

Mobile ID (Asan Imza) – secure key to the Digital Trade Hub in Azerbaijan and cross-border e-services



XV anniversary international scientifically-
practical conference on public key
infrastructure and
electronic signature issues

«PKI-Forum Russia 2017»

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www.asanimza.az

Global trends to keep an eye on

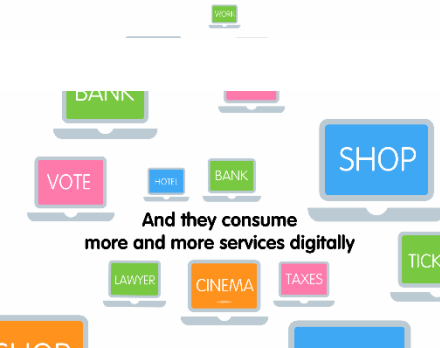
People are going mobile

- ✓ Smartphones and tablets – fast growth ahead!
- ✓ User interface for everything
- ✓ Social distribution happens in hours



Big Data → service innovation

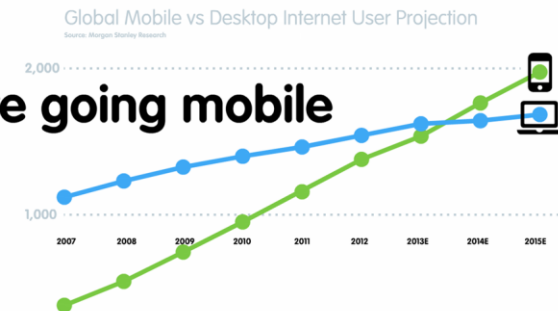
- ✓ Real-time data – uploadable, findable, sharable
- ✓ Processing costs fall rapidly → accessibility improves
- ✓ Data mining and analytics: finding patterns



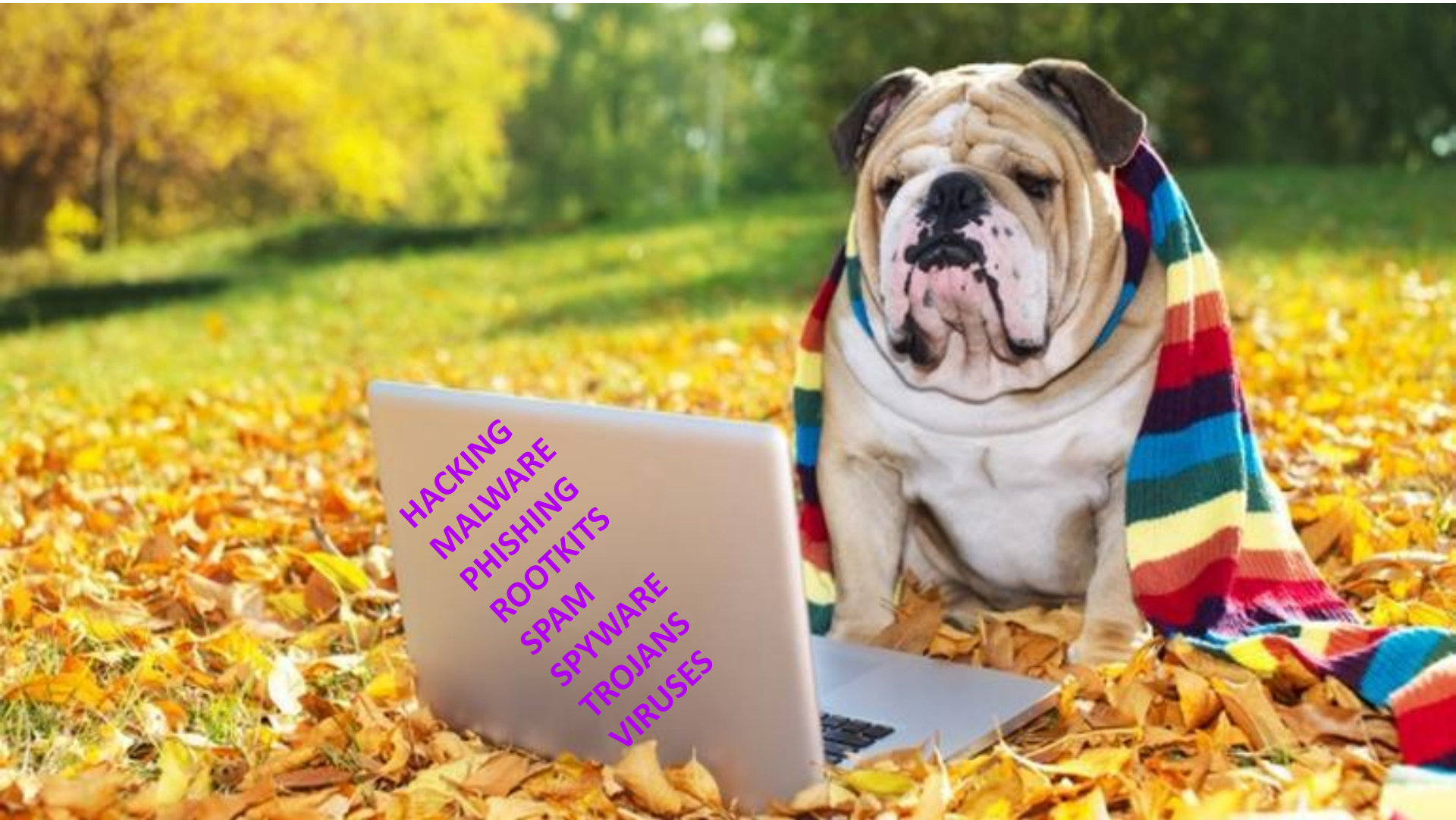
But: cyber threats are intensifying



People are going mobile



On the Internet nobody knows you're a dog!



What is Mobile-ID?

Asan Imza: SIM based personal identification for digital services



Three-factor authentication

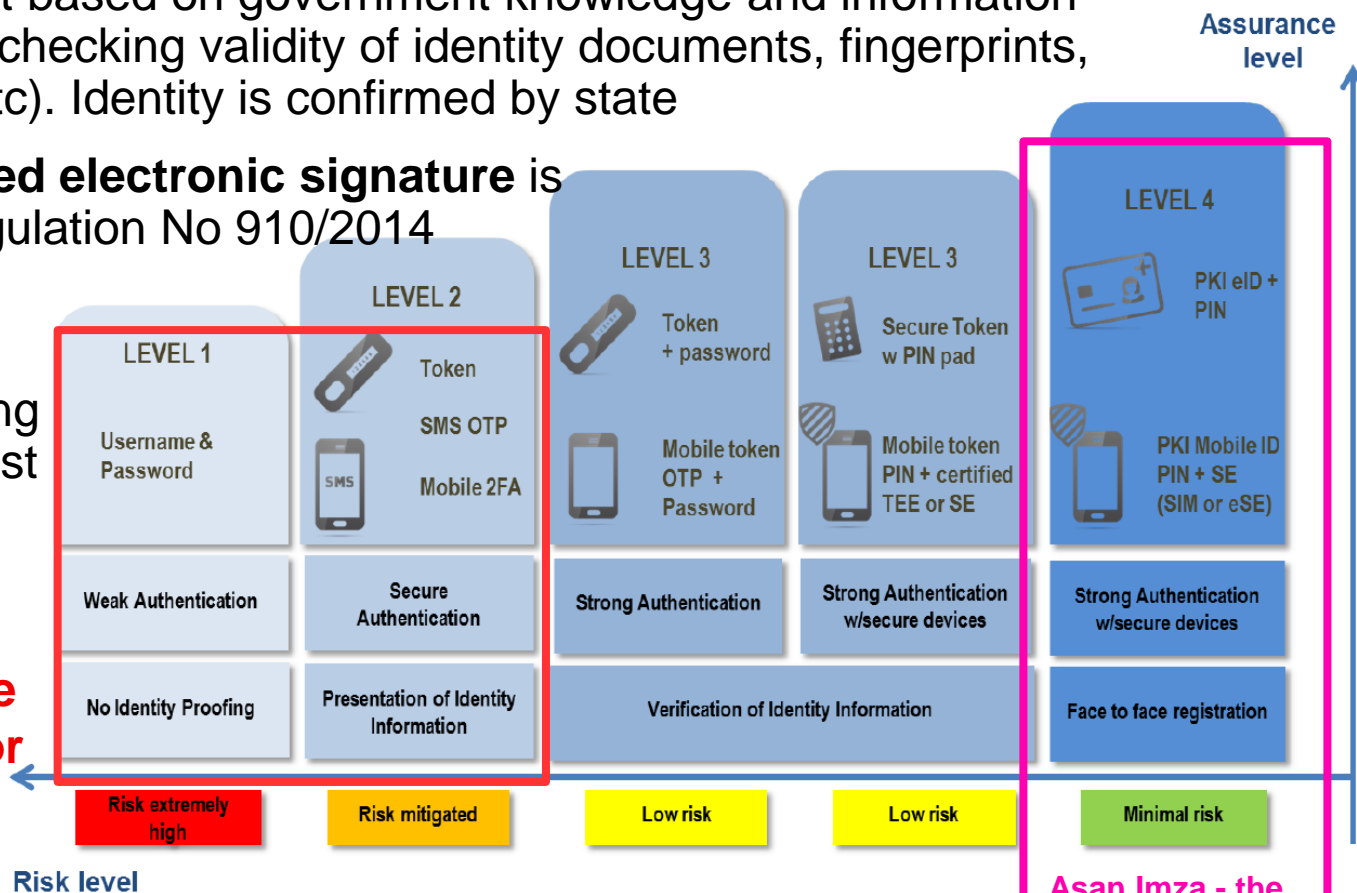
Digital certificates issued by Asan Imza cannot be used without an additional PIN code, meeting the three-factor authentication requirements of:

- ✓ “something you have” (physical SIM card),
- ✓ “something a user is” (biometrics and face-to-face meeting),
- ✓ “something you know” (PIN code).

Asan Imza – the highest level of assurance

- The domain of issuing identity is usually seen as a fundamental government task
- Identity management based on government knowledge and information (population registry, checking validity of identity documents, fingerprints, photo, citizenship, etc). Identity is confirmed by state
- Asan Imza - **qualified electronic signature** is compliant to EU Regulation No 910/2014 (eIDAS Regulation)
- Identification and method for processing mID applications must ensure high level of trust

NIST declares the age of SMS-based 2-factor authentication over



Mapping between (ISO) Assurance levels and authentication methods
 Source: 'Eurosmart position paper – server signing within the eIDAS regulation'

Asan Imza - the highest degree of confidence and the minimal risk

Asan Imza– mID guaranteed & issued by STATE

**GOVERNMENT
services**

**FINANCIAL
services**

**BUSINESS
services**

>95% of services do not need physical presence

IT's me - Jon



AUTHENTICATION



I confirm this with my
Signature



Qualified electronic signature
with qualified digital certificate

TRUSTWORTHINESS
Is in dependence of
the ISSUER of the mID

STATE LEVEL
issued mID creates state &
international level of TRUST

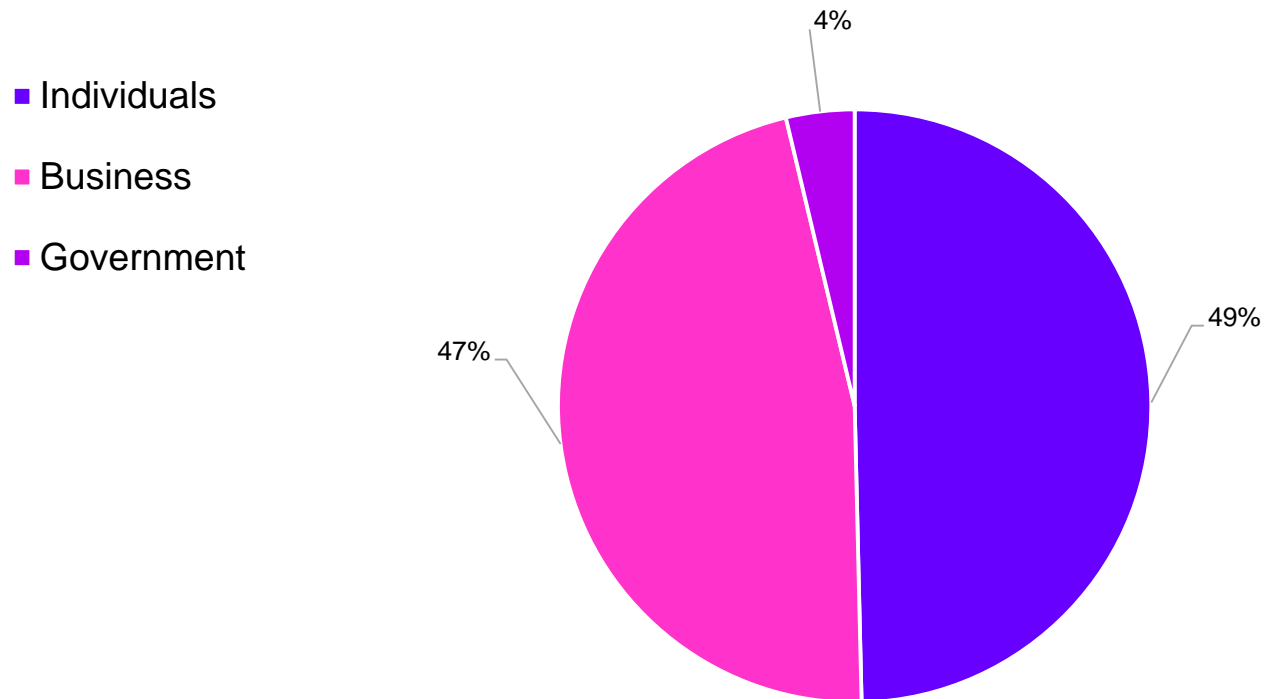
Azerbaijan Asan Imza in 2017

- ✓ Pilot launch in **September 2013**, product in **February 2014** as the first SIM based digital identity in Azerbaijan
- ✓ Issued by **all major mobile operators**: MNO Azercell (Telia), Bakcell and Azerfon
- ✓ **Asan Imza in numbers**:
 - ✓ Issued more than **370 000** Mobile-ID certificates
 - ✓ More than **25** million transactions and Mobile ID signatures
 - ✓ Over **90%** of tax declarations submitted electronically (in total 400 thousand taxpayers in Azerbaijan)
 - ✓ over-state e-service using Asan Imza in process of appointment of authorized persons and labor contracts registration
 - ✓ Around **500** different e-services in Azerbaijan

Who is the mID user?

- ✓ there have been issued around **370 000** Asan İmza certificates in the country.

Asan İmza User Group



The most popular e-Services used with Asan İmza

✓ Tax services

Ministry of Taxes of Azerbaijan holds the premier position among other public service providers. 63 of 457 public e-services are provided by the Ministry. It is one of the few government authorities rendering its services to the users also via a dedicated tax portal (www.e-taxes.gov.az). In general, till March **2017** taxpayers conducted around **10 MLN.** tax operations using their Asan İmza via the e-Tax Portal.



✓ Labour and social protection e-services

The second largest figure of using e-services with Asan İmza is related with the e-services of labor contract registration for employers and employees rendered by Ministry of Labor and Social Protection of Population and e-services of State Social Protection Fund. The cumulative number of usage of these e-services with Asan İmza made approximately **1.5 MLN. in 2015.**

✓ **e-Custom declaration** The newly introduced e-customs declaration service allows citizens and businessmen to electronically declare their imported goods and transport means using mobile ID (Asan İmza) without the need to physically apply to any customs broker/customs department as it earlier used to take place. The whole process is as easy as logging in to the e-Government portal using Asan İmza, filling in the e-declaration and signing the ready declaration with again Asan İmza. Since only **April 2016** more than **500 000 signed** e-declarations have been sent.

Innovative services with Asan İmza

✓ Declaring taxes by phone: 195 Call Centre

Taxpayers can fill in and submit their simplified tax declarations by calling 195 Call Centre. There is even no need to use PC or Internet for this purpose; the operator of Call Centre will guide the taxpayer throughout the overall process only asking to confirm the ready declaration with his/her PIN2 to submit it.

✓ Expanding the list of services at 195 Call Centre and integrate other popular services via other call centers with Asan İmza



Client identification during call to bank or public service call center.

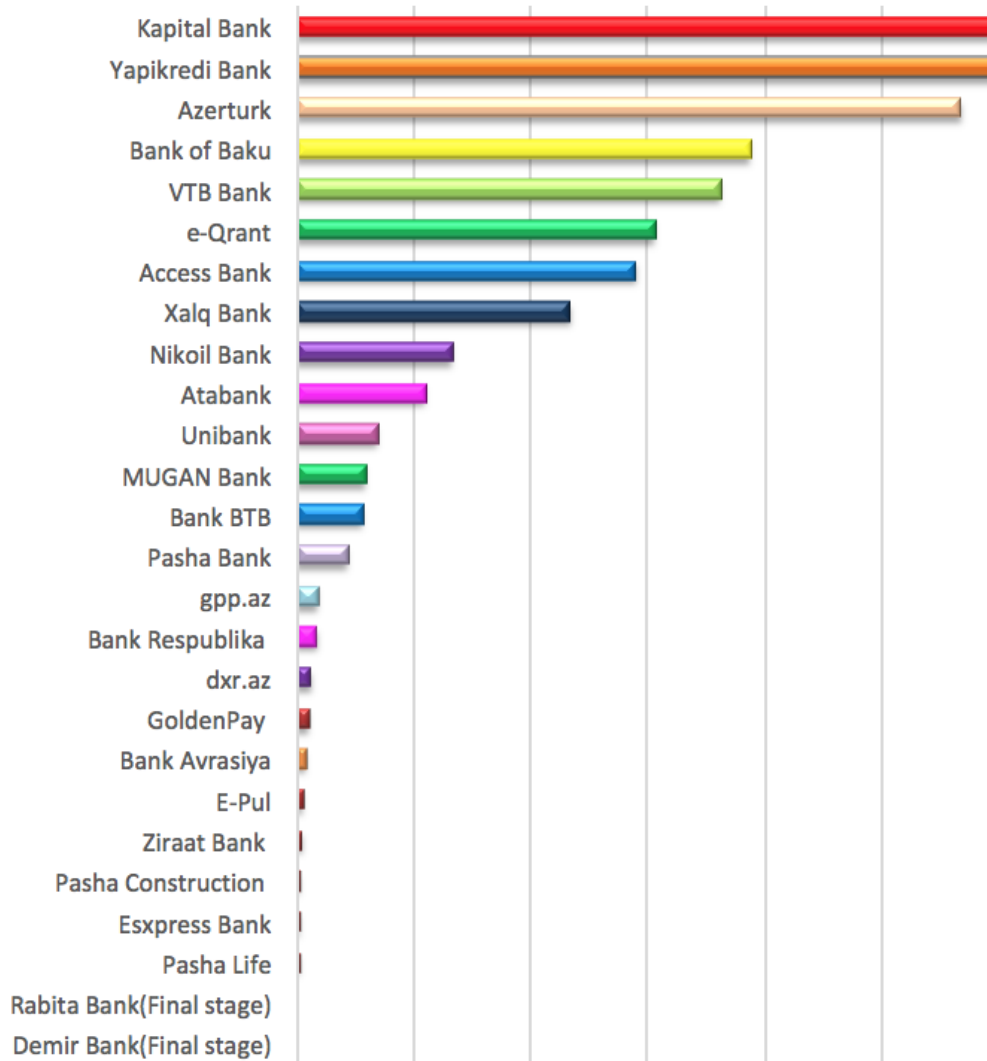


Mobile-ID allows service provider to positively identify caller.



Asan İmza – secure key to financial services (KYC)

Usage of Asan İmza e-systems within private service providers



ABOUT BANK SYSTEM RULES GUIDELINE

Welcome to internet banking service of Azer-Turk Bank

ASAN İMZA

Asan İmza Number +994

Asan İmza User Id

SIGN IN

Unibank Mobile
BANK SİZİN TELEFONUNUZDA
TƏHLÜKƏSİZ • SÜRƏTLİ • RAHAT

Available on the App Store
Get it on Google play

Asan Imza is easy

All you need is a mobile phone with secure SIM

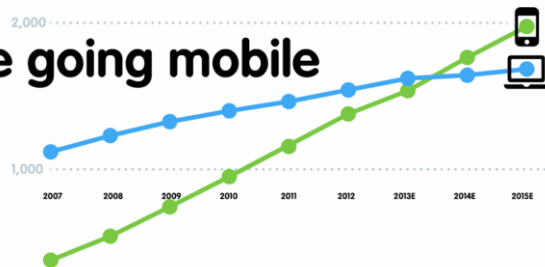


Mobile-ID requires no device upgrades on the customer side.



Global Mobile vs Desktop Internet User Projection
Source: Morgan Stanley Research

People are going mobile



eID vrs mID



NO Card reader



NO ID card



NO E-Token



NO Drivers & PC Soft

Definitive data and analysis for the mobile industry

GLOBAL DATA

Mobile connections, including M2M

Jan 2016

7,639,191,938

▲ 6.10%

Unique mobile subscribers

Jan 2016

3,782,324,103

▲ 5.35%

Revenue/year

FY 2014

\$1.06T

▲ 1.99%

ARPU/month

FY 2014

\$10.37

▼ -4.50%

Source: GSMA Intelligence 2016, current year-end data except interpolated subscribers and connections

Asan Imza – unified authentication both for public and private sector services





BEST
Solutions

DIGITAL TRADE HUB of Azerbaijan – PPP Government Start-up for cross-border e-services

B.EST Solutions has packaged the **BEST** part of our brains and expertise into selected products and solutions.

Azerbaijan Digital Trade Hub

- ✓ President of the Republic of Azerbaijan issued a Decree to strengthen the leading position of the Republic of Azerbaijan as a key **Digital Trade Hub (DTH)** in the region.
- ✓ “Azerbaijan Digital Trade Hub” will enable foreign & local businessmen to prepare and sign documents and agreements electronically, and perform electronic services in real-time.
- ✓ The Decree sets measures necessary to achieve mutual recognition or validation of electronic signatures with various countries, which will facilitate e-commerce transactions executed by entrepreneurs, and pursue promotion of Mobile ID (“Asan Imza”), one of innovative products of the country accepted at global level.
- ✓ One of the unique attributes of the DTH Portal will be its arrangement based on public-private partnership principle and corporate governance standards. Public-private partnerships (PPP) have been and will continue to be a key enabler of digital transformation for governments.



DTH' Advantages

Digital Trade Hub (DTH) of Azerbaijan offer wide range services for regional economic and trade facilitation. The main advantages of covered services is next:

1. First Governmental e-Trade and e-Commerce Start-up to support local SME export and regional cross-border e-services under the management of **the Center for Analysis of Economic Reforms and Communication**.
2. DTH integrated with global eCommerce players like Amazon, eBay, Alibaba, etc.
3. Cross-border e-services (B2B, B2G services, custom operations between DTH' partner countries, Company online-registration, bank account online, etc). New Regional Digital Single Market for Silk Road, for GUAM and cross-border e-services with EU courtiers.
4. Developing strong cooperation between mResidency in Azerbaijan and eResidency in Estonia. Validation schema of e-signatures between DTH' partner countries. Following eIDAS standard.
5. The First e-Trade and e-Commerce portal guaranteed by the Government. All transactions are legally binding according to DTH' partner country legislation.
6. Single Window for SME (PPP) providing all needed international standards (certificates, financial transactions, etc).
7. Latest and modern technology and international standards: Blockchain, M2M, SIM card based Mobile Identity, PKI
8. One of the unique attributes of the DTH - its arrangement based on Public–Private Partnership principle and corporate governance standards. Private companies involved into development of platform and building cross-border e-services.

DTH opportunities and challenges

- ✓ DTH is a Public-Private Partnership consortium of international and regional organizations, national entities, government institutions, transport and logistic companies and banks. DTH led by the Center for Analysis of Economic Reforms and Communication that presents more than 1500 local manufactures and SME from Azerbaijan and soon from other countries including EU, Silk Road and EU Eastern Partnership countries. Together, we foster inclusive development by promoting the uptake of e-commerce.



\$25.3 trillion: the estimated worth of the global e-commerce market in 2015



47% of the people around the world could theoretically make online purchases from different locations.



850 million: the number of online shoppers in the world's top 10 e-commerce markets



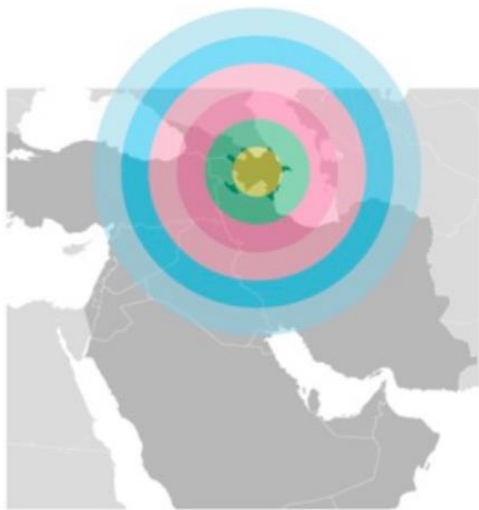
3.5 billion: Internet users across the world in 2016

Sources: UNCTAD and ITU

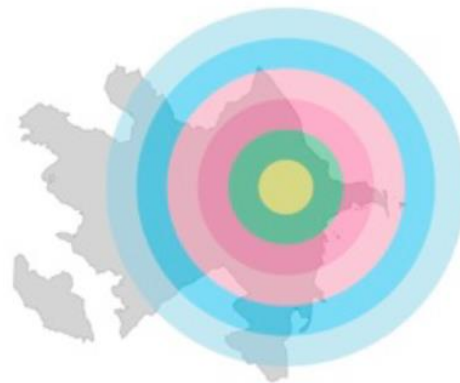
- ✓ DTH can be a powerful driver of economic growth, inclusive trade and job-creation across Azerbaijan. It can also help micro, small and medium-size enterprises transition from the informal to the formal sector and from domestic to international markets, to unite efforts for more effective export and marketing of the products, to enjoy the benefits of cross-border digital services and to create Regional Digital Single Market.

Goals of DTH

Becoming an economical hub of the region.



Becoming a model on modern governance and a case-study for other institutions to follow



Attracting investments from foreign capital.



mResidency with Asan Imza

- ✓ **mResidency** program in Azerbaijan - the issuance of Mobile ID (“Asan Imza”) to non-residents through diplomatic representative offices and consulates.
- ✓ The aim of the project to issue Asan Imza to everybody who is interested to start business in Azerbaijan, to invest to the country and to use all opportunities of online services in Azerbaijan being abroad.
- ✓ All m-Residents of Azerbaijan will:
 - Establish an Azerbaijani company online within a day
 - Administer the company from anywhere in the world
 - Conduct e-banking and remote money transfers
 - Have access to international payment service providers
 - Digitally sign and transmit documents and contracts
 - Manage accounting records and declare Azerbaijani taxes online
 - etc....



**WELCOME
TO THE DIGITAL
WORLD OF
AZERBAIJAN**

**Anywhere, anytime, anyhow
any service to anybody**

Our main goal is to create possibilities for citizens to use easy, secure e-services without limitation of place, time and devices and confirm operations with their mobile signature.

“Made in Azerbaijan” - Azexport.az portal – first national B2B and B2G market place

Asan İmza is integrated to Azexport.az portal - unified database of goods produced in Azerbaijan Republic

- Gives a broad opportunities to entrepreneurs, who want to register their products and services on portal
- Easier way of authorization without any additional registration.
- Easier way to add all pertinent information about the relevant product or service to portal.
- 3 mln. Transactions, 0.5 MLN unique page visits (azexport 40%, alibaba 35%, allbiz 30% others 50%)

More information at
www.azexport.az

AZEXPORT.AZ

Categories: Home, Lights & Construction > Agriculture & Food > Machinery, Industrial Parts & Tools > Metallurgy, Chemicals, Rubber & Plastics > Packaging, Advertising & Office > Auto & Transportation > Electronics > Telecommunication & IT products/solutions > Electrical Equipment & Components > Gifts, Sports & Toys > Bags, Shoes & Accessories > Services

Asan İmza (Mobile Identity)

www.asanimza.az

WELCOME TO THE DIGITAL WORLD OF AZERBAIJAN

Anywhere, anytime, anywhere any service to anybody

Asan İmza (Mobile Identity)

★★★★★ 0 reviews Write a review

Seller: B.EST SOLUTIONS MƏHDUD MƏSULİYYƏTLİ TƏMİYYƏTİ

Product Code : Asan İmza

Availability : In Stock

By agreement

Ex Tax:By agreement

Qty 1 Add to Cart

Like Share 0 Tweet

Made In Azerbaijan

Partner Panel

ASAN İMZA

+994 Asan İmza nömrəsi

Asan İmza İstifadəçisi ID

İstifadəçisi ID-sini göstər

Davam et

Azexport.az portal integrated with Global e-Commerce platforms all over the world

01 Alibaba

02 Ebay

03 Allbiz

07 – ...
Amazon



04 TradeKey

05 EC21

06 AZEXPORT

Azexport.az – orders to the subscribers: 300 mnl \$

Division of export orders placed with the Azexport.az portal in the first quarter of 2017, by countries

Azexport presents

Division of export orders placed with the Azexport.az portal in the first quarter of 2017, by countries

Azexport.az portal received export orders from 32 countries in the first quarter of 2017. Apart from neighboring countries such as Russia, Turkey, Iran and Kazakhstan, the portal received order from various countries across the world including the United States, African countries such as Togo and Benin and others (Denmark, France, Latvia, Belarus, Moldova, Romania, Tajikistan, etc.). The top 8 countries, which used the services of the Azexport.az portal are described in the infographic presented in page 8.

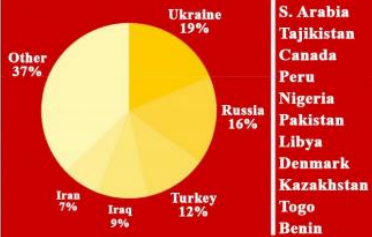
Amount of export orders placed with the azexport.az portal in the I quarter



Orders placed with azexport.az portal in March of 2017

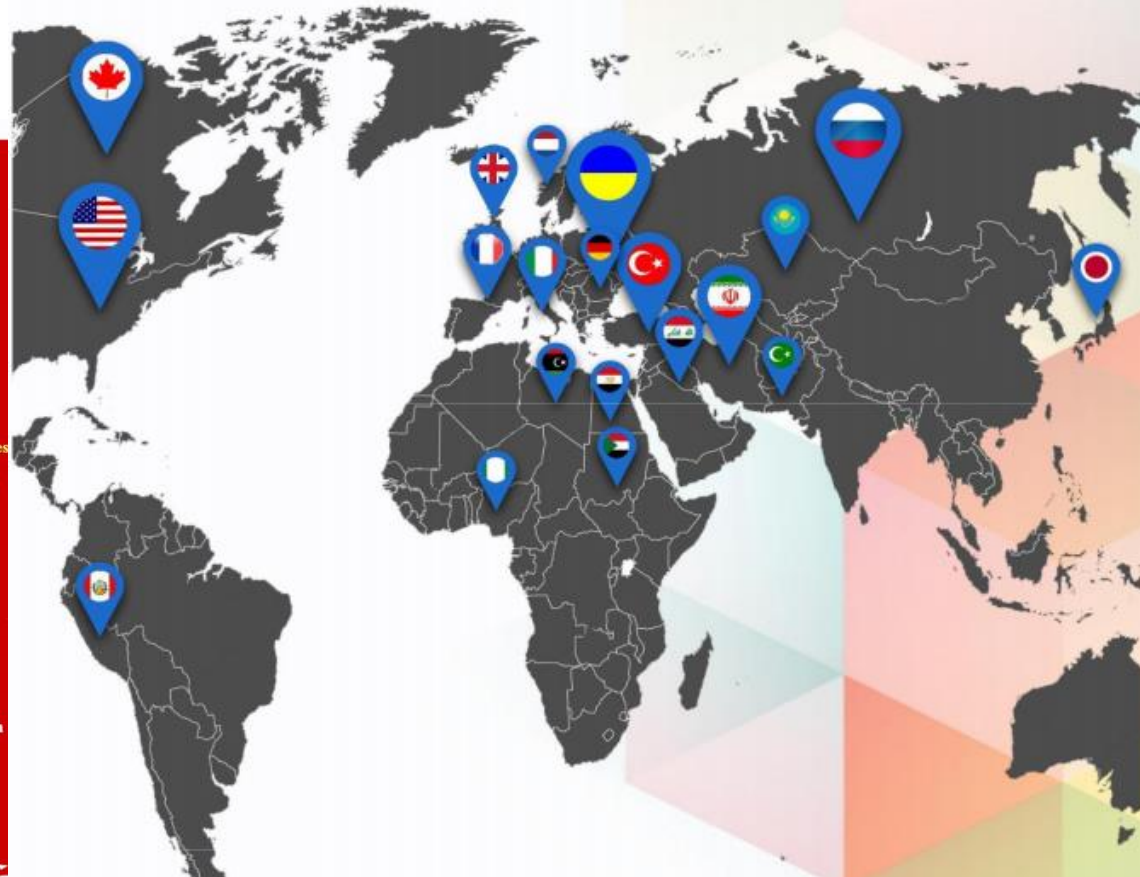
www.azexport.az

Division by countries



In March, Azexport received order from 20 countries across the world.

GEOGRAPHY OF EXPORT

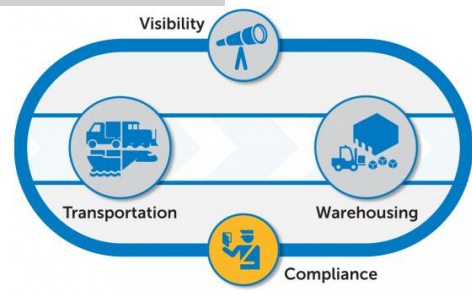


www.iqtisadiislahat.org | www.ereforms.org | www.ecoreform.az



Source : azexport.az

Digital Signatures' recognition process between Azerbaijan and Russia and other countries – base for cross-border e-services



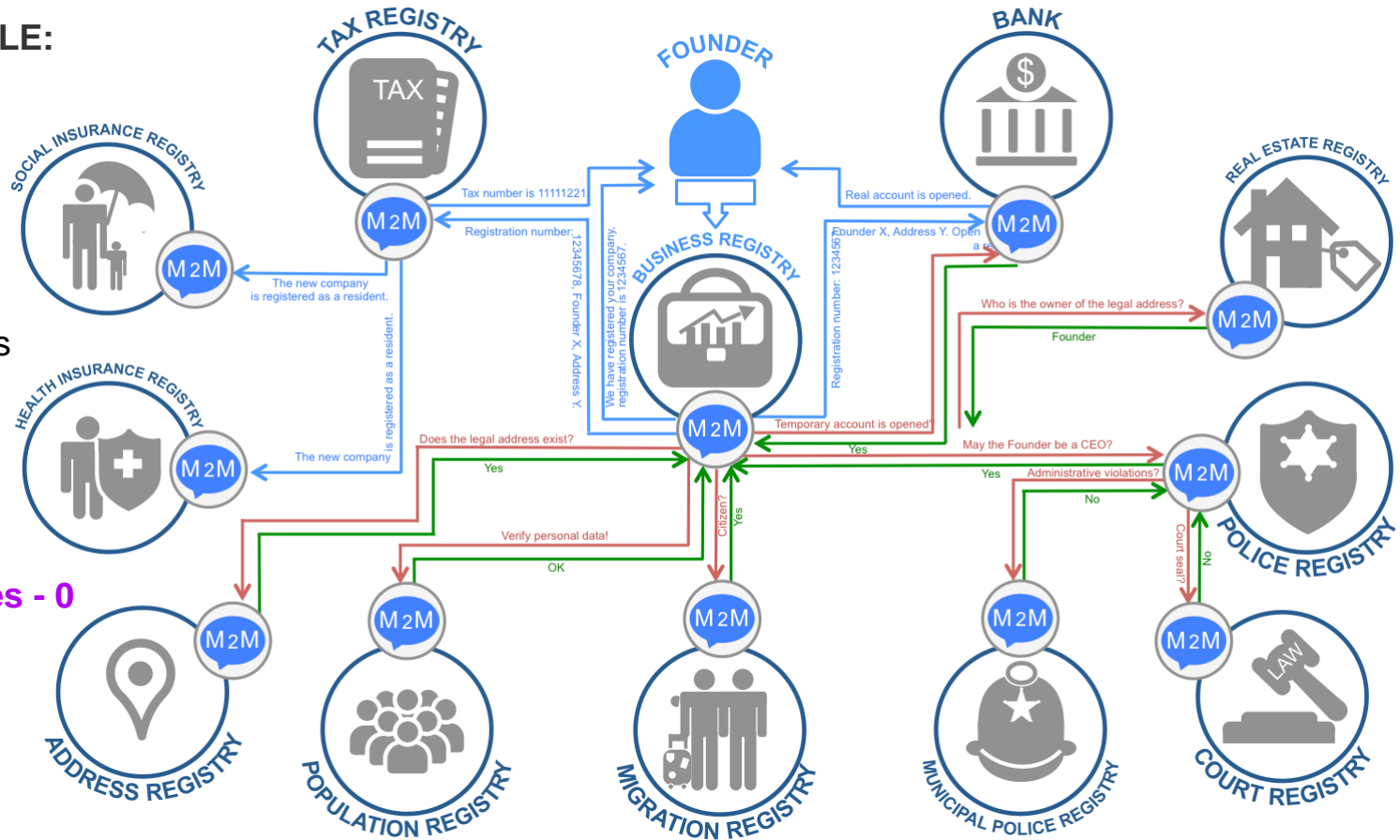
DTH – blockchain solution – Secure Data Exchange Technology with Mobile ID

PROCESS EXAMPLE:

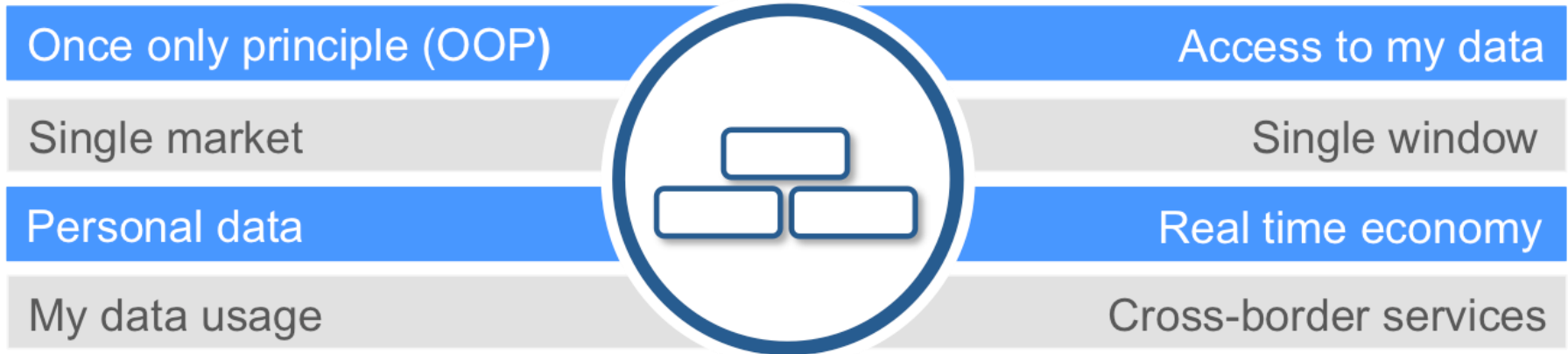
"Company registration in DTH"

Automated process between 12 systems

Duration - 1 min
Involved employees - 0
Delivery costs - 0
Papers - 0



DTH – Automatically Documented Transactions inside Azerbaijan and between different countries



All data transmitted through DTH have:

- ✓ an Mobile Electronic Signature (Asan Imza) incl. mResidency,
- ✓ time stamp,
- ✓ log file and
- ✓ can be used as an official document

DTH challenge

CHALLENGE

Organize data exchange between different entities information systems without human intervention, automatically.

CONDITIONS

Since information systems automatically execute an algorithm (program) and cannot independently evaluate the reliability of information, means that the exchanging data must be securely protected. In order to be able to investigate unusual situations and to identify the perpetrators, the log file with the transaction history must have an official status.

SOLUTION

Encryption - the content of exchanged messages are available only for the sender and the receiver.

System authorization - both, the sender and the receiver systems can be 100% sure, that on the other side is a system, which they need to communicate with.

Electronic signature - all transactions are signed and official documents. As they are signed in accordance with the law, they can be used in court.

Logging - official acts of data transmissions, signed and time stamped by parties are made automatically and they can be used in court. The sender and the receiver store these files in their system and can always trace all operations. Users have full control of their log files.

Decentralization - data moves directly from the sender to the receiver. All functions are performed by the application and without any participation of central server or other intermediaries. This means when the communication begins, user A application connects through the protected channel directly with user B application.

Vendor neutral - the ability to quickly interfaced with any platform.

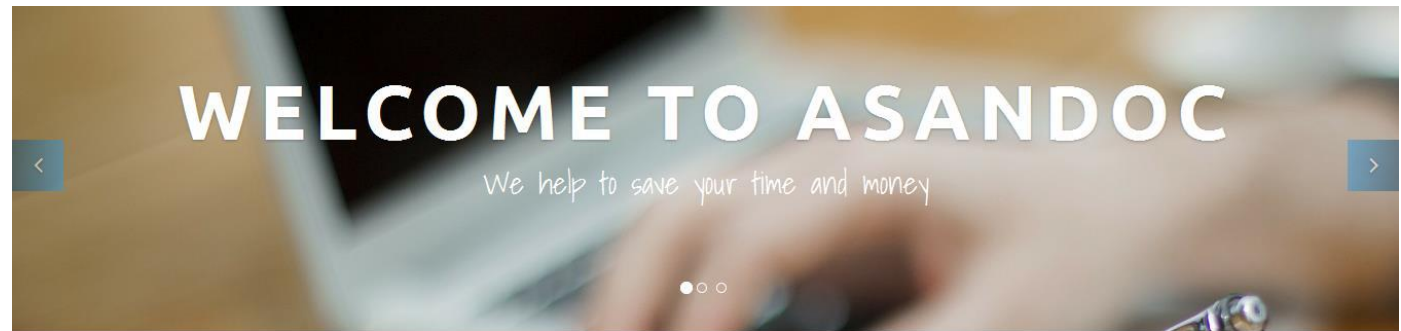
ISESCO BESTDOC Portal – a cross-border corporate platform for digital signature

- ✓ ISESCO BESTDOC PORTAL, claiming to be the first ever m-signing and authentication service in the ISESCO countries and globally as the best practice of innovative document management system for international organisations, aims to export the paperless society experience and enables sharing and m-signing of documents in any format underpinned by strong user authentication.
- ✓ **Islamic Educational, Scientific and Cultural Organization (ISESCO) BESTDOC PORTAL** uses e- & m-signature and authentication technology that aims to be at the forefront in the mobile signature world.
- ✓ Introduction to the project was in November 2015 at ISESCO annual meeting in Baku. Agreement signed in November 2016.



AsanDoc – over-the-country e-&m-signing portal

- Works are underway on creation of a brand-new online document storage and e-&m-signing portal which will be available to all Asan İmza (Mobile ID) users in our country and will enable them to store, sign and exchange their documents using the portal.
- The service is launched both as a business solution for corporate customers as well as for individuals who wish to benefit from the functionality provided on the portal.



ABOUT ASANDOC

One of the main differences between customary identification documents like passports and digital identities comprised of certificates stored in an appropriate CA and private keys stored on either a smartcard (Raqamsal ID-kart) or a SIM-card in a mobile phone (Asan İmza or Mobile ID) is that the latter have the function of giving signatures. Saving both time and money, as you can sign electronic versions of documents without printing and shipping hard copies, it is also secure, as both the identity of the signer and the authenticity of the signature are guaranteed by respective certificates. Only a signature given with a certificate valid at the moment of signing is valid itself, which is why an appropriate service is available to verify the validity of a certificate in real time. Digital signatures can be used for confirming payments in internet banks, using services of state institutions or private enterprises online, concluding agreements with business partners, etc.—basically anything for which you have customarily written your signature as the statement of intent.

ASAN İMZA

AZ ID Card

Sign In

Mobile number

User ID

LOGIN

Are we well aware of mID?

Are You Turtle? Live You 300 Years?



*Appreciate your time, nerves and money.
See what a clever and successful person use!*



Asan İmza – Happy to share





My government
is always
with me

www.asanimza.az