Smart Prison

Pia Puolakka
Criminal Sanctions Agency, Finland
EuroPris ICT workshop, 30.9.2020
Development of ICT-services in prisons 2017-2018
Prisoners may be given permission to send and receive e-mail messages and use the internet for an important reason related to the maintenance of outside contacts, subsistence, or attendance to work-related, educational, judicial, social or housing matters or for another corresponding important reason.

Prisoners may be given permission to communicate with their close relatives or other close persons via video connection or other suitable technical means of communication where the participants have an audio and visual connection with each other. In order to maintain outside contacts or for another important reason, prisoners may be allowed to communicate with some other important person in this manner.
Prisoner workstation and network environment 2017 - 2018

- Developed in co-operation with Government ICT Center Valtori
- Data security audited by F-Secure
- 200 laptops in use
  - 2-20 joint use workstations in every unit
  - Lenovo laptops (hardened)
  - Mobile network (4G modems + sim cards)
- Permission to use must be applied from prison director
Services in joint use workstations

- Skype –meetings
- Restricted Internet
  - Closed prisons: 800 whitelisted websites
  - Open prisons: blacklisting
- All new website requests are controlled by the security department
- Moodle for high-school education
- Open Office tools
- Separate laptops for high-school examination
Challenges

• Authentication and controlling
  • Skype-meetings’ supervision
  • Services that require strong electronic authentication or e-mail authentication

• E-mail access lacks in closed prisons’ workstations
  • Imprisonment act’s requirement is not met

• Whitelist
  • No possibility for searching / browsing

• Digital skills?

➢ **Conclusion:** personal device & smart system is needed!
Prison - always 10-20 years behind the (digital) development of society?
Smart Prison project 2018 -
Strategy – digital strategy
Vision 2025
United, uniform, and competent
Prepares for a life without crime
Safely towards more open enforcement

Social objectives (clients and citizens)
- We prepare clients for a life without crime
- We ensure safety during the enforcement of sentences and promote the safety of society
- Legal protection and equal treatment are realised in our operation

Operative performance (processes and organisation)
- We form networks and integrate into the normal services of society
- Our operational and client processes are smooth and information systems promote performance
- Our network of facilities and organisational structure help us reach our goals

Staff
- We reform our management system and support the development of our staff’s competence
- We improve the staff’s well-being at work and our employer brand
- We carry out goal-oriented interactive work

Resources
- We allocate resources to activities promoting the strategy
- Our operation is economic and productive
Digital services support strategical targets

- Reduce recidivism
  - More services with personal and easy access
  - Less paper work: more time for face-to-face contact
  - Continuum to digital society

- Reintegrate into society
  - Principle of normality: availability of public services
  - Prevent marginalisation: digital skills are needed in modern society
  - Modern job market requirements

Main strategical vision: Preparing for a life without crime!
Targets of the project

- Hämeenlinna Smart Prison 2020
  - 100 women inmates
  - Personal cell device in every cell
  - Smart system installed
  - Pilot environment for new digital services
  - Digital services as part of everyday management, rehabilitation and interaction between staff and prisoners

- General digital development
  - Digital services portal for joint use workstations
  - Enabling new digital services
  - Inmate e-mail system
  - Digital guidance training to staff
  - Meeting the challenges of covid-19!
General digital development
Gate - Portti: Digital services portal

- Opening page of the joint use workstations
- Tabs categorize whitelisted websites into seven rehablitative themes
  - For example substance abuse, education, healthcare, family work & social services
  - Finnish / Swedish / English

https://www.rikosseuraamus.fi/fi/index/portti.html
New digital services

- More whitelisted websites for rehabilitation and studying
  - Online programmes
  - "Virtual Hospital"
  - Suomi.fi electronic messages
  - Basics of AI – course

- Digital skills training
  - Digital guidance from staff to prisoners

- Online consultation
  - Public Employment
  - Social Insurance Institution
  - Red Cross

- A-Clinic online digital therapy

- Virtual Reality (VR) pilot
  - Separate devices
Developing Smart Prison
GOAL
To improve the prisoners’ ability to live without crime.

- Decrease the risk of repeated offending

HOW?
Effecting the probability of repeated offending is the foundation of everything. Effects are produced through...

CULTURE
Active support and motivation
Humane and respectful interactions

LEADERSHIP
Coaching for change

FOR WHOM?
The concepts’ beneficiaries include the society, the personnel of the prison, as well as the prisoners.

WHY?
The prison concept is based on Finnish imprisonment act, which states that the goal of the enforcement of imprisonment is to increase the readiness of the prisoner to live a life without crime, by promoting the prisoner’s ability to manage his or her life and by promoting his or her adjustment to society as well as to prevent the commission of offences during the term of sentence.

RESPECT FOR HUMANITY

JUSTICE

BELIEF IN THE ABILITY OF A PERSON TO CHANGE AND GROW

SECURITY

SERVICE PROVISION
Supporting convicts’ independence and initiative
Matching services to convicts’ needs

BUILDING PARTNERSHIPS OUTSIDE THE PRISON

FOR THE PRISONERS
Improved chances of participation in the society and of living without crime during and after the sentence.

FOR THE PERSONNEL
Sense of meaningfulness in work and opportunities for professional growth.

FOR THE SOCIETY
Safety and resource-effectiveness that is measurable.

A prison is a learning environment for a life without crime – safe, encouraging and supporting of participation in society –
Prison concept – Smart Prison concept

Prison concept

• Cut costs and uses space more efficiently
• Enable more open prison environment
• Increase prisoners’ rehabilitative independence
• Leave more time for interaction and coaching
• Require a new type of a work and management culture

... supported by digital services

• Digital services are cost-effective
• Cell device is a secure access to outside — WLAN works out of cell too
• Online independent rehabilitation services and studies
• Routine tasks can be managed independently with the cell device
• Change in prison culture enables positive change in prisoners
Service design

- Planning and organizing services and their components in order to improve **quality** and **interaction** between the services and the users.

- Establishing best practices for designing services according to the needs of the users so that the service will be **user-friendly, relevant** to the users and **motivates** the users to use the service more.

- Prisoner as a customer – user-relevant services are **effective** services that reduce recidivism.
Digital service design

- What are the best digital practices for rehabilitation, reintegration and reducing recidivism?
- What new innovative digital practices can we pilot in Hämeenlinna?
- What are the questions for the proof of concept (POC)?

- Prison concept
- Scientific research
- Individual planning of the sentence term
- Specific needs of women
- Smart prison model in other countries
Collaborative development process

- Workshops and questionnaires for staff and prisoners
- Service map with seven rehabilitative themes
- Proof of concept (POC) in 2019 in two prisons

Specifically for women:
- Empowerment & self-esteem
- Family, parenting and child care
- Learning and vocational skills for modern job market
- (Mental) health care: trauma-informed practices
- Wellness, spirituality, recreation
- NGOs

| TH 1 | Substance abuse and addictions |
| TH 2 | Values, attitudes and behaviour |
| TH 3 | Everyday life skills |
| TH 4 | Education and vocational skills |
| TH 5 | Health and well-being |
| TH 6 | Children, parenting and social relations |
| TH 7 | Reintegration into society and living without crime |

### Service map 2021: examples of services

| TH 1 | Substance abuse rehabilitation wards |
|      | Programme work |
|      | ... |
|      | Psychologist’s reception |
|      | ... |
|      | Spiritual services |
|      | Cooking and household skills |
|      | ... |
|      | Outdoor work / Green care |

| TH 2 | Values, attitudes and behaviour |
|      | Programme work |
|      | ... |
|      | Psychologist’s reception |
|      | ... |
|      | Spiritual services |
|      | Digital guidance |

| TH 3 | Everyday life skills |
|      | Cooking and household skills |
|      | ... |
|      | Outdoor work / Green care |
|      | ... |

| TH 4 | Education and vocational skills |
|      | Basic education |
|      | ... |
|      | Library |
|      | ... |
|      | Vocational education connected to work activities |
|      | ... |

| TH 5 | Health and well-being |
|      | Medical care |
|      | ... |
|      | Outdoor exercise |
|      | ... |
|      | Gym |

| TH 6 | Children, parenting and social relations |
|      | Different types of visits |
|      | ... |
|      | Family ward |
|      | ... |
|      | Family camps |

| TH 7 | Reintegration into society and living without crime |
|      | Case management and social service counselling |
|      | ... |
|      | Support for release |
|      | ... |
|      | NGO-services for women |

© Rise, Senate Properties, Workspace, Delfoi, Melkior & Kopla
<table>
<thead>
<tr>
<th>TH 1</th>
<th>Substance abuse and addictions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whitelist</td>
</tr>
<tr>
<td></td>
<td>Self-help materials in electronic form</td>
</tr>
<tr>
<td></td>
<td>Video consultation with NGOs (for women)</td>
</tr>
<tr>
<td></td>
<td>Online shop</td>
</tr>
<tr>
<td></td>
<td>Digital guidance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TH 2</th>
<th>Values, attitudes and behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whitelist</td>
</tr>
<tr>
<td></td>
<td>Video consultation with NGOs (for women)</td>
</tr>
<tr>
<td></td>
<td>Online shop</td>
</tr>
<tr>
<td></td>
<td>Digital guidance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TH 3</th>
<th>Everyday life skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whitelist</td>
</tr>
<tr>
<td></td>
<td>Online shop</td>
</tr>
<tr>
<td></td>
<td>Digital guidance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TH 4</th>
<th>Education and vocational skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whitelist</td>
</tr>
<tr>
<td></td>
<td>E-learning</td>
</tr>
<tr>
<td></td>
<td>Basics of AI -course</td>
</tr>
<tr>
<td></td>
<td>Digital Leap course</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TH 5</th>
<th>Health and well-being</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whitelist</td>
</tr>
<tr>
<td></td>
<td>Virtual Forest (VR)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TH 6</th>
<th>Children, parenting and social relations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whitelist</td>
</tr>
<tr>
<td></td>
<td>Virtual visits with family members and other close ones</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TH 7</th>
<th>Reintegration into society and living without crime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Whitelist</td>
</tr>
<tr>
<td></td>
<td>Video consultation with communal, judicial and social services (employment, housing etc.)</td>
</tr>
</tbody>
</table>

© Rise, Senate Properties, Workspace, Delfoi, Melkior & Kopla
Proof of concept (POC) in 2019
Digital learning environment
Digital change in prison culture and interaction

- 100 female prisoners
  - 100 digitally marginalised
  - 100 individual cells
  - Personal smart device in every cell
- All staff gives digital guidance
- Bringing together and developing all our best digital practices
Smart cell
Smart cell device & co.

- Developed in co-operation with Gerdes, Legal Register Center and Government ICT Center Valtori
- Data security auditing by F-Secure
- Lenovo laptops (hardened)
  - LAN + WLAN
- Separate laptops
  - High-school examination
  - E-mail
  - VR
- Separate cell TV & phone
Cell device services

- Intranet / noticeboard / news
- Restricted internet
  - Whitelisted websites
  - Portti - opening page
- Canteen
- Virtual visits
  - video calls with prison staff, relatives and public service providers

- Messaging
  - requests and applications

- e-learning and studying
  - Open Office for homework...
  - Possibility to use Moodle

- e-books and audiobooks

- Material bank
  - guidelines, self help material for rehabilitation
In a digital learning environment prisoners can...

- **Manage** their daily affairs via the cell device
- **Study** also independently and subjects not available in prison
- **Contact** their relatives online
- **Consult** professionals and take responsibility for their rehabilitation
- **Learn** digital skills
- **Learn** to search for information online
- **Improve** their free time with meaningful activities when in their cells
- **Stay on track** what happens inside and outside the prison
- **Relax** and calm down in a virtual forest
In a digital learning environment staff will...

- **Benefit** from more flexible work flows
- **Contact** prisoners more proactively face-to-face
- **Interact** with prisoners in new ways - online
- **Supervise** digitally
- **Learn** digital skills
- **Guide** prisoners to use digital services
- **Adopt** values and attitudes supporting
  - New prison concept
  - New prison officer concept including both security and rehabilitative work
Integrations 2021 -

• New offender management system
  • Use of AI in offender management
• Prisoner health care management system
• Prisoner payment card
• Integrating other systems that are now separate?
Some digital specialities
NGOs

Digital Leap
➢ Basic skills & coding / image processing

Visible Women
➢ Online psychologist’s consultation

Kalliola Settlement Activities

Krits – Finnish Foundation for Supporting Ex-offenders
Prisoners learning Artificial Intelligence (AI)

- **Elements of AI**
  © Helsinki University & Reaktor

- 6 modules: defining AI, problem solving, probabilities, machine learning, neural networks, future implications

- Advanced course is coming…

Photo: Matti Ahligren / Aalto University
Digital services supporting daily activities
Substance abuse rehabilitation wards

Online self-help materials and online programmes
Chapel & facilities for spiritual practice

Streamed spiritual events for isolated prisoners?
Daily living

Kitchen

Cafeteria

Canteen and online material for learning to manage household and financial matters
Recreation & Library

News, radio and e-libraries
School & vocational education

E-learning material, e-books and audiobooks
Child care & parenting

Online material for parenting skills & NGOs’ websites
Future
Data and digitalisation strategy 2021-

- Digiln research project: effects of smart prison
- Effects of covid-19: use of digital services increases for good
- Target of digital leap: 10% of services are used digitally
- Extending the smart system to all prisons
  - smart probations?
Our story continues

- **Business Insider**: At prisons in Finland, inmates are learning AI and taking online tech courses as a bridge to life on the outside

Smart Prison opening on the 2 November 2020!

Pia Puolakka, Project Manager
Smart Prison project
Criminal Sanctions Agency, Finland
pia.puolakka@om.fi