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# EXPANSION OF SERVICE DESIGN ACADEMICS IN BELGIUM: THE GROUNDWORK FOR A CURRICULUM BASED ON CONTEMPORARY INDUSTRY NEEDS

**Domien LOOSEN, Thomas MARQUENIE, Lotte VERBOVEN and Ivo DEWIT**
Department of Product Development, University of Antwerp, Belgium

## ABSTRACT
The Belgian design scene is not unfamiliar with the concept of service design and has hosted some leading-edge companies throughout the years, pushing the field forward. The next step in the development of the field is the expansion of the academic aspect of service design within Belgium. The topic of service design is already addressed in existing design programmes, though it is yet to be a focus of study on its own. This paper helps to expand the range of study programmes at the University of Antwerp and contributes to shaping the service design landscape in Belgium.
The Department of Design Sciences at the University of Antwerp provides students with extended interdisciplinary skills and knowledge, leading them into the world of design. The department now seeks to create an additional master's programmes with a curriculum catered to service design providing graduates of this programme with all the necessary skills to be at the top of their game when they start their careers in service design. To ensure continuity between what the university delivers and what the job market expects and desires, the programmes will be developed from the ground up. The university, for this study, has worked in collaboration with current leaders in the field, providing their expertise and requirements for the future of service design. Insights were obtained by means of workshops and collaborative projects with students and experts in the service design scene, as well as building on existing literature and current educational programmes across the world.

*Keywords: Service design, design education, curriculum of a master's programmes*

## 1 INTRODUCTION
As our global economy experiences a shift in focus from product driven to services and product service-system driven [1], the field of Service Design (SD) has grown significantly. Design agencies are pivoting and specializing in the field to follow new expectations and standards. Design schools across the world are starting to provide SD specific course options to facilitate this change and support the increase in demand for designers fluent in service-dominant logic. In an attempt to provide relevant education in an ever-evolving world, the University of Antwerp would like to expand its design academics and add the option for a SD specific postgraduate course. To ensure this course accurately reflects the needs of the sector, this paper provides a first step towards creating the new curriculum by determining these wants and needs through a workshop with local service design agencies.
In current traditional design academics, service design is often still seen and taught as a subsection of classical (product) design. This follows an older perspective on service design, as described by Holmlid, S. (2007), "a human-centred approach and an outside-in perspective. It is concerned with systematically applying design methodology and principles to the design of services." [2]. Though still relevant, it treats service design simply as an area of implementation for established design methodologies, rather than requiring its own underlying foundation. More recent literature starts to describe SD as holistic [3], and a toolbox or management approach [4]. Acknowledging that SD is not just a step or function of design but a process of its own.
These definitions and implementations of SD are evolving fast, the academics however are currently lagging. This paper will cross reference with insights in the SD process as applied in the Belgian SD sector to aid in creating a curriculum that answers to industry needs and is future proof.

This includes SD having to take into consideration complex and overlapping service systems, therefore needing to more frequently involve system design [5]. Currently the university teaches these concepts through a strategic design module in the first master's and a project following the PSS (Product Service System) design toolkit by Ivo Dewit (2018) [6].
By creating a SD specific postgraduate course, the university will be the first in Belgium to provide such a course.

## 2 RESEARCH QUESTIONS

1. What are the key skills and characteristics required of a graduate of the curriculum by the current field of SD?
2. What valuable insights can the above give into realistic methods to educate students within the new curriculum?

Our goal for this paper is to formulate answers to the research questions stated above. By co-creating and discussing topics of interest in SD and how such a postgraduate degree should look. This with all involved stakeholders, during a set of workshops.

## 3 RESEARCH METHODS

Before getting started with the workshop we conducted some preliminary literature research regarding SD and different academic options. Additionally, we inquired with current design students at the university to poll their knowledge and interest in SD and an additional postgraduate option.
For the workshop, we invited members of the Service Design Network (SDN) Belgium from different agencies. These members were briefed beforehand and welcomed in a polyvalent space where the workshop took place with seven participants.
The workshop started off with two warm up activities. The first was the creation of a word cloud with key words defining SD. During the second, the participants were asked to each note down what the timeline of the service design journey looked like to them. These activities not only allowed to get the participants to start thinking about the topic, but it also allows us to gauge how uniform the perception of the field is across different members and compare this to existing literature.


*Figure 1. Workshop with SD agencies*

The actual workshop was divided into three parts. During the first the participants were asked to fill in a set of posters aiming to explore the current situation. One asking to describe what the current typical CV of an applicant looks like. Then moving on to what the profile of a new hire tends to look like. During the second phase, the participants were asked to describe "The Ideal Newbie" a hypothetical perfect candidate for hire. Discussing their background and studies, their hard and soft skills, as well as their personality. This is the profile of graduates the eventual curriculum should aim to produce. The last phase was a conversation and brainstorming session about what such a curriculum might entail, what should be taught and how it could most effectively be brought to the students. Additionally, the background of students that should be able to enrol in the programmes was discussed. This conversation was recorded for review later on.

# 4 RESULTS

A trend we noticed during the preliminary desk research, indicates that a consistent reliance on theoretical methods remains. This theory-based knowledge is used as background for more effective implementation of the functional, more practical skills. This might indicate a dichotomy between the ways of teaching and the implementation of the skill or knowledge.

During an initial survey to get a general idea of the interest towards this topic amongst students. Although the familiarity of SD was a bit disappointing, the curiosity and willingness to learn about it was surprisingly high. The survey ended up shaping a basic blueprint of what students expect from a new topic like this, how it's taught, by whom and what the requirements are.

The workshop involving the SD agencies was very interesting as it made it possible to further delve into the way we could bring this to a bigger audience. The typical journey laid out 8 key steps to follow:

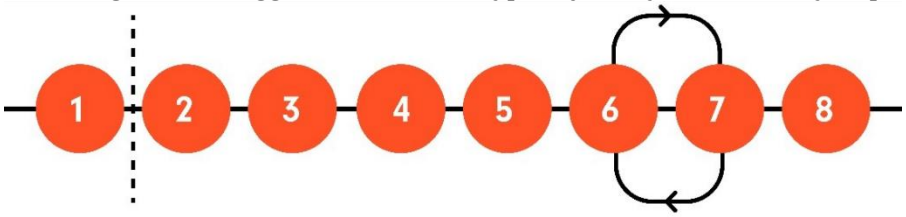


*Figure 2. Common layout of the SD process*

1. Estimation workability of the collaboration design agency & client
2. Defining design challenges and agreements
3. Research (desk research, stakeholders, context map)
4. Observation (interviews with experts & users)
5. Concept design (journey, vision, touchpoints)
6. Testing (prototype)
7. Refine
8. Elaboration & implementation

This design journey, based on different paths of different agencies, can give a good insight into the different touchpoints a service designer must cross. These steps can eventually be considered as a guide to follow when starting to create a new postgraduate course.

The journey illustrated by the design agencies above is noticeably similar to the one described in "This is service design doing" Stickdorn (2018) [4]. The minor differences are related to the global structure of the journey. Where observation is followed by concept design in our model, this is not the case in the illustrated journey in the book. There, observation, which includes a wide variety of analyses consisting of stakeholders, mind maps and journey maps, is followed by ideation planning and scope definition. Then brainstorming leads to the formulation of raw ideas and selection which is then followed by prototyping planning, diverging in explorative prototyping, and converging in evaluative prototyping. When comparing our findings to the SDN research framework [8] the achieved outcome is consistent. However, as opposed to our 8 phases, this paper only uses two (planning and execution). These two approaches are comparable.

Next, the attention went to discussing what the current situation is and the wants & needs of SD agencies. All parties described aspects such as 'skills to be taught', 'habits to unlearn' and 'most difficult to teach' as can be seen in the table below. There was a clear emphasis on presenting and facilitating. The "Designer's ego" was amongst the more popular answers in its category.

*Table 1. Answers describing a typical new Hire to a Service Design agency*

| **Skills to be Taught** | **Habits to Unlearn** | **Most difficult to teach** |
|---|---|---|
| - Fitting tools to people / Context | - Dealing with uncertainty | - Eye for detail |
| - Prototyping (services) | - Doing, Not talking | - Organisation analysis |
| - Knowing how to build the perfect team for the job | - Over-aesthetics | - Critical thinking, but working towards solutions |
| - Client / Project management | - Keeping the level appropriate | - Seeing patterns in design research |
| - Advocate customer centricity | - Copy/Pasting | - Turning user insights into design principles and ideas |

| | | |
|---|---|---|
| - To be a good Facilitator | - Designers' Ego | - Talking to management |
| - Thinking in opportunities | - Product dominant mindset | - People reading and managing in co-creation |
| - Distinguishing main goals from side problems (complexity) | | - Cocreating with users, be honest: The solution will not come from you, the 'almighty designer |
| - Presenting | | |
| - Design process | | |
| - Self and Time management | | |

This all led to creating a hypothetical CV to illustrate clearly what the ideal newbie should look like in terms of academic career, skillset, and approach. Although these requirements are fluid, they give a guideline. In terms of studies proceeding a career in SD, topics such as psychology and communication management came out as the best preparational experiences in terms of understanding a client's needs, which is a soft skill. But things like visualization of complex systems, sketching and digital prototyping are mostly taught in studies such as product development, graphic design or digital design.
In general, being wide eyed towards the world and your environment is a key to success. Having the confidence to differentiate main goals from side problems and strategic management are also highly appreciated skills amongst the SD agencies. Undoubtedly, being comfortable working in a team and facilitating a group or co-creating, is necessary.
Besides hard skills such as prototyping and creativity, ways of teaching those skills were also discussed. Projects and cases were amongst the more popular methods. Big individual projects from A to Z make you bump into all kinds of real-life struggles. Including feedback sessions and alternating between short design sprints and longer ongoing projects, together with theoretical courses, are ways to delve into the SD world. Guest lectures by experts in the field, to give a realistic view on the economical aspect of SD, was also a highly requested suggestion. A strong consensus was reached that an internship does not belong in a postgraduate course, there are other ways to bring experts to the course such as masterclasses. Instead of an internship and a thesis, we must combine these two into one end-term project. The ideal situation of the application of the theory must be fluent and dynamic. There is no need to test the theoretical knowledge if we can apply it in real life scenarios. Creativity is the biggest challenge for people without a design background. This could become a part of the curriculum but should ultimately be integrated everywhere.

## 5 DISCUSSIONS

In general, people interested in the service design domain already have an open-minded, critical way of thinking and a proactive attitude. These soft skills must be used to develop further soft and hard skills.
The desired hard skills can be categorized into two main categories. The first involves maintaining situational overview and a general level of understanding. This consists of analysing the organizations and the services they provide - differentiating main goals from peripheral goals - defining the right design challenges, principles & drivers - cocreation with the user - and (self-)management. Each of these capabilities are highly sought after when entering a service design agency. The last three however were ones that could be considered as 'to be taught'. The second is quick hands-on creation, aiming for creativity, and especially clear communication. Particularly in the form of prototypes, experiments, research, and processes. Implementing co-creation where needed [9].
When it comes to the soft skills there were once again two distinguished core aspects that came up. On one hand there is mindset and an innate understanding of what a service really is and can be. It also addresses thinking in alternatives and being able to appropriately keep options open long enough to allow for well selected solutions. The mindset is closely related to design thinking. It is not an easy thing to teach because it is innate to the person. It is something the course would have to filter for and bring to the surface. On the other hand, they focus on successful stakeholder management and being able to facilitate in group settings to achieve this, the student is required to be able to use improvisation and intuition to adapt during these sessions quickly and creatively.
The conversation between the experts concludes that service design is much more than a process, that the mindset plays a key role in the innovation of new product & services [4]. A focus on soft skills that

encourage a productive attitude and the ability to integrate room for new ways of thinking, are a key element for innovation. This aligns with research done by Katzan [10].
Participants agreed that classic courses like thesis and internship do not belong in the postgraduate course, especially not in their typical form. When it came to the trade-off between group-assignment or individual projects, the opinions were divided. The importance of the ability to act independently and the greater value of working in a team were played against each other. A solution for this dilemma, presented by some of the participants, could be in the form of a personal project with group-based feedback sessions, implementing the course taught concepts in an individual's own context. Theoretical courses were not exceedingly popular in their current state. The participants had great ideas of the application of these theories in a large project. Owning the skills, you were taught and being able to apply them is more important than knowing the theories they were based on.
Factors such as cultural differences, gender, and perception were not specifically mentioned during the workshop though can be considered under the term 'Open mindednesses'. The importance of which was discussed when determining important characteristics. This type of open mindedness and inclusion will play a key role in the future of service design [11].

# 6 CONCLUSIONS

The first research question was analysed fully, with collaboration and input from experts in the field. A selection of clear requirements soon emerged, focusing on soft skills with hard skills to support them.
Given the importance of design thinking to succeed in the field of SD, this knowledge should be an initial requirement to continue with the rest of the curriculum. Due to this, it is possible the course might consist of multiple paths, depending on the level of design background of the student.
The information brought to the students should be conveyed in real-world contexts, allowing for realistic application. Following this logic, the eventual curriculum ought to be project heavy, with a focus on developing the individual and necessary skills. It is important to note that this is about requiring insights and skills and learning to implement them.
Reflecting realistic settings could also mean implementing creative sources of 'sabotage' or 'struggles' that would reflect those that could occur in the real world. The student should be able to face projects failing and moving on from that point. It is part of the design process that does not get reflected enough in current academics. The aim is to create a modular and evolutive programmes, keeping in mind the participating partners, students and contemporary environment.
Additional and more thorough research and development is needed since we were not able to fully define the methods and build-up of the curriculum within the scope of this study.
Understanding the current field of SD and its actual requirements is a key step in providing relevant and specific educational programmes to support and enhance the future of service design. The industry is increasingly asking for or at least needing expertise in services surrounding their products. This demand cannot be ignored. Service design and its importance is often overlooked in the design process and ought to be brought to the foreground and provided the necessary attention [12]. Starting in education.
This paper aims to aid in the creation of new design focused courses or the adaptation and improvement of existing ones.

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