VNPT 4.0 and Digital Government

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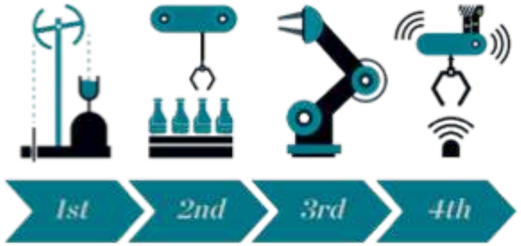
VNPT4.0 and Digital Government

1 Our view of Digital Government

In Vietnam, digital transformation is reflected by 3 closely related trend

- **In Vietnam, digital transformation is reflected by 3 closely related trend**



Industry 4.0

Led by the industries and businesses/enterprises

Smart City

Led by stakeholders: government, enterprise, universities, institutes, communities,…

Digital Goverment

Led by Goverment

"To be efficient and effective in today's complex, interlinked and fast-changing environment, governments need to redesign their structures and processes to capitalize on a new set of actors and tools,"

World Economic Forum
Future of Government Report

VNPT

1 Our view of Digital Government

"Digitally transform the government departments to work collaboratively, effectively and efficiently to drive a more engaging citizen centric public services with sustainable development of an integrated communities."

ENGAGE YOUR CITIZENS

Through connected mobile services to increase satisfaction and participation

- Improve efficiency
- Enhance citizen engagement
- Enable rapid response and transparency
- Increase online and mobile

EMPOWER YOUR EMPLOYEES

to do their best work by leveraging the power of mobility

- Advance government employee productivity
- Collaborate with integrated
- Increase citizen services response rates
- Enhance services experience

OPTIMIZE GOVERNMENT OPERATIONS

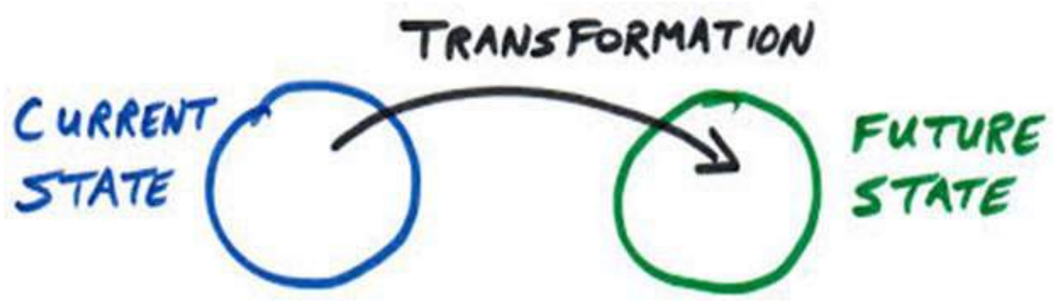
to ensure cost and operating efficiencies with trusted cloud services

- Reduce costly
- Enhance capabilities for managing citizen identity and data securely
- Improve agency agility
- Increase resiliency with scalable

TRANSFORM YOUR SERVICES

and better utilize data to produce actionable analysis and enable better decision making

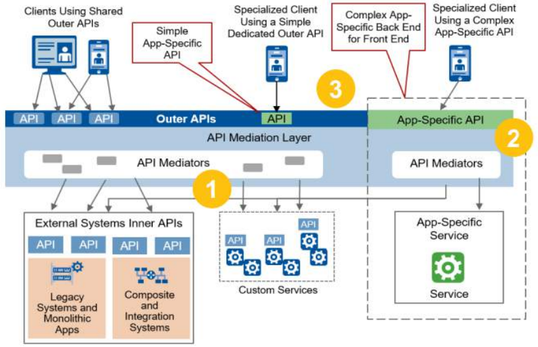
- Accelerate insight driven decisions
- Achieve the potential of the IoT
- Control government data storage and analysis costs
- Combine multiple data sources



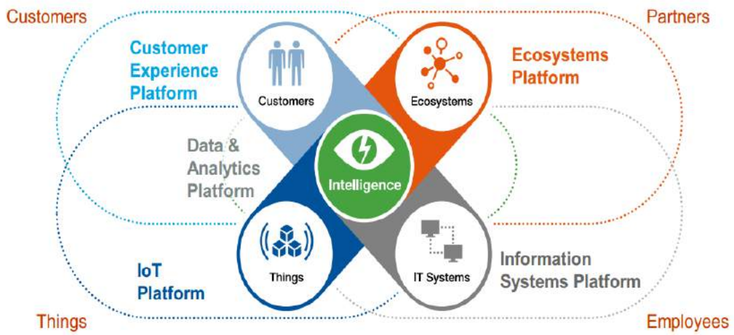
VNPT

1 Our view of Digital Government

Promote the development of new technologies in digital government (AI, Blockchain, IoT, AVR, ...)



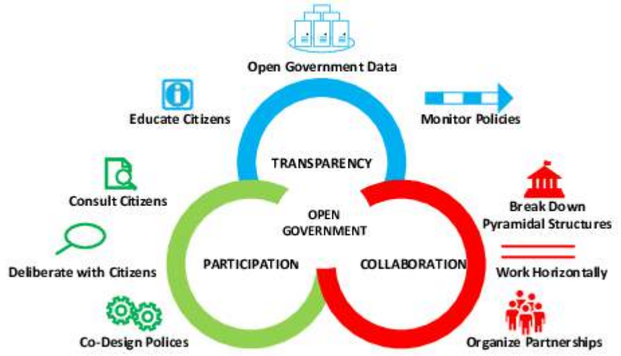
APIs are used extensively across the Vietnam public sector as an enabler to digital government



5G will promote the development of components of the digital government technology platform

5G will enhance the participation of people using the Government's digital services

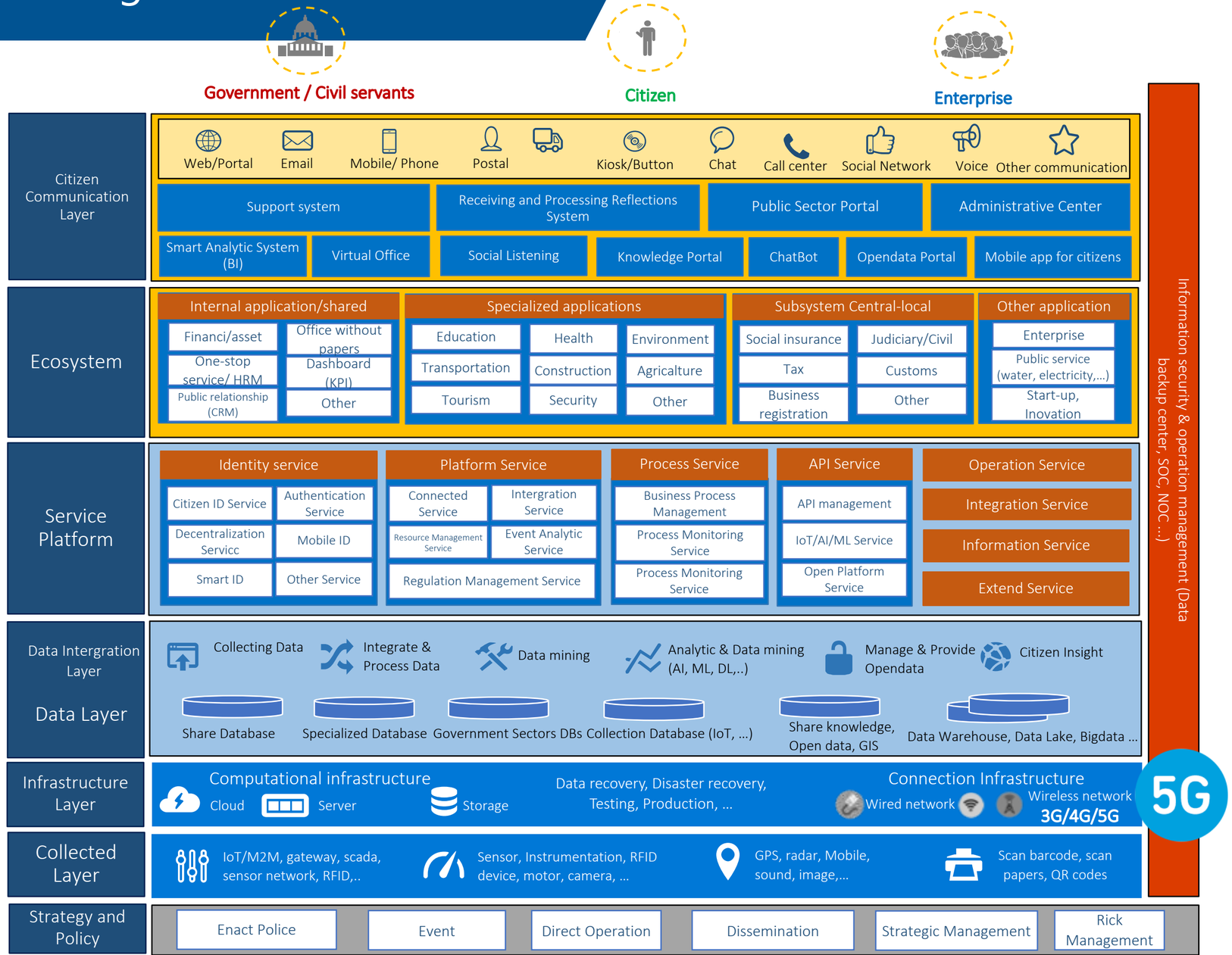
5G contributes to building digital infrastructure, digital economy, promoting e-transactions and people's use of digital services



Promote government open, open data

VNPT

1 Our view of Digital Government



VNPT

2

VNPT Digital Government Strategy

2 ABOUT VNPT

73 năm

VNPT is the leading telecommunications-information technology-communications enterprise of Vietnam for more than 70 years.

We have been constantly striving to build a modern, uniform and widespread national communication infrastructure system, bringing high-quality, useful and friendly products and services to everyone.

VNPT has been gradually transforming to a digital service provider (DSP), focus on developing disruptive and innovative ICT products and services to continue creating real values for life, contributes to the strong development of the Vietnamese economy.

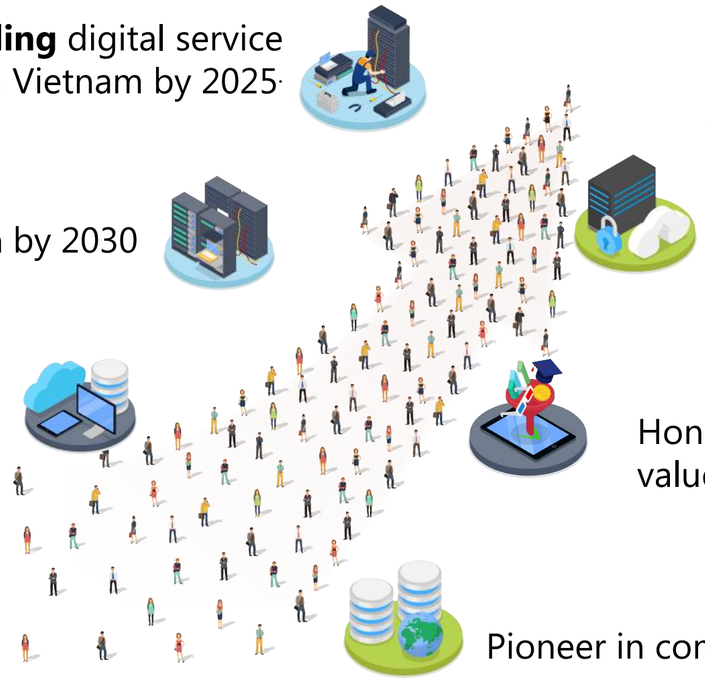
2 ABOUT VNPT

Vision

Become **the leading** digital service provider in Vietnam by 2025

Become **Digital Hub of Asia** by 2030

Become the customers **number 1** choice for ICT products and services in the market



Mission

Provide customers and partners with high-quality, disruptive and innovative Telecommunication and ICT and Digital products and services

Honor and appreciate the true value of the employees

Pioneer in community activities

2 ABOUT VNPT

Cloud Computing Services

- Leasing Infrastructure (**IaaS**)
- Leasing Platform (**PaaS**)
- Software outsourcing (**SaaS**)

IT Management Services

- Managed Security
- Desktop Management
- IT Maintenance and Support
- Managed Applications

Software Services

- Business Applications
- Security

Network Management Services

- Device/CPE Sevices
- Network Management

IT Professional Services

- IT Infrastructure Service
- System Integration
- IT Professional Services

Network Professional Services

- Network Integraion
- Network Professsional Services

VNPT

2 VNPT Telecommunication network capacity

- **VNPT broadband network**

05 international optical cable links

4 submarine cables, 1 terrestrial cable
Using capacity of 3.8 Tbps on the international internet link, ensure safety and backup

IP Core network provided in 63/63 provinces and cities

Total capacity: 48 Tbps

Optical Line Termination (OLT GPON)

7200 OLT, total capacity of 10 million FTTH/GPON portals

Dense Wavelength Division Multiplex (DWDM) national and multi-region

Total capacity: 15 Tbps

National IP network

Total capacity: 57 Tbps

Total ADSL broadband subscribers

+ 5.4 million subscribers of FTTH
+ 1.2 million subscribers of IPTV

Broadband Nework

Core IP

Capacity:12 million (3G/4G) subcribers and 30 million concurrent mobile (2G/3G) subcribers.

BTS

2G: 25.000 station;
3G: 33.000 station;
4G: 27.000 station.

Subcribers

Mobile subcribers:
31.7 million.

Coverage

2G: 89% coverage, 97% population;
3G: 82% coverage, 93% population.
4G: 78% coverage, 87% population.

2 VNPT – a leader in e-government solutions

VNPT is focusing on building IoT Platform, Big Data Platform, Cloud Platform, Smart City, M2M/IoT, AI and specialized IT solutions in Health, Education and Security, Traffic Safety...

A trusted partner of the Office of the Government in the digital transformation of our government operations and services

60% of hospitals & healthcare facilities running on VNPT's Hospital Information System

55 strategic ICT cooperation agreements signed, out of 63 provinces

VNPT Education Suite serving 5 millions students & 10,000 schools nation-wide

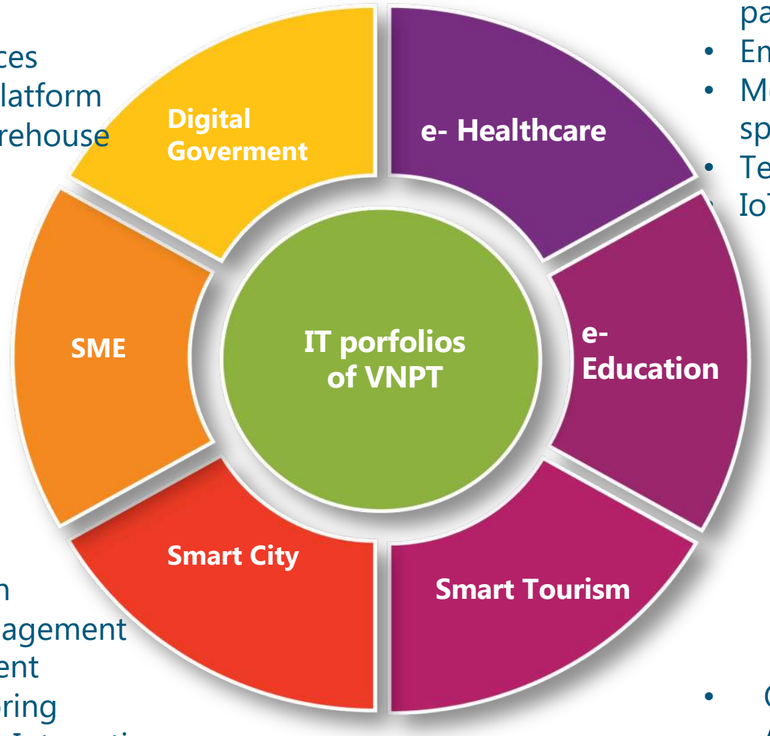
VNPT

2 VNPT Digital Ecosystem

VNPT has comprehensive technology capabilities for SmartCity, digital transformation and smart applications with the ecosystem of IT portfolios across different areas.

- Administrative procedure digitalization,
- Digital workspace
- Online public services
- Electronic Citizen Platform
- Data Lake/Data warehouse
- Open Data

- Interconnected health information system, health data portal
- Electronic health record, Smart card for patients
- Emergency management system
- Monitoring and forecasting diseases spread
- Tele-medicine
IoT devices for health.



- ERP/CRM/HRM
- POS/DMS
- Smart Ads
- Tracking
- Social Listening

- School Management (vnEdu)
- e-learning platform
- Smart classroom (smart devices, e-books, digital libraries, e-learning, smart student cards)
- Student smart card

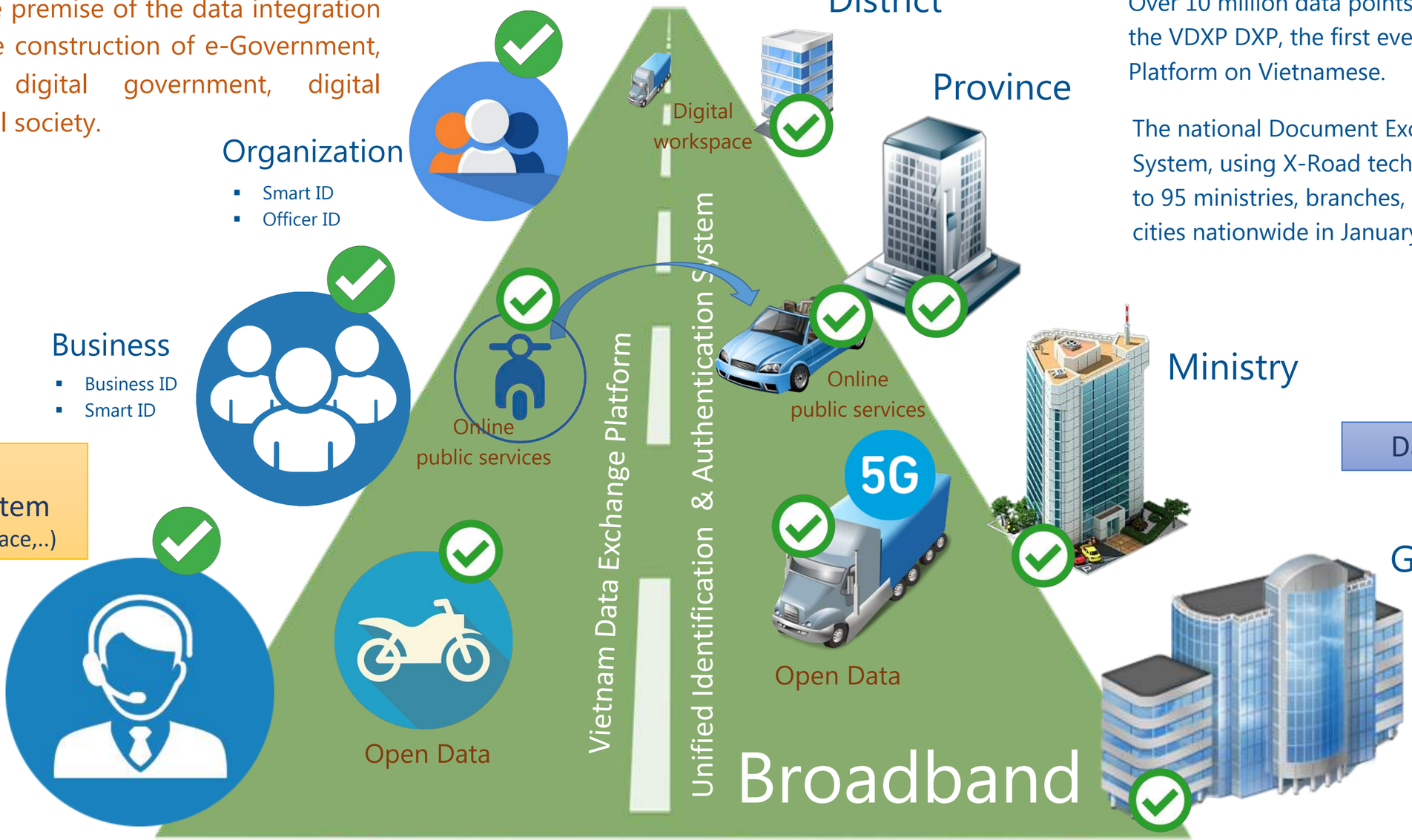
- Safe City
- Smart Transportation
- Urban Planning Management
- GIS, Land management
- Environment Monitoring
- Government– citizen Interaction Platform (My City)
- Intelligent Operation Center

- Online Tourism Portal and Interactive App
- Digitalize tourism data national-wide

VNPT

2 Vietnam Data Exchange Platform - VDXP

VDXP is the premise of the data integration platform for the construction of e-Government, towards the digital government, digital economy, digital society.



Organization
- Smart ID
- Officer ID

Business
- Business ID
- Smart ID

Citizen
- Citizen ID
- Smart ID
- Mobile ID

Unified Biometrics System (fingerprint, voice, face,..)

Data sharing

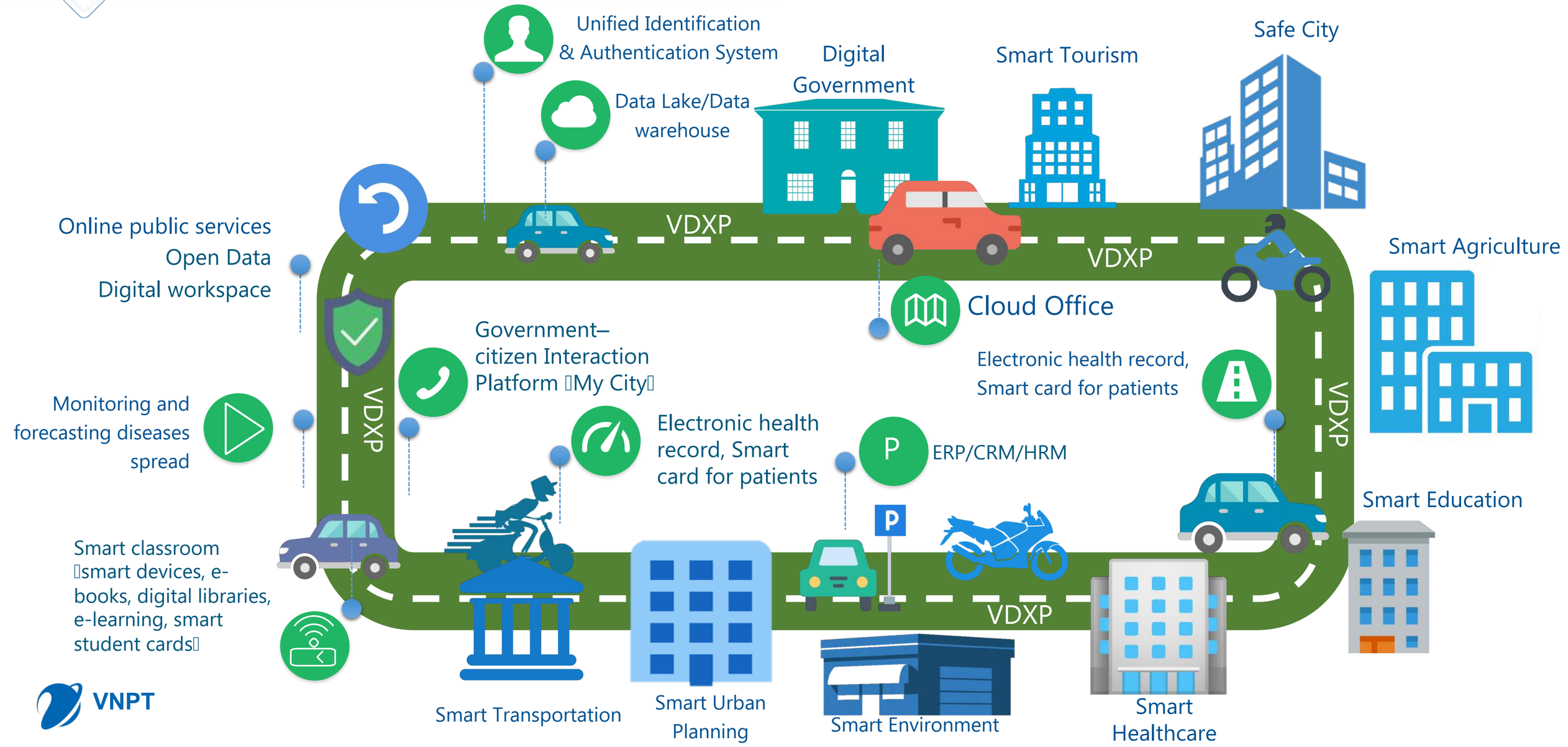
Easily link the department IDs across different platforms with VDXP's 4 million connections between email and mobile IDs and cookie and email IDs.

Over 10 million data points are available in the VDXP DXP, the first ever Data Exchange Platform on Vietnamese.

The national Document Exchange Platform System, using X-Road technology, deployed to 95 ministries, branches, provinces and cities nationwide in January 2019.

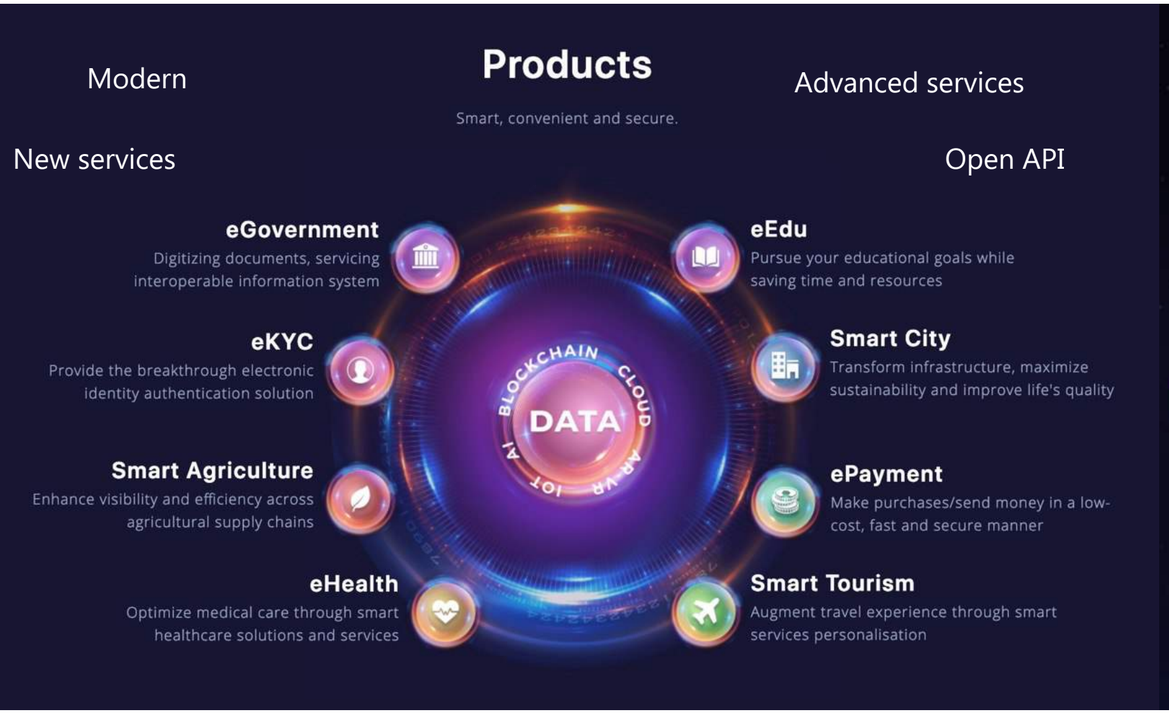
VNPT

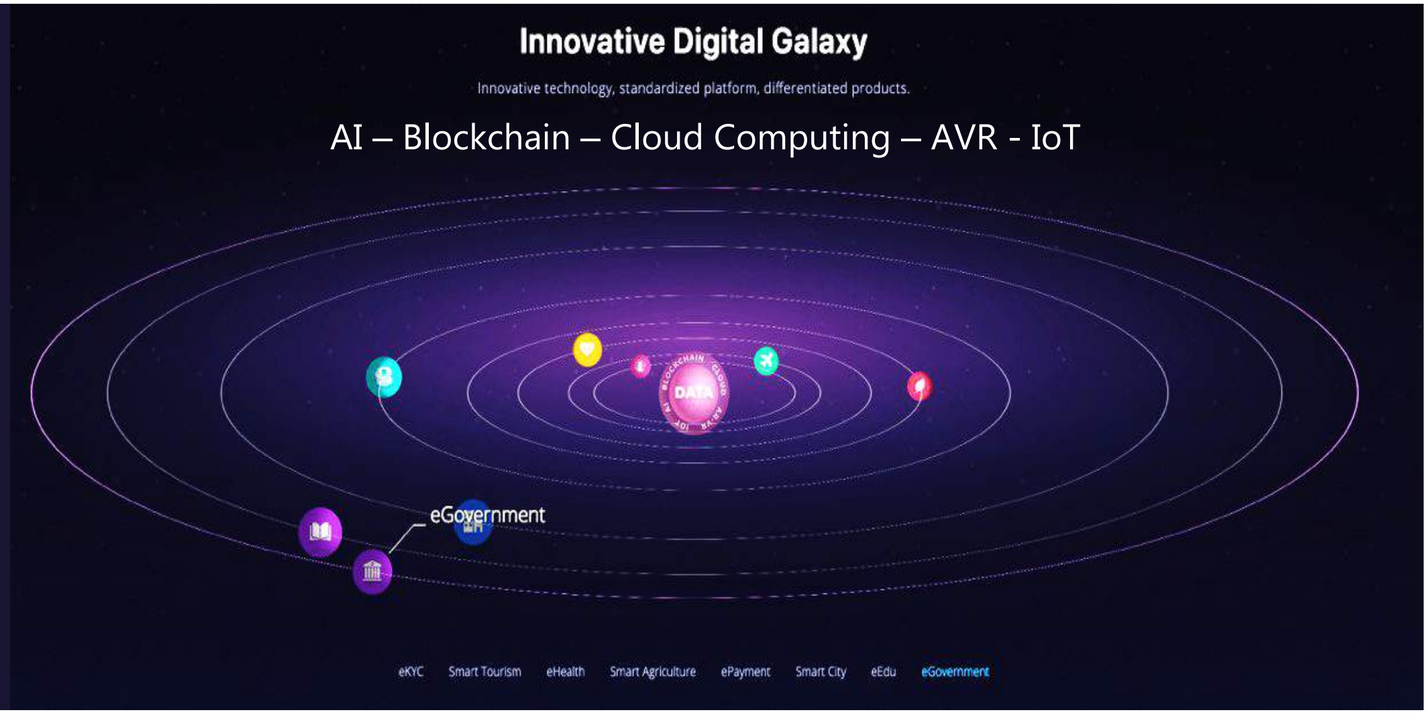
2 VNPT Digital Ecosystem - VDXP



VNPT

2 Innovative Digital Galaxy - IDG





Face recognition system, extract information on ID card, passport, driver's license, ... minimizing fake registration transactions and illegal

Widely used in banking, digital finance, and public services,…

Authentication and identification solutions on advanced technology platforms are AI and Blockchain storage data

APIs are used extensively across the Vietnam public sector as an enabler to digital government

VNPT

Cloud Computing

VNPT Cloud & solutions for enterprise

Cloud Computing

VNPT Cloud co-operates with enterprise

Customer | **VNPT** implementation consultancy | **Public Cloud**

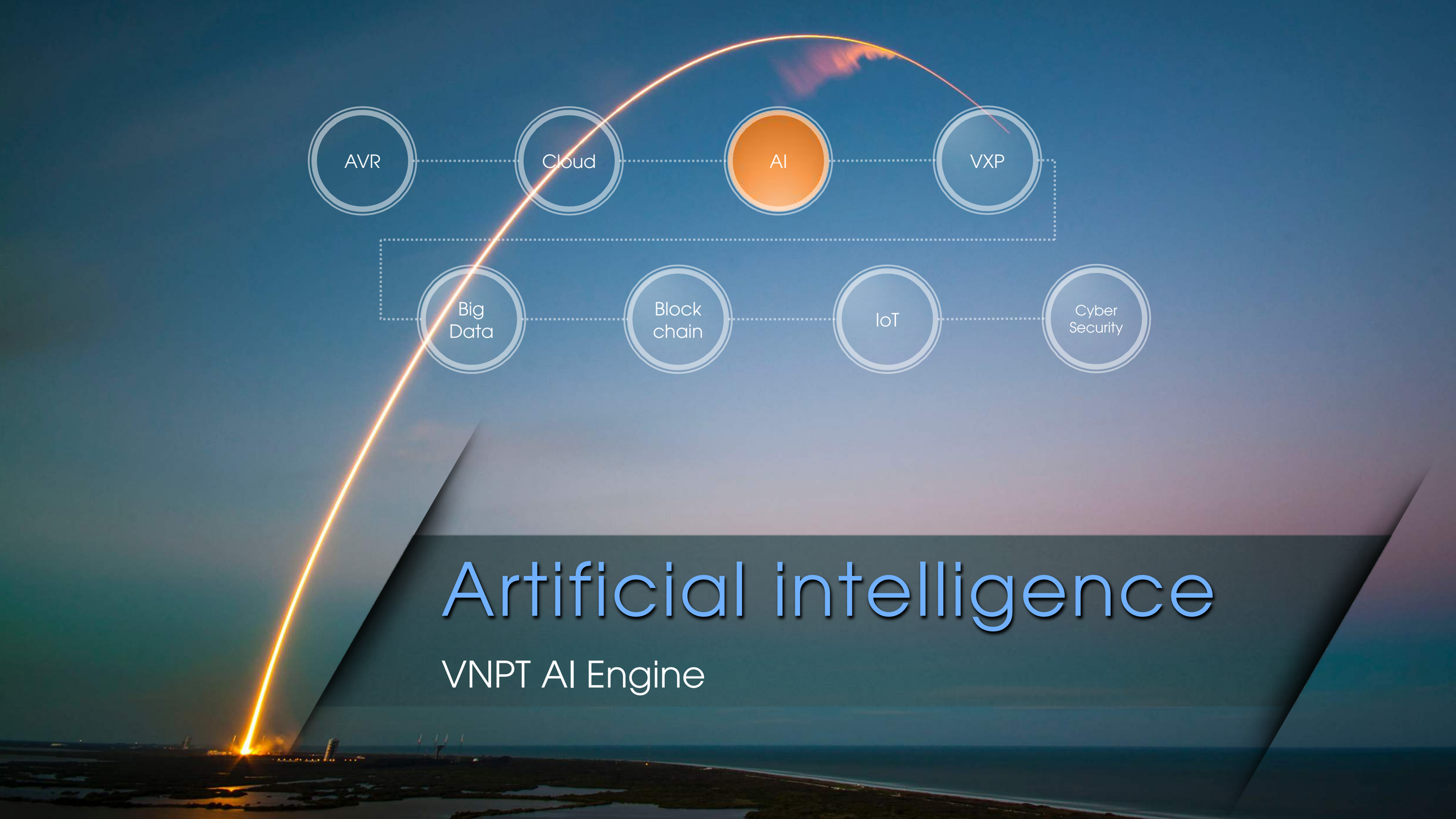
- Private Cloud
- Virtualization
- Consolidation

VNPTCLOUD

- SaaS
- Virtual Machine
- Block Storage
- Object Storage
- ...

Human Resources

Effective



Artificial intelligence

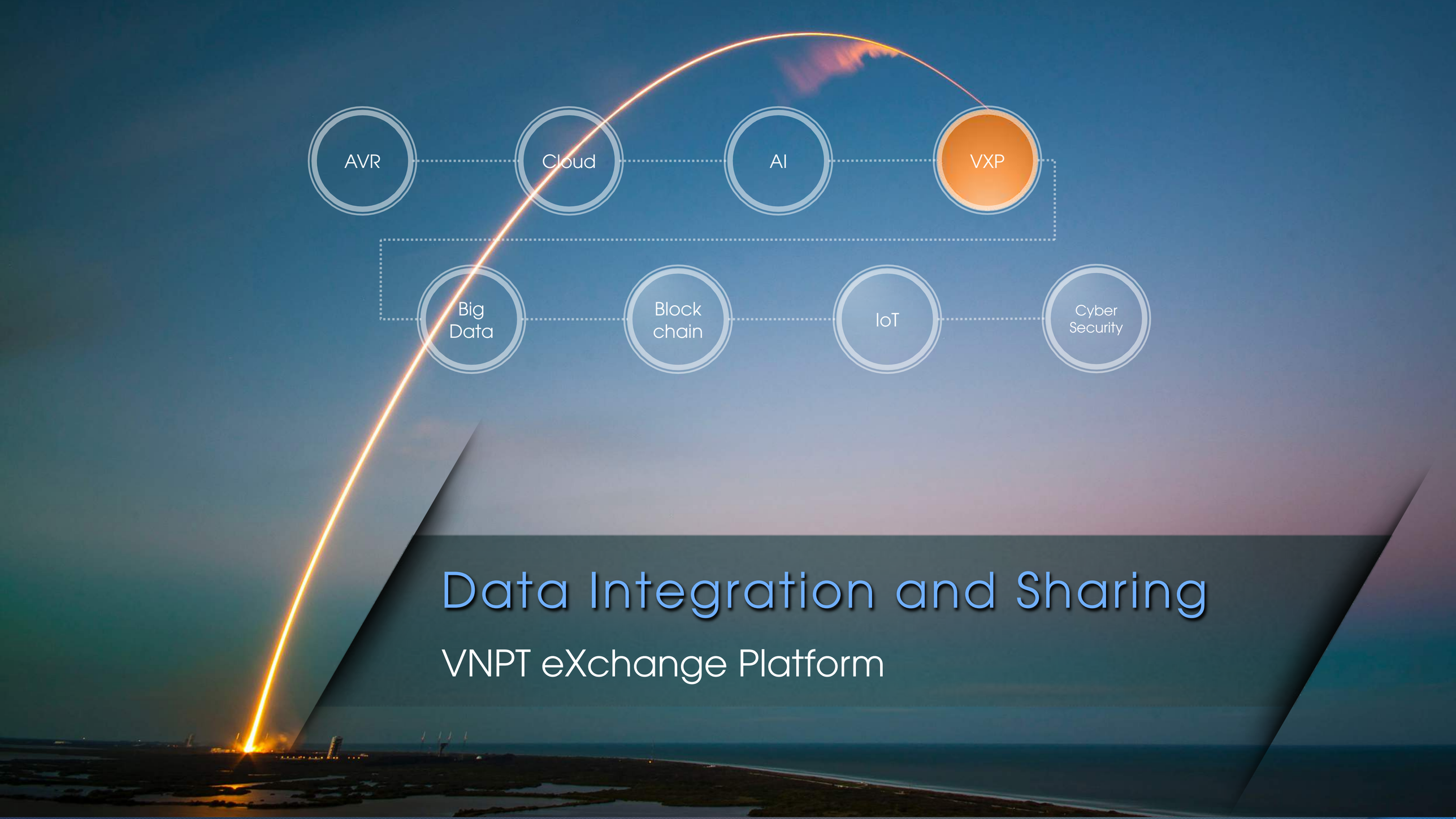
VNPT AI Engine

Artificial Intelligence

VNPT AI Engine

Unified AI platform of VNPT

Intelligent, Accurate, Effective, Unique



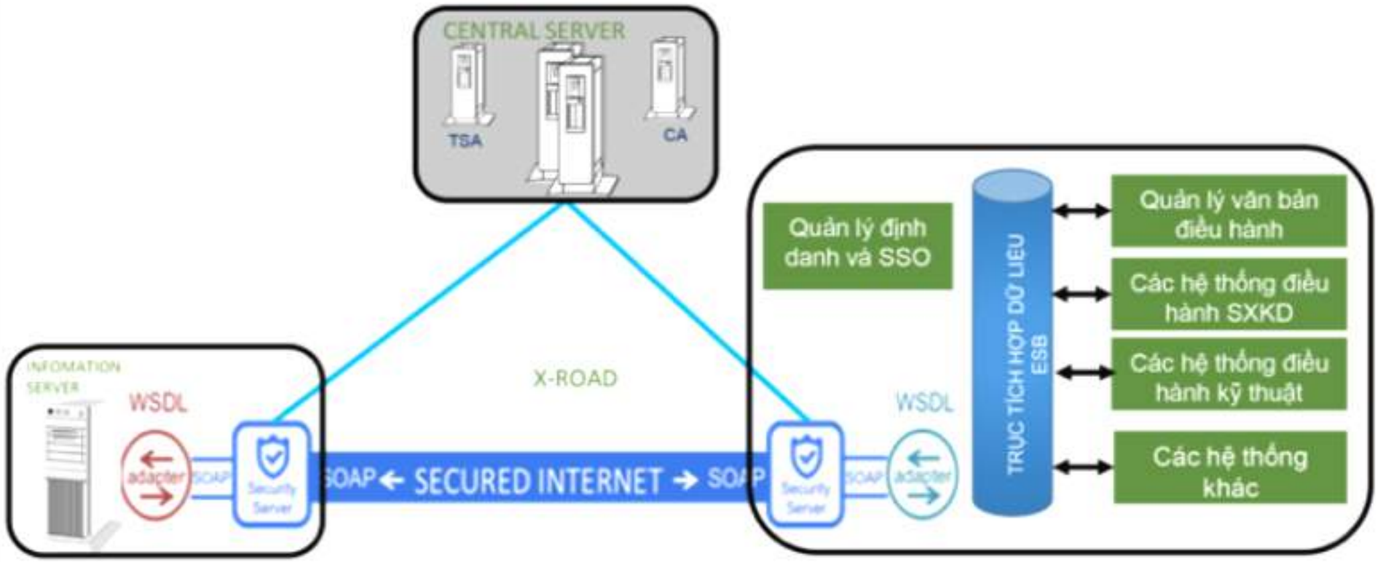
Data Integration and Sharing

VNPT eXchange Platform

Data Integration and Sharing

VNPT eXchange Platform

VNPT eXchange Platform (VXP) = X-Road + ESB



X-ROAD

Triển khai liên thông theo chiều dọc để chia sẻ dữ liệu, ứng dụng giữa các cấp trong từng hệ thống

ESB

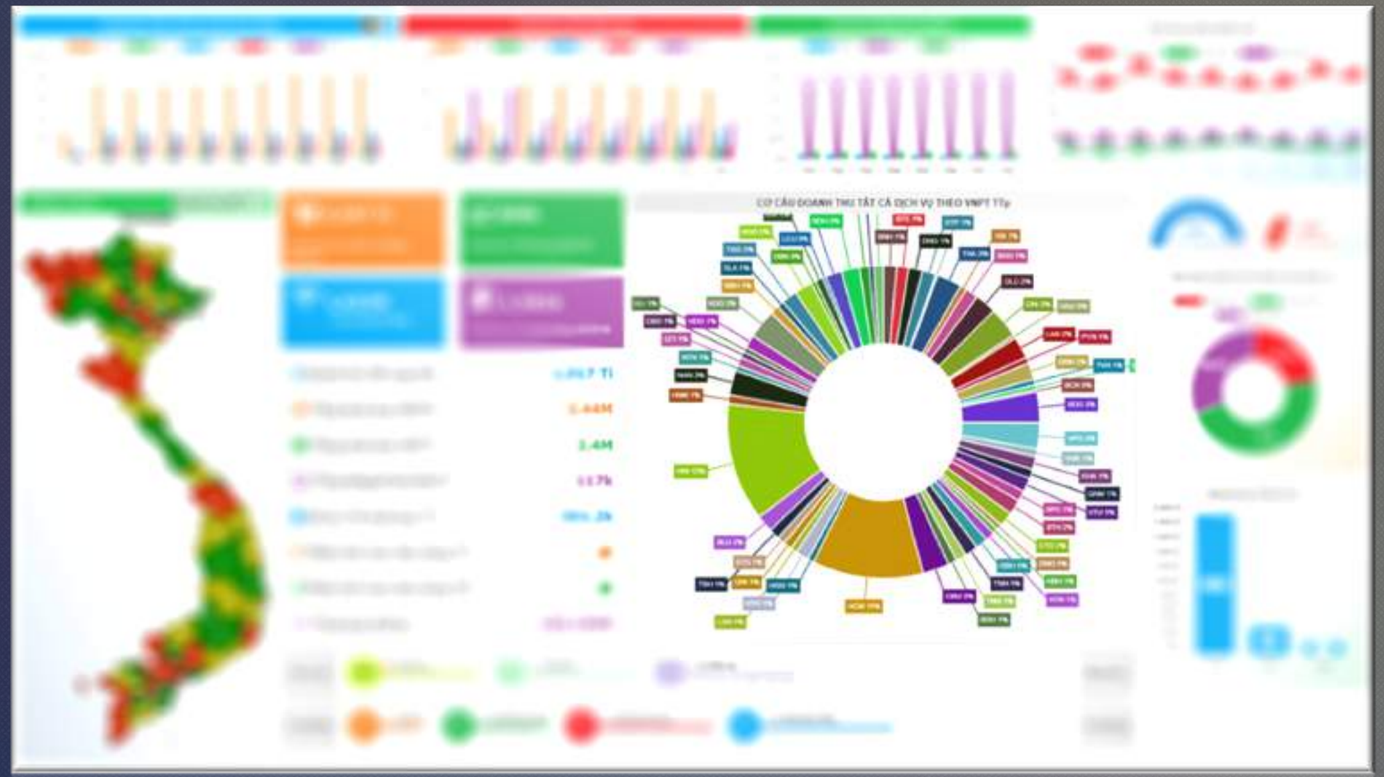
Triển khai liên thông theo chiều ngang (trong một địa phương, tổ chức) trao đổi dữ liệu giữa các nghiệp vụ, hệ thống trên môi trường không đồng nhất

Big Data

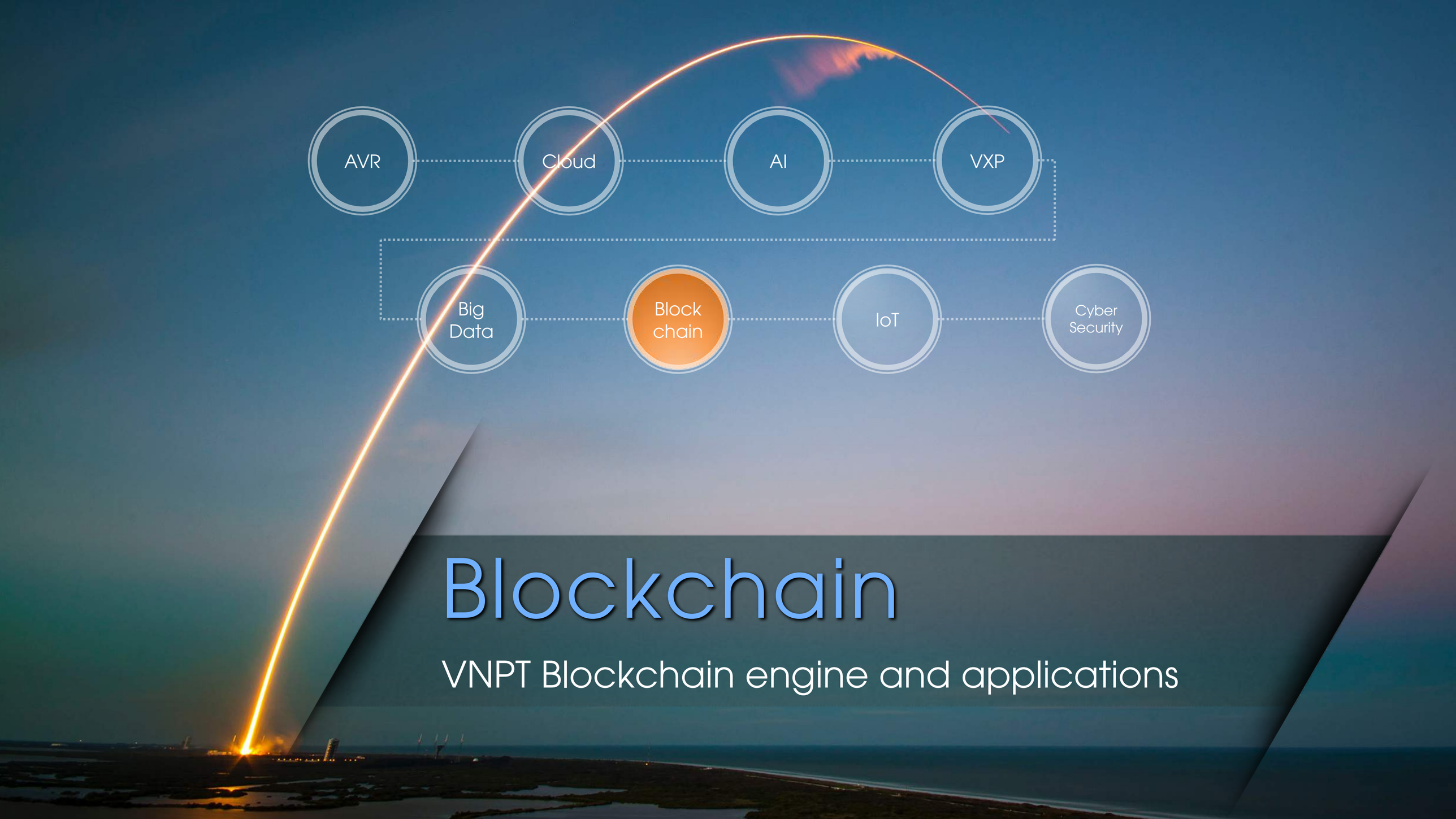
VNPT Big Data Platform

Big Data

Dashboard: monitoring and evaluating the business and financial situation of enterprise



- Big Data, BI : analyze and synthesize data to produce desired KPIs, predictions
- Connect to databases : OSS, CRM, HRM, … on demands

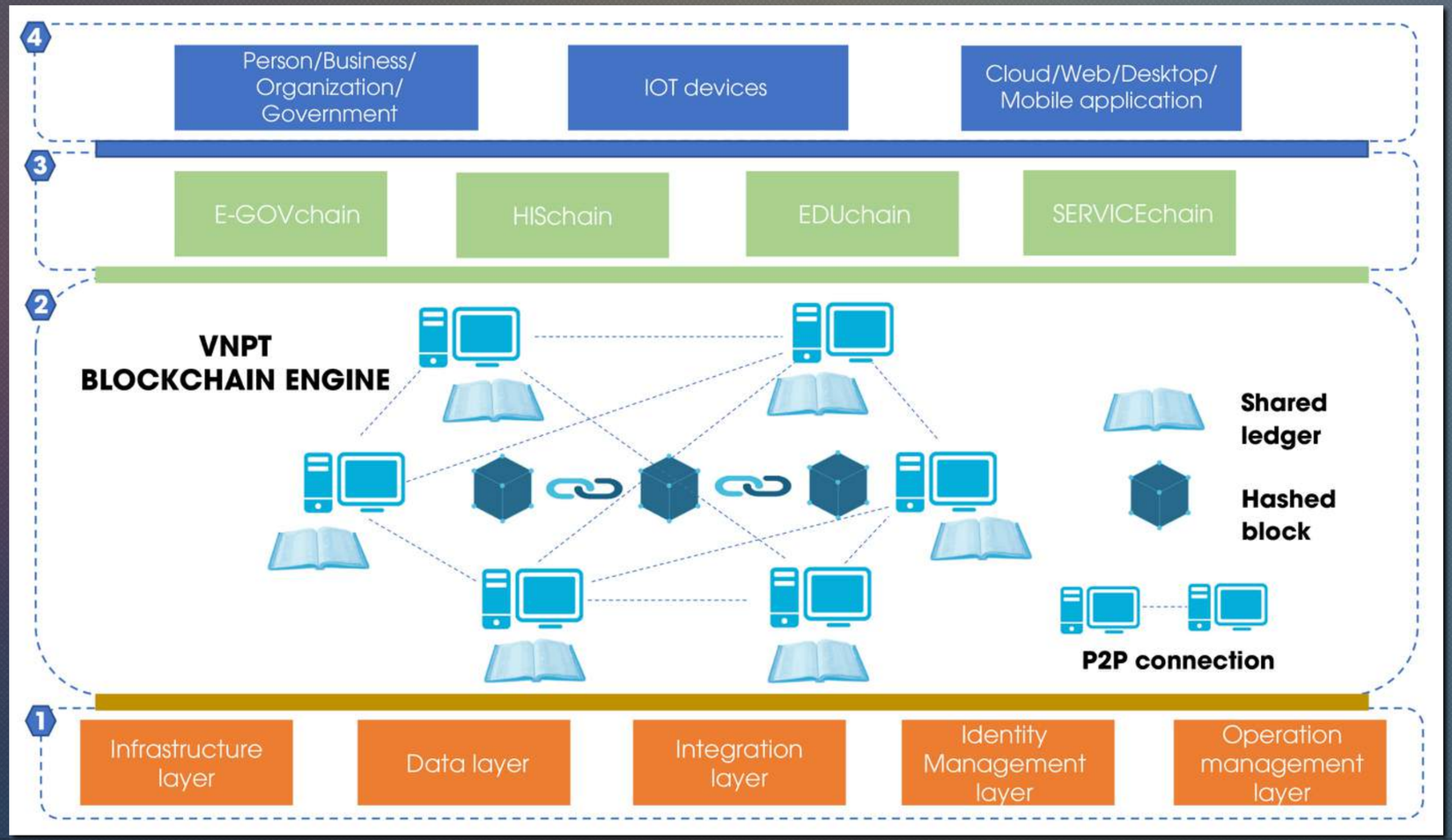


Blockchain

VNPT Blockchain engine and applications

Blockchain

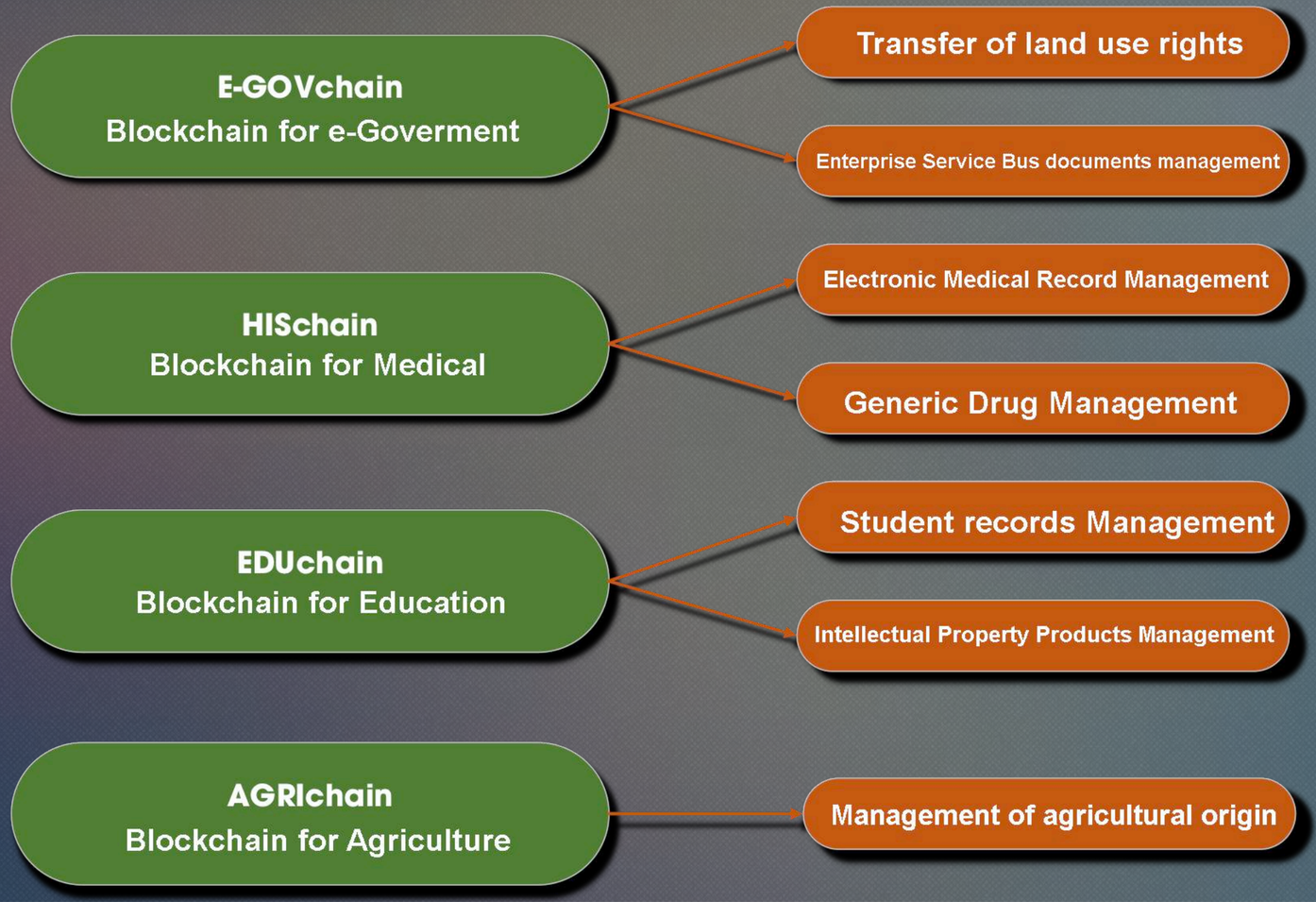
VNPT Blockchain engine



VNPT Industry 4.0 technology platforms & applications in digital transformation for enterprise

Blockchain

VNPT Blockchain engine

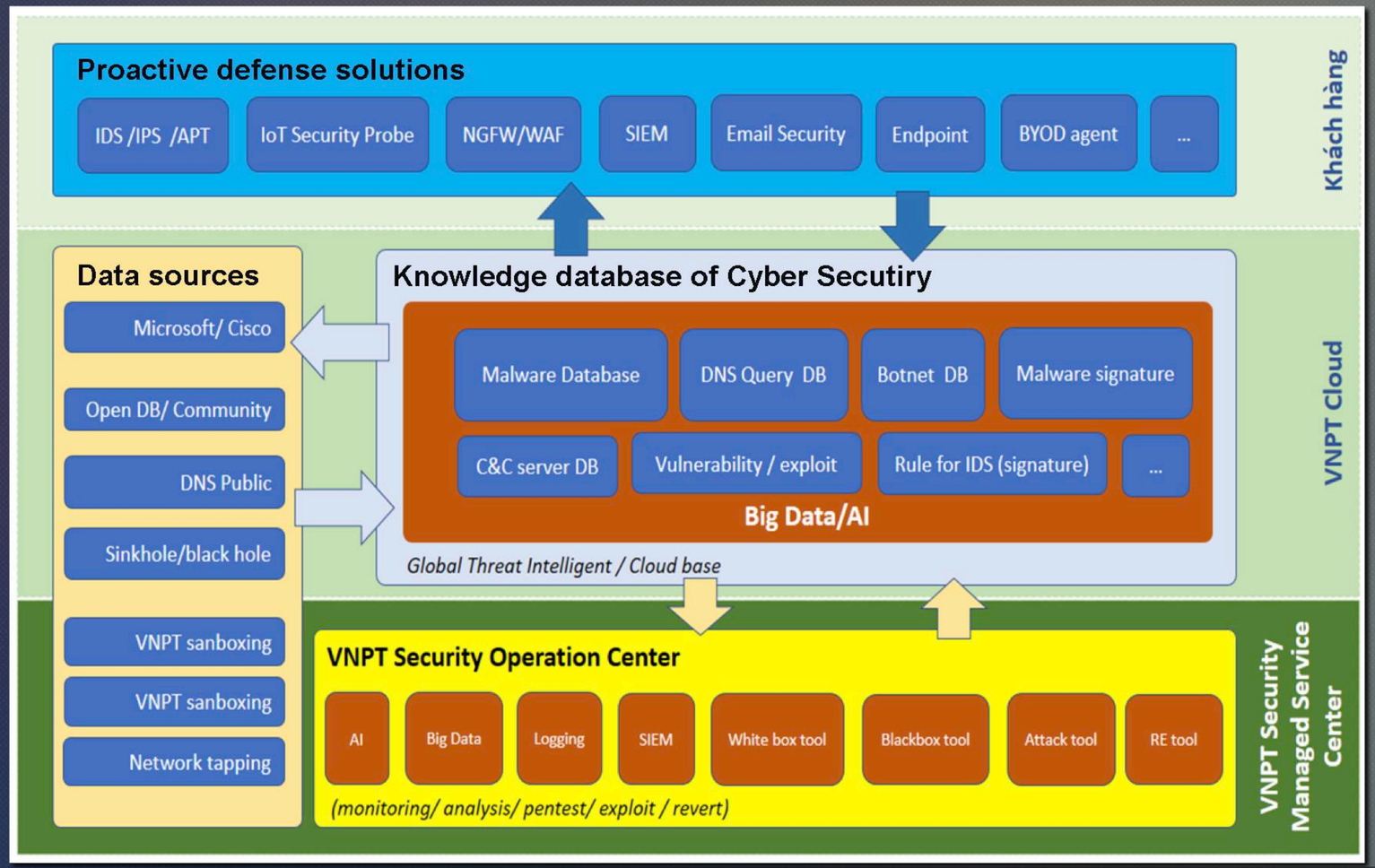


Cyber Security

VNPT Cyber Security

Cyber Security

VNPT Cyber Security solutions for Ecosystem 4.0



- System uses BigData, Machine Learning technologies
- Components deployed at the customer are agents that use the data of central knowledge system on VNPT Cloud

Cyber Security

VNPT Cyber Security Services (Managed Security Services – MSSP)

Customers

- MSSP services for organizations with diverse capabilities; from invesment to fully equipped
- MSSP services for government organizations, ministry departments and corporations

Services Provided

- Security monitoring service; incident rescue service
- malicious code search service; invasive investigation
- risk assessment; sinkhole; Provides scouting information

VNPT Industry 4.0 technology platforms & applications in digital transformation for enterprise

Thank you!

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