

服务设计完善医疗服务



蔡佳翔与陈笃生医院的同事合作，设计了较舒适，容易穿戴和脱下，安全且制作费合理的面罩。

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医护团队抗疫工作面向多，除了医疗、清洁和行政工作者，还有像蔡佳翔（33岁）一样的设计系毕业生。

蔡佳翔2014年毕业于拉萨尔艺术学院设计传播系，目前在陈笃生医院的精益管理部（Kaizen Office）担任高级服务设计师。部门名称Kaizen（日文即“改善”）是源自日本的管理概念，意指公司每个人逐渐、持续地改进，可应用于所有运营流程，在全球多个领域，例如医疗界、政府部门和金融机构都获采用。精益管理部是陈笃生医院的质量改善部门之一，这个15人团队会和医院各部门同事合作，改善医院的工作程序以及病人在医院的体验。

改良传统医疗眼罩

蔡佳翔最近参与改良抗疫用的防护面罩的企划。传统眼罩会让使用者不适，而且会起雾，精

益管理部因此着手为前线同事设计更理想的面罩。蔡佳翔与同事向医护人员了解需求以及工作环境，再以2003年抗沙斯用的面罩为原型改良。他们在两周内重复设计了100多次，终于完成一个较舒适，容易穿戴和脱下，安全且制作费合理的面罩。面罩已通过第一轮用户体验测试，目前正大量生产，以便让全医院的前线同事都能用到。

蔡佳翔说：“过去都是当面开会，并且示范新设计样本，现在（因为阻断措施）透过视频沟通，多少影响原型制作的进度，所以我们也构思如何以其他方式沟通，让交流过程更快，更理想。”

从广告设计到服务设计

蔡佳翔说，“服务设计”在2012年仍是相当新的概念，他报读拉萨尔时是以平面设计师或广告美术总监为目标。第二学期选择专攻广告，却开始觉得“少了什么”；他认为世上已有太多可推销和购买的产品，反而是social innovation labs（社会创新工作室）的工作更具启发性。

他说：“我看到他们如何与

受益者合作，一起设计更好的用户体验，因此在最后一个学年换了跑道，把重点放在社会创新设计。通过设计创造更理想的产品和服务，从而帮助别人，这对我来说更真实。”

2014年，蔡佳翔凭毕业作“垂直甘榜”拿下知名创意比赛“铁撬奖”（The Crowbar Awards）的最佳设计奖；“垂直甘榜”是个通过分享美食，让新移民融入社会的企划。毕业后，他拿到新加坡设计理事会的奖学金，远赴英国伦敦皇家艺术学院（RCA）修读服务设计硕士学位，2017年学成归来。

那一年，蔡佳翔常陪亲戚进出医院复诊，激发了他以设计改良医院患者体验的想法。后来经由新加坡设计理事会介绍，了解到陈笃生医院有个专门通过设计解决问题的部门，决定申请加入。

他参与的其他企划包括与护士合作设计的多功能长者椅FuSA（Function and Safety meet Aesthetics；意即兼顾功能性、安全性与美感），这个椅子可让患者用作复健，也能变身凳子或床，让看护者坐下或躺下

休息。他的团队也改善了一些工作程序，例如减少患者在转去社区医院之前的等待时间。

蔡佳翔认为自己既是设计师，也是医护工作者，因为他的工作就是改善并加强医院对于患者的照料，同时支援前线同事。他说：“我们必须好好地了解同事面对的挑战，也要授权他们，携手为患者和社区创造解决问题的创意方法。”

Service design helps to enhance medical work

In the fight against the coronavirus pandemic, many individuals from the healthcare industry are involved. In addition to medical personnel, there are cleaners and administrative staff on the frontline, as well as design graduates such as 33-year-old Chua Jia Xiang.

He graduated from LASALLE College of the Arts' BA(Hons) Design Communication programme in 2014 and is currently a senior service designer at Tan Tock Seng Hospital's Kaizen Office. The department's name originates from Japan and means improvement. As a management concept, it has been applied to numerous operation processes in different fields globally, including healthcare, government and finance.

The Kaizen Office is one of the quality improvement departments at Tan Tock Seng Hospital. Its 15-member team works with other departments to enhance work processes and patient experience.

Improvements to traditional protective goggles

One of Jia Xiang's recent projects is the upgrading of protective goggles worn by medical personnel in their battle against COVID-19. Traditional protective goggles are uncomfortable to wear and have a tendency to fog up with condensation. In view of this, the Kaizen Office looked into designing a more user-friendly mask for their colleagues.

Jia Xiang and his team mates gathered feedback from staff at the frontline to understand their needs and their work environment. Using a face mask from the SARS epidemic in 2003 as a prototype, they started to make improvements to it. After going through more than 100 designs within a span of two weeks, they finally arrived at a design which offered better comfort, could be easily worn and taken off, was safe and cost-effective to produce. The new face shield has already passed its first round of user acceptance test and is now in the mass production phase.

“In the past, we would have face-to-face meetings to showcase the new design samples. However, due to current circuit breaker measures, we can only communicate through video conferencing and this has affected progress of the prototype’s development,” shared Jia Xiang.

From advertising to service design

According to Jia Xiang, service design was a relatively new field in 2012. When he first enrolled into LASALLE, his aim was to become a graphic designer or an art director at an advertising firm. However, during his second semester, he started to feel disillusioned with the commercial field as it dealt with an excessive number of products. What was more inspiring to him was the work done by social innovation labs.

“I saw how they worked in collaboration with beneficiaries to design a better user experience. This prompted me to shift my focus to social innovation design during my final academic year. Through design, I believe we can create better products or services that can benefit people,” he said.

In 2014 Jia Xiang’s graduating work, *Vertical Kampong*, won ‘Best Design’ at the renowned Crowbar Awards for its vision to help new immigrants integrate into Singapore society through the act of sharing good food. He was further awarded a scholarship from DesignSingapore Council and went on study at the Royal College of Art (RCA) in London, pursuing a MA in Service Design. He completed his studies in 2017 and returned to Singapore.

During the year after his return, Jia Xiang often accompanied his relative to the hospital for follow-up sessions. The experience inspired him to think about using design to enhance patient experience. Subsequently, through the recommendation of DesignSingapore Council, he got to know about Tan Tock Seng Hospital’s Kaizen Office and immediately sent in an application to be a part of its team.

Among the many projects which Jia Xiang has since been involved in, another interesting one was FuSA (Function and Safety meet Aesthetics) – a multi-functional chair that doubles up as a seat for patients to perform physiotherapy, and a bench or bed for caregivers to rest on after their duties. The office has also made inroads into improving work processes, such as reducing the waiting time for transfer requests to community hospitals.

In his current role, Jia Xiang feels that he is both a designer and a medical worker – an integral member of the healthcare profession who enhances patient care level and supports frontline staff. “We need to have a good understanding of the challenges faced by our colleagues in order to find creative ways to resolve problems for patients and the community,” he said.