

KOTEC's Digital Transformation

Tech-mate:
Connecting the Value of Technology with Data

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KOTEC Innovative Growth Platform for tech companies from Startups to Scale-ups



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About KOTEC



Establishment of KOEC

🕒 Objective

Facilitates funding for tech-based innovative SMEs
through the implementation of the technology guarantee system

🕒 Organization (2024)

- 🕒 8 Regional HQ, 79 Branches
- 🕒 1,501 Employees (304 PHDs, 1,106 experts)

🕒 Establishment

Established under the Special Law in 1989
(KOREA TECHNOLOGY CREDIT GUARANTEE FUND ACT)

- 🕒 Non-profit Organization (No Shareholders)
- 🕒 Contributions from Government & Financial Institutions

2022
Implemented
Carbon Valuation Model
Supporting green-tech SMEs

2019
Launched KPAS
Patent Appraisal System

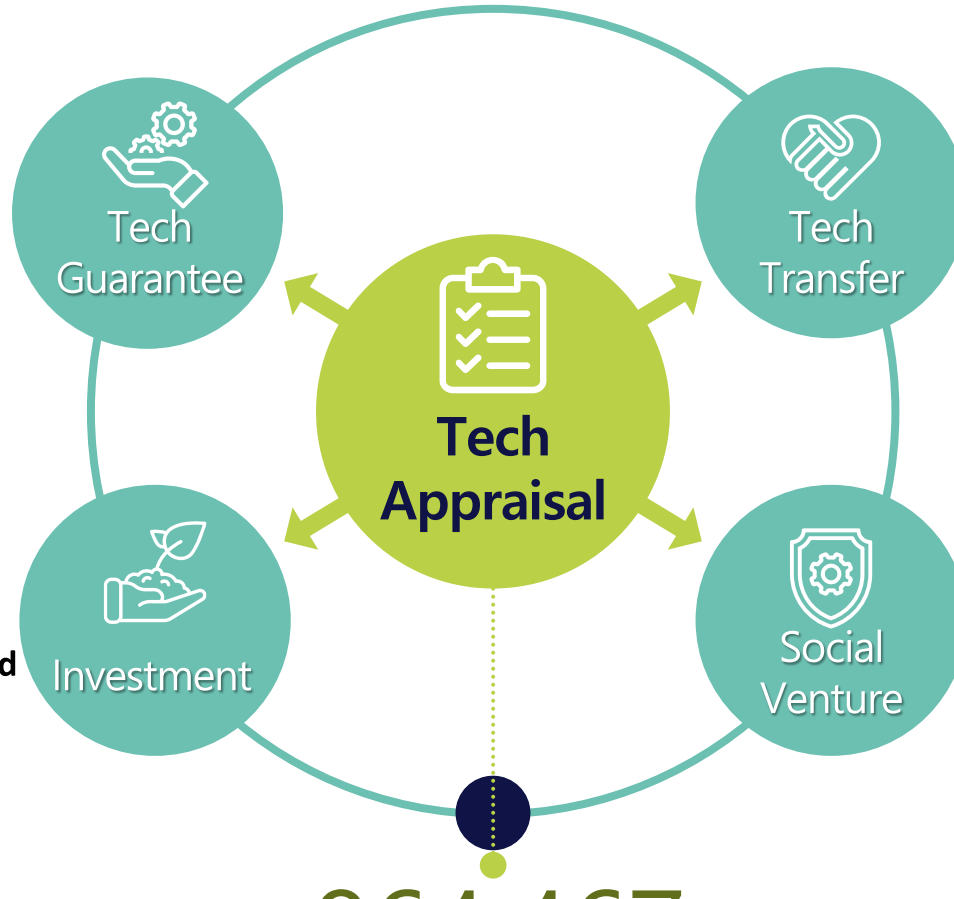
2005
Developed KTRS
Specialized tool
evaluating tech-based
innovative SMEs

2014
Started the Tech-Bridge
Technology Transfers &
Commercialization System



- KRW 28.2 T** (81,962 SMEs)
- Guarantee support for SMEs with high future value and strong technological capabilities, despite limited collateral

- KRW 306 B** (343 SMEs)
- Direct investments for outstanding tech- startups, regional enterprises, and technology innovation firms.



- 6,872** (Since 2014)
- Tech Transfer b/w public research institutes or universities and SMEs, and financial support for commercialization

- KRW 468 B** (Since 2018)
- Guarantee support for social venture companies pursuing both social and economic value

864,467 (Since 1997)

- Evaluation of intangible technologies based on technology merit, marketability, and business viability utilization as financial and non-financial support mechanisms.
- Conducting technology evaluations for in-house use and outside parties.



Transition to Non-Face-to-Face & Business Automation





Non-visit System

< Digitally available >

- Guarantee Application
- Guarantee Agreements
- Guarantee Extension
- Document Submission



Increased Convenience

- **Simplified Process**
- Automatic Document Submission (Scraping)
- Various Digital Certificates



Positive Impacts

- **Saves 95,886 hours annually** for customers
- Increases satisfaction
- Reduces greenhouse gas emissions

Reduction of travel distance
by 3 million km



Reduction of 300 tons
of greenhouse gases

Business Automation(RPA)

First public institution to introduce virtual server RPA

RPA?

Robotic Process Automation

Software Robot



Simple Reporting

Program execution

Data processing

RPA

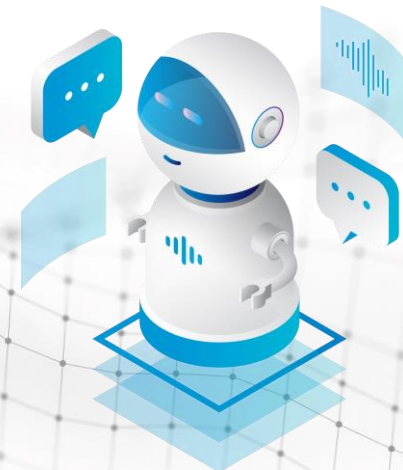


Example

Intellectual Property Post-Management

로봇업무자동화(RPA)
[지식재산권 사후관리]

- Tasks / 11(2019) → 91(2023)
- Annual Savings / 60,093 hours
- # of Tasks by RPA / 1,249,155(42h)
- Wage savings effect / KRW 2.8B(EUR 2M)





KOTEC's Digital Innovation



Deep Learning

Patent Value Grading System (KPAS-I)

- Automatically categorizes the level of patent into nine grade, ranging from AAA to C

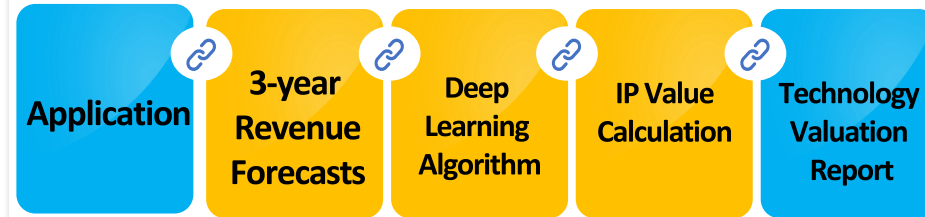


등급	AAA	AA	A	BBB	BB	B	CCC	CC	C
백분율 (%)	4%	7%	12%	17%	20%	17%	12%	7%	4%
누적비율 (%)	4%	11%	23%	40%	60%	77%	89%	96%	100%

Big Data Analysis

Patent Value Calculation System (KPAS-II)

- Automatically calculates the monetary value of patent, leveraging AI trained with revenue approach data



KPAS- I



KPAS- II

IP Valuation Guarantee



IP Value Guarantee

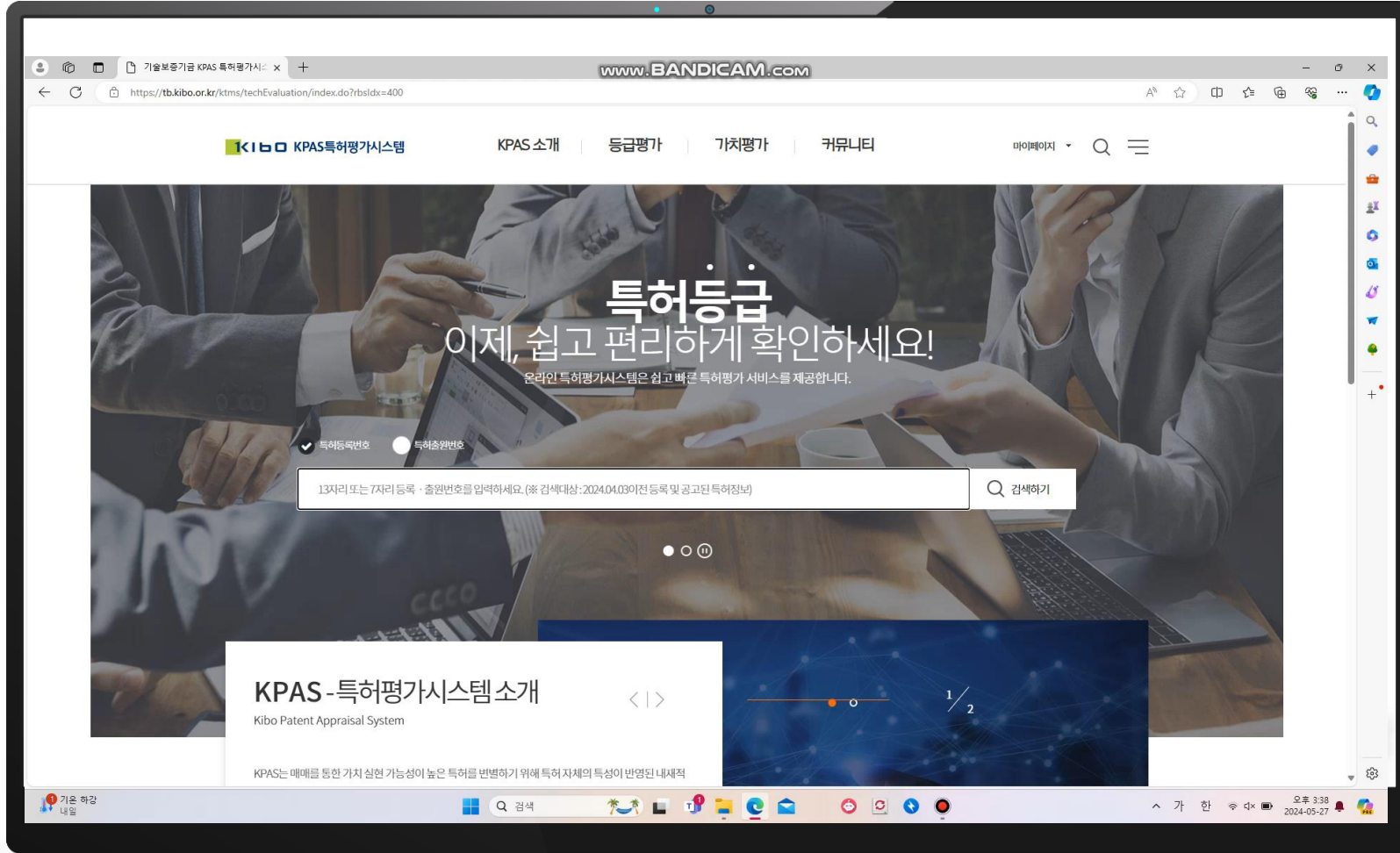


IP Fast Guarantee



IP Grade Guarantee

Demonstrating the Patent Automatic Evaluation System (KPAS)



On&Off-Line Hybrid Tech. Transfer and Commercialization Framework

On-Line Platform

SMART+
TECH-BRIDGE

Off-Line Platform

<Contact Points for Collecting Tech. Demand + Interagency Networks>

SMEs — Points of Contact — 75 branches Over the Country — Network — Universities, R&D institutes

KIBO 기술보증기금

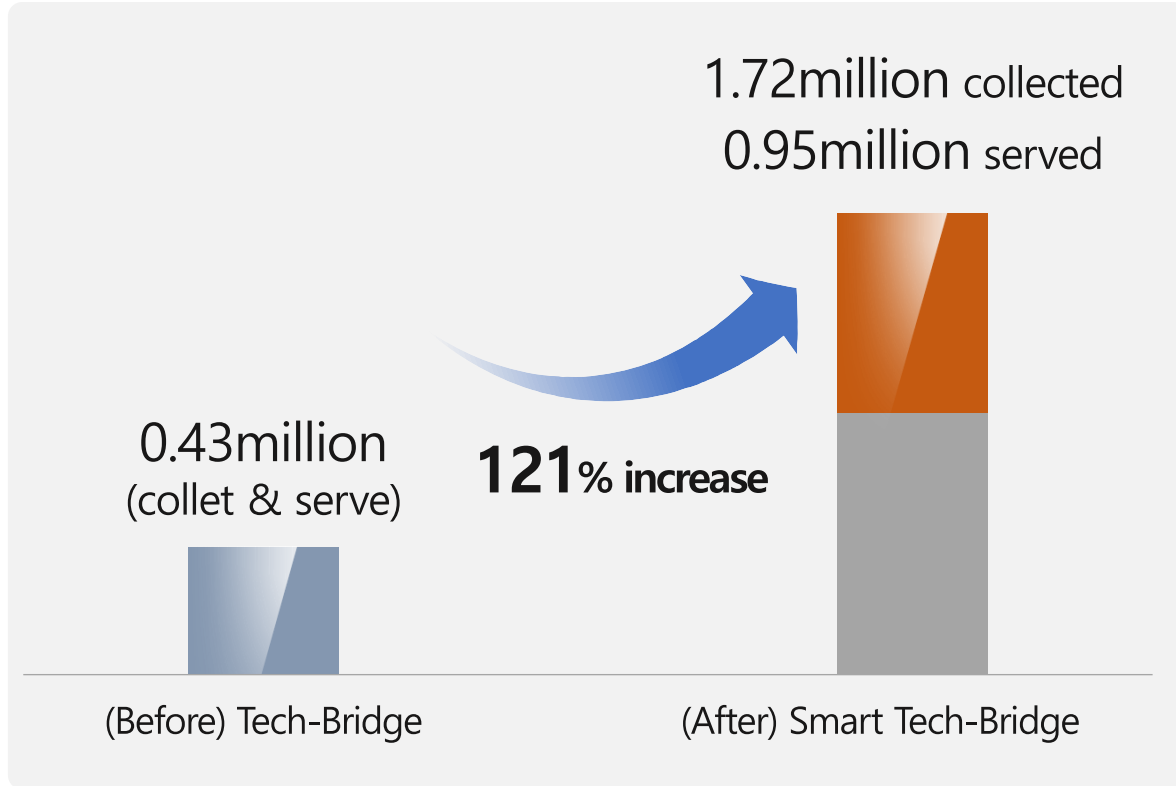
ETRI, KRICT, KETI, NIB, KAIST, KIST, IP Market, KISTP

<One-Stop Tech. Transfer Financing>

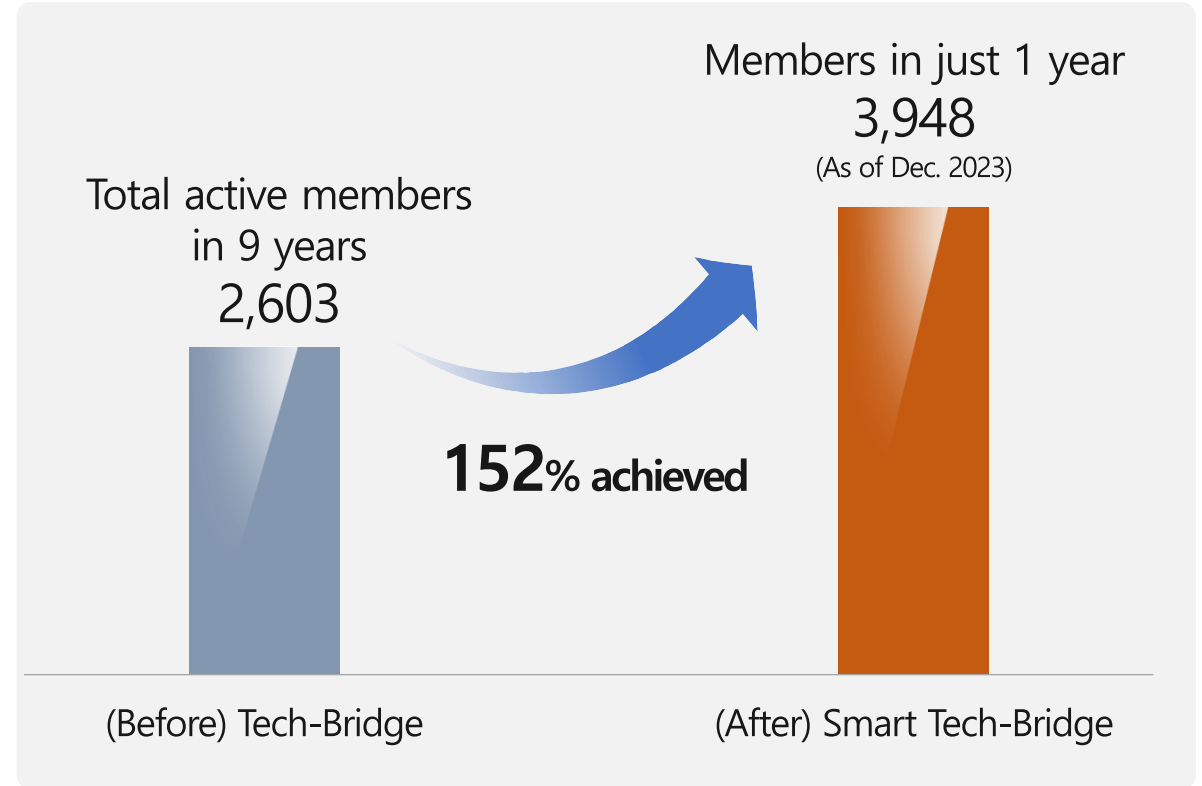
Acquisition — R&D — Production

[Step1]Tech. Transfer ➤ [Step2] Additional R&D ➤ [Step3] Commercialization

Performance of Smart Tech-Bridge



Supply Tech-information



Membership account

Thank you

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The logo for KOTEC, featuring a stylized 'K' in blue and green followed by the letters 'OTEC' in blue.

Innovative Growth Platform for tech companies from Startups to Scale-ups

