KONAN
TECHNOLOGY

AI can Make The World a Better Place

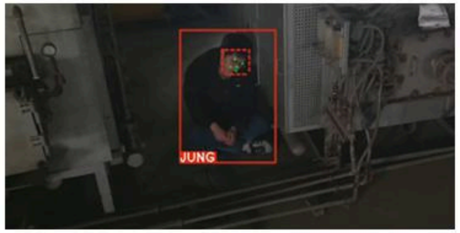
Konan Technology will take a step forward

Technology

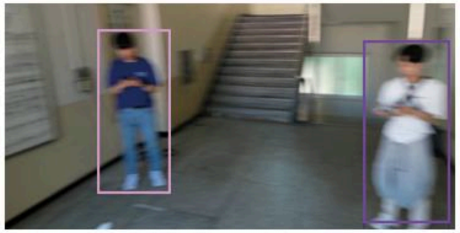
Video AI

Konan Vision AI - Indoor SAR (1/2)

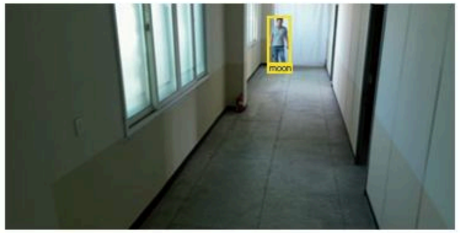
Konan Vision AI enables real-time person detection and recognition at the edge.



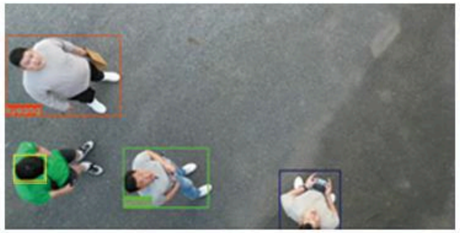
Poor Lighting



Motion Blurring



Far Distance



Pose Variation

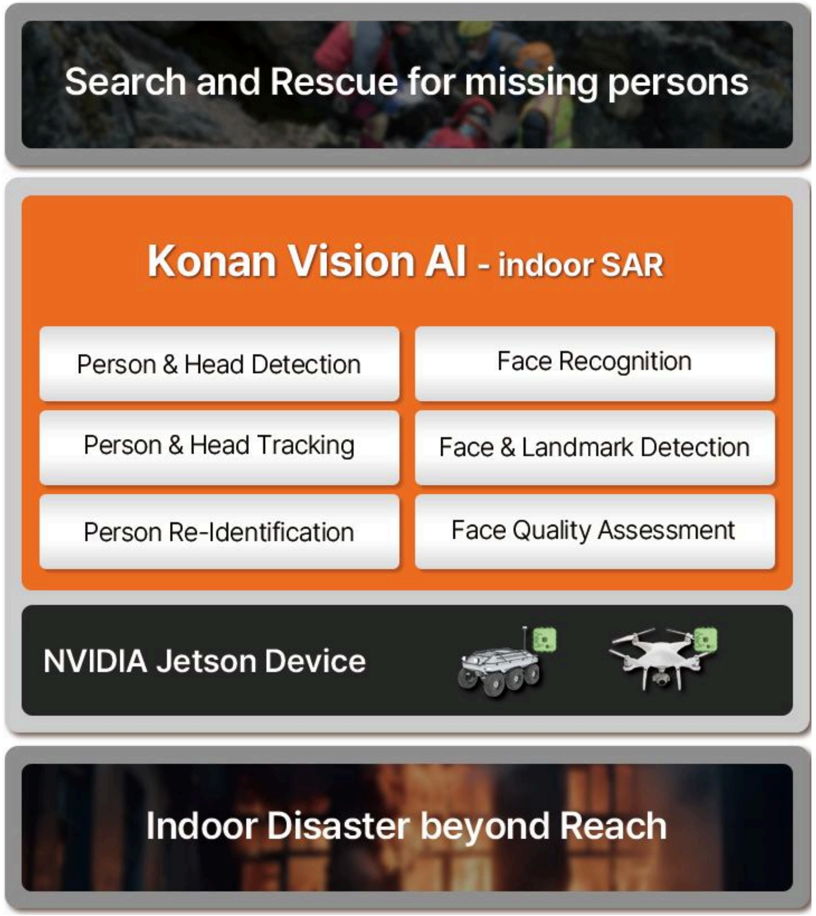
- Supports multi-vision tasks simultaneously in real time on the Jetson series.
- This cutting-edge technology provides highly accurate person and face recognition in various surveillance scenarios such as CCTV systems, UAVs and delivery robots.
- Our technologies can help to quickly identify victims and survivors of indoor disasters and terrorist attacks.

Technology

Video AI

Konan Vision AI - Indoor SAR (2/2)

Indoor SAR offers highly accurate person and face recognition in diverse surveillance scenarios, including CCTV systems, UAVs, and delivery robots.



Search and Rescue for missing persons

Konan Vision AI - indoor SAR

- Person & Head Detection
- Face Recognition
- Person & Head Tracking
- Face & Landmark Detection
- Person Re-Identification
- Face Quality Assessment

NVIDIA Jetson Device

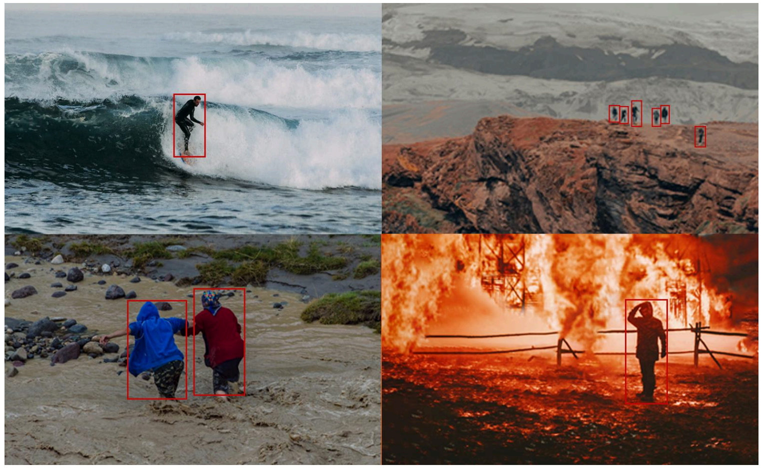
Indoor Disaster beyond Reach

Technology

Video AI

Konan Vision AI - Outdoor SAR (1/2)

Konan Vision AI enables real-time person detection and recognition at the edge.



Person Detection Under Challenging Conditions

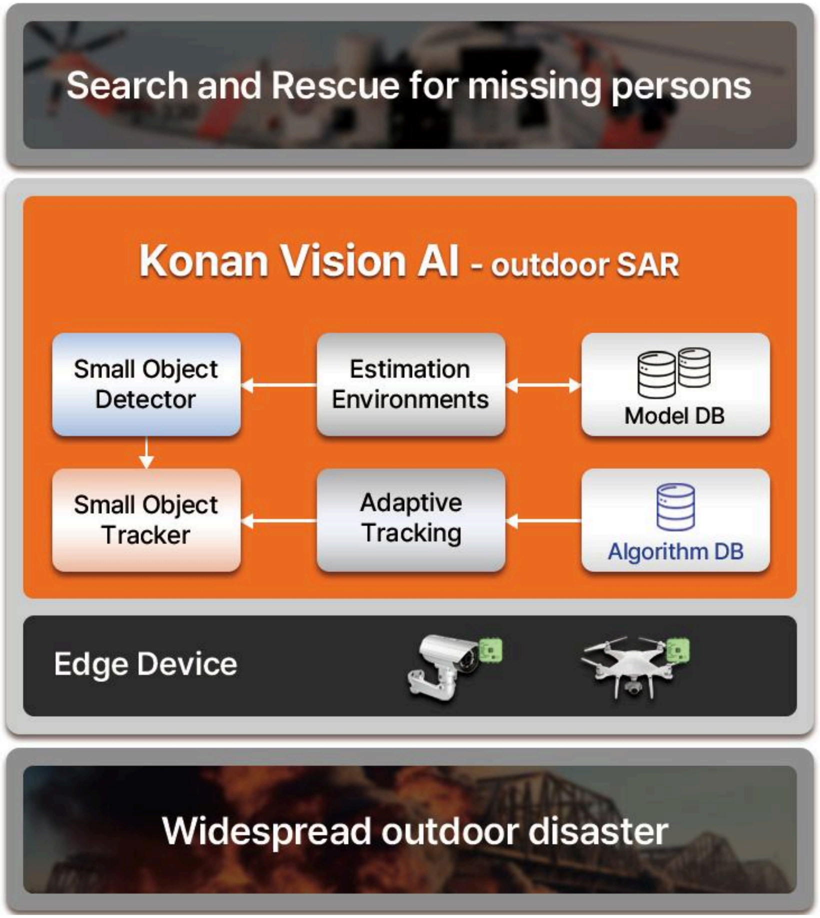
- With small-object-optimized networks and schemes, our system achieves robust high-altitude object detection.
- Under challenging conditions, including inclement weather, our video object identification technology ensures stable and reliable performance.
- Adaptive Object Data Association effectively extracts object features in camera blur situations, thus reducing ID missing.
- The enlarged Adaptive Object Data Association algorithm maintains stable object tracking performance even when frame drops occur.

Technology

Video AI

Konan Vision AI - Outdoor SAR (2/2)

Outdoor SAR achieves robust high-altitude object detection with small-object-optimized networks and schemes.


Search and Rescue for missing persons
Konan Vision AI - outdoor SAR
Small Object Detector
Estimation Environments
Model DB
Small Object Tracker
Adaptive Tracking
Algorithm DB
Edge Device
Widespread outdoor disaster

Technology

Digital Twin

Data-Centric AI Maintenance, Konan PHM (1/2)

Konan PHM is a digital twin-based AI predictive maintenance solution. It enhances the accuracy of fault diagnosis and remaining life prediction for components/equipment in the aerospace, defense, and manufacturing industries, supporting optimal decision-making.

Overcoming Data Limitations

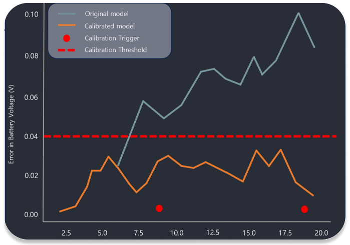
Field issue Lack of failure data and labeling data.

Solution The innovative combination of technologies such as Physics-informed Neural Networks, Self-supervised Learning, and Domain Adaptation enables robust fault detection and diagnosis even with limited failure data.

Sustained Performance

Field issue Performance decline of initial prediction models due to aging of components or systems.

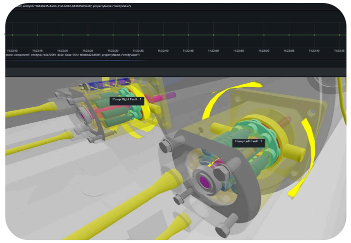
Solution Data-Driven Model Evolution: Continuous Learning and Model Updating for Optimal Performance.



Real-time Simulation for Immediate Insights

Field issue Simulation Latency at the operational phase.

Solution Enabling Real-time Simulation with Neural Operator technology. Our data-driven simulation solution empowers Faster Decision-making.

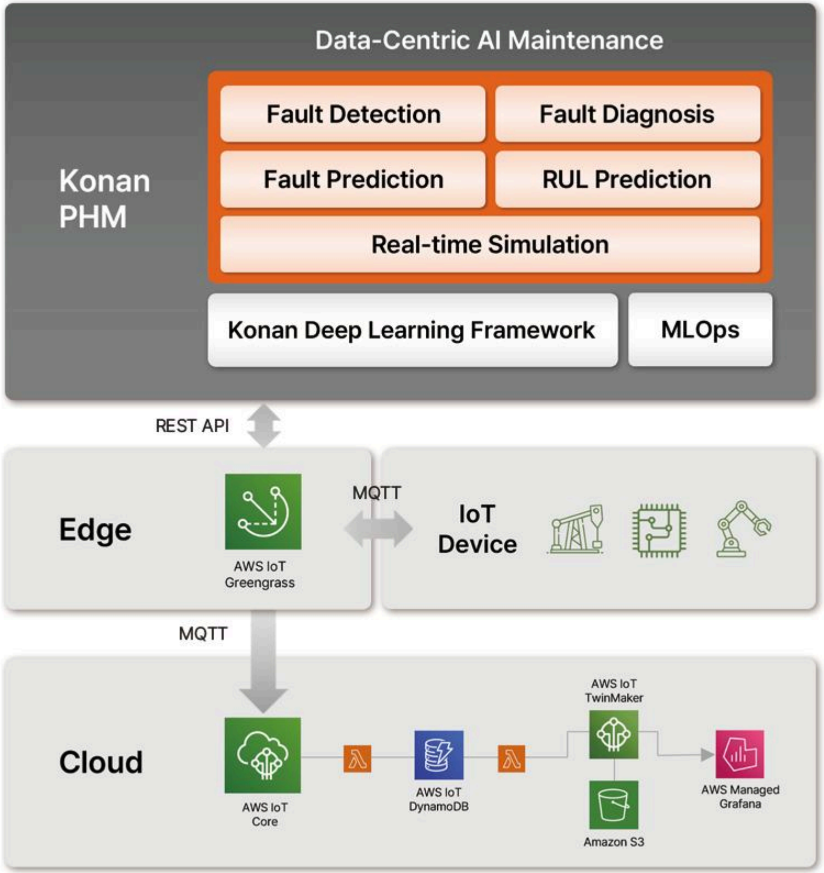


Technology

Digital Twin

Data-Centric AI Maintenance, Konan PHM (2/2)

Konan PHM is a digital twin-based AI predictive maintenance solution. It enhances the accuracy of fault diagnosis and remaining life prediction for components/equipment in the aerospace, defense, and manufacturing industries, supporting optimal decision-making.


Data-Centric AI Maintenance
Konan PHM
Fault Detection
Fault Diagnosis
Fault Prediction
RUL Prediction
Real-time Simulation
Konan Deep Learning Framework
MLOps
REST API
Edge
AWS IoT Greengrass
MQTT
IoT Device
MQTT
Cloud
AWS IoT Core
AWS IoT DynamoDB
AWS IoT TwinMaker
Amazon S3
AWS Managed Grafana

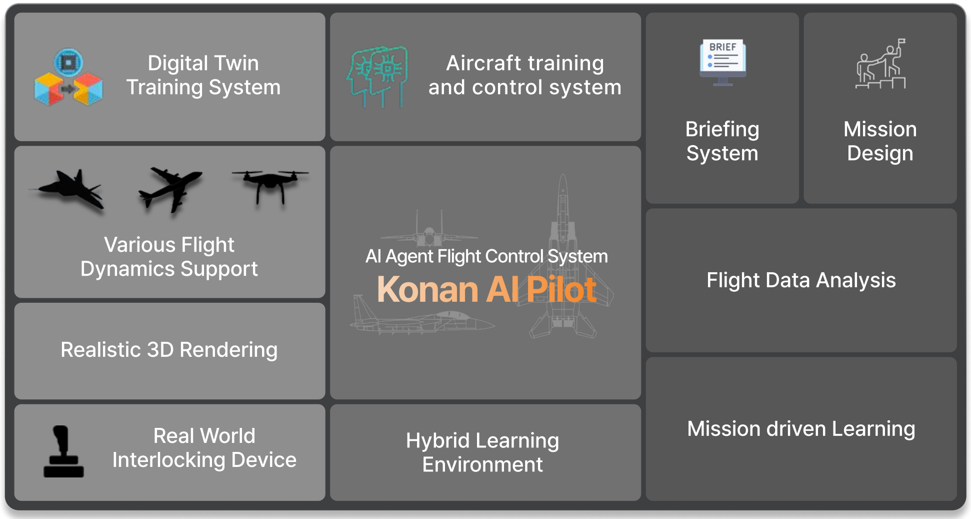
Technology

Digital Twin

AI pilot features

A digital twin technology that implements drone autonomous driving and unmanned flight training using reinforcement learning

Unmanned flight training using reinforcement learning, ‘Konan AI Pilot’



Digital Twin Training System

Aircraft training and control system

Briefing System

Mission Design

Various Flight Dynamics Support

AI Agent Flight Control System

Konan AI Pilot

Flight Data Analysis

Realistic 3D Rendering

Mission driven Learning

Real World Interlocking Device

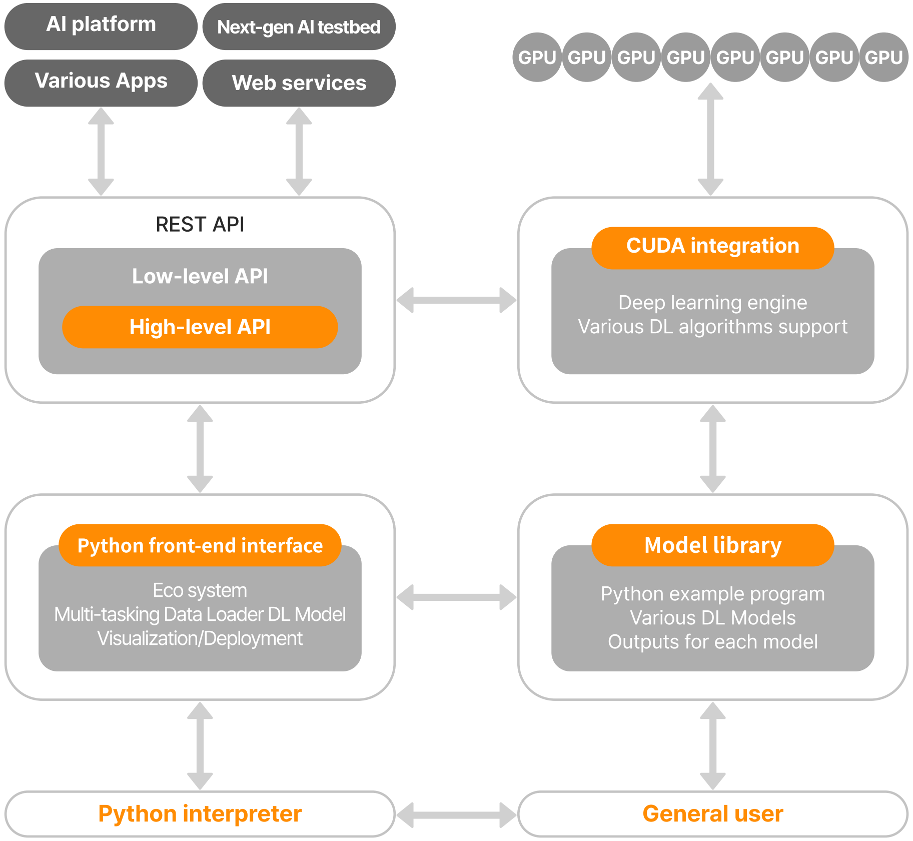
Hybrid Learning Environment

Technology

Deep Learning Framework

DL Framework Architecture

A flexible Deep Learning Framework that is easy to use for developers across a wide range of industries.



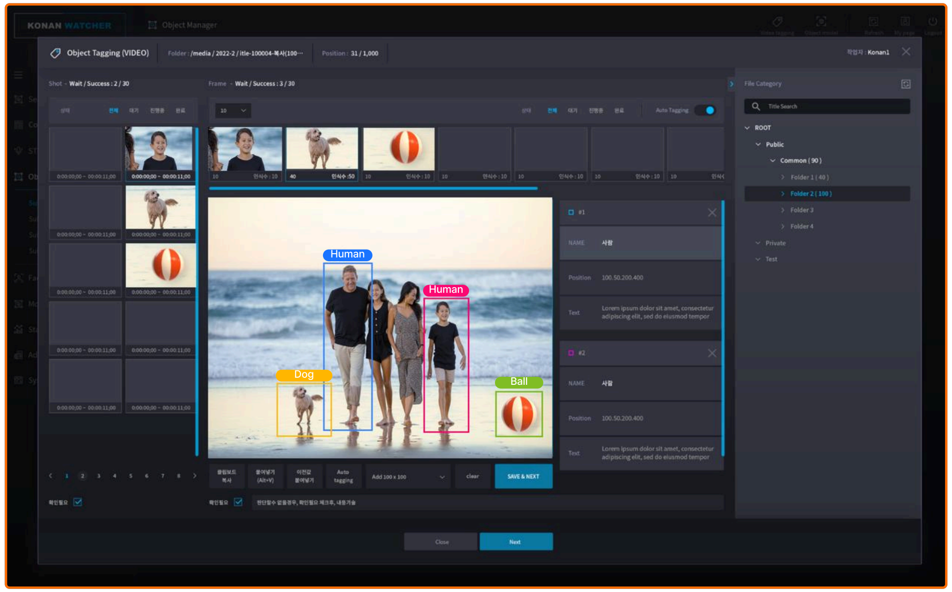
AI platform
Next-gen AI testbed
Various Apps
Web services
GPU
GPU
GPU
GPU
GPU
GPU
GPU
GPU
REST API
Low-level API
High-level API
CUDA integration
Deep learning engine
Various DL algorithms support
Python front-end interface
Eco system
Multi-tasking Data Loader DL Model
Visualization/Deployment
Model library
Python example program
Various DL Models
Outputs for each model
Python interpreter
General user

Technology

Video AI

Storyboard generation by Konan Watcher

Vision AI solution composed of Video Scene and Object detection, Timeline based storyboard generation for intuitive video editing

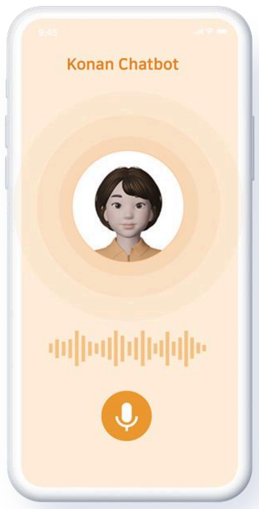

KONAN WATCHER
Object Tagging (VIDEO)
Human
Human
Dog
Ball
SAVE & NEXT
Close
Next

Technology

Text AI

STT+NLU+TTS on Chatbot

"Conversational agent" technology that listens, understands, and speaks natural language like a human



“ Let me know the company location

“ Where is the company ?

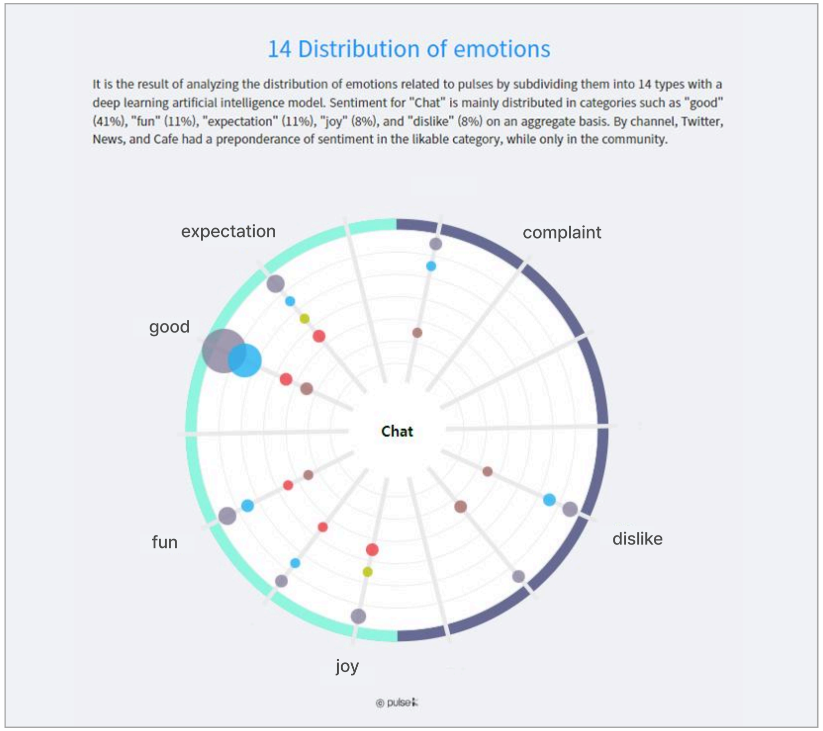
“ Tell me the company transportation

Technology

Text AI

NLG by pulse K

"NLG(Natural Language Generation)" technology applied to a billion-scale unstructured social data analysis service



14 Distribution of emotions

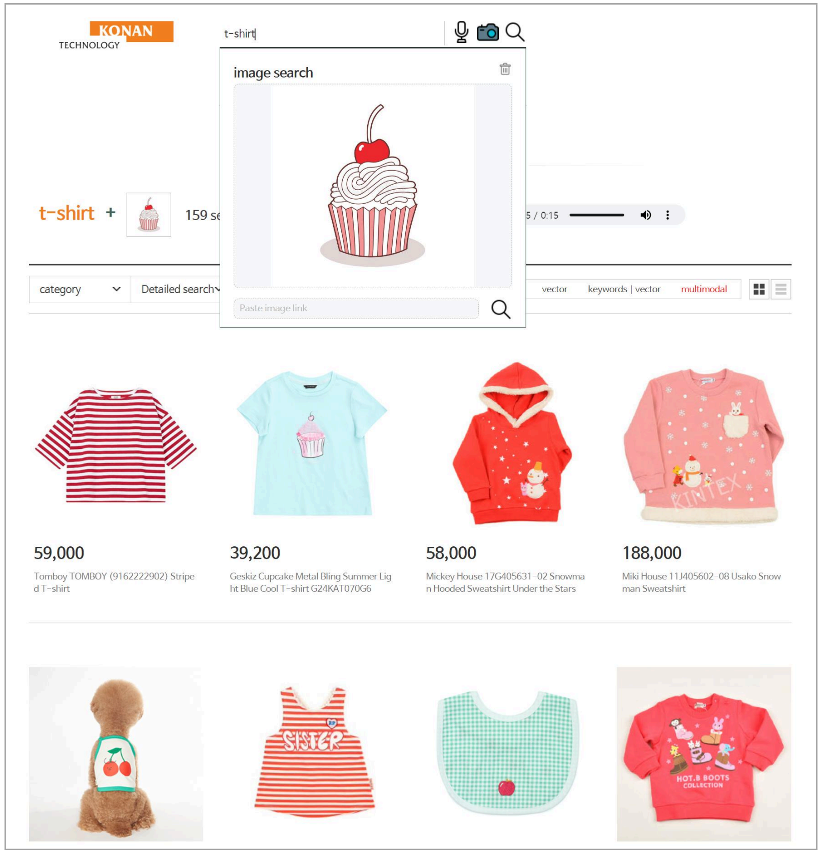
It is the result of analyzing the distribution of emotions related to pulses by subdividing them into 14 types with a deep learning artificial intelligence model. Sentiment for "Chat" is mainly distributed in categories such as "good" (41%), "fun" (11%), "expectation" (11%), "joy" (8%), and "dislike" (8%) on an aggregate basis. By channel, Twitter, News, and Cafe had a preponderance of sentiment in the likable category, while only in the community.

Technology

Text AI

Multi-modal search

"AI-based Multi-modal search" technology that understands the user's situation and intentions


KONAN
TECHNOLOGY
t-shirt
image search
Paste image link
t-shirt +
159 se
5 / 0:15
category
Detailed search
vector
keywords | vector
multimodal

59,000
Tomboy TOMBOY (9162222902) Striped T-shirt

39,200
Geskiz Cupcake Metal Bling Summer Light Blue Cool T-shirt G24KAT070G6

58,000
Mickey House 17G405631-02 Snowman Hooded Sweatshirt Under the Stars

188,000
Miki House 11J405602-08 Usako Snowman Sweatshirt

Company Overview

Konan Technology is an AI software company. Established in 1999, Konan Technology focuses on unstructured big data analysis technology for over 25 years.

Company Name	**Konan Technology Inc.**
CEO	**Young Sum Kim**
Date of Establishment	**April 1999**
Core Technologies	**Text AI, Video AI, Digital Twin**
Key Products	**Konan LLM, Konan Search/Analytics/Chatbot, Konan Watcher, Konan Voice, PHM, AI Pilot**
No. of Employees	**223**
Address	**327, Gangnam-daero, Seocho-gu, Seoul**
Corporate Type	**KOSDAQ-Listed Company**

Customer

Based on the accumulated consumer trust for over 25 years, Konan Technology has secured more than 2,900 customers ranging from large corporations such as Hyundai Motor Company, Samsung Electronics, and SK Telecom to public institutions.

2,900

Customers

3,400

Projects

Enterprise

HYUNDAI
SAMSUNG
SK
현대중공업
LG전자
KIA
olleh kt

HYOSUNG
SHINSEGAE
DOOSAN 두산건설
CJ 헬로비전
DOOSAN 두산인프라코어
한일현대시멘트
AMOREPACIFIC

SPC
E:LAND MALL
DAEKYO 대교
KPSA 한국프로스포츠협회
모두투어
HANSSEM
KAI

Customers

Based on the accumulated consumer trust for over 25 years, Konan Technology has secured more than 2,500 customers ranging from large corporations such as Hyundai Motor Company, Samsung Electronics, and SK Telecom to public institutions.

Public Institution

기획재정부
문화체육관광부
국토교통부
산업통상자원부
외교부
인사혁신처
행정자치부
특허청
조달청
미래창조과학부
국세청
여성가족부
통일부
KTV 국민방송
대한민국 국방부 Ministry of National Defense
경기도일자리재단
국제지식재산연수원
NIA 한국정보화진흥원
KDI 한국개발연구원 Korea Development Institute
TS 한국교통안전공단
LH 한국토지주택공사
부산광역시
서울특별시
한국전력공사
서울교통공사

Finance

IBK기업은행
현대증권
KB국민은행
KB금융지주
KB국민카드
우리투자증권 www.wooriwm.com
우리은행
하나카드
신한카드
신한은행
BCcard
현대해상
수호천사동양생명
KRX 한국거래소
수협중앙회
DAOL 다올투자증권
전북은행
MG새마을금고중앙회
한국수출입은행

Commerce

롯데홈쇼핑
11번가
현대홈쇼핑
Shopping
AMOREPACIFIC
CLIO PROFESSIONAL
GS SHOP
Willie 밀리의 서재
오늘의집
롯데백화점
FILA
HANSSEM
비즈마켓
수협중앙회
DAOL 다올투자증권
전북은행
MG새마을금고중앙회
세종사이버대학교
신한은행
국제지식재산연수원
PARADISE CASINO

Customers

Based on the accumulated consumer trust for over 25 years, Konan Technology has secured more than 2,500 customers ranging from large corporations such as Hyundai Motor Company, Samsung Electronics, and SK Telecom to public institutions.

Media

KBS
SBS
MBC
YTN
EBS
JO!NS
MT 머니투데이
스포츠서울
매일경제
Mnet
한국경제
국회방송
fn 파이낸셜뉴스

Education

서울대학교
연세대학교 YONSEI UNIVERSITY
고려대학교 KOREA UNIVERSITY
이화여자대학교 EWHA WOMANS UNIVERSITY
경희대학교 KYUNG HEE UNIVERSITY
숙명여자대학교 SOOKMYUNG WOMEN'S UNIVERSITY
성균관대학교
DCU 대구가톨릭대학교
국립 한국방송통신대학교 Korea National Open University
KAIST
DKU 단국대학교
세종사이버대학교
YU 영남대학교

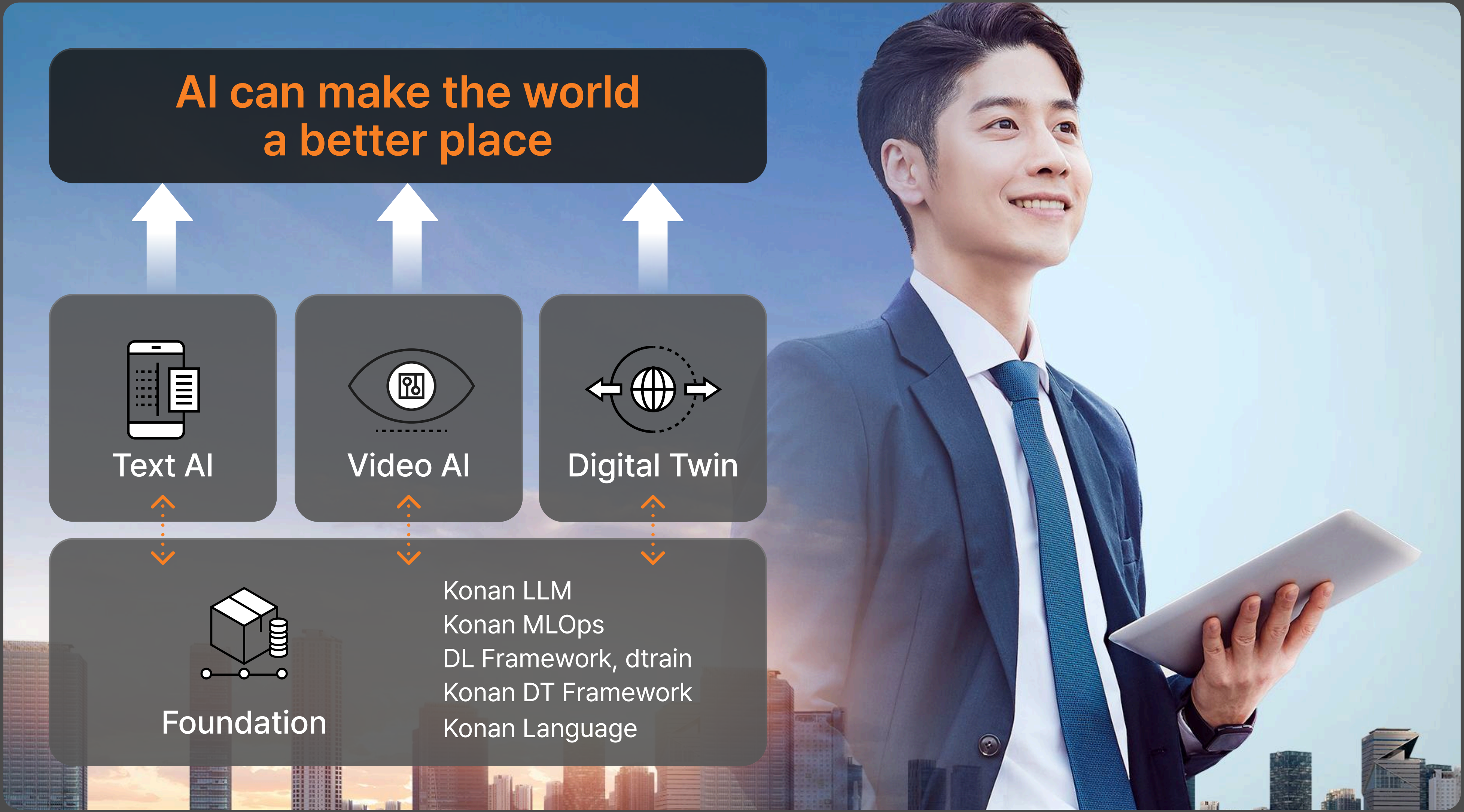
Company History

For the past 20 years, we have built a strong technology foundation in the unstructured data analysis field. For the upcoming 10 years, we will write history as an leading AI company related to image, voice and text.

2025	Co-developed Korea's first LLM-based clinical platform with Hallym University Medical Center
	Selected as an 'Emerging AI+X Top 100 Company' for 4 consecutive years
2024	Contract 'Generation AI Project' with Korea Southern Power Corporation
	Honored with the Minister's Prize at the Korea AI Industry Awards
2023	Selected as 「Defense Innovative Company 100」
	Completion of the 'Defense Intelligent Platform' project for R.O.K MND
	Released document generation AI, 'Konan LLM'
2022	Konan Technology (402030) listed on KOSDAQ
	Business agreement with 'KAI' to strengthen AI-based aerospace technology
2017	Started applying AI technology to commercial products
2009	Provide video-search technology for Nate Portal
2007	Provide integrated search services for Nate Portal and Cyworld
2006	Business alliance with SK Communications established
2005	Overseas incorporated company Konan Digital Inc. established
2004	Launched SBS Digital News based on 'Konan DigitalArc'
2001	Konan image-searching technology selected as MPEG7 international standard
1999	Konan Technology established

Vision

Our AI technologies empower enterprises to make faster, better decisions.



AI can make the world a better place

Text AI

Video AI

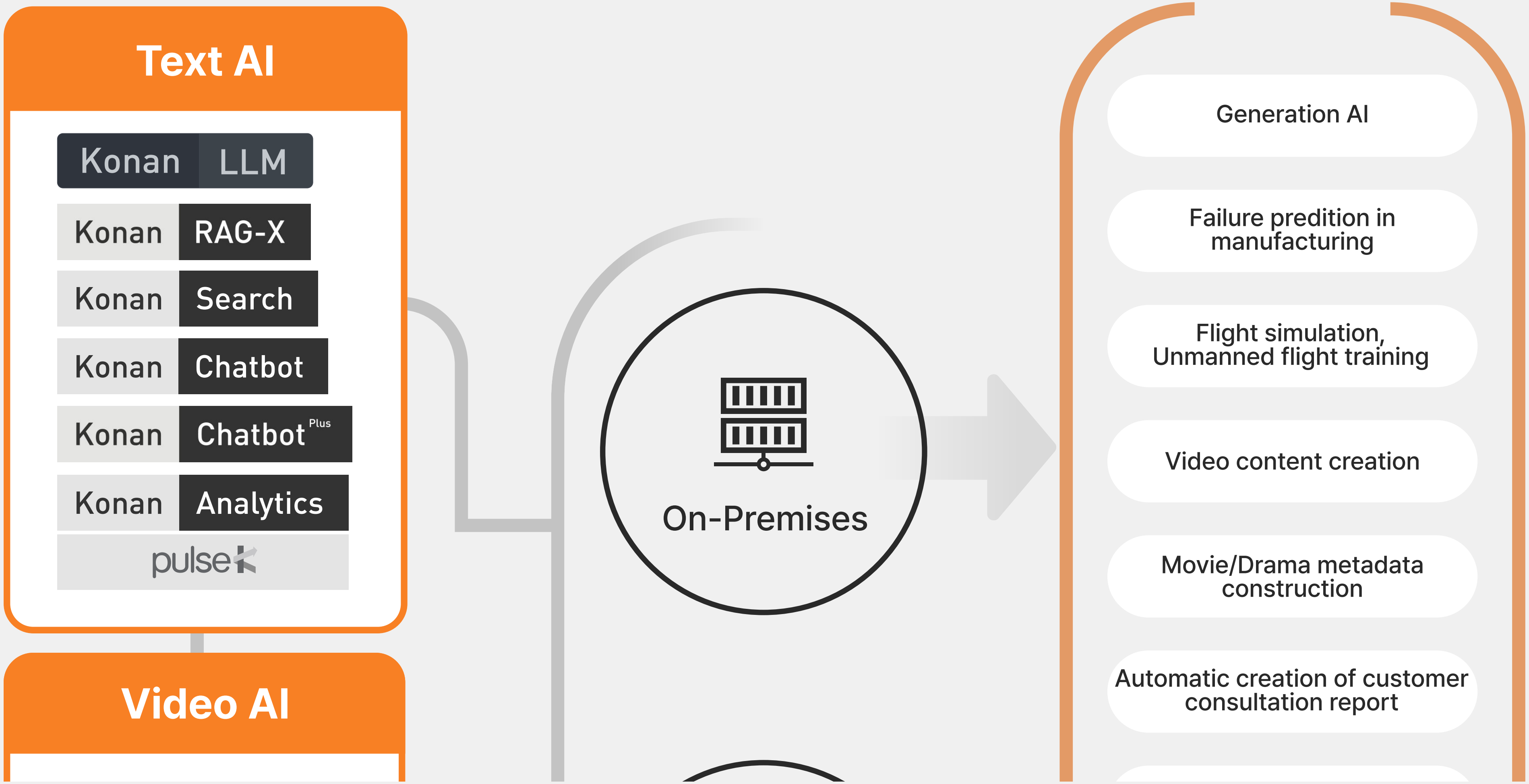
Digital Twin

Foundation

Konan LLM
Konan MLOps
DL Framework, dtrain
Konan DT Framework
Konan Language

Business Information

Konan Technology focuses on technology commercialization to develop AI that 'watch, listen, understand, and speak' like human-beings do.



Product

Solution Delivery Method

Applied Field

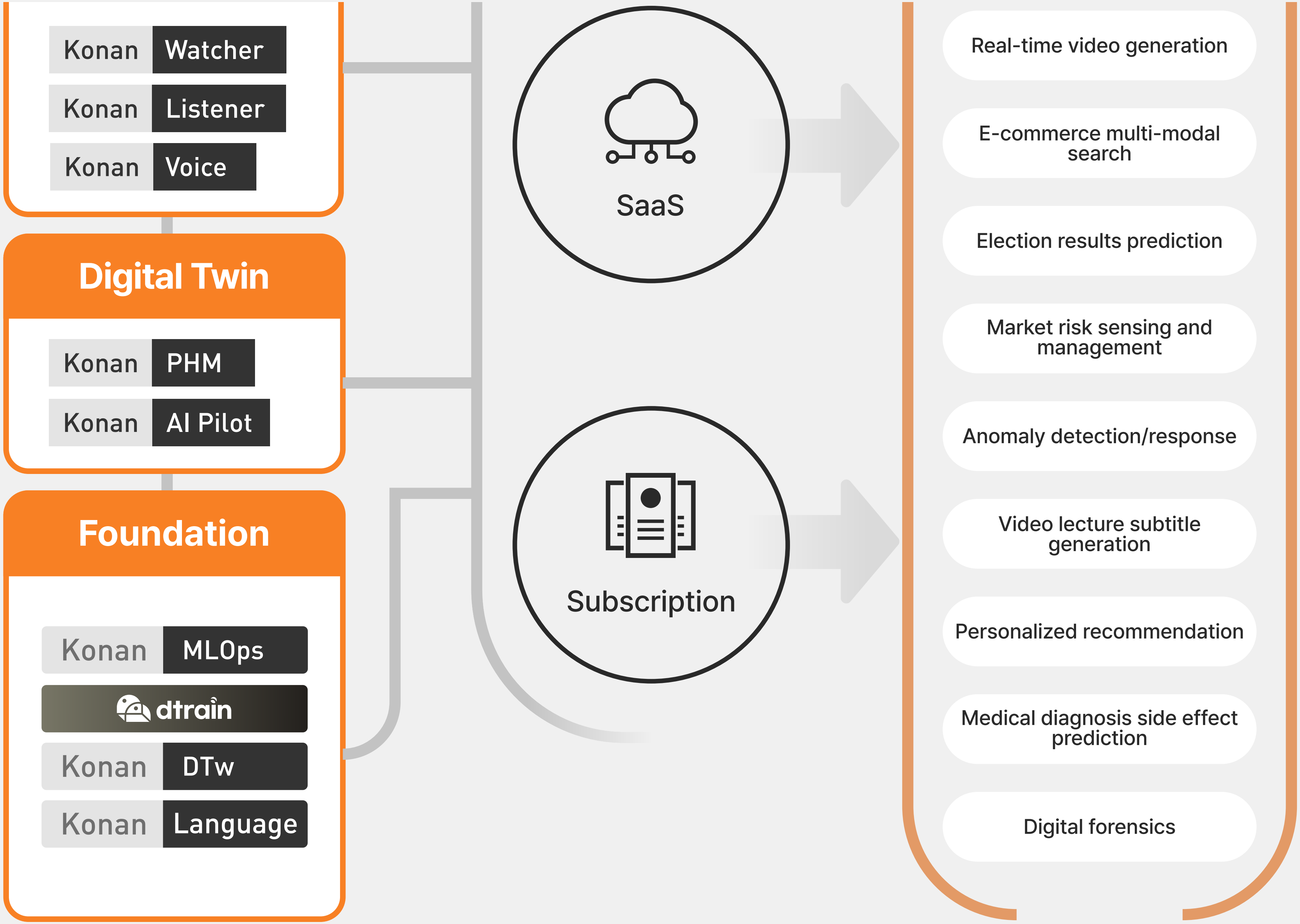
Text AI

- Konan LLM
- Konan RAG-X
- Konan Search
- Konan Chatbot
- Konan Chatbot Plus
- Konan Analytics
- pulse

Video AI

On-Premises

- Generation AI
- Failure predition in manufacturing
- Flight simulation, Unmanned flight training
- Video content creation
- Movie/Drama metadata construction
- Automatic creation of customer consultation report



Konan Watcher

Konan Listener

Konan Voice

Digital Twin

Konan PHM

Konan AI Pilot

Foundation

Konan MLOps

dtrain

Konan DTw

Konan Language

SaaS

Subscription

- Real-time video generation
- E-commerce multi-modal search
- Election results prediction
- Market risk sensing and management
- Anomaly detection/response
- Video lecture subtitle generation
- Personalized recommendation
- Medical diagnosis side effect prediction
- Digital forensics

Featured Products

Text AI

To understand the intention of the speaker.

Konan LLM

Konan LLM is an on-premise 'Document Generation AI' for B2B/B2G. It boasts Korean document generation having the largest number of Korean tokens. Also, it provides accurate and well-founded answers through self-developed Vector Search engine-based RAG.

Konan RAG-X

Konan RAG-X delivers up-to-date answers by leveraging various sources and clearly citing references to ensure information reliability. It also recommends follow-up questions based on previous queries, helping users quickly find relevant information and maintain a coherent, natural flow of conversation.

Konan Search

Konan Search is an "AI-based multimodal search engine" that understands the user's situation and intentions. You can search by taking a picture without typing, and you can search for synonyms /similar expressions by vector search without using a synonym dictionary.

Konan Chatbot

Konan Chatbot is an AI-based conversational agent that upgrades businesses by providing high quality conversational services.
It provides conversational services that are based on natural language understanding, text mining, machine learning, and deep learning technologies.

Konan Chatbot Plus

Konan Chatbot Plus is an AI-based translation service that allows real-time conversations in various languages. It provides more natural communication with foreigners in their native language through high-quality speech recognition and machine translation technology.

Konan Analytics

Konan Analytics is an 'intelligent text analytic engine' that discovers business insights through structured and unstructured data analysis using machine learning, AI, and data science based technologies.

pulseK

pulse-K is a real-time analytic service that analyzes current online issues and finds business signals using AI-based data science technology.

Video AI

Recognize objects in video, such as people, faces, voices, and situations, to understand the context of video scene.

Konan Watcher

Konan Watcher is a solution that can identify various multimodals such as faces, entities, situations and scenes in video contents and can be applied to public, broadcasting, and national defense fields.

Konan Listener

Konan Listener is an end-to-end voice recognition engine solution that automatically generates subtitles from various video contents by combining and utilizing technologies such as video processing, natural language processing etc.

Konan Voice

Konan Voice is '3D Character-Integrated Text-to-Speech (TTS) service' for B2B/B2C. It automatically lip-syncs and dubs a 3D character with just the script text. Additionally, it can express 6 emotions and provides natural high-quality sound with a MOS of over 4.5.

Digital Twin

System diagnosis, prediction, and optimal decision-making by PBDL and RL with digital twins.

Konan PHM

Konan PHM can have a dramatic impact on manufacturing operations by PBDL and RL with digital twins.

Konan AI Pilot

Konan AI Pilot implements drone autonomous driving and unmanned flight training using reinforcement learning.

Leadership

Youngsum Kim CEO

Ph.D. in electrical and communications engineering, Hanyang University
Senior Researcher, ETRI
Bellcore Research from U.S.A

Youngsum Kim, he has been asked his top business priorities, he always replies"Our people are our top competitve advantage."
Under this management philosophy, he has built a strong organizational culture based on autonomy.
And he has focused on artificial intelligence business development that encompasses image, voice and text from its inception to the present.

Seunghyun Yang CTO

Ph.D. in Computer Science, Seoul National University
Senior Researcher, ETRI
IBM Natural Language Processing Researcher, Seoul National University
SKT CTO concurrently

Seunghyun Yang has directed the company's technology innovation based on the principle of creating well-made products that are minimalistic and faithful to the basic function of the product.
As a result, It has become the only AI software company in Korea that uses its own 'K-language' as its source code and trains AI models with its own deep learning framework.

Leadership

Deokho Yoon Vice President/ Director of Vision AI Research Institute

Ph.D. in Computer Science, Seoul National University
Professor, Hannam University

Deokho Yoon is in charge of developing a flexible deep learning framework for next-generation AI research and development.
Additionally, he had led the development of ""SBS Digital Newsroom System"" that adopted a digital TV news production system for the first time in South Korea.

Seungki Kim Vice President / Head of Business Operations

CEO, Ssangyong Information & Communications
Executive Director and Research Center Head, Osstem Implant

Seungki Kim is an IT industry veteran with over 35 years of expertise in IT and business management. He served as the CEO of Ssangyong Information & Communications and as the Head of the Software Product Research Center at Osstem Implant.

Leadership

Youngchang Song CFO

Bachelor of Laws, Seoul National University
KTB, Heungkuk Life Insurance

Youngchang Song has a background in excellent investment management and has over 29 years of experience in the financial field.
Before joining Konan Technology, he was in charge of investment management at KTB Network and management planning at Heungkuk Life.

Jungju Choi Executive Director

Ph.D. in Computer Science, Postech
Professor, Department of Media at Ajou University
Senior Researcher, ETRI
Academic Chairperson, Korea Computer Graphics Society

Jungju Choi is the head of research and development for digital twin and metaverse technologies.
He has a number of research achievements and publications in computer graphics, such as standardization of '3D digital human models' and 'Haptic rendering to improve immersion'.

Leadership

Wantaek Lim Managing Director

Bachelor of Computer Science and Statistics, Seoul National University
Head of Mobile Division, KTH
Senior Invited Researcher , KISTI

Wantaek Lim is a strategic planning expert with over 10 years of experience.
Prior to joining Konan Technology, he was in charge of the mobile businesses such as Pudding Camera, Pudding Face Recognition service, location-based SNS service "I'm in", at KTH.

Wonchul Do Managing Director

Master of Computer Science, Hongik University
General Director of Technology, Handysoft corp.

Wonchul Do is head of research and development for LLM and chatbot. Prior to joining Konan Technology, he was head of developing collaboration software such as Groupware, BPM(Business Process Management System) and KMS(Knowledge Management System) at Handysoft corp.

Leadership

Changmin Oh Managing Director

M.S. in Computer Science, Seoul National University
SW Engineer, Empas,Inc.

Changmin Oh leads a group focused on developing the company's search/analytics products and researching LLM training and optimization. He is particularly interested in designing search systems, ranging from edge devices to large-scale systems handling billions of records.

Hyunmin Lee Director

M.D. in Computer Science, Chonnam National University
Senior Researcher, A-Lab

Hyunmin Lee conducted Nate Semantic Search project leveraging her expertise in NLP technologies. She also developed Konan Analytics, a product for unstructured text analysis. Currently, she is managing pulseK, an online media analysis service based on real-time data collection and analysis.

Leadership

Youngjoo Suh Managing Director

Ph.D. in Information and Communications Engineering, KAIST
Associate Research Professor, KAIST
Researcher, ETRI

Youngjoo Suh is the head of the Voice Group. He has been actively conducting R&D in the field of Speech AI, with a primary focus on speech recognition and speech synthesis, in both academia and industry for over 30 years. He has published dozens of papers, including 'Probabilistic Class Histogram Equalization Based on Posterior Mean Estimation for Robust Speech Recognition' in IEEE Signal Processing Letters.

Mansoo Kim Managing Director

M.S. in Computer Science, Kyungpook National University
Managing Director, Cognent9
Primary Co-founder, DigitalAria
Researcher, ETRI

Mansoo Kim is leading the Digital Twin Group. The Digital Twin Group is engaged in research and development of equipment health prediction and autonomous flight technology for UAVs in the manufacturing, aerospace, and defense sectors. He has recently become interested in developing technologies that integrate digital twin and artificial intelligence.

Leadership

Minho Ahn **Director**

Ph.D in applied mathematics form Pohang University of Science & Technology
Managing Director, Creverse Inc.
Technical Director, Unity Technologies Inc.

Minho Ahn is leading the development of AI Pilot, a critical component for next-generation air forces. His research focuses on creating intelligent agents that enhance human strategic decision-making under information constraints, utilizing advanced reinforcement learning techniques and linguistic geometry. Additionally, he developed FXUI, a vector graphics-based embedded GUI solution currently deployed in over 100 million devices.

Hyunsu Kang **Director**

Master of Computer Science and Statistics, Chunbuk National University
Systran(Korea) Development Group Leader

Hyunsu Kang has a lot of experience in natural language processing. Recently, he has been applying object recognition technology and reinforcement learning technology using drones to the defense field.

Leadership

Hansang Cho **Director**

M.S. in Mathematics, Postech
Former Research Director of AI Lab, Cognet9
Former Research Director of Computer Vision Lab, Zenitum

Hansang Cho is a Computer vision engineer with over 20 years of experience. He is responsible for developing Computer vision and MLOps solutions. Additionally, he has a strong interest in AI infrastructure, recognizing its critical role in supporting AI applications.