Product Liability of Living Lab Products

I. Forward

Only about 18% of the products or services continue to create good sales and have long product life cycles after entering the stream of commerce. This might denote that mass investing in the R&D does not necessary guarantee to develop popular goods and services. In order to overcome this obstacle, many experts and scholars from different research areas propose different R&D mechanisms to solve this problem. The so called "open innovation" is one of the most dynamic R&D mechanisms in recent years, which is created to compensate the weakness of "closed innovation".

By introducing the concept of "open innovation", Living Lab invites real users join the projects of un-launched products and services for every possible R&D process to obtain the real interaction wherefrom, to fulfill the goal of "user centric" innovation. However, if users or any third party is injured or damaged from the trial products or services, to what extent Living Labs is liable for is one important question to further future innovation environment.

This article will first gives a brief introduction and the development of living labs in Taiwan, follow by applying national laws and analysising obstacles to the liability issue caused by defective Living Lab products. Then, the article will continue to refer to foreign legislation and Living Lab practice, and conclude by suggestions and recommendations to the Living Labs practice in Taiwan.

II. Brief Introduction of Living Labs

A. Composition of Living Labs

The concept of Living Labs was developed by Professor William J. Mitchell from the MIT Media Lab and School of Architecture. Professor Mitchell proposed applying the user-centric research method by using Living Lab as a R&D platform and bring together stockholders (cocreators), including public sectors, companies, universities and research fellows, and the most important, the end-users communities, both professional or non-professionals from various backgrounds, to join the R&D process.

B. Operation Mode of Living Labs

Living Lab invites end users to join the real world testing either in a digital, physical or virtual environment. Un-launched products or services are provided for testing and users are required to give feedbacks either experience, opinions, suggestions or even ideas to the products or services in return. Living Lab then collets and utilizes the feedbacks and observe the behavior patterns for product or service modification and improvement, future R&D plans and market analysis.

C. Benefits of Living Labs

Lirving Lab could effectively converse different backgrounds and levels of empirical environment, enhance the efficiency in R&D and bring about different benefits to the stakeholders. By participating in the R&D process, users could give feedbacks to Living Labs to further up the un-launched products and services (on the marketplace) to fit consumers' needs. For industry, Living Lab provides platforms to get together stakeholders, speed up the integration of stakeholders of different size or from different fields and promote the R&D efficiency. For universities and research institutes, the public-private-people (user)-partnership (PPPP), could further more flexible services or R&D ecosystem and not only to have user-centric innovation, but also user-driven innovation.1

D. Development of Living Labs

Living Labs has been energetically developed in Europe. Through the integration of project resources, individual Living Lab forms into Living Labs networks and actively engaging in cross-border or cross-project co-operation. 2

The concept of Living Labs has been introduced into Taiwan, there are several Living Labs in Taiwan so far, for example, Living Labs Taiwan from Institute for Information Industry (III), 3Touch Center (Center for Technology of Ubiquitous Computing and Humanity) from National Cheng Kung University, 4 Insight (Center of Innovation and Synergy for Intelligent Home and Living Technology) from National Taiwan University, 5 and Eco City from National Chiao Tung University. 6 The Living Labs aim to bring about the user-centric and user-driven model and bring new elements to R&D innovation.

III. Liability of Losses, Damages, or Injuries Caused by Living Lab Products

In order to encourage more end users join the Living Labs experiment, Living Labs usually provide the un-launched products or services as gifts or lend it for free. However, if products or services caused injury, economic loss or property damages to the users or third party during the experiment, to what extent should the Living Lab be liable for.

A. Legal Status

Upon on discussing of legal liability of Living Labs, the first prong to review is the legal status of Living Labs under the legal system in Taiwan. Although it is called "Lab", but it is not necessarily to be a lab with "physical facility", it could also be "virtual Labs", for example, HP and Firebox are both launch for virtual Living Labs online to invite users join their open innovation projects.

The concept of open innovation within the Living Labs environment, where Living Labs play as a role of a cook pot which gather personnel, equipment, and technology from parties from different working fields, integrate resources and creativeness to catalyze innovative ideas for new products and services. Normally, each Living Lab can be viewed as an independent "legal entity". In other words, it can exercise rights ad bear responsibility/liabilities under the law, and therefore, to response to needs for R&D, increase efficiency and contribute matters of legal compliance.

B. User's Legal Claims Against Living Labs

1. Contractual Liability

Living Labs often use "user agreements" as legal documents to regulate the legal relationship between Living Labs and users. If there is any injury, damages or losses occurred during the experiment, users can sue Living Labs for breach of contract and sue for liability, warranty or

violation of justice of contract.

If the product is defective, such as manufacture defect, design defect or lack of proper warning, the injured user can sue Living Labs based on warranty. However under the provisions of Article 411 of the Civil Code, 7 if the product is offered for trial free for charge, if the gift is defective and caused injury, damages or losses to the users, Living Lab is not liable for breach of warranty. Unless the Living Lab intentionally conceal the defects and not information the user, or represent to the user that the product is guaranteed flawlessness and free from defects. Under this situation, Living Lab will be liable for damages caused by the defect. In the situation that when Living Lab only lend the products for trial, with the provisions of Article 466 of the Civil Code, 8 only when Living Lab intentionally conceal the defect, then is liable for the injuries and damages resulting there from.

However, the purpose of the Living Labs experiment is to implement the open innovation, through the operation of the mechanism, by inviting potential users to join the experiment and require them to give feedbacks, ideas and recommendations for future product improvement. In addition to that, in most of the situations, it is difficult for Living Labs to foresee the existence of potential risks of their products or intentionally conceal the defects or guarantee the products are without defects; therefore it will be even harder for the injured users to bear the burden to proof the above situations.

It is worth to address that, Living Labs and users shall enjoy contract autonomy as long as the provisions and terms of contract are not violating laws, public order and good morals, but not without any restriction. When parties have right of freedom of contract, at the mean time, their contract shall not exceed the boundaries of contractual justice. Especially, the burden and allocation of risks needs to be measured and assessed by the status and interests of the parties on rational bases.

Because one of the special characteristics of Living Lab is open to general users to participate the experiment voluntarily, Living Lab usually adapts fill-in standard form contracts for convenience. But for the protection of the users, Living Lab shall pay more attention to the provisions and terms of contract which must not violate Article 247-1 of the Civil Code, 9 for example, provisions of contract shall not waive, decrease or increase liabilities of the parties, waive or limit any party to exercise his/her rights, or significant detriment one another's' interests, otherwise that part of the provision shall be void.

2. Tortious Liability

When damages are caused by defective Living Lab products, users may be able to sue Living Labs and based his/her causes of action on Consumer Protection Law Article 7 business operator's liability, 10 The Civil Code Article 191-1 manufacturer's liability 11 and as well as The Civil Code Article 184 (1) tortious liability. 12

Yet, in order to provide motivations and incentives for users to join the open innovation, Living Labs usually gratuitous lending or gifting products or services to the users, at least in this stage, Living Labs are not conform with the definition of "business operators" 13 in the Consumer Protection Law, in designing, producing, manufacturing, importing or distributing goods, or providing services design, manufacturing, inputs, distribution of goods or the provision of services for business enterprise operators. Nor the Living Labs users are under the same definition of "consumer" 14 protected under the definition of the Consumer Protection Law, as those who enter into transactions, use goods or accept services for the purpose of consumption. Therefore, the relationship between Living Labs and the users are not "consumer relationship" 15 for sale of goods or provision of services, for which the Consumer Protection Law might not be applicable to offer protection to the users

Reviewing from the legislative history, Article 191-1 of the Civil Code was amended after the Consumer Protection Law. The reason for amendment was to maintain the completeness of the torts liability in the Civil Code and in supplement to the inadequacy of the Consumer Protection Law. 16 In referred from the above, the definition of "goods" is synonymous with the definition in the Consumer Protection Law. In order to apply the provisions, parties must be in the "consumer relationship" as regulated in Article 2 (3) of the Consumer Protection Law. As mentioned above, usually, Living Labs provide the products free of use or as gifts, it is really difficult to say there is "consumer relationship" between the parties

The first clause of Article 184 of the Civil Code states, "A person who, intentionally or negligently, has wrongfully damaged the rights of another is bound to compensate him for any injury arising there from. The same rule shall be applied when the injury is done intentionally in a manner against the rules of morals." Hence, in this situation the burden of proof will lay on the users to prove that Living Labs is either with negligent or intent to damage the users by the defective products.

Living Labs adapt open innovation to encourage users to participate into the every possible R&D process and obtain feedbacks or recommendations in return. Therefore, most of the time, Living Labs do not have "intent" to cause damages to the users, but whether Living Labs are with "negligence" will often be difficult to prove by the users.

C. Third Party's Legal Claim Against Living Labs

1. Contractual Liability

In the case when a third party, who is not associated with the Living Labs experiment, sustains injury or damage from the defective Living Labs products, he or she might not be able to sue under the terms of contract because there is no contractual relationship exists between the parties. The possible cause of action for the third party might be able to sue Living Labs based on torts liability for damages.

2. Tortious Liability

Although Article 7 of the Consumer Protection Law does provide cause of action for the third party to sue against the business operator for defective products, the third party must base his or her claim on the "consumer relationship" between the Living Labs or users. However, as mention as above, the relationship between Living Labs and the users are not under the "consumer relationship" as prescribed in the Consumer Protection Law, thus third party cannot sue Living Labs for damages in accordance with the Consumer Protection Law. As to the application process of provisions prescribed in Article 191-1 and 184 (1) of the Civil Code, the result is as the same as above.

IV. Foreign Legislation and Practice

A. American Jurisprudence 2d

In the Comment of the 63A Am. Jur. 2d Products Liability §1142 states, "[s]trict liability covers not only products which have been sold, but also products that have been designed to be sold, have been produced to be sold, or are offered to be sold or marketed". Furthermore, introduction into the stream of commerce does not require a transfer of possession; strict liability rests on "foreseeability", and not on esoteric concepts relating to transfer or delivery of possession. Furthermore, the Comment extends the scope of application of strict liability to the "Transaction Other than Sales". Strict liability also applies to the distribution products in a commercial transaction other than a sale, one provides the product to another either for use or consumption or as a preliminary step leading to ultimate use or consumption.

For products made available for demonstration, testing or trial regulated in 63A Am. Jur. 2d Products Liability §1147, where a product-caused injury has taken place while the product is being tested or used for trial purposes by the prospective buyer, prior to the completion of a sales transaction, the person or entity who placed the product into the stream of commerce by providing it to the prospective buyer may be strictly liable. Strict liability also applies to those who manufacture and supply products to consumers on an investigational basis, even though the "supplying" does not technically amount to a sale.

In the Observation of §1147 states that "[a] manufacturer who enters the marketing cycle by way of a demonstration, lease, free sample, or sale is in the best position to know and correct defects in its product, and as between the manufacturer and its prospective consumers, should bear the risk of injury to those prospective consumers when any such defects enter the market uncorrected.

In sum, if one sustained injury, damages or economic losses by Living Labs products, he or she may sue Living Labs for product strict liability prescribes in §1142 & §1147.

B. Living Labs Practice in Foreign Countries

Referring to provisions of "Standard Contract" used between Living Labs and the users in other countries, most of the time, Living Labs might disclaim damages to property, but cannot disclaim legal protection or injury compensation. At the mean time, most of the Living Labs also adapt public safety insurance and product liability insurance to protect themselves and the users.

V. Conclusion and Recommendation

In conclude, the legal norms in Taiwan seems not be able to offer proper protection to Living Labs and the users. This article suggests that in order to form the ecosystem for the open innovation model of Living Labs, Living Labs shall provide proper protection to the users in order to balance the interests between Living Labs and users and catalyze the motive for the users to join the experiment.

In referring to the "Guidelines for Good Clinical Practice for Trials on Pharmaceutical Products" 17 from the Department of Health, besides the proper duty, the main purpose of the guideline is to ensure the safety of the human participants. In the provisions prescribe in Article 22 of the "Good Clinical Guidelines", the clinical trial agreement or related document shall provide participants with proper compensation or treatment when damage occurs.

The "Model Clinical Trail Agreement" also provides provisions of damage compensation and insurance in the template which state the application to the assumption of risks and consumer protection. However, because the pharmaceutical clinical trial is with higher risk, the competent authorities, Department of Health, particularly get involved within the regulations and mechanisms of clinical trials to protect the human participants. In sum, whether the similar mechanism can be applied directly between the Living Labs and users needs for further consideration.

Finally, for the continuous operating environment, it is necessary for Living Labs to adapt related laws and measures for the open innovation operating model. It is suggested that Living Labs shall enter contracts in the terms with proper risk allocation in accordance to contract justice and possibly with public safety or product insurance to share their liabilities.

1.EUROPEAN COMMISSION INFORMATION SOCIETY AND MEDIA, Living Labs for User-Driven Open Innovation: An Overview of the Living Labs Methodology, Activities and Achievements, European Commission (2009), at7, available at

http://ec.europa.eu/information_society/activities/livinglabs/docs/brochure_jan09_en.pdf (last accessed on Dec. 31, 2012).

2. ld., at 11-12 & 14.

therefrom."

- 3.Living Lab Taiwan, http://www.livinglabs.com.tw/index.html (Last accessed Dec. 26, 2012).
- 4. Touch Center from National Cheng Kung University, http://touch.ncku.edu.tw/touch/?q=node/52 (Last accessed Dec. 26, 2012).
- 5.Insight from National Taiwan University, http://insight.ntu.edu.tw/zh-tw/node/662 (Last accessed Dec. 26, 2012).
- 6.Eco City from National Chiao Tung University, http://www.ecocity.org.tw (Last accessed Dec. 26, 2012).
- 7.Civil Code Article 411, "The donor is not liable for a defect in the thing or right given. But, if he has intentionally concealed the defect or expressly guaranteed that the thing was free from such defect, he is bound to compensate the donee for any injury arising therefrom."

 8.Civil Code Article 466, "If the lender intentionally conceals a defect in the thing lent, he is responsible to the borrower for any injury resulting
- 9.Civil Code Article 247-1, "If a contract has been constituted according to the provisions which were prepared by one of the parties for contracts of the same kind, the agreements which include the following agreements and are obviously unfair under that circumstance are void.

 (1) To release as to reduce the respectibility of the party who prepared the entries of the contract. (2) To increase the respectibility of the
- (1) To release or to reduce the responsibility of the party who prepared the entries of the contract. (2) To increase the responsibility of the other party. (3) To make the other party waive his right or to restrict the exercise of his right. (4) Other matters gravely disadvantageous to the other party.
- 10. Consumer Protection Law Article 7, "business operators engaging in the design, production or manufacture of goods or in the provisions of services shall ensure that goods and services provided by them meet and comply with the contemporary technical and professional standards of the reasonably expected safety prior to the sold goods launched into the market, or at the time of rendering services. Where goods or services may endanger the lives, bodies, health or properties of consumers, a warning and the methods for emergency handling of

such danger shall be labeled at a conspicuous place. Business operators violating the two foregoing two paragraphs and thus causing injury to consumers or third parties shall be jointly and severally liable therefore, provided that if business operators can prove that they are not guilty of negligence, the court may reduce their liability for damages."

11.Civil Code Article 191-1, "The manufacturer is liable for the injury to another arising from the common use or consumption of his merchandise, unless there is no defectiveness in the production, manufacture, process, or design of the merchandise, or the injury is not caused by the defectiveness, or the manufacturer has exercised reasonable care to prevent the injury. The manufacturer mentioned in the preceding paragraph is the person who produces, manufactures, or processes the merchandise. Those, who attach the merchandise with the service mark, or other characters, signs to the extent enough to show it was produced, manufactured, or processed by them, shall be deemed to be the manufacturer. If the production, manufacture, process, or design of the merchandise is inconsistent with the contents of its manual or advertisement, it is deemed to be defective. The importer shall be as liable for the injury as the manufacturer."

12. Civil Code Article 184 (1), "A person who, intentionally or negligently, has wrongfully damaged the rights of another is bound to compensate him for any injury arising there from. The same rule shall be applied when the injury is done intentionally in a manner against the rules of morals."

Consumer Protection Law Article 2 (2), "business operators" means those who are engaged in the business of designing, producing, manufacturing, importing or distributing goods, or providing services.

Consumer Protection Law Article 2 (1), "consumers" means those who enter into transactions, use goods or accept services for the purpose of consumption.

Consumer Protection Law Article 2 (3), "consumer relationship" means the legal relationship arising between consumers and business operators for sale of goods or provision of services.

16.王澤鑑, 侵權行為法第二冊: 特殊侵權行為, 第313-314頁 (出版日期2006年7月)

17.DEPARTMENT OF HEALTH, Guidelines for Good Clinical Practice for Trials on Pharmaceutical Products,

http://www.6law.idv.tw/6law/law3/%E8%97%A5%E5%93%81%E5%84%AA%E8%89%AF%E8%87%A8%E5%BA%8A%E8%A9%A6%E9%A9%97 (last visited Dec. 31, 2012)

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