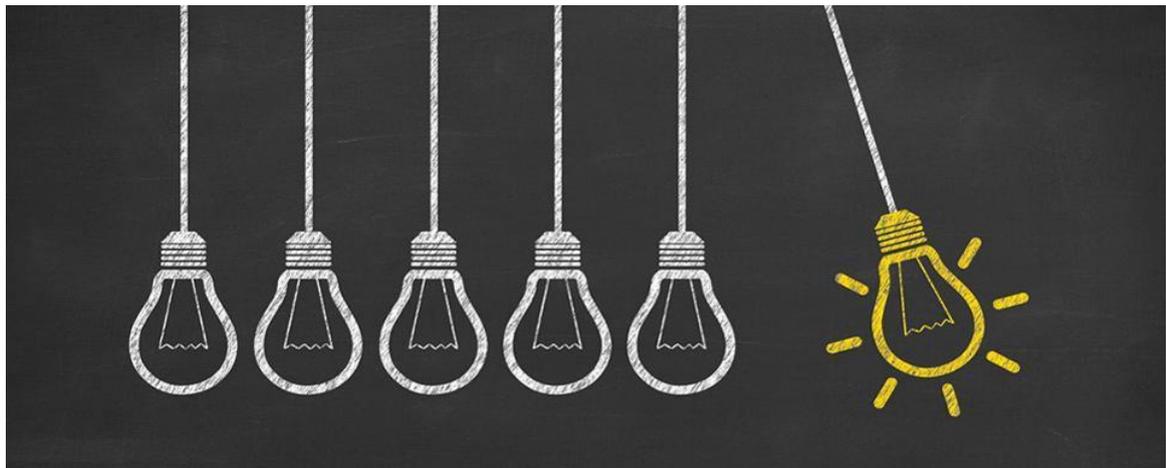




## PROMOTING GERONTECHNOLOGY & INNOVATION IN HONG KONG



Engagement Activity  
Post-event Report  
Sept 2017

# PROMOTING GERONTECHNOLOGY & INNOVATION IN HONG KONG

## BACKGROUND

The ageing population is a global phenomenon that challenges our values and commitment to sustainable social development. Many countries are exploring different ways to enhance the well being of their senior citizens. Moreover, amongst those methods, the adoption of innovation and gerontechnology stands out as most promising. Gerontechnology refers to the applications of design and new technologies to promote independent living and autonomy in the older adults while strengthening the support of their networks.

In 2013, the Japanese Government developed a strategy to guide the adoption of robotics to provide care for old people, supported by JPY 2.39 billion. In Germany, a "High Tech Strategy 2020" has been launched by the Federal Government to transform the country into a leader in innovation, with a theme of healthcare technology. There are also exciting developments in places such as Korea, Taiwan, Singapore and Mainland China. In Hong Kong, the Elderly Services Programme Plan (ESPP) formulated by the Elderly Commission (EC) suggests that adoption of technology and innovation should be an angle too critical to miss.

Comparing to the overseas countries or regions, Gerontechnology is still in at its infant stage. There is even a lack of an overview of existing gap and hurdles on this subject area. The Hong Kong Council of Social Service (HKCSS) thus proposed the first-in-town 'Landscape Study on Gerontechnology and an engagement activity to discuss the research findings. With the funding support of the Social Innovation and Entrepreneurship Development Fund (SIE Fund), HKCSS has partnered with Our Hong Kong Foundation (OHKF) to conduct a "Landscape Study of Hong Kong's Gerontechnology" earlier. Also funded by the SIE Fund, the Stakeholder's Engagement Session was organized in June 2017 to tap the local wisdom further.

In this report, we would like to give an account of the key learning points of the engagement activity, feedbacks from the participants and the way forward.

**THE ACTIVITY**

Date: 20 June 2017(Tuesday)

Time: 13:00 -17:00

Venue: The Efficiency Unit, 41/F, Revenue Tower, 5 Gloucester Road, WanChai.

Time	Programme
13:00	Registration
13:15-14:00	Networking & light lunch.
14:05-14:10	Welcoming Remarks <ul style="list-style-type: none"> <li>▪ Dr C.K. Law (Associate Professor, Dept. of Social Work and Social Administration, University of Hong Kong., Member of SIE Fund)</li> </ul>
14:10-14:20	Presentation of Souvenirs and Group Photo
14:20-15:00	Sharing of findings in "Landscape Study of Hong Kong's Gerontechnology." <ul style="list-style-type: none"> <li>▪ Mr Stephen Wong (Deputy Executive Director and Head of Public Policy, Our Hong Kong Foundation.)</li> <li>▪ Mr Kenny Shui (Senior Researcher, Our Hong Kong Foundation.)</li> </ul>
15:00-15:05	Introduction of Guest Facilitators
15:05-15:15	Healthy Break
15:15-16:15	Breakout session Guest Facilitators: <ul style="list-style-type: none"> <li>▪ Mr Timothy Ma (Vice-chairman of the General Chamber of Social Enterprise);</li> <li>▪ Ms Yvonne Li (Former co-founder and CEO of AvantageVentures)</li> <li>▪ Ms Lois Lam (Chief Officer, NGO Capacity Building, Hong Kong Council of Social Service.</li> <li>▪ Ms Tanni Hsu (Project Officer, Policy Research and Advocacy, Hong Kong Council of Social Service.</li> </ul>
16:15-16:55	Group sharing
16:55-17:00	Closing Remarks  Mr Chua Hoi Wai (Chief Executive, Hong Kong Council of Social Service)

## SHARING OF FINDINGS IN" LANDSCAPE STUDY OF HONG KONG'S GERONTECHNOLOGY

Aiming to stimulate thoughts, in particular in areas of development, policies, and infrastructure of gerontechnology to tap new opportunities, the SIE Fund commissioned HKCSS to conduct the first-ever study of the subject in the city. The Landscape Study of Gerontechnology in Hong Kong collected the views of stakeholders and enhanced their understanding of gerontechnology and its application of innovations to meet the current and future demand for elderly care.

Conducted by OHKF in partnership with HKCSS, the study focused on four areas, namely Living, Healthcare, Diet, and Transport and looked into 72 products and services with the potential of widespread use in Hong Kong. Among them, 56 were being used in Hong Kong. Most of these 56 products and services were locally developed, for example, virtual reality (VR)-based rehabilitation system for cognitive-impaired patients, an automatic shower machine, and a smart RFID walking cane, etc.

The study also identified five main challenges facing gerontechnology in Hong Kong:

- 1) A lack of understanding about gerontechnology, with gerontechnology products seen as supplementary rather than core to elderly care;
- 2) A lack of collaboration among stakeholders; for example, cooperation among universities, research institutes, NGOs and government departments are;
- 3) Startups fall victim to the "Valley of Death" as a lack of funding often hinders applied research or commercialization of their products;
- 4) Products that are well received overseas do not enjoy the same popularity in Hong Kong due to cultural differences and the small market size; and
- 5) A lack of test beds for new products.

In summary:

- As compared with other countries and regions, the development of gerontechnology in Hong Kong is still at an initial stage.
- The gerontechnology landscape study is crucial because it provides an extensive examination of the subject, something that has been lacking in Hong Kong.
- This study has successfully highlighted the opportunities, challenges, advantages, and gaps for the gerontechnology sector.
- Products and services derived from gerontechnology can enhance the living quality of the elderly and relieve the pressure of their caregivers.
- For service providers like residential services, gerontechnology helps improve service quality and efficiency, mitigate human resources shortage, and enhance occupational safety.
- Collaboration with different stakeholders and service users in promoting the development of gerontechnology should be encouraged.
- Stakeholders should work together to turn challenges facing the sector into opportunities. It will support innovations for our city and help brilliant ideas thrive while bringing a pleasant living to the elderly in their later years.

**BREAKOUT SESSION**

Discussion focus:

In the Gerontechnology Landscape Report published on 12 June 2017, a total of 24 gaps and difficulties, involving different stakeholders across various stages of the gerontechnology ecosystem have been identified.

The breakout session aims to brainstorm ideas to narrow gaps and prioritize the areas that are in most need of innovative solutions to cope with the ageing challenge.

The participants (see Annex) were divided into four groups. Each group discussed one set of gaps as follows:

<b>A. Society's awareness of the importance of technology, lack of human resources and cultural difference</b>	<b>B. Eco-system and support for technology companies and start-ups</b>
<ul style="list-style-type: none"> <li>▪ Gap 1: Society's Lack of Awareness in the Importance of Technology</li> <li>▪ Gap 6: Lack of Human Resources</li> <li>▪ Gap 12: Product Design not Catering to Elderly Consumers</li> <li>▪ Gap 14: Cultural Differences and Difficulties in Product Localization</li> </ul>	<ul style="list-style-type: none"> <li>▪ Gap 8: Obstacles in Spin-off and Licensing Procedures</li> <li>▪ Gap 9: Lack of Support for Start-ups (Valley of death)</li> <li>▪ Gap 13: Lack of a Testing Ground for New Products for Use in Elderly Homes</li> <li>▪ Gap 18: Gerontechnology Products Are Too Expensive for elderly</li> </ul>
<b>C. Collaboration between the parties, e.g., universities, research institutes, NGOs, government departments and other stakeholders</b>	<b>D. Riding on the success of GIES</b>
<ul style="list-style-type: none"> <li>▪ Gap 21: Insufficient Collaboration between Universities and research institutions</li> <li>▪ Gap 22: Insufficient Collaboration between Research Organizations and the Private Sector</li> <li>▪ Gap 23: Insufficient Collaboration between the Private Sector and NGOs</li> <li>▪ Gap 24: Insufficient Medical-Social Collaboration</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Gerontech and Innovation Expo cum Summit (GIES) marks the beginning of congregating a crowd of multidisciplinary experts, leaders in the community and service users to promote gerontechnology and raise the community's awareness of Gerontech in coping with the ageing challenges.</li> <li>▪ Riding on the success of the GIES, what actions to be taken and how to sustain the momentum in building the eco-system of gerontechnology in Hong Kong.</li> </ul>

## KEY LEARNING POINTS IN GROUP SHARING

### Group A: Society's awareness of the importance of technology, lack of human resources and cultural differences

#### Gap 1: Society's lack of Awareness in the Importance of Technology

- Awareness, education, and empowerment of elderly care should be started from a young age.
- Effort should be made to strengthen the positive image of elderly persons with the means of public education on the new technologies to promote independent living and autonomy in the older people. (See Elderly Services Programme Plan Recommendation 1)
- Effort should be made to organize regular mass events, and road shows to bring up the significance of technology adoption. (See Elderly Services Programme Plan Recommendation 18)



about the Elderly Services Programme Plan, Recommendation 1 – Public education should be strengthened to promote the positive image of elderly persons, enhance their status and role in society, and foster positive inter-generational relations.

Specifically, consideration should be given to arranging more inter-generational programs in schools, youth organizations, business sector, etc. Topics on elements of ageing and intergenerational interaction should also be included in primary and secondary education learning activities where appropriate. There should also be public awareness programs/campaigns to eliminate misunderstanding and stereotypes about elderly persons. (Elderly services Programme Plan, Elderly Commission 2017.)

Recommendation 18 – Efforts should be made, and resources are deployed to further enhance the utilisation of information and ICT by both elderly service users and service providers in promoting quality of life and service quality, effectiveness and efficiency. (Elderly services Programme Plan, Elderly Commission 2017.)

#### Gap 6: Lack of Human Resources

- For the insufficient human resources in the technology sector, the government should make an effort to play an active role in grooming talents in this area.
- Effort should be made to work on primary and secondary school curriculum to build up problem-solving skill and creative mindset.
- Effort should be made to plan for capacity building sessions for both management team and frontline staff.
- Effort should be made to instill a social mindset of caring for the elderly or social values for tech professionals. Effort should be made to facilitate the adoption of technology in the caring industry. (See Elderly Services Programme Plan Recommendation 12a)



In Elderly Services Programme Plan, related Recommendation 12a on human resources is found – Measures to improve recruitment, retention, working condition, and career development of staff in elderly service should be explored.

Possible directions to consider enriching the jobs of care workers at various levels, to enhance their job satisfaction and to advance their skill set. The possibility of better use of technology and electro-mechanical equipment to promote occupational safety and health and thereby reduce wear and tear and risk of injuries among care staff should be explored.

In considering the use of technology, due regard should be given to factors such as the need for re-engineering of the work process, funding, user-friendliness, etc. It is hoped that through better use of technology and equipment, the effectiveness of service delivery can be improved. (Elderly Services Programme Plan, Elderly Commission 2017.)

#### Gap 12: Product Design not Catering to Elderly Consumers

- Effort should be made to work with service operators to co-create design for older care needs.
- Effort should be made to build up more knowledge sharing platforms for exchange of ideas.

#### Gap 14: Cultural Differences and Difficulties in Product Localization

- Effort should be made to work out a demand assessment team to assess the needs of the elders and match them with the products
- Effort should be made to recruit individuals and operators at trial run/test stage.
- Effort should be made to tackle with insurance requirements and issues.
- Effort should be made to build up a regularized platform for publicizing findings/news.
- Effort should be made to create a platform for localization/adaptation. To set up or invite operator to create a testing ground for the new tech, or a platform encouraging the reporting of the trial.

**Group B: Eco-system and support for technology companies and start-ups**

Gap 8: Obstacles in spin-off and licensing procedures

- Users' needs drive demand. Effort should be made to work with users for the exploration of possible solutions. The user interface is a crucial consideration for start-ups.
- High technology used in foreign countries can be taken as reference. Effort should be made to stock take the available solutions from ready-made products. Localization of products is regarded as one of the primary tasks for the local business.

Gap 9: Lack of support for start-ups (Valley of death)

- Effort should be made to build up stakeholders or incubators exchange platforms for start-ups.
- It should be reviewed that grants for engineers in Hong Kong require new ideas instead of advancement of ready-made products, which would lower the chance for startups to receive funding.
- Effort should be made to set a reasonable price for gerontechnology related service as similar to In-home emergency call service. If it is under CSSA, the service charges are covered by government funds.

Gap 13: Lack of a testing ground for new products for use in elderly home

- Effort should be made to work out subsidy scheme for both public and private service operators in the procurement of use of technology products. The subsidy should also take into account the fixed cost, operation flow R&D cost, and maintenance cost.

Gap 18: Gerontechnology products are too expensive for elderly

- Voucher as a payment mode could be considered as a way to provide a subsidy for elders to purchase technology products for their quality of life and ageing in place. (See Elderly Services Programme Plan Recommendation 15 and 17)



Recommendation 15 in ESPP states – A more forward-looking approach should be adopted in public expenditure on elderly services in responding to the changing socio-economic profile of the elderly population and in promoting a more equitable sharing of financing LTC in the current population and across generations, including Co-payment for services commensurate with affordability. The Government may need to review the fee schedules of various types of service, in particular, the LTC services. The evaluation of the Pilot Scheme on CCSV and the findings of the feasibility study on the Pilot Scheme on RCSV should provide more evidence for the planning of service directions in the future.

Recommendation 17 in ESPP states – The role of the private sector should be recognised, and public-private partnership should be encouraged. The Government should encourage initiatives in public, private partnership, such as making available examples of good practices, utilising the potentials of private operators in filling up the service gap. Findings from the review of the pilot scheme on CCSV and RCSV should be duly considered, and the future development of the voucher system should be explored.

**Group C: Collaboration between the parties, e.g., universities, research institutes, NGOs, government departments and other stakeholders**

Gap 21: Insufficient cooperation between universities and research institutions

- Effort should be made to build up a regularized knowledge sharing platform.
- Research projects can be started with small-scale
- Effort should be made to set up a stakeholder database for facilitating collaboration and resource matching.

Gap 22: Insufficient collaboration between research organizations and the private sector

- Effort should be worked out to cover the activity-based cost in research and development.

Gap 23: Insufficient collaboration between the private sector and NGOs

- Effort should be made to transform the results of R&D to the service-related application.
- Effort should be made to explore channel for sale and marketing, such as exhibition and online platform.

Gap 24: Insufficient medical-social collaboration

- Government policy is essential to facilitate medical and social development.
- Effort should be made to promote user participation in service and product development cycle
- Systematic allocation of the resource should be considered. It would encourage different sectors to get involved in R&D.

**Group D: Riding on the success of GIES**

Riding on the success of GIES

- Educational aspect and the goal of raising awareness have been achieved. It is considered a Good Practice to have end-users' participation to show the existing of a real market.
- Plenary and workshops are too good to miss. Repeating some of the seminars should be considered.
- The products are useful to end users. An online catalogue or a package of reference materials as giveaways for visitors would be helpful after this GIES experience.
- Better to have next/regular stakeholder engagement activities to keep the momentum, to connect the stakeholders/NGOs, on sharing of successful experience and collaboration model.
- The displays in GIES are useful to caregivers. After GIES, either through NGOs or a public platform, connection with caregivers should continue. It is especially meaningful for those caregivers who are unavailable to visit GIES but have significant needs on using Gerontech, to be educated.

## CONCLUSION AND RECOMMENDATION

According to the findings of the Gerontechnology Landscape Report, there are numerous hurdles for Hong Kong to adopt more technology and innovation in addressing the ageing population phenomenon. While acknowledging those obstacles, the market for Gerontechnology and elderly care products in Hong Kong had enormous potential. A joint effort in developing a coherent vision shared amongst industry, policymaker, innovators, investors, professionals, operators, caregivers and user communities should be in high priority

With all the benefits gerontechnology can bring to our ageing society, it also mitigates the promotion of ageing in place, which is in line with the Government's policy directive and reduces the social costs to the public. After the engagement activity, we look forward to having systematic ways of facilitating stakeholders understanding, partnership and collaboration in the innovation cycle to share knowledge; facilitating testing field or enabling innovations (both local and foreign) to meet users' needs, and accelerating the uptake of Gerontechnology and care innovation at scale.

Considering the recommendations of the Elderly Services Programme Plan, specific policy support should be given to the development of pilot projects. (For example in promoting the use of assistive technology, ICT, inclusive design; Tele-health) for both user communities and service providers to enhance the quality of life, better health management, and to address the problem of human resources shortage.

Consideration may also be given to developing a knowledge repository to provide most update gerontechnology application in elderly services to the front-line workers. Practical ways to involve users and caregiver communities in the R&D should be further explored.

Based on the report, the recommended follow up for the SIE Fund are:

1. Funding support to the Innovative Programmes
  - i. Silver Innovator Project: a collaboration with the Hong Kong Science and Technology Park so as to provide start-up funding and support to top-notch innovative gerontechnology ideas.
  - ii. Comfortable lifting Bed to Wheelchair Project: a collaboration with the residential home operators (subvented and non-subvented) and with the academia to improve the mobility of elderly residents by creating a transformable bed-wheelchair prototype and testing the feasibility of deployment in local residential homes.
2. Commissioning research on Gerontechnology
  - i. Research and pilot new service designs, in collaboration with NGOs and other medical and paramedical partners and the Hospital Authority in providing unit-dose packages for seniors living alone in the community to alleviate the risks of drugs mismanagement.
  - ii. Research and pilot new service designs, in collaboration with professional partners from palliative care in providing bathing on wheel service in the hospice home care.

- iii. While the Gerontechnology Landscape Report has acknowledged those obstacles in the upstream 'Technological R&D' end of the spectrum, a follow up study focusing more on the downstream adoption end should be conducted.

## Participant List

	Affiliation	Name	Title	Group
1	AFinder Elderly Ambassador Outreach Programme	Ms. Janet Yeung	Project Secretariat	A
2	Big Mag	Ms. Leila Chan HiuLui	Chief Editor	A
3	Caritas Hong Kong - Services for the Elderly	Ms. Doris Yu	Service Head of Caritas Hong Kong - Services for the Elderly	B
4	Christian Family Service Centre	Ms. Tong Choi Ying	Programme Director [Elderly Care – Home & Community Care	C
5	City University of Hong Kong	Dr. Esther Chow	Associate Professor Department of Applied Social Sciences	A
6	Consumer Council	Dr. Victor Hung	Principal Planning and Trade Practices Officer	B
7	CUHK Jockey Club Institute of Ageing	Prof. Timothy Kwok	Deputy Director	B
8	Department of Health	Dr. Li MunPik, Teresa	Assistant Director of Health (Family and Elderly Health Services)	A
9	Department of Health	Dr. Chung Wai Hung, Thomas	Consultant Community Medicine (Student Health Service)	B
10	Evangelical Lutheran Church Social Service - Hong Kong	Mr. Billie Lau	Service Director (Elderly Service)	D
11	ZeShan Foundation	Ms. Lorraine Lui	Program Officer	A
12	HiuKwong Nursing Service Limited	Mr. SHIE Wai-hung, Henry	Executive Director	B
13	Home Affairs Department	Mr. Marco Chu	Assistant District Officer (Sai Kung) <sup>2</sup>	A
14	Hong Kong Association of Gerontology	Mr. Chung Wai-Tong	Executive Director	A
15	Hong Kong China Women's Club	Ms. Anita Wong	Elderly Services Director	A
16	Hong Kong Design Centre	Dr. Edmund Lee	Executive Director	A

17	Hong Kong Medical and Healthcare Device Industries Association	Mr. Kevin Orr	Treasurer & Chairman of Product Technology Panel	C
18	Hong Kong Pharmaceutical Care Foundation	Ms. S C Chiang	Director	D
19	Hong Kong Polytechnic University - School of Optometry	Dr. Allen Cheong	Associate Professor, School of Optometry	A
20	Hong Kong R&D Centre for Logistics and Supply Chain Management	Mr. Stephen Wai	Senior Manager, Business Development	D
21	Hong Kong Sheng Kung Hui Welfare Council Ltd.	Ms. Chow Mee Tim	Assistant Director	B
22	Institute of Active Ageing Hong Kong Polytechnic University	Prof Daniel Lai Wing-Leung	Director	C
23	Mighty Oaks Foundation	Ms. Poh Lee Tan	Director and Founder	C
24	Shun Hing Electronic Trading Co., Ltd	Mr. CH Wong	General Manager, Group Planning Department	B
25	Rehab-robotics Company Ltd	Mr. Michael Tsui	CEO	C
26	Social Welfare Department	Ms. Pang Kit Ling	Assistant Director (Elderly)	C
27	SOW Asia	Ms. Eugenia Lo	CEO	D
28	STAN Group	Mr. Andy Hung	Public Affairs - Manager	B
29	The Elderly Services Association of Hong Kong	Mr. Alan Yeung	Executive	A
30	The Hong Kong Research Institute of Textiles and Apparel	Mr. Ray Cheung	Director, Research, and Development	D
31	The Hong Kong Society for the Blind	Mr. Joseph Cho	Director (Clinical and Vocational Services)	B
32	Tung Wah Group of Hospitals	Ms. Katherine Chan		C
33	Kerry Holdings	Ms. Poon Hui Ling	Project Director - Sustainability & Employee Engagement	D
34	Zheng Ge Ru Foundation	Mr. Peter Lee	Manager	D

35	Hong Kong Young Women's Christian Association	Mr. Dominic Chui	Director of Communication and Resources Development	D
36	Diamond Cab	Ms. Doris Leung	CEO	D
37	Hong Kong Trade Development Council	Mr. Kevin Chan	Senior Product Promotion Manager	C
38	SIE Fund Task Force	Dr. C.K. Law		
39	SIE Fund Task Force	Mr. Timothy Ma		
40	SIE Fund Task Force	Ms. Yvonne Li		
41	SIE Fund Task Force	Mr. Patrick Cheung		
42	Our Hong Kong Foundation	Mr. Stephen Wong		
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48	Efficiency Unit	Ms. Elsa Hung		
49	Efficiency Unit	Miss Loretta Yuen		
50	Efficiency Unit	Ms. Irene Lam		
51	Efficiency Unit	Mr. Leo Yim		
52	Efficiency Unit	Ms. Kate Yu		
53	Efficiency Unit	Mr. Dennis Luk		
54	Efficiency Unit	Mr. Alex Lau		
55	Hong Kong Council of Social Service	Mr. Chua Hoi Wai		
56	Hong Kong Council of Social Service	Dr. John Fung		
57	The Hong Kong Council of Social Service	Ms. Grace Chan		
58	Hong Kong Council of Social Service	Ms. Lois Lam		

59	Hong Kong Council of Social Service	Ms. Tanni Hsu		
60	Hong Kong Council of Social Service	Mr. Tony Lee		
61	Hong Kong Council of Social Service	Ms. Jessica Tam		
62	Hong Kong Council of Social Service	Ms. Candy Wong		
63	Hong Kong Council of Social Service	Ms. P.Y. Cheng		
64	Hong Kong Council of Social Service	Ms. Katie Wong		
65	Hong Kong Council of Social Service	Mr. C.C. Kuo		
66	Hong Kong Council of Social Service	Ms. Zoe Chan		