

Postgraduate Programme in Service Design: Towards India's Sustainable Economic Development

Shashank Mehta

National Institute of Design

Ahmedabad, India

shashank@nid.edu

Abstract

Worldwide, the service sector now plays a dominant role in the growth of economies. Services in India account for more than half of its GDP and is growing by 10% annually. Services offer lucrative employment opportunities and provide the much needed economic independence and self-respect in individuals engaged in the same. By providing employment at the local level, services help arrest migration to the cities. Design of services would thus be one of the key differentiators for India's progress towards sustainable, equitable, inclusive, societal, and economic developments.

Unlike products, services are intangible. Services normally emerge out of the interaction with the client/user. Therefore, design of services calls for multidisciplinary approach and variety of specialised inputs from different fields. A postgraduate programme in Service Design, the one anchored in the Indian context, would form a critical support to the country's large organised and unorganised service sector; it would refine, improve and align their services to the contemporary needs and demands of the users and that of the markets.

Key words

Services in India; Service Design; Design Education

Introduction

Most industrial economies of the world, including United States and the European Union, have gone through a major economic shift over the last few decades; the service sector now dominates these economies. Services now account for

82% of US output (GDP).¹ And it accounts for 72% and 71% of the GDP of the UK and France respectively.² Twenty million people in the UK work in service organisations, and it accounts for 85% of US employment.³ In Europe, 89% of SMEs operate in some form of service industry.⁴ Majority of the Fortune 500 companies are today service companies.⁵ Most of the new companies founded or jobs created in these economies, are in the service sector. More and more hybrid product-service companies are relying in a major way on services. The revenue mix at IBM has gone from 68% product/32% services in 1994 to 48% /52% in 2003, a 63% change in ten years.⁶

Product markets are saturated. Companies are struggling to compete solely on price. Today, the customer is the dominant reference point for strategy and innovation, and customers are complicated. They have individual needs, feelings, and expectations that cannot be standardised. No machine or computer can cope with these individual needs to offer a totally new dimension of value. Customer service is becoming a key differentiator for the companies today. In order to stand out from competitors, companies need to recognise themselves as service providers. Product companies are thus developing themselves into solution companies by adding services to accompany their products. Today's customers are expecting personalised services that can make their lives easier, enjoyable, and exciting; they are more informed and more demanding; they make little distinction between goods and services.

Service is understood as synonym of the customer need. It is

not a product that the customer requires, but the service—the essential function—that the product provides. Services can meet the user's needs directly by reducing/eliminating the need to introduce products or other tangible solutions. This shift from a reliance on products to services also helps encourage the process of dematerialization. The dematerialization of a product literally means less, or better yet, no material is used to deliver the same level of functionality to the user.⁷ "The average consumer power tool..." explains John Thackara in his book, *In the Bubble: Designing in a Complex World*, "... is used for ten minutes in its entire life—but it takes hundreds of times its own weight to manufacture such an object".⁸ A product-service system with shared tools could offer access to them when needed. Services encourage sharing, borrowing, collaboration and cooperation among its users. It can thereby facilitate and cater to communities' needs and alleviate the requirement of ownership for many products.

This important shift towards services is also discussed in the context of sustainable economic development. This is seen as a new opportunity to reduce the use of natural material. A shift from producing and consuming products, to producing and consuming services, it is argued, would help reduce material consumption and thereby reduce the use of natural materials. This will help create the much needed ecological restructuring of the society to shift the economy that is currently based on heavy process industries and intensive energy use, to an information-intensive and service-intensive society. The World Business Council for Sustainable Development's (WBCSD 1996) list of eco-efficiency measures includes the item "increase the service intensity of products and services", along with more traditional environmental measures.⁹ Speeding up this development is seen as a means to achieve a sustainable, dematerialised economy.

Services: An Emerging Economy

Worldwide, the service sector now plays a dominant role in

the growth of economies. Its overall share in the year 2009 was 64.2% in world GDP.¹⁰ This major sector is expected to be the main source of employment for the next decade or so. Speedy growth of this sector is also fuelled in many ways by the ubiquity of information technology (IT) and communication technology. They help quickly productize the new service idea. IT is the production department of the services era in much the same way factories and machines were for the goods era. And internet is the trucks and roads of this service era.¹¹ Importance of services to the economy will thus continue to grow. Service has been now recognized as the third sector beside agriculture and manufacturing. Service is thus the currency of this new economy.¹²

Services and India

For India and other thickly populated and developing countries, services offer lucrative employment opportunities. For majority of the people here, it becomes difficult to get a secure job that ensures them of a regular income. Therefore, people turn towards self-employment from a very early age. They find ingenious and innovative ways of earning their livelihood by utilising all the resources and skills at their disposal. It is in such a scenario that various kinds of services get developed around any need, locality, or industry. These services cover almost all kinds of human needs and requirements. One could find services engaged in the home delivery of milk, newspaper, and grocery items and also a totally different category of services involved in buying back used cartons, containers, used packages, and old newspapers from various residential areas. The auto rickshaws plying on the city roads double up as school rickshaws that take children from various localities to their respective schools. The housewives may be utilising their spare time in offering homemade food or repairing clothes. Many of these services are offered either by an individual or a group and they mostly remain at the informal or unorganised level.

India also has a large organised service sector. Transportation sector, especially the railway services, the

large healthcare sector, and government administration are some of the largest employers and the organised service sectors of the world. Combining both the organised and the unorganised service industries of the country, service sector in India touches majority of the Indian population, through either providing direct employment or as beneficiary of the services. This major sector contributes 55.2% share in the country's GDP and is growing by 10% annually, contributing to about a quarter of total employment.¹³ Indian economy is thus primarily a service-process oriented economy rather than material or product-oriented economy prevalent elsewhere.

Services offer the much needed economic independence and thereby self respect in the society. By utilising the skills and resources available with individual/s, services would help instill the much-needed sense of confidence amongst the individual/s. By providing employment at local level services would help arrest migration to the cities. Services are low on investment and encourage customised and localised solutions. Therefore, services would help distribute wealth to a large population, and develop an equitable and inclusive society. Services help encourage reusability and help in reducing production, consumption, and overall dematerialisation. Services focus upon improving interaction with the service provider and the user, thus encouraging further social interaction and community development.

Understanding Service

Over the last few years, as this once minor sector is expanding rapidly, the interests in understanding and designing services have increased substantially across the world, both at the academic as well as at the business level. However, these efforts are far from adequate. Our knowledge of service innovation is incomplete.¹⁴ The efforts so far were focused largely on product improvement, product design and development, and product innovations. In the goods era of the past, manufacturing being the main source of investment in research and development, the major focus

remained on optimisation and improvement of products and their processes of production, market research, and product design. This traditional “inside-out” approach focused on upgrading, refining / value addition of the existing product/s through addition of new features; whereas, this new domain calls for “outside-in” design—“user-led-design” approach, the one that can identify and understand the unmet customer needs and develop solutions around the same. ‘Most analyses of innovation tend to focus on products, not services. It is now time to update our curriculum for teaching and researching innovation to address the dominant sector of economic activity’ mentions Henry Chesbrough, the innovation expert and the author of the book *Open Services Innovation*.¹⁵

Unlike products, services are intangible and they are immaterial. Services cannot be produced; they can only be performed. They cannot be owned and cannot be stored. Service cannot be pre-produced. It is produced and consumed simultaneously. It can include different components. They may be product, space, service components. Service normally emerges out of the interaction with the client/user. Thus, the unique aspect of the services is that they are live. Service happens over time and across several touch points. Client/user perceives services on many different levels. The overall experience would be the combination of the experiences of all the touch points. Services thus create complex experiences.¹⁶ Unlike products, no two service delivery experiences are alike. Ascertaining quality of the service is difficult.

Service Design

Service Design is the activity of planning and organizing people, infrastructure, communication and material components of a service, in order to improve its quality, the interaction between service provider and customers and the customer's experience.¹⁷

Service Design helps create new services or helps improve

the existing services. It addresses the functionality and form of services. It helps make the service interfaces useful, usable, and desirable from the client's perspective. It helps make the service effective, efficient and distinctive from the service provider/supplier/organisation point of view. By utilising the available resources, Service Design helps connect organisation/supplier/service provider to its clients in a desirable way. Service Design helps create experience for its user and thereby helps improve everyday life. It therefore helps create brand affinity. 'Good service design is the process of deliberately crafting our experience and delivery of services, to make them more valuable for the people that use and provide them,' mentions Nick Marsh from Engine Service Design.¹⁸ Service Design helps create the much needed value addition to differentiate against competitors. Today, it plays a crucial part in the success of any organisation. It helps bring true understanding of the market, its users, their experiences, and expectations. With higher quality service experiences as the basis of success, Service Design brings new perspective on future development. Service Design changes organisational culture.

Service Design, according to Prof. Richard Buchanan is a service work; it is about reframing the ordinary, about equitable distribution of resources and tools to make decisions well. According to him, the reason for spending so many efforts in talking about Service Design has to do with justice. The real purpose behind Service Design according to Prof. Buchanan, is to change social relationships, to give knowledge, information and tools to construct knowledge, and to make action good in use, to use it wisely.¹⁹ In the context of India and similar other developing countries, Service Design will help many of their essential services accessible and affordable to the masses. With appropriate integration of technology, Service Design will help these essential services reach out to the remotest areas and to the lowest strata of the society.

Scope for Service Design in India

Services touch majority of India's population; therefore, Service Design would form one of the key interventions towards improving its quality of life. Service Design will help encourage and enhance human interactions, thereby encourage societal interactions, community development efforts, and social innovations. This major sector of the country is developed mostly to serve local needs and requirements; it offers great opportunities for improvements in terms of productivity, efficiency, and effectiveness. By creating new employment opportunities, improving, and adding value to existing services, Service Design will help India progress towards developing a sustainable and inclusive society. With its large rural population, creating employment opportunities at the local level will help develop its villages and thus arrest migration of its people to cities, one of the major areas of concern for the country.

By improving existing services, including some of the country's large organised services such as railways and postal services, Service Design would be a major contributor to the country's economic development. It would help the country's industries connect to their users in a better way, understand and meet their unmet needs, and help improve their competitiveness in today's global markets. Thus, Service Design would be one of the key determiners of the country's progress towards sustainable, equitable, and inclusive societal and economic developments. Service Design offers immense scope and career prospects for design graduates.

Design Education: Scenario in India

Interests in design as a profession have grown rapidly in India in the last few years. Design is now recognised as one of the important contributors of business success. It is now explored as one of the lucrative career prospects besides engineering, medicine, and management. New institutes of design are being set up in different parts of the country to offer courses and programmes in various disciplines of design. These design programmes are mainly offered in the

domains of Industrial Design, Communication Design, Textile Design, and Fashion Design. While National Institute of Design, NID, Ahmedabad offers design programmes in eighteen different disciplines; Department of Design (DoD) at the Indian Institutes of Technology at Mumbai, Delhi, Guwahati, and Kanpur, offers programmes in the area of Industrial Design and Communication Design. The National Institutes of Fashion Technology (NIFT) set up in different cities of the country, offer programmes in the disciplines of Fashion Technology, Design, and Management. Craft design centres have been set up in different states to cater to the specific needs of the craft sectors of the respective states. And new private design institutes are coming up every year in the country. These programmes are offered both at the undergraduate and postgraduate levels.

Traditionally, the design process, both globally as well as in India, has focused on the client's perspective. It focuses on identification of problems/issues related to the existing products, processes or systems through the systematic process of information collection and analysis. Through creative explorations, design then helps synthesise new experiences, inferences, and insights into tangible and contextual solutions. The traditional design process thus focuses on improving/refining existing products and systems, more of "inside-out" approach for design and innovation. And products as discussed earlier, while they may satisfy the user's want, however, may not satisfy the user's need. The washing machine, for example, does not satisfy the user's need of clothes being washed, though, it may aid in increasing the comfort level of the user. It may serve the want of owning a product. However, the user has to then take up the ownership of performing the tasks, learning these tasks, and maintaining the product.

Service Design, on the other hand, focuses on understanding users; their unmet needs and expectations, thus calling for "outside-in" approach to design and innovation for developing new solutions, strategies or business models.

Service Design goes beyond the traditional product or tangible solution-oriented design process to control the new elements that are touch points (the interaction between the actors) and the time. It is the new holistic multidisciplinary approach that addresses the challenges of the service economy. Service Design thus brings together the most appropriate and relevant experience, methods, and tools from various fields to employ them for the design and development of services. It integrates management, marketing, research, and design.

While the demand for services and thus their designs have increased rapidly in India, there are no specialised courses/programmes offered at any of the design institutes of the country. In the absence of these specialised inputs/courses, the tasks of design and development of new services or improving the existing services are undertaken mostly by product designers or interested graphic designers. With the rapid growth and easy availability of Information and Communication Technology (ICT) in the country, demands for web-based /online services have increased manifold. However, with their traditional design approach, the focus remains largely on product-based solutions rather than service-based solutions. Thus, it remains at the same level as the products in terms of addressing the customer's needs.

Service Design Fundamentals

'Service design is designing experiences happening in time and space, which reach people through different touch-points,' defines the Finnish website www.servicedesign.fi.²⁰ Experience is a complex phenomenon and is based on an individual's perception in which the original messages are filtered through individual history, values, attitudes, and previous experiences. The overall experience that a user gets, is driven by the service interface. Designing this interface demands aligning all touch-points against the service concept. A touch-point is typically a contact point with one of the elements of the service offering. A typical service will

have many touch-points that act like pieces of a puzzle that need to be aligned into a cohesive form that is consistent, easy to use, and has strategic alliance. Service Design works on the design of all different touch-points that together result in a “designed service interface”.

One can thus only design the service environment and all service related communication, but not the actual human experiences or conceptions. Service Design involves designing service environment related communication (communication with several of the senses), designing service process related communication (web pages, brochures and other marketing and communications material), and developing the communication of service personnel (personal communication skills, dressing etc.).²¹ Service Design involves design of artefacts and other things including communication, environment and behaviours. It can be both tangible and intangible.

Service Design helps visualize, formulate, and choreograph solutions to problems that do not necessarily exist today.²² It helps understand behavioural patterns, interpret user requirements and transform them into possible future services. The methodology for designing services as proposed by Morelli has three main directions that are identification of the actors involved in the definition of the service; definition of possible service scenarios and sequences of actions and actors’ role; and representation of the service illustrating all of its components.²³ Some of the elements of service design include vision, resources, reliability, responsiveness, reassurance and communication.²⁴ The Service Design process applies explorative, generative, and evaluative design approaches.²⁵ Designing services would call for six mindsets that are understanding, thinking, generating, filtering, explaining and realizing, to complete the project.²⁶

There cannot be a service without a customer. He/she is the purpose of it. Service is built around its customers. The

entire Service Design process needs to be built around its user/ customer involving him/her right from the beginning of the process. Developing a good understanding of his/her aspirations and behavioural patterns, unmet needs and expectations, motivations and goals become the foundation of the Service Design process. Services rely on the interactions between the users and providers of the service. Service Design thus demands analysis of all the points of contact between the user and the service provider.

Understanding and identifying the latent need/s of the user is a difficult task as most of the time, user may not be consciously aware of or be able to articulate the needs. Service Design thus calls for in-depth user research through application of techniques and tools derived from disciplines ranging from anthropology, social studies, ethnography, and social construction of technology. Observing the situation or customer interactions, shadowing user/passively observing the customer in a service setting, spending a day in the life of a customer, structured and/or unstructured interviews with all the stakeholders including user, service staff, mapping every aspect of how a customer becomes aware and interacts with the service, brainstorming, interaction with the users, and interaction through specific games are some of the techniques used to look for clues and patterns of user behaviour. The observations and information are documented through variety of tools such as the digital camera and video recorders to further analyse them to capture new insights and to discover unarticulated needs.

Utilising design methodology and diverse collection of related design tools and techniques, the holistic approach of Service Design would help explore new ideas, define appropriate solutions for the identified latent need, and create a blueprint of the service. Visual illustration through variety of representation techniques will help describe the nature and characteristics of the interaction, inner mechanism of service to all the stakeholders and the actors involved. Service scenarios, storyboards, storytelling, video sketching, and

video prototypes are some of the design tools used to place the service in a human context, quickly stimulate customer's participation and effectively describe the interactions, without having to build the entire service or solution up front. These make it easier and feasible to quickly prototype service ideas, test them out, analyse them and further refine and finalise the solution. This forms one of the major advantages of services. 'It is easier to innovate and less expensive in services than in manufacturing.'²⁷

As a multidisciplinary approach, service design would call for specialised inputs from variety of different fields ranging from product design, graphic design, interface design, interaction design, space design (interior & exterior design, including set and stage design), system and strategy design, experience design, branding, ethnography research, psychology, participatory design, market research, marketing, product development, communication planning, and process management²⁸

The fundamentals of good service according to Engine, one of the leading service design and innovation consultancy firm based in London are:

Systems, services are provided and experienced through systems and relationships; **Value**, service and also its design is normally focused on adding value; **Journeys**, all services are experienced over time. people take different journeys to, through, and from a service; **People**, services always involve people and rely on both the user and the producer working together; and **Propositions**, services are generally packaged as a 'proposition' for users to buy into. Good service design translates intangible service propositions into tangible and desirable offerings.²⁹

Service Design: A Course Module at NID

A three-week course module on Service Design has been developed and offered to the postgraduate students of the Strategic Design Management discipline here at the National Institute of Design, since 2003. The module is

offered in the third semester (second year) of their two-year postgraduate programme. The course module aims to introduce students to the concept of service design. It exhorts students to explore the scope for design intervention in the field of service design. Through the three assignments, one each taken up every week of the three-week course module, students are systematically initiated to explore, experience, and understand the field of Service Design. The methodology adopted for delivering the module takes the students through intense discussions, brainstorming, user research, process of analysis of the information and creative synthesis to develop solutions/concepts, scenario development methods, business model and strategy development, prototyping and testing methods.³⁰ The insights and experiences of design and development of the course module is documented through a paper titled *The Service Design Course Module: Steering Design Students Towards New Career Opportunities*. The outcomes of the course assignments over these years, have been documented at www.servicedesignindia.posterous.com

The experiences and learning gained from the course module offers a new direction and creates new capabilities among the students of the Strategic Design Management discipline. It offers them a unique capability and strength as design management graduates and also opens new career opportunities. The course module helps develop that much needed confidence and new direction to start their career as design entrepreneurs. While some of them, after their graduation, joined industries as design managers/product development managers with their specific focus and responsibilities to develop and improve internal communication and services, few of them are working with service-based industries to improve customer relations and offerings. One of the students set up a service-based venture after his graduation. And a group of students after their graduation, has set up its design studio that focuses and specialises in Service Design.³¹

Opportunities for Specialisation in Service Design

There are now options available for further study and specialisation in this emerging domain of Service Design and innovation. Royal College of Art, London offers a two year MA in Service Design. This programme aims to enhance students' capabilities to apply a design led approach to transform the experience and values of services.³² While Domus Academy, Milan, Italy offers Masters in Service and Experience Design, a postgraduate programme of 12 months duration. The programme emphasises the centrality of users and users' experience into management and innovation of the service industries.³³ And the Master of Design for Services, the postgraduate programme at the University of Dundee aims to develop among its students, the skills to observe and understand the current situation, visualise change and prototype the future.³⁴ Whereas, Service Innovation Design, a postgraduate programme at the Laurea University of Applied Sciences is offered under their Master of Business Administration programme. It is a 90 credits professional programme to be completed within 1.5 to 2.5 year duration.³⁵

These postgraduate programmes are offered to the graduates from various design disciplines, graduates from engineering and computer sciences and to the mid and senior professionals, who are seeking to enhance their capabilities by applying a design-led approach to deliver high value added services for their clients. These programmes equip students to the latest tools and techniques of Service Design. The students develop their skills to research, develop, evaluate and communicate service design solutions through series of lectures, workshops, and projects. The graduates of these programmes will have their career opportunities in the service sectors ranging from banking, finance, insurance, retail, hospitality, healthcare, tourism, transportation, entertainment, e-commerce, and communications.

Conclusion

The Indian economy can be primarily viewed as a service

economy. Services account for more than half of India's GDP. Its large, organised, and unorganised service sector industries touch the lives of majority of the country's population. Services provide employment opportunities utilising existing skills and resources, thereby addressing one of the key concerns of the country. Services thereby offer economic independence and self-respect to the individuals. Services are low on investment and encourage customised and localised solutions. By providing employment at local level, services help arrest migration to the cities. Services in the context of India, help encourage human interaction, dematerialisation and overall sustainable economic and social development. Encouraging new services and improving existing services should thus form one of the major focuses for the country's future economic and societal progress.

Service Design would thus form one of the key interventions towards improving the quality of life of majority of the people of India. Service Design will help the country's large service industries to improve their productivity, efficiency, and effectiveness. It will help them better connect to their users, understand and meet their unmet needs, thereby help improve their competitiveness in today's global markets. Service Design would be one of the key differentiator for country's progress towards sustainable, equitable and inclusive societal and economic developments. Service Design will help India transit from industrial economy to service economy and further to the experience economy.

Service Design is today, the new holistic multidisciplinary approach that brings together the most appropriate and relevant experience, methods, and tools from various fields to employ them for the design and development of services. Service Design focuses on the relationships and interactions between people, artefacts, and activities. It works on design of different touch-points resulting in designed service interface to create desired experiences. Service Design, therefore, calls for variety of specialised inputs ranging from

design, research, marketing, and management.

The traditional process of design focused normally towards design and development of products and artefacts, that is tangible solutions, would fall short of meeting the demands of today's service industries and that of the emerging service economy. A postgraduate programme in Service Design, the one anchored in the Indian context would form a major support to the country's large organised and unorganised service sector; they could refine, improve, and align their services to the contemporary needs and demands of the users and that of the markets. The graduates of this programme, while working with the country's large unorganised and organised service industries, will create the much needed value addition, while utilising their existing skills and resources. The postgraduate programme in Service Design will thus hasten the process of India's sustainable and inclusive societal and economic development.

References

- ¹ Peer Insight, "Seizing the White Space: Innovative Service Concepts in the United States," *Technology Review* 205(2007).
- ² Design for Service: For Both Service and Manufacturing Businesses 26/12/2008 <<http://www.enginegroup.co.uk/assets/pdf/>>.
- ³ Peer Insight, "Seizing the White Space," 2007.
- ⁴ "Design for Service" <<http://www.enginegroup.co.uk/assets/pdf/>>.
- ⁵ Peer Insight, "Seizing the White Space," 2007.
- ⁶ Stefen Moritz, "Service Design: Practical Access to an Evolving Field".
- ⁷ "Dematerialization" 11/06/2012 <<http://en.wikipedia.org/>>.
- ⁸ John Thackara, *In the Bubble, Designing in a Complex World* (MIT Press: Cambridge, 2006).
- ⁹ Eva Heiskanen and Mikko Jalas, *Dematerialization Through Services: A Review and Evaluation of the Debate* (Ministry of Environment: Helsinki, 2000).
- ¹⁰ KVSP Rao, "Technology and Knowledge Transfer and Collaboration among Consultants in the Asia Pacific Region" *Country Paper India* 09/04/2012 <<http://www.acesl.org>>.
- ¹¹ Peer Insight, "Seizing the White Space," 2007.
- ¹² Moritz, "Service Design".
- ¹³ Union Budget and Economic Survey. Economic Survey 2011–12, Services Sector 25/06/2012 <<http://indiabudget.nic.in/index.asp>>.
- ¹⁴ Peer Insight, "Seizing the White Space," 2007.
- ¹⁵ Peer Insight, "Seizing the White Space," 2007.
- ¹⁶ "Service Design" *Wikipedia*_23 Dec. 2008 <<http://en.wikipedia.org>>.
- ¹⁷ "What is Service Design," *Design Council* <<http://www.designcouncil.org.uk>>.
- ¹⁸ "Coral Reefs: Service Design's Definition and Its Four Boundaries" 26/12/2008 <<http://humanistic-creative-trends.blogspot.com>>.
- ¹⁹ Jari Koskinen, "Service Design: Perspectives on Turning-points in Design".
- ²⁰ Koskinen, "Service Design".
- ²¹ Koskinen, "Service Design".
- ²² "Definition of gr8xperience: All About Great and Well-designed Service Experiences," 26 Dec. 2008 <<http://gr8xperience.com/definition>>.
- ²³ "Service Design" <<http://en.wikipedia.org>>.
- ²⁴ "Design for Service" <<http://www.enginegroup.co.uk/assets/pdf/>>.
- ²⁵ "Definition of gr8xperience" <<http://gr8xperience.com>>.
- ²⁶ Moritz, "Service Design".
- ²⁷ Moritz, "Service Design".
- ²⁸ Moritz, "Service Design".
- ²⁹ "Design for Service" <<http://www.enginegroup.co.uk/assets/pdf/>>.
- ³⁰ Shashank Mehta, "The Service Design Course Module: Steering Design Students Towards new Career Opportunities" *LeNS conference: Sustainability in Design: NOW! Challenges and Opportunities for Design Research, Education and Practice in the XXI Century*, Bengaluru, 2010.

³¹ Mehta, “The Service Design Course Module.”

³² Royal College of Art. “Service” 6 Aug 2012
<www.rca.ac.uk>.

³³ Domus Academy. “Master in Service and Experience
Design,” 06/08/2012 <<http://www.domusacademy.com>>.

³⁴ University of Dundee. “Master of Design for Services,” 6

Aug 2012 <www.dundee.ac.uk>.

³⁵ Jukka Ojasalo and Katri Ojasalo, “Creating Competences
in Service Innovation and Design: The SID Master’s
Programme for Practitioners Combines Business and Design
Competences,” *Touchpoint: The Journal of Service Design*
3.3 (2012).