

Co-create Innovative Business Model: A Case Study of Social Enterprise in Taiwan

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Abstract--Co-creation model becomes the increasing crucial and innovative source of competitive advantage for the firms discussed in recent researches. Most literatures focused on co-creation between firms and customers. Nevertheless, multi-stakeholders play more influences on the business activities, social enterprises show good examples themselves for social innovation to co-create with stakeholders providing services and solving social problems through innovative business ways.

Thus, this paper analyzes one social enterprise “iHealth Express Group” (hereafter “iHealth”) which developed a mobile medical care online to offline infrastructure and extended the service to long term care in Taiwan to express how it co-create new business with multi-stakeholders by qualitative study. iHealth built several innovative platforms and identified itself as decentralized service platforms, it also won the third Prizes of “DBS-NUS Social Venture Challenge Asia” in Singapore in 2015.

The findings illuminate several co-creation features of iHealth and proposed six propositions for new business service co-creation of social enterprises. This paper argued social mission and positiveness of innovation playing imperative role in co-creation activities, furthermore, we build a framework relating the effects social enterprises co-creation for discussing the implications of academics and managing the relationship with stakeholders.

I. INTRODUCTION

Changing the world and make it better is not anymore for specific persons, there are more and more people joining the design and activities, reflecting this point, co-creation is an advanced approach and concept to produce positive performance demonstrated in recent literatures. On the other hand, social enterprise which produce products and services to reach specific commercial and social objects with firm strategies to solve the social problems by innovation and business routes [1] is also viewed as a power form of organizations. And, it is a kind of social innovation.

Social enterprises have more stakeholders than general firms, such as social targets, disadvantaged people, customers, suppliers, profit and none-profit firms, investors, communities and governments etc. [2]. How does social enterprise co-create with these stakeholders do develop innovative business model is the key to change the world. However, previous researches of co-creation focuses on single target to co-create with firm, such as customers and suppliers, little from multi-stakeholders lens to discover the co-creation process, especially in operation model of social enterprise. And we also are interested in how does social enterprise cooperate with stakeholders to co-create new service, is there any different way and characteristic in the process from general firms? Recently, scholars begun to

incorporate the users of technologies, customers and multi-stakeholders to co-create the value and innovation in the dynamic market innovation network or system which is different from firm-centric innovation logic [3], thus, the importance of firms managing relationship with multi-stakeholders is increasing, especially for social enterprises. Then we are curious to know what kind of network social enterprise within is conducive to create new business model?

As the issue of balance economy, society and environment become increasing important, all sectors (private, public and third sectors) pay much attention to the activities and policies on social economy and innovation. “iHealth Express Group” (<http://www.ihealth.com.tw>) breaks through the traditional pharmacy and health-care business model playing a leading role of Taiwan social enterprises and positions at a central network, gives us a good example to observe the co-creation process with its multi-stakeholders.

Therefore, this paper uses a qualitative empirical study to discuss the above observations and question, then it highlights six insightful propositions of co-creation in social enterprise context, and more, based on the findings and illustrations, this paper develops a theoretical framework to contribute to fill the gap of co-creation literature.

The rest of this paper proceeds as follows. First, we provide a brief review of characteristics and concept of social enterprise and co-creation in the literatures, then we discuss our setting and methods for data collection and analysis. In the subsequent section, we present the process of co-creation of iHealth and provide six propositions, and develop a framework to show the new services drivers of social enterprise’s co-creation. Finally, we conclude with the research implications of our study.

II. LITERATURE REVIEW

A. The characteristics of social enterprise

As the advanced technology and the ability of innovation proceeding, there are more and more approaches to solve the social and economic problems and improve the welfare of societies, even change the world. Social enterprise is an approach to aim to maximize livelihood improvement and human wellbeing by utilizing business, technology and innovation to achieve both economic and social goals [4], [5], [6]. The most important mission of social entrepreneurs is to create the sustainable social value for public interests, on the contrary, the mission of general entrepreneurs is to maximize profits, social value is mere a by-product in the process [7].

There are increasing researchers studying social enterprise

[8], however, it is not yet become the main stream in the academy. It needs more researchers involving in this area. Most rating researches of social enterprise includes internal operation of social enterprise, the characteristics of social entrepreneurs, the relationship of social enterprise in private and public sectors and the development of firm growth [9], lacks of sufficient innovation aspect study. Nevertheless, Wang [10] pointed out that only to improve innovation ability so that enhance social enterprise's financial and social value, it is the key for startup and operation successfully. Additionally, "innovative business" of social enterprises is more important than "innovative products", and they not only face the challenges of social and economic objects, but are also responsible for the multi-stakeholders [11]. That reveals social enterprises are harder in operation than general firms, therefore, they also have to build social capital strategically for interacting with multi-stakeholders [12].

Based on previous researches, successful social enterprises are the central of network of many organizations that brining more opportunities of cooperation [13]. The successful social entrepreneurs can connect resources that they do not have to solve social problems and change the social structures [14]. Thus, how to leverage multi-stakeholders' resources to develop innovative business is vital for social enterprises to survive in the competitive market.

B. The development context of social enterprise in Taiwan

Since the "921 earthquake" brought big damages in people, buildings and communities in 1999, Taiwan government (Ministry of Labor) learnt from the European policy and cooperated with local none-profit organizations (NPOs) to recovery and reconstruct the foundations and improve employments. Based on the experience and the increasing social enterprises emerging in the society, the government (Executive Yuan) launched "Social enterprise action project" to develop social enterprises in 2014. Hence, there are more and more forums, communities, networks, co-working spaces and holiday markets showing up. The premier of Executive Yuan even provided the official residence for running social enterprise community, and Executive Yuan invited several governmental departments and social enterprises to participate international forums from 2014 and try to build networks for social enterprise.

Therefore, from central and local governments to second and third sectors, there are several relating activities hold in recent years. Sometimes, the cross-departments will cooperate with each other to implement projects. In order to mutual help, self-regulation and build national networks, the "Taiwan social enterprise development alliance" was established in 2015. Policies, regulations, routines, norms and meanings shaped the social enterprises ecosystem in nation, firm and individual levels.

C. The effects of co-creation

More and more companies invite customers to join

designing products and services directly [15], hence, companies have to foster the ability to cooperate with these stakeholders, for instance, searching new opportunities of cooperation by networks and enable stakeholders involving value creation activities [16]. Simultaneously, firms also need to learn how to cooperate and share resources with other firms smoothly to solve the challenge of information flow [17].

Co-creation is not only a significant approach to improve the ability of innovation of managers [18], but also can advance the process of innovation of organizations [19] and is the key factor to drive the new competitive advantages [20]. Perks, Gruber and Edvardsson [21] indicated co-creation was the value creation process participated by firm and its stakeholders (like customers, suppliers and wholesalers), innovation is the result of interaction of individuals and inter-organizations. It is helpful to develop new business models [18], [22].

Firm adopts co-creation approach also can increase the commitment between employees [23] and stakeholders [24], but sometimes may bring the risk [25]. Ramaswamy and Gouillart [15] observed firm cases several years and found that co-creation could produce higher productivity and creativity for firms and reduced the cost, turnover of employee, moreover, create new business model and enhance profits. Co-creation creates a win-win situation for multi-participants not only for firms, and it is hard to imitate the relationship between firms and stakeholders so that provide a source of long-term advantages and high entry barrier.

How to do in co-creation? Ramaswamy and Gouillart [15] pointed four principles. First, the process of co-creation should add value for the stakeholders or they will not participate wholeheartedly. Second, the best way to co-creation is focuses on making all stakeholders acquiring valuable experience. Third, try to enable all stakeholders interact with each other directly. Fourth, firms should provide platform for all stakeholders interacting and sharing experiences.

Through co-creation, all participants may refresh their old recognition of role, authority and responsibility to lead to customer-oriented social innovation. That is coincide with social entrepreneurship. However, scholars emphasized more on single target studies, seldom discuss from the lens of multi-stakeholders [18]. Thus, this paper studies how do social enterprises co-create with multi-stakeholders to develop innovative business model, exemplify one social enterprise, "iHealth Express Group" (iHealth) in Taiwan, to illustrate the co-creation process and hopes to contribute to empirical and theoretical literatures.

III. METHOD

A. Research Setting

This paper tries to discover the context of co-creation and cooperation process between social enterprise and its

multi-stakeholders, and adopts qualitative research is helpful to understand the complete picture of the phenomenon [26], and improve to build the theory [27].

iHealth provides an excellent setting for addressing our research question for several reasons. First, it is an emerging and leading social enterprise in Taiwan, breaking through traditional pharmacy business model to an innovative one although there are many obstructs in the startup era. Second, it has broken even and balanced its financial condition and grows gradually to date from 2010 it established. Third, it viewed as a health-care platform with multi-stakeholders and insists fulfilling its social mission. Fourth, it continuously created new services and platforms each year and emphasizes on the expertise of pharmacy and medical care, furthermore, it won the third Prizes of “DBS-NUS Social Venture Challenge Asia” in Singapore in 2015.

In conclusion, it positions at the central network of social enterprise in health-care industry in Taiwan, we expect the representative example can shed light on the co-creation concept and enhance its theory content in social innovation.

B. Data collection and analysis

We conducted the qualitative study by three main ways. First, there are many mediums interviewing and reporting the idea, mission, start-up process and activities about iHealth recent years, we check a great deal of data (such as reports, news, videos, TV channel, magazines and documentaries) in public media¹ that with detail development information relating iHealth, and those also be used in triangulation with the interview contents. For getting more information, we participated in some social enterprises activities to listen to the speeches of the founders of iHealth. Then, we paid more attention at start-up process, service model, transformation and cooperation projects information and designed semi-structured interview questions from the public data for reference spots in fundamental issues. For example, we saw the “China Life Insurance Company” (hereafter “China Life”) cooperation project in iHealth’s website, we asked “What

kind of situation and opportunity did iHealth cooperate with China Life?”

Second, based on the semi-structured interviews, we visited the office of iHealth to interview the founders, the Chief Executive Officer (CEO)-Mr. Wang and Chief Operating Officer (COO)-Mr. Chan that they charge external and internal business affairs separately, and asked them more about the idea source, process and story of cooperation and innovative services following the conversation topics and contents to understand the development context by face-to-face interview, telephone and social media (such as Facebook, LINE). Besides, we also asked cooperative partners of iHealth, like one vice manager of social enterprise. However, due to the time limit, we can not complete the all interviews in cooperative partners and stakeholders, hence, we checked with the COO of iHealth. The main questions shows in TABLE I.

IV. CASE BACKGROUND: IHEALTH EXPRESS GROUP

In order to understand why iHealth have increasing service innovations and what role it plays, it is necessary to know how iHealth provides services and runs business model which illustrating in this section.

iHealth was founded in 2010 in Taiwan by three young pharmacists and developed a mobile medical care online to offline infrastructure and extended the service to long term care by providing patients chronic disease prescription refilling and delivery for free². It adopted innovative business model as a health-care platform to break the traditional operation of pharmacy although it did much effort to deal with doubt and untrusted by the clients who never knew the new service model at the early stage. Patients can send the prescription information or photos through smart phone, internet or fax to iHealth, then pharmacists will deliver the medicine to assigned locations according to the refilling dates everywhere in Taiwan, even in the country or mountain area.

TABLE I
THE MAIN QUESTIONS OF INTERVIEW

Cooperate with other social enterprises	What kind of the project content did iHealth cooperate with Duofu and how long did the project run? Who propose the project and in what kind of situation? Why did iHealth and Duofu work well without signing contract? What the further steps you plan to go with each other?
Cooperation project launched by two employees of iHealth and China Life	Why did the two employees willing to start the idea? What kind of relationship between the two employees? What kind of the situation, place and time they meet? How did the cooperation process proceed? Did you confront with any obstacle? How did you overcome the distrust of China Life initially? Did iHealth reward the employee?
Cooperate with other partners(NPOs)	Why did you know each other? How did the cooperation and service idea come out? Why did iHealth cooperate with the organization? Is there any organization proposing the cooperation project with iHealth? Why did iHealth refuse the project? What the new models and features of cooperation did iHealth prefer?
Cooperate with investor and customers	Why did iHealth accept the invested by “Senior Marketing System Company”? How did the cooperation process operate in different organization with different value proposition? Why and how did iHealth develop these new service platforms? Did the investor support any resource? How did the pharmacists find the problems of clients and transfer to new services?

¹ Some media report examples in <http://www.ihealth.com.tw/about/media-report>.

² Pharmacists have to obey the law that pharmacists should deal with prescription refillings and deliver the medicine by themselves personally.

Not only providing health counselling, education and medication reminding service to the patients and their family by pharmacists of iHealth, but also total pharmaceutical care, like residence drug reviewing, drug safety education, prescription dispensing, patient counselling, enhance the life quality of residence in nursing home etc.. Moreover, pharmacists help government implement health promotion and disease prevention, and they also provide the healthy and medicine education and counselling in the remote areas voluntarily.

iHealth broke even in 2013 and make a profit U.S.\$3 million in 2014, growing two to three times every year since 2010. 80% revenue from nursing home (proximately 1,500 units, one third of Taiwan) and others are from individual patients. Now iHealth has about 50 staffs in Taiwan, their average age is 28 years old, some of them are attracted and joined iHealth for acknowledging it's three social missions, including (1) seeking for "health equity" through the island, (2) advocates to reallocate medical resources and promote community health in suburban areas and vulnerable groups, and (3) committed to create the best working environment for health professionals.

How does iHealth balance revenue and cost while charge no fee for delivering medicine to clients? First, the pharmaceutical services charge and medicine fee claimed from National Health Insurance Bureau as traditional community pharmacies and hospital pharmacy (under the National Health Insurance policy and system, pharmacy dealing with one prescription refilling will gain subsidy in proximately U.S.\$2). Second, iHealth serves more clients in urban areas that can cover the costs of delivery in remote areas.

To be a health care platform for aging society, iHealth actively developed several relating innovative services starting in 2013, for example, it provided nutrition service, facility-visit doctor service, helping people claim for government's social benefit and select a desirable nursing home, and developed drug-drug interaction and medication duplication reviewing platform for pharmacists of Taiwan. Each new service plays as sub-platform connecting with iHealth.

The stakeholders of iHealth includes staffs, social enterprises, none profits organizations, investors, mentors, governments and nursing homes who play as co-creators of innovative business of iHealth. Not all stakeholders and organizations can be co-creators of iHealth because it will be selected discreetly for health care requirement and protecting the value of social enterprise of iHealth. The next section will demonstrate how iHealth co-create innovative business and cooperations with some of its multi-stakeholders.

V. FINDINGS AND RESULTS

A. Match with the expertise of other social enterprise

The high willingness of collaboration exists between

social enterprises and works well like iHealth and "Duofu."³

Duofu is also a social enterprise which delivering wheelchair-users go to hospitals and visiting. The founders of iHealth and Duofu met each other in one startup program of social entrepreneurship. As the vice general manager of Duofu saying: "*We are both social enterprises and have similar social mission, Duofu for the disability and elderly, iHealth for people with sub-health and unhealthy, both we are devoted to help people may be neglected in the society and should have more collaborations with each other.*"

After knowing iHealth's business model, the CEO of Duofu suggested that Duofu be willing to promptly provide some pickup trucks with drivers to drive pharmacists of iHealth delivering medicines to clients for charging low rentals to meet iHealth's need. Considering the overlapping customers, common social mission, saving costs of maintaining cars and lower rental costs from average price, moreover, Duofu emphasizes much education on staffs about and cares humanity, Duofu's drivers could also provide the security of pharmacists, especially for female pharmacists, iHealth accepted the cooperation of suggestion.

In addition, because pharmacists of iHealth need to drive a car or ride motorcycle to delivery medicine and health-care service, iHealth ask iHealth assign drivers with rich experiences to share the knowledge of transportation security to the pharmacists.

Therefore, due to the common social mission and customer sort, iHealth cooperate with Duofu on each service procedure, expertise and social mission without signing any contract. Moreover, they have built closely network in the social enterprise to connect private sector, none government sector and government.

From the above, it follows the point of view of co-creation that the partnership of co-creation run in a sustained relationship, emphasizes sharing resources and provides the necessary assistance to each other timely [26]. This results in Proposition 1.

Proposition 1. Inter-social enterprises have common social value, object, mission and similar customers sort can build the trust, closer and informal cooperative relationship between each other and its staffs without signing any formal contract. In addition, due to the deep care to the society and humanity, social enterprises can observe the need of customers sensitively that can make both social enterprises have more willingness to develop more fit and innovative service portfolios cooperatively enhancing the co-creation value of firms.

³ Duofu is the first private accessible transport company in Taiwan that serves wheelchair-users (e.g. the disability and elderly in inconvenient walking) to control and manage their life independently, like receiving medical treatment. Duofu also provides wheelchair-users from all over the world for travelling or having meetings in Taiwan.

B. New cooperation form the network of employees

iHealth cooperated with “China Life Insurance Company” (China Life) in October 2014, iHealth provides medicine delivery, 24 hours in pharmacy counselling, analysis of health examination report and other health care and long-term care services to the insured of China Life, China Life transfers the clients who had medical insurance contracts with chronic disease prescriptions to iHealth. iHealth and China Life provide not only different services to the medical insurance clients without any other charge but also extend the health-care service net to the clients.

The new cooperation is a milestone for iHealth. And the period of agreement from connection to contract is less than two months. Particularly, the start point of the idea came from the private gathering of employees of iHealth and China Life. The two friends are hired by iHealth and China Life separately, in the casual gossip during the dinner, the employee of China Life proposed the possibility of integrating the service of iHealth might enhance the value of insurance service, after the talks they reported each other’s supervisor and relating units about the idea. iHealth and China Life started to discuss the project of cooperation.

There are few doubts need to be clarified between iHealth and China Life at the initial stage of discussion, as the COO of iHealth, Mr. Chan, saying by interviewed “China Life always cooperates with firms with turnover over U.S.\$0.6 million a year, they had much doubts to cooperate with iHealth that we only registered less than U.S.\$0.23 million at the beginning of startup, and they doubted the true or false that pharmacists would deliver medicines because never hear about our name and business model, furthermore, they wondered if iHealth could provide the service to large volume clients of China Life around Taiwan immediately.”

After the CEO of iHealth, Mr. Wang, expressed the social mission and business model to the vice president of market department of China Life, China Life also check the news about iHealth, they reached an agreement in the cooperation. iHealth provided incentives to the employee who matched the cooperative project actively.

The informal relationship of employees of inter-organizations can be a crucial platform of co-creation through the identity of each other firm’s value and the empower of organization. This new cooperative project enabled iHealth to open the insurance market, on the other hand, adding new service for the clients of China Life. Both iHealth and China Life enhance the brand value. This case echoes Aoki and Lennerfors [28] pointed that the relationship of firm and supplier were not only existing in management-level, but also important in the relationship of employees of inter-firms. There follows Proposition 2 below.

Proposition 2. The employees of social enterprise have spillover effect of social value of their organizations, empower the authority to the employee can make the relationship network of employees to be a co-creation platform of innovative service and collaboration of organization.

C. The demand innovation from partners

The COO of iHealth expressed that there are some collaborative partners of iHealth coming from the forums, meetings and activities, the innovations emerged naturally from the talks or gossips, not for specific purposes. That is, the collaborative projects are produced from once conversation unexpectedly in the frequent interactions.

For example, iHealth co-created with “Taiwan Foundation for the Blind” (hereafter “Blind Foundation”) as a new service produced in a break tea time in one forum. iHealth designed braille on the medicine bag for reminding the blinds how to use the medicine and delivered it to them of Blind Foundation, on the other side, Blind Foundation assigned lecturers to teach pharmacists understand how did the blinds act and move in their life world and transferred some members to iHealth. Cooperating with different partners enables iHealth developing service innovation.

However, iHealth selects the cooperative partners and service items discreetly, it does not work with unfamiliar organizations. For instance, the COO of iHealth saying “Once there had one firm wanted to cooperate with us to sale the blood glucose meters, but we do not understand that firm and selling products are not our main mission of firm, iHealth had different business idea from that firm, so we reject the cooperative purpose.”

As by the increasing performance of business and promotion of reputation of iHealth, there are more and more firms from senior-oriented industry want to cooperate with iHealth. In order to avoid the deterioration of business vale, iHealth pays much attentions on selecting cooperative partners, it adopts freely connecting with partners and let the innovations emerging naturally and frequently rather approaches extending service scope and scale by collaboration. This results in Proposition 3 and Proposition 4.

Proposition 3. Social enterprises embedded in the characteristic of not viewing business profits for only one firm goal, they emphasis more on the integration with service and business goal and take conservatism to protect their firm value when evaluate the cooperative projects.

Proposition 4. Whether social enterprises cooperate with other organizations based on the trust relationship network and fit social ideas, and the innovative collaboration begins at the emergence of frequent interaction. The new services of collaboration stemming from the need of customers, not for the instrumental strategy.

D. Leverage the supports from investors and response the voices from customers

“Senior Marketing System Company” (hereafter “SMS”)⁴ assisted iHealth adapting business model from focusing on individual clients to nursing homes, thus, iHealth accepted

⁴ SMS is a leading company to provide several senior-oriented health-care services in Japan.

the investment of SMS. Leveraging SMS's senior-oriented health-care experience and the competence of building information communication technology on internet, iHealth manifested the need of customers that found by the pharmacists to new services.

For example, pharmacists have to visit nursing homes each week and visit individual clients by delivering medicine and provide health-care relating counselling service, they found that the clients did not know how to choose suited nursing homes, the nursing homes also are hard to search the source of clients. For solving this problem, iHealth established the nursing home and institution match platform, there are more than 150 nursing homes paying the publication fees and it will charge another fee if successful matching. That is also an approach to test the need of customers and understand the change of market.

In addition, iHealth also developed drug-drug interaction and medication duplication reviewing platform for pharmacists because pharmacists of iHealth found the inconvenient when they helped nursing homes pass through the examination, collected all government's social benefits and subsidies in one platform for senior and disadvantaged people searching and applying what they need, and created one platform for people matching suited insurance representatives in 2015. These ideas of innovations and platforms are drove from the delivered process which pharmacists interacted with clients, and developing fast and possible innovative services by leveraging investor's (SMS) core competence and resources after the pharmacists reporting the problems in the meeting hold each week.

Owing to the understanding of discrepancy, in principle, SMS provides suggestions and experiences to iHealth and supports what it needs rather than asks it to comply with Japanese model in health-care. Flexibility and space, fasten iHealth's innovations. The above leads to our fifth and sixth proposition.

Proposition 5. When the social enterprises have explicit social and business missions, investors plan to invest those need to understand the service discrepancy in different areas and demand of customers, keep trust and space to social enterprises implementing social and business missions, and support the skills and resources that create more innovative service from real need and increase the entry barrier to latent competitors.

Proposition 6. One approach of social enterprises to co-create with customers is to find their voices of difficulties and problems in the life directly and leverage those to innovations immediately. That is, who interacting with customers frequently and response to solve problems quickly is the key to emerge new ideas.

Taken as a whole, this paper finds that the operation of social enterprises exists two spillover effects to improve co-creation behaviors. First, the stakeholders of social enterprises will diffuse social enterprises' social missions and

services through themselves networks actively due to the social value and honor. Second, there are weak and strong network ties existing in social enterprises and stakeholders, like common customers and those who also recognize the social goal, can increase the extent of trust. These two spillover effects will lead to more positive power of drivers for social enterprises co-creation. More specifically, the sources of positive power of drivers may stem from the influences of social goals implemented by social enterprises that recognized by stakeholders, and the extent of drive power may relate to the frequency and depth of interaction between social enterprises and stakeholders, and between inter-stakeholders.

VI. DISCUSSIONS

The extant literature on co-creation emphasizes much on the interaction among firms, customers and suppliers to view and discuss their performance [20] and innovation [18], [19]. This paper tries to explicate how firms co-create with multi-stakeholders in innovative business that exemplifies one social enterprise, iHealth, in Taiwan. This paper indicates six propositions to illustrate how iHealth co-create innovative service with multi-stakeholders, such as social enterprise, none profit organization, investor, pharmacist, individual customer, nursing home and employee.

As winning a prize and reported by media, there are more and more people knowing iHealth and want to connect or cooperate with it. That let iHealth cautions more in preserving its firm value and identification of employees, therefore, this paper induces three characteristics of co-creators of iHealth. First, co-creators need also have clear social mission or acknowledge the mission and idea of inter-organizations. Second, cooperation is based on long-term partnership and common experience context, sharing resources and assisting each other, rather the short-term strategic contract relationship. Third, the ultimate concerns of co-creators are social problems and needs but economic issues, they also have to care the common customers or disadvantaged practically and deeply. These three characteristics driving from social entrepreneurship could be the indicators for the social enterprises choosing co-creators.

On the co-creation process, this paper finds five features of co-creation of iHealth. First, new services are emerging in one of conversations naturally underlying interacting frequently, not specific purposes. This proves that Ramaswamy and Gouillart [15] argued co-creation is an approach to create ideas within the continuous interaction relationship, partners interact directly in practical experiences and emerge the solutions of problem-solving or improvement in one unanticipated conversation. Second, the interaction between iHealth and co-creators is based on mutual trust, and trust is based on the identification of social goal. Social enterprises will be more discreet to the cooperative projects which proposed by the unfamiliar organizations. Third, the

content of new services should be focused on the pharmaceutical and medical expertise, iHealth does not engage in unrelated businesses, not to mention the cooperation for only economic purpose. Fourth, the source of innovation stems from quickly responses to needs of service targets [29], and discovering and understanding the sustainable goals of customers and transferring that to be emergent innovative actions. Fifth, stakeholders are willing to deliver the social goal and service of iHealth, and introduce their stakeholders of network to be as iHealth's new co-creators.

How to create the opportunities of co-creation? In the above context, this paper argues "social mission" and "positiveness of innovation" are the two main attractive powers for social enterprise to bring co-creation network, not connecting and knowing more people but deeply and frequently interacting stakeholders in formal and informal conditions. As the COO of iHealth stating: "*We do not adopt all innovation and cooperations projects, it must be very cautious because there may not be the helpful assistance to iHealth, we can earn less but not harm the social value we startup at the beginning, that is why we are here.*"

Social enterprises should fulfill the ultimate concern of customers and search the solutions to the social problems they find, and interact frequently with partners based on trust so that they may bring more unexpected innovative services and cooperations. Especially, when the service processes entering the stakeholders' life experience that will carry out spillover effects of spreading information and connecting with networks that enable stakeholders have chances to contribute to the society through joining social enterprises business activities and system, furthermore, bridging the structural holes of stakeholders and social enterprises to provide network benefits and identifying innovation opportunities [24]. Payne and Holt [30] noted co-creation can strengthen the relationship of value network between customers and firms, this paper argued co-creation of social enterprises also can consolidate the multi-stakeholders so that to create more opportunities of innovation in business models [31], [32], improve the economic effects of co-creation network [15] and solidify more competitive advantages for social enterprises.

For the social entrepreneurs, how to scale up their value co-creation system and add more cooperation opportunities? We propose three advices. First, based on Resource-Based View, Service-Dominant Logic (SDL) viewing customers as the centric model of firm resources can robust marketing ecology, namely that firms can deploy customers as operant and operand resources of value co-creation [33]. We further suggest social entrepreneurs can view the multi-stakeholders as platforms to connect and deliver social and business values that will enhance more interactions with stakeholders' networks rather only view the social entrepreneurs as innovators. More heterogeneous as stakeholders with more value co-creation spots and power that riches the value co-creation ecology system. Second, continually innovation is

the growth and competitive advantage key to firm, social entrepreneurs should further develop relating new services and technologies which ideas from the customers or other stakeholders, for example, iHealth created some new service platforms that seems not direct but relating and complementary to its pharmacy domain, but as a health-care platform, thus these platforms can help sense the demands of customers, clients and markets and connect, extend and deepen the relationships between stakeholders which is the co-creation main foundation. Transfers the problems and needs of stakeholders to diversified and complementary innovations and not limits in the domain services will broaden the scope of value co-creation. Third, social entrepreneurs may improve their social missions and values diffusing to the society. Because the more clear and motive social value, the more perception and inspiration that stimulates the stakeholders to act and connect with social enterprises, it will shape the drive to the co-creation system in virtuous circle.

For the agents of social enterprises, such as staffs, employees or shareholders, we suggest that they should have two changes to diffuse authentically good things. First, they should change the mindset from viewing the job or business as just earning instrument to the channels to improve the society around themselves. Deliver any service and solve any problem will change the social meaning of service and product so that they are the change makers to the society. Second, they should extend their expertise domain to relating complementary skills and knowledge (such us from pharmacy to health-care, service platform design and new information technologies) rather focus on specific field. That will empower them to carry out more ways to diffuse authentically good things.

Interestingly, *service-ecosystem* concept provides a useful lens to analysis the co-creation process [3]. As Vargo, Wieland and Akaka viewed service-ecosystems as "*the participation of systemic actors and the role of institutions in innovation and market (re)formation,*" thus, "*innovation can be broadly conceptualized as the co-creation or collaborative recombination of practices that provide novel solutions for new or existing problems (i.e., the at least partial disruption of existing institutions)*" (p.70) [3]. In our article as proposition 2, employees can be operant resources that introduce their resources (relationship, network, knowledge etc.) to the service innovation because they have mutual belief with social enterprise and be empowered to co-create the business value propositions that proves the service-ecosystem concept of Vargo, Wieland and Akaka. Additionally, socio-technical system, including of rules, norms, values, meanings and practices, is also the driver of market innovation [3], therefore, stakeholders who approve of the social and business values of iHealth will be as potential drivers to co-create innovative services. Further, Vargo, Wieland and Akaka emphasized the function of institutions which can lead interaction among actors [3], we agree the argument which exemplify iHealth.

However, this research service-ecosystems with a little difference, we propose that social innovation service-ecosystems stem from the potential and subtle social issues, problems and demands that need different kind of agents and stakeholders to discover, thus, social entrepreneurs should know how to cohere the cognition of stakeholders through business and innovative ways to diffuse and create social value. Simultaneously, social entrepreneurs should play as gatekeeper to filter whether the new created values fitting the social value or not. Due to much lacks of discovery and

attention on social value, in iHealth case, we find many potential opportunities to meet social and economic value, especially adopting disruptive innovation approach. That is, make virtuous circle of social value is more important than economic value so that the service-ecosystems will foster potential innovative energy and drivers.

Finally, based on the six propositions and findings, this paper builds an innovative co-creation framework of social enterprises as figure 1 and figure 2, hopes that inspire future researches discover more insights on this topic.

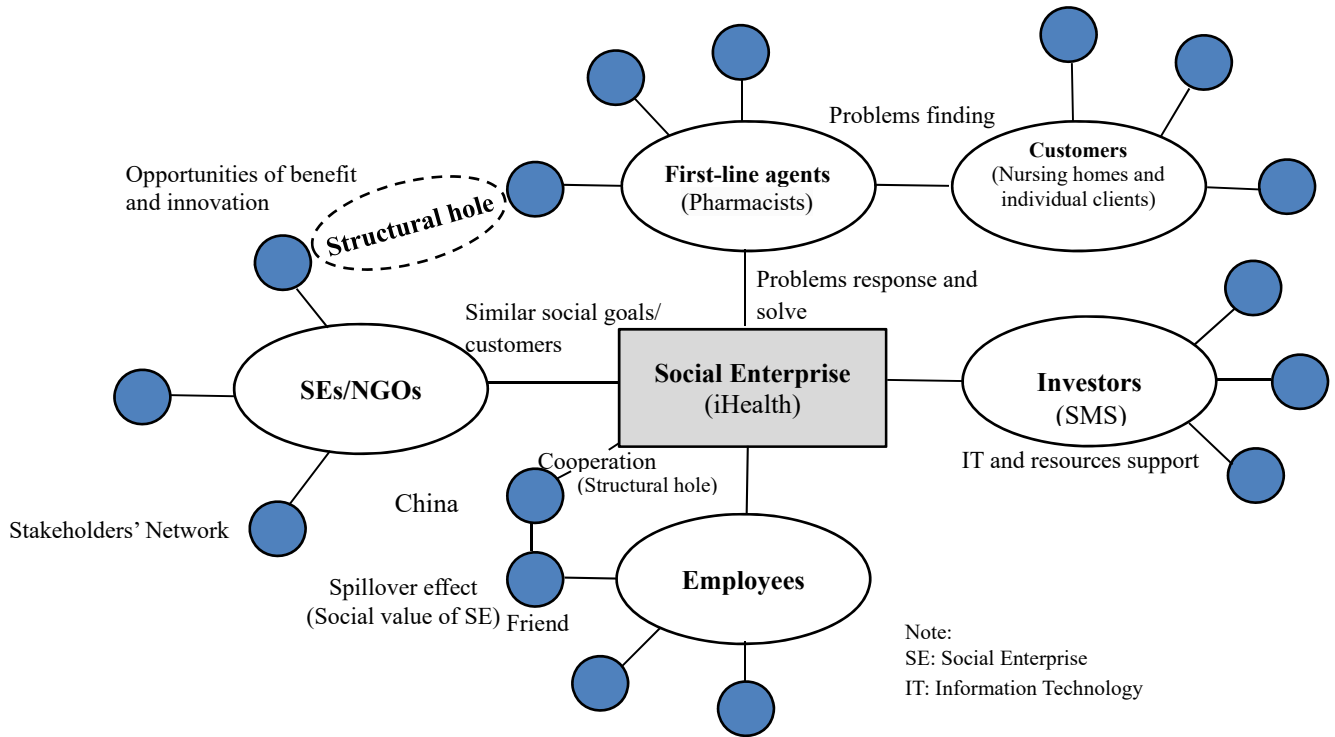


Fig. 1. Co-creation network of social enterprises

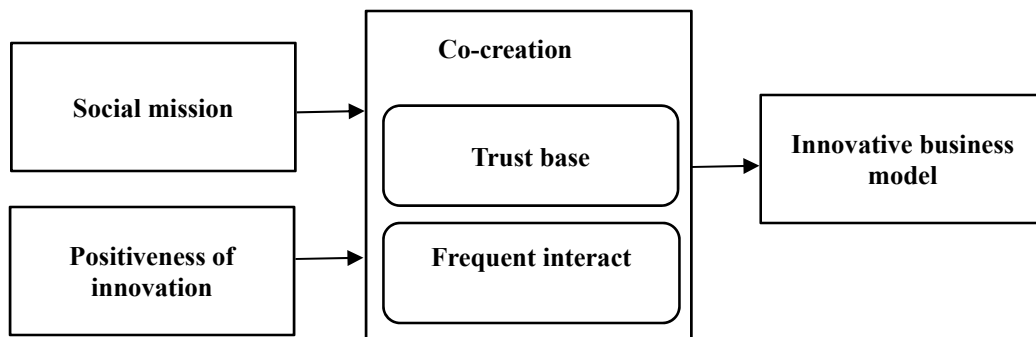


Fig. 2. The effects of drivers of social enterprise's co-creation

VII. CONCLUSION

Prior research on co-creation has generally focused more on the process between customers and suppliers. This paper adopted qualitative research approach to study how social enterprise co-create with multi-stakeholders to develop innovative business model, enhancing the gap of literature. Particularly, this paper uses the emerging form of firm-social enterprise to illustrate it's specific features on co-creation process, such as selecting partners discreetly, trust relationship and social care which are different from general corporations. Specifically, a firm is viewed as a composition of resources [34], this paper expresses how the firm leverages the internal and external resources of multi-stakeholders to increase the opportunities of innovation through social innovation approach. iHealth is a good example for understanding the reality.

The findings also offer some interesting insights for understanding how co-creation paly a useful way to strengthen the effects of network economy and long-term development of social enterprises that develop more innovative services rooting in the local for customers and stakeholders. The operation of iHealth shows us each co-creator existing in the network, society and economy can create different extent of opportunity and power. This paper proposes six propositions that mention above to explicate the relationship and process of co-creation between social enterprise and stakeholders. Furthermore, as Figure 1 illustrates, we show the co-creation map of social enterprise to demonstrate the detail link and relationship which has crucial insights. Additionally, we argue social mission and positiveness of innovation are two drivers of co-creation of social enterprise to develop innovative business model based on trust and frequent interact conditions (As Figure 2).

Finally, as the value of society and economy switching gradually in the world, does advanced technology and innovation make people care each other more frequently, or seldom? Make life more convenient, or extend the trust distant between people? The deep reason why iHealth work successfully is it rebuild the trust of embedded in the business model through innovation and technology. Trust may be a simple thing and concept, but that is hard for some firms to do it. With trust of co-creation enables the engine of innovation starting.

Under the social enterprise or social economy context, there are some interesting aspects and issues that future researches can address that we suggest, consists of co-creation in different level industry context, the different innovative effects of area and culture to co-creation, co-creation ecology system and distinguishing characteristics of multi-stakeholders to the performance of co-creation.

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