

Call for contributions at the ASPA Conference 2019 on
Prospects and Challenges of Science Parks in the Digital Era

Hsinchu, Taiwan
November 11-13, 2019

Significant amounts of research have indicated that the digitalization is a growing trend with a powerful influence in shaping the development of techno-economic regime as well as the society as a whole. The digital economy encompasses a wide range of technological applications used in daily lives, including radio frequency identification tags, sensors, actuators, and smart devices connected to all the internet-based tracks. Likewise, precision machinery and biomedical technology are also crucial to the society nowadays, implemented in health care big data, integrated medical information systems, and enhanced human-machine interaction experiences in manufacturing. The digital economy uses the Internet to form a huge network of smart objects. While the conventional Internet connects people and facilitates exchange of information, the digital economy, such as the 4th industry revolution, integrates machines and objects with embedded sensors, and allows them to predict the logical people/machine behaviors and communicate autonomously over the Internet. For example, many Internet-of-Thing services have been developed and the global market for such services is growing rapidly. According to the International Data Corporation, the global IoT market is on track to hit \$7.1 trillion in 2020.

New types of innovative services and products based on digitalization applications facilitate the transformational needs for industrial development, regulation and policy, and social awareness. The emerging economies, especially those with the higher population in the Asia, such as India, Vietnam and Thailand, own potential markets wide-open to the digital applications. The special context underlined by these Asian economies' culture and environment is likely to generate very different applications and business models (such as adversary innovation and inclusive growth model) from those in the developed countries. Innovative applications and business models inspired by the power of digitalization mingling with the regional characteristics are gradually implemented in these markets. It is interesting, also crucial, for the academics and practitioners to observe, explore, and examine the phenomena in order to fully utilize the opportunities provided by the emerging digital economy. This also presents a great opportunity as well as an urgent

need for the science park, especially those in the Asian context, to adapt and transform their prior successful operational models so as to well respond to the forthcoming digitalization era.

Objective

The influence of the digitalization has gradually led to the disruption of the traditional practices and the formation of innovative business models. Many successful business models are created based on or facilitated by the internet-based applications. These successful cases are the legitimate benchmarks for others to explore, learn, and may eventually stimulate even more innovative models. Furthermore, the innovation system derived from the digitalization economy is likely to vary under different contexts such as religion, geographic region, culture, and etc. How the Asian latecomers adopted, adapted, and applied in the digital economy and what are the embedded opportunity and challenge are worth further exploring.

The theme of this conference aims to explore the prospects and challenges in the digital era brought by or facilitate through the internet-based applications, especially in the Asian context. The issues to explore include, but are not limited to, the following:

- Transformation in the Emerging Economies: Culture, Opportunities and Challenges
 - Main concern: how should science parks and enterprises in the emerging economies respond to the impact of digitalization so as to meet the derived challenge and secure new opportunities?
- Future Science Parks: Regional Innovation Systems vs. Glocalization
 - Main concern: glocalization emphasizes that globalization must be closely integrated with the needs of localization. Enterprises must respond to the individual cultural context in place, and infuse themselves into the structure of global market. In the face of internationalization and rapid industrial transformation, how science parks are able to cope with the regional innovation system along with the trend of glocalization?
- Transformation of Governance of Science Parks in the Digital Era
 - Main concern: transformation refers to the process of change in terms of policy, regulations, institutional relationships, social norms and values, and actors' behavior over time. With the arrival of digital era, how science parks strategize to reposition themselves so as to response to such process of changes?

- Sustainability, Clean Energy and Business
 - Main concern: Clean energy is the must for sustainability which needs a great deal of government support to benefit business growth and transform the society as a whole. To achieve this, how the policy mechanism and resources allocation based on culture-context is effective to establish a sustainable society as a whole?
- Startup and Entrepreneurship Ecosystems
 - Main concern: how the science parks is able to act as a hub for the entrepreneurial ecosystem, by responding to the needs of startups and strengthening industrial linkages so as to accelerate knowledge circulation and create industrial value-added?

Proposal submission and review process

We invite authors to send proposals about any relevant fields for the theme of this conference. Depending on the topic discussed in the paper proposals that we receive, the Steering Committee will distribute papers into different parallel sessions.

Submission of abstracts (paper proposal) is open to everyone. Authors do not need to be members of ASPA, and participation from a variety of organizations and sectors is welcomed.

Proposals to present contributions at this ASPA conference in November, 2019 will undergo the review process below. Selections will be made according to the paper's content and its ability to address the topics and themes outlined above. The conference organizers will aim to include papers from the broadest possible range of expertise and perspectives.

Selection of Abstracts

All manuscripts must first submit an 800-1200 word abstract to the Steering Committee Secretariat through online system that will be made available on the following link: aspa2019.aotek.com/regist/

- ◆ The official conference website will be available on the late of June: www.aspa2019-hsinchu.com.
- ◆ All abstracts must be in English.
- ◆ The authors will be invited to present the submitted proposal need to submit their complete full papers no later than September 15, 2019.
- ◆ All the submitted papers will be collected and published by the ASPA 2019

conference.

Important dates

Deadline for abstract submission: July 20, 2019

Notification of accepted abstract: August 15, 2019

Deadline for completed manuscript submission: September 15, 2019

