

Reform and Practice of Design Education Based on Community Service

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Abstract: Community as a unit of society, should be the starting aim of university education. This paper aims to explore the design education methods based on community service and collaborative innovation. The service design tools are introduced into the improvement and innovation of community business system through the practice of design course to improve and innovate local business community. Business community map and business contact point are created to quickly locate pain points and needs of business community and improved and innovation models are developed for providing more effective services. On this basis, the transformation in educational achievement for community service can be realized.

1. Introduction

The "Guidelines for Special Action on Developing Service-oriented Manufacturing" (Ministry of Public Information, 2016) proposed that service design should be taken as a key area to accelerate development, indicating the opportunity of integration of social service innovation and design education. Community as a unit of society, community service should be a new direction and goal of university education besides enterprise service. Based on number of product is increasing, the material resources is decreasing, the field of design includes not only the traditional tangible product, also involves a lot of intangible or interdisciplinary field, including system, service, function, behavior, social strategy, scene, evaluation, social innovation. Gerybadze proposed the concept of innovation community and emphasized the importance of group communication for innovation community. Community service is a comprehensive service for innovation community concept. Through case study and literature review, POLIMI explored the impact of cognitive social capital of old people on collaborative service design and give some suggestions about how to activate their creativity based on social capital [1]. Research in the field of community services for the elderly also includes using the method of ethnography, contact points, matrix for opportunity balance and PNC analysis to investigate elderly people in urban community and find the design opportunity and put forth the design idea such as "sharing table", "old raising young", "helping with meals" [2]. Based on the stakeholder's needs as the starting point, from the novel food-community supported agriculture design and application system, Woodland Community Cafe is

regarded as sustainable ecosystem services and integrated community food projects according to the needs of different resident, such as organizing community cookery course to cultivate residents' healthy, cooking skills and enhance interpersonal interest, launching the production of light meals for sale at flea market, and purchasing local farm food with low-cost to provide residents with healthy ingredients [3]. Wuxi Blue Sky ecological farm system uses the tool of S.W.O.T analysis of whole farm development and stakeholders situation, found the main challenge of farm operations, from organic, networking and feedback [4]. Collaborative innovation can realize the revival and development of non-heritage culture in traditional community. The Huayaohua Project of Hunan University builds a local knowledge platform through the intervention of collaborative design and sharing value with community residents, and then realizes the development of non-heritage goods and business models on the basis of productive protection. In this case, the designer changes from an expert role to a facilitator [5].

Under the background of mobile internet, there is a trend of platformization in the community service. It aims to build benefit sharing-based win-win governance mechanism, the logic mechanism of the platform construction among the logical basis of constructing community platform was carried out through building the "ring chain" to realize the innovation performance of value profit pool [6]. It is necessary to establish a multi-stakeholder perspective to solve community complexity problems within a process of converting social problem into design solution. As the Swedish NGO, HKF successfully operated the cultural adjustment project of catering services and refugee children through multi-party cooperation. The wechat public accounts "Green Cloud Freight" founded by the Institute of Service Design of Tsinghua University, try to link truck drivers with NGO members to achieve the integration of design and evaluation [7]. Based on the synchronization project of six universities on DESIS-China network platform, which focuses on square dancers, Taihu fishermen, white-haired shareholders and community scavengers, and explores the sustainable life style of the community with the help of user research and service design tool such as the KJ-method, balloon workshop and performative tools [8].

Taking community service innovation as one of the practical objectives of design education and it will become an important way of innovation design education by introducing service design method. The innovative activities of community service are a series of intangible and tangible design outputs which focus on the community users to provide targeted services. This research focuses on the project of design education based on community service, try to break through the framework of school-enterprise-government cooperation, improve and innovate community services through professional innovative thinking and visual technology, and realize the transformation in educational achievement for local business community. Business community map and business contact point are created to quickly locate pain points and needs of business community and improved and innovation models are developed for providing more effective services. In addition, an online and offline service platform is build to link universities and communities.

2. Methods for Design Education Based on Community Service

2.1. "T" Talent Training Mode

The construction of "T" talent training mode and curriculum system will help to get through the curriculum of design education, including business strategy, service design, design psychology, interactive design, visual communication, product and display design, creative design and other curriculum practice links and extracurricular project-based teaching infiltration, forming a deep horizontal education mechanism. Reform and practice of design education based on community

service and collaborative innovation will closely connect talent training with the community, improve students' outreach ability and service awareness, form in-depth education, deepen the "T" growth ecosystem layout, and improve citizen literacy. Design education aimed at community service can break through and extend the framework of school-enterprise-government cooperation by emphasizing the transformation of teaching results into the landing design output of community service, including beautifying the community environment, improving the community service system and creating new service systems, etc. The project of design education based on community service starts from basic research and create community service model deducing through community service design practice and platform, and then the training framework of T-type talents is constructed.

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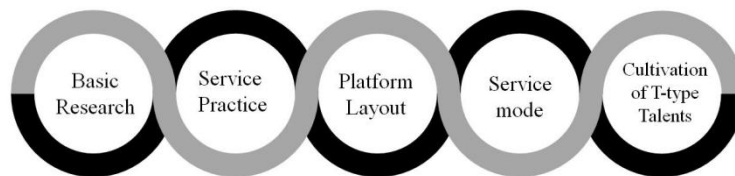


Figure1: Path of design education system building based on community service.

2.2. POLIMI Service Design Toolkit

POLIMI Service Design Toolkit uses service design tools including task analysis matrix, service blueprint, contact matrix, team sketch, service prototype, etc., and combines in-depth interviews and focus groups to conduct user research and service design practice [9]. In the project personas, customer journey, blueprint, role play are selected for important stages: user research, process design and roadshow.



Figure 2: POLIMI service design toolkit.

It is showed the desktop play for the community tourism service project in the course of service design. Students are creating desktop models of tourism items and showing the service process through role-play tool in Figure 3.



Figure 3: Desktop play for the community tourism service project.

2.3. Business Community Map

The project seeks to introduce touch point tool, create community business MAP through community research, and combine three touch points to obtain the ecological gradient assessment through household survey and interviews in order to locate the pain points and demand for the community business.

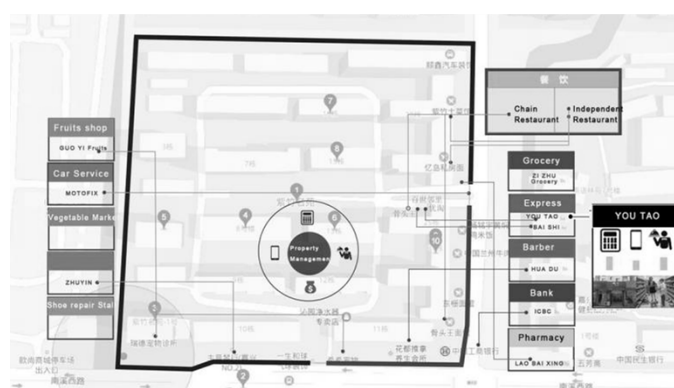


Figure 4: Business community map and gradient assessment tool.

2.4. Improved and Innovative Models for Business Community Service

The project is carried out according to the touch point and resident needs. Through the analysis of software, hardware and interpersonal touch point, with the help of the service design tool of Ali Five-Line Spectrum, the two-tier solution of improved and innovative models for business community service and service design paradigms are put forward with the suitable characteristics of simplicity, rapidity and economy, including "special sale for quick picking", "Two-bar-code scanning board at a glance" and "warm service languages" etc.

2.5 "Good District" Platform based on SNS for Community Collaborative

To optimize the allocation of community and school resources, provide point-to-point and O2O community services as the goal, the project try to build the "Good District" network, which is a network based on SNS containing two versions for mobile and web and will help integrate into the global emerging community network construction trend and help achieve the ultimate goal of love-

based design education.

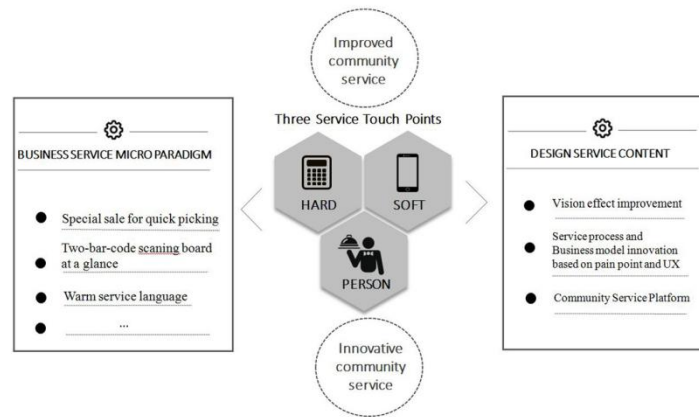


Figure 5: Improved and innovation models for business community service.

3. Practice for Design Education based on Community Service

"HA CHA SAN WONTON" is improved business design for an old wonton shop at Xincheng community in Jiaxing, which is well known in the local community as an intangible cultural heritage store. On the basis of user research including user portraits of personas and user journeys through field research and user interviews, team members located pain point and redesign the VI system to improve the brand's aesthetics and literature.

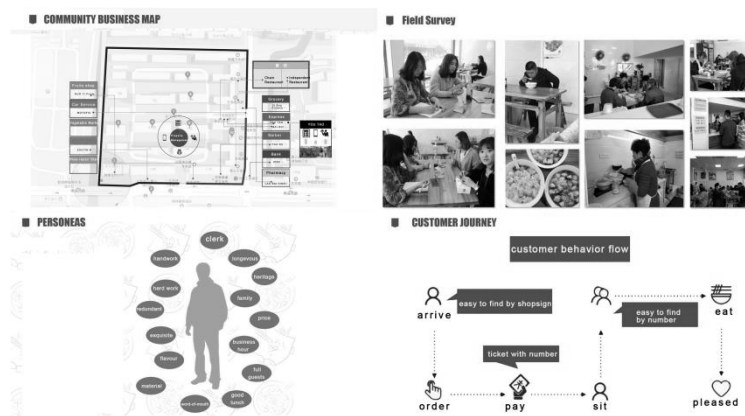


Figure 6: "HA CHA SAN WONTON" field research

The case of "Nanhuling Painting" is another community intangible cultural improvement business service design. In this project, students not only designed posters, but also studied and created Nanhuling Painting and participated in the marketing activities to thus experiencing the full-link path for service design from design, production to marketing.

Other practice of the community service design project covered a variety of business type in the community, including tailor's shop, garage stand, fruit stand and flower shop, etc. all of which have the problems of lack of brand system, unclear service content and so on.

4. Conclusions

The project of the community service design integrates the analysis of consumer psychological characteristics from the course of design psychology, user research tools from the course of user research, service blueprint and process design from the course of service design, and finally intensify the comprehensive design skills through practical design service. In addition to business community services, the next step of the project will focus on the community population, and further explore the talent cultivation method combining design education with community practice in the context of community policy and social development.



Figure 7: "Nanhuling Painting" community business service design.

Acknowledgements

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