

Wellness industry in Korea

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Korean economy experienced extreme growth mainly in the manufacturing business until 1990s but from the knowledge industrialization era of 2000s, it faced new challenge of change of industrial paradigm and discovery of new growth power.

As a part of this future strategy discussion, Korean government announced 17 growth areas in 2009. These include: New energy recycling, state of the art green city, fusion of broadcasting communication, applied robots, global health-care, etc. u-Health is a primary focused topic in global healthcare subject, as it tries to innovate the medical industry with ICT and technology convergence. However, despite investment and efforts of companies or government during last 10 years, it has been difficult to produce successful business models except hospital information systems.

Although it is a preferential policy area, the reason for this policy not creating substantial new industries is that even though it seeks future growth there currently exists no policy framework for future industries. The existing policy method is mainly composed of supplier centered policies. Government administered industry census is collected and investigated based on the production process characteristic standard

industrial classification and exportation. National research on the market is National Statistics office's "survey of family budget consumption". To complement this industrial policy project function, Korea Ministry of Knowledge and Economy (MKE) has increased investment on the "fusion business model" strategy. Core of this change is switching industrial policy from supplier centered to consumer centered and switching product manufacturing process centered to consumer's needs and trends. This attempt is an important turning point for the Korean industrial policy.

In order to promote utilization of u-Health industry, the Government has been investing in four areas:

- (1) digitalization of hospital affairs,
- (2) public healthcare services with u-Health technology,
- (3) development of medical devices and systems for u-Health, and
- (4) pilot studies on ICT-based regional u-Health research centers.

Digital hospital including HIS (computerized Hospital Information System), EMR (Electric Medical Record) and PACS (Picture Archiving and Communication System) were successfully de-

veloped and adopted by hospitals. But in case of the last three areas of investment, even though more than 50 pilot projects were supported, only few models are commercially available. A major reason of failure was attributed to the fact that most u-Health service models are not allowed under current medical service acts in Korea, i.e., third party of personal medical information are prohibited, and remote treatments and consulting services are not allowed or not covered by public medical insurance system. The u-Health companies have been trying to change this act for many years, but a social agreement has not been reached yet. Besides, a fundamental question was raised: If u-Health services are legally and institutionally allowed, will they be possibly accepted by market customers, including patients, health-conscious consumers, medical practitioners and hospital management? Results of pilot studies show that prospects are not pessimistic. First of all, knowledge-base of safety, effectiveness and validity of u-Health services are not currently established in affordable level of acceptance by healthcare professionals. More basically, it is difficult to find a proper business model that fulfills multiple stakeholders' interest in an optimal way: Who's going to pay the service charges?



Considering these backgrounds, the MKE proposed a “New promotional strategy for u-Health New Industry”. Key philosophy of this strategy is that industrial policy should be based on possible business models including value chains and the proper customer segments. The strategy suggested a divide of the customer segment into three parts: Patients, health-conscious consumers under 65 years old and seniors. These three categories of business models correspond to each customer segments elicited: u-Medical, u-Wellness and u-Silver. u-Medical is the healthcare service area for the disease prevention, treatment and control based on the ubiquitous information technology. u-Silver is the healthcare service area for the old based on the ubiquitous information technology. u-Wellness is the healthcare service area for improving the quality of life based on the ubiquitous information technology. Even though the strategy for u-Health New Industry has focused on u-Wellness business models, there has been no study on industrial policy about Wellness Industry in Korea. So the MKE asked us, the Wellness Technology R&D Group at Korea Institute of Industrial Technology (KITECH), to lead this study.

Major subjects of this study are:

- 1) Defining and classifying Wellness New Industry,
- 2) Establishment of structure of industrial statistics,
- 3) State-of-art of industrial activities,
- 4) Promotional plan and
- 5) Deriving possible business models in Wellness area and planning a new pilot project.

To perform this study, KITECH invited experts from companies who have had experiences of investment or were willing to expand their business on Wellness area. 25 companies from various industrial sectors participated. They had different experiences according to their industrial sectors, truth be told, they had abundance of experiences of failure from the market. Armed with those gloomy lessons, we reconsidered industrial areas, technologies and products, services business models and even relationships between each player.

In this study, we re-defined concept of wellness industry and classify into three sub-area with a basis of consumer’s value for high quality of life. To do this, first we classified consumer’s pursuits for wellness value: Health & Lifestyle, Living & Environment, and Activity and Relaxation.

Then we deployed each value proposition into three categories: Self-Care Industry, Living-Care Industry and Wellness Entertainment Industry, respectively. Self-Care industry is consist of Fitness, Nutrition and Anti-aging sub-sectors, Living-Care industry is consist of Well-being ware, Well-being Interior and Living space management sub-sectors, and Wellness Entertainment Industry is consist of Outdoor sports, Sportainment and Wellness Tourism sub-sectors. Then we reformed Industrial Statistics Korea 2008 and derived estimation of the Wellness market and amount of produced products and services. The total amount of industrial production was estimated as 45 bil. € in 2008, with 18.0 bil. € of Self-care industry, 16.3 bil. € of Living-care industry, and 10.7 bil. € of Wellness Entertainment industry.

Then we analyzed the infrastructure, human resources, innovation ability of companies and previously supported R&D programs. Our analysis shows that most of the investments supported by the government were focused on development of technology itself. When the developed products work well or a special amount of proposed clinical cases was achieved, the project was evaluated as a successful project.

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Acceptability of “Business Models” from the target market forms a background to the evaluation processes. We concluded that this kind of practice in R&D projects closes the gap between suppliers and consumers, that is, a delay in utilization of u-Health product and services. So we moved our focus on the study of consumer’s ability and willing of payment on a new service. When we discussed with the ,failure acquainted’ experts, we came to the conclusion that end-users need u-IT based new wellness services but they will not pay for the whole amount of services. So in order to build up an acceptable business model, some third party payers should be moved into the business model. We considered possible third parties, such as public services supported by local government, private insurance, public educational systems, company’s employee welfare program, retail network, telecommunication services, etc., and estimated their benefit-cost balances. As a result, we suggested a couple of business models including a workplace wellness program.

The most important result of this study is an experience of collaborating strategy planning with companies from various different industrial areas, from global enterprises to small & medium companies. They shared experience of failure, that is the most secured part of the company,

and technologies, their customers’ behaviors, and even the company’s own business prospective. And some companies already built a collaborative business consortium after this study. We believe that innovation of industry are originated from open collaboration between innovative people, and those 25 companies will head into a new era of Wellness industry with us.

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