



*Knowledge  
Transfer at HKU*

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# What is a university?

A university is a knowledge organization whose primary mandate is to generate, acquire and transfer knowledge

These objectives are achieved through

- Teaching and education (generate and transfer knowledge through students)
- Research and publications (generate and transfer and exchange knowledge through research findings and publications)
- Knowledge exchange (generate, transfer and exchange knowledge through economic and social engagement with government, business and the broader community).

# Knowledge Exchange/Transfer


Knowledge exchange, which we will label knowledge transfer (KT) here for consistency with UGC terminology, includes technology transfer (TT), but also encompasses knowledge exchange in all disciplines, including the arts and humanities

KT provides a vitally important complement to research by maximising the value to the whole community. KT is often facilitated by inter and multi disciplinary research, which are core to the HKU mission

# KT examples in HKU (lab)

- Faculty of Dentistry: The Dental Materials Science Laboratory is the world's sole supplier of the Portable Materials Hardness Testing Machine. 24 machines have been sold to universities in the UK, USA, Germany and Singapore, such as Johns Hopkins University and UC Berkeley, together with transfer of know-how
- Faculty of Engineering: Hermes is the first open-source solution in message exchange using the ebXML standard, developed by the Centre for E-Commerce Infrastructure Development (CECID). Used in more than 80 countries, received many awards, currently deployed by the HKSARG in Marine Dept, OGCIO, Transport Dept and the Government Electronic Trading Services. Also deployed by many HK companies including MTRC, bigBOXX.com, OOCL and Kerry Logistics

# KT examples in HKU (non-lab)



Faculty of Architecture: The HKU Real Estate Index Series is a set of monthly real estate price indices that reflect the changes in price levels of real estate in Hong Kong, first set of transaction base tradable indices outside of the UK and US, and can be used for development of real estate derivatives


Faculty of Business and Economics: The Asia Case Research Centre contributes to the development of the management education profession locally and internationally through its production of context-rich business and policy-related cases for teaching. Many cases have been translated into simplified Chinese while some are translated into other languages. More than 245,000 copies of its case studies have been distributed worldwide

# Key Questions for HKU

## How best to:

- Define what is KT (as opposed to teaching and research)
- Measure the quantity of KT
- Assess the quality of KT
- Assess the impact of KT
- Support KT

# Initial Inclusive Definition of KT

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- Teaching of professional and continuing education
  - Research funded explicitly as applied research that requires evidence of knowledge transfer, such as Public Policy Research and Information Technology Fund
  - Contract research for government, NGOs and companies
  - Contract training that transfers academic knowledge
  - Student placements that enable KT beyond student learning
  - Community service which makes use of academic knowledge
  - Communication of academic knowledge to the broader community through public lectures and non-academic media
  - Service to the academic community, such as membership of journal boards
  - University Press
  - Membership of government and international advisory committees

# Quality of KT?

Relates to:

- Level of innovation
- Level of impact
- Scope of impact

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# Possible measures

- No. of patents
- No. of technology licenses
- No. of research contracts (and average value)
- No. of newspaper articles
- No. of memberships of government advisory committees
- No. of downloads from Scholar's Hub, including theses
- No. of musical compositions
- No. of architectural designs built
- No. of engineering designs built
- No. of clinical trials done
- No. of books published by the university press
- No. of advanced professional and continuing education courses for transferring current research results
- No. of local/regional/international conferences organized
- No. of local/regional/international awards or prizes

# Possible Supporting Strategies

- Financial support to faculties through Budgetary Resource Committee allocations based on the FDPs
- Open Access support for research publications to maximize access for the broader community. This is supported through the Scholar's Hub, HKU's institutional repository
- KT database, Open Access to maximize impact
- KT as an explicit element of the staff performance review process
- KT as an explicit element of the HKU communication strategy
- Task force to identify further improvements in strategy

# Process learning

Classic example is:

- HKU response to SARS, where a serious threat to the community was turned into a research and KT opportunity that extended far beyond the visible medical and biological research to include multidisciplinary research and KT covering from engineering and architecture, to epidemiology and psychological counseling
- This is an excellent example of the community benefits of shared knowledge and expertise in a university, which can take a broader perspective of benefit than the financial perspective of any company
- HKU learnt from this process and was able to make use of it in developing a response to the Sichuan earthquake

# Task Force

Current membership is:

- Prof Paul Tam, HKU PVC (Research)
- Prof John Malpas, HKU PVC (Planning)
- Prof Paul Cheung, HKU Head of Technology Transfer
- Prof John Bacon-Shone, Associate Dean (Research), Faculty of Social Sciences

# Finances

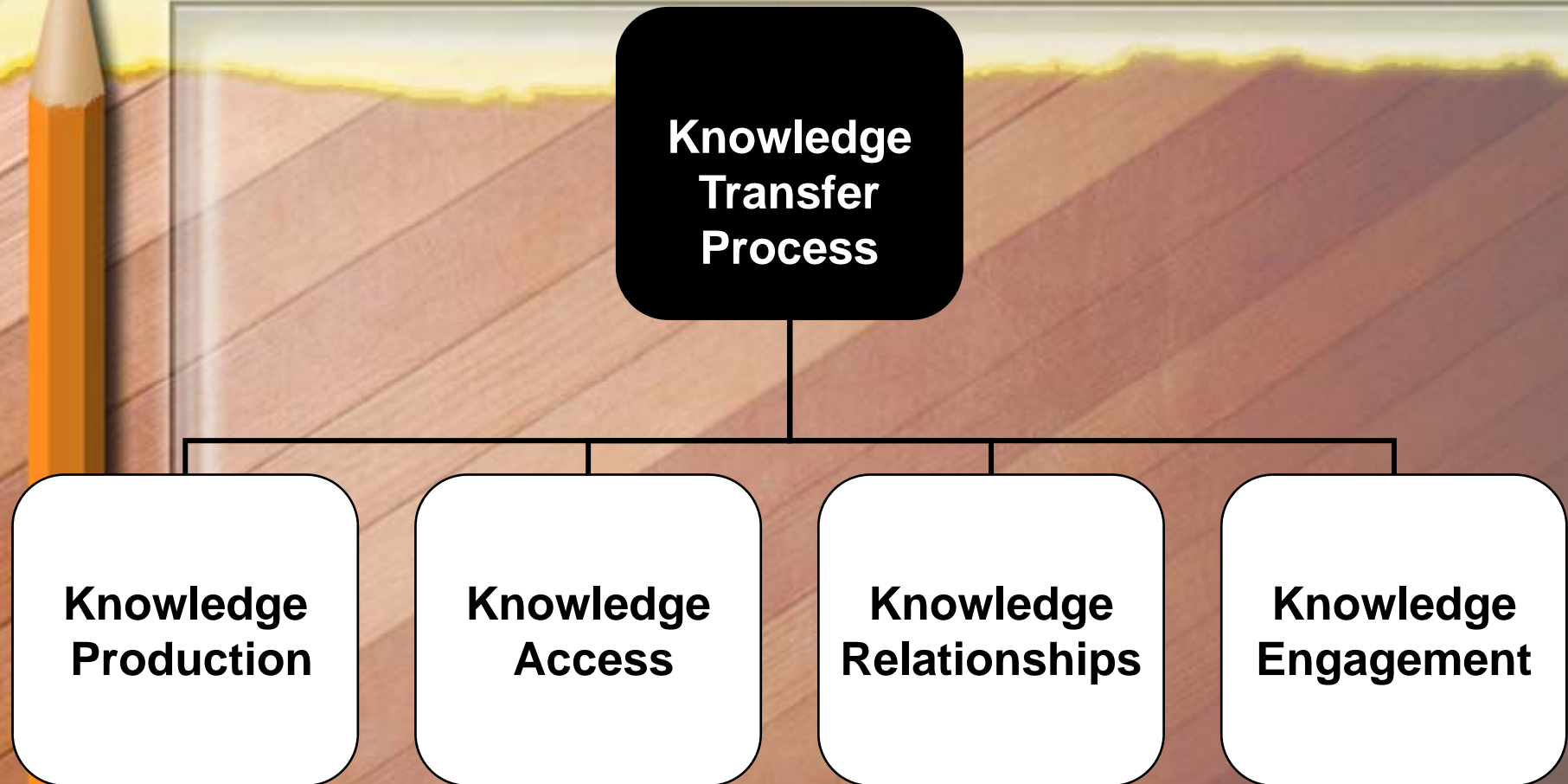
- KT will impact on faculty finances through the BRC allocations.
- Licensing, contract training and contract research also provide a mechanism for financing from non-UGC sources.



Thanks!

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# Conceptual Framework



# UGC Support

- UGC support should be for the process and publicity, rather than KT itself, which should normally be funded by the recipient of the KT
- Could support one-off resources to enable faster growth of the Technology Transfer Unit and to enable speedy implementation of a good KT database system that could be shared across institutions
- Opportunities for UGC to provide central support for KT:
  - Funding and encouraging implementation of an KT expertise database uniformly across all institutions
  - Support for a biennial KT showcase (perhaps alternating with the current ITC showcase)
- In the long run, essential that UGC makes the HKSARG aware of the need to resource universities to support KT as well as teaching and research activities in order to maximize the overall social, economic and environmental benefit to everyone in Hong Kong