

# HUMAN AI VIRTUAL

Prepared by Pengembangan  
Bisnis & Produk ER



PLN Icon Plus Emerges as The Winner Of  
Asian Telecom Awards 2024  
Broadband Telecom Company of The Year



PLN Icon Plus sebagai Subholding Beyond kWh berfokus pada bidang Telekomunikasi, ICT dan Green Solution.

## PT Indonesia Comnets Plus established since 2000



ICON+ berdiri pada tahun 2000 sebagai anak perusahaan PT PLN (Persero) yang bergerak di bidang jasa layanan jaringan telekomunikasi, teknologi informasi dan komunikasi.



**>1Jt & 5rb**  
Retail & korporat



**100%**  
Milik Indonesia



**7 x 24 Service**



**2509 POP**



**50 Kantor**  
Strategis Bisnis



**260.493 km**  
Jaringan serat optik

## Tahun 2022 ICON+ Berubah Menjadi PLN ICON Plus



Pada tahun 2022 ICON+ melakukan rebranding menjadi PLN Icon Plus, sekaligus bertransformasi menjadi Subholding Beyond kWh. Seluruh bisnis PLN Group yang tidak berhubungan secara langsung dengan penjualan kWh (daya), akan dikelola oleh PLN Icon Plus.

## PLN Icon Plus **Digital & Green Solution Provider**



**Digital Solution**



**Application Services**



**Pln mobile**



**Internet of Things**



**Optimalisasi Asset**



**Multimedia As A Services**



**Connectivity Solution**



**ICONET**



**ICONNET**



**ICONAPPS**



**ICONWEB**



**ICONBASE**



**Green Solution**



**PV Roof Top**



**Electric Vehicle Ecosystem**

# Pengembangan Bisnis & Produk



## BISKONFRA

**Connectivity** services both private or public (internet access), infrastructure active for connectivity

### Network

- Clear Channel
- CC Kapasitas Besar
- Metronet
- IPVPN
- IPVPN Premium
- IPVPN VSAT
- Free WIFI Infra
- Jaringan SCADA PLN
- Teleproteksi PLN
- Telepon Desa

### Internet Corporate

- Internet Corporate
- IP Transit
- Internet VSAT
- Internet Desa

### Infrastructure & Device

- Fiberisasi BTS
- Open Access
- Dark Fiber
- Collocation DC
- ICONCLOUD
- Neutral Pole Sharing
- MS Office (PC/Laptop)
- MS Smart Printing
- MS Router
- MS SDWAN
- MS Mobile Comm
- MS Radio Trunking

### Internet Broadband

- Internet Broad Corp
- Ides Cafe

### Retail

- ICONNET



## BANGBIS ER

**Digital Product** services with a Product Based, Project Based, Multimedia and Strategic Alliance depend on needs customer business solution

### Product Based

- Hi+ Energy (EMS)
- iOffice
- Contact Center
- E-Score
- ListriQu

### Multimedia

- CCTV / iSee
- VMS
- Telicon
- MediAds
- Wifin
- Smart Meeting Room
- Video Tron
- Video Wall
- Zoom
- Command Center
- ICONPLAY (IPTV – OTT)
- Smart Home
- IP Telephony

### Project Based

- Internet of Things
- Smart Town Hall
- SIMRS
- E-Balita
- LMS
- E-Procurement
- MS IT Dev. Ops
- IT Asset Management
- IT Master Plan
- iSchool
- E-Sign
- E-Materai
- Biometric
- CRM
- ERP
- CSS



## BANGBIS ER

**Renewable Energy** services such as Photovoltaic Rooftop and Electric Vehicle with Manage Service or One Time Charge Business Model

### Photovoltaic Rooftop B2B

- MS PV Rooftop
- OTC PV Rooftop
- PJU Solar
- BESS

### Photovoltaic Rooftop B2C

- MS PV Rooftop
- OTC PV Rooftop

### Electric Vehicle

- Private EV Charging
- MS Electric Vehicle
- SPKLU

# Delivery Layanan Pengembangan Bisnis & Produk

## Product Based

### iOffice Plus



**SYSCCA** Contact Center



**Hi+ energy**  
High-Information Energy

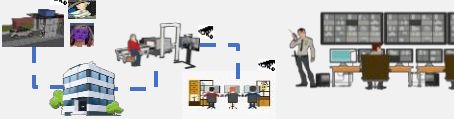


### Smart Office

VMS

Command Center

Telicon Mobile



**RATING SCORING**



## Partnership



zoom

IoT

SIMRS

LMS

**KAY REACH**  
SYSTEM

**miota**  
live smart

ASP

**IDE**  
Infrastruktur  
Digital Edukasi

PT. ASTA BERKAH AUTONOMOUS

**sml**  
Innovation and beyond.

**FIX**  
INDONESIA  
.COM

CRM

Cyber  
Security

ERP

IT Asset  
Mgmt

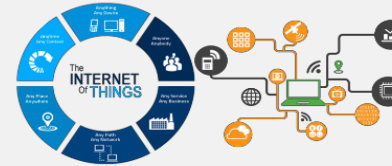
accenture

**ITS E C**  
SECURITY DELIVERED

odoo

ivanti

## Internet of Things



## CRM



## Digital Potency

> 75 Mio  
Household using  
electricity Power



> 1,9 Mio  
Social & Special  
Services

> 4,3 Mio  
Business &  
Industry Cust



> 1Mio  
Government  
Building

## iSchool Plus



eBalita



E-Sign



E-Materai  
e-Meterai

## Project Based

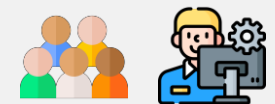
### Smart Tourism



### Digitalisasi ProBis



### Professional as a Services



Contact  
Center

Bigdata  
Database

ETax

GIS

**BOTIKA**

**NUSA DATA**  
By Akar Inti Data

**EQUINIX**

**pajakku**

**PERURI**  
Digital Security

**esri**



# HUMAN VIRTUAL AI

Redefine human-computer interaction through  
Pioneering innovation

Integrating state-of-the-art AI solutions: natural language processing, voice and avatar interaction to empower businesses in delivering unparalleled user experiences across various domains.



# Intelligent Companions for a Better Tomorrow

PLN Icon Plus has built a cutting-edge AI ecosystem, from chatbots, omnichannel dashboards, voice technology, LLM, and Digital Human AI. Our solutions transform customer interactions, streamline transactions, and drive personalized experiences, fueling business growth and success

## Already Product



**Chatbot**



**Omnichannel**

AI working together with human



**Voice Technology**

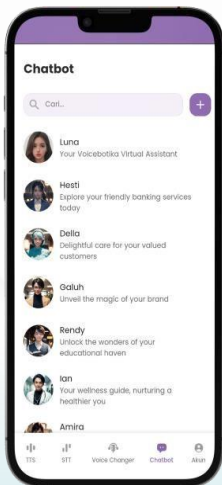
Giving the AI the ability to hear & speak



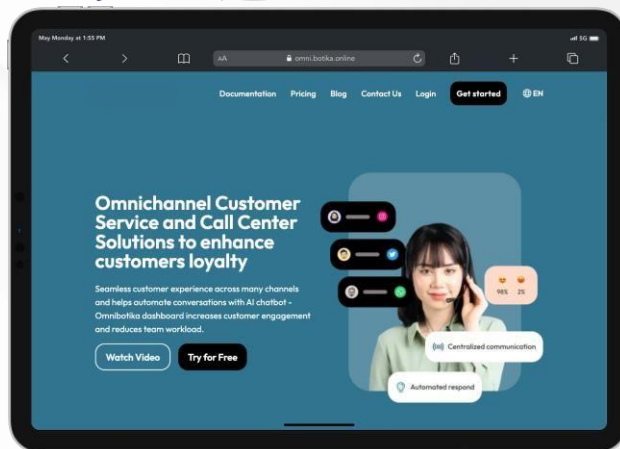
**Digital Human AI Virtual**

Giving the AI the ability to hear & speak





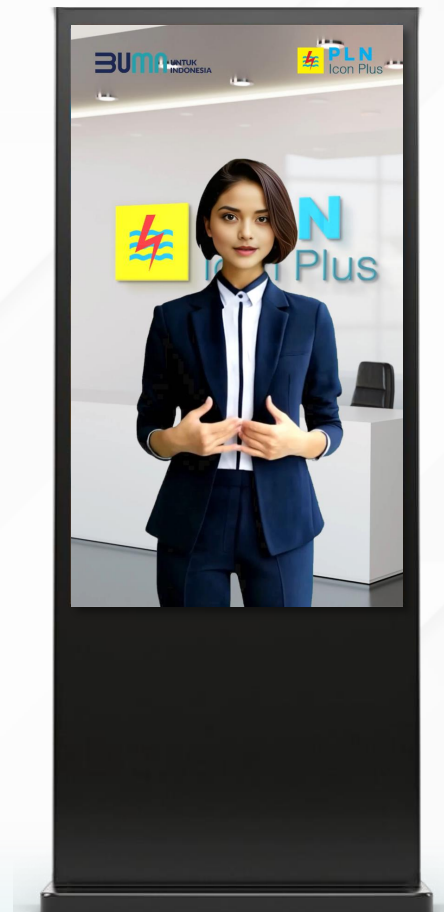
**Chatbot**  
Text Base



**Omnichannel**



**Voice Assistant**



**Digital Human AI Virtual**

## Human Virtual AI

Memberdayakan setiap solusi dalam ekosistem untuk menghasilkan hal yang unik dan mendorong Solusi yang lebih maju

# Key Features Human AI Virtual

## Features & Custom AI

- Dynamic UI (Popup Image, Video, Form)
- Direct URL
- Media Gallery
- Filler Video
- Background Customization
- Regex
- 3 Mode Voice (tap to speak, wake word, tap speak tap)
- Menu Button, Chat Mode
- Color Based
- Font Type and Size
- Logo
- Running Text Note
- Language Switcher
- Pop up Action (Listening, Analyzing Input, etc.)
- Wake Word Similarization

## Technology

- Menu Button, Chat Mode
- Color Based
- Font Type and Size
- Logo
- Running Text Note
- Language Switcher
- Pop up Action (Listening, Analyzing Input, etc.)
- Wake Word Similarization

## 2D Realistic / Animasi



- Custom Gesture
- Custom Model
- Custom Hairstyle & Kostum

## Display On

KIOSK

LCD Display

Website

Android/iOS



## Deployment

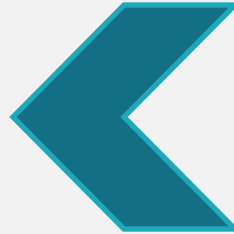
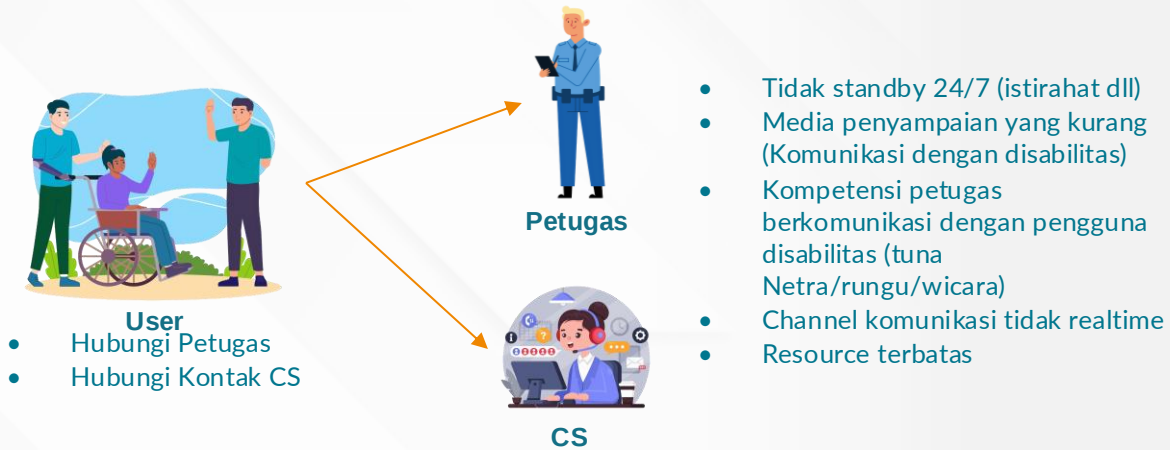
On Cloud

On Premise

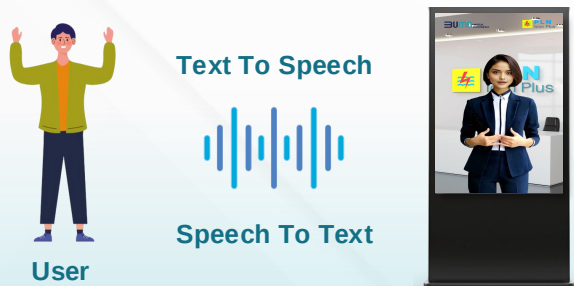
API Integration

# Digital Human AI Virtual

Example of Interaction between user and Digital Human AI Virtual



## Conventional



- VA Standby 24/7
- Media penyampaian variative (Text, Audio, Image, Video)
- Wake Word
- Suggestion Pertanyaan
- Personalize
- Rute & Wayfinding (Visual)
- Icon brand dan wujud visual layanan bantuan
- Iklan
- Pengaduan



## Digital Human AI Virtual

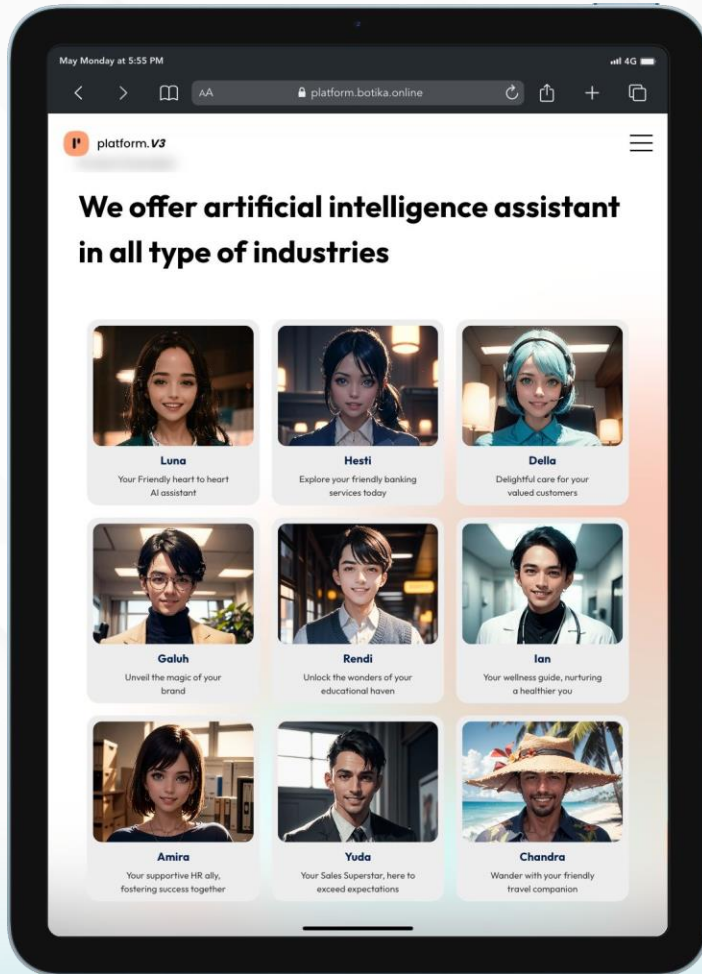
# Fine Placement

HOSPITAL ☐ OFFICE / BRANCH ☐ PUBLIC TRANSPORTATION ☐ MUSEUM / TOURIST ATTRACTION ☐ SHOPPING MALL



# Digital Human AI Virtual

## Use Case



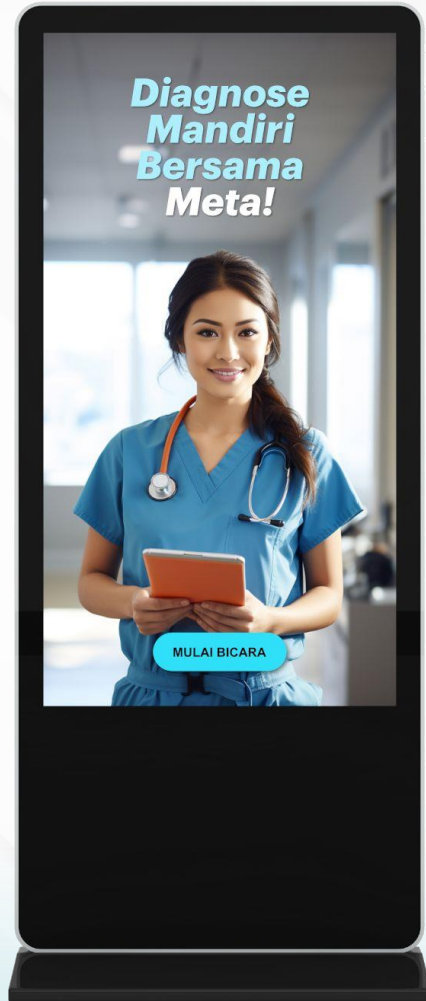
## 1 Customer Service

- **Agen Dukungan Virtual** : Digital human dapat berfungsi sebagai agen layanan pelanggan yang tersedia 24/7 untuk menjawab pertanyaan pelanggan, menyelesaikan masalah, dan memberikan panduan personal
- **Kios Interaktif** : Di tempat – tempat seperti bandara, hotel, pusat perbelanjaan, kios yang dilengkapi dengan digital human dapat memberikan informasi dan membantu pelanggan dengan cara yang lebih menarik dan efisien.



# Digital Human AI Virtual

## Use Case



## 2 Kesehatan dan Perawatan

- **Asisten Kesehatan** : Membantu pasien dengan pengingat obat, menyediakan informasi tentang kondisi medis, dan memberikan dukungan emosional, pengingat jadwal pengobatan dan memberikan dukungan social.

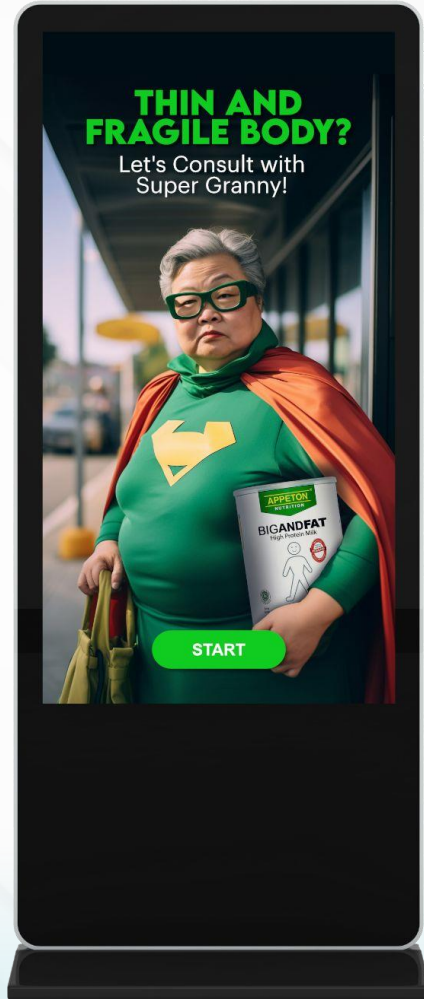
## 3 Digital Banking Services

- Digital human dapat membantu pelanggan dengan transaksi keungan, menjawab pertanyaan tentang produk perbankan, dan memberikan saran keungan yang dipersonalisasi, meningkatkan efisiensi layanan nasabah.



# Digital Human AI Virtual

## Use Case



## 4 Periklanan dan Pemasaran

- **Brand Ambassador Virtual** : Berinteraksi dengan audiensi di media social, kampanye pemasaran, dan acara virtual, menciptakan hubungan personal merk / brand.
- **Pembuatan Iklan** : Membuat iklan video yang dipersonalisasi dengan biaya rendah dan proses produksi yang lebih cepat menggunakan digital human



# Digital Human AI Virtual

## Use Case



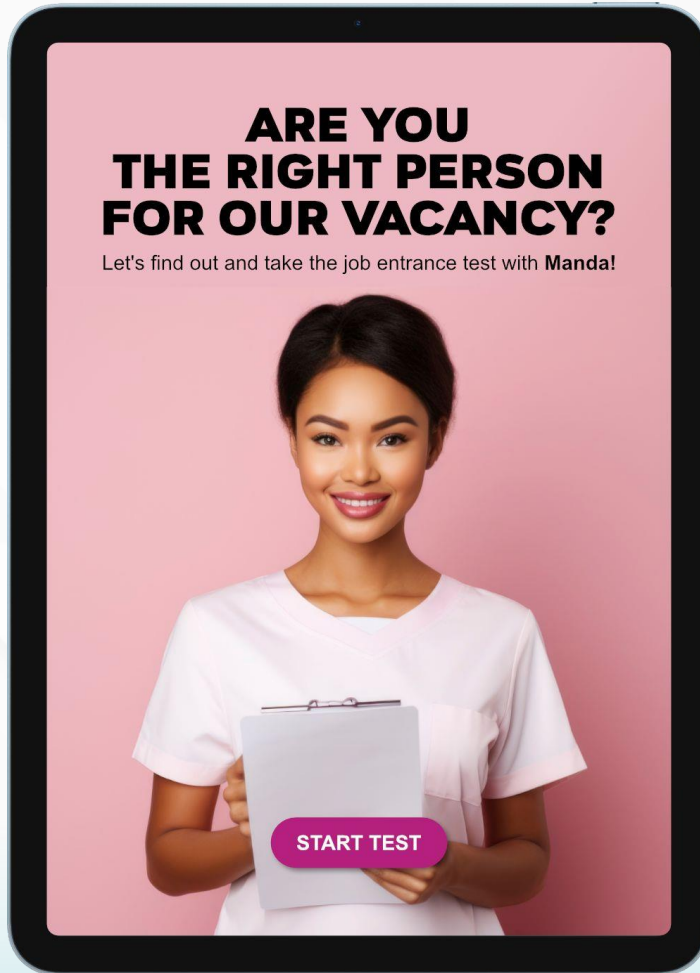
### 5 Periklanan dan Pemasaran

- **Pemandu Wisata Virtual** : Membimbing turis di museum, cagar alam, atau tempat wisata lainnya, memberikan informasi Sejarah dan cerita menarik.
- **Asisten Perjalanan** : Membantu pelancong dengan informasi tentang rute, tempat menarik, dan rekomendasi lokal.



# Digital Human AI Virtual

## Use Case



## 6 Trainer / Internal HR Perusahaan

- **Pelatihan Interaktif** : Digital human digunakan dalam program pelatihan Perusahaan untuk memberikan simulasi interaktif dan scenario pelatihan.
- **Onboarding Karyawan** : Membantu karyawan baru memahami budaya Perusahaan, prosedur, dan tanggung jawab pekerjaan melalui panduan virtual.



# Digital Human AI Virtual

## Use Case



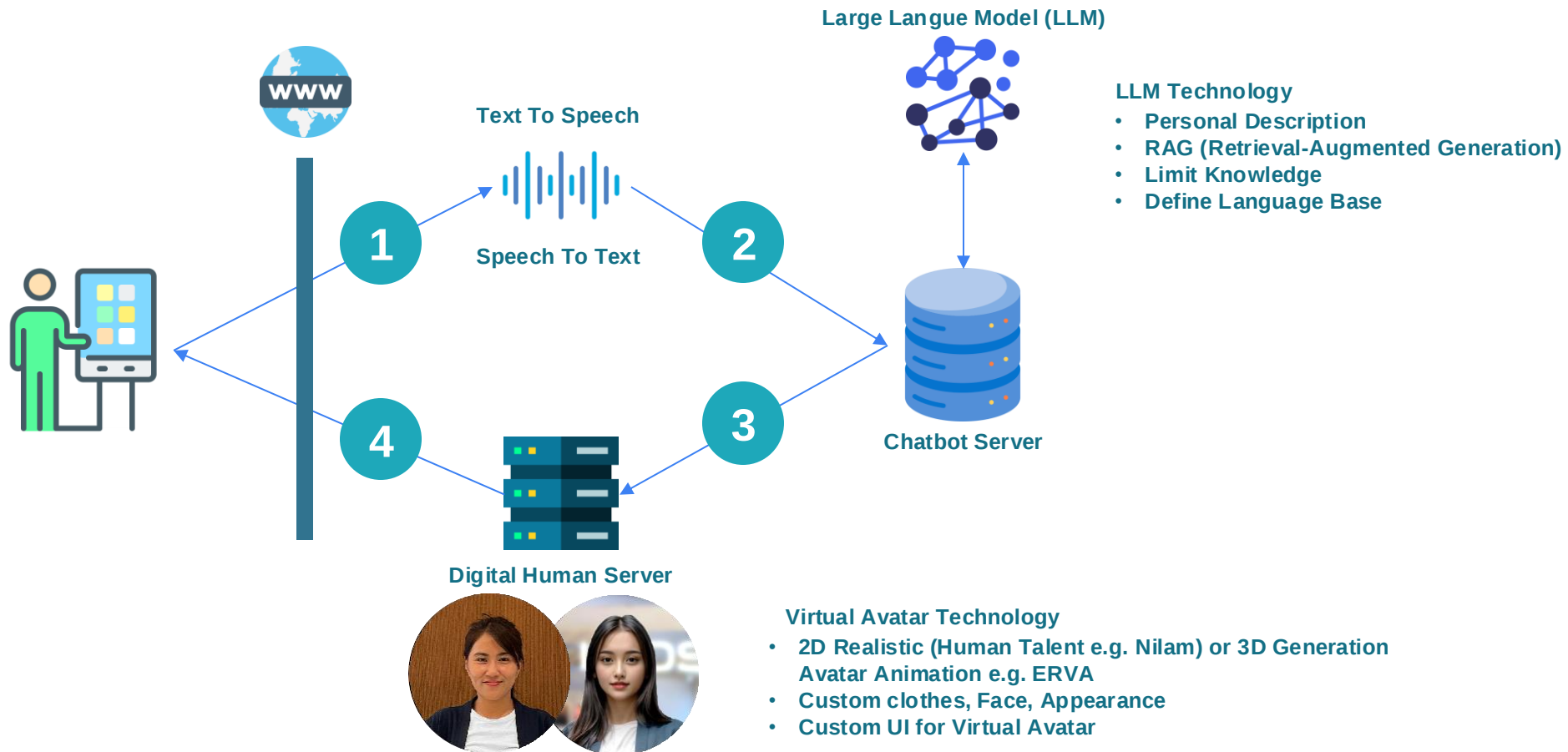
## 7 Layanan Publik dan Pemerintah

- **Pelayanan Publik Digital** : Membantu warga dengan informasi layanan public, pendaftaran, dan prosedur administratif, seperti : Imigrasi, PLN, ESDM, dll.
- **Pemandu Virtual di tempat Umum** : Di bandara, stasiun, dan layanan publik, digital human dapat memberikan informasi dan bantuan kepada Masyarakat.



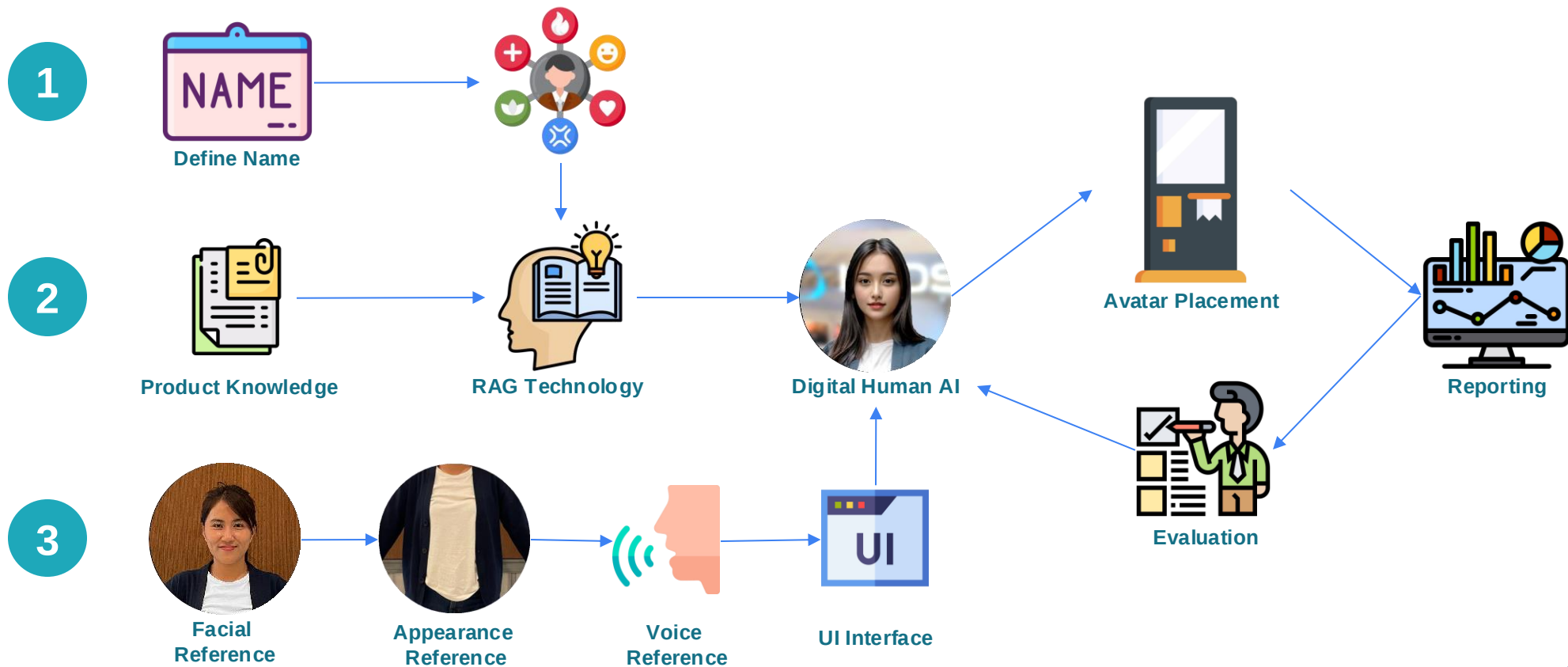
# Technical Clarification

## Architecture of Digital Human AI (Topology)



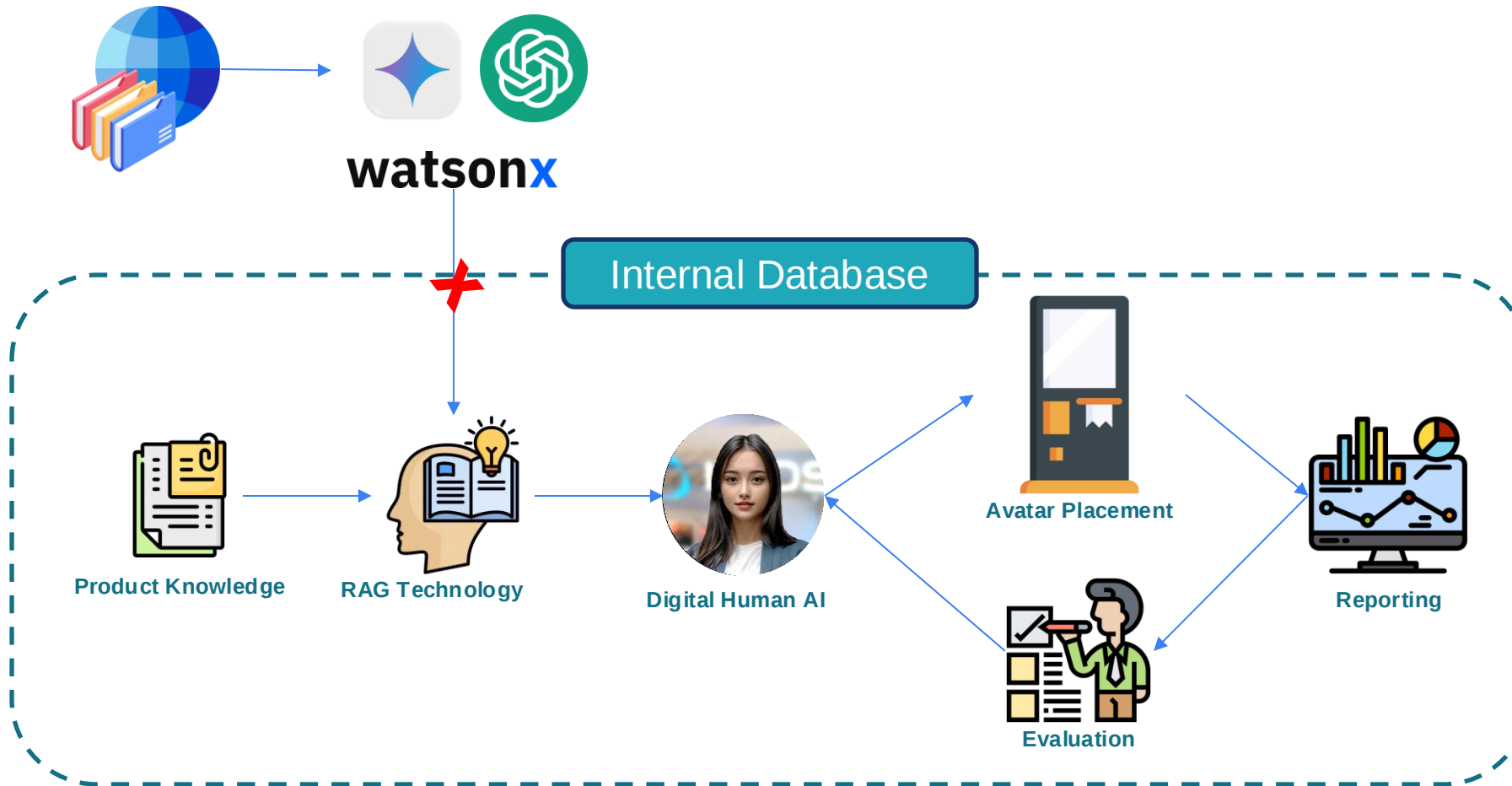
# Technical Clarification

## Building Avatar



# Technical Clarification

Knowledge Privacy



# Pricing

## Business Scheme

Untuk delivery layanan Human 3D Avatar AI terdiri dari beberapa komponen layanan:

1

### Avatar Visual Human AI

#### Set-up (One Time Charge)

- Pembuatan 2 karakter human AI  
**Rp 50.000.000,-**
- Set-up & Customization Knowledge Base
  - 100 knowledge / FAQ
  - Custom & Dynamic UI VA (Button Interactive, and Flowing Bubble, Media Gallery, Popup (Media, Direct URL Website for Kiosk, form, video)

**Rp 35.000.000,-**

#### Subscription (1 tahun)

- IT Support & Maintenance  
**Rp 7.000.000/bulan**
- Annual License Human AI per-Device
  - TTS (Text to Speech), STT (Speech to Text), Avatar, Platform LLM (Large Language Model)

**Rp 7.000.000/bulan**

2

### Media Perangkat

#### Kios-K (One Time Charge)

- Penyediaan perangkat Kios-K dengan spesifikasi minimum

| Item            | Spesifikasi                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System Device   | <ul style="list-style-type: none"><li>• Operating system: windows 10 pro 64-bit (10.0, build 19045)(19041.vb_release.191206-1406)</li><li>• Bios:5.26(type:UEFI)</li><li>• Processor: 12<sup>th</sup> Gen Intel® Core™ i5-12-35U (12 CPUs), ~1.3GHz</li><li>• Memory: 8192MB RAM</li><li>• DirectX Version: DirectX 12</li><li>• Storage Type: SSD (SATA/M.2) Min 256GB</li></ul> |
| Sound Devices   | <ul style="list-style-type: none"><li>• Description: Speakers (4-USB PnP Sound Device)</li><li>• Default Sound Playback : Yes</li><li>• Default Voice Playback : Yes</li></ul>                                                                                                                                                                                                    |
| Display Devices | <ul style="list-style-type: none"><li>• Native Mode :1920 x 1080(p) (60.000Hz) Full HD</li><li>• Monitor Model: HDMI</li><li>• Card name: Intel® UHD Graphics</li><li>• Touch Screen</li></ul>                                                                                                                                                                                    |
| Internet        | Realtime dedicated internet dengan kecepatan stabil minimal 10Mbps (Upload & Download)                                                                                                                                                                                                                                                                                            |

**Rp 50.000.000,-**

- Harga diluar untuk kebutuhan microphone & camera
- Harga diluar biaya pengiriman untuk masing-masing wilayah.

3

### Additional License

#### Up to 1-10 License (Kios-K)

- TTS (Text to Speech), STT (Speech to Text), Avatar, Platform LLM (Large Language Model)

**Rp 7.000.000/bulan**

#### Up to 11-20 License (Kios-K)

- TTS (Text to Speech), STT (Speech to Text), Avatar, Platform LLM (Large Language Model)

**Rp 5.500.000/bulan**

# Get Requirement



## Daftar yang harus dilakukan

- Tentukan karakter/model persona
- Buat 2D Model atau Studio Shooting
- Tentukan User Journey
- Tipe Deployment(Kiosk)

## Hal-hal yang perlu dipertimbangkan

- Jumlah atau pengguna bersamaan untuk Pixel Streaming (1 server maksimal 4 pengguna bersamaan)
- Lokasi kiosk (Suara bising/ramai pengunjung/tidak kondusif/hening)
- Tentukan Fungsi Lain (Integrasi API 3rd Party?)
- Integrasi Hardware (Printer for Card ID? Scan for get data)





# Terima Kasih

New PLN 4.0 Unleashing Energy & Beyond

Contact Person : [hello.dsd@iconpln.co.id](mailto:hello.dsd@iconpln.co.id) / [agung.Setiawan@iconpln.co.id](mailto:agung.Setiawan@iconpln.co.id)



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