

Smart state needs smart libraries: designing proactive public services in Estonia

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RaRa NATIONAL LIBRARY
OF ESTONIA





Estonia



133,000 written folk songs

First song celebration festival 1869

Up to 100 000 gather to Song Festival Grounds

Smart Estonia



21st in World Global Innovation Index (Wipo 2021)



Over 20% of Estonians have a personal gene map



Proportion of digital government users 93% (Desi 2020)



1996

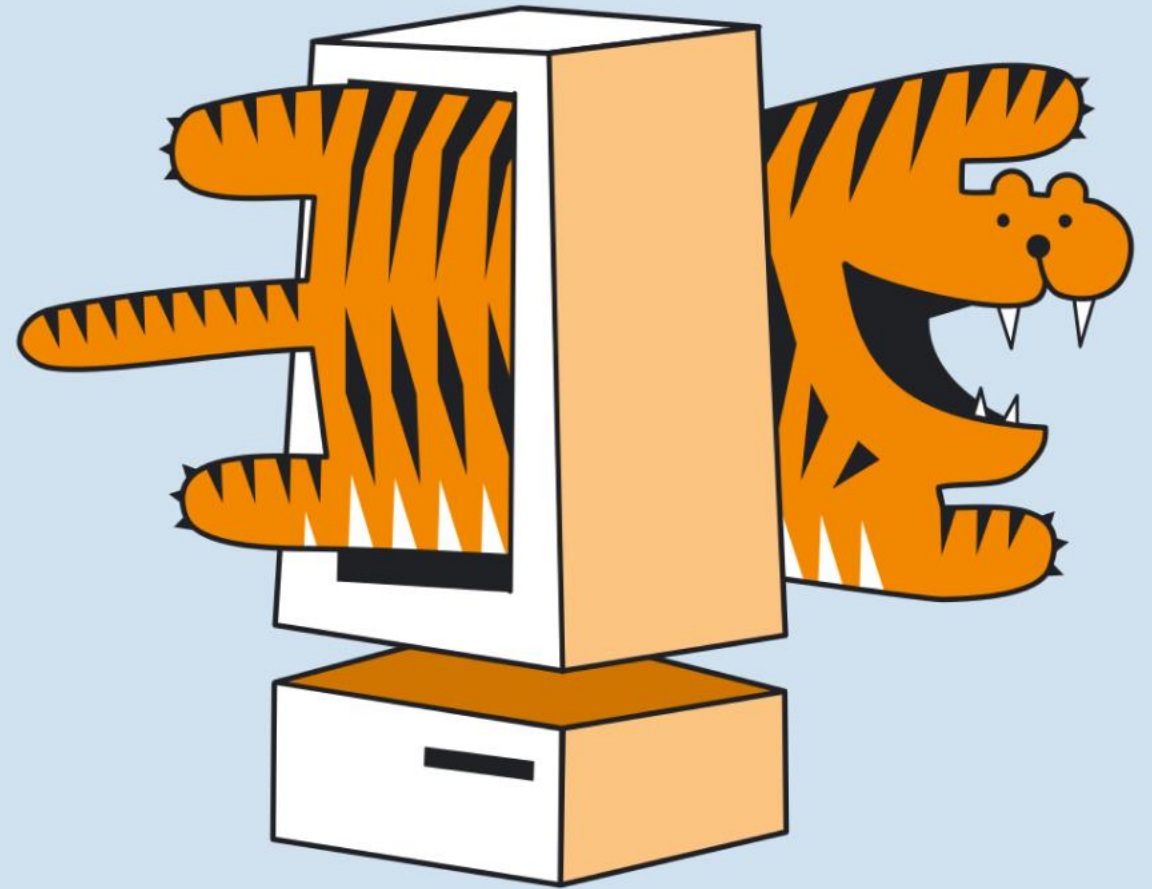
Tiger Leap Initiative

1997-2002:

Computers, software and internet access to all schools

Computer training for 11 thousand teachers

Initiative put a start to e-Estonia



TIIGRIHÜPE

1996 first
e-banking services



2000 e-Tax
Board



e-Health



2000
m-Parking service



2002 electronic ID
and digital signature



NLE renovated building to re-open in 2026



Lending platform MIRKO

Aim: to make physical collections available across Estonia

Via computers and smart devices

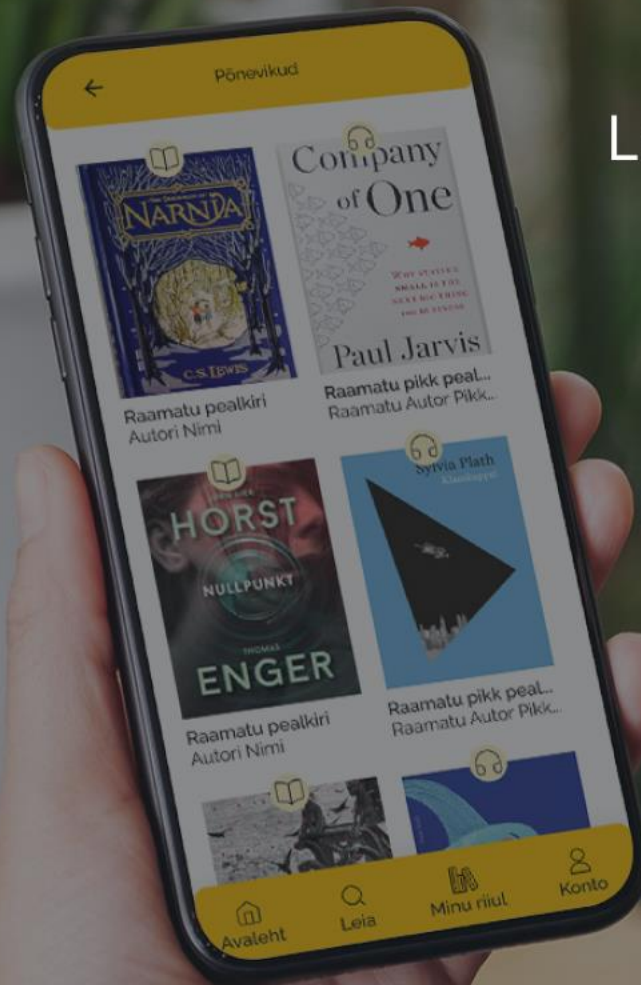
User pays for delivery

507 public libraries in Estonia (2022)

34 libraries have joined MIRKO - aim to involve all



Lending platform MIRKO



Lending of e-publications and audiobooks
Launch 14 February 2023

Via computers and smart devices
(web or app)

For all with Estonian personal ID code,
regardless of their location

Free use, access also for Estonian
e-residents

Lending platform MIRKO

Users of both services: **9616**
(14 March 2023)



Physical collections:
1822 items ordered since launch



E-publications: **10751** items
borrowed since launch

Estonia: population **1,35 million**
12 million loans total from Estonian libraries (2022)

Very small publishing market:
paper books 3981 titles, e-books 1785 titles (2022)

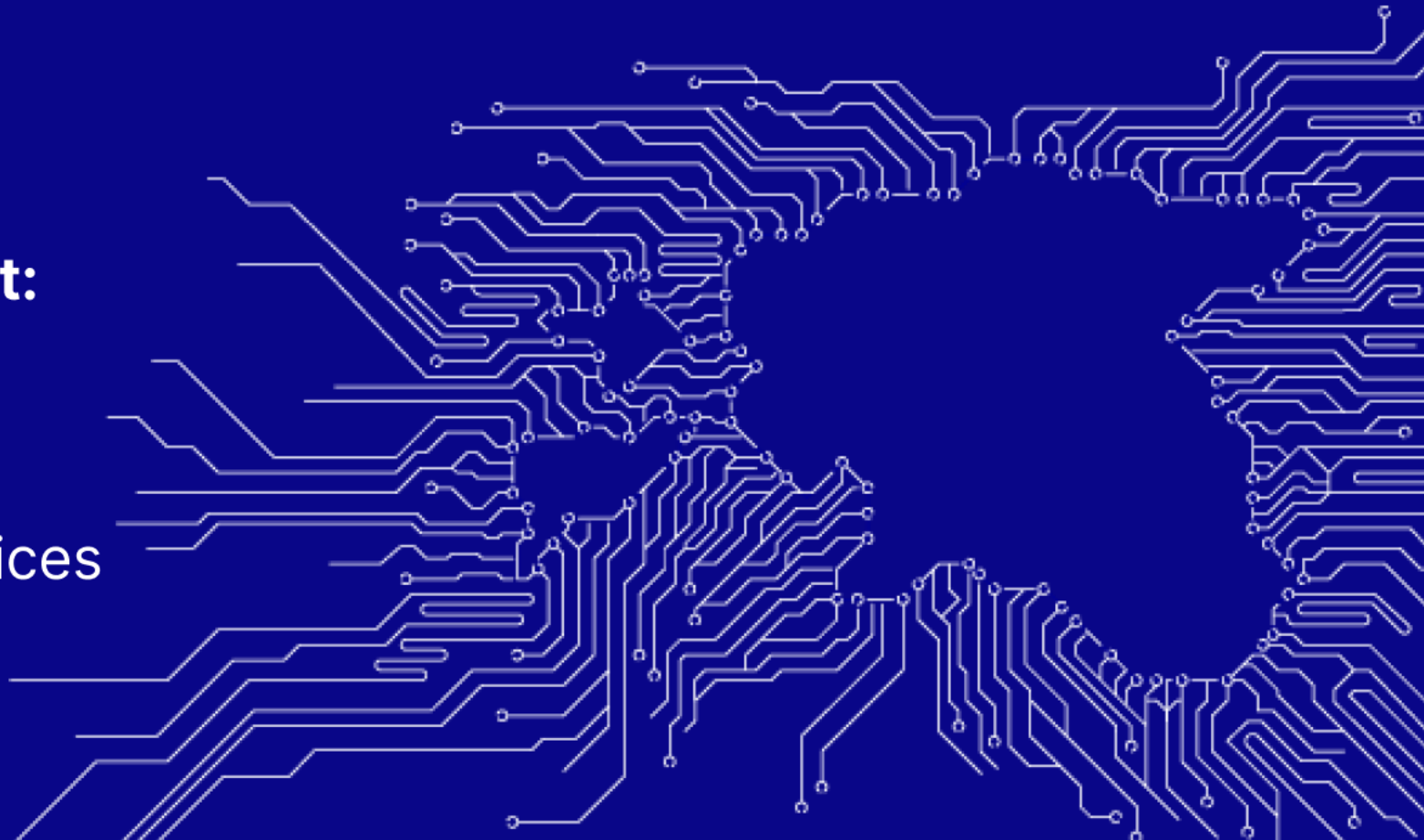


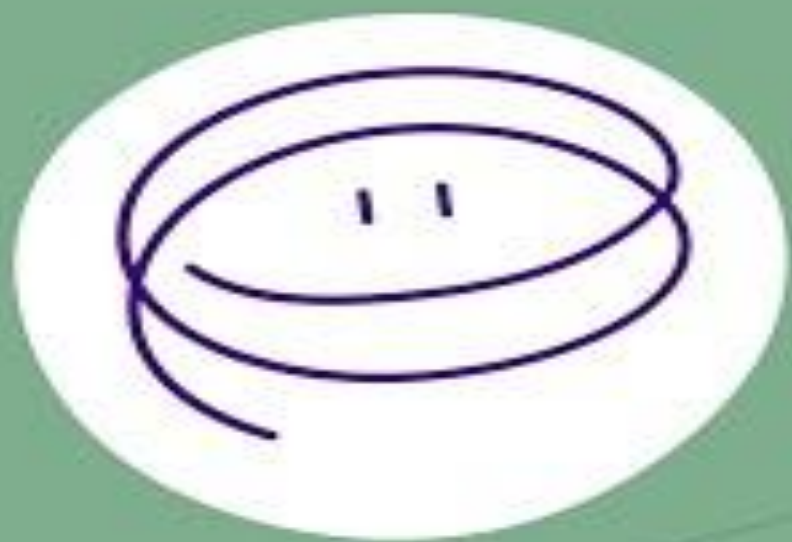
Digital Agenda 2030

- improved digital government
- cyber security
- development of electronic communication

Improved digital government:

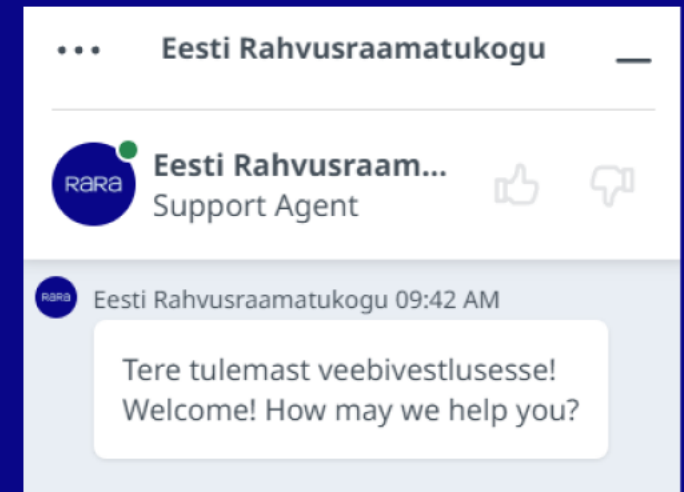
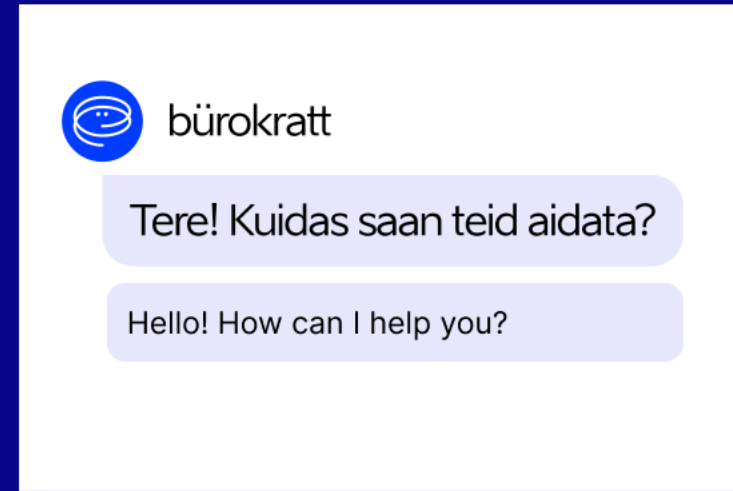
- AI powered government
- switch to life and business event based proactive services





NLE ChatBot Ask Us

- prototype ready in 2020
- reliable info free of charge 24/7
- questions in writing via chat in Estonian and English
- questions via VoiceBot in Estonian, voiced answers
- interfaced with NLE website, ready to use in autumn 2023



NLE automated text tagging AI

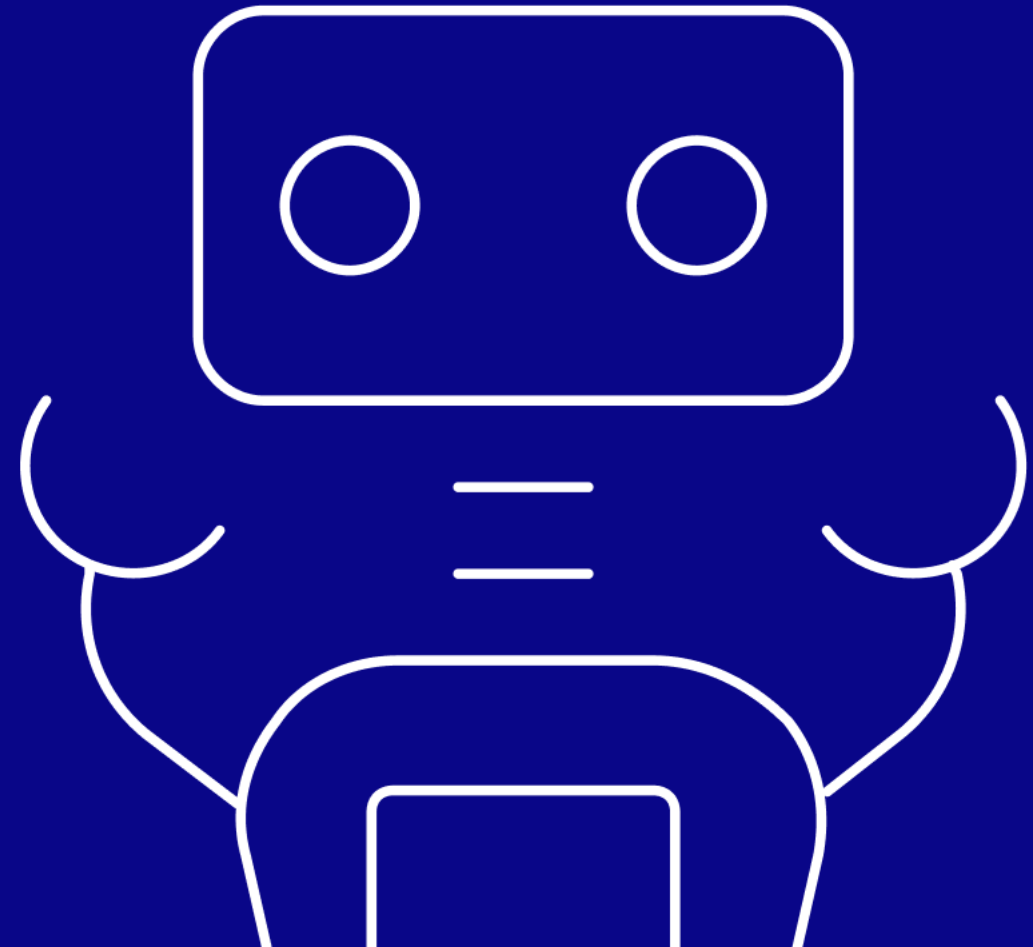
2 projects - focus on books and articles

- ensures objectivity and consistency of tags
- supports Estonian language technologies
- reduces expenses

Prototype: <https://marta.nlib.ee>

AI created tags - higher assessment from users than from librarians

Practical: one tagging tool for the entire country



Digital Agenda 2030: public services reach you when you need them

Life and business event based and proactive services:

- invisible
- cross-authority
- provided automatically



Proactive services provided by libraries

Main target groups:

I School and university students, people in vocational, in-service training

II Visually impaired people, dyslexic people

-ca 10 000 visually impaired in Estonia
-15–20% of population with problems related to dyslexia in Estonia

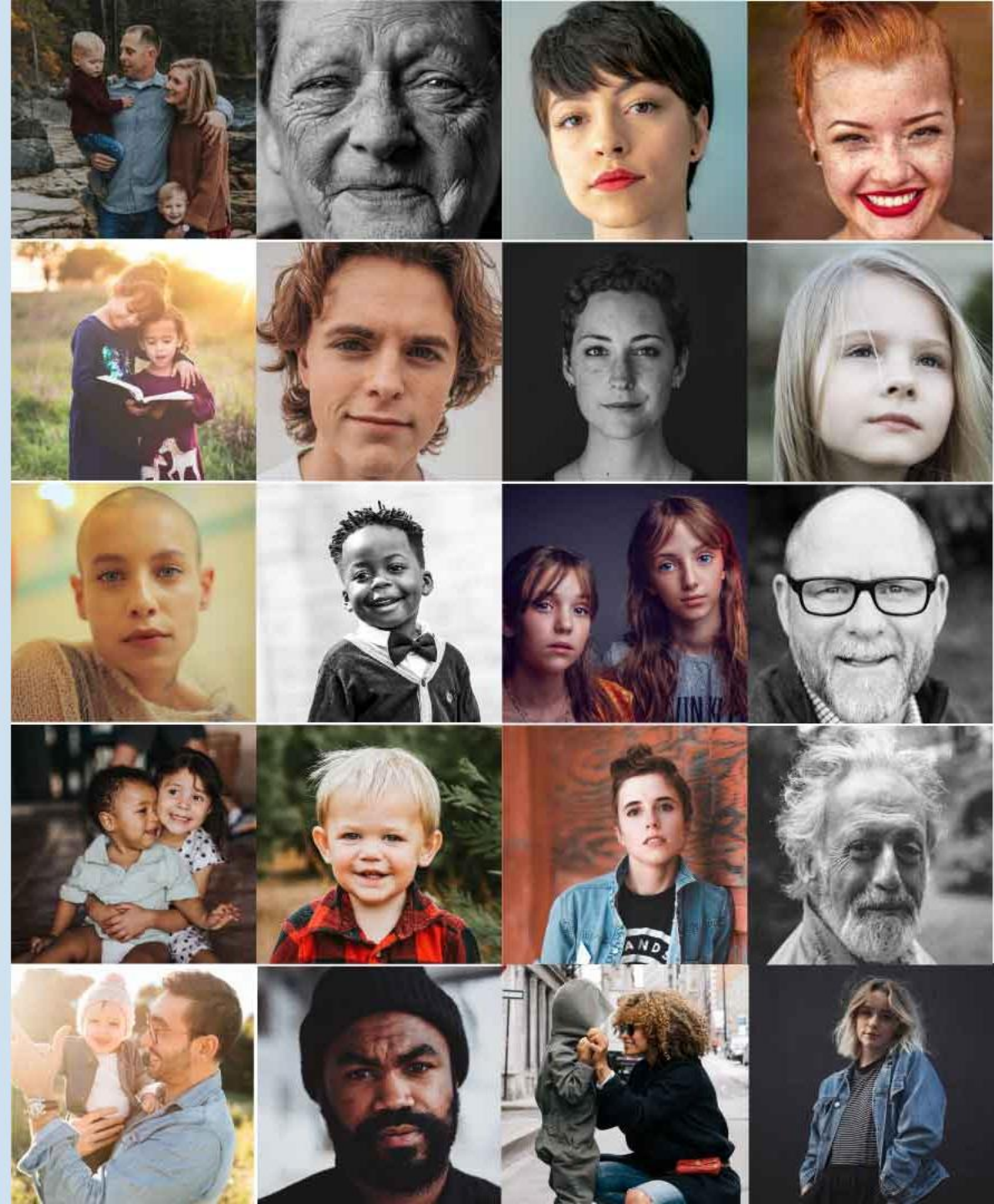
III People with limited digital skills

-in 2019 one third of adults in employment or looking for work had no basic digital skills
(EU Actions to address low digital skills 2021)



Estonian Human Development Report 2023

Libraries as community centres to
support mental health - bringing people
together, helping fight depression
and overcome loneliness





Thank you