

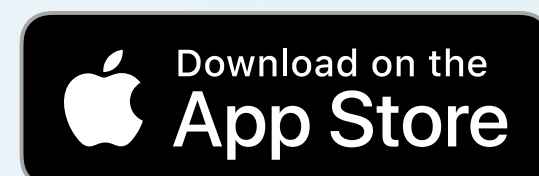
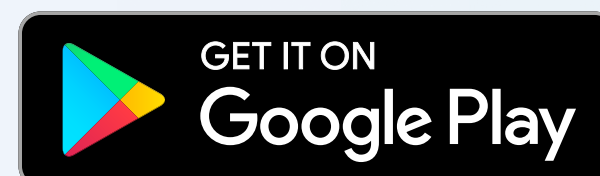


A PRODUCT OF VNPT AI ECOLOGICAL SYSTEM  VNPT AI



Electronic know your customer

A high-precision electronic identification solution to digitize customer experience, increase conversion rates, and reduce risks for organizations





WHY CHOOSE VNPT eKYC ?

VNPT's Facial Recognition Technology reach the top 10 in global list



VNPT's Facial Recognition Technology Reach the top 10 in global list

According to the quality assessment and measurement test of the us national institute of standards and technology (NIST)
Kiosk category - FRVT 1:N (skin color and ethnic diversity)

 Top 10 global ranking
FRVT 1:N Identification

Algorithm	Gallery	Mugshot	Mugshot	Mugshot	Mugshot				
	Probe	Mugshot	Mugshot	Webcam	Profile 90°	Border	Kiosk	Border ΔT ≥ 10 YRS	Mugshot ΔT ≥ 12 YRS
	Date	N = 12000000	N = 1600000	N = 1600000	N = 1600000	N = 1600000	N = 1600000	N = 1600000	N = 3000000
neurotechnology_013	2023-02-03	0.0065 ⁽¹⁸⁾	0.0026 ⁽¹²⁾	0.0182 ⁽¹⁶⁾	0.1600 ⁽¹⁰⁾	0.0072 ⁽¹¹⁾	0.2412 ⁽⁴⁹⁾	0.0682 ⁽¹⁰⁾	0.0286 ⁽¹⁵⁾
s1_004	2023-02-03	0.0062 ⁽¹⁷⁾	0.0028 ⁽¹⁷⁾	0.0202 ⁽²²⁾	0.8062 ⁽³⁸⁾	0.0074 ⁽¹²⁾	0.9947 ⁽⁷⁵⁾	0.0859 ⁽¹⁷⁾	0.0263 ⁽¹³⁾
cogent_007	2023-01-30	0.0038 ⁽⁶⁾	0.0027 ⁽¹⁵⁾	0.0178 ⁽¹⁴⁾	0.1547 ⁽⁹⁾	0.0078 ⁽¹³⁾	0.1205 ⁽²⁵⁾	0.0695 ⁽¹¹⁾	0.0276 ⁽¹⁴⁾
maxvision_001	2022-10-28	0.0067 ⁽¹⁹⁾	0.0029 ⁽¹⁸⁾	0.0187 ⁽¹⁷⁾	0.1755 ⁽¹²⁾	0.0078 ⁽¹⁴⁾	0.0801 ⁽¹¹⁾	0.9544 ⁽⁶¹⁾	0.0295 ⁽¹⁶⁾
deegolint_001	2020-07-23	0.0050 ⁽¹²⁾	0.0025 ⁽¹¹⁾	0.0116 ⁽⁶⁾	0.9418 ⁽⁴⁶⁾	0.0079 ⁽¹⁵⁾	0.1081 ⁽²¹⁾	-	0.0236 ⁽¹⁰⁾
griaule_001	2022-07-26	0.0074 ⁽²⁰⁾	0.0030 ⁽¹⁹⁾	0.0213 ⁽²⁵⁾	0.7771 ⁽³⁷⁾	0.0079 ⁽¹⁶⁾	0.0833 ⁽¹⁴⁾	0.9906 ⁽⁶²⁾	0.0310 ⁽¹⁷⁾
firstcreditkz_001	2022-11-22	0.0048 ⁽¹⁴⁾	0.0022 ⁽⁸⁾	0.0157 ⁽¹⁴⁾	0.2310 ⁽¹⁶⁾	0.0088 ⁽¹⁷⁾	0.0813 ⁽¹³⁾	0.0835 ⁽¹⁶⁾	0.0195 ⁽⁹⁾
vnpt_002	2021-11-12	0.0089 ⁽²⁴⁾	0.0037 ⁽²⁴⁾	0.0199 ⁽²⁰⁾	0.2971 ⁽¹⁸⁾	0.0088 ⁽¹⁸⁾	0.0794⁽¹⁰⁾	-	0.0440 ⁽²³⁾
vnpt_002	2022-09-08	0.0097 ⁽²⁹⁾	0.0047 ⁽³¹⁾	0.0264 ⁽³¹⁾	0.2055 ⁽¹³⁾	0.0090 ⁽¹⁹⁾	0.0794 ⁽¹⁰⁾	0.1075 ⁽²²⁾	0.0473 ⁽²⁵⁾
ntechlab_010	2021-06-24	0.0036 ⁽⁵⁾	0.0019 ⁽⁶⁾	0.0125 ⁽⁷⁾	0.2073 ⁽¹⁴⁾	0.0091 ⁽²⁰⁾	0.0806 ⁽¹²⁾	0.1029 ⁽²⁰⁾	-

VNPT AI



WHY CHOOSE VNPT eKYC ?

VNPT Face Liveness Detection Technology meets international standard ISO 30107-3 Presentation Attack Detection (PAD)



VNPT's Face Liveness Detection Technology meets international standard ISO 30107-3 (PAD) which evaluated by iBeta (FIDO Alliance)

iBeta (FIDO Alliance) Quality Assurance - The only organization recognized by the US National Institute of Standards and Technology (NIST) for its assessment criteria



VNPT eKYC v1.0.2

Prepared for:

Vietnam Posts and Telecommunications Group

57 Huynh Thuc Khang Str., Lang Ha Ward,
Dong Da District, Ha Noi, Vietnam

16 February 2023

Report #: 230216-iBetaBTR-v1.0

Trace to Standards
ISO 30107-3
Sections 1.3, 6.0, 7.1, 7.2, 8.1, 10.2, 11.3, 11.5, 13.1, 13.2, 13.3 and 13.4
NIST Handbook 150-25
Sections 4.1.5, 5.10.1 through 5.10.4

*Test Results in this report apply to the biometrics system configuration tested. Testing of biometric systems that have been modified may or may not produce the same test results. This report shall not be reproduced, except in full.
iBeta Quality Assurance is accredited for Biometric System Testing.*



WHY CHOOSE VNPT eKYC ?

VNPT is ready to provide chip-based citizenship authentication service with RAR-C06 (VNPT eKYC IDCheck)



The information on the chip-based citizen identification card is accurately authenticated 100% with the RAR-C06 population and citizen identification database of the Ministry of Public Security.

VNPT eKYC IDCheck is a service to verify the correctness, integrity of information, and verify signatures on chip cards with RAR-C06, in order to minimize risks in electronic identity transaction



**RESEARCH AND APPLICATION CENTER
FOR RESIDENTS DATA (RAR)**



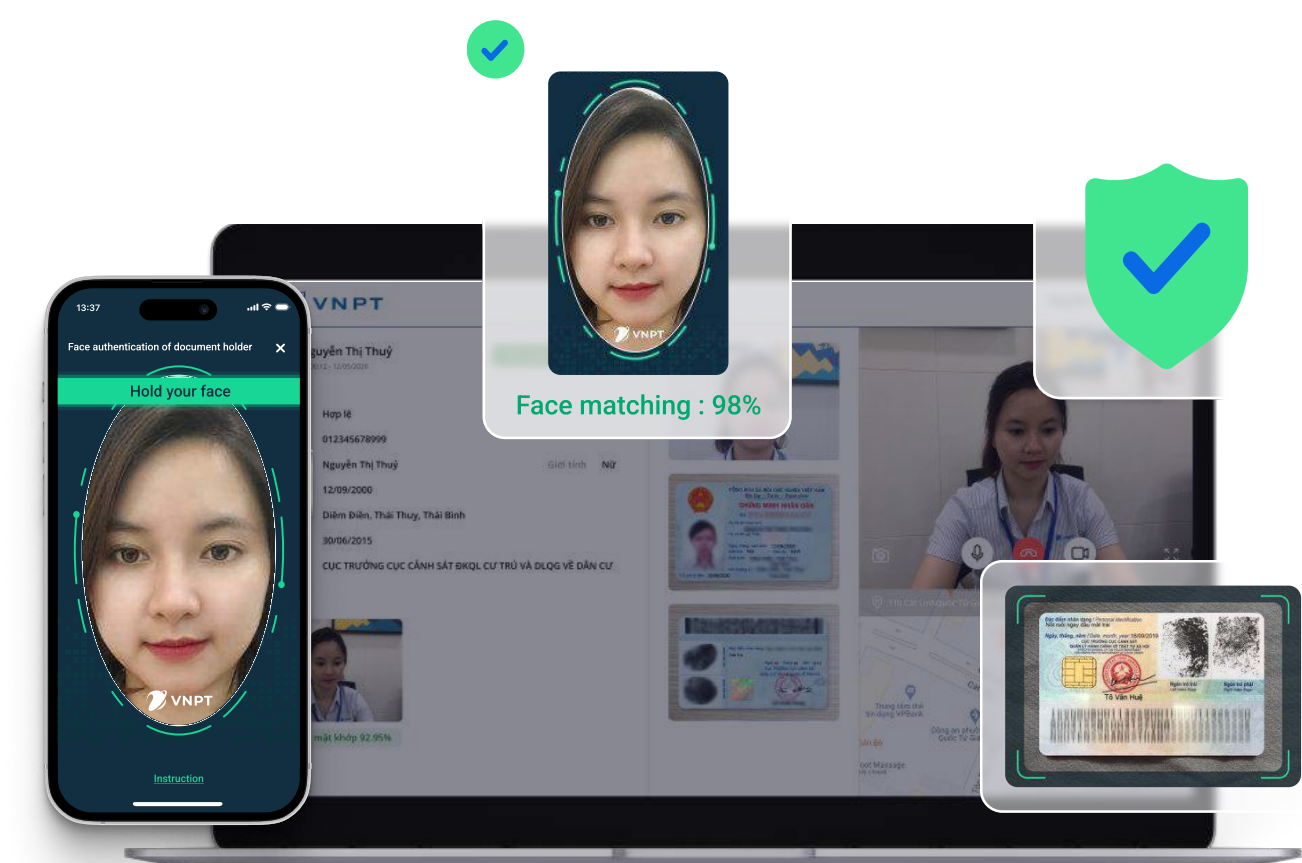
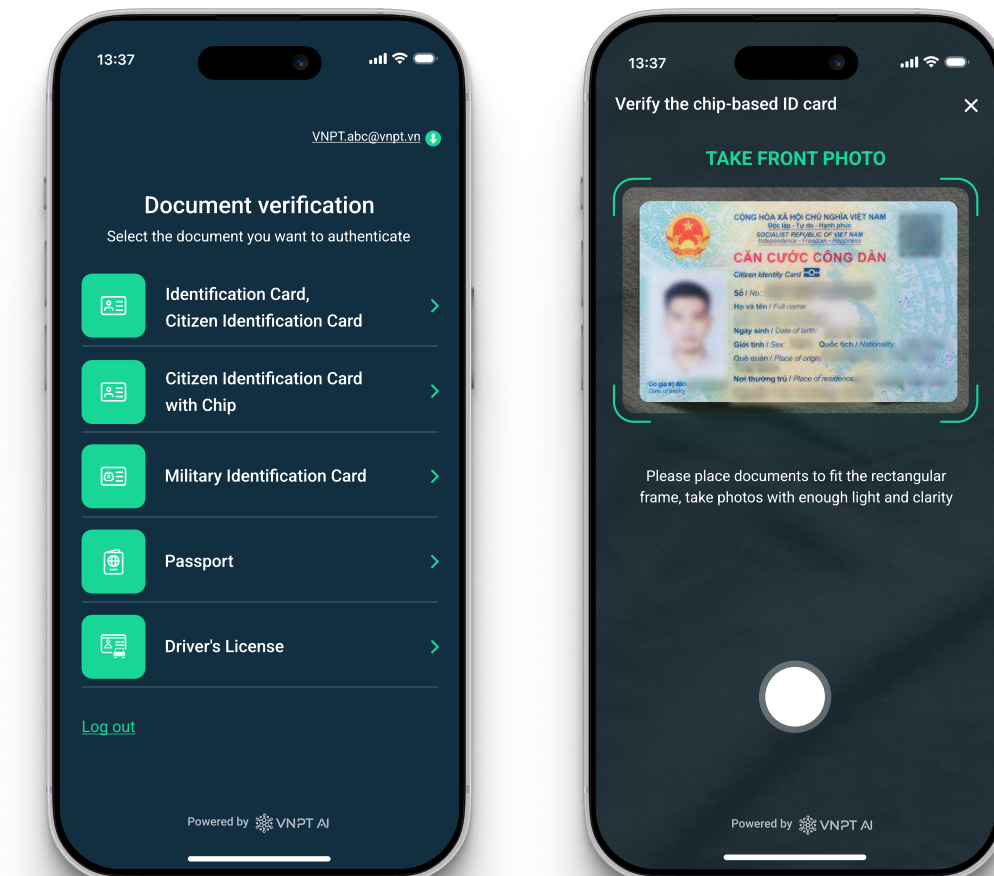
CASE STUDY

Customers: Banks, Securities companies,...
eKYC applications: On boarding – Account register



Effects

- Transaction time reduced **from 15-20 minutes to 1.5-2 minutes**
- Work productivity increased **15 times**
- **Millions of new accounts** opened during the **Covid-19** pandemic
- **35,000 new customers** register iMoney on HDbank app, **15,000 accounts** have verified information online



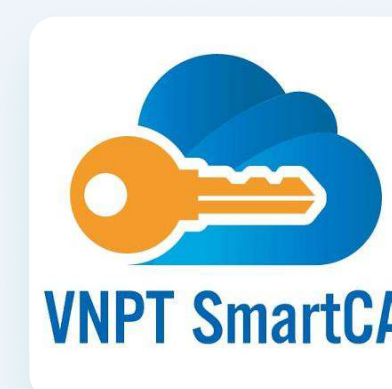


CASE STUDY


eKYC application in digital signature generation

Effects

VNPT SmartCA becomes a pioneer in providing digital signatures in Vietnam by integrating electronic identity VNPT eKYC. It provides a completed experience for all customers when using digital signatures in electronic transactions: registration, activation of digital certificates and purchase of signatures are done completely online.

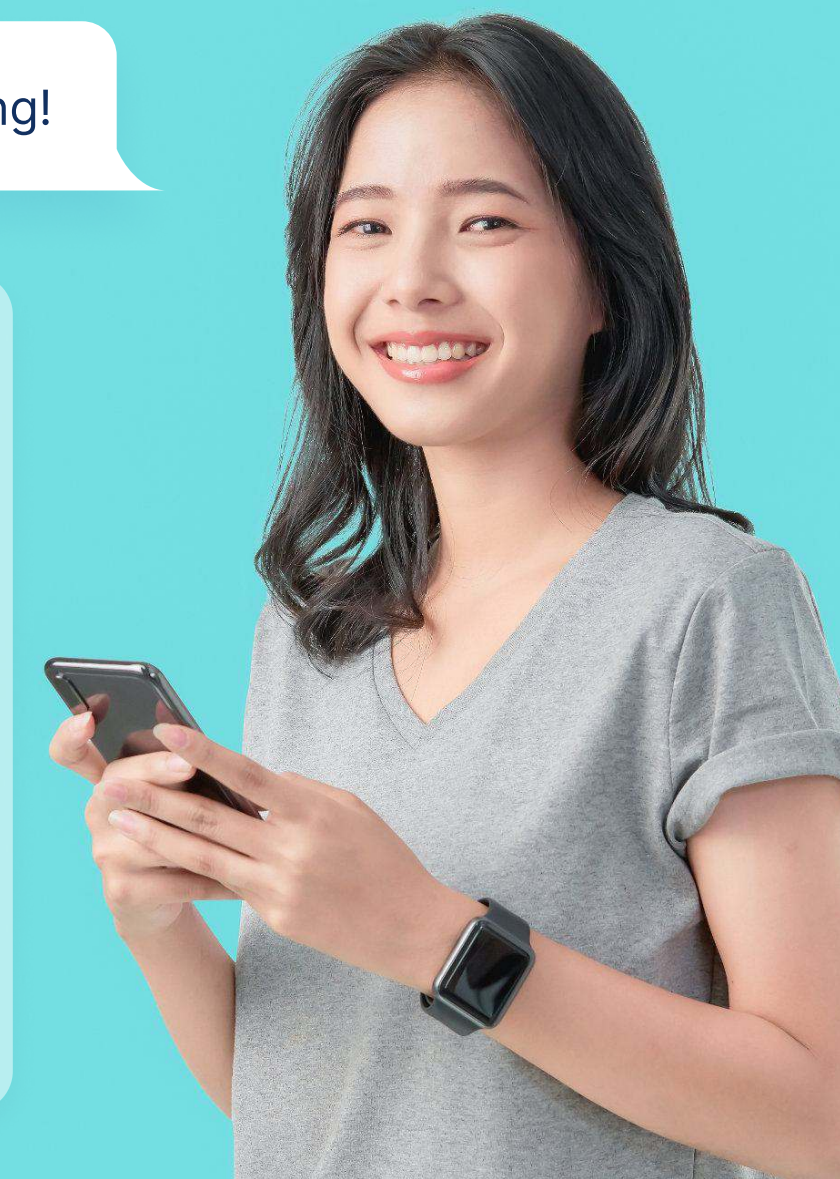


Ký số thành công!



Trạng thái
Đã kích hoạt

Họ tên:	Nguyễn Mai Phương
CMND/CCCD:	001012345678
Hiệu lực:	29/06/2021-30/07/2021
Đơn vị:	VNPT IT
Số seri:	123456





CASE STUDY

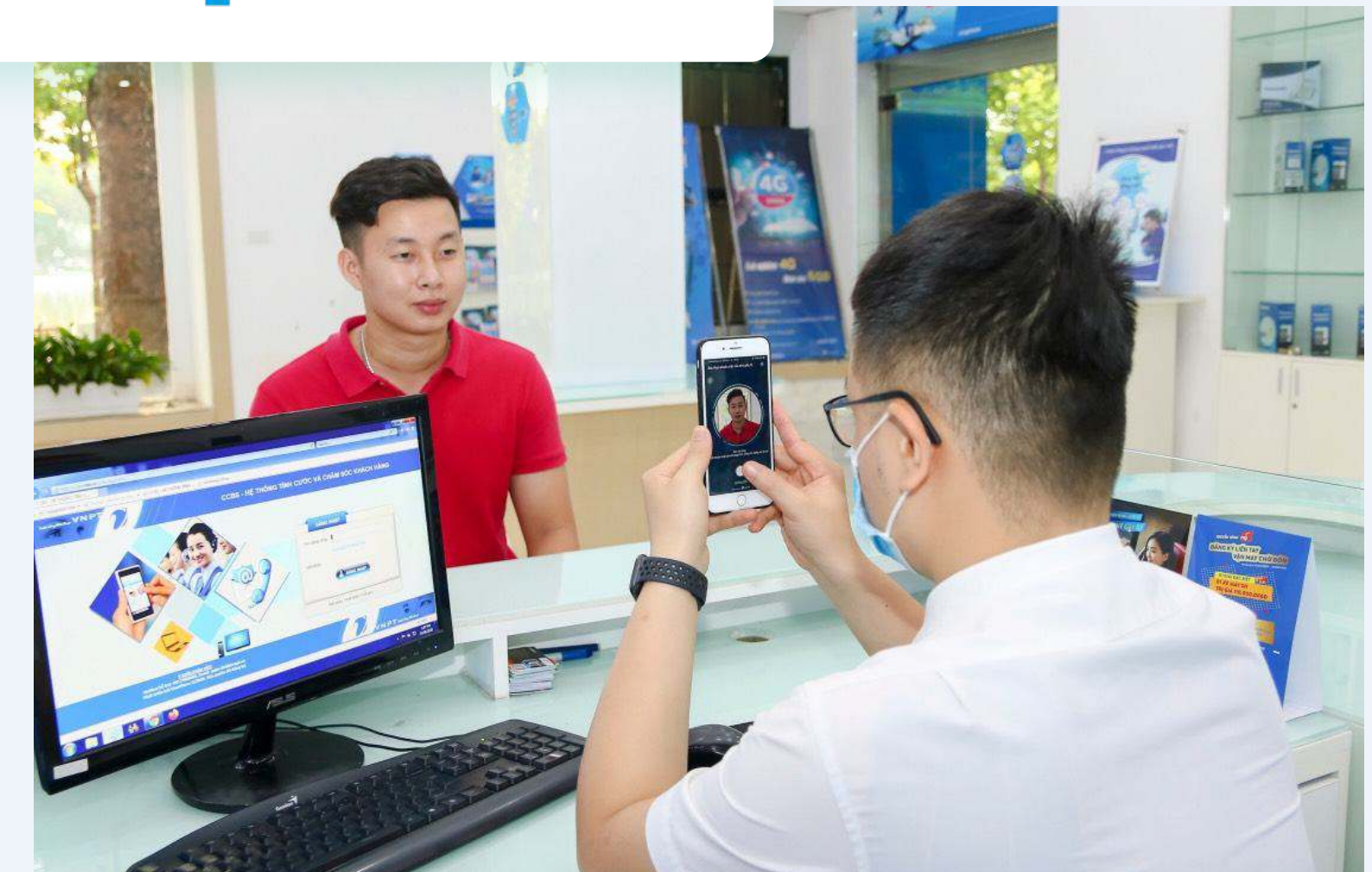
Support the process of registering SIM cards, limiting the problem of Vinaphone's unregistered Sims



Effects

- For distribution agents, after implementation, VNPT eKYC has helped to identify customers who have registered for SIM in order to limit the problem of unregistered and non-existent customers (virtual customers).
- VNPT eKYC also supports correct identification to prevent distribution agents from activating SIMs for inappropriate purposes.
- For owners, VNPT eKYC helps to prevent phone number spoofing as well as to experience 4.0 telecommunications services, minimizing physical contact between customers and Vinaphone staff

vinaphone





OUR VALUES

With VNPT eKYC, we always want to bring values to meet the expectations of our customers



Increase customer experience

Customers can easily make online transactions quickly without having to go to the transaction counter.



Shorten check-in time

It only takes 1 to 2 minutes for authenticated identification instead of 10 to 15 minutes to perform a transaction like before.



Cut-back operating costs

The business's customers are continuously expanding, increasing the efficiency of resources and support time of tellers.



Increase customer experience

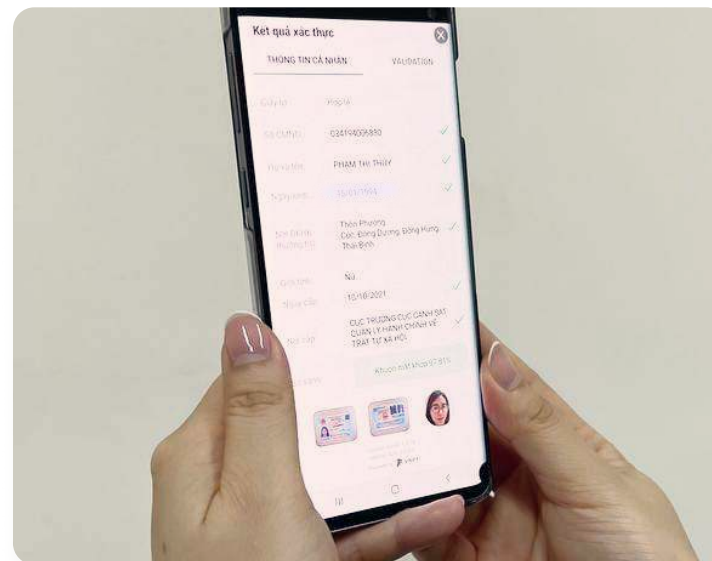
Customer transactions are secured to avoid information leakage and minimize cases of fraud.

Our Technologies



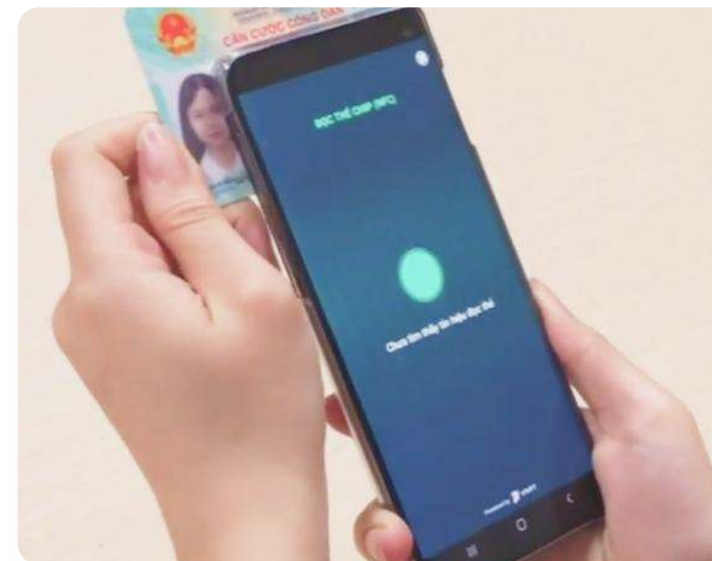
Liveness Detection Technology

Applying AI technology to detect the reliability of personal documents and portrait; determine photos taken directly or through another device or virtual camera



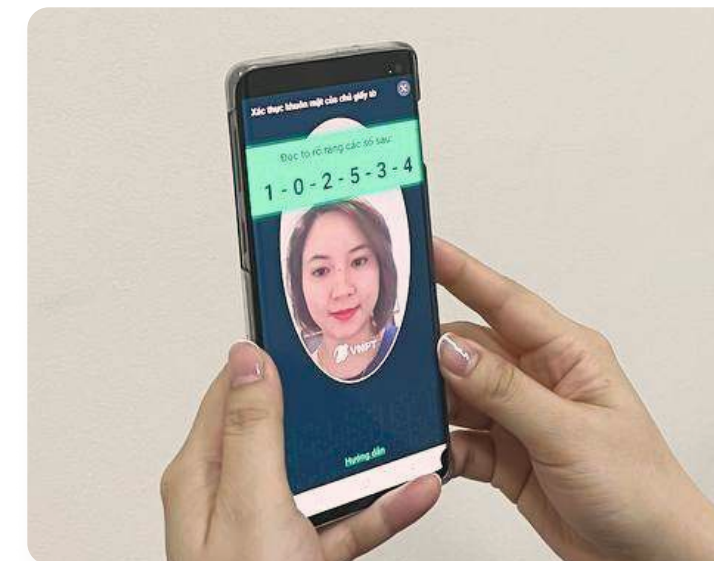
OCR Technology

Applying AI technology to extract and digitize information on personal documents; detect invalid cases



NFC Technology

Using Near-Field Communications (NFC) to read information on ID cards with chip, which increases accuracy and security



Facial biometrics authentication

Integrated Facial Biometric Recognition System with high accuracy



SDK

Supporting cross-platform from iOS 9.0 and Android 4.2 to higher version with easy and fast integration in just a few hours



OUR VALUES

With VNPT eKYC, we always want to bring value meet business expectations



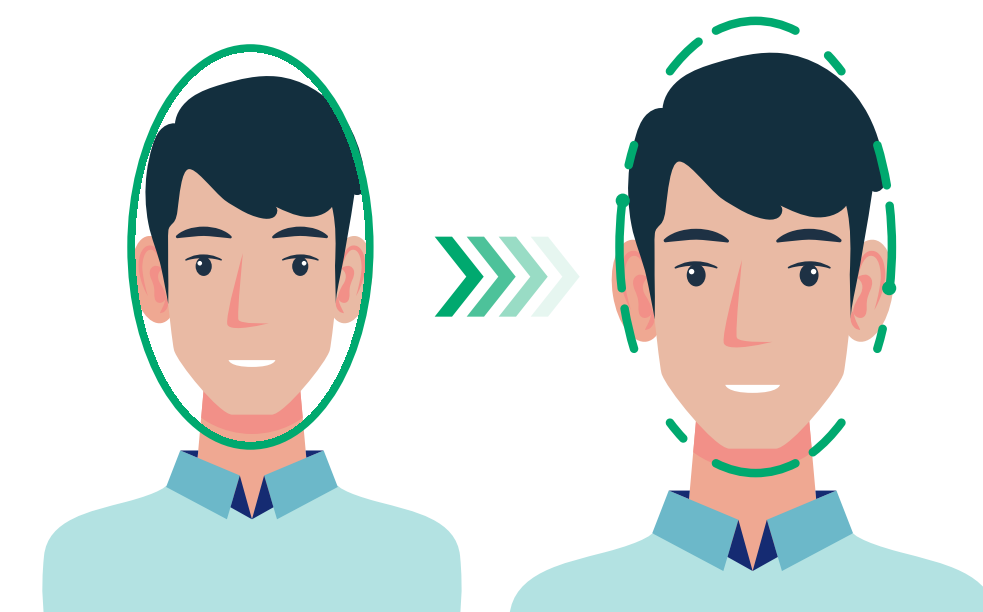
Provide 02 SDK version

- The experience-optimized version helps you convert more customers thanks to the quick authentication process
- The security-enhanced version saves you effort in your risk prevention efforts



The experience-optimized version

This is the result of a great combination of AI and UX, verifying images with just a single photo. Anyone can operate it easily and quickly



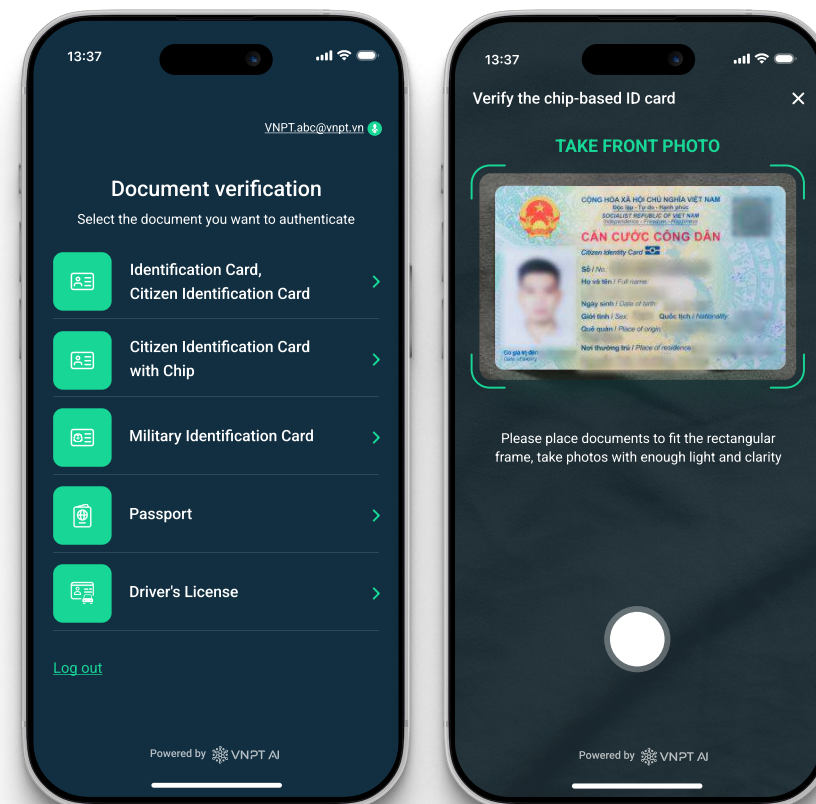
The security-enhanced version

Face authentication is safer and more secure with 3DScan technology, which encodes and detects abnormalities in the process of moving faces into near and far frames, minimizing authentication risks



EXCEPTIONAL FEATURES

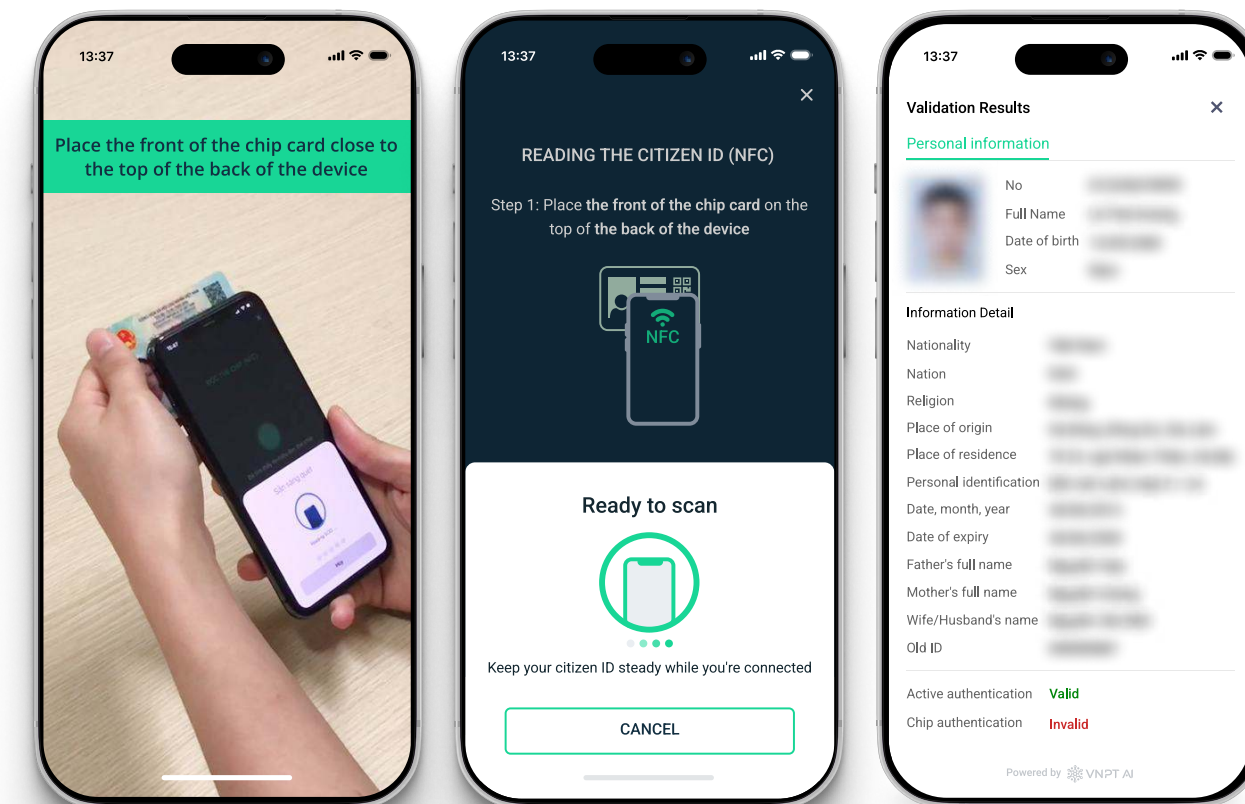
The AI Assistant digitalizes every touch point on all mobile devices and computers



Personal documents identification and extraction

Identify and extract (OCR) most valid personal documents under current Vietnamese law such as:

- ✓ Citizen identity card (all versions).
- ✓ Chip-based citizen ID.
- ✓ Military ID card.
- ✓ Passport (Vietnamese or foreign).
- ✓ Driver license (all versions).



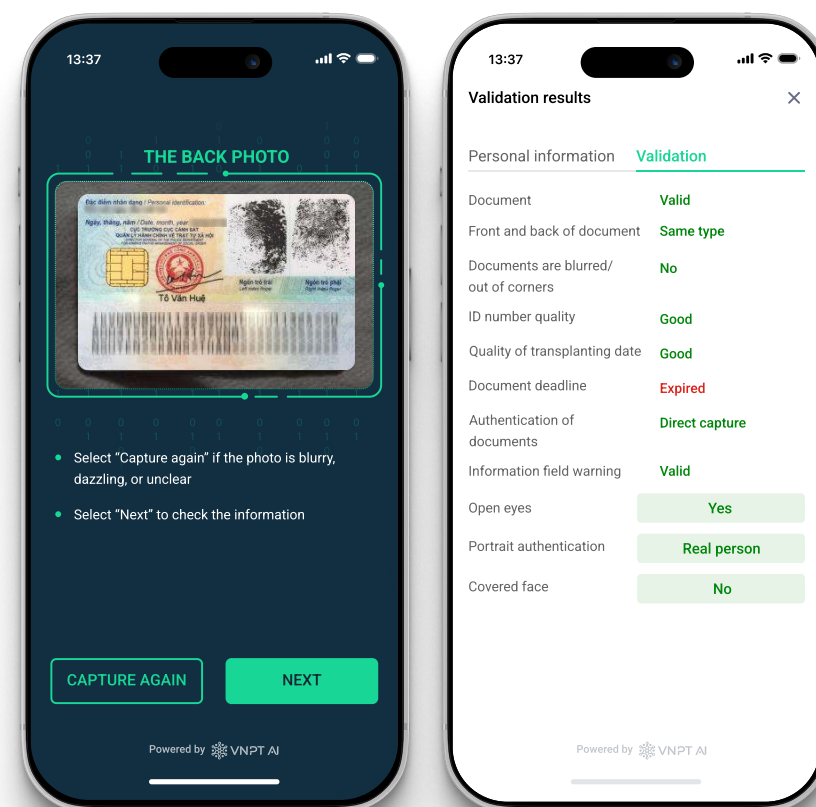
Read information thanks to NFC technology

- ✓ Read the chip card of the new CCCD through NFC proximity technology.
- ✓ The information is read completely and accurately, minimizing the risk of document falsification compared to authenticating documents by image.



EXCEPTIONAL FEATURES

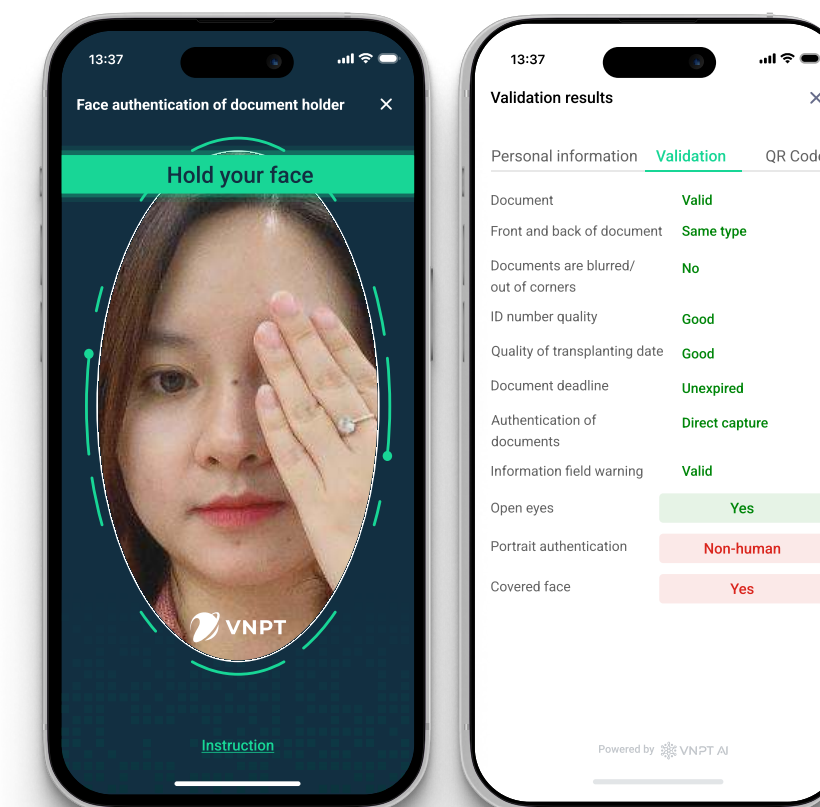
The AI Assistant digitalizes every touch point on all mobile devices and computers



Detecting unsatisfactory personal documents

Guaranteed to detect most cases of documents that are not eligible for information registration:

- ✓ Detect documents that are blurred, damaged, corners cut, erased, etc,...
- ✓ Detection of documents with portrait photos or expired documents.
- ✓ Detect fake documents (in case the input images are photocopied, scanned ID cards, etc,...
- ✓ Check the logic of information on documents to detect abnormalities.



Portrait authentication

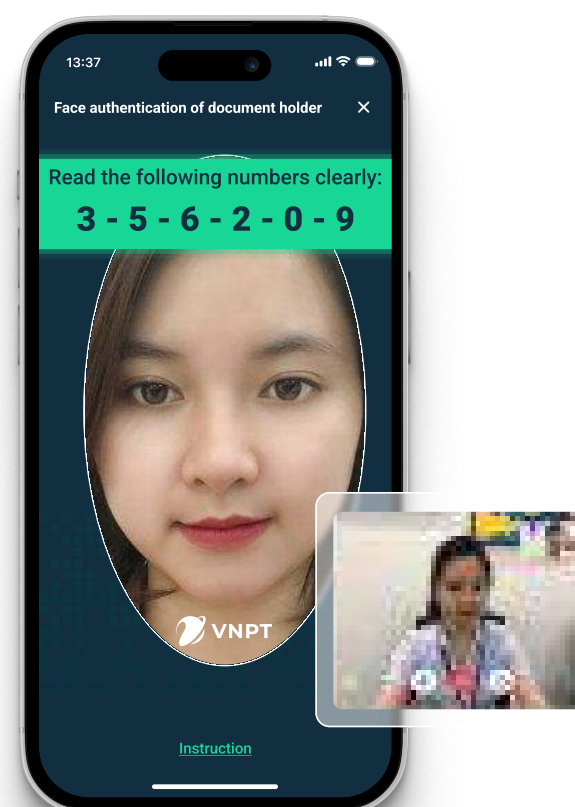
Immediately detect fake portraits and give instant warning:

- ✓ Only confirm customers' selfie photos in real time.
- ✓ Authenticate a person's signs of life and reject fake faces (printed photos, photos displayed on electronic devices, 2D/ 3D masks and non-human faces).
- ✓ Detect faces that fail to meet minimum requirements, obscured faces or faces with closed eyes.



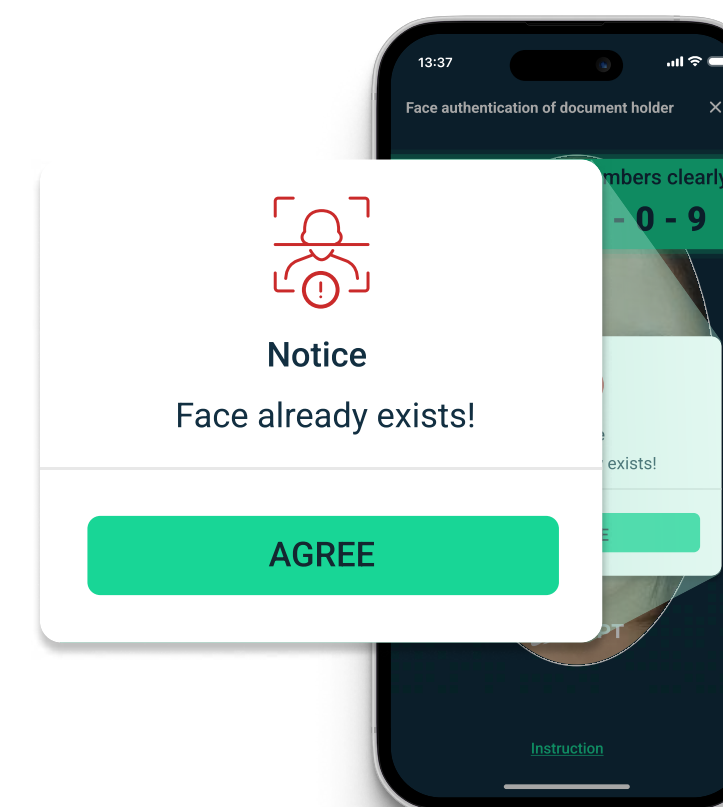
EXCEPTIONAL FEATURES

The AI Assistant digitalizes every touch point on all mobile devices and computers



Enforced authentication via video and voice

Detect cases of deliberately spoofing faces, especially cases of using fake faces (photos, videos taken from devices, masks...) through video calls, face-authentication videos and voice authentication by random number sequences.



Data checking and cross-validation

Build an identity database that helps businesses check and cross-validate data to maximize counterfeit detection as well as ensure user safety.



EXCEPTIONAL FEATURES

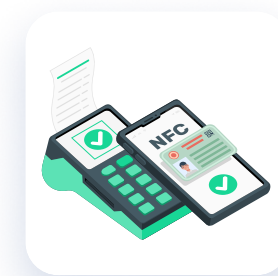
The AI Assistant digitalizes every touch point on all mobile devices and computers



Verify chip-based citizenship with RAR-C06

Detecting 100% of cases of forgery of chip ID card information because the data on the chip card is verified with the RAR-C06 population and citizen identification database of the Ministry of Public Security.

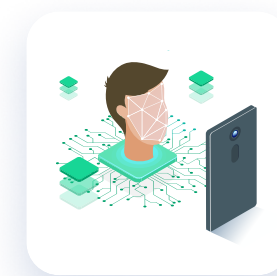
Example of Business Process use VNPT eKYC IDCheck



Step 1

Put the chip-based citizen ID into the chip card reader

Insert the chip-embedded citizen identification card into an app or specialized device that reads chip card information



Step 2

Validate the portrait of the owner

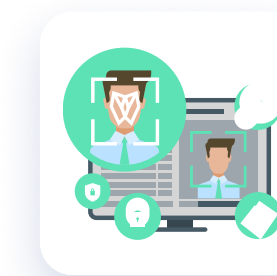
Authenticate portrait and face in chip-embedded card, in biometric database



Step 3

Validate chip-based citizen ID with the Ministry of Public Security

The information in the chip-embedded Citizen Identification Card is authenticated with RAR-C06 of the Ministry of Public Security



Step 4

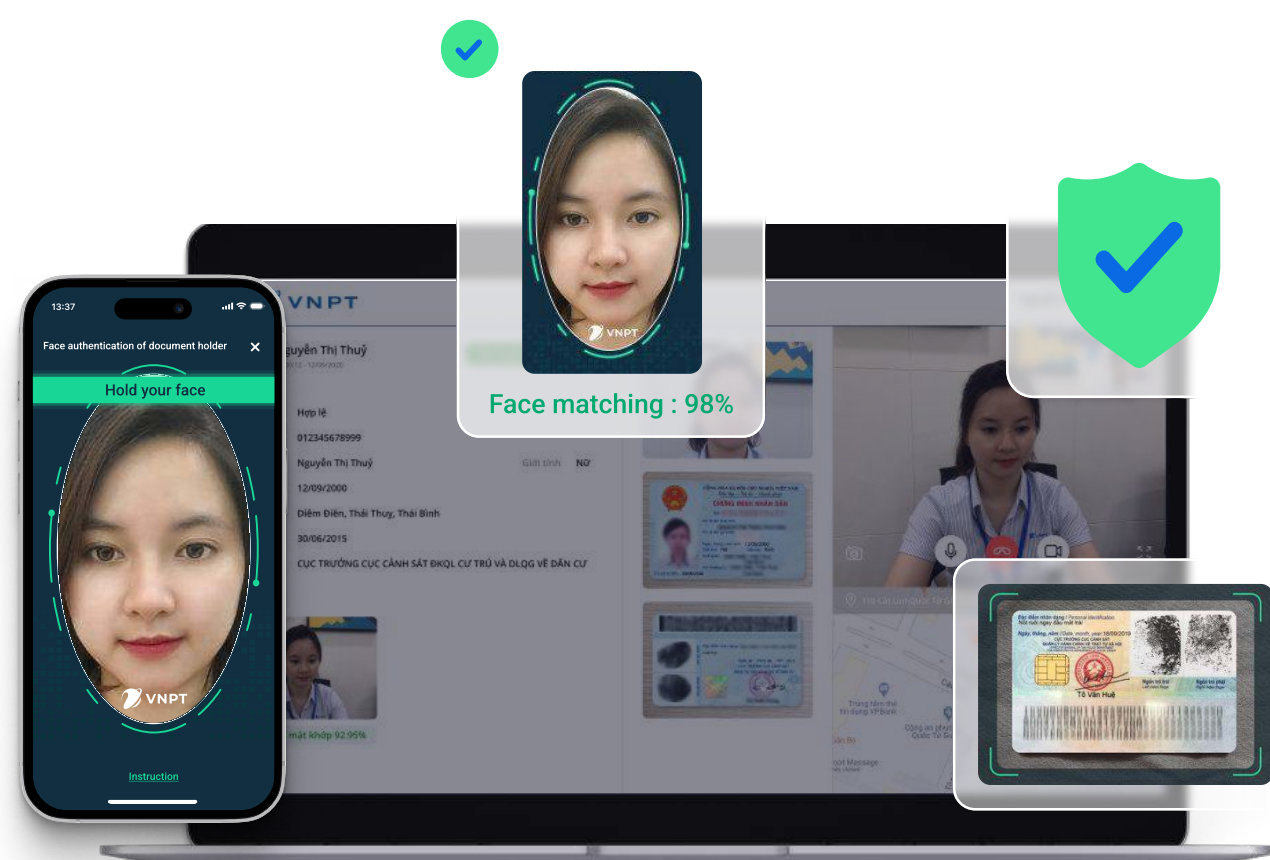
Send validation results to the integrated application

Validation results are sent to the eKYC integrated application, from there to the next transaction for the customer



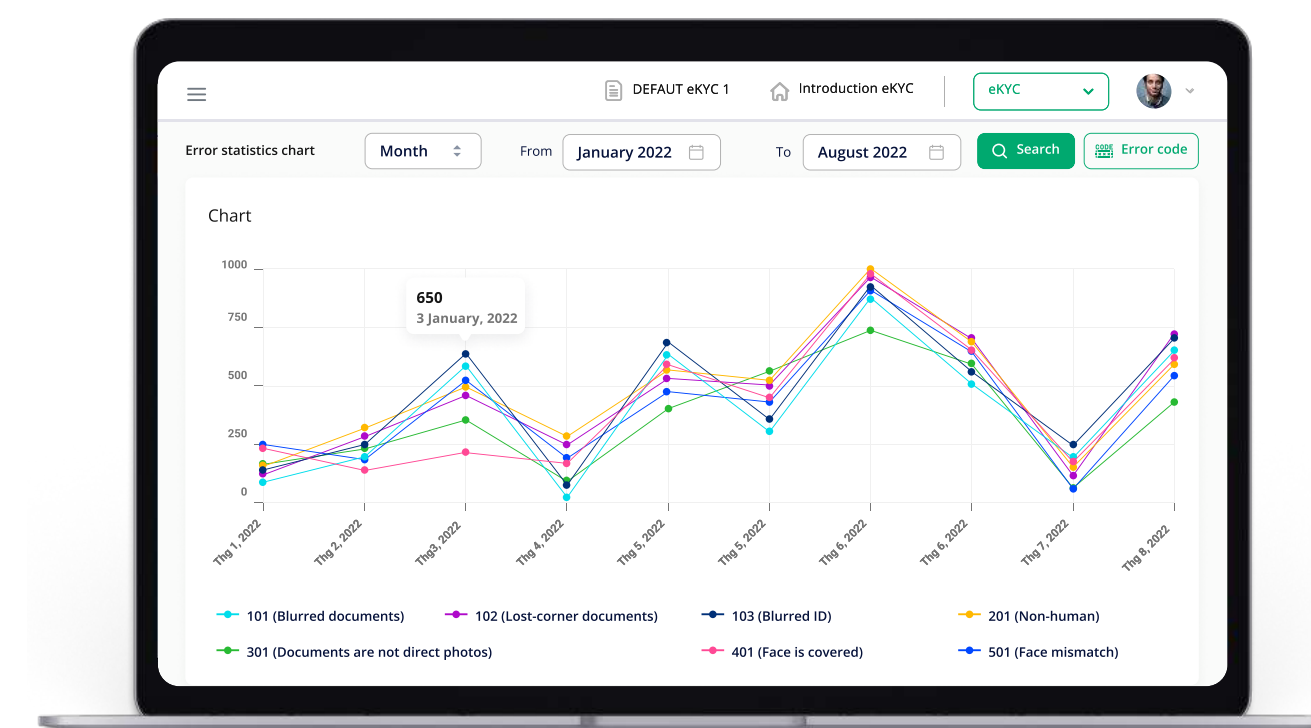
EXCEPTIONAL FEATURES

The AI Assistant digitalizes every touch point on all mobile devices and computers



3-level security to avoid information leakage and theft

Integrated versions are built on the most advanced three-level security model, minimizing high-tech phishing tricks to infiltrate and steal information.



Providing error monitoring tools to promptly react to abnormal incidents

Provide users with powerful tools to statistics and monitor errors according to the selected timeframe, which helps to quickly detect abnormalities and make decisions to prevent or handle them.

WHY CHOOSE US

The leading information technology provider in Vietnam

VNPT is the leading ICT service provider in Vietnam with an extensive network and infrastructure; is an enterprise providing digital solutions based on world-class quality AI technology, highly meeting the digital transformation needs of the Government and businesses.

55

Top 55 Telecommunication Brands worldwide

10

Top 10 Vietnamese IT enterprises

5000+

Talented Information Technology engineer

100+

Experienced AI experts

VNPT eKYC solution is honored to win many prestigious awards



The 3rd prize
Vietnamese Talent



Chia Khoa Vang



Asia Communication Awards



Gold award **Cyber Security Excellence Awards**



Bronze Stevie
Stevie Awards



Top 10 World category
Kiosk-FRVT 1:N



Make in Viet Nam



Sao Khue



Reached ISO 30107-3
(PAD) international
standards assessed by
iBeta (FIDO Alliance)



Top 10
IT enterprises in 2020



Gold award
Globee IT World Awards



OUR CUSTOMERS

We are trusted by top partners





vnFace



vnSocial



Smart Vision



Smart Reader



Smart Bot



Smart Voice



Smart UX



VNPT eKYC



vnCallbot

Thank you!



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