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Digitalisation in Corrections Recidivism Reduction

Inmate's treatment and training using VR

Scenario Description

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DIGICOR Digital Scenarios

Recognising the marked resistance of European penitentiary services towards technological modernisation, the Digital Scenarios seek to directly influence senior officers and those responsible for the operational management of penitentiary settings by aggregating and disseminating innovative and evidence-based practices in the field of digital readiness in prisons.

Raising these stakeholders' awareness regarding the benefits of well-implemented digital solutions in the prison setting, namely in what concerns inmate rehabilitation, will contribute to enhancing the prison services openness towards modernisation.

Scenarios to be developed:

Inmate communications

- Scenario 1: Telephony
- Scenario 2: Videocall and video visitation
- Scenario 3: Secure e-mail/text messages/digital letters

Education and e-learning

- Scenario 4: e-learning and access to online resources

Digital self-service solutions

- Scenario 5: implementing integrated digital self-service solutions

Training and treatment using Virtual and Augmented reality

- Scenario 6: Inmate's treatment and training using VR
- Scenario 7: Officers training using VR and AR

Videoconference with courts

- Scenario 8: Implementing videoconference systems with courts

Telemedicine

- Scenario 9: Implementing telemedicine

Offender and Case Management Systems

- Scenario 10: Implementing offender and case management systems

Electronic monitoring in prisons and probation

- Scenario 11: Implementing an EM project (RFID and GPS)
- Scenario 12: Implementing an EM project (mobile phone)
- Scenario 13: Implementing an inmate monitoring system in a correctional environment

Smart Prisons and digital transformation in corrections

- Scenario 14: Implementing a "Smart Prison initiative"

Artificial Intelligence in corrections

- Scenario 15: Using AI and xAI in prisons and probation

DIGICOR Digital Scenario Form

Scenario #: 6 Inmate's treatment and training using VR
Problem/problems that it aims to solve:
Research has shown that access to treatment and training using Virtual Reality can reduce recidivism and allow the inmate to have better outcomes.
Description of the solution:
VR treatment and training in prisons can be solved in several ways: • **In the classroom as part of an education or vocational solution.** • **In treatment rooms as part of a therapeutic solution.**
Expected benefits:
For the organisation and staff: • **Allows staff both educational and clinical access to training or treatment which can provide better outcomes for inmates in the education and clinical areas and which would not be possible otherwise.** **For the inmates:** • **Positively affects the behaviours of inmates and significantly contributes to social reinsertion and reduction in recidivism.** • **Allows the inmate to get access to training and treatment in a way not otherwise possible.** • **Allows for better clinical and educational outcomes for the inmate.**
Evidence of effectiveness:
In Europe, several research initiatives have been developed to explore the use of V.R. in educational and therapeutical contexts in prison. A recent study by Smith et al. (2022) reports on the feasibility and initial effectiveness of Virtual Reality Job Interview Training within two prisons. VR-JIT was deemed by detainees as highly acceptable and usable and had significant improvements in interview skills, interview training motivation, interview anxiety, and greater employment by 6-month follow-up. Another use of virtual reality in prison is reported in New Zealand. It is aimed at assisting inmates with dyslexia and other learning difficulties to improve their basic literacy and numeracy skills (Prison Learning Alliance 2020, 8). **As examples, it is important to refer to some E.U. funded projects, such as the VR4DrugRehab project, aiming to develop and test an innovative drug treatment programme using advanced Virtual Reality (VR technology in a young offender population under probation supervision; the ViRTI project, aiming to use virtual reality technologies by creating virtual environments, compensating for the scarcity of resources (such as training laboratories, materials and tools) in prison facilities;**

the VISION project, seeking to develop the inmates' competencies through VR based Vocational Education and Training programmes; or the TRAIVR project, aiming to provide rehabilitation through a VR training programme based for refugee probationers with drug addiction problems.

Key phases of the implementation:

Phases of implementation will vary depending on the extent of the project undertaken. The list below outlines some of the key phases for a successful implementation.

- **Extensive market soundings are undertaken to ensure best-of-breed solutions.**
- **Consideration is given to having a Proof of Concept and/or Pilot Phase to ensure that the requirements are fully understood and agreed upon.**
- **A comprehensive tender process is undertaken once the requirements are agreed upon.**
- **A cost benefit exercise is undertaken to ensure the costs and benefits are understood and that sufficient funding is in place.**
- **Buy in is obtained from Senior Management, Staff and Staff representatives through extensive engagement.**
- **Communication to ensure the benefits are understood by management, staff and inmates.**
- **A change management exercise is undertaken and local champions of change are put in place.**
- **The project is carefully planned and managed from start to finish.**
- **Clear and agreed objectives are outlined so it is understood what success means.**
- **Post project reviews are undertaken.**

Key success factors:

It is recommended that before undertaking any project of this type that it is understood what helps to ensure a successful project.

- **Clear and clearly articulated project goals.**
- **A comprehensive and detailed Project plan.**
- **Early definition of deliverable quality criteria.**
- **Active senior management support with a shared vision throughout the project's life.**
- **A fully representative Project board in place from the start of the Project.**
- **Carefully planned Project implementation.**
- **Concise, consistent, complete, and unambiguous business and technical requirements.**
- **Realistic cost estimates and Project schedules.**
- **Early risk analysis and ongoing risk management.**
- **A clearly defined business process change management implementation plan.**
- **Proactive Project issue resolution.**

- **Stakeholder involvement throughout the Project life cycle.**
- **Defined and consistently executed Project management to minimize scope increases.**
- **A skilled Project Manager experienced in the execution of project management best practices.**
- **Execution of a formal Project development methodology.**
- **An experienced implementation team(s).**

Key risk factors:

Key risks to note are:

- **No proof of concept and/or Pilot Phase to ensure that the requirements are fully understood and agreed upon.**
- **No clear understanding of the market options available that potentially lead to a poorly tendered solution.**
- **No cost benefit exercise is undertaken to ensure the costs and benefits are understood and that sufficient funding is in place.**
- **Lack of buy-in from Senior Management, Staff and Staff representatives.**
- **No change management and/or local champions of change.**
- **Lack of proper project planning.**
- **Insufficient engagement to ensure the benefits are understood by management, staff and inmates.**
- **No clear and agreed objectives for the project.**

Jurisdictions in which it has been implemented:

Some countries have implemented or are starting to implement VR solutions for inmates in their prisons. In the past number of years, New Zealand, the USA and Finland have all implemented VR solutions.

Specific Regulations to consider

These will vary from jurisdiction to jurisdiction it is therefore recommended that an exercise to consider the specific regulations in your jurisdiction is undertaken as part of the pre-project planning phase.

Estimated implementation period:

This will vary depending on the extent and complexities of the project undertaken. It is recommended that a detailed project plan is developed and agreed upon in conjunction with the selected service provider.

Estimated cost

This will vary depending on the solution chosen. It is recommended that detailed market soundings are undertaken in advance of tender commencement to gain an understanding of potential solutions that best suit the requirements of the jurisdiction. The tender process itself will also serve to ensure the most economic and advantageous solution is obtained.

Useful resources:

http://www.vr4drugrehab.org/
https://prisonsystems.eu/projects/virti/
https://prisonsystems.eu/projects/vision/
https://prisonsystems.eu/projects/traivr/

Main suppliers:

There are several suppliers in the market. The following list serves to give examples of some of the project/service providers. It is recommended that jurisdictions carry out detailed market soundings in advance of project commencement to gain an understanding of the market suppliers in their area.

- **Vainu**
- **Nsena VR**
- **GTL (ViaPath)**
- **Innovative Prison Systems**

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Digitalisation in corrections towards reduced recidivism

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