



ЭРҮҮЛ  
МЭНДИЙН ЯАМ



ЦАХИМ ХӨГЖИЛ,  
ХАРИЛЦАА ХОЛБООНЫ ЯАМ

unicef   
НҮБ-ын Хүүхдийн Сан



ЦАХИМ  
ЭРҮҮЛ  
МЭНД



**UCHRAL Nyam-Osor**

MEMBER OF A PARLIAMENT,  
MINISTER OF DIGITAL DEVELOPMENT AND  
COMMUNICATIONS

# DIGITAL TRANSFORMATION IN MONGOLIA

2024.04.08-09



2022

THE FIRST 10 YEARS

2030

SECOND 10 YEARS

MINING TO MIND

2040

THIRD 10 YEARS

2050

NEW RECOVERY POLICY

Vision **20**/**50** LONG TERM DEVELOPMENT POLICY



BORDER PORT



ENERGY



INDUSTRY



URBAN AND RURAL



GREEN DEVELOPMENT



PUBLIC PRODUCTIVITY



**.01** CURRENT SITUATION

**.02** POLICY AND IMPLEMENTATION





2008

NATIONAL PROGRAM TO ESTABLISH REGISTRATION AND INFORMATION UNIFIED SYSTEM

2009

NATIONAL DATA CENTER

2010

NATIONAL PROGRAM TO ENSURE INFORMATION SECURITY

2011

NATIONAL PROGRAM FOR THE HIGH SPEED BROADBAND NETWORK

2011

LAW ON ELECTRONIC SIGNATURE

2012

NATIONAL PROGRAM FOR E-GOVERNANCE

2012

ELECTRONIC ID

2013

E-KIOSK MACHINE

2015

ELECTRONIC SIGNATURE

2015

DIGITAL TELEVISION

2017

X KHUR

2018

DAN

2019

ESTONIA COPERATION

2020

E-MONGOLIA 1.0

2021

DIGITAL LAWS

2022

MINISTRY OF DIGITAL DEVELOPMENT AND COMMUNICATIONS

2022

E-MONGOLIA ACADEMY

2022

"DIGITAL NATION" STRATEGY

2022

MINDGOLIA

2023

KHURDAN

2023

E-BUSINESS

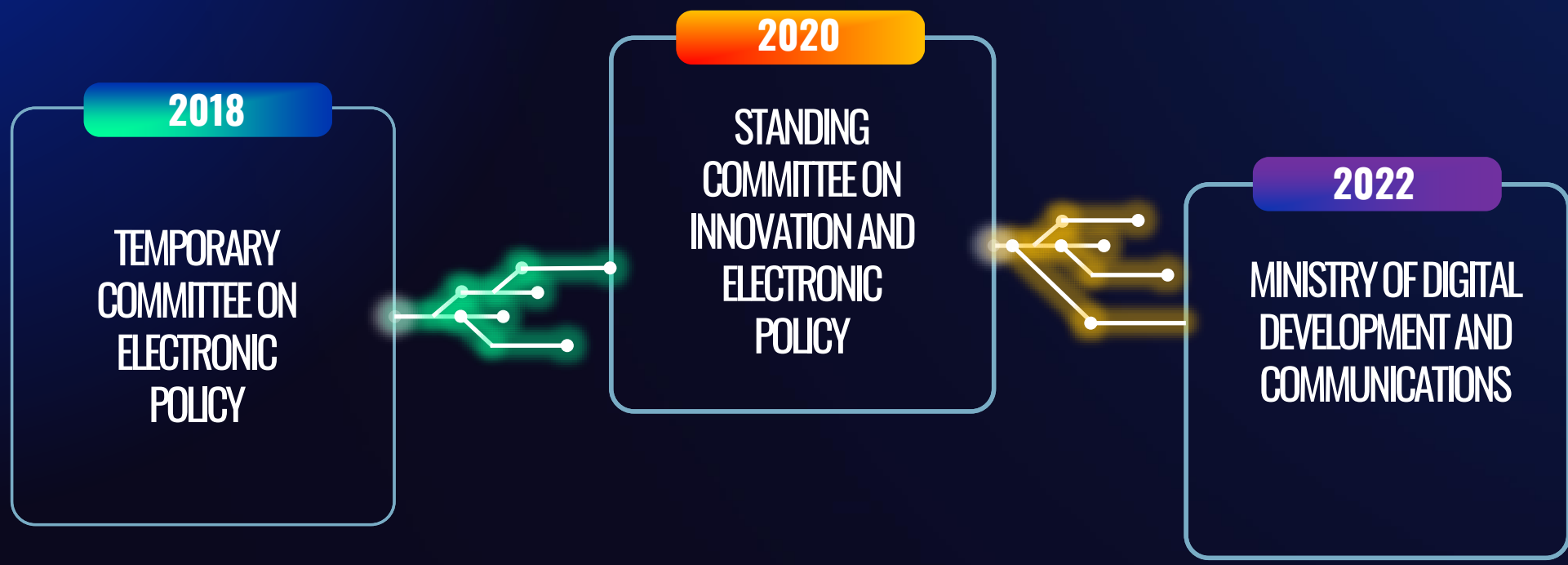
2023

OPEN INFORMATION

"Shil" operation

2023

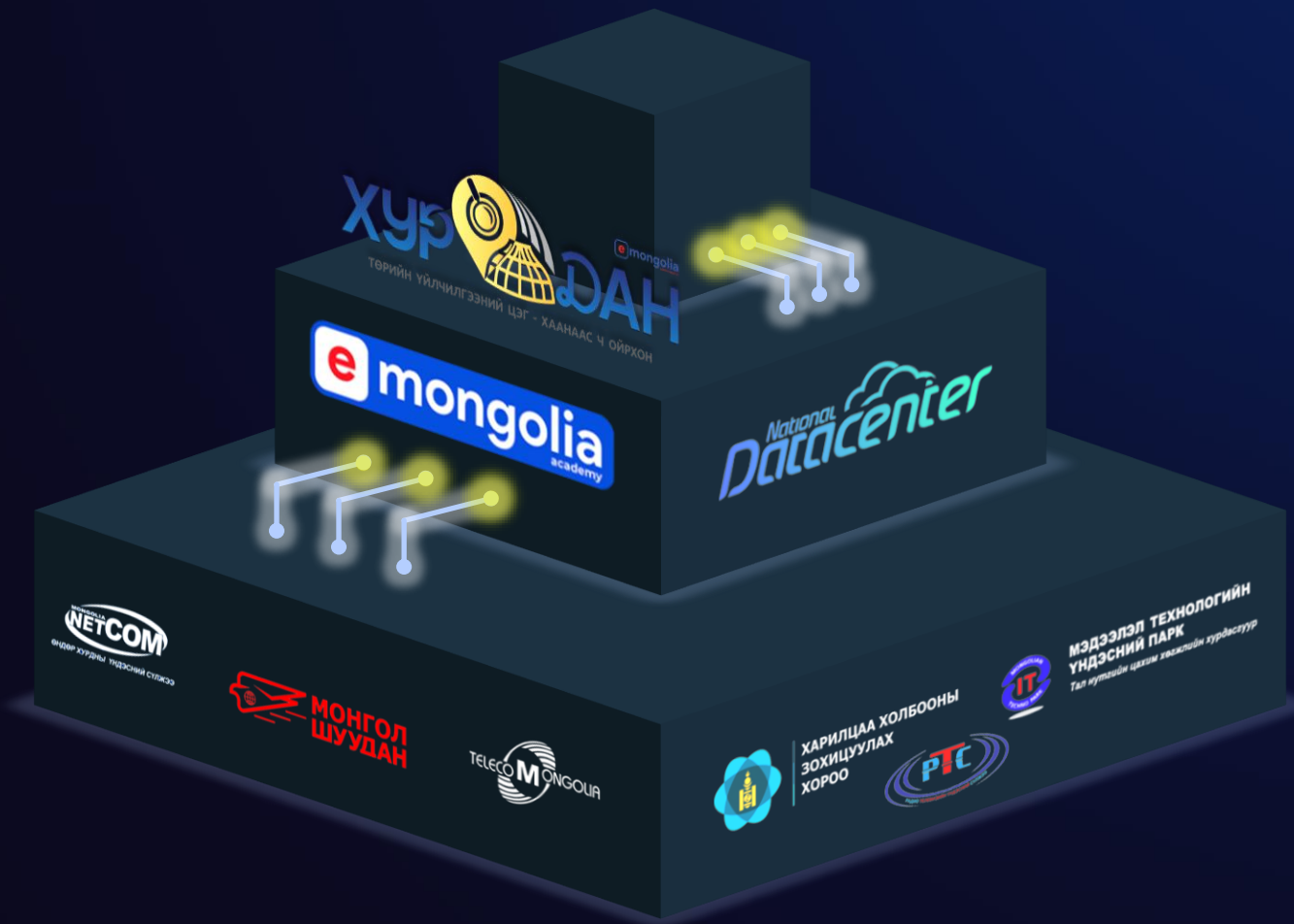
e mongolia 3.0





MINISTRY OF DIGITAL DEVELOPMENT AND COMMUNICATIONS

# BRANCH INSTITUTIONS





# LAWs

2021

Law of Mongolia on  
Protection of Personal Data

2021

Law of Mongolia on  
Electronic Signature

2023

109 laws to promote  
digital transformation

2019

Law of Mongolia  
on Broadcasting

2021

Law of Mongolia on  
Cybersecurity

2021

Law of Mongolia on Public  
information transparency

1999

Law of Mongolia on  
Radio Wave

2001

Law of Mongolia on  
Communication

2003

Law of Mongolia on Post



## STATISTICS

PEOPLE ARE CONNECTED TO THE  
INTERNET

**4.2 сая**

CONSUMER OF MULTI-CHANNEL  
SERVICES

**738,850**

NUMBER OF PEOPLE USING  
SMARTPHONES

**4 сая**

NUMBER CONNECTED TO FIBER OPTIC  
CABLE

**21 province,  
325 sum**

TOTAL FIBER OPTIC CABLE  
LENGTH

**49,318 KM**



# E-GOVERNMENT DEVELOPMENT INDEX



## DIGITAL TRANSFORMATION

## E-ECOSYSTEMS

## E-ECONOMY

E-GOVERNMENT DEVELOPMENT INDEX (EGDI) (193 countries)



Innovation index (132 countries)



0.24%

Share of IT sector in GDP



\$37.7 сая

Share of IT revenue in the digital development and communication sector (2022)

7.5%

46/143

4G network

14/144

3G network

As of 2022, Mongolia was ranked at 73rd out of 100 on start-up ecosystem globally

As of 2022, the turn-off in digital health was 1.7 trillion MNT which is equivalent to 3.2% of the GDP.



# CYBER SECURITY INDEX



Global cybersecurity report 2020  
issued by the International  
Telecommunication Union

**120**/194

Asia-Pacific cybersecurity report  
2020  
Issued by the International  
Telecommunication Union

**22**/37

National cybersecurity index report  
2021 issued by the Estonian  
e-Governance academy

**123**/160



**.01** CURRENT SITUATION

**.02** POLICY AND IMPLEMENTATION





# POLICY



Public e-service



Public Information Infrastructure



Infrastructure



e-Economy



Cyber security



Digital Literacy



Cosmology



Capacity of human resource



## PUBLIC e-SERVICE

# 109

109 laws were amended

Adopted on 18<sup>th</sup> December, 2023  
Effective from 1<sup>st</sup> March, 2024

### Principles

01

E-ARCHIVE

02

E-AUTHORIZATION

03

ELECTRONIC  
ACCOUNT OF BANK

04

E-CONTRACT

05

E-SIGNATURE

### Changes in Law on Health

#### Section 8.4

The government will develop and approve the procedures for collecting, processing, using, storing and ensuring security of health information in cooperation with the central state administrative organization in charge of health issues and the central state administrative organization in charge of electronic development and communication.

#### Section 8.10

Procedures for setting requirements for health care and service software, evaluating and reporting compliant software shall be approved jointly with the central state administrative organization in charge of health care and the central state administrative organization in charge of electronic development and communication.



# NATIONAL SATELLITE





2023.07.04

The Starlink logo, a stylized white 'X' with a long, curved line extending from the top-right arm, is positioned above the word 'STARLINK'.

STARLINK



# SYSTEM'S



**ХҮР**  
**МЭДЭГДЭЛ ХҮРГЭХ СИСТЕМ**

2.5 billion data transferred  
28 million notification sent

**E-MONGOLIA**  
**ERP СИСТЕМ**

1.78M users, 45M service  
45,913 users

**OPENDATA.GOV.MN**

1093 types of open data

**DOCX.GOV.MN**

57 thousand documents sent

**SUDALGAA.GOV.MN**

1,315 research published

**LAVLAGAA.E-MONGOLIA.MN**

639,387 thousand references

**e business 1.0**

**31,970 users**  
**118,499 access**

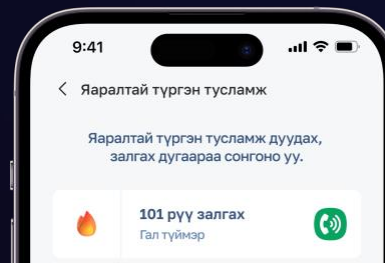
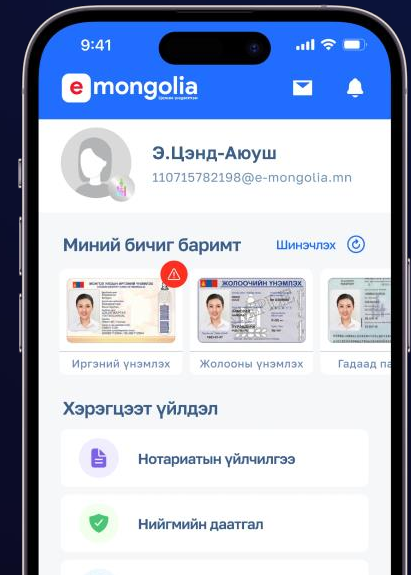
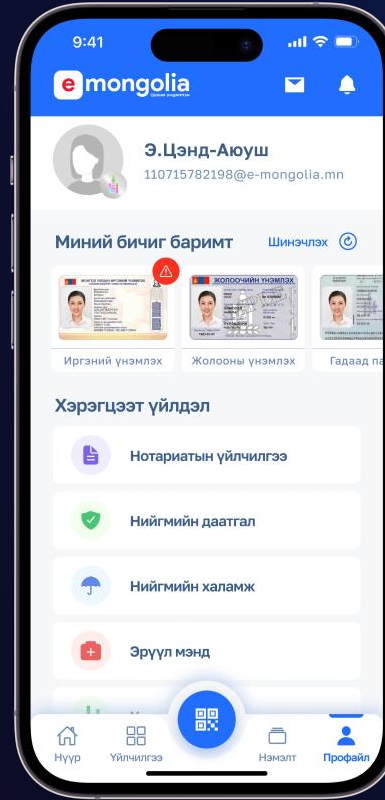
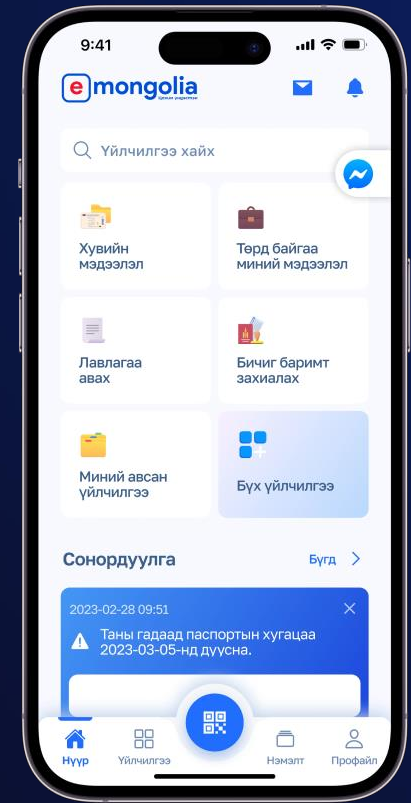
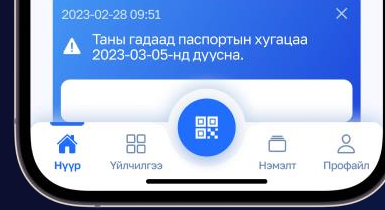




**PUBLIC  
e-SERVICE  
eMongolia**



**WCAG**





**e** kids

**CHILD  
PROTECTION  
PLATFORM**

**33,249**  
Children

■ **PUBLIC e-SERVICE**  
To child

**DATA  
FREE**





# National digital literacy framework

## Hardware & Software

- Use of ICT devices
- Use of software

## Data

- Ability to find data, information
- Use of data
- Processing of data

## Problem solving

- Solving information and communication technology issues
- Approach the problem critically
- Receive services electronically

## Cooperation

- Communicate through ICT
- Cooperate through ICT
- Ethics in digital environment

## Cyber security

- Information and cyber security
- Privacy
- Healthy usage of ICT
- Protect environment

## Creativity

- Creating digital content
- Intellectual property
- Process engineering



18 skills in 6 categories



# TRAINING AND EMPOWERMENT OF HUMAN RESOURCES

**1000**  
Seed for the Future Huawei engineer training program

**1000**  
Google Certified Engineer

**1500**  
Public-private partnership, "Smart Government II" project

**1000**  
Training IT engineer to Japan

**1500**  
"Smart Government II" project





# PUBLIC e-SERVICE KHURDAN



**29**

In foreign country

**131**

In Mongolia

**82** Province

**48** The capital city

**1** Border port



# Digital province policy



- ✓ **STABLE**
- ✓ **FRIENDLY TO CITIZENS**
- ✓ **BENEFICIAL**
- ✓ **SAFE**

-  **e-learning**
-  **Health service**
-  **Garbage management**
-  **Public e-Service**
-  **control camera**
-  **Smart detector (alarm)**
-  **Smart lighting**
-  **Motion control**
-  **Smart apartments**
-  **Water management**
-  **Energy management**
-  **Green plant**



OPEN DATA SYSTEM

WWW.SHILEN.GOV.MN

TOTAL AMOUNT REIMBURSEMENT FROM SPECIAL GOVERNMENT FUNDS

91.6 ТЭРБУМ ТӨГРӨГ

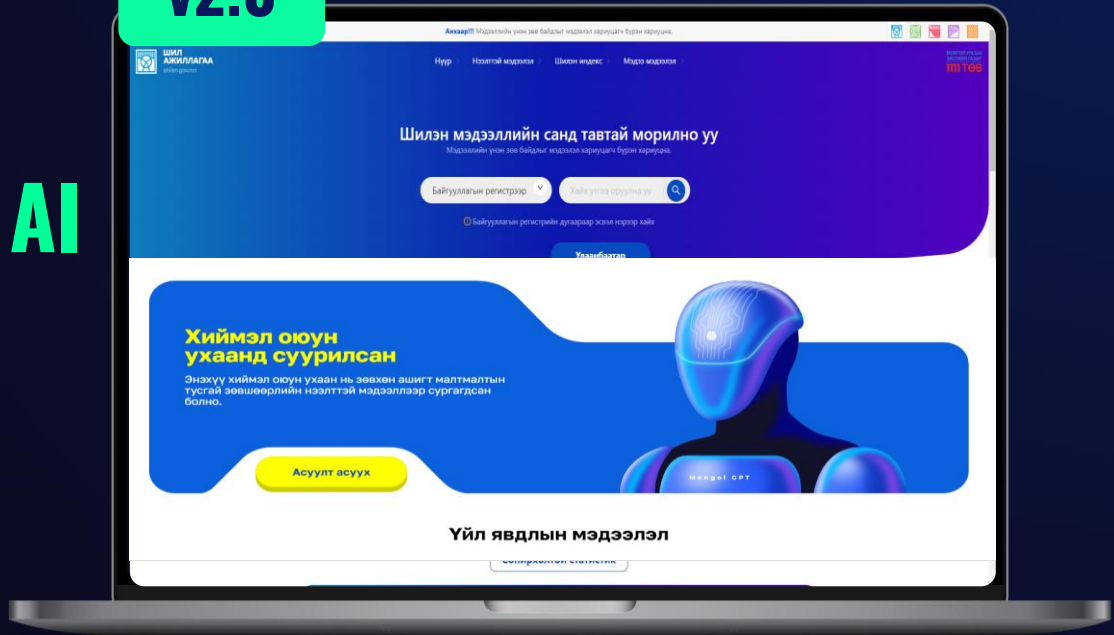
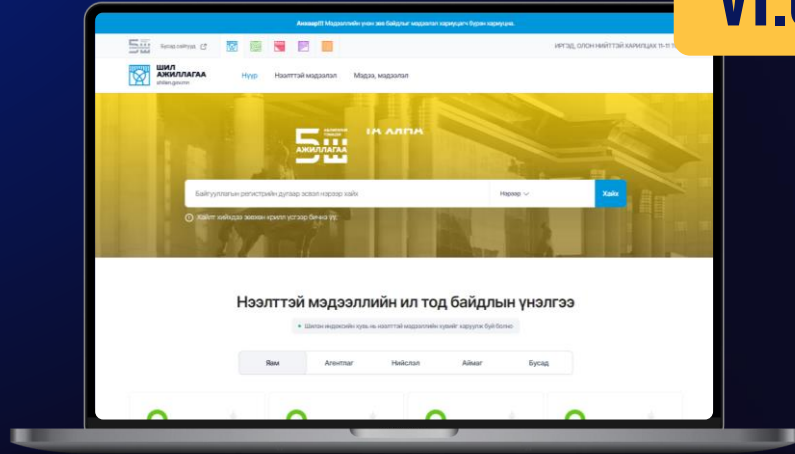
2023.03.27

v1.0

2024.03.25

v2.0

→ AI



970,355 data  
12,915,075 access



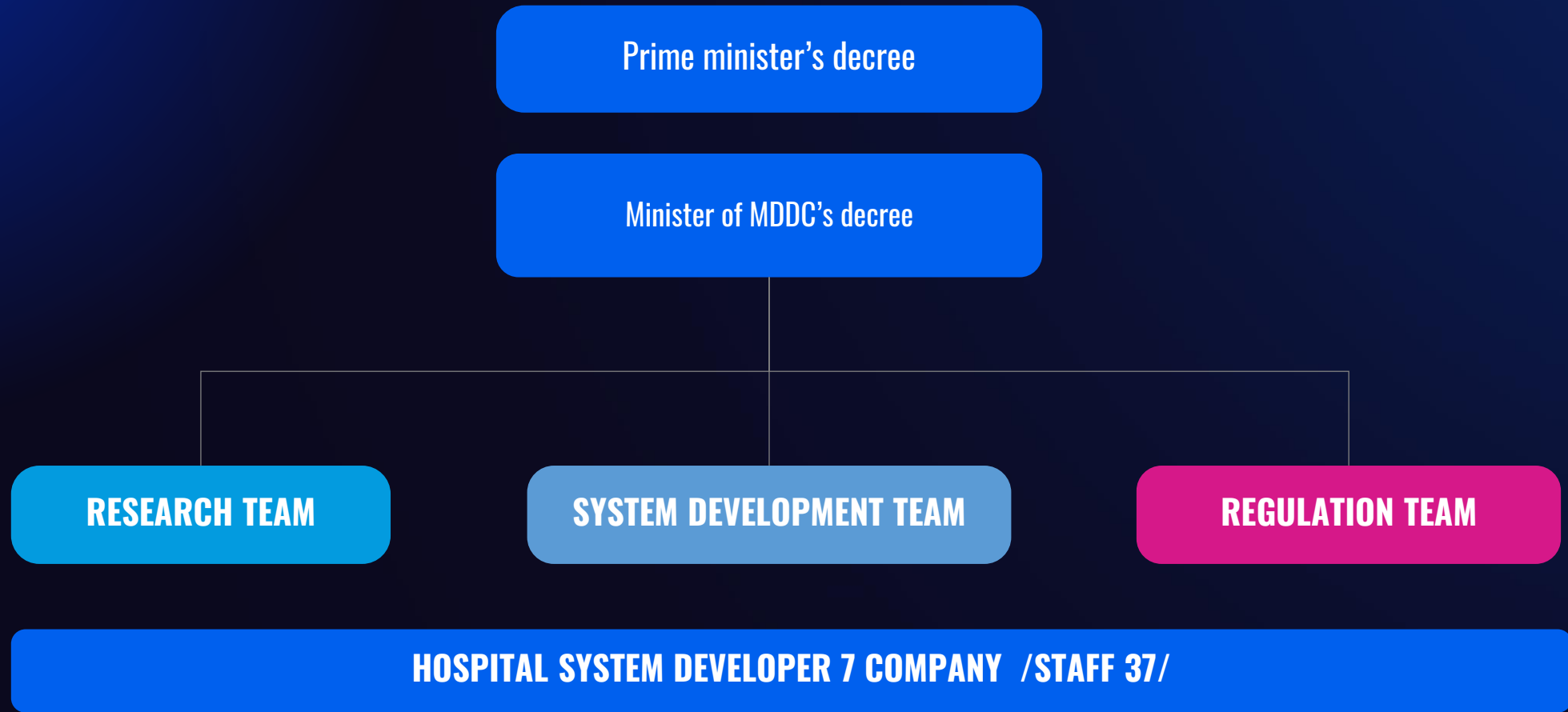
***CLOUD***

ТӨРИЙН КЛАУД СИСТЕМ





# DIGITAL HEALTH



Around 100 staff from both private and public sector.

# DIGITAL TRANSFORMATION IN THE HEALTH SECTOR



**Prescription**



**Diagnostic conclusion**



**Laboratory test result**



**Children's immunization certificate**



**Outpatient card**



**Pregnancy control card**



**Maternal and child health records**





**EXPECTED  
ACTUAL  
RESULTS**



**Citizen /Patient/**



**Doctor's and spacialist**



**Hospital & Institutions**



**Government**



**THANK YOU  
FOR YOUR  
ATTENTION**

