Scoping Study on Service Design

Submitted by the Madano Partnership to:

Arts & Humanities Research Council

FINAL REPORT

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2. Executive Summary

This short executive summary pulls together our reflections on the main areas of enquiry:

1. The definition and boundaries of service design as a discipline are contested in both academia and professional practice, presenting significant opportunity for further research and exploration.To date the published literature is often self-reflective, concerned with finding a history and a justification, looking for roots in design thinking, interface design etc. Unfortunately this search for a multidisciplinary identity is not yet convincing, and some academic critiques of this work are perhaps more telling. Interview findings indicate that some believe that service design as an academic field needs at least a unifying 'label' in order to access funding. In terms of the market for services, an identity is also required in order for service design to be considered a valuable business investment. It is worth noting that a significant number of practitioners 'sell' the proposition by calling it something else, most likely associated with innovation. All this points to a field that is ripe for research funding, to enable these key themes to be developed and resolved.

2. There is positivity about the sector with a general consensus from the research findings that demand for service design is growing and will continue to do so, as our services led economy grows. However this reported demand works against comments that service design works on too small a scale to flourish. Expanding the sector to work on a larger scale, for example, working in hospitals nationally rather than in one department may be a challenge for the sector as it is constructed currently on a small and more informal basis.

3. It appears widely acknowledged that service design is multi-disciplinary, as evidenced through our survey and interview discussions, however this is less clear from the current literature published on service design and in some of the focus in research projects. We would suggest that service design academics could be encouraged to reach into other relevant bodies of knowledge that relate to their fields, engaging with the academic output they generate and the individuals and departments who put it together.

4. The professional practice of service design is a small community, mostly of micro-businesses and freelancers, with some in-house teams in users and some service design work by larger design consultancies. It is a young field, for example over a third of our survey respondents have been practising for under three years. There is little evidence of a strong conceptual basis for a well-defined service design industry. In the UK, a handful of agencies operate solely in this territory with many focusing on public sector issues, and increasingly structuring themselves as social enterprises. These organisations do not often refer to themselves as service design agencies but rather as 'social change' agencies or similar. There are also many larger agencies who offer service design as part of their suite of offers but we can only assume that service design practice is still a relatively small element of their business. For professional practice to grow the size of agencies needs to grow and their client base needs to expand beyond the public sector.

5. There is little compelling academic or professional practice material on the impact and value of service design. Respondents were unable on the whole to provide detailed or robust case studies of impact and there appears to be no common method or framework for measurement. There is a clear divide between academics and professional practice on the importance of measuring impact and value. Practitioners considered it essential in order to provide evidence to potential future clients, but academics were generally of the opinion that it cannot be measured and appeared to have limited interest in exploring how it could be measured. Further research into creating a measurement framework could support practitioners in 'selling' service design to industry.

6. There seems to be a growing number of service design courses but some commented that routes into the profession are less than obvious as the profession is in its infancy, affecting the standard of service design

graduates moving into professional practice. Service design teaching was critiqued for being shallow and not looking to other disciplines to strengthen its theory. International networks have been built largely on current service design expert's histories of education and employment, which is to be expected. However if the 'discipline' is not producing graduates to replace the current leaders in service design, there is a risk service design may not grow further.

7. Service design is undertaken across the world, and the UK has been seen to some degree to lead the way. Along with the UK there are 'pockets' of service design activity in Northern Europe, Italy, Australia and South Korea. International collaboration between the academic institutions exists, and the academic international service design community connect through annual conferences, international projects such as DESIS (Design for Social Innovation and Sustainability) and online networks. However, apart from DESIS, client facing research projects across the board tend to be fairly small and intensive, for example working with one department in a health service, or one branch of an organisation. There is a concern that the small scale of service design projects in practice is hindering the development of the discipline.

8. Collaboration between academics and UK businesses on the theme of service design appears limited. A lack of time to collaborate and participate in research on the part of professional practitioners was seen as a key reason behind this. Where collaboration is occurring evidence suggests it is academia with public sector organisations, stemming from the fact that service design has primarily been seen as a way to solve social challenges, rather than business challenges. This is clearly an area for development but genuine collaboration in research is a costly business, and has to fit all partners' needs.

Recommendations

1. 'Service design' is a complex and new area of academic study and teaching. As a "discipline" it is not yet clearly defined by a body of academic literature and with rather frayed edges, it remains open to considerable interpretation. Given this, and after some considerable thought it would be our recommendation that a future call focus on the role of design in services innovation and specific services sectors rather than on 'service design' per se. The role of design in the services sector is a neglected area of research, and we believe offers a larger and more expansive territory for research.

2. Further to this it is clear that as a community of practice service design academics need opportunities to engage with larger more established businesses – final users in the design value chain- who may already use, or be interested in benefitting from service design practice – focusing on the services sector in the UK would help to facilitate more of this kind of engagement. It would also provide an opportunity to work with academics from other disciplines in an integrated way.

3. Two of the most commonly recurring themes in this report have been that of innovation and impact. Any future activity under the suggested umbrella would provide opportunity to cover these two themes. Many service design researchers perceive the relevance of their work to the innovation agenda and competiveness, given the dominance of services in the modern economy. There is a matching growth in the innovation studies and policy communities in understanding the drivers and effects of services innovation, though this discourse has hardly engaged with design research and practice. Given the UK's relative strengths in design, there appears scope for research to stimulate appropriate forms of connectivity between the two meta themes of "design" and "service innovation."

More specifically, it would seem appropriate that any future activity look at ways to link business school academics with design academics to cover these large issues and to consolidate “design in services” as part of the impact agenda.

4. In relation to mechanisms for funding, our research suggests that there is a desire for funding to support service design academics at all levels, at the most junior level through to the most senior, providing opportunities for PhD students, opportunities for mid-career researchers to move up, and support for those most senior in the field to be established as professors etc. However, there is limited appetite for large calls and some lack of confidence around design ‘holding its own’ when working with other more established disciplines. Given all of this it would seem that any future call would need to work hard to support links being made between academics across the disciplines, and therefore we’d suggest supporting networking and capacity building activities around the core theme of design in services.

However consideration might be given to an element of somewhat larger collaborative research projects as part of the networking activity, to contribute to easing the barriers noted above.

3. Introduction

Following the outcomes of their initial scoping study of the state of current thinking on the value and impact of design and design research in the UK, the Design Council, and the AHRC, along with the ESRC, commissioned the Madano Partnership to look in more detail at the area of Service Design. This area is of particular interest because it is a newly-emerging field both in the design profession and in academic research, and one in which there is considerable opportunity for engagement between the business and academic spheres. Service design is a cross-disciplinary field, important to the world of design and social innovation. Research reflects this cross-disciplinary approach and is often co-created with practitioners and policy makers in business, government or civil society, highlighting the relevance of service design for all three Councils.

The AHRC, the Design Council and the ESRC commissioned this study to explore opportunities in Service Design in greater detail.

Specific questions which the research has addressed include:

- What is service design and where does it occur? Is there a working definition?
- What are the main areas of activity in the service design profession currently?
- What are the main areas of activity in academic research in service design currently?
- What is going on internationally in service design both in academic and business spheres?
- What sort of demand is there for service design expertise (professional or academic) in private and public sector businesses?
- To what extent, and in what fields, is there existing engagement between design professionals (or broader businesses) and academic researchers in service design?
- Where are the gaps in such engagements and opportunities for new collaborations?
- In what ways does service design contribute to the sustainability of choice for customers and producers?
- What would the priorities be for any Research Council funding in Service Design? (E.g. funding to facilitate or stimulate engagement between design researchers and non-academic partners? Capacity building for postgraduates or early career researchers? Funding to support leading-edge academic research? Development of research networks? Academic collaboration across relevant disciplines, e.g. between designers and business schools and if at all how are these projects linked in to others e.g. business research. Or public management research for the public service design aspects?)

Project scope

Taking into consideration the fact that we expected the topic of service design to be wide-ranging and difficult to determine, a scope of work was produced at project commencement:

1. This study will only focus on work and agencies where the term ‘service design’ or a close cognate is used, and where contacts consciously label their work as service design in what they are involved in/delivering/researching. Without this label the field could expand into a range of organisations and fields of work which contain elements of service design, but are either not aware it is service design or only use some features of service design.

2. This study will concentrate on the theories and practices of design professionals; we therefore expect it to mainly include service design agencies and academics that have made several contributions to the literature on service design.

3. We will research both theoretical and applied research. As in the initial scoping study, theoretical research which addresses the fundamental nature of design and its role in creating different sorts of meaning for designers, users and consumers. Applied research relates more to research that is practiced in specific applications and industries, but we need to draw a line at the more technical end of this spectrum unless lessons learned relate to good practice / principles.

4. Whilst carrying out the study we will continue to look in to ‘what is service design’ and attempt to build on this initial paper as part of the desk research aspect of the project.

5. The scope will include both national and international research and practice. The international aspect of the research will focus on countries where there exists a service design sector, and Design School and Research Units with apparent strengths in this area of research.

6. The design of public services (especially healthcare) will be covered mostly in passing, rather than in detail due to the extent of the available material.

This report brings together all of our findings from three strands of research; an introductory literature review, a series of in-depth interviews with experts in the service design field and an online consultation. It provides an overview of service design, both in practice and academia, and attempts to answer the research questions through key reflections, concluding with recommendations for a future research call.

4. Methodology

Introductory Literature review: methods

This scoping study began with a review of the main bodies of literature that is currently published and available on service design. The review involved:

- Agreeing a working definition of service design
- A review of the main 'service design' academic literature e.g. recent contributions by Kimbell, Voss and others as well as covering a history of existent material e.g. some of the "design thinking" and "wicked problem" materials as the nature of design has to be re-conceived for the services application. E.g. also covering what is a strong "human centric" element in approaches to service design
- Making a note of members of the research community active in this space for follow up either for phone interview / sending a link to the online consultation
- Reviewing grey literature on 'service design' e.g. NESTA projects etc.; web-sites, presentations and reports by service designers e.g. UserStudio (France), Livework, ThinkPublic, UsCreates etc
- A summation of the main lessons and principles from the literature into some broad principles.

This was then analysed and a 'stand-alone' literature review was produced, which is included as part of this report, but will also be published separately.

Service Design Interviews: methods

The Madano Partnership conducted 16 interviews with experts in the field of service design. The interviewees included academics who are active in researching and/or teaching service design; academics active in design or innovation but not service design specifically (although they may have an interest in service design); practicing designers, working in-house client side and for agencies; and those who contribute to policy, for example research councils outside of the UK. The table below shows the breakdown of interviews:

Academic, active in the field of service design	5
Academic, active in the field of design but not service design	3
Practising service designer, agency side	2
Practising service designer, client side	4
Policy	2

The interviews examined:

- What is happening within academia in the discipline of service design
    - Where are the key research/teaching institutions?
    - Current research activity, nationally and internationally
    - Is service design an application of “design” or a sui generis activity??
    - What is the relationship to ‘design thinking’?
    - What are the key issues that need addressing to help service design develop as a well-regarded area of discipline and deliver impactful research?
- What is happening on service design within industry
    - Who are the main consultancies delivering service design, where are they and what is their scale and type of business
    - What is the demand for service design work
    - Examples of collaboration with academia
    - How do you measure the value and impact of service design and how do service designers add value to business?
- Service design and innovation: How does service design contribute to innovation?
- Views on future resources: what should a future fund resource?

A copy of the detailed discussion guide is included at Appendix 1

Online survey: methods

Design

An online survey was designed to gather views on service design from a wider perspective, and to provide some quantitative data on views and opinions of service design; a copy is included at Appendix 2.

Sample and distribution

Prior to launching the survey, Madano, with assistance from the Design Council, AHRC and ESRC compiled a list of individuals who have an interest in service design. At the time of survey launch the list consisted of 183 people, from a variety of backgrounds including academics, students, practitioners, researchers, those currently working in design, in innovation or working outside of design but with a knowledge and interest in the area of service design.

A link to the survey was sent to the sample of 181. To encourage wider participation we asked all interview and survey respondents to distribute the survey themselves to people they believed would want to be involved in the research. The survey was also posted on the Service Design Network LinkedIn page (http://www.linkedin.com/groups/Service-Design-Network-1856454?trk=myg_ugrp_ovr) which has over 3,000

members and sent to Service Design Research (http://www.servicedesignresearch.com/) and the Service Design Network (http://www.service-design-network.org/) to distribute to their members. This means the exact sample cannot be known but efforts were made to reach as many people as possible who could make a contribution to the research.

Response

We received 121 complete responses to the survey. There was a drop off during the course of the survey: 156 respondents started the survey and 121 completed it, giving a completion rate of 78 per cent. As a result sample sizes for each question vary. The table below shows the number of responses for each section of the survey, followed by a breakdown of the type of respondents who answered each section.

Table 1: Number of respondents by section

Section Heading/Questions regarding:	Number of responses
Background	156
Academia	51
Professional practice	98
Future Funding	121

The table below shows how the responses broke down by type of respondent, whether answered by an academic or by a practising service designer. When considering the breakdown it is important to take into account that respondents could tick more than one option, which is why the percentages do not total 100.

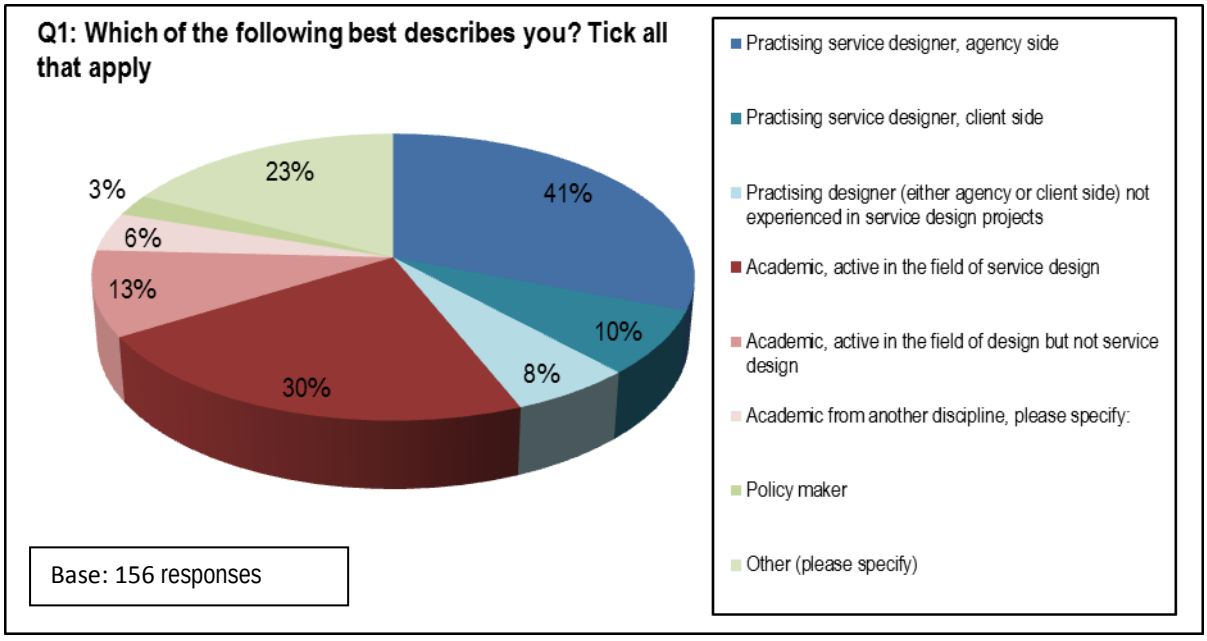
Table 2: Breakdown of responses to each section by type of respondent

Section	Academic % of total	Practitioner % of total	Other % of total
Background	45	54	26
Academia	82	35	22
Professional practice	38	67	20
Future Funding	49	54	26

The questionnaire had a number of sections, the academia section was answered mainly by those who define themselves as academics (82 per cent of the total number of respondents for the academic section), whereas respondents to the professional practice section were more mixed (67 per cent of total number of respondents defined themselves as practitioners, 38 per cent of the total number academics and 20 per cent of total number defined as other responses), highlighting that certainly some academics felt confident to give opinion of what was happening in professional practice and indeed they may be involved in private sector consulting in some capacity.

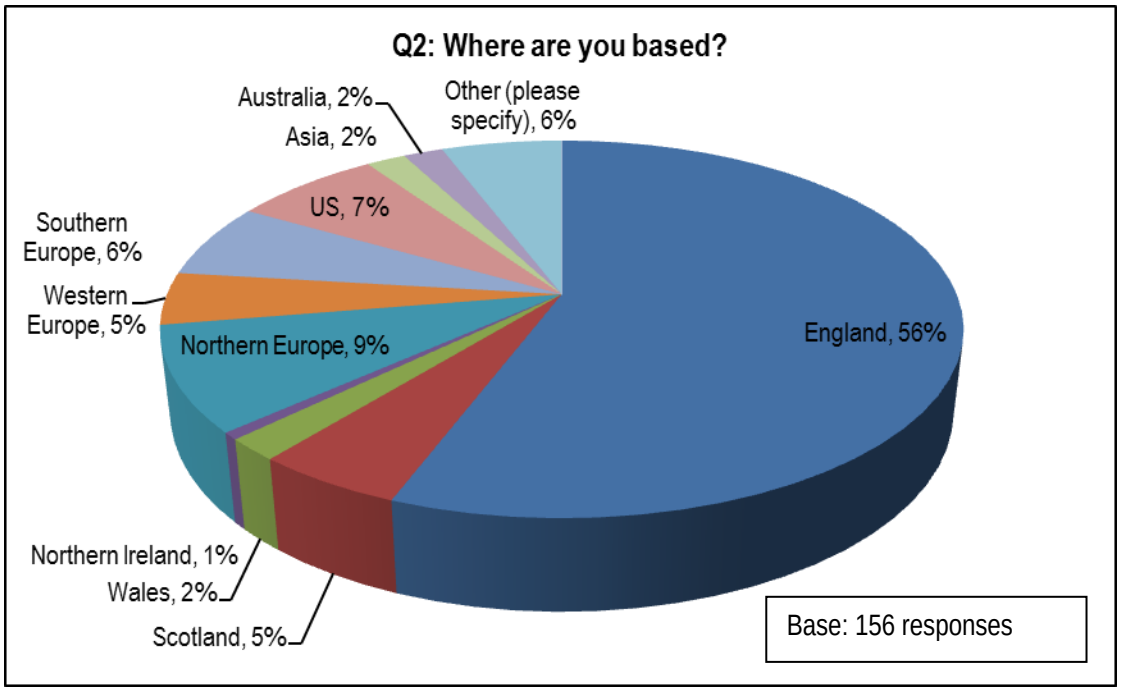
As shown in Figure 1, below, overall a fairly even mix of service design academics and practitioners was achieved, along with some policy-makers and those who did not fit into either academia or professional practice (defined themselves as other); the 'other' responses included teachers, researchers, curators and students.

Figure 1: Respondent type



Looking at the geography of responses the majority came from England (56%), followed by Northern Europe (9%) and then the rest of Europe and Scotland (5-6%). The survey did receive a small number of responses from the US, Asia and Australia. The slightly higher number of responses from Northern Europe than other regions outside of England corresponds with the interview findings and desk research that point to Northern Europe as being a 'hotspot' for service design.

Figure 2: Geography of responses



5. Literature Review

Introduction

This note is a selective review of contributions to a literature on service design. It draws on publications in refereed journals but also on conference papers and more informal media. The main aim is to show the main trends in thought and writing on the subject in order to highlight gaps or the most promising areas for a possible research programme.

Service Design is a young field of teaching and research in academia and this matches the developments in the market place, where a small but active and vocal set of practitioners has emerged in recent years. As a self-aware grouping of researchers, the field dates to the early 1990s, although it can trace its origins to a small number of earlier contributions, going back to the early 1980s. (Shostack, 1977,1981). The area is sufficiently novel that its intellectual linements are not yet well determined - it has not yet developed what Thomas Kuhn called a practice of "normal science" where the main terms and methods are generally accepted and apposite research strategies and objectives are well defined. Indeed some leading contributors have doubted whether "service design" defines actual or just potential research and market practices (Kimbell 2008). Others though are more confident that there is a well-established research agenda that has already had major effects on the practice of leading businesses in service industries (Mager, 2009). The subject is largely multi-disciplinary, drawing extensively on marketing and management literatures, to the point where the grounding in design might seem tenuous (Kimbel, 2010). There is a degree of awareness and engagement with how to conceive of innovation in services but little or none with the economic theories and literatures on that subject. This position is a mirror image of the limited attention to design (and none to service design) in the field of innovation economics.

Defining Terms

As a result of the emergent nature of the field, much of the literature is concerned with defining and even justifying the idea of service design (Mager 2009), (Junginger & Sangiorgi. 2009). This stream in the literature draws heavily on the practices and methods of service designers to differentiate the field from "traditional" design (Holmlid 2009). There is a widespread view that this is a growing research field but lacks unifying definition i.e. an absence of theory. (Sangiori, 2009).

Others, though, are more confident, with an explicit definition of Service Design offered by Birgit Mager, who heads a Service Design Department at the Cologne Schools of Design:

"Service Design addresses the functionality and form of services from the perspective of the user. It aims to ensure that service interfaces are useful, usable, and desirable from the client's point of view and effective, efficient, and distinctive from the supplier's point of view." (Mager 2009)

This useful construct tries to cover both the user centricity of much of the conceptual framework developed by specialists in the field. But it also maintains the importance of the need for efficacy from the service suppliers' perspective, reflecting the fact that one source of ideas for the (putative?) sub discipline is business literature, including marketing journals.

Others have emphasised the practical even craft like nature of service design and maintained the link with the designer's role: "Service design ultimately depends on the designer's sensibility and uses a range of tools from different disciplines to achieve a range of objectives." (Saco & Goncalves, 2008, 12)

On the other hand, formalising and codifying the relevant approaches and practices can be seen as the contribution of academe and service design research:

"The development of a formal language for services is one of the exciting new fields in development and practice, because a formal language of services might become the basis for systematically creating conditions that would support the design of service experiences." (Mager, 2009)

The need for a distinct practice of service design in part springs from the increasing recognition from at least the early 1990s, that the vast majority of final outputs in the modern economy is classified as "services" so there is a need to understand, measure and encourage innovation in services. Design is a part of innovation in production so why not in services? As part of the desire to find an intellectual identity, researchers have sought a history of ideas underlying service design and a set of connections to current or recent movements of thought in design and its uses. The UK Design Council has been seen as part of that history:

"Service design owes quite a bit of its origin to both American and British design consultancies, notably IDEO, and public institutions in England and Germany, such as the UK Design Council in London and KISD in Cologne." (Saco & Goncalves, 2008, 12)

Another perspective is that service design has evolved from interaction or interface design, the development in software writing that prioritised the User Interface (UI) and usability research so that programming the content and functions of the software was driven by these needs. Service design took up the user centricity theme, through making "service encounters" the core of its identity. (Sangiorgi 2009, 415)

Both terms in our discipline - "service" and "design" - as economic activities, or even as philosophical constructs are problematical and their coverage and meaning and contribution to productivity, growth, employment and welfare have been endlessly debated. So does the fusion or overlap posited by "service design" offer a new clarity or a false dawn? Two design managers have recently commented that:

"Inadvertently, we have all conspired to fuse together two twenty-first-century meta-narratives—services and design—into a heady mélange of scepticism and hope." (Saco & Goncalves, 2008, 19)

Some commentators have therefore ventured into offering a definition of a service, to underpin their concepts of service design. For example,

''a service may be defined as a change in the conditions of a person or a good belonging to some economic unit, which is brought about as the result of the activity of some other economic unit with the prior agreement of the former person or economic unit.''

Following on from this (perhaps rather ponderous) definition, they see service design as a meta activity to make interactions with customers. Terminology is likely to be derived from market research (Evenson & Dubberly, 2010, 404, 405).

A frequently repeated characterisation is that services are perishable and that production and consumption are joint and inseparable. However, this characterisation has been challenged and a model of services as involving "performance, processes and deeds" have also been mooted (Holmlid & Herz, 2007).

But these attempts at a clear cut, universal definition of service may impede rather than assist the development of better models of innovation and design in the relevant sectors and specific forms of service offering, because of the heterogeneity of services, many of which do not seem to exhibit the characteristics offered as part of these monolithic definitions. For example, in what sense are financial services perishable or the production and consumption of transport services inseparable?

A different way of conceiving the design/service relationship has emerged in some recent contributions, where the operational principle is suggested to be design for service, rather than service design. Here the physical artefacts that are the traditional means and ends of design are integral to the service but the service itself is not fully designed but becomes an enabler.

“As Manzini (2011) similarly argues, talking of designing for services rather than designing services recognizes that what is being designed is not an end result, but rather a platform for action with which diverse actors will engage over time.” (Kimbell, 2011)

Disciplines and Schools

Although apparently modest in the scale of dedicated research activity, some leading academics in the field have detected a spreading of the influence of their sub-discipline:

“Universities are moving: In the beginning of the new millennium it was the Köln International School of Design, that had started an academic Service Design program in 1992, the Polytechnicum Milano, Carnegie Mellon University and Linsköping University that had established Service Design as topics within an academic field – now we find Universities all over the world focusing on Service Design education ..” (Mager, 2009). However the paper does not enumerate these other Universities and the group listed here, plus in the UK, Imagination at Lancaster University, a group at Northumbria in Newcastle and, up to recently, the Said Business School, Oxford, dominate research output, often through joint publications.

A trend observed by some is the application of design principles to public sector services with designers working with groups and communities as “enablers”. Examples include UK Design Council Initiatives such as the RED projects (transformative design) and DOTT. (Sangiorgi, 2009, 418)

Some researchers in the field seek to align the emergent discipline with other perspectives on services and innovation, including "services science" (Chesborough and Spoherer). A recent contribution by a group of some leading figures in services design agrees with the perception of services science protagonists that there is an absence of systematic study and understanding of the principles of services, so that the industries and businesses are held back by an inability to innovate based on knowledge. They see a future with service design at the centre of every organisation’s innovation and where service design is an integral part of service science. (Evenson et al, 2010)

Two recently emerging approaches to the apparent lack of a distinctive model or theory of innovation in services - Service Science, and Service dominant Logic- have been seen by some researchers to have possible overlaps or synergies with the field of service design.

Service Science is an idea associated very much with IBM - the seminal papers have been written by IBM researchers, who have been seeking to promote a systematic study of services, impelled originally by IBM's own need to understand and optimise its own services business. Subsequent developments have though been to suggest that a more comprehensive framework, to be used to promote economic ends such as productivity, is an imperative for modern economies (Spohrer & Maglio, 2008).This paper notes that IBM had a major role in the

emergence of an academic discipline of computer science in the 1950s and see a parallel with the emergence of a science for the service based economy. The authors suggest a definition of service as 'clients and providers working together to effect a transformation'.

This literature argues the absence of a systematic study of services and that this lack of conscious and systematic foundations for understanding services, their innovation and sources of growth, both amongst businesses and in universities, threatens future productivity gains, implying a need for a shared agenda between business, government and academia and set of concepts and terminologies that would enable re-connection of University research and services sectors (Chesborough & Spohrer, 2006, p36). (Although it may be noted that there is not a science of manufacturing, rather sciences of engineering, materials, chemistry, operations, logistics etc.).

The services science literature appears to have eloquent calls for a new discipline but lacks much in the way of proposals for its content. Nonetheless, some researchers in service design have sought synergies between the separately developing frameworks, based on a perception shared with services science protagonists that there is an absence of systematic study and understanding of the principles of services, so that the industries and businesses are held back by an inability to innovate based on knowledge.

Shelley Evenson and colleagues see a future with service design at the centre of every organisation's innovation and where service design is an integral part of service science. Service design they argue is complementary to development, management and marketing of services, which is a differentiation from "conventional" applications of design in that strategy is developed as part of a service development process, not a pre-condition. Service design is not solely about "designing processes" but covers user orientation, contextualisation and design as a strategic instrument. Part of becoming the core of service science would be the development of a specific language of service design. (Evanson et al, 2010)

A marketing theory based vision of services and service innovation as essentially different from "traditional" product innovation takes the form of "service dominant logic." (SDL) This phrase coined in the seminal paper in the field (Vargo and Lusch, 2004) contrasts the proposed vision of services and their marketing with the claimed "goods dominant logic" of mainstream marketing and innovation literatures. The model has been extensively developed by the originators into 10 Fundamental Propositions (Vargo and Lusch, 2008) which on closer examination can be reduced to four basics. These are:

FP1. Service is the fundamental basis of exchange.

FP6. The customer is always a co-creator of value.

FP9. All social and economic actors are resource integrators.

FP10. Value is always uniquely and phenomenologically determined by the beneficiary

This literature is given to sweeping and unsubstantiated generalisations on the nature of economic life, but most of them do not seem to effectively differentiate services from goods. In particular, the concept of "value" used in the Fundamental Propositions is not formally defined. Implicitly it is "value in use" i.e. the consumer's subjective appraisal of worth. This is sometime contrasted with the "value chain" that is said to be the defining characteristic of goods markets. This "value in exchange" (shades of Karl Marx) is presumably the value added in production stages. This is of course a price based concept - the value added is the difference between selling price and the costs of inputs and includes wages, salaries, capital cost and profit. The price the final consumer is willing to pay is by assumption the minimum value to them of the product. Their value in use may be higher i.e. they are by definition co-creators of "value" in this subjective sense. It is not at all clear from this literature why the case should be differently conceived for services.

However, despite the evident theoretical limitations of the "service dominant logic," researchers in the "service design" community have explored the possible overlaps in theory. One recent paper, (Edman, 2009) for example, compares the central ideas of service design with the fundamental propositions of service dominant logic (SDL) and finds them to be broadly complementary but also with some significant discrepancies - one model does not collapse into the other. SDL basically proposes that everything is service and that value is always co-created. One implication for the service organisation is that a wider range of people and business functions should be aware of the customer. In this context, the customer focussed designer - who can address "wicked problems" (Buchanan, 1992) - can be a major contributor. Here we see a read across to another major source of ideas and intellectual grounding for service design, in the literature on Design Thinking.

Another effort at drawing the connections between SDL and service design (Cautela et al, 2009) uses SDL as the basis for a set of service categories that it is argued can inform the practice of service design. The paper aims to develop services categories with service logic and provide models of innovation subject to these service categories and to suggest roles of service design.

They read SDL as a new model of value generation, in which services are the main point of reference. (Cautela et al, 2009, p4320). The contribution to the theory of service design lies in the categories or "service offer clusterings "derived from Gummeson:

a. interaction based (sole transaction)

b. relationship focussed (multiple transactions)

c. network centred (transactions by different actors.) p 4321

In this structure for service logic, the roles of service design can be summarised as:

a. Interface design - servicescapes, symbols etc. Semiotics. Innovation through translation into symbols of e.g. new technologies and how to use them.

b. Services channel, rules and culture. Support learning- and knowledge transfer - e.g. through new user competencies.

c. Entire system architecture design.

A major body of theory and literature that developed during the 1980s and 90s go under the banner of "design thinking". In generalising the concept of design away from its tradition of making visual artefact and potentially applicable everywhere and to all social, economic and business problems, this body of analysis helped to pave the way for the sub-discipline of service design. A seminal contribution is Buchanan's paper on "Wicked Problems in Design Thinking" (Buchanan, 1992) which posits design as an almost universal discipline of thought that can integrate the over specialised fields of knowledge for human well-being:

"…design continues to expand in its meanings and connections, revealing unexpected dimensions in practice as well as understanding." (Buchanan, 1992, 5) and should therefore be seen as "a new liberal art of technological culture."

This paper, in Lucy Kimbell's words "…shifted design theory away from its legacy in craft and industrial production towards a more generalized "design thinking" that could be applied to nearly anything, whether a tangible object or intangible system. " (Kimbell 2009)

A more popularising account of design thinking published by Tim Brown of IDEO, promotes the penetration of design (and designers) into the core of management and business strategy. He provides a summary version,

citing Thomas Edison - who famously led the development of an electricity distribution network as complementary to the light bulb - as an early design thinker:

"Edison's approach was an early example of what is now called "design thinking"—a methodology that imbues the full spectrum of innovation activities with a human-centered design ethos." (Brown 2008)

In Brown's account, design thinking drives innovation through observing what people want and their preferences over product characteristics and thus enables businesses to differentiate through better understanding of market's needs.

Design thinking - a system of spaces rather than distinct steps and projects have three fundamental spaces to pass through:

1. Inspiration - the circumstances or issues to be addressed in the design thinking process
2. Ideation - the process of idea genesis and testing
3. Implementation - setting out the path to market or change in the organisation.

This is not a linear process but a project will iterate, especially between the first and second spaces (Brown, 2008, 4).

In a penetrating critique, Kimbell describes "design thinking" as a confused and contradictory body of ideas to be abandoned. She reviews design thinking using theories from sociology, science and technology and organisation. She makes a link between design and social science to deepen understanding of the contribution of design to value creation (Kimbell 2009).

Design in innovation economics

Two of the themes running through this review are the roles of design and the approaches to understanding services innovation, to put the "service design" school in context. The economics field of innovation studies has included limited coverage of design as a contributing factor (Hobday et al, 2011). Although there is an extensive academic literature on design from an economic perspective, there has been more research on design's role in creating economic good driven by public policy demands and commissioned by governments or other policy agencies. The results have appeared, therefore, in policy focussed or evidence based documents, published by the agencies concerned - "grey literature" and not so much in the academic journal literature. One such policy generated study (Swann, 2010) led to a set of functional categories for applications of design. Design is:

- multi-faceted;
- a link from creativity to innovation;
- a source of competitive distinction;
- an approach to planning and problem-solving;
- a means of creating order out of chaos;
- an approach to systems thinking.

These heads of analysis can be roughly applied to service design to help identify possible gaps or opportunities for further development and integration with the economics of innovation, which has so far not engaged with the new ideas.

New forms of innovation

There has been a significant body of economic analysis of ways of approaching the innovation problem for business that fall under the head of "new forms of innovation," which have attracted considerable interest in the policy community. The two most frequently cited are open and user innovation; although apparently conceptually opposites both can be shown to depend on good strategic design capabilities to be effective.

Open Innovation

Open innovation as a concept has been popular and given a theoretical underpinning in a number of publications, although mostly concerned with the manufacturing industry and the sharing of R&D and its results. The central concept is that firms choose to work with external partners, who can offer new or different ideas, capabilities and technologies to the innovators developments. This is often contrasted with a closed innovation model, led by in-house R&D and by secrecy and unwillingness to share with external bodies. As a characterization of innovation practice before the development of the open- innovation literature, this can be shown to be flawed. Most innovators have in fact always been willing to access external knowledge. However, whether "open innovation" is a new or a well-established model for business innovation, close study of the forms of openness revealed by the UK innovation survey indicates that the existence of a design department in a business greatly facilitates the effectiveness of a range of open innovation strategies, as the appropriate design discipline is important in co-ordinating and integrating a diversity of external and intra-mural inputs to achieve successful innovation. A study of how design capability is important in the effective deployment of an "Open Innovation" strategy in many industries is set out in a report by Dr Virginia Acha (Acha, 2008).

The main conclusions from that study are:

- Design capacity enables effective open innovation strategies because of the important role of interfaces between partners in task partitioning – combinatorial specialisation. Tasks and interfaces are achieved by organisational design of tasks and technical design in interfaces.
- Overall, the paper supports two basic hypotheses on "open innovation":
- 'Open' innovators need more developed design capabilities to manage innovation across organisational boundaries.
- Open patterns of innovation will vary by sector, reflecting differences in market conditions, opportunity (technological and organizational) and organizational structures for innovation.

Notably, some services sectors, especially business services, exhibit strong patterns of design led open innovation, which provides a lead to future opportunities for service design research and applications.

Services Innovation

In the field of innovation economics, a trend roughly contemporary with the emergence of service design has been growing interest and literature on innovation in services. The point is often made that innovation studies

have been founded, either explicitly of more implicitly on a "goods dominant logic" (Vargo and Lusch 2004, 2006) with approaches that have the production and distribution of physical goods at their heart providing the framework for theory and empirical research.

Although Bessant and Davies (DTI, 2005) argue similarities between innovation in manufacturing and services, there has been a growing research and policy stimulated literature on the particularities of services innovation.

It is widely perceived that innovation economics and policy have been developed on the basis of an understanding of innovation that is very manufacturing oriented. One of the more explicit treatments in this mode is the well known classification system of Keith Pavitt, (Pavitt, 1984) where services are defined as "supplier dominated," reflecting an underlying model of innovation that is essentially about technological change. Innovation in services is treated as second order or as taken from embodied technology in new equipment and facilities.

One well known contribution to the economics of innovation literature offered one angle on services innovation as sort of mirror image of innovation in manufacturing, but the underlying notion of innovation is the introduction and take up of major technological advances. The difference in services is hypothesised to be how the new technology affects the sector (Barrass, 1986). The essential element is a “reverse product cycle” innovation process which takes place in user industries such as services, once the new technology has been adopted. This cycle starts with process improvements to increase the efficiency of delivery of existing services, followed by process innovations for higher service quality, ultimately leading to product innovation in new types of services. Although design does not feature in this approach (in common with most of the innovation economics literature) it seems intuitive that recent ideas of service design could find a natural, cross disciplinary home in the second and third of these stages of service innovation.

Other writers have delved into the fundamental reasons for the lack of a distinctive economics of services innovation (Gallouj, 2002), (Gallouj & Windrum, 2009). This is seen to lie in a long tradition, dating back to Adam Smith, of perceiving services as inherently unproductive and by implication non innovative. “Production has etymological connotations of progress and leadership whereas “to serve” implies lower status. These ideas have a strong hold and even in the predominantly services based economies of the west today, there are frequent calls within policy making circles, and numerous policy initiatives, for manufacturing strategies to create employment opportunities. In parallel, policy is informed by innovation measurement frameworks which are substantially based on indicators such as R&D and patenting that are heavily biased towards manufacturing industry, so that most services sectors appear to have lower degrees of innovativeness than manufacturing. However, even using these indicators, some services sectors have exhibited high innovation, which affects other sectors. What are usually termed “knowledge-intensive business services” (KIBS) have significant impacts on their clients’ innovation processes (including in manufacturing industry). These service providers assist at different stages in the innovation process. Some commentators have seen the emergence of a “consultant-assisted” model of innovation (Gallouj, 2002). Again, although design is not explicitly mentioned in this literature, designers, including service designers, fit comfortably into the KIBS category.

The economic theory of services innovation can be seen in dialectical terms, through alternatives of Assimilation/demarcation/synthesis discussion.

The *Assimilation* hypothesis derives from Pavitt's taxonomy - services are “like” manufacturing. Services therefore are innovation backward, shown by low scores on patenting and R&D.

The idea of *Demarcation* is the antithesis, which argues for services specific innovation, especially organisational change, including the application of ICTs and the role of KIBS. There is attention to co-production, especially in B2B services. Also featured is the idea of ad-hoc innovation (client/problem specific, non-reproducible).

The proposed *Synthesis* seeks to take the main *demarcation* ideas but integrate these with the assimilationist production based theories in a neo-Schumpeterian framework. (Gallouj & Windrum, 2009)

These accounts of services innovation from an economic theory perspective do not make reference to design (except implicitly as design consultancies are a form of KIBS). Especially there appears no awareness of service design, or of the services science and service dominant logic schools of thought. It might therefore be of interest to effect some communication between disciplines with a broadly common initial presumption of the need to raise the intellectual profile and specific treatment of services and service innovation.

Examples of policy driven attempts to engage with services innovation as a distinctive form include the EPISIS project (Kuusisto et al, 2011) which struggled, as much of the literature has, with defining and categorising services and thence the particular nature of innovation in services. Although the great heterogeneity of services is acknowledged there is also a more or less explicit wish to identify some essential characteristic e.g. that services involve person to person engagement, or are transitory in consumption, that have not been persuasive. However the search for an embracing definition has probably held back the field of inquiry.

Also, while “mainstream” innovation economics studies have begun to embrace the importance of design, it is often seen as an adjunct to R&D, helping to add attractive qualities to products basically specified by technologically determined characteristics. Although more recently the broader role of design in strategy and in relating technical possibilities to market needs has been recognised, but implicitly at least seen as most relevant to production industries. Neither the economics of innovation nor the policy makers and agencies have so far picked up on service design as part of the innovation landscape. There is some attempt by the service design community to identify an explicit role for design in services innovation. But this has involved only limited knowledge of the economics of innovation, so there has not been “joining up” of the “design for innovation” and “services innovation” perspectives.

In one recent overview of the field argues that service design is a mode of innovation. Indeed that it is transformative for innovation and productivity in services as this is under-developed compared with production sectors and that the user interface is at the core. (Evenson et al, 2010)

Tools and Methods

A broadly common theme in service design research literature is the enumeration and explication of the range of tools and processes adopted in the day to day practice of service designers, including some adapted from other disciplines. The use of these is seen to be characteristic of the specialised design houses.

These can include techniques used in Interaction Design, such as storyboarding, flowcharting, scenario creation, dramatisation and role play (Sangiorgi 2009, 416). Others include “servicescapes” and the “customer journey”. (Holmlid, 2007)

A persistent theme in the service design literature is that it puts the user or consumer of services at the heart of design, in contrast to an artefact centred approach - the designer in their studio - which can be felt to be characteristic of traditional design practice. Service design takes an outside-in, human centred perspective. (Holmlid, 2007)

A large part of the human centricity of much of the research literature and of practitioners comments on their activities is the element of co-creation, either by the designer and the client (service provider) or between one or both of these and the final consumer of the service:

"Service design not only accepts that service is different, but also acts on this premise by employing features that include co-creation, constant reframing, multidisciplinary collaboration capacity-building, and sustaining change". (Saco & Goncalves, 2008, 10)

Co-design or co-creation of the service experience has also been highlighted in the service design literature (Steen et al, 2011). Service design is seen as process of planning and organising all the elements of a service, including the interfaces, to optimise the customer experience, with co-design between designers and clients and between both representative customers playing a central role. The benefits of co-design are argued to occur:

- through improving the creative process and organisation of the service project;
- for the service's customers by a better match between offer and needs;
- in the supplier through creativity, awareness of customers and internal cooperation on innovation (Steen et al, 2011).

The authors though also draw attention to the need to evaluate the benefits of the approach.

The importance of the customer/user contribution is taken to its extremes in the service dominant logic approach (Vargo and Lusch, 2008), where the customer is "always" a co-creator of value.

There has been a plea for the transfer of tools and techniques for codifying knowledge and ideas such as "notation and specification" from the arts and humanities into service design. These could include scripting, service acting, dramaturgy from film and theatre (Mager and Evenson, 2008). These authors advocate a systematic study of the transferability of methods from the arts into service management of a design:

"The results from this type of research, we believe, could provide the foundation for the development an approach to service scoring—a way for service designers to write and stakeholders to perform services that deliver both value and beauty". (Mager and Evenson, 2008)

This perception runs in parallel with a concept found in much of the literature, that the service designer has more of the role of a choreographer, helping to arrange the steps and turning point of the "customer journey". (Holmlid, 2007)

The use of exemplars has also been advanced as a technique that can aid the communication of service design ideas. Exemplars are illustrative stories that embody the principles that the design team wish to communicate:

"…. exemplars in the form of micro-narratives are retrieved in design discourse primarily from gathered data, common reference points, and personal experiences. They contribute to the collective understanding of the service concept and support the alignment of the service offering with customer expectations". (Blomkvist & Holmlid, 2009)

A key concept is the customer journey and how the service is structured to make that experience most satisfactory which the designer and service supplier need to understand from the user perspective. The journey can be conceived literally as the encounters a user has in spatial interactions, when taking up experiential services such as transport, or visiting sports venues. (Voss and Zomerdijk, 2007)

Documenting the customer journey in experiential services is another way of arriving at the "service blueprint". (Evenson et al, 2010)

Many of the tools and methods that have been highlighted in the service design literature e.g. design as choreography, represent departures from the traditional practices of designers in the making of visual artefacts.

But a closer parallel with long established engineering design practice can be seen in the idea of "blueprinting" the structure of the service offering, showing how the back office and front office (customer interface) components fit together in terms of workflow (Shostack, 1987, 1993). This is one of a number of important contributions by Lynn Shostack that are very frequently cited in the service design literature. The core of these contributions is to place the user/customer at the heart of the marketing effort. Services are fundamentally processes and their marketing cannot, it is argued, be effectively conceived in the same way as goods.

As building blocks for the blueprint, Shostack offers a simple bivariate categorisation of service development and marketing strategies, lying between 'Complexity' on the one hand and 'Divergence' on the other (Shostack, 1993). Complexity can include a wider range of offerings, for example, but with a rigid demarcation of staff responsibilities for effective delivery. Divergence means a more bespoke set of offerings that needs to be supported by more skilled and flexible staff to respond to particular needs. This bivariate model lends itself to visual presentation with strategic options shown on "positioning charts" using High-Low Complexity/Divergence axes. The service process has to be designed with employees and customers in mind, including the degree and means of motivating employee participation and the optimal degree of divergence.

The technique of using visualisations is popular amongst commentators on design including service design, albeit derived from observations of practice rather than theoretical principles. Their role has been usefully summarised in a recent study based on interviews with 14 service designers. (Segelström, 2009)

Visualisation can present user data to design project participants. It is this 'Role of the visual' that makes this a design discipline. The research that focussed on organisational structures does not have this element and so perhaps do not belong under service design. For designers, visualisation is used in what is termed the Research/Interpretation stage of the creation process.

While the designers interviewed always said that the data and the project goals influenced how user input was visualised, there were also distinct patterns of use of types of visualisations. That is, there was a degree of (partially informal) codification of visualisations. These included journeys, narratives and personas and the use of visual and/or audio media.

Future Directions

This review has summarised some of the significant contributions to the service design literature and related academic fields. Within these are a number of explicit or more implicit research themes or trajectories that motivate the service design research community.

Some writers have noted the lack of a distinctive body of rigorous theory and principles, and that service design tends to depend on observing examples of professional practice (Kimbell, 2011). Conscious of the status as a "community of praxis," there has been a search for some theory to add to the field through examining how "service design" stands in intellectual terms in relation to other modes or sub-disciplines for making sense of services that have been developing in parallel.

A previous section of this review has outlined some of these approaches, including "service science" an attempt to bring codification and systems thinking to services and innovation in them. Some have asked if service design can be intellectually positioned as part of service science. (Saco & Goncalves, 2008, 17)

But there is a strand of thought amongst leading researchers in the field that seeks a much more specific and internal platform for and direction of service design research. These could include developing a formal language, as the basis for a systematic field: "A design language for services empowers service designers to create

interactions, spaces, and processes on the basis of a solid knowledge of systems relationships." This should, in one view be supplemented by taking in appropriate theoretical constructs from psychology, as service design is fundamentally about the human users of services. (Mager, 2009)

Following from the dominance of services in output and employment in modern economies, there is a wish amongst some academics to see a shift in national resources in the direction of services and the research and business practices that support them:

"There is need for a broader acceptance of investments in research, development and design in the service industries and a need for a broader understanding of the contributions Service Design brings to this emerging field. And last but not least more systematic education for Service Design in academic and professional context." (Mager, 2009)

Other futures and therefore research orientations posited for service design include becoming much closer to other dimensions of service supply and demand, with a perceived need to embed design practice in the overall service system. Service design academics have developed a range of theoretical perspectives to enable this contextualisation, for example the application of Activity Theory (Sangiorgi & Clark, 2004), which posits that "service encounters" are mediated by the social and specific conditions and the wider activity systems of participants. (Sangiorgi, 2009)

Service design has also sought a place as part of organisational management and strategy, according to one view, which would like to see the designer's role move from the periphery - specific deliverables - to an organisation's core, even into change management.

"In order to instil or effect change it is therefore necessary to unearth the fundamental assumptions that drive an existing situation. The question is how can service designers do this and what do they need to succeed?" (Junginger and Sangiorgi, 2009, 4341)

This conception raises the question of how far service design is still an application of the basic designers' training and skills or has migrated into a new form of inquiry and set of usages with little or no roots in design considered as the making of intermediate artefacts. But others have suggested that when organisation and marketing literatures have engaged with service design this has excluded design theory (Kimbell, 2011). It remains a debated question in the literature whether service design is conceptually part of "design," a new sui generis discipline or a new synthesis of "design" and cognate approaches to services.

Lucy Kimbell, for example, is concerned to go back to basics for service design's specific contribution. Although making links to social science and economics to embed design, especially service design, more clearly and centrally in economics and innovation, she insists that physical objects - the visual images or objects made and used- are central to design and that cognitive models have lost sight of this fundamental:

"The concept "design thinking" with its suggestion of cognitive styles neglects to account for the artefacts without which design practice cannot proceed and which constitutes design" (Kimbell 2009). Instead she suggests that progress in research can be made through a "practice theoretic" approach, with two elements design as practice and designs in practice.

A related direction for developing research and its applications, also promulgated by Lucy Kimbell, is "designing for service" - a constructivist approach - rather than designing services (Kimbell, 2011). Here the traditional - and, in her view, defining skills of designers - come back into play using visual media and artefacts as constructive elements in the design process and as touch-points for service users.

“An understanding of service that does not rest on the distinction between goods and services from industrial manufacturing, but rather sees service as the fundamental basis of exchanges of value.” (Kimbell, 2011). This perspective, taken forward as a research theme might engage with the "service dominant logic" school of thought on service marketing and innovation.

6. An overview of service design in academia

Where is service design happening?

Service design is taught and researched across the world, but there are some regions where it is more established than others. Northern Europe, particularly Sweden (University of Malmo, University of Linkoping), Norway (The Oslo School of Architecture and Design), Finland (Aalto University) and Denmark (Aalborg University), is one such region, where service design is fairly established, both in academia and in practice. More recently the UK has become an area where service design is expanding. One academic described the UK as a 'hub' for service design currently and that it is attracting service designers and those with skills and interest in service design, because of new research in academia at institutions such as Imagination, Lancaster and Northumbria School of Design, and innovative design projects at organisations such the Young Foundation and the Innovation Unit.

Other 'pockets' where service design is taught and researched include Milan, Italy (Politecnico di Milano, DOMUS Academy), the US (Parsons New School for Design, NY and Savannah College of Art and Design, Georgia) and Australia (Swinburne University).

As is often the case with academic research, a relatively small pool of academics is advancing the study of service design, moving from institution to institution. For example, Lara Penin, previous PhD student in service design of Ezio Manzini at Politecnico di Milano brought service design to Parsons New School for Design and in the same way Daniela Sangiorgi, another of Politecnico Di Milano's PhD students took service design to Imagination Lancaster.

Some example projects of academic research

Not all institutions have an academic research programme, and some are more focused on teaching. In the UK, the main institution where new research is taking place is ImaginationLancaster, based at Lancaster University, and the work of Daniela Sangiorgi and her colleagues, on the foundational research into service design as a discipline. The School of Design in Northumbria and Dundee University are also conducting research into service design, undertaking collaborative projects with organisations to help design their services, rather than research into the fundamentals of service design. Northumbria ran one of the first Knowledge Transfer Partnerships in service design with Age UK Newcastle, to help improve Age UK Newcastle's services and leave a legacy of service design principles within the organisation. It used user-led research to do this and has established new working practices for Age UK staff.

What are the main themes within service design research?

The pattern for research into service design appears to be academics co-working and/or examining practice. Few institutions are studying the concept of service design, with the exception of ImaginationLancaster who are examining service design as discipline. Others are studying the methods of service design, for example Koln is researching the 'language' of service design and the tools used in service design, as is Linkoping University.

As can be seen from the table in Appendix 3 a large number of projects in academia are related to public services, in particular health and social care. In Europe, where the aging population is a major social challenge, some projects are around the design of services in social care, to help tackle the problem of increased demand for services for an older population. One interviewee from Denmark, reported that service design projects have happened as a consequence of the public sector struggling to cope with the demands of the elderly. Healthcare

is another sector where academic service designers have conducted research, particularly in the UK, where Imagination Lancaster and Dundee University are working with the NHS on service design projects.

Innovation is another topic which key service design institutions are focused on. However they are not researching the links between service design and service innovation, but more looking at how service design can support social innovation. DESIS is a large project focusing on social innovation, and using service design within this. DESIS is an international network of practitioners developing projects on design, sustainability, and social innovation, with the aim of addressing social challenges. DESIS is again focusing on researching service design in practice, working with communities to address their social issues. One such example is Amplifying Communities, a case of which is given below. For a detailed list of institutions and their service design activities see Appendix 3.

Amplifying Creative Communities: Amplify Manhattan
DESIS

Aim
To assess how social innovation can make a different in the communities of North Brooklyn, and help residents to come up with solutions to social challenges which affect them.

Action
In 2011 design students visited the North Brooklyn neighbourhoods of Williamsburg and Greenpoint to interview community organizations and leaders involved in many different forms of urban activism towards sustainability. The interviews did not follow a script but rather were open-ended conversations about issues such as transportation, water rights, sustainable food and emergent models of working and living.

Results
Following the interviews the team determined four main themes, or the areas where creative citizens and organisations are collaborating to invent innovative solutions to overcome problems in their neighbourhood. The Amplify team used these themes as the basis to create an exhibition and produced four short films. A series of workshops consequently happened, bringing together local residents to discuss how to tackle local problems.

Source: Informed by interviews: http://amplifyingcreativecommunities.net/

Size and scale of research projects

The research projects, apart from DESIS tend to be fairly small and intensive, for example working with one department in the NHS, or one branch of an organisation, e.g. Northumbria School for Design working with the Newcastle branch of Age Concern was a PhD student project. One interviewee reported that the small scale of service design projects in practice is what is hindering its development, and this is reflected in the size of research projects in academic institutions also. A number of commentators expressed frustration that service design departments were not working on large scale projects with large corporates.

7. An overview of service design in practice

Where is service design being professionally practised?

As part of this study it was not our intention to 'size' the service design industry. However, in developing the sample to be consulted on the project we logged the agencies we came across. For more detail see Appendix 4 which provides a list of 13 agencies inside the UK (predominantly in London) and three outside of London.

Some interviewees gave estimates of the size and scale of the industry in their locality. In Denmark it was thought that there were around 15 to 16 service design agencies, and a similar number in both Norway and Sweden. Although for the UK and Northern Europe both academia and practice has a strong presence it is not always the case that professional practice occurs where research and teaching take place. Milan Universities are known for service design, but interviewees from these universities reported that their graduates moved overseas to work in the service design profession. It was felt that growth in the service design profession was a result of both the need for new ways to solve social challenges, and the acceptance of service design by organisations, in particular by the public sector.

Service design in practice in the UK appears to have primarily started in public sector organisations. Likewise in Denmark, where an organisation called Mindlab uses government funding to improve public services.

Many interviewees did state that service design has been happening for a while, and is not necessarily labelled as such. For example, in the US customer service has always been a focus: ensuring that service meets the customer's needs.

What do the agencies deliver?

Many design organisations deliver service design as part of a suite of design offers but there are few organisations for whom service design is their sole business. Organisations solely delivering service design in the UK include Engine, Snook, Service Junkie and nonon. These organisations vary greatly in size, nonon is essentially one person whereas Engine has over 20 employees. Their client base is fairly mixed. Snook work with public sector clients; their tagline is 'We are the Scottish service designers making social change happen,' clearly demonstrating where their interests lie. Service Junkie's clients are also public sector and charities. Engine and nonon client base is more mixed. Organisations solely deliver to the public sector, for example Uscreates, ThinkPublic and Participle all share the same aim: to improve public services. These organisations do not describe themselves as service design consultancies, but rather as 'social change' or 'social design' agencies.

Service design in-house

Service design has become embedded within some non-design private sector organisations. Eon is an example where they have taken service design in-house. They previously used a service design agency but after a number of years they have built up a service design team of ten within the organisation, who are used to improve customer services for the organisation. The in-house team differ from design agencies in that their 'designers' are not trained designers or trained service designers but come from backgrounds such as customer services or marketing. The example of Eon demonstrates that there are blurred boundaries between service design and other disciplines such as marketing. It also raises the question of what a 'service designer' is, when individuals who do not come from a design background or have training in this area are practising service design.

Service design clients

The list of service design clients is long and varied. It is clear there is a strong focus on public sector clients for many organisations. Within the public sector, healthcare, particularly the NHS in England is a large client. Local authorities are also a key client for service design agencies, mainly supporting services for vulnerable groups in a local authority setting such as the elderly, young people and children's services.

Private sector clients vary, but they tend to be large multi-national organisations rather than SMEs. The more common examples are telecommunications, financial and energy companies. The larger, more established design agencies (such as Engine and Livework) tend to work for the larger, commercial agencies.

Types of projects

Although not all agencies describe themselves as service design agencies, their projects use methods associated with service design. These include:

- A user-centred approach
- Ethnographic and qualitative research
- Prototyping
- Customer journey mapping.

Interviewees and survey respondents were asked to provide examples of where service design has been used effectively. The case study examples given appear to be of small, intensive projects, working with a small number of service users. The issue of developing service design in practice seems similar to that in academia: the size of projects is hindering its progress into the 'mainstream'. For example Futuregov created 'Patchwork', through using service design, a method of connecting the different services which are supporting a child. This was developed with one local authority, and is being introduced in another, but to have a larger impact it would need to be introduced nationally, and in more than one department in the local authority. A number of interviewees reported that until service design works in larger areas, e.g. on national projects, rather than regional it will struggle to develop further. (More case studies/examples are discussed later in the report.)

8. Research Findings

The research has drawn out a series of reflections in key areas, which are represented in the interview and survey data, and corroborate with the literature review. They are in the following areas:

1. Definition of service design
2. Service design is multi-disciplinary
3. Service design profession
4. Impact, adding value, case studies
5. Teaching service design
6. Demand
7. Collaboration
8. Who else is involved?

The interview findings and survey results follow these themes and have been set out in this order in the report. The key reflections provide answers to what this scoping study was seeking to address, as described in the introduction, and it is based on these, and discussions with our sponsors, that we have formulated our reasoning behind recommendations for a future research call.

8.1 Definition of service design

Defining service design

The majority of interviewees did not necessarily believe that a formal definition for service design was required. However despite this, they did consider that service design needed a label and some way for others to understand it's meaning in order to 'sell' the concept. In academia the opinion is that it is required to enable the field to access funding streams. In industry, the reasons are similar, service design needs a label, in order for it to be become a concept that businesses can understand, see value in and invest in.

Some hold the view that service design is the name for this discipline now, but that in ten years' time this may change to a new name or term of reference. The problem that arises from this may have changed or morphed into something else, speaking to the fact that it currently has blurred boundaries.

Some interviewees felt service design was merely a way of describing a body of methods that could be used, i.e. a process. From the interviews and desk research it appears as though the differentiator between service design and other areas of design as a discipline uses specific tools and methods. This was a particular concern for some academics, who felt that more work is needed on the theory of design, in order to provide a base for teaching and further study on the impact of service design.

Those in professional practice, either on client or agency side, were least concerned about talking about service design. They are much more inclined to talk about what they use a service design approach to achieve, such as innovation or customer satisfaction.

'We don't use service design terminology … it's daunting for people, they don't understand what it is, it's more about tools and techniques, for example co-creation is a stronger term.' (Practitioner, client side)

Our survey asked respondents a question around defining service design. A large proportion of respondents defined service design as an interdisciplinary or multi-disciplinary field (64%). This opinion did not differ between service design academics and practitioners. Very few considered service design to be a self-contained discipline and practice.

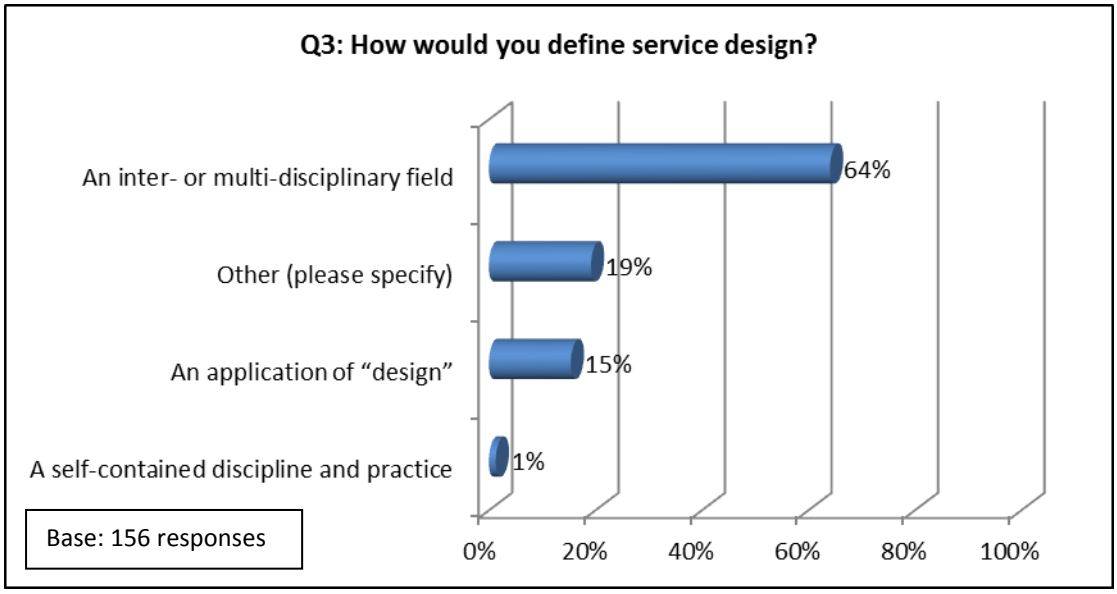
The 'other' responses to this question fell into two categories: those that felt service design was both an application of design and a multi-disciplinary field:

"It's an application of design within an interdisciplinary context" (Academic active in the field of service design)

And those that felt it could not yet be defined because it was still emerging and too early to say.

"It is very difficult to say as the definition of service design is in flux." (Academic active in field of design but not service design)

Figure 3: Definition of service design



Interviewees were asked whether they saw service design as an application of design or a unique discipline. This question did not provide straight-forward answers, and the response from many interviewees was that 'it is a bit of both.'

One academic described it as a 'difference by degree, not of kind', saying it cannot be separated from design as that is where it has its roots, however some interviewees reported that is has moved beyond design as it overlaps into other disciplines. It is felt by some that it should *not 'live in one place, as it already partially exists in a lot of places.'* This view of service design as an interdisciplinary approach is consistent and was echoed by those in in house roles considered to 'cut across many functional disciplines.'

For business this is not necessarily an issue, as long as practitioners can describe service design to their client, and in a way that they perceive value in it. However, some academics report they have faced problems seeking funds for service design research because it is not its own unique discipline.

It was acknowledged that, to varying degrees across the people that we interviewed, the theoretical base for the discipline is diffuse and rather confused. These rather tepid findings highlight the dilemma: that service design is a concept that with very blurred and confused edges, has most coherence when defined by the methods it uses, and fully understood as a multi-disciplinary pursuit.

8.2 Service design is multi-disciplinary

The view from some academics is that service design is a discipline in 'development'; in both academic and teaching terms. There does seem to be an increase in service design teaching, with post-graduate courses now solely available in service design. For example the Royal College of Art in Glasgow runs an MA in service design which started in September 2012, and the London College of Communications changed the name of its MDes from Innovation and Creativity to Service Design Innovation in 2012 also, as a result of a stronger focus on service design in its teaching (For more detail on teaching service design see page 42.

Interviewees stated that service design includes features from disciplines outside of design, in particular management, marketing and computer science. It was suggested that in Scandinavia there is a particular link to computer science. Computer Supported Cooperative Work (CSCW) was reported as being an area of study which shares methods with service design.

From the combined findings of the interviews the following disciplines and sub-topics were considered to share methods and concepts with service design:

Computer Science	Management	Marketing
Computer Supported Cooperative Work	Operations management	Services marketing
Service Sciences	Services management	

Other disciplines where service design features as part of a course, for example a course module, include interaction design, information design, service systems design and business design.

Some academics support the idea that business skills need to integrate with design skills, but understand this can be difficult to achieve. This links back to the concern that service design, being multi-disciplinary needs to draw on existing disciplines such as management theory; the issue is this appears difficult to do. One interviewee reported that she had tried to integrate business with design whilst working within a business school for ten years, but because of differing aims, budgets and resources, never quite achieved it. It would seem the interest is there but the action and know-how of how to bring disciplines together is not.

*'In academia there are no institutional rewards for doing work outside your discipline… somehow we need to trigger some collaboration to get to the next stage.' (*Academic, specialist in service design)

The case study below describes the challenges faced when two universities brought design and social science together:

LSE and London College of Communication: Knowledge Exchange: 'Visual Rhetoric'

Background

Visual Rhetoric is a partnership between social scientists at LSE and design students at London College of Communication. The main objective of this project is to make visualisation an integral part of LSE research projects by linking up institutionally with the competences developed at LCC, where highly creative and competent visualisation and visual research are the main purposes of a year-long training culminating in a design project involving information graphic, animation or documentary filming. The LSE/LCC initiative will bring creative design competence into the social research process on an annual basis.

Action

The students have a social science mentor and a design mentor, and are expected to work together throughout the year. The main objective of this project is to make visualisation an integral part of LSE research projects by linking up institutionally with the competences developed at LCC.

Results

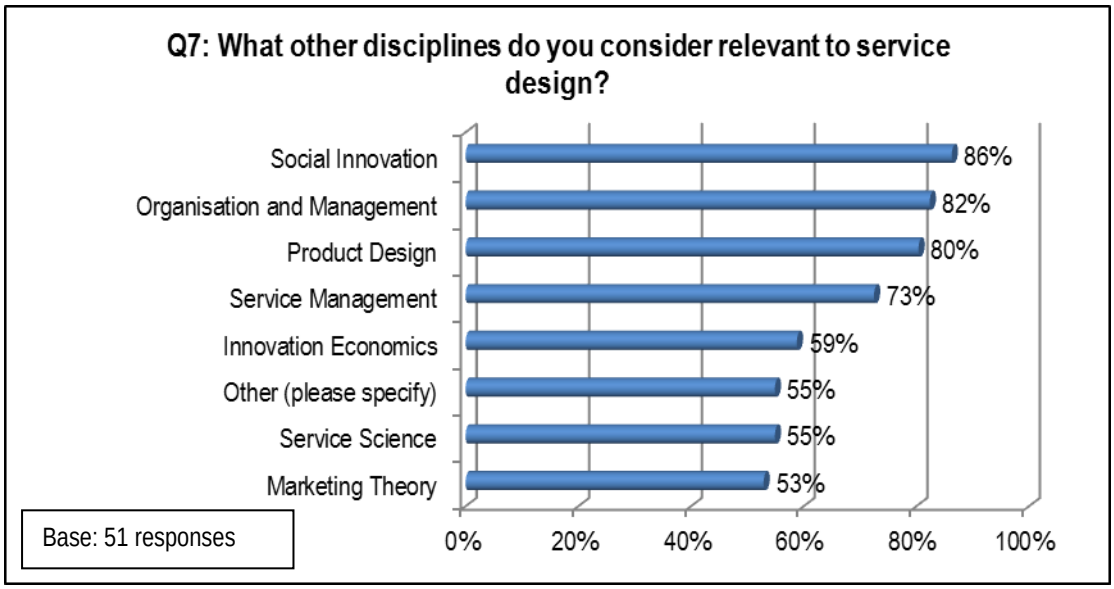
The partnership has been running since 2009, and is achieving its' aim of bringing research and arts together. It recently held an exhibition of this year's projects, and has maintained its funding to continue. However it has come across a number of challenges in bringing together two different disciplines:

- Top down buy-in is important and difficult to achieve. Senior management from both sides seem to be very territorial and are worried about protecting their identity, brand, revenue streams etc.
- The balance of the relationship between social scientists and designers is hard to achieve – the designers feel as though the social scientists feel like they are a client of the designers, rather than it being an equal partnership
- It can be difficult to access resources when you don't 'belong' to one department. The structure of funding means it's unclear where resources for a multi-disciplinary course comes from
- The current curriculum structure hinders future progress – *"we want to create an institutional model that provides a dedicated constant stream of designers and under the current curriculum structure we are not able to do that"*

Source: Interview with academic running this programme and 'Visual Rhetoric' bid document

Our survey asked respondents which disciplines they felt service design was relevant to:

Figure 4: Disciplines considered relevant to service design



As can be seen from the chart social innovation was the most popular answer, followed by organisation and management and product design.

The 'other' responses to the above question fell into the following categories, with other design disciplines and social science being the most popular responses amongst them:

Other disciplines relevant to service design ('other' survey responses)	Count (out of 28 responses, many who listed more than one discipline)
Other design discipline	15
Social science	11
Computer Science	4
Management	4
Arts	2
Communications	2
Customer services	1
Education	1
Business	1

Social innovation occurred as a theme in other areas of the survey, with almost 30 per cent of respondent's mentioning case studies in social innovation.

The survey findings demonstrate that service design is seen to be relevant to a number of other disciplines. However, our desk research and interview findings suggest that more needs to be done to use information and material from these disciplines. One interviewee described service design as 'shallow' because it fails to do this.

"Service design [teaching] is shallow because it doesn't look outwards towards other sectors and disciplines with which it has shared ideas" (Academic)

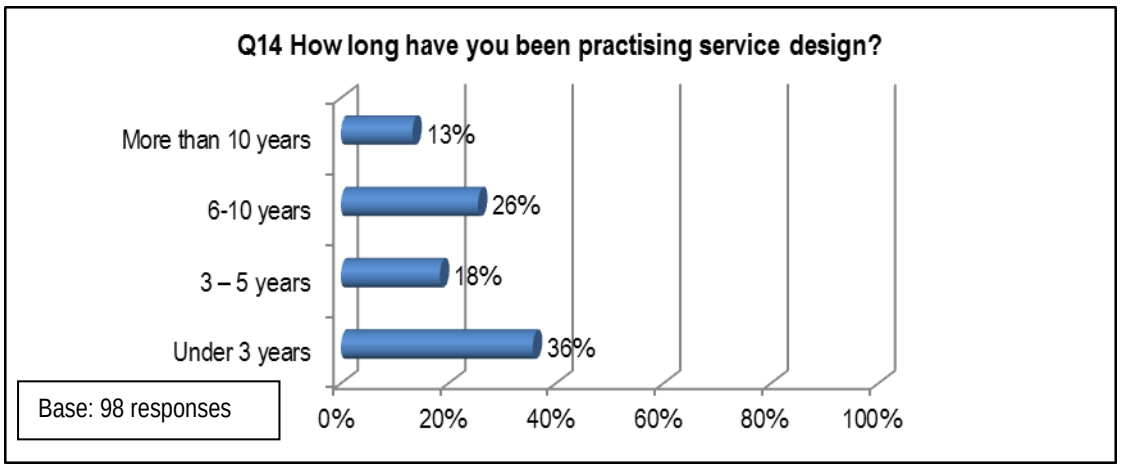
The challenge is how to encourage service designers and researchers and experts in the other disciplines which are relevant to service design to work together. As the LSE and LCC case study shows this needs careful management and planning to overcome challenges such as gaining senior buy-in and achieving an equal balance between each discipline.

'For service design to add value as a discipline it needs to work with other disciplines … it's not a stand alone thing.' (Service design practitioner)

8.3 Service design profession

The general consensus from the desk research and interview findings is that service design in professional practice is fairly new.

Figure 5: Respondent length of time practising service design



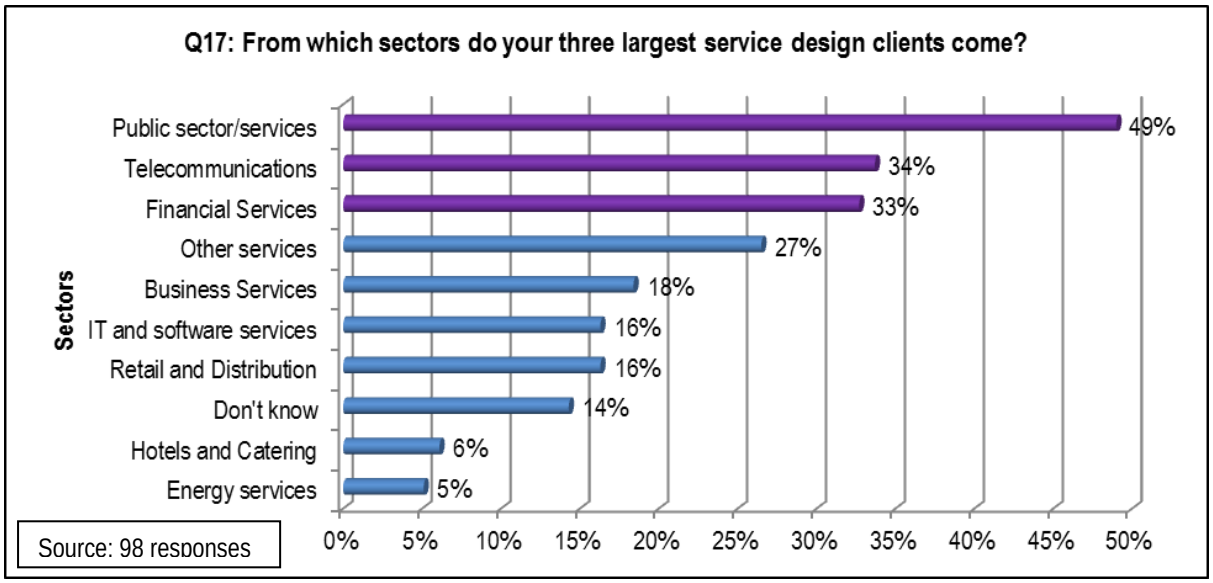
Just over half of respondents (54 per cent) to our survey have been practising service design for five years or less, with only 13 per cent practising service design for more than 10 years.

Perhaps reflecting the fact that professional practice is a young field, interviewees reported that the spread of activity is very informal and unsurprisingly follows the individuals involved in the field.

"The community is spread by word of mouth; someone who's doing something interesting knows someone else in service design and word spreads" (Academic, specialist in service design)

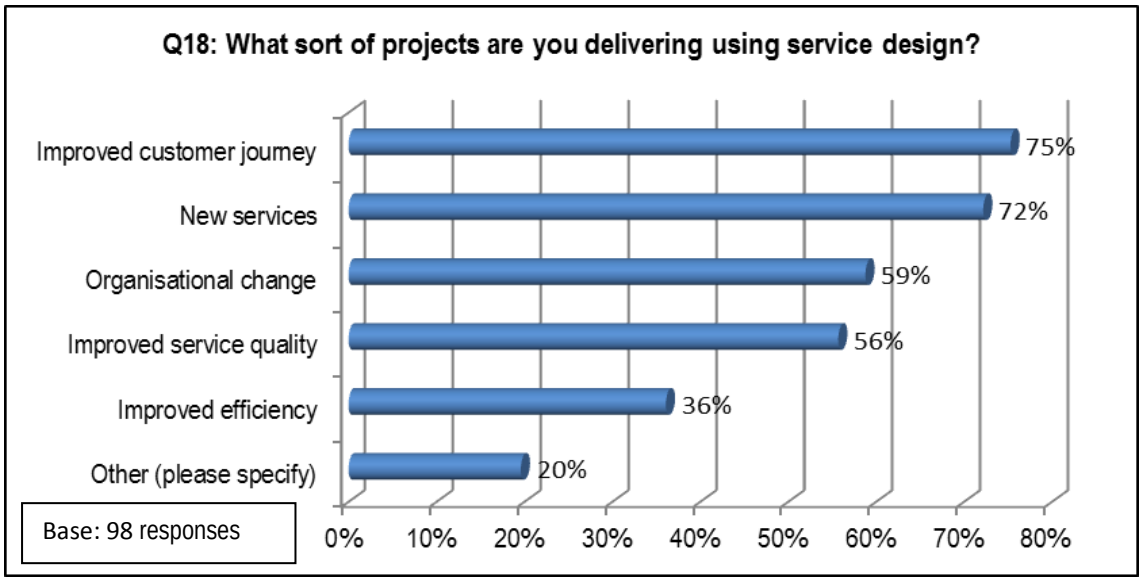
The informal nature of the service design community, and its youth means there are few formal access points to create and undertake collaborative projects. In the professional practice part of the survey respondents were asked to name their three largest service design clients. The top three in this order were public sector services, telecommunications and financial services.

Figure 6: Service design client sectors



The survey also asked the sorts of projects that agencies are delivering using service design, and the two most popular answers were 'improved customer journey' and 'new services', highlighting the user/customer focus of service design.

Figure 7: Service design sorts of project



Improved efficiency and improved service quality are areas where service design could have an economic impact, but currently it seems the work of service designers is not focused on these areas.

The 'other' responses fell into the following categories:

- Academic – developing theory
- Collaborative research – bringing different disciplines together in service design
- Customer experience
- Impact – measuring impact and evaluation
- Industry – reviewing practice

- Innovation- how service design helps innovation.

The current picture of service design in professional practice is that of a small, developing community, with a focus on the public sector. If the discipline is to be taken up by a wider market, the sector needs agencies who can apply design based solutions in any type of market or context, which at the moment appear to be lacking.

8.4 Impact and adding value

When asked about measuring impact, and the importance of measuring impact, interviewees generally considered this difficult to answer. It was acknowledged and appreciated that businesses would want to know what impact service design could have, but for many there is concern about how impact can be measured. One in-house practitioner described the problem:

'Most non-service design projects are fairly discrete, you would change one thing about the business, and then evaluate the impact this one change made. With service design you might make six to seven small changes across the whole customer journey over a long period of time, so it's difficult to disaggregate what made the difference and therefore evaluate the impact.' (Practitioner, client side)

For some the answer has been to use qualitative research to assess the impact. This has seemed to work well where service design has been used for social change projects, but business is considered to require more quantifiable evidence.

'Service design can be seen as a bit fluffy … it's colouring in rather than something serious.' (Practitioner, client side)

'We have to generate some impact data ... if you look at lean manufacturing it is very measurable and clients can therefore see value in it … on service design nobody has cracked the impact material yet.' (Service design practitioner)

Some examples were provided that included some quantification. One interviewee gave an example of where service design was used to improve HR services to staff in an office environment. The success measurement used was the percentage of staff calling in sick to work. Following the change to services the number of staff calling in sick reduced by 20 per cent. Another example provided by an interviewee was improving customer services in an energy company and measuring the number of customer complaints to judge the impact of the change. As the number of complaints decreased service design was seen to have a positive impact. The Eon case study given below provides an example of measuring service design against a benchmark.

Both examples given use a chosen measurement, and in both of these cases there was a defined problem to start with. This is another reason why it is thought to be hard to measure service design: there is often no defined problem to begin with. But when new ideas need to be developed and used – this needs innovation. The benchmark for this would be market success and the role of the service design project in that bigger picture.

Eon
Measuring impact: Changing smart meters for customers

Background
Eon started using service design as a client of Engine's but now have their own team of 10 service designers, and a Head of Service Design. They started to use service design as a way of improving their telecommunications process and have progressed to using it for every part of the customer experience.

Action
The team are responsible for the customer experience. They design the experience at every level – face to face, online, smartphone and contact centre. One example of where service design at was used was with changing the customer engagement around the smart metering process as smart meters need to be replaced every decade (i.e. someone knocks on your door, hopes you're in and changes your meter). Eon created a customer journey to help ensure that customers were in and prepared for this to happen, meaning Eon could do their job. They created a journey using email and text communications to remind customers that a technician would visit and when.

Result
Eon used the number of smart meters changed, i.e. jobs completed as the success measure. The number of jobs completed (the success measure) increased by two thirds following this service design intervention.

Research which measures the impact of service design, and provides evidence of its value was an area of interest for many respondents, unsurprisingly more practitioners than academics appeared to see this as important for future research. A number of suggestions were made re:

1. Developing a measurement framework for service design, and;
2. Producing best practice examples and case studies.

What is clear from all of our review is that little research on measuring service design is occurring currently. Our survey asked for details of case studies on service design which is currently happening and to categorise these case studies. As the table below shows, no case studies were provided on economic impact analysis or social impact analysis.

Table 3: Q10: What is the category of the project described?

Basic - the nature of service design	13%
Identify best practices	23%
Economic impact analysis	0%
Social impact analysis	0%
Innovation related	29%

Other (please specify)	35%

Case studies

Respondents provided 44 examples of what they considered to be important case studies in service design. Thirty of the 44 examples were funded by the public sector, namely research councils, local authorities and the European Commission. The case studies were varied, including improving services for patients in healthcare, embedding design into organisations, both private and public sector, improving customer service for energy companies and hospitality and improving transport services. Where the case studies did vary was on the amount of funded awarded to each project. This ranged from nothing up to €10 million. Projects taking place in Northern Europe were appeared to be assigned the largest amounts of funding for substantial, long-term projects such as the CRISP programme in the Netherlands which aims to develop a knowledge infrastructure which consolidates the leadership position and stimulates the continuing growth of the Dutch Design Sector and Creative Industries. The projects with higher funding were large scale projects for the public sector. The smaller projects tended to be for private clients and local authorities, probably because they are shorter term projects, to create solutions to specific problems, rather than broader research.

Examples of publicly funded, privately funded, large scale funding and small scale funding are provided below:

Type	Funder	Amount of funding	Description
Public sector	EPSRC HACRIC Centre	£103,000	Design In Practice: flexibility and change for healthcare service providers.
Private sector	Thorn Transit Systems now Weston Cubik	£50,000	An Investigation of Revenue Collection System in Urban Mass Transit
Large scale funding	Research Council of Norway plus 4 private enterprises	€1.3 million	AT-ONE service innovation methods. The AT-ONE project will further develop the area of service-design together with Norwegian research- and teaching organisations and industry.
Small scale funding	Yorkshire Forward	£66,000	Margins within the City, a community project with the aim of finding and inspiring ways of creating a sustainable future for Leeds, with the active

			involvement of all its citizens.

The survey also asked for examples where organisations have improved their services as a result of service design. We received 111 examples of case studies where organisations improved their services as a result of service design. There were slightly more responses provided on how service design helped private organisations rather than public sector organisations (46 in comparison to 35).

Within examples given from the private sector, just over a quarter of examples explained how service design has improved services in the transport sector, such as Engine working with ZipCar to improve the user experience and wit Virgin Atlantic customers it improve the experience of booking flights and experiencing the airport. Other examples, in the main, came from financial, energy and telecommunications sectors. Examples from these sectors were around improving customer services and simplifying the customer journey, for example Fjord working with Citibank to transform digital banking for its users.

"Fjord worked with Citibank to help the bank transform its' digital banking services on the mobile. With Fjord's guidance Citibank took a service design-led — instead of technology-led — mobile approach to maximize the potential of the tablet and the new user behaviour it presents. While users demand clear and reliable personal finance tools, using a service design-led approach, Fjord was able to move the banking experience beyond the mere presentation of account information. The result is an innovative product that empowers users and genuinely helps them make smart financial decisions."

The examples from the public sector overwhelmingly regarded healthcare and tackling social challenges, with each accounting for approximately a third of responses. The remaining responses included hospitality, transport and product based services. The healthcare examples tackled a range of issues in health services from improving the processes of delivering food in hospitals to improving how people find their way around a hospital. Social challenges varied but were largely to do with improving services for vulnerable groups, such as the elderly, young people or the unemployed.

The examples which demonstrated this clearly were those which recorded how service design had improved an organisation's services, for example by saying they had better customer feedback after using service design methods, or that improve an organisation's efficiency. Examples such as this were few though, and where case studies did offer an explanation as to how service design had made a difference to the organisation, it was often in a broad sense, i.e. *'it improved the whole customer service'*. This lack of specific examples as to how service design improves organisations' services is in line with other research findings that suggest that the impact of service design is difficult to measure.

8.5 Teaching service design

There are a growing number of service design courses in the UK. Prospective service designers can currently study MAs in service design at Jordonstone College of Art and Design at Dundee University, Royal College of Art and London College of Communications. Jordanstone and the Royal College of Art both introduced their courses in 2012, with students starting in September 2012, so are both very new. The LCC course changed it name from previously MDes Innovation and Creativity to MDes Service Design Innovation to better reflect the content of the course.

A standardised approach

The need to create a standardised approach to teaching service design is seen as essential by some practitioners working in service design, particularly those looking to grow and employ service designers in the near future. One practitioner commented that he has noticed that graduates come through with a range of different skills and different views of what service design is, making it difficult of for him, as an employer, to know if they possess the knowledge his business requires.

The concern is that graduates are not entering the world of design practice with the same opinions of firstly, what service design is, and secondly the methods used to deliver service design. Some interviewees believe this is due to a lack of research being done into service design at these institutions, meaning the service design courses do not go into 'enough depth'.

This aligns with the point of view of some academics interviewed who stated that more 'foundational' research is required to 'make sense of the discipline.' Daniela Sangiorgi's research, at ImaginationLancaster, focuses on this area, and other academics with a theoretical approach to service design share this view.

Integrating service design with other disciplines

Service design is taught as part of many design courses. There is a strong link with innovation, with some institutions combining the two in their teaching.[1] Some academics interviewed felt the cross-over with service innovation is to be expected. It was expressed that academia can 'fragment' things when it is not necessary, and that separating service design from service innovation is one such example.

A worry from practitioners is that business skills are not taught alongside service design skills. Suggestions from interviewees included making work experience compulsory on service design courses, and incorporating guest lecturers from design agencies and businesses which use service design into courses. There was also mention of the importance of teaching design students 'critical thinking' and that this is an important skill that many institutions fail to sufficiently emphasise.

[1] MA Integrated Service Design and Innovation, Carnegie Mellon, US and MBA Service Innovation and Design, Laurea University, Finland

8.6 Demand

The opinion expressed in many of the expert interviews is that the majority of service design demand arises from the public sector, with service design seen as core to developing a response to social challenges. The view is that public sector funding has driven this. For example the RED projects led by the Design Council, were set up in 2004 to tackle social and economic issues through design led innovation. As stated elsewhere in this report there are a core number of agencies which deliver service design work mainly for the public sector and use design to solve social problems, such as Livework, Uscreates and Thinkpublic.

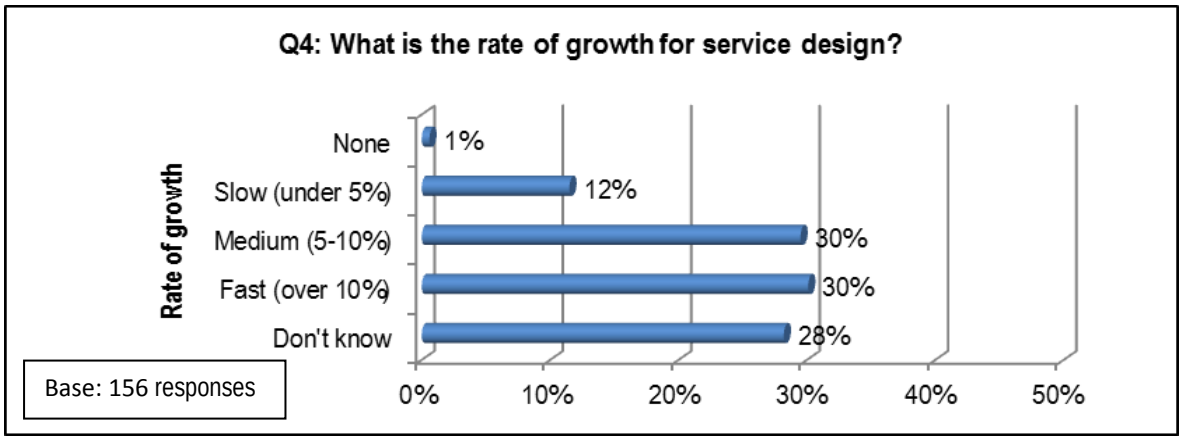
However, interviewees do believe that service design is now making some inroads into the private sector and there is general optimism, with the move to a service led economy that service design will continue to grow in this area.

"Design will inevitably follow the pattern of industry, manufacturing to services will mean a move from product design to service design, therefore businesses of all types will start to see a need for service design" (Academic, specialist in service innovation)

*'Service design will out last product and industrial design … it is a longer range concept.. a more sustainable concept.' (*Academic, specialist in service design)

The survey findings reflect this view that service design is growing:

Figure 8: Rate of growth in service design

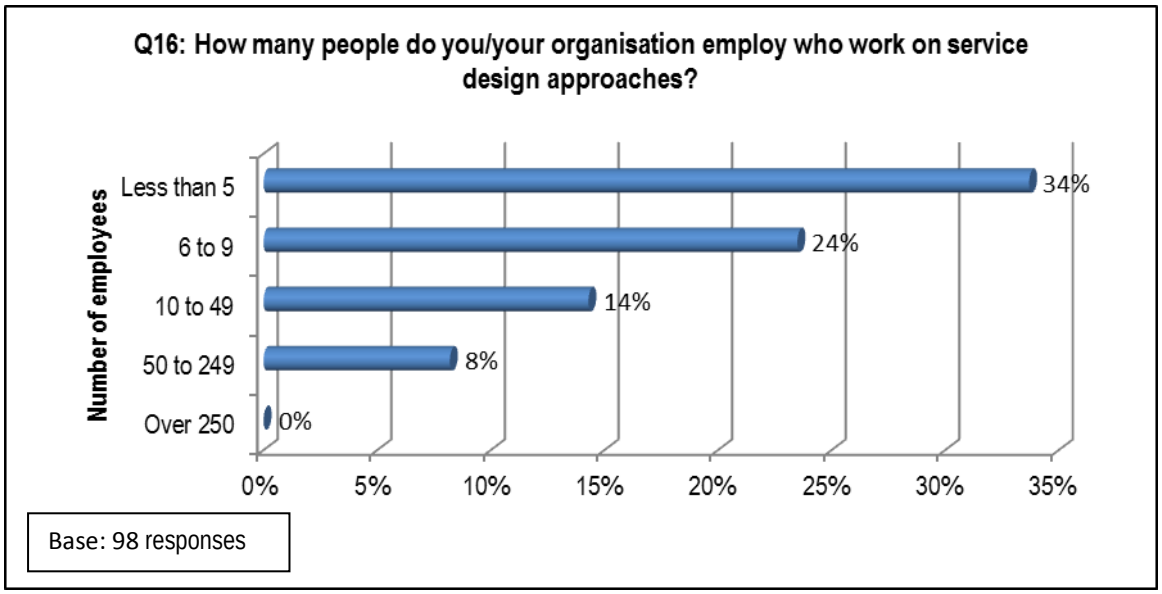


The survey findings would suggest that the growth rate for service design is medium to fast, and most positively only one per cent of respondents thought there was no growth at all.

However, a significant proportion of respondents (28 per cent) affirmed that they did not know what the rate of growth was for service design, suggesting it is not clear to all of those involved in the sector, whether there is demand for their work.

Some interviewees suggested that though the demand may be there, there are a number of issues which will in practice limit the growth of service design. The first is that is operates on such a small scale. The size of agencies is very small. The survey found that 72 per cent of service design agencies who responded to the survey employed less than ten people, meaning the majority of them are micro-businesses (see Figure 9). The question is how easily can such businesses grow and expand.

Figure 9: Number of people employed who work on service design approaches



The second is persuading businesses to take on service design, without impact evidence. Practitioners who we interviewed who are working in house, spoke of the pressure to justify their position within their organisation, by explaining how they are benefiting the organisation financially, which is not necessarily straight forward and suggests a potential value for research in developing an assessment tool-kit.

8.7 Collaboration

In our research we came across some examples of collaboration between service design practitioners and service design academics. For example Engine run an annual five day workshop with a Korean University, Snook regularly go and speak to Universities about service design, whilst other practitioners are involved in the delivery of student courses. However these examples appear to be the exception rather than the norm. The feedback from the interviews was that service design practitioners have 'no time' to properly collaborate with academics, and they work at a very different pace, with practitioners being concerned that academics would slow them down.

*'We need mechanisms to get academics who are developing the knowledge base with those who are working in the field.' (*Academic, specialist in service design)

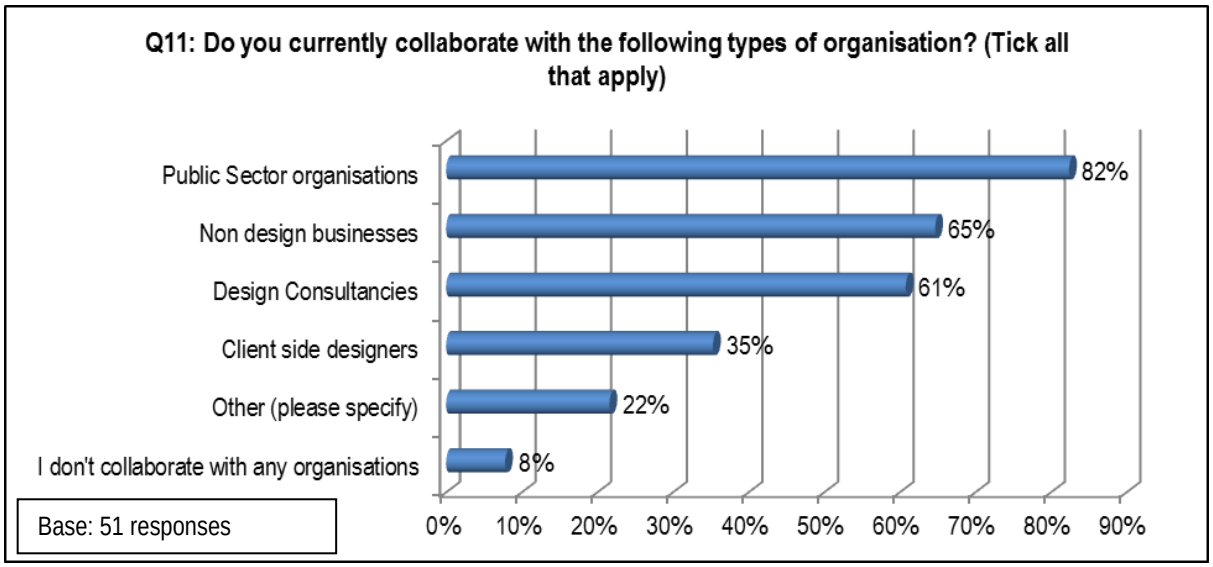
The survey responses in contrary suggest that service design academics do collaborate, with 86 per cent of respondents for this questions saying that they collaborate with researchers in other disciplines. Only a small percentage, nine per cent, of academic service designers said they do not engage with other researchers, however it is not necessarily easy to find academic output from these collaborations in journals etc.

The survey asked which disciplines service design researchers collaborate with and the answers fall into the following categories:

- Social sciences
- Design (Design Thinking, Interaction design, product design,
- Business and management
- Marketing
- Computer Science
- Healthcare.

As shown in Figure 10, 82 per cent of respondents within the academic section of the survey said they collaborate with public sector organisations. Design business and agencies fell below public sector and non-design agencies, with 61 per cent of academics saying they collaborate with design consultancies and 35 per cent collaborating with client side designers.

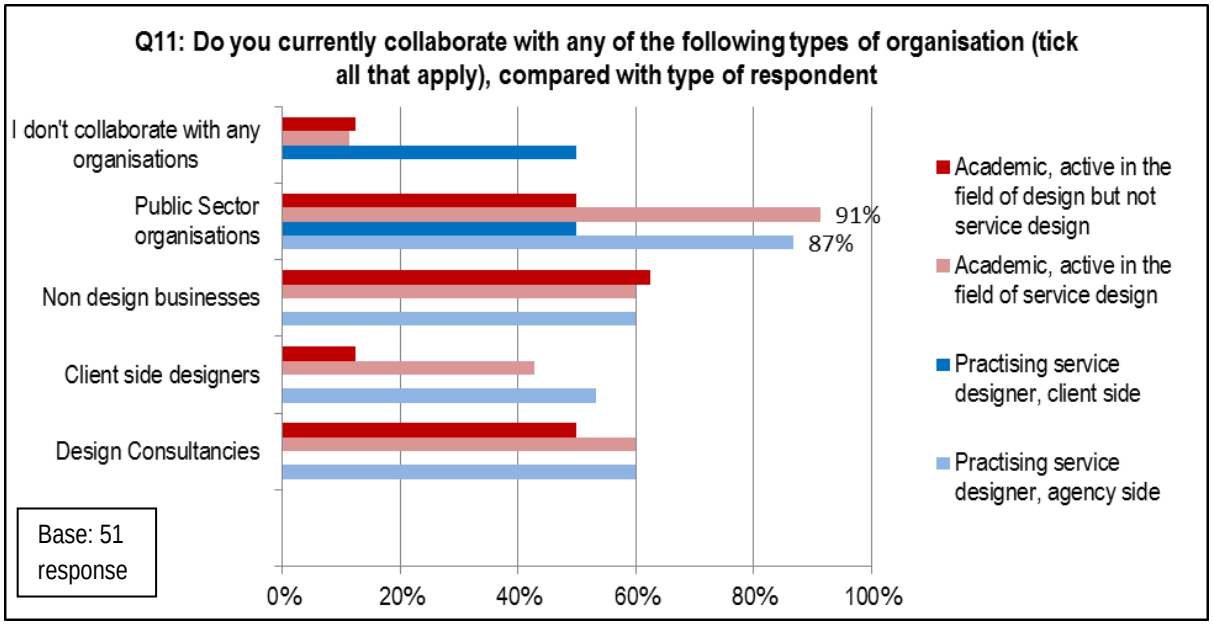
Figure 10: Collaboration with other organisations



The question in Figure 11 was posed to academics, and the results clearly demonstrate that public sector organisations are the main partners of service design academics, above design consultancies and client side designers.

Some practitioners did answer this question in the survey, and collaboration overall is more common amongst agency side practising service designers, than client side. For practising service designers, as with academics, the public sector appears to the most common organisation to collaborate with; 87 per cent of agency side practising service design respondents said they collaborate with the public sector.

Figure 11: Collaboration with other organisations compared to respondent type



The share of service design practitioners, particularly those working in house, who are collaborating with academics seems relatively low. There are reasons for this, as staff time is a constraint for agencies, while

opportunities to network and share ideas are limited. One in-house interviewee stated that he would 'love to share ideas with other service designers' but he just does not know how. The building of networks through research could assist with this.

We cannot tell from the survey what outputs have come from this collaborative activity, however as stated previously, there is only limited evidence of it in academic papers.

When those in professional were asked about their collaboration activity with academics, 46 per cent said that they do collaborate and mentioned partners from design schools, management schools and engineering.

In sum, we believe that 'collaboration' is happening in small pockets at a relatively low level, and that ensuring more of this type of activity and more visible output from this activity would require significant support and investment.

8.8 Who else is involved?

As part of this research there was interest in understanding the range of players involved with service design. Largely they fell into four main groupings.

Those working in innovation

Academics interviewed whose specialism is innovation discuss having an 'interest in service design', particularly its methods such as blueprinting and prototyping, as they believe they encourage innovation. The research included interviews with those working in social and service innovation. They expressed that they came across service design because of its methods, and how these can offer and create new, innovative ways of working. For example prototyping highlights problems and issues early on, and forces designers to think of ways around these issues, and user-led research enables customers to create solutions of their own.

Designing policy

Designing policy is a new field, and one that is more prominent in Northern Europe, particularly Denmark, where Mindlab and the Centre for Design Culture and Management are working in this field. Designing policy is far younger than service design, and currently not a lot is published in relation to it, but some aspects of service design can be seen within it. One interviewee provided a quote which actually comes from information design but which she reported applies to all services, including the design of policy:

*'To provide appropriate service at the right time, in the right place in the right form.' (*Academic, specialist in service design)

Public Sector

Design of public services is strongly linked to service design, even if it is not always called service design. For example one interviewee reported the Australian tax offices have used service design methods over the past 10 years to improve their service, but they have not called it service design. Thus there is a general interest from the public sector in service design.

Businesses

Interviewees from client facing organisations are using service design to 'stay ahead of the curve' and believe other businesses will follow. Our in-house service design practitioner interviewees informed us that their staff working on service design mainly came from marketing or customer service backgrounds: they are not trained designers. The interviewees we spoke to were fully aware of service design, being trained designers themselves or having previously worked with a service design agency. However, the fact that people are now working in service design who have no training in design does highlight how the phrase 'service design' is being used widely and perhaps in areas which do not constitute what perhaps an academic might consider to be service design.

9. A future research call

Funding topics

The survey asked for examples of what research ideas should receive future funding. The responses have been summarised in the table below:

Table 4: Q26 Please describe any research ideas that you think it would be good to achieve future funding for? (Please provide a clear description in no more than 2 to 3 sentences).

Topic	Description
Collaboration	Events Embedding service design within a non-design community/organisation Develop a program to understand the role of business in design
Impact	Development of quality systems/evaluation Focus on service design for B2B services or professional services (which are currently overlooked) Develop best practice case studies from service design in industry Conduct research into how effective service design can be across different business models and sectors Assistance in explaining what service design is and how it benefits business
Policy/Public sector	Using service design to develop effective and efficient business models for government Development of healthcare services and communication – an opportunity in this area due to the devolution of resource to the PCTs
Foundational research	A study of the practice of service design, an analysis of the methods used, comparing public and private sector use of service design A fundamental review of what 'services' ethos and needs are
Innovation	Supporting social innovation through service design practices across all sectors Research into how service design practice compares with regard to value, perceived value, innovation and ROI

These themes summarise the topics suggested in the survey and in the interviews and they are examined in more detail below.

Research theme: Collaboration

Projects which encourage collaboration were a common suggestion, particularly projects which combine design with business.

"Merging the bubble of academia with real practice/industry; perhaps developing a program to understand the role of business in design." (Survey response: 'other – designer of products and services)

One suggestion was to place a designer in a non-design setting, not in a practitioner/client relationship but have a designer embedded within an organisation. This is not a new concept and a good example of this taking place is in Cornwall City Council, where Dr. Andrea Sidmouk works as Chief Designer, supporting all areas of the Council's work. This is described in more detail in the case study below.

Building events and networks were also among the answers provided, to help bridge the gap between academic service design research, and service design in business.

Practitioners would like ways to meet academics to find out what is happening in service design as they feel cut off from the world of academic research. Creating networks which combine both could be a way of achieving this.

Shaped.By.Us, Cornwall City Council

Background
In 2009 Andrea Siodmok, previous Chief Design Officer at Design Council set up 'Designs of the Times' (Dott Cornwall), co-designing solutions to social challenges. Andrea is now 'Chief Designer' at Cornwall City Council, and runs Shaped.By.Us using funding from the national Creative Councils programme. Shaped.By.Us is an answer to finding 'radical new service configurations' in a time of reduced public services and cuts to spending.

Action
Shaped.By.Us has been created through a collaboration with the public, private and third sector, and helps address social and community challenges. Citizens, professionals and public service organisations co-develop and co-design new ideas. Using the website www.shapedbyus.org it is a simple process by which citizens can generate ideas, receive support (from experts and councillors, and toolkits on how to 'make ideas happen') and get a green light to further support and investment.

Results
Shop By Lay By is one example of how Shaped.By.Us improves and introduces new services. It is a scheme to help farmers sell their produce directly to the consumer, without having to sell via supermarkets. Portable buildings in roadside locations have been set up to stock everyday essentials, meeting the Council's aims around self-sufficiency and creating a strong brand for Cornish producers. Using service design, and having a trained designer within the Council has introduced a new perspective on public services, enabling citizens to make changes, rather than relying on the local council.

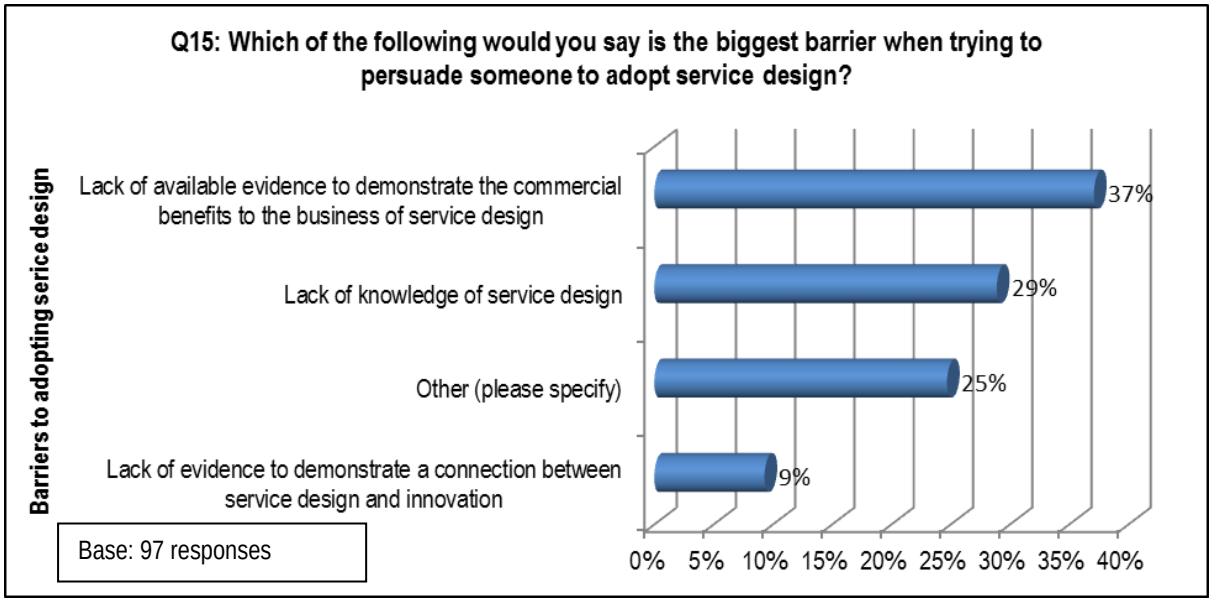
Practitioners would like a way to meet academics to find out what is happening in service design as they feel cut off from the world of academic research. Creating networks which combine both could be a way of achieving this.

It was also expressed by some interviewees that service designers need to learn from other disciplines where the concept of service design is used, such as operations management, marketing and computer science. It was thought that a conference which brought together all disciplines would be very beneficial to service designers.

Research theme: Impact

Approximately 10 per cent of respondents (7 out of 69 responses) thought that developing a collection of best practice case studies and building a body of evidence behind service design would be a good use of future funding. This relates to survey findings that suggest the biggest barrier service design agencies have to introducing service design to businesses is the fact that there is a lack of available evidence to demonstrate the commercial benefits to the business of service design, as shown in Figure12.

Figure 12: Barriers to adopting service design



It is clear that more evidence is needed on the impact service design has on businesses. The key area where more research was felt to be required is around economic impact. This applies to both public sector and private sector organisations. For the public sector, how can service design based innovation improve users' lives or reduce costs? How can public services become more efficient to save public money? For the private sector the question is how does service design improve the customer experience, lead to increased market share or reduce costs and increase profit? There were no interviewees that were aware of research on this topic but it was thought to be important by all.

Research theme: Policy/public sector

Though this was mentioned as a potential research theme by survey respondents, this is not an area which comes across as under-researched in service design. As the wider research shows, service design and the public sector are very closely linked, with 82 per cent of academic respondents to the survey stating that they collaborate with the public sector. It is notable also that the public sector is the largest single customer for service design agencies. The academic literature itself is not especially focussed on public sector issues, but is rather about the general principles of design in the services context, which includes but is not exclusive to, the public

sector. Much of the literature is marked by an interest in competitive advantage for firms, or has a strong customer experience dimension, which again is pertinent to the public sector. So while the application of service design in public services and the public sector is important, there seems to be substantial on-going activity.

Research theme: Foundational research

Research into the foundations and theory of service design is a topic which was mentioned by some academics in the interviews, and it was also mentioned in the survey, although only by a small number of respondents, as an area for future research funding.

And a couple of respondents still felt research into the definition of service design was required. However responses around foundational research were minimal and research around practice, impact and collaboration far outweighed this idea for future research funding.

Research theme: Innovation

There was agreement that there is a strong link between service design and innovation, and this is most apparent in social innovation. Within business, interviewees also conveyed that service design helped organisations innovate, although some academics were unclear how they did this. One academic described the links as 'murky and confusing':

'Service design seems to help innovation in the public and third sector but to me it's not yet clear how it helps innovation in other organisations' (Academic with specialism in social innovation)

Practitioners were more positive about how service design contributes to innovation. Practitioners stated that service design helped with seeing processes 'through a new perspective'. For example using a co-creative approach to gain the views of customers and spot new opportunities through this:

'Customers use things in a way you don't expect and this creates a different solution to the one originally being tested.' (Service design practitioner)

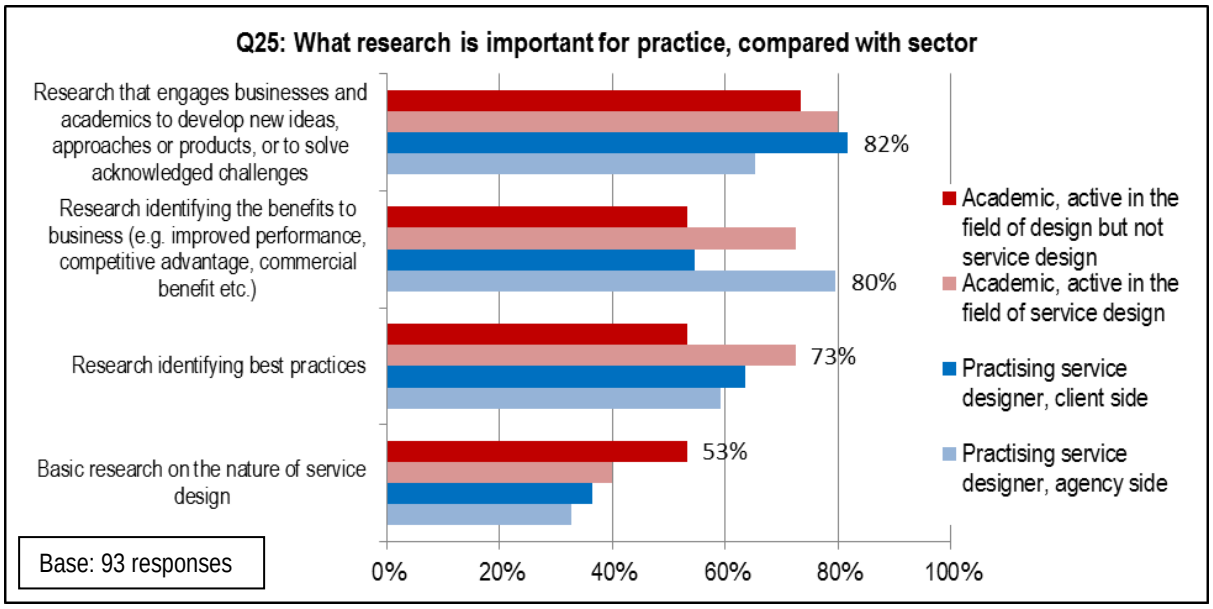
Prototyping was another method which practitioners felt encouraged innovation, as whilst testing the service, new and improved ways of delivering the service would come to light. Another aspect which could help innovation in an organisation was service designers considering the context for service development and delivery:

'It's a human centred approach which looks holistically at the understanding of the connections between products and services, and people's lives' (Service design practitioner)

Academics and practitioners alike saw the deepening of the link between service design and business innovation as an area where future funding could help promote dialogue and research applications. The examples given by practitioners were all anecdotal, and there were no formal studies discussed on service design's role in innovation. A research project which sets out to provide evidence on this would help to answer this question. Both social innovation and service innovation were mentioned as possible areas of work, for example, 'how to support social innovation through service design practices across all sectors, particularly the public and third sectors,' and 'research into service innovations, coming from an individual or a local level'.

The survey demonstrates that those involved in the field of service design believe funding projects in the field of innovation would be beneficial. 'Research that engages businesses and academics to develop new ideas, approaches or products, or to solve acknowledged challenges' was the most common answer by respondents when asked 'What type of research is important for practice', as portrayed in Figure 13 below. The academic literature notes the share of services in the modern economy and the rather under-played role of design in economic models and policies on innovation; so rigorously derived theories and examples of service design have a potential for impact.

Figure 13: Research that is important for practice, compared to type of respondent



When considering what academics believe to be important compared with practitioners, according to the survey findings, there is not a great deal of difference. Academics were, unsurprisingly, more interested in research on the nature of service design and in identifying best practices. Interestingly academics active in the field of service design, and agency side service designers were interested in identifying the benefits to business, more than others.

The other responses to 'what research is important for practice' fell into the following categories:

- All research is important
- Best practice – building best practice examples
- Collaborative research
- Developing tools – building on the methods of service design
- Impact – and how to measure impact of service design.
- Innovation
- Research from a commercial perspective
- Research with users
- Tackling social challenges
- Teaching offer – assessing the service design teaching offer
- Theory – developing the service design theory further.

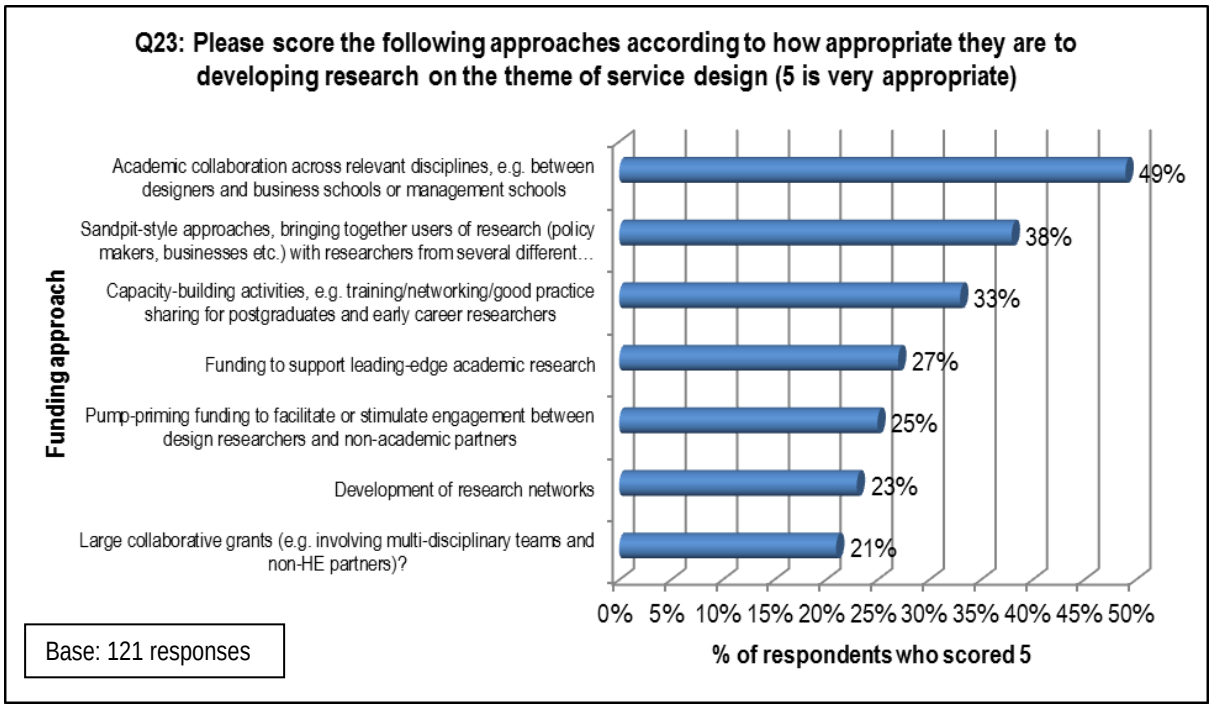
Again building best practice and research around innovation was considered to be important, as was measuring the impact of service design. In the 'other' responses it was suggested that measuring the impact could be done through carrying out more research from a commercial perspective, rather than an academic perspective and through conducting more research with the end-users – those who eventually benefit from service design.

Funding approaches

The survey asked respondent's views on what funding approaches would be appropriate to developing research on the theme of service design. The most popular response was 'Academic collaboration across relevant disciplines, e.g. between designers and business schools or management schools', with 49 per cent of responses favouring this approach.

Academic collaboration was a clear theme drawn out of the interviews, where some interviewees felt that as service design is seen as an inter-disciplinary subject, research should also be inter-disciplinary and should involve academics and researchers from other disciplines. In the interviews it was suggested service designers collaborate with management, marketing, innovation and computer science. The issue lies in how to encourage different disciplines to collaborate. The London School of Economics and the London College of Communications have attempted this, brining social science students together with designers. The case study on page 34 describes this process, the benefits and challenges.

Figure 14: Appropriate funding approaches



Sandpit style approaches were welcomed, with practitioners (in our survey) expressing keener interest in these than academics. There was a general sense that sandpit require careful management.

*'Sandpits are one of the greatest innovations to come out of the Research Council's ... but you need to be very careful on how you encourage design academics to work with other disciplines ... there could be a series of sandpits / collaborative events to work out a series of project.' (*Academic, specialist in service design)

Some academics expressed a preference in the interviews in working with organisations/people that they have an existing relationship to eliminate the risk of the project failing.

Smaller funding pots

Interestingly there is least interest in large collaborative grants. The impression given by the interviewees is that the larger pots of funding are difficult to navigate and apply for. The service design community is a small community and forming large enough consortiums for larger amounts of funding may be difficult. There is also to a degree a lack of confidence in applying for funding, possibly explaining the support for capacity building activities.

There was also interest from the interviewees expressed in more support for PhD funding:

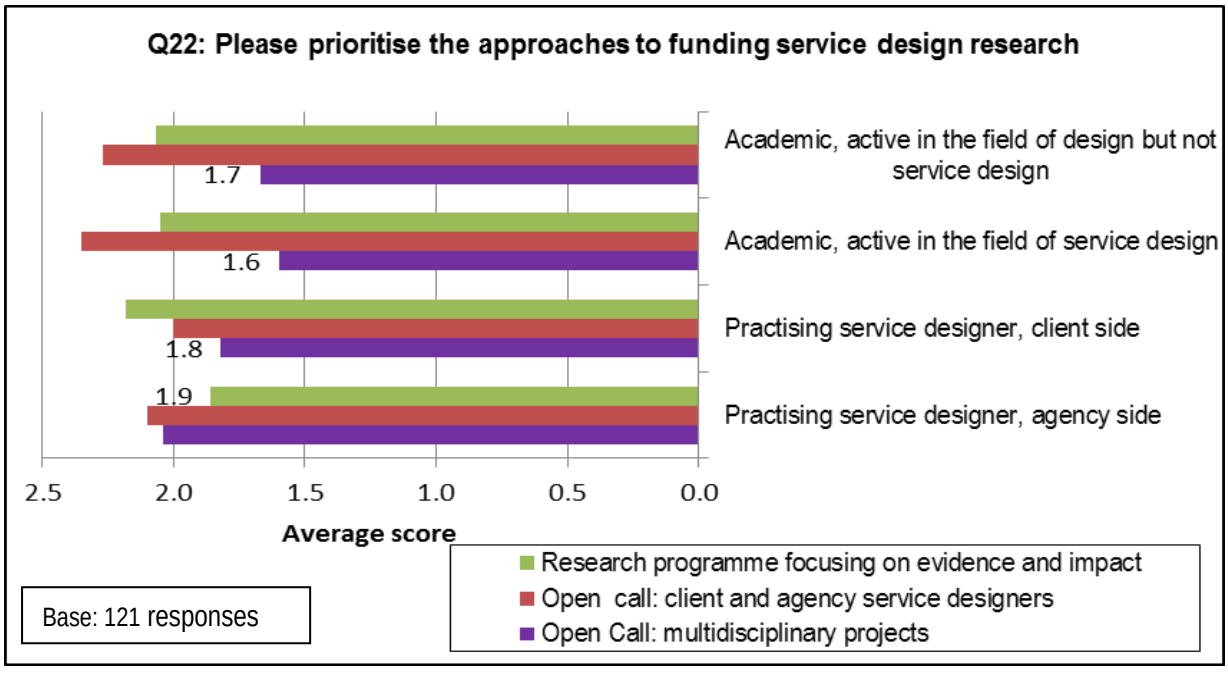
*'The Research Councils most recently have gone into block grant mode for PhD's, this denies a greater flexibility to set up studentships ... if the Research Council's want to have an impact they should develop a discrete call for part funded studentships with a focus on a particular area of practice, this would help to contribute to the knowledge base.' (*Academic, specialist in service design)

It is also worth noting that there was enthusiasm from interviewees that this project has cross council support. There was a desire to see this continue to enable some of the issues with the development of service design addressed e.g. involving a mix of disciplines, addressing measurement issues etc.

Potential options for a funding call

The survey asked respondents to order three potential funding calls from 1 (most preferable) to 3 (least preferable). The preferred option overall was an open call for multi-disciplinary projects with 41 per cent of respondents placing this as their top preference.

Figure 15: Preference for approaches to funding by respondent type (1 is most preferable to 3 least preferable)



As you can see from Figure 15, which took the average score by each respondent type, an open call for multi-disciplinary projects was the preferred option for academics and client side practitioners. However agency side practising service designers indicated a preference for a research programme which focuses on evidence and impact, perhaps reflecting the fact that they require evidence and impact in order to sell their work to clients.

Respondents were asked to recommend funding approaches and mechanisms which they considered appropriate to the field of service design. Fifty eight suggestions were made on the survey about possible funding approaches and mechanisms. Funding more conferences, events and networks was a popular choice, with respondents commenting that the creation of forums which include academics and practitioners would be preferable. Suggestions were also made with regard to holding more conferences and/or forums to promote service design to potential funders, such as corporate or government sponsors.

Funding approaches which would encourage measuring impact, such as the development of an evaluation framework, along with activities that test the tools and processes used in service design were also proposed. The idea of 'testing' service design was a common response, with respondents stating that they need to gather views from the 'end-user', and suggested holding workshops with users to decide funding approaches.

Aligned with the idea of measuring impact, some respondents wanted to see the funding being used to build up a 'catalogue' of best practice.

Many felt that a collaborative approach was key, with academics, practitioners and users working together and that approaches should encourage this. However, there were a few respondents who wanted to keep the funding within academia, and ensure that the funding approaches do not stray from academic research:

"I feel it is vital that design researchers (mainly academic) are at the centre of any initiative to promote service design. That is, design researchers MUST be the Principal Investigators of any programme of work."

This potentially highlights some difficulties in bringing together academia with practice, when considering funding approaches.

10. Recommendations

1. 'Service design' is a complex and new area of academic study and teaching. As a "discipline" it is not yet clearly defined by a body of academic literature and with rather frayed edges, it remains open to considerable interpretation. Given this, and after some considerable thought it would be our recommendation that a future call focus on the role of design in services innovation and specific services sectors rather than on 'service design' per se. The role of design in the services sector is a neglected area of research, and we believe offers a larger and more expansive territory for research.

2. Further to this it is clear that as a community of practice service design academics need opportunities to engage with larger more established businesses – final users in the design value chain- who may already use, or be interested in benefitting from service design practice – focusing on the services sector in the UK would help to facilitate more of this kind of engagement. It would also provide an opportunity to work with academics from other disciplines in an integrated way.

3. Two of the most commonly recurring themes in this report have been that of innovation and impact. Any future activity under the suggested umbrella would provide opportunity to cover these two themes. Many service design researchers perceive the relevance of their work to the innovation agenda and competiveness, given the dominance of services in the modern economy. There is a matching growth in the innovation studies and policy communities in understanding the drivers and effects of services innovation, though this discourse has hardly engaged with design research and practice. Given the UK's relative strengths in design, there appears scope for research to stimulate appropriate forms of connectivity between the two meta themes of "design" and "service innovation."

More specifically, it would seem appropriate that any future activity look at ways to link business school academics with design academics to cover these large issues and to consolidate "design in services" as part of the impact agenda.

4. In relation to mechanisms for funding, our research suggests that there is a desire for funding to support service design academics at all levels, at the most junior level through to the most senior, providing opportunities for PhD students, opportunities for mid-career researchers to move up, and support for those most senior in the field to be established as professors etc. However, there is limited appetite for large calls and some lack of confidence around design 'holding its own' when working with other more established disciplines. Given all of this it would seem that any future call would need to work hard to support links being made between academics across the disciplines, and therefore we'd suggest supporting networking and capacity building activities around the core theme of design in services.

However consideration might be given to an element of somewhat larger collaborative research projects as part of the networking activity, to contribute to easing the barriers noted above.