to studying people and groups in their natural setting' (Soukup et al., 2017). Two group members interviewed fellow crew member Judit Kun in her home to observe how she and her young family consume media (see Fig 5). The insights discovered from this interview were invaluable as the two interviewing team members saw how and where the family's devices were used and stored. This simply wouldn't have been possible had the team not been immersed in Judit's environment.
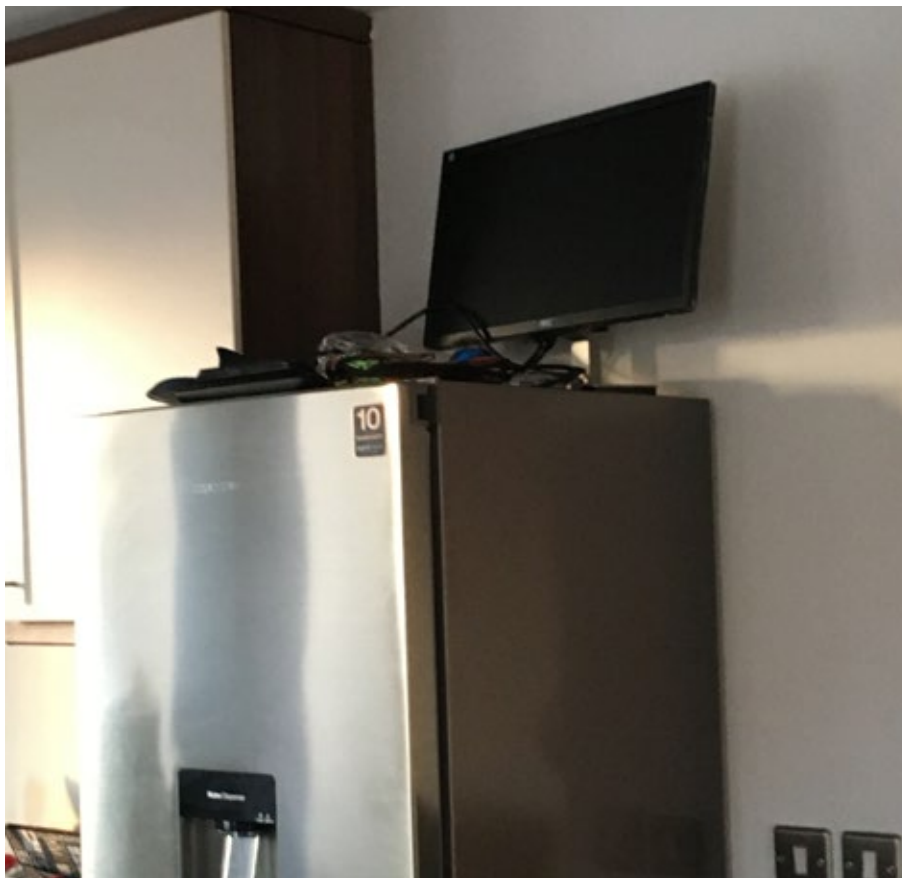
Fig 5. Judit keeps all screens out of her child's view as she believes screens are bad for brain development.

The other three team members conducted the analogous experience and spoke to Chris and Sam at a small café called the Koffee Pot about how customers personalised their food orders. Although the insights the team gained from this experience weren't used in the final ideas, it gave some indication of what the ideas needed to pay attention to in the future. One thing that Sam spoke about was customer expectations, that if the restaurant down the road allowed customers to make "swaps" in their orders, then customers should be allowed to do the same in the Koffee Pot. He went on to say that customers could leave negative reviews on TripAdvisor if these requests weren't tailored to, which might have an impact on business.

The team talked a lot about the ethics of any ideas that were developed and one thing that was spoken about was, "what happens at the end of the product's life?". The team discussed the notion that if the BBC were to hyper-personalise their platform, how would customers interact with other platforms? Stacie Petter (2008) outlined the importance of managing user expectations, saying "inappropriate user expectations can have a downstream effect on the use of and user satisfaction with an information system."

Insights and Recommendations

Through clustering and synthesis, the team were able to narrow down three key insights to present to the BBC:

01. Parents feel guilty when using screens as a childminder while they are doing chores (like cooking or cleaning);

02. Quality time within families is defined as "spending time and interacting with each other";

03. Parents are concerned about the effects that using a screen has on their children's development.

Using these insights, it was discovered that parents felt guilty about the excessive consumption of media on multiple devices, which encourages isolation of families within the same home. From this, the team were able to coin the term 'devisolation', a portmanteau of 'devices' and 'isolation'. Also, the likes of
Forbes.com backed up the insights that had been uncovered relating to how people interact with screens with their trend forecasts of 2018. In it, it was suggested that "we're going to have to rethink how we interact with our apps and devices. The onset of smart speakers and better voice search has made it so it's no longer necessary to look at a screen to input data." (DeMers, 2017).

Empathy was at the core of the BBC's brief, and the team knew that their ideas had to revolve around it. Despite no one in the team having any experience of having to use media as a childminder, the team wanted to focus on removing the guilt that parents felt when having to do so

themselves. As a result, a new empathetic "How might we...?" question was developed: How might we help 'Jayn' positively occupy her kids without feeling guilty? In the presentation to the BBC, the team offered three opportunity areas that could be explored within the next five years:

01. Create an application using mixed reality hardware for children to add interactivity when cooking the dinner with parents;

02. Personalize BBC's Cook-Along Kitchen Experience ('CAKE') for kids using audio layers on top of the existing content;

03. Using voice recognition software to create a side-quest quiz for families to use while watching BBC family content.

Regrettably, the team were too focused on working the insights into the ideas, and it was difficult for the BBC to make the connection of where object-based media fitted in. During a team reflection after the presentation, the team agreed that more time could have been spent on making object-based media a more central feature of each opportunity area.
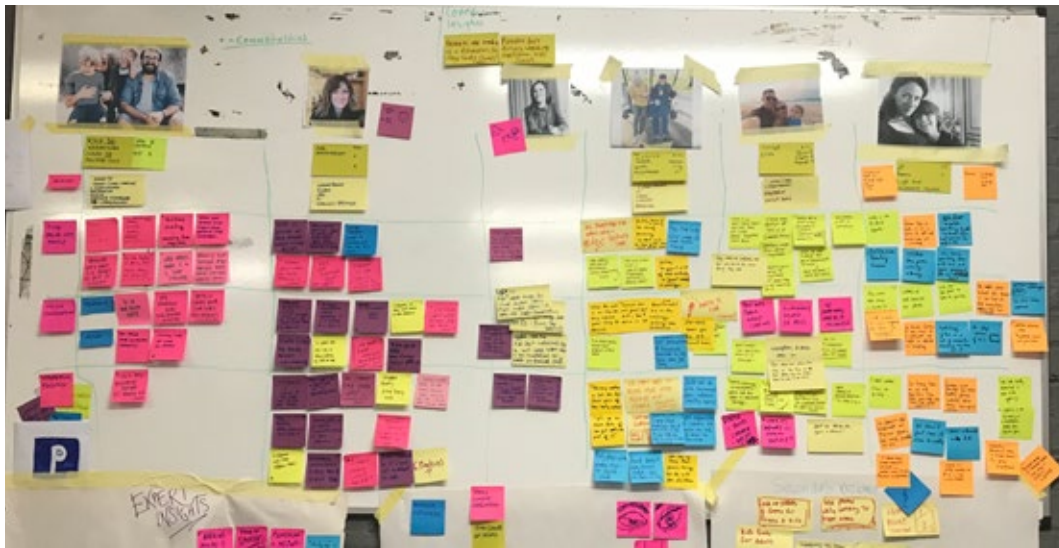
Fig 6. Snapshot of six of the downloaded interviews with young families.

1. Families perceive **quality time** to be spending time together and interacting with one another.

2. Parents feel guilty when using screens as a **childminder**.

3. There are many concerns about children and **screen time**.

Fig 7. Inside pages of the 'Devisolation' book designed and provided to the BBC in the presentation.

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Figures

Fig 1. Members of Team Divide. Illustration by Georgia Byron.

Fig 2. IDEO. (2015) *Field Guide to Human-Centred Design.* 1st ed. [pdf] San Francisco, IDEO. Available at: http://www.designkit.org/resources/1 [Accessed 28 Mar. 2018].

Fig 3. Group brainstorming session. Team photo archive.

Fig 4. Assumption map. Team photo archive.

Fig 5. Judit's kitchen showing TV on top of the fridge. Team photo archive.

Fig 6. Snapshot of six of the downloaded interviews with young families.

Fig 7. 'Devisolation' book, designed and produced for the BBC presentation by 'Team Divide'. *Words:* Jelle Disseldorp, Pedro Henrique, Federica Pellati. *Illustrations:* Georgia Byron. *Design:* AJ Huxtable-Lee.

02. Part 2

Understanding People

A talking head video on the fundamentals of extreme user interviews.

Video time: 7:28

Link to YouTube video:
https://youtu.be/tLpucd0DFcQ

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[4:34 - 4:36] IDEO. (2015) *Field Guide to Human-Centred Design.* 1st ed. [pdf] San Francisco, IDEO. Available at: http://www.designkit.org/resources/1 [Accessed 28 Mar. 2018].

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Images

[3:20] Whale illustration by AJ Huxtable-Lee (2018).

[3:42 - 3:48] Image of Alexander Graham Bell. *The Biography.com Website*. (n.d.). Alexander Graham Bell Biography. [image] Available at: https://www.biography.com/people/alexander-graham-bell-9205497 [Accessed 03 Apr. 2018].

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