

Status and measurement of ICT Innovation in Korea

2015. 12. 1.

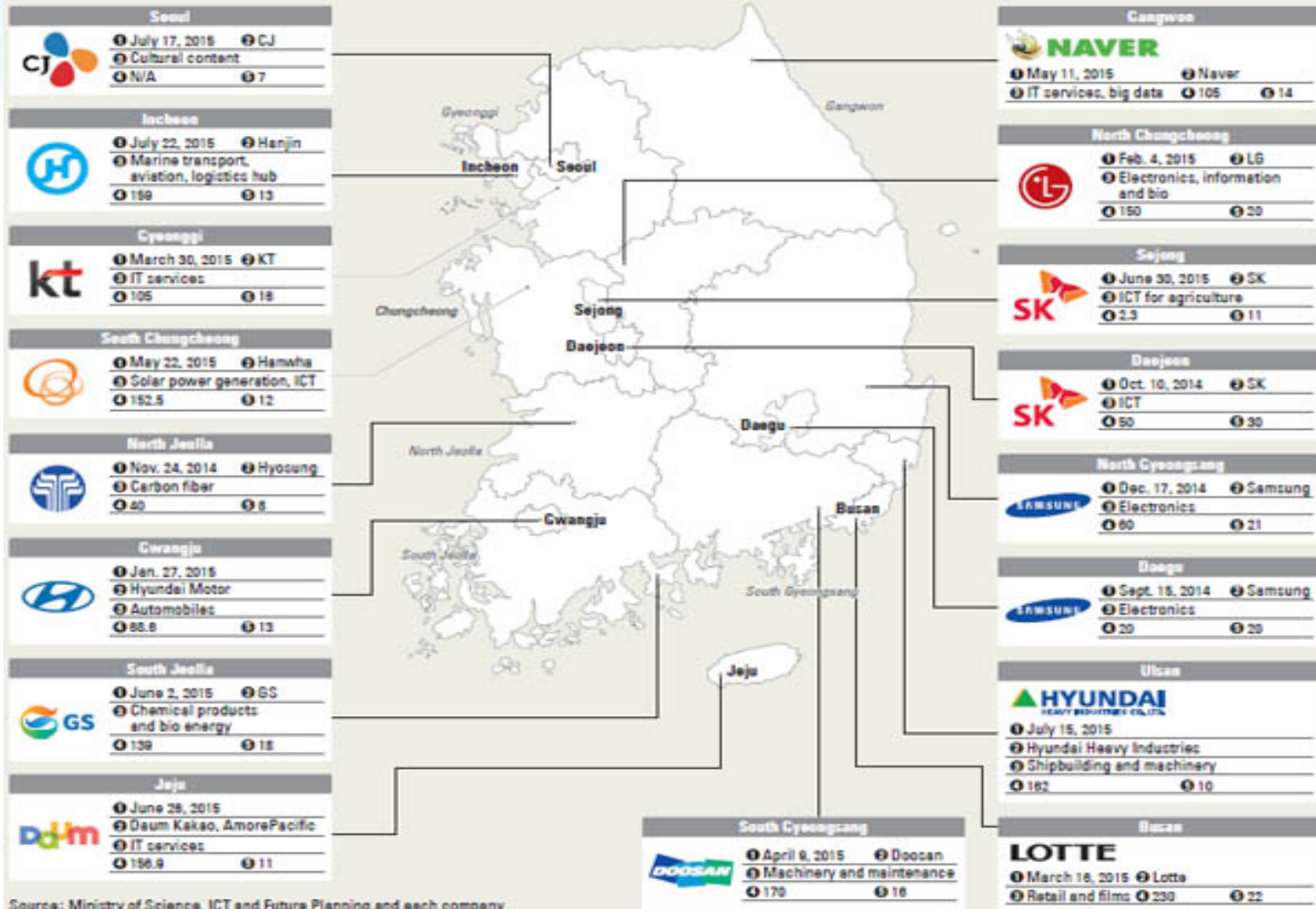


1. Creative Economy in Korea

Centers for Creative Economy & Innovation nationwide

*No. of employees as of July 23

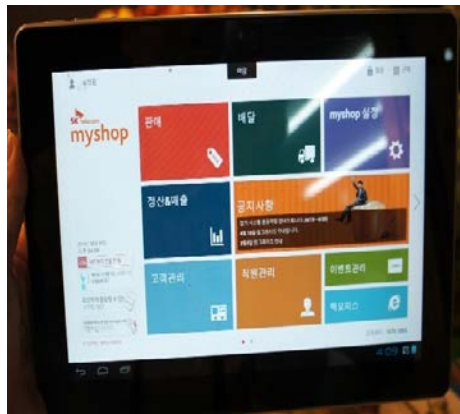
📅 Opening date 🏢 Company name 📌 Specialization 💰 Funding (unit: billion won) 👥 No. of employees



Source: Ministry of Science, ICT and Future Planning and each company

2. Cases of ICT innovation in Korea

Jeil Marketplace & SK Telecom



Smart Farm



3. Measuring Innovation – Pilot Index related to Creative Economy

Dong-A and Bain & Companies Creative Economy Index(2013)

- Defines four stages with 11 main indicator, 32 sub-indicators

Stage 1 : Creating Ideas,

Stage 2 : Generating ideas into business

Stage 3 : Making ideas to grow

Stage 4: Creating a virtuous cycle of success

Hyundai Research Institute Capability index of the Creative Economy(2013)

- Based on Five factors with 46 indicators
 - (1) human capital
 - (2) innovation capital which mainly refers to capital for both R&D and innovation
 - (3) ICT capital
 - (4) cultural capital
 - (5) social capital

3. Measuring Innovation - Survey on SME's ICT Adoption

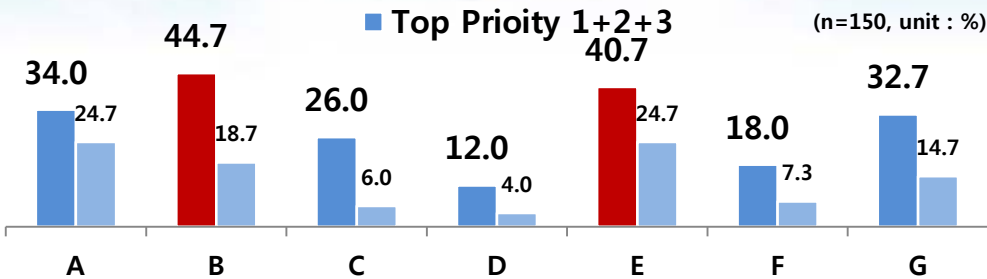
➔ Details of Survey

Classification	Survey on ICT Adoption of Korean SMEs												
Survey target	S&M companies in 7 industries with high level of ICT introduction and usage (under 300 no. of employees)												
Survey method	Visit (Face-to-Face Interview) * E-mail & fax survey will be conducted when necessary												
Sample size	301 Small and Medium Businesses												
Sampling method	Sampling based on square root & proportional allocation by industry with high ICT introduction & usage rate												
Survey Categories	<table border="1"> <thead> <tr> <th>Classification</th> <th>Detailed survey categories</th> </tr> </thead> <tbody> <tr> <td>Company general status</td> <td>Company name, location, industry type, business location No. of employees ('14 total employees, no. of employees by field) Sales ('14 total sales) Export status (main export countries, '14 export amount)</td> </tr> <tr> <td>ICT Adoption status</td> <td>ICT introduction status (supply, operation, customer contact, operation support) Rate of importance by introduction purpose (current product replacement, diversification of product, increase of productivity, change in market environment) ICT field & investment field Factors hampering investment</td> </tr> <tr> <td>ICT introduction effects</td> <td>Introduction effects (supply, operation, customer contact, operation support) Level of contribution of ICT introduction to product/process innovation/company size expansion Fields with high level of innovation</td> </tr> <tr> <td>Government support measures</td> <td>Level of contribution of government support for favorable business operation Government support for enhancement</td> </tr> <tr> <td>Difficulties & suggestions</td> <td>Government support policies for favorable ICT introduction Suggestions & proposals for ICT introduction</td> </tr> </tbody> </table>	Classification	Detailed survey categories	Company general status	Company name, location, industry type, business location No. of employees ('14 total employees, no. of employees by field) Sales ('14 total sales) Export status (main export countries, '14 export amount)	ICT Adoption status	ICT introduction status (supply, operation, customer contact, operation support) Rate of importance by introduction purpose (current product replacement, diversification of product, increase of productivity, change in market environment) ICT field & investment field Factors hampering investment	ICT introduction effects	Introduction effects (supply, operation, customer contact, operation support) Level of contribution of ICT introduction to product/process innovation/company size expansion Fields with high level of innovation	Government support measures	Level of contribution of government support for favorable business operation Government support for enhancement	Difficulties & suggestions	Government support policies for favorable ICT introduction Suggestions & proposals for ICT introduction
	Classification	Detailed survey categories											
	Company general status	Company name, location, industry type, business location No. of employees ('14 total employees, no. of employees by field) Sales ('14 total sales) Export status (main export countries, '14 export amount)											
	ICT Adoption status	ICT introduction status (supply, operation, customer contact, operation support) Rate of importance by introduction purpose (current product replacement, diversification of product, increase of productivity, change in market environment) ICT field & investment field Factors hampering investment											
	ICT introduction effects	Introduction effects (supply, operation, customer contact, operation support) Level of contribution of ICT introduction to product/process innovation/company size expansion Fields with high level of innovation											
	Government support measures	Level of contribution of government support for favorable business operation Government support for enhancement											
Difficulties & suggestions	Government support policies for favorable ICT introduction Suggestions & proposals for ICT introduction												

3. Measuring Innovation - Survey on SME's ICT Adoption

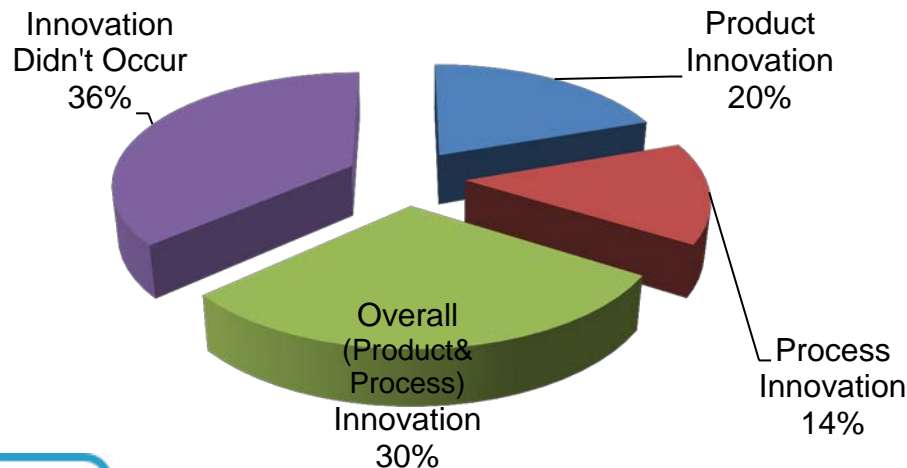
ICT Adoption Effects

<Innovation factors through ICT adoption>



- A : Production of new product very different from current products
- B : Launching of new products highly improved from past products
- C : Different production methods from current methods
- D : Very different logistics method from current methods
- E : Very different operation methods from current methods
- F : ICT field employment
- G : Increase of sales

Technical Analysis



Categorization of companies participating in 2014 innovative activities into companies with product innovation, companies with process innovation, companies with overall innovation (product and process), and companies that do not achieve both product and process innovation

4. Challenges in Measuring ICT Innovation

- **Data Availability**
- **Data Reliability**
- **Process for data measuring**



Thank you!