

## Mapping and developing Service Design Research in the UK

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# 2 Service Design Research in the UK

## An overview

The first SDR UK workshop titled 'Building the Service Design Research UK Landscape', was used in conjunction with an online database (www.servicedesignresearch.com/uk), to document and discuss the current situation of research in Service Design across the UK. Presented case studies of research projects (see page 16-19) further informed this discussion.

The picture that gradually emerged from these activities sees a diverse set of people. universities and funded research projects with a common interest for services, but with different backgrounds such as Design Management, Design for Sustainability, Healthcare Innovation or Digital Innovation (see Appendix I); this data was then used to identify and discuss themes and sectors where research is currently focused, together with emerging research questions that could inform future work. The illustrated maps are neither exhaustive or fixed in time, as things are in constant development, but they do offer a juncture for reflection on where Service Design is developing.

#### Sectors

From this initial overview, research in Service Design appears to have been concentrated on investigating the contribution of Design for Public Service Innovation (see sectoral map page 14). This specific sector, and within it particularly healthcare, attracts the majority of research activities that build on the existing tradition of research centres, such as King's College London, Sheffield Hallam University or Glasgow School of Art. The call for novel innovation approaches and models of service delivery in the public sector has motivated and supported this concentration of UK-funded research activities. European funding in contrast, supports the setting up of EU wide observatories of best practices within design driven public sector innovation, as seen in projects such as "Supporting Public Service Innovation using Design in European Regions" (SPIDER), "European Design Innovation Platform" (EDIP) or "Design for Public Good;" these aim to better inform design policies.

A distinctive research field, touching on very different contexts such as the Construction, Energy or Transport sectors, or in general manufacturing organisations, is instead connected to Service Design research through the need for sustainable solutions and behavioural change.

#### Thematic areas

From a thematic perspective Service Design research has been mainly interested in exploring the role and impact of Design within and for Service Innovation (see Thematic map page 12). Within this macro field we can distinguish two different areas, one aiming to investigate and experiment with ways to embed Service Design as an approach to service innovation within service organisations (Embedding Service Design) and the other aiming to apply Service Design to imagine and experiment with new or improved models of service provision (New Service Development). These two areas overlap with the common interest on developing, improving and evaluating specific Service Design Methods.

Within the New Service Development theme, a cluster of research activities looks into ways to design and evaluate Product Service Systems, considering their impact in terms of sustainability or behavioural change. Adjacent and related areas of research here are the wider fields of Social and Digital Innovation.

Finally some research projects are studying and theorising Service Design Practice, to position this field within interdisciplinary areas such as Service Research or Service Science, or to interpret it using theoretical models i.e. Practice Theory or Science and Technology Studies.

## **Emerging research questions**

As part of this discussion, emerging research topics and questions have been identified and discussed. These represent gaps in the current landscape or areas of research that are just starting to be addressed:

Service Logic vs Servitisation: there is a general agreement that what is called Service Logic goes beyond the practice of adding services to products as Service Logic represents a business approach that can be applied to everything and not only to manufacturing companies. What is the design process/approach to support the adoption of Service Logic in organisations?

Management vs Design: there is an interest on how Management and Design can learn from each other (business training in design and vice-versa) and on how they can compete or collaborate. Service designers are now working on more complex and strategic projects where their competitors are no longer other design studios but business consultancies like McKinsey. Questions here are: How are service designers equipped to compete on this level? What is the knowledge gap? How can they build legitimacy? What are their new consultancy business models?

Digital and Open Innovation: there is a general interest in the role and application of digital and open innovation in Service Design also as a source to imagine new service models. Successful examples are Digital by Default, Nonon's OS-Geovation Challenge. How can Open and Digital Innovation be applied to generate new service and engagement models?

Social Innovation & Start-ups: many designers are engaged in the design and development of start-ups, in particular those with an interest in social innovation and social entrepreneurship. How can service designers develop and sustain these new ventures? What is Design bringing to Social Innovation and social entrepreneurship?

SMEs and Service Design Innovation: SMEs have received limited attention from Service Design, even when they represent a significant percentage of the UK economy. Consequently, there is the need to make Service Design more accessible and understandable to SMEs. What are the specific requirements and barriers to work with SMEs and how can Service Design support their development?

Models of Service Design practice: service design practitioners are developing and working in different ways. They can operate as a traditional consultancy, create inhouse innovation centres in public or private organisations/institutions, work in multidisciplinary studios or create their own start-ups. How are Service Design practitioners operating today? What are the models and what is the impact?

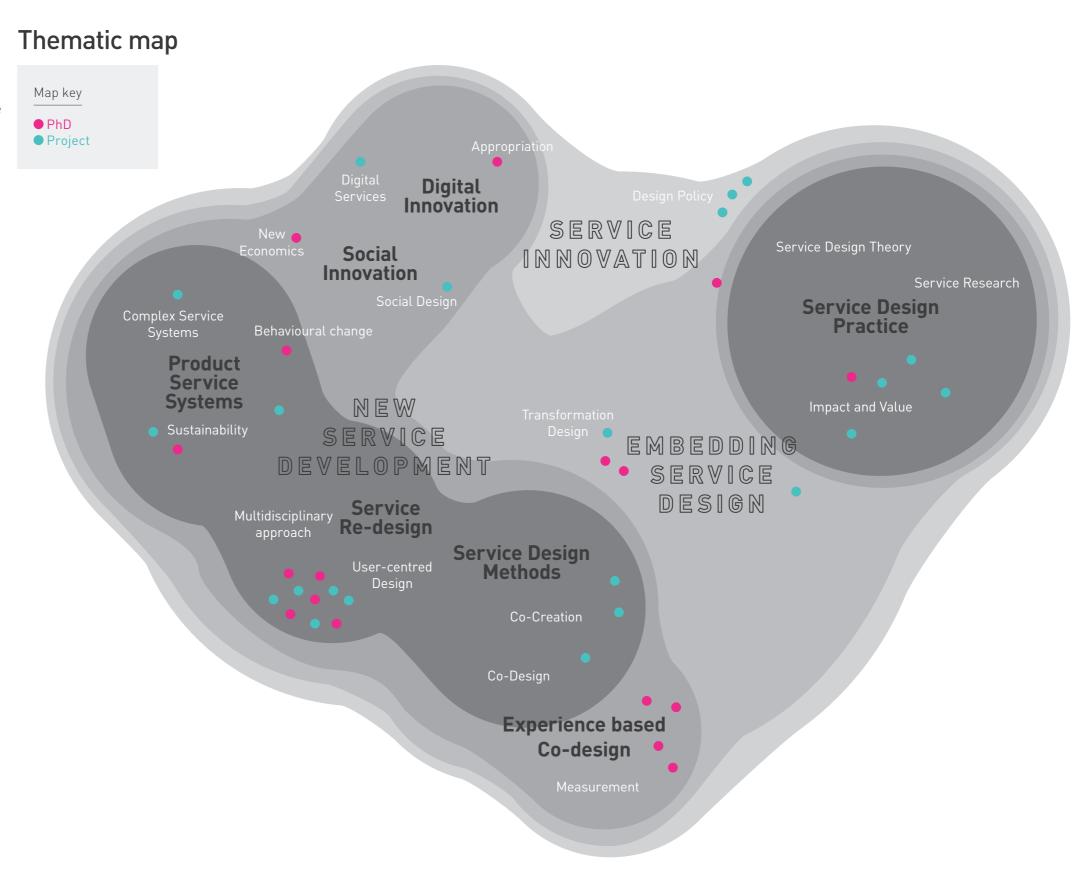
Impact and Innovation Metrics: There is the need to have a collection of case studies, to measure their impact and create new innovation metrics, capable of recognising the different practices and dimensions of innovation, in order to better document Service Design's value. How can we measure and document Service Design driven innovation and impact?

Service (Eco) System and Networks: Service Design can happen at different levels of service systems and networks. In the field of Design for Sustainability, we can talk about Design for Service Eco-Systems. How is Service Design working at a system's level? How is Service Design contributing to, and shaping new value network configurations? And how is this linked with Sustainability?

Public Service, Policy making and Service
Design: There is an initial interest in how
Service Design Thinking can inform and affect
not only Public Service design but also Policy
Making. Design approaches may be applied
and become part of more traditional Policy
Making processes. What is the value Service
Design can bring to Policy Making? How can
Service Design be integrated within more
traditional Policy Making processes?

Service Design Education: This can be considered both in terms of academic Service Design Education and as education and training for professionals and organisations. What are the emerging Service Design education models? How can organisations and professionals from other disciplines be trained into and adopt Service Design?

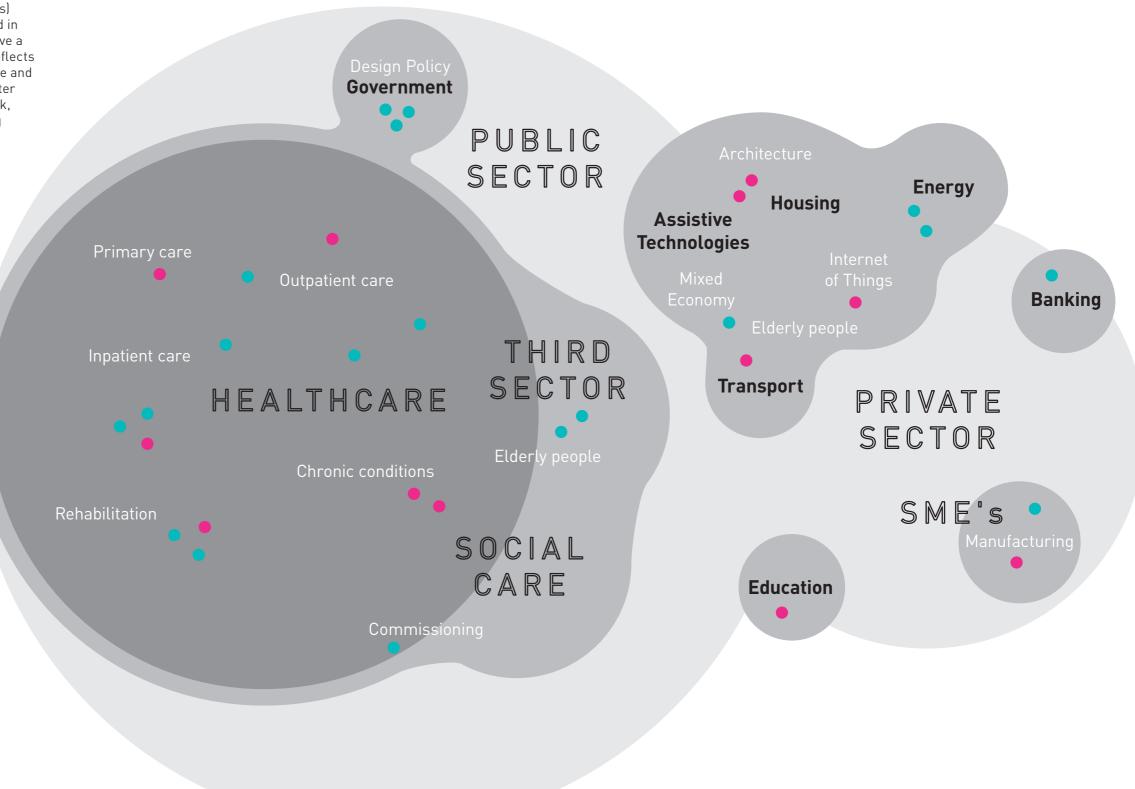
Architecture, Urban Planning and Space: an unexplored link is the one with the design of cities and spaces. The possible collaboration between Service Design, Architecture, Interior Design and Urban Planning could represent a novel growing area of research and practice. How can Service Design contribute to the Design and Planning of cities, architecture and spaces?



## Thematic and Sectoral maps

The thematic and sectoral maps both build upon the clustering of funded (green dots) and PhD projects (red dots) as presented in Appendix 1. Not all recorded projects have a sectoral reference, as some research reflects on the discipline more generally. The size and density of background colour of the cluster areas represents a concentration of work, while white text are key words indicating specific research focuses.

Map key
PhD
Project



# Restarting Britain 2: Design & Public Services

Jocelyn Bailey

### **Design for Public Services**

Jocelyn Bailey (Policy Connect) presented the results of an inquiry led by the Design Commission into the role of Design for Public Services renewal. The inquiry heard from witnesses working in the design industry, government, policy and academia via round table discussions, interviews and written evidence submissions.

This report aimed at clarifying what Design can bring to Public Service reform, within both Central and Local Government. Design is recommended for its ability to integrate user knowledge, manage complex situations through prototyping, and conduct real public engagement. Its application is envisaged for redesigning individual services, redesigning policies and to work at a systems level, going beyond individual and discrete service provisions.

The recommendations articulated in Restarting Britain 2, suggest the need to develop design leadership in central government, increase design capacity across government and design capacity in the design sector itself. Jocelyn Bailey highlighted the existence of a vacuum of support and advice between learning about the potential of design and applying it in local government, that should be addressed from an institutional perspective.

Suggested strategic areas for developing service design research are public sector commissioning and digital innovation (i.e. Digital by Default project). Finally she recommended the need to normalise the Design approach as part of public service thinking, practice and policy training.



Workshop 01



Restarting Britain 2: Design and Public Services,
Design Commission 2013

## Sustainable Product Service Systems

## Tracy Bhamra

### Service Oriented Life-Cycle Design

Tracy Bhamra (Loughborough University) briefly described the potential for Products Service Systems (PSS) within the context of environmental sustainability.

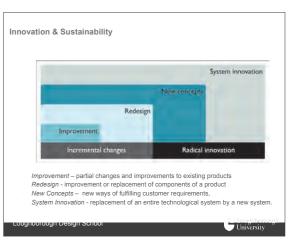
Given the need for radical innovation, products should no longer be the focus of design. Three main kinds of services were presented: Product Services — adding services to extend the life of a product; Use Services — when products are not owned but accessed and Results Services — where companies provide the final result to clients.

The last category has been suggested as having the widest potential for radical change. An EPSRC project titled SOLiD (Service Oriented Life-Cycle Design) investigated factors influencing the adoption of PSS concepts in 20 manufacturing firms in the manufacture of electronic instrumentation and industrial air conditioning business markets. This research demonstrated the opportunities for designers to work on developing these kinds of services, but it was identified that there were barriers in the transformation of business structures and thinking; in particular for companies that had not yet developed the capabilities required for service delivery and who where still organised around traditional manufacturing operations logics.

Suggested areas for future research for Service Design were studies on how designers could support transformational changes in manufacturing organisations for the development of service provision capabilities and logic, to increase both competitiveness and sustainability performance.



Workshop 01



Presentation slide

## Mappmal: a nutrition management and monitoring system for vulnerable older hospital patients

## Alastair Macdonald

### Design legitimacy within multidisciplinary research

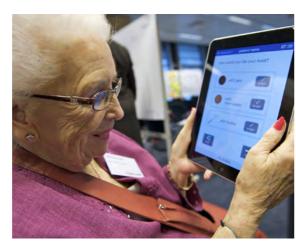
Alastair Macdonald (Glasgow School of Art) has summarised a research project called Mappmal funded by ESRC which has been researching and developing a nutrition management and monitoring system for vulnerable older hospital patients.

Evidencing the differences in research approaches, in a multidisciplinary field, the project raises the issue of legitimacy of 'designerly' ways of researching, in the context of healthcare and medical research. The issue of legitimacy manifested in the tensions with the non-design members of the team with regards to types and modes of interpretation of design evidence. If ethnographic methods were perceived overall as more familiar and acceptable, design approaches to analyse data, develop and prototype ideas were instead considered as unusual and unfamiliar. These tensions remained until early intervention prototypes had emerged, where participants could begin to see how the approach might lead to workable innovations.

How to build legitimacy and effective collaborations in research contexts where a more traditional, scientific and evidence based approach dominates, was then proposed as a valid research question for the future of Service Design.



Still from hospitalfoodie narrative Image © Peter Baynton 2011



Tablet-based patient interface
© 2011 Cate Gillon Photography

# The National Centre for Product Design and Development Research

1		II.	
Product#1	Product #2	Product#3	Product #4 (+ Service)
R&D phase	Plate & frame reactor	Tube reactor	Deployment treatment un
0.5 litre min <sup>-1</sup> capacity	41 litre min <sup>-1</sup> capacity	250 litre min <sup>-1</sup> capacity	667 litre min <sup>-1</sup> capacity
2000	2005	2009	2011

## Paul Thurston

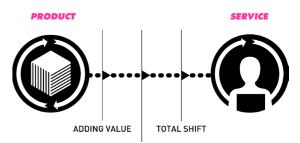
## **Service Design for SMEs**

Paul Thurston (Cardiff Metropolitan University) presented the work of The National Centre for Product Design and Development Research (PDR) at Cardiff Metropolitan University.

In particular a programme run for SMEs to learn how to innovate using Service Design, was illustrated. Despite SMEs representing a significant part of the UK economy, the presentation proposed the need for more work with SMEs as Service Design practice and research has predominantly looked at the public sector or big organisations.

When working with SMEs, Design needs to provide a valid argument as it is competing with a plurality of other methodologies that companies have already been exposed to such as Lean, Total Quality, Design Management, Sigma, etc. Other barriers are SMEs initial understanding of Design as associated with engineering or styling, and the cost of Design agencies, which is too high. In addition any proposed transformation would need to consider the limitations in investment capacity of SMEs. Existing studies into servitisation processes and challenges could better inform the work of designers in this area.

Investigating modes to better approach manufacturing SMEs and the development of a dedicated Service Design methodology, were suggested as a promising field of research for Service Design.



Presentation slide visuals

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Visual design by

**Amy Ricketts** 

The Service Design Research UK (SDR UK) Network is funded by an AHRC (Arts and Humanities Research Council) Network grant. The aim of the Network is to review and consolidate the current state of Service Design knowledge within the field of Design. SDR UK has delivered three thematic workshops and a website (www.servicedesignresearch.com) with a database of academics, educational courses, research and PhD projects related to Service Design and Service Innovation. Data and insights produced via these activities have then been used to create interpretative maps of the field and to identify emerging research areas and recommendations for future development.

www.servicedesignresearch.com/uk

This report organises the Network's materials to give an overview of Service Design Research in the UK, with its key research themes and sectors, and discusses the nature and challenges of Service Design practice.

In the last section the report offers twelve short pieces by a range of academics, experts and practitioners who have participated in the Network, reflecting on possible future directions and challenges for Service Design research. In our conclusions we bring together all these considerations to offer key recommendations for academics, practitioners, funding agencies, innovation and design bodies as well as design commissioners. We hope this work represents an effective platform to consolidate and develop further the SDR UK community and its links with the international scene.

## Funded by



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