HENDRIKUS GOZALI | COUNTRY HEAD, INDONESIA STT GDC

WELCOME ADDRESS

HERE IN INDONESIA

WE CURRENTLY HAVE **90** mw of **DATA CENTRE CAPACITY!**

...WITH PLANS TO DOUBLE THAT WITH AVAILABLE LAND **2+**

WE ARE COMMITTED to SUPPORT INDONESIA's **AI & DIGITAL** infrastructure DEVELOPMENT

"THESE DATA CENTRES ARE NO LONGER JUST WAREHOUSES OF CPUs. **THEY ARE AI FACTORIES** — THE MOST IMPORTANT BUILDINGS OF OUR TIME. THEY TURN DATA INTO INTELLIGENCE."
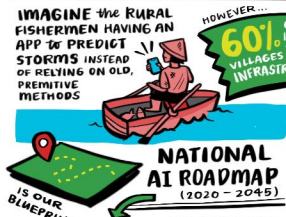
DATA CENTRES SERVE AS a BACKBONE OF OUR DIGITAL SOCIETY!

...AND ARE THE KEYSTONE OF DIGITAL ECONOMIES

IT PROVIDES THE NECESSARY INFRASTRUCTURE TO FOSTER INNOVATION ACROSS INDUSTRIES

PROF. DR. IR. HAMMAM RIZA, M.Sc., IPU | PRESIDENT, KORIKA

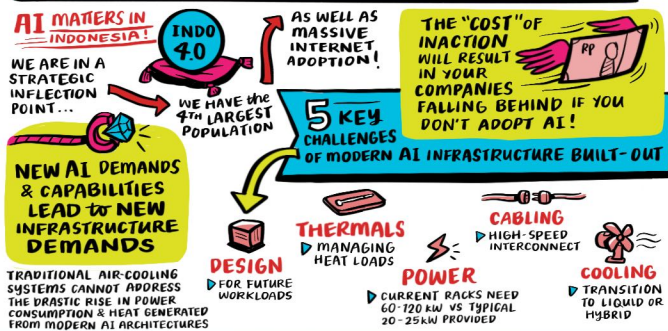### 1 MAKING AI a REALITY : LAYING THE FOUNDATIONS FOR SCALABLE, REAL-WORLD INTELLIGENCE

IMAGINE THE RURAL FISHERMEN HAVING AN APP to PREDICT STORMS INSTEAD OF RELYING ON OLD, PRIMITIVE METHODS

HOWEVER... **60%** OF INDONESIAN VILLAGES LACK INFRASTRUCTURE

NATIONAL AI ROADMAP (2020 - 2045) IS OUR BLUEPRINT...

DEVISED THROUGH a COLLABORATIVE MULTI - HELIX (ACADEMIA, BUSINESS, GOVERNMENT, COMMUNITY) APPROACH, INTENDED TO BE INCLUSIVE, ETHICAL & RESPONSIBLE

3 KEY CHALLENGES FOR AI DEVELOPMENT IN INDONESIA

1. **TALENT GAPS** INDONESIA NEEDS 9 MILLION DIGITAL TALENTS BY 2030 — A SEVERE SHORTAGE OF SKILLED AI DEVELOPERS

2. **INFRASTRUCTURE & ACCESS**
   - INDONESIA NEEDS 2800MW OF DATA CENTRE CAPACITY to SCALE AI, CURRENTLY WE'RE AT 500MW
   - WE NEED DISTRIBUTED DATA CENTRES ALL ACROSS

3. **DATA, SECURITY & PRIVACY REGULATION & ETHICS**
   - WE NEED A ROBUST REGULATIONS & ETHICAL STANDARDS

BOBBY WIJAYA | SENIOR SYSTEM ENGINEER, LENOVO

2 AI-READY INFRASTRUCTURE : BUILDING THE FOUNDATION FOR SCALABLE INTELLIGENCE

THERE IS AN **"EXPLOSION OF DATA"** LARGELY DRIVEN BY ADOPTION OF AI

3 KEY DRIVERS
- INCREASED BUDGETS
- EMPLOYEE PRODUCTIVITY
- SUSTAINABILITY

HIGH-END H100 GPU SERVER — REQUIRES 10,000 WATTS
L40s SERVER — REQUIRES 4,000 WATTS
a CLUSTER OF 5,000 SERVERS — CAN CONSUME 50MW

IT'S IMPERATIVE TO HAVE **ROBUST DATA SECURITY & PRIVACY MEASURES** WHEN IMPLEMENTING AI

ESPECIALLY FOR SENSITIVE INTERNAL COMPANY DATA!

WITH LIQUID COOLING SIGNIFICANTLY REDUCING WASTED POWER FOR COOLING COMPARED to AIR COOLING

LENOVO NEPTUNE™ TECHNOLOGY FAMILY COOLING SOLUTIONS — INCLUDES TRADITIONAL LIQUID COOLING PG25 GLYCOL & A UNIQUE "WARM WATER COOLING" APPROACH THAT USES WARM WATER INSTEAD OF SPECIAL FLUIDS

LENOVO IS #1 IN x86 SERVER RELIABILITY FOR 10 CONSECUTIVE YEARS!
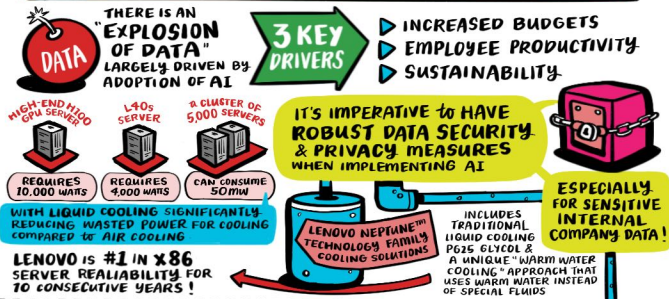

THOMAS LEE | VICE PRESIDENT, BUSINESS DEVELOPMENT, APJ REGION, SUPERMICRO

3 FROM NOW to NEXT : POWERING THE AI JOURNEY WITH SCALABLE INFRASTRUCTURE & BEYOND

AI MATTERS IN INDONESIA!

INDO 4.0

WE ARE IN A STRATEGIC INFLECTION POINT...

WE HAVE THE 4TH LARGEST POPULATION

AS WELL AS MASSIVE INTERNET ADOPTION!

THE "COST" OF INACTION WILL RESULT IN YOUR COMPANIES FALLING BEHIND IF YOU DON'T ADOPT AI!

5 KEY CHALLENGES OF MODERN AI INFRASTRUCTURE BUILT-OUT

NEW AI DEMANDS & CAPABILITIES LEAD TO NEW INFRASTRUCTURE DEMANDS

TRADITIONAL AIR-COOLING SYSTEMS CANNOT ADDRESS THE DRASTIC RISE IN POWER CONSUMPTION & HEAT GENERATED FROM MODERN AI ARCHITECTURES

DESIGN — FOR FUTURE WORKLOADS

THERMALS — MANAGING HEAT LOADS

POWER — CURRENT RACKS NEED 60-120 kW vs TYPICAL 20-25kW PROVIDED

CABLING — HIGH-SPEED INTERCONNECT

COOLING — TRANSITION to LIQUID OR HYBRID

PROF. DR. IR. HAMMAM RIZA, M.Sc., IPU | PRESIDENT, KORIKA
WILBERTUS DARMADI | CIO, TOYOTA ASTRA MOTOR
BINTORO YUWONO | PRESIDENT DIRECTOR, BERCA HARDAYAPERKASA
ANDRY GUNAWAN | ENTERPRISE BUSINESS COUNTRY MANAGER, INDONESIA, NVIDIA

4 PANEL | FROM VISION TO DEPLOYMENT : POWERING AI FROM POLICY to ENTERPRISE

INDONESIA HAS THE QUALITIES THAT MAKE IT

(900+) DIVERSE LANGUAGE
277 MILLION POPULATION
(17,000) NUMEROUS ISLANDS

a GOOD DATA FOR THE MINING for NVIDIA USE CASES FOR AI...

WE FACE a SIGNIFICANT **TALENT GAP...** — DATA SCIENTISTS, MACHINE LEARNING ENGINEERS

DATA READINESS IS CRUCIAL — IF WE DON'T HAVE GOOD DATA QUALITY, THE IMPLEMENTATION OF AI WON'T BE VERY SUCCESSFUL

THE CONCEPT OF **SOVEREIGN AI** WILL EMPOWER INDONESIA TO MANAGE OWN DATA WITHIN RESPECTIVE DATA CENTRES

THERE MUST BE A CLEAR DIRECTION ABOUT AI STRATEGY! — FROM TOP DOWN!

DATA & the AI MODEL (LLM & SLM) ARE TWO VERY IMPORTANT COMPONENTS FOR AI IMPLEMENTATIONS