Lecturers Role in Talent Development – Huawei ICT Academy

by **ICT Talent Ecosystem Development**

Huawei: Leading provider of ICT infrastructure and smart devices

Vision & mission

Bring digital to every person, home and organization for
a fully connected, intelligent world

170+
countries and regions

207,000
employees

55.4%
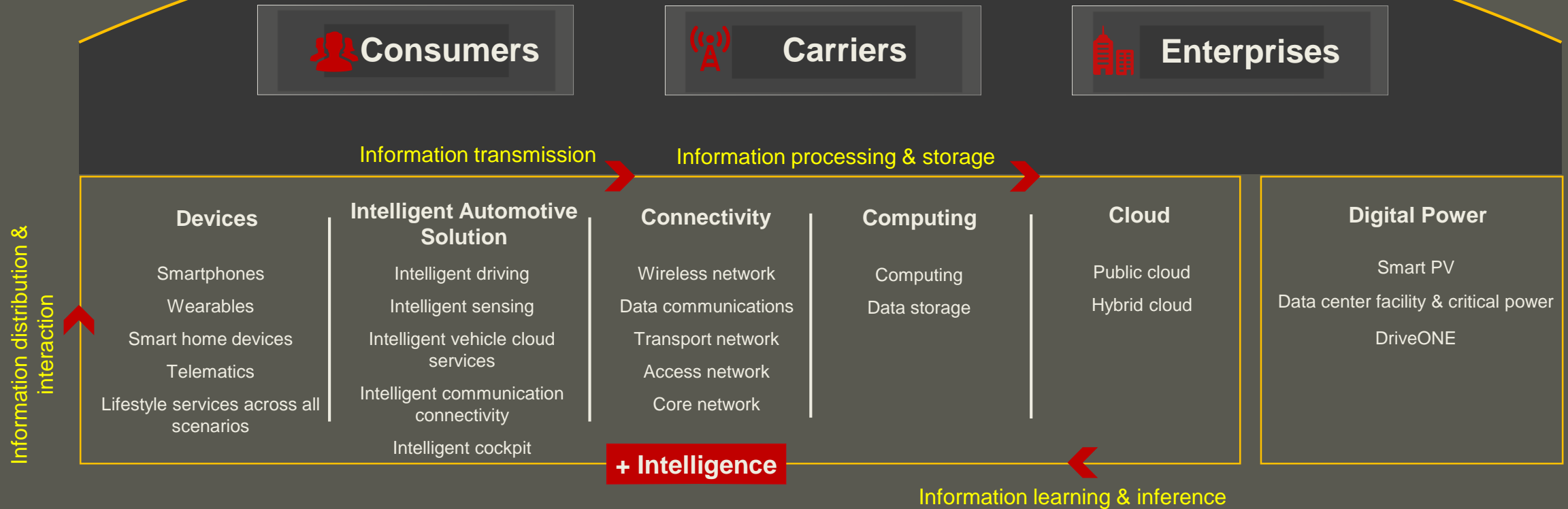of employees work in R&D

No. 4
in global R&D investment

120,000+
active patents held globally
(*Huawei has one of the world's largest patent portfolios.)

Focusing on ICT to provide products, solutions, and services to three customer groups

Bring digital to every person, home and organization for a fully connected, intelligent world

Consumers

Carriers

Enterprises

Information transmission

Information processing & storage

Information distribution & interaction

Devices	Intelligent Automotive Solution	Connectivity	Computing	Cloud	Digital Power
Smartphones	Intelligent driving	Wireless network	Computing	Public cloud	Smart PV
Wearables	Intelligent sensing	Data communications	Data storage	Hybrid cloud	Data center facility & critical power
Smart home devices	Intelligent vehicle cloud services	Transport network			DriveONE
Telematics	Intelligent communication connectivity	Access network			
Lifestyle services across all scenarios	Intelligent cockpit	Core network			

+ Intelligence

Information learning & inference

Mission

Bridge ICT talent supply & demand, promote the transformation and upgrade of the ICT industry

HUAWEI

HUAWEI ASEAN ACADEMY (INDONESIA)

Business Institute

Technical Institute

Engineering Institute

Business & Strategy
(Awareness)

Profession & Education
(Professional)

Practitioner
(Vocational)

Vision

Based on Indonesia, with the world, nurture outstanding digital talent

Cultivated 110,300+ ICT talents in 4 years and more

15
Signed MOU

110 K+
Trainees

7,930+
Huawei Career Certified

8,600+
Training Days

107
ICT Academy University Partners

Structure of digitalization and spillover effect
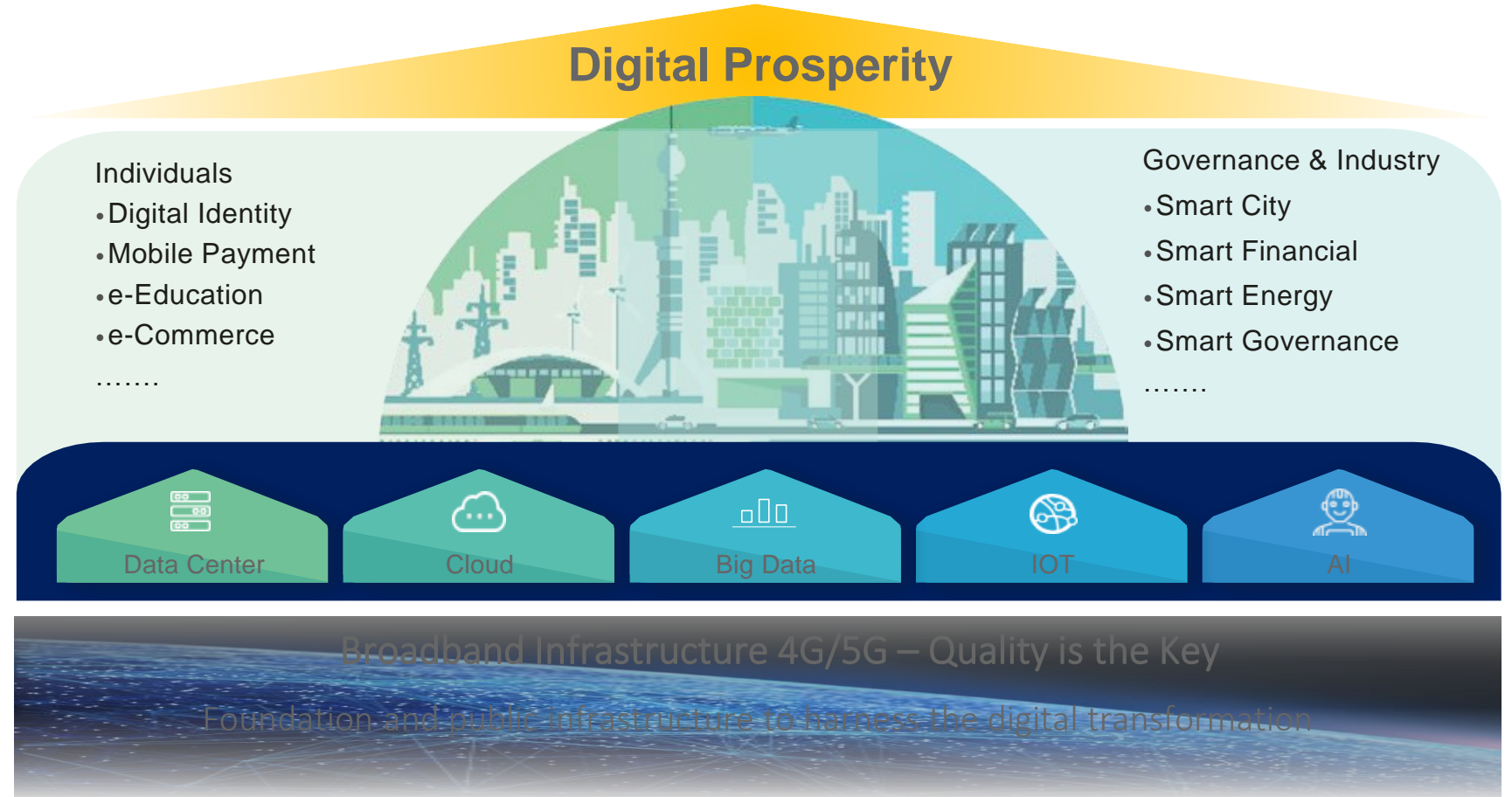
3. Service Platform
Empower people and industries based on digital economy fueled by unlimited data
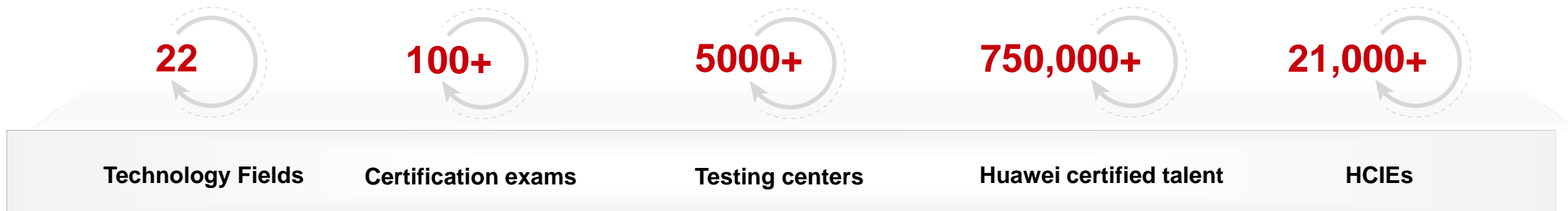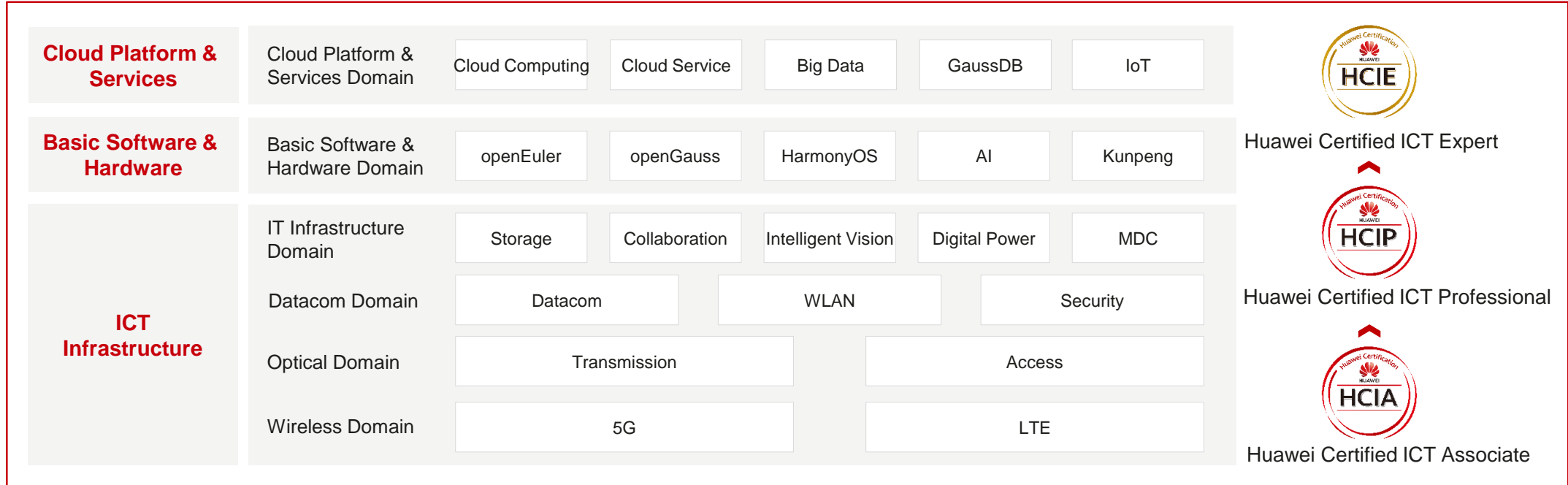
2. Intelligent Platform
Transfer data to ability and productivity by Emerging technologies

1. Connectivity Platform
Connect physical world and digital society as a bridge

Digital Prosperity

Individuals
- Digital Identity
- Mobile Payment
- e-Education
- e-Commerce
....

Governance & Industry
- Smart City
- Smart Financial
- Smart Energy
- Smart Governance
....

Data Center | Cloud | Big Data | IOT | AI

Broadband Infrastructure 4G/5G – Quality is the Key

Foundation and public infrastructure to harness the digital transformation

Huawei Certification: Building a comprehensive ICT certification system to improve digital skills

Cloud Platform & Services	Cloud Platform & Services Domain	Cloud Computing	Cloud Service	Big Data	GaussDB	IoT
Basic Software & Hardware	Basic Software & Hardware Domain	openEuler	openGauss	HarmonyOS	AI	Kunpeng
ICT Infrastructure	IT Infrastructure Domain	Storage	Collaboration	Intelligent Vision	Digital Power	MDC
	Datacom Domain	Datacom		WLAN		Security
	Optical Domain	Transmission			Access	
	Wireless Domain	5G			LTE	

HCIE
Huawei Certified ICT Expert

HCIP
Huawei Certified ICT Professional

HCIA
Huawei Certified ICT Associate

22	100+	5000+	750,000+	21,000+
Technology Fields	**Certification exams**	**Testing centers**	**Huawei certified talent**	**HCIEs**

Huawei ICT Academy Curriculum – designed for Academia

Basic Literacy Course	Customer Visit	Teamwork	Project Management	Business Etiquette	Time Management	Leadership

Professional Courses (Computer/ Electronic Information Category)

Connectivity

Instructor-led

- Principles and Applications of WLAN
- 5G Network and Applications
- Data Communication and Network

Cloud & Computing

- Principles and Applications of Cloud Computing
- Data Storage
- Artificial Intelligence and Applications

App Develop

- Internet of Things and Applications

General Courses

Self-Study

- Search and Artificial Intelligence
- Data Management and Analytics
- Introduction to 5G Knowledge
- 5G Network Architecture and Key Technology
- Cloud Advanced: Architecture and Technologies
- Information Representation and Data Organization
- Computer Network
- Overview of AI
- Development and Basic Concepts of Cloud Computing
- Overview of IoT Technologies
- Digital Power

Course Catalog: https://e.huawei.com/en/talent/news/#/details?consultationId=1673

Released	Planning stage

Academy Course suite: course outlines, MOOCs, teaching slides, e-textbooks, lab manual for teachers, lab manual for students, lab construction guide, and mid-term/end-of-term test questions

Localization of Training Materials
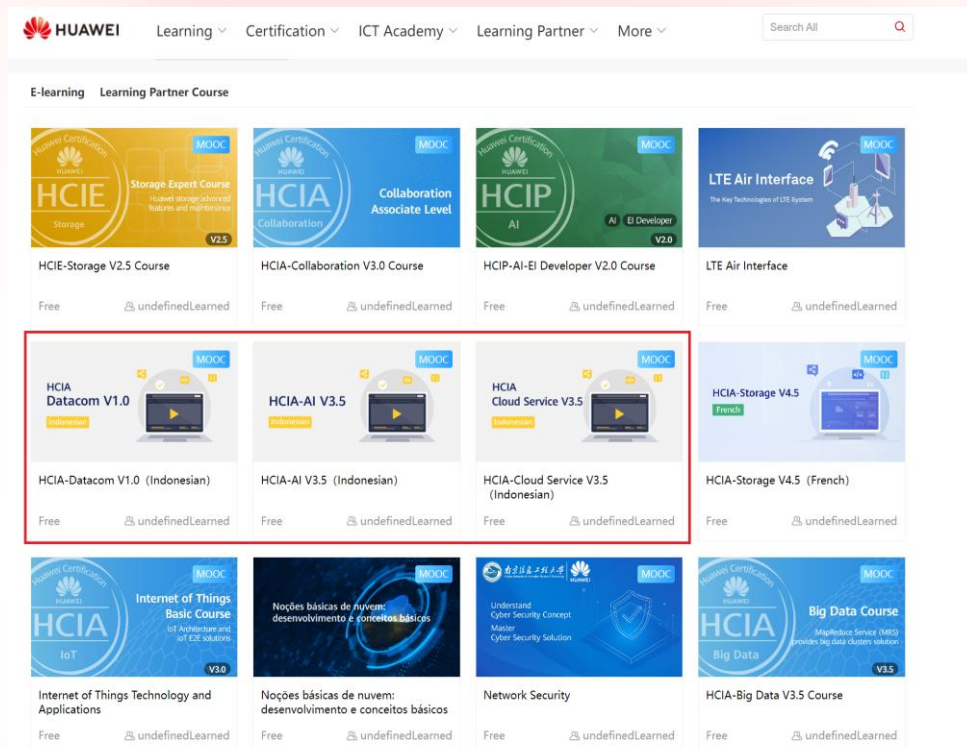
- Indonesia's linguistic and ethnic diversity makes **English materials challenging** for some regions.

- ITB as an IASC is Translating key subjects into local Indonesian Bahasa language for the benefit of ICT Academy participants.

2023	2024
Translated courses	Localization in Progress
• Datacom	• 5G
• Cloud Service	• Big Data
• Artificial Intelligence (AI)	• Access

Huawei ICT Academy Resource and Coverage 2018 - 2024

Huawei

Course authorization
Instructor enablement
Learning resources
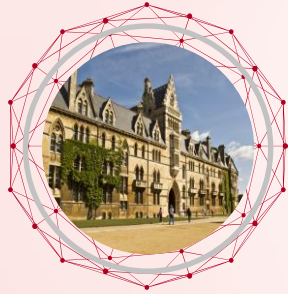
Universities

Course syllabi
Lab environments
Certified instructors

Students

ICT competency
Practical experience
Career certification
Job opportunities

2,600+ Academies   **11,000+** Certified Instructors   **200,000+** Students/Year

107 Academies

200+ Certified Instructors
770+ Associated Instructors

10,000+ Students/Year
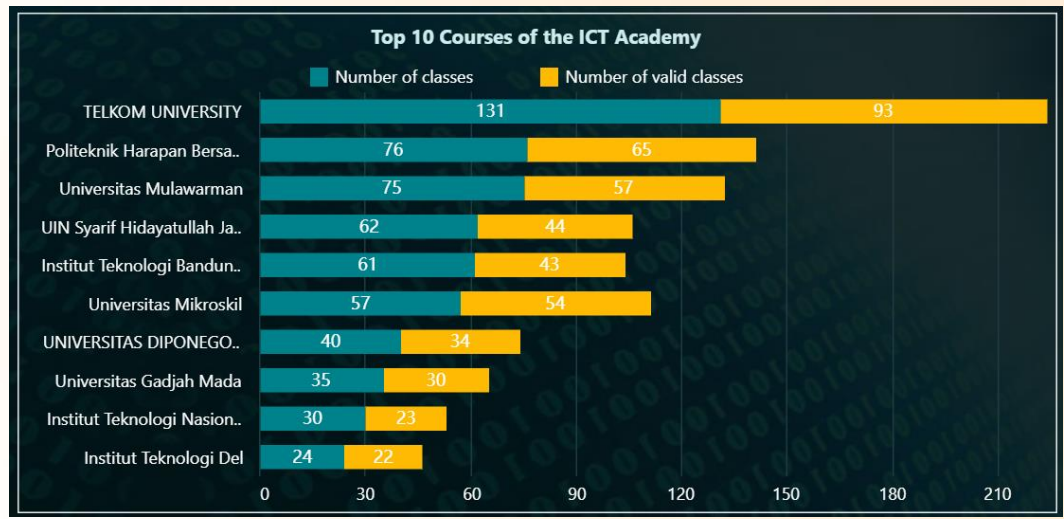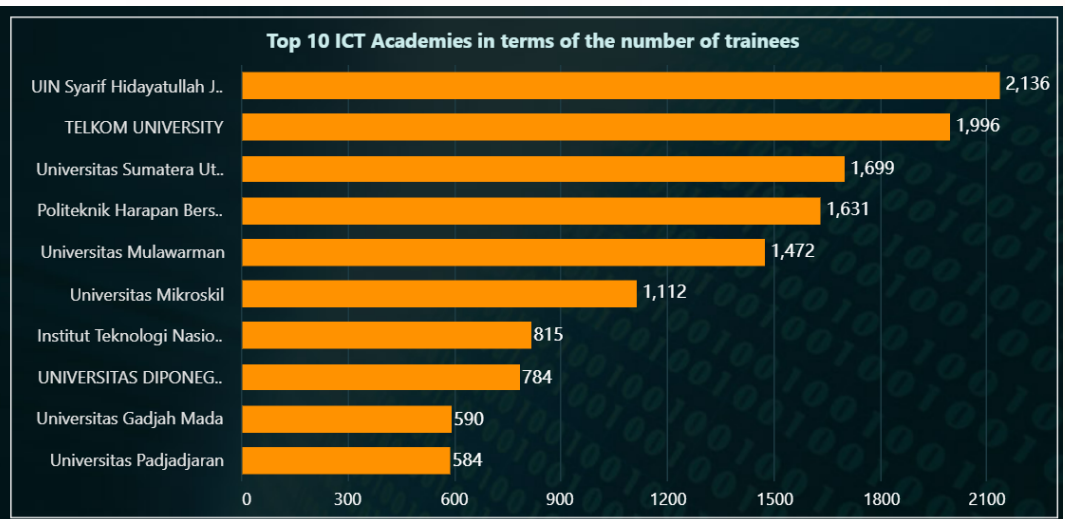**1,800+** Certified Students

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107
Active ICT Academiey

1,133
Number of classes

907
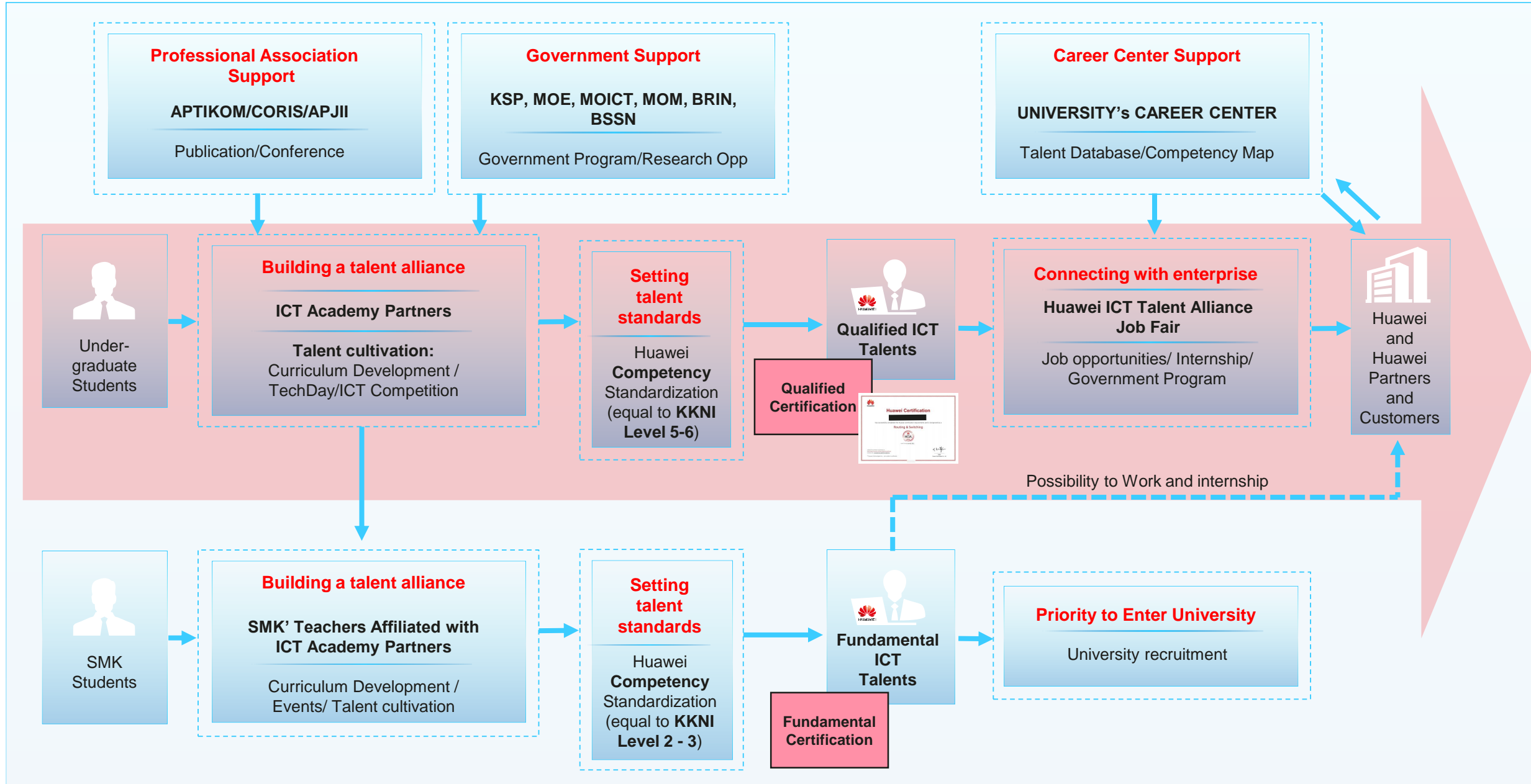Number of valid classes

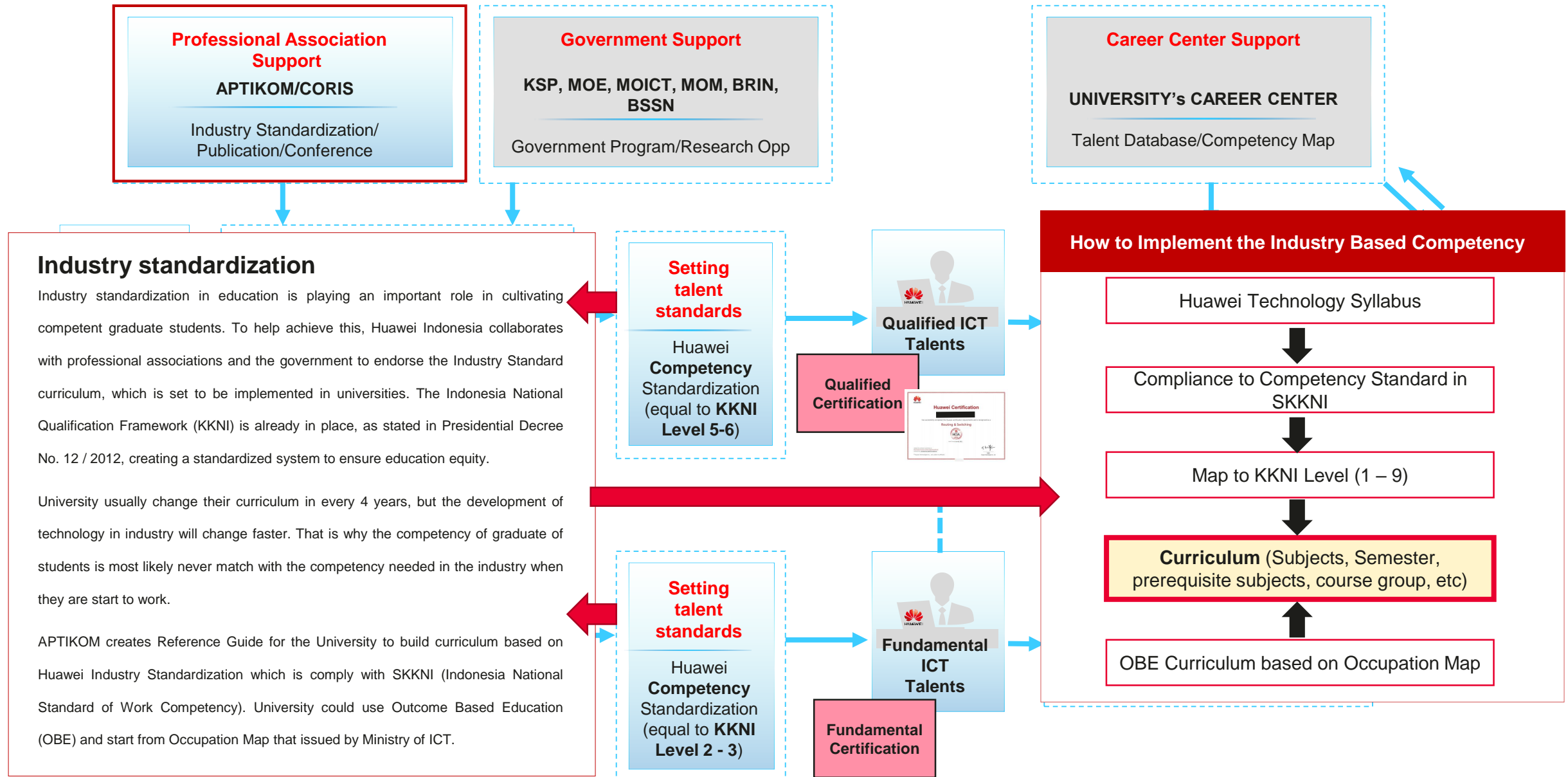**26,364**
Associated Students

23,426
Enrolled Students

Top 10 ICT Academies in terms of the number of trainees

Academy	Trainees
UIN Syarif Hidayatullah J..	2,136
TELKOM UNIVERSITY	1,996
Universitas Sumatera Ut..	1,699
Politeknik Harapan Bers..	1,631
Universitas Mulawarman	1,472
Universitas Mikroskil	1,112
Institut Teknologi Nasio..	815
UNIVERSITAS DIPONEG..	784
Universitas Gadjah Mada	590
Universitas Padjadjaran	584

Top 10 Courses of the ICT Academy

Legend: ■ Number of classes   ■ Number of valid classes

Academy	Number of classes	Number of valid classes
TELKOM UNIVERSITY	131	93
Politeknik Harapan Bersa..	76	65
Universitas Mulawarman	75	57
UIN Syarif Hidayatullah Ja..	62	44
Institut Teknologi Bandun..	61	43
Universitas Mikroskil	57	54
UNIVERSITAS DIPONEGO..	40	34
Universitas Gadjah Mada	35	30
Institut Teknologi Nasion..	30	23
Institut Teknologi Del	24	22

Technology Direction Distribution (2024)

Technology	Percentage
5G	2.51%
LTE	0.10%
openEuler	2.84%
openGauss	0.22%
WLAN	0.63%
Security	5.66%
Storage	0.14%
Big Data	6.17%
Access	0.22%
AI	39.18%
Datacom	27.55%
Digital Power	0.03%
IoT	6.65%
Cloud Service	3.96%
Cloud Computing	4.04%
Collaboration	0.03%
Other	0.10%

HUAWEI TALENT JOB CHANNELING PROGRAM

Professional Association Support

APTIKOM/CORIS/APJII

Publication/Conference

Government Support

KSP, MOE, MOICT, MOM, BRIN, BSSN

Government Program/Research Opp

Career Center Support

UNIVERSITY's CAREER CENTER

Talent Database/Competency Map

Under-graduate Students

Building a talent alliance

ICT Academy Partners

Talent cultivation:
Curriculum Development /
TechDay/ICT Competition

Setting talent standards

Huawei **Competency** Standardization (equal to **KKNI Level 5-6**)

Qualified ICT Talents

Qualified Certification

Huawei Certification
Routing & Switching

Connecting with enterprise

Huawei ICT Talent Alliance Job Fair

Job opportunities/ Internship/ Government Program

Huawei and Huawei Partners and Customers

Possibility to Work and internship

SMK Students

Building a talent alliance

SMK' Teachers Affiliated with ICT Academy Partners

Curriculum Development / Events/ Talent cultivation

Setting talent standards

Huawei **Competency** Standardization (equal to **KKNI Level 2 - 3**)

Fundamental ICT Talents

Fundamental Certification

Priority to Enter University

University recruitment

DEVELOPING CURRICULUM – INDUSTRY STANDARDIZATION

Professional Association Support

APTIKOM/CORIS

Industry Standardization/ Publication/Conference

Government Support

KSP, MOE, MOICT, MOM, BRIN, BSSN

Government Program/Research Opp

Career Center Support

UNIVERSITY's CAREER CENTER

Talent Database/Competency Map

Industry standardization

Industry standardization in education is playing an important role in cultivating competent graduate students. To help achieve this, Huawei Indonesia collaborates with professional associations and the government to endorse the Industry Standard curriculum, which is set to be implemented in universities. The Indonesia National Qualification Framework (KKNI) is already in place, as stated in Presidential Decree No. 12 / 2012, creating a standardized system to ensure education equity.

University usually change their curriculum in every 4 years, but the development of technology in industry will change faster. That is why the competency of graduate of students is most likely never match with the competency needed in the industry when they are start to work.

APTIKOM creates Reference Guide for the University to build curriculum based on Huawei Industry Standardization which is comply with SKKNI (Indonesia National Standard of Work Competency). University could use Outcome Based Education (OBE) and start from Occupation Map that issued by Ministry of ICT.

Setting talent standards

Huawei **Competency** Standardization (equal to **KKNI Level 5-6**)

Qualified Certification

Qualified ICT Talents

Huawei Certification
Routing & Switching

Setting talent standards

Huawei **Competency** Standardization (equal to **KKNI Level 2 - 3**)

Fundamental Certification

Fundamental ICT Talents

How to Implement the Industry Based Competency

Huawei Technology Syllabus

↓

Compliance to Competency Standard in SKKNI

↓

Map to KKNI Level (1 – 9)

↓

Curriculum (Subjects, Semester, prerequisite subjects, course group, etc)

↓

OBE Curriculum based on Occupation Map

Indonesia Teachers Incentive Program^{*)}

Objectives: To motivate trainers and students, improve their enthusiasm in class opening and student competency, and increase the number of active students

Incentive Condition:

Category 1: Incentive based on Active Students
Huawei ICT Academy Teacher **opens class on Huawei Talent platform and achieves number of active students** in the class as per Huawei policies

Number of Active StudentsAchieved	Incentive Award (per student)	
	ICT Academy Teacher (Non HCIA + HCIA) (USD)	HCAI certified Teacher (USD)
< 25	0	0
25 - 99	1	1.2
100 - 149	1.5	1.8
150 – 199	2	2.4
200 - 249	2.5	3.0
250 or above	A*3	A*3*1.2

*) Depends on 2024 regulation

Teaching and Learning Incentives 2023

No	University Name	$ Amount Get	IDR Amount Get	Total Voucher @100k IDR (pcs)
1	Universitas Sumatera Utara	$ 3,882.00	IDR 60,559,200	606
2	UIN Syarif Hidayatullah Jakarta	$ 3,459.00	IDR 53,960,400	539
3	Politeknik Harapan Bersama	$ 2,832.00	IDR 44,179,200	442
4	TELKOM UNIVERSITY	$ 1,692.00	IDR 26,395,200	264
5	Institut Teknologi Bandung (ITB)	$ 1,566.00	IDR 24,429,600	244
6	Universitas Mulawarman	$ 990.00	IDR 15,444,000	154
7	Universitas Tarumanagara	$ 892.80	IDR 13,927,680	139
8	Universitas Mikroskil	$ 840.00	IDR 13,104,000	131
9	UNIVERSITAS DIPONEGORO	$ 662.40	IDR 10,333,440	103
10	Politeknik Negeri Bandung	$ 439.80	IDR 6,860,880	69

Indonesia Teachers Incentive Program

Category 2: Incentive for Teacher Self Certificate

Huawei ICT Academy Teacher upskilling and achieving HCIA Certification for self

Certification Achieved	Incentive Award
	Exam Voucher
HCIA	FREE*

MAGANG & STUDI INDEPENDEN BERSERTIFIKAT HUAWEI INDONESIA

SIB Batch 1 - 2021

- Registered: 3749
- Accepted: 203
- 54 mentors
- 13 topics & 203 Research

MB Batch 2 - 2022

- Registered: 1985
- Accepted: 19
- Opened: 96 job positions
- Confirmed Join Huawei: 5

MB Batch 3 - 2022

- Registered: 4699
- Accepted: 11
- Opened: 30 job positions
- Confirmed Join Huawei: 4

MB Batch 4 - 2023

- Registered: 9408
- Accepted: 16
- Opened: 50 job positions
- Hiring in process

MB Batch 5 - 2023

- Registered: 2925
- Accepted: 26
- Opened: 50 job position
- hiring in process

MB Batch 6 - 2024

- Registered: 2510
- Accepted: 39
- Opened: 50 job positions
- Ongoing

Government Support

KSP, MOE, MOICT, MOM, BRIN, BSSN

Government Program/Research Opp

digitalent

Digital Talent Scholarship

| Vocational School Graduate Academy | Fresh Graduate Academy | Professional Academy | Thematic Academy | Government Transformation Academy | Talent Scout Academy |
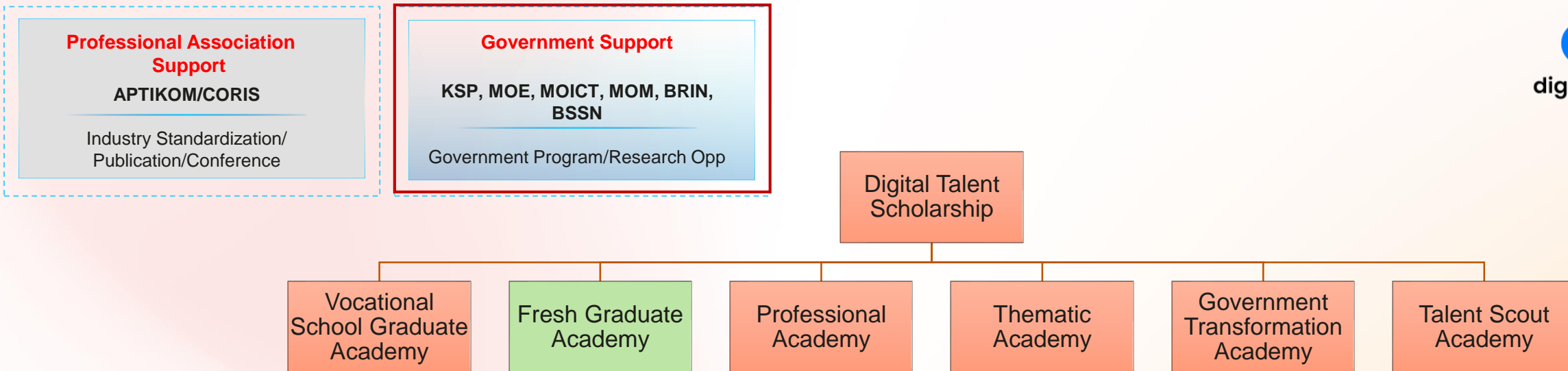
Digital Talent Scholarship program is **Ministry of Communication and Information (Kominfo) Program** for graduated students. There are 6 Digital Talent Scholarship Program, those are: **Vocational School Graduate Academy (VSGA), Fresh Graduate Academy (FGA),** Professional Academy (PROA), TA (Thematic Academy), Talent Scout Academy (TSA) and Government Transformation Academy (GTA).

Total 2021: **1,350** Students
Total 2022: **1,773** Students
Total 2023: **500** Students
Total 2024: **500** Students

Tahun	Tema Pelatihan	JP	Pendaftar	Diterima	Onboarding	Completion	Completion (%)	Berhak Sertifikasi	Ikut Sertifikasi	Pass Certification	Certified (%)
2021	Artificial Intelligence	120	621	524	419	332	79.24%	275	192	114	59.38%
2021	DataCom	140	82	75	44	36	81.82%	35	23	4	17.39%
2021	Storage	120	67	61	55	43	78.18%	32	12	2	16.67%
2021	Cloud Computing	120	40	32	24	15	62.50%	14	11	6	54.55%
			810	692	542	426		356	238	126	
2022	Artificial Intelligence for Junior Developer	120	1132	1022	660	547	82.88%	192	80	46	57.50%
2022	Data Communication	140	262	243	131	121	92.37%	20	11	4	36.36%
2022	5G Technology for Beginners	120	262	243	176	144	81.82%	114	62	1	1.61%
2022	Cloud Technology for Beginners	120	180	159	97	88	90.72%	60	11	2	18.18%
2022	Storage Management	120	114	104	67	48	71.64%	27	11	1	9.09%
			1950	1771	1131	948		413	175	54	
2023	Artificial Intelligence for Junior Developer	130	447	218	173	121	69.94%	49	35	4	11.43%
2023	5G Technology for Beginners	120	202	67	58	47	81.03%	45	37	4	10.81%
2023	Data Communication	140	134	60	44	27	61.36%	15	12	3	25.00%
			783	345	275	195		109	84	11	
	Grand Total		3543	2808	1948	1569		878	497	191	
	Average		1181	936	649	523	77.79%	293	166	64	26.50%

Pass Grade Completion: 60%
Pass Grade Berhak Sertifikasi: 80%

Indonesia Digital Talent Day 2022 - 2023

Huawei held the Indonesia Talent Day 2022 event at the Krida Bhakti, Jakarta, with the theme of **"Building the Character of Indonesia Digital Talents"**. This event is **to appreciate the multi stakeholders which supported the 100,000 Indonesia Digital Talent program**. Along with the event, there is the **Huawei ICT Competition awardee** for the National Level.

The event was opened and attended by **Dr. Moeldoko, Presidential Chief of Staff**; **8 Ministries**, **12 Rectors**, more than **300 students** and also attended by online: **93 Universities** and public.

Indonesia Talent Day 2023 held at Universitas Tarumanagara Jakarta, with the theme of **"Unleash Digital Talent Potential Towards Golden Indonesia 2045"**. This event is **to appreciate the multi stakeholders which supported the achievement of 100,000 Indonesia Digital Talent program, one year before the designated target**. Along with the event, there is the **Huawei ICT Competition 2023 awardee** for the National Level. The event was opened and attended by **Dr. Moeldoko, Presidential Chief of Staff**; **8 Ministries**, **12 Rectors**, more than **400 students**

Indonesia Digital Talent Day 2022

Indonesia Digital Talent Day 2023

Huawei ICT Competition 2018 - 2024

2019 Regional Competition

1st Prize: Telkom University   **3rd Prize: Institut Teknologi Bandung**

2020 Regional Competition

1st Prize: Institut Teknologi Bandung

2020 Global
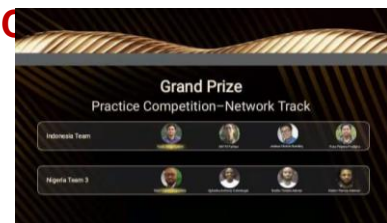
Double Championship - Grand Prize: Institut Teknologi Bandung

2022 Global Competition Winner

Institut Teknologi Bandung
Won Second Prize Winner in
CLOUD TRACK

2023 Global Competition Winner Announcement

Institut Teknologi Bandung
Won Third Prize Winner in
NETWORK TRACK

Institut Teknologi Bandung
Won Second Prize Winner in
CLOUD TRACK

Institut Teknologi Bandung
Won Second Prize Winner in
INNOVATION TRACK

Telkom University
Won Third Prize Winner in
INNOVATION TRACK

2024 Global Competition Winner Announcement

Institut Teknologi Bandung
Won First Prize Winner in
NETWORK TRACK

Institut Teknologi Bandung
Won Second Prize Winner in
CLOUD TRACK

Prajna Deshanta, Telkom Univeristy
Represented as
MOST VALUABLE INSTRUCTOR

JOB FAIR: Connect the employment to students

Certified Students from Huawei ICT Academy → **Job Fair** ← **Job Vacancies** from Huawei Eco-system → Huawei | Huawei Partners | Huawei Customers | ICT industry
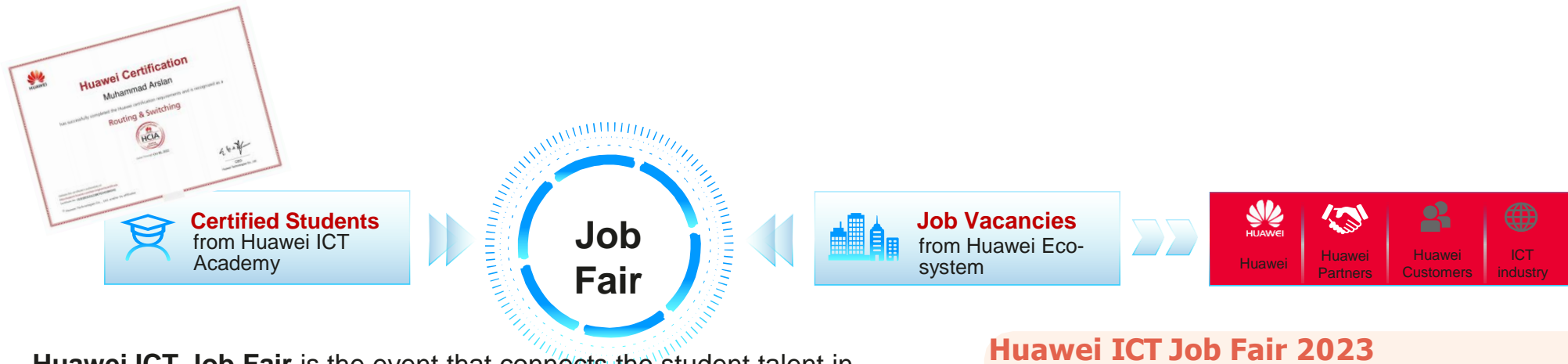
Huawei ICT Job Fair is the event that connects the student talent in Huawei ICT Academies to the job opportunities in Industry (Huawei, Huawei Partners, and Huawei Customers).

Huawei ICT Job Fair 2022 **held offline at Engineering Faculty of Universitas Indonesia** on 10th December 2022 supported by **Career Development Center of Universitas Indonesia**.

Huawei ICT Job Fair 2023 **held offline at Universitas Tarumanagara** in IDTD 2023.

10 Dec 22: Offline Event → **14-27 Dec 22: Online Application**

Huawei ICT Job Fair 2023

570+ Participants

40+ Universities

50+ Vacancies

14 Companies Huawei
EBG Partners & CEG Suppliers

1,000 Teachers Cultivation Program
towards Golden Indonesia (Indonesia Emas) 2045

Huawei Indonesia already achieve cultivating 100.000 digital talents, in 2020 – 2023, one year faster than target. We aware that **the role of Teachers is very important to increase the competence of the graduate students**. Through Huawei ASEAN Academy and Huawei ICT Academy, we cultivate Digital Talents in Indonesia for both Higher Education level and Vocational Education.

To enhance the capability and of teachers with **industry-based competency**. Huawei will launch "**1,000 Teachers cultivation to achieve Indonesia Emas 2045**" It is hoped that after this Cultivation, decision makers in Universities, Polytechnics, and Vocational High Schools (SMK) can explore all technology from Huawei and can apply those technology in their respective University, Polytechnics and schools and can provide provisions for their students in facing the world of work.

This activity aims to provide an introduction and insight into the latest Huawei technologies, currently trending technologies such as artificial intelligence, cloud technology and other technologies developed by Huawei and the use of these technologies in the real world. The training will focus on both technical and general / introduction depends on the type of attendance from Universities, Polytechnics and Vocational High Schools (SMK).

Training Event: **2nd Week of September 2024**

AGENDA and Training Content

Keynote Address:
Representative from Government: DG of Vocational Education about their insight on the future of education, especially in Digital Transformation

Training Content

- **For Non IT Teachers or SMK Teachers**
  Introduction to AI (for SMK or non ICT University). Half day training
- **For IT Teachers from University or Polytechnics**
  HCIA AI Introduction, for Lecturers from University or Polytechnics. 2 Days training
  HCIA Cloud Introduction, for Lecturers from University or Polytechnics. 2 Days training

Training Format: Online, hosted and coordinated by 10 APTIKOM Region (provinces)

1,000 Teachers Cultivation Program
BENEFIT

Benefit to University / Polytechnics	Benefit to SMK	Benefit to SMK's Students
Promote Academy to SMK	Links with Industry and knowledge sharing	Links with Industry and knowledge sharing – real world knowledge
Fully Supported by Huawei	Access to latest technologies and Huawei e-learning resources	Access to latest technologies and Huawei e-learning resources
Recognized and Endorsed by DG Higher Education and Vocational Education, Ministry of Education, Culture, Research and Technology	Access to industry standard simulation tools	Access to industry standard simulation tools
Will get talented students from SMK in future	**Extensive Industry standard training** and **Opportunity to get certification for SMK Teachers**	Industry standard ICT training (KKNI Level 3) & Local certification (**Fundamental Certification**) for students*)
Training and International Certification for University/Polytechnics Teachers	**Partnership** with Global Tech Company	**Students who ELIGIBLE gets free Certification voucher** or receive special discounts for Huawei certification exam vouchers (HCIA)
	Support provided from Huawei and Academy	Opportunity to join Huawei's Events
	SMK is able to provide an **Industry based curriculum** for students	*) For those who follow all competency criteria
	Making students **ready** for entering University and/or employment	

1,000 Teachers Cultivation Program
Implementation Model and Cultivation Prediction
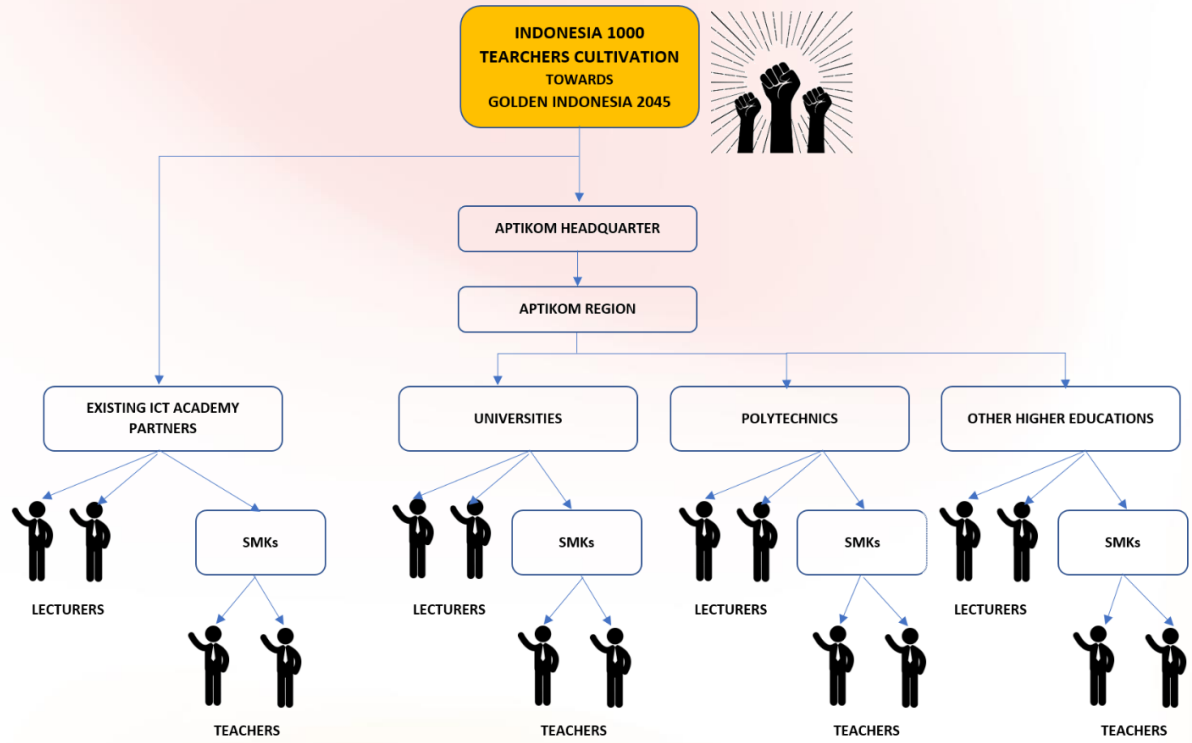
No	APTIKOM Province	No of Target Univerisy, Polytechnics (Higher Education)	No of SMK under coordination of University, Polytechnics	Total University + SMK per Province	Total Teachers (assumes 2 teachers per University/Polytechnics/SMKs)	Predicted Students to be cultivated in a year (assumes 25 students per teacher per semester)
1	Sumatera Selatan	5	10	55	110	5,500
2	Banten	5	10	55	110	5,500
3	Jawa Barat	5	10	55	110	5,500
4	Jawa Timur	5	10	55	110	5,500
5	Bali	5	10	55	110	5,500
6	Sulawesi Selatan	5	10	55	110	5,500
7	Sulawesi Utara	5	10	55	110	5,500
8	Sumatera Barat	5	10	55	110	5,500
9	Sumatera Utara	5	10	55	110	5,500
10	Jawa Tengah	5	10	55	110	5,500
		50	100	550	1,100	55,000

Thank you.

把数字世界带入每个人、每个家庭、每个组织，构建万物互联的智能世界。

Bring digital to every person, home and organization for a fully connected, intelligent world.