

The background features a dark teal gradient with several wavy, translucent lines that create a sense of depth and movement. A fine grid pattern is visible in the background, particularly in the upper right quadrant. The overall aesthetic is modern and digital.

# Applying AI in 'Pencho Slaveykov' Public Library - Varna e-services

[www.libvar.bg](http://www.libvar.bg)

# Development trends in the GLAM sector

- Displaying the collection online
- Accessing the full collection digitally
- Moving visitors' experience outside the walls
- Redefining the role of museums and libraries as community gathering places
- Encouraging visitors to bring their smart devices

# AI and Chatbots at the Library

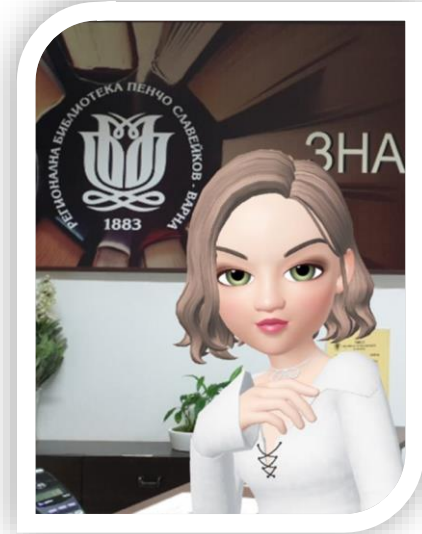
## AI Technology selection:

- Smart navigation through RFID scanning
- Facial Recognition
- Intelligent Question-Answering (IQA) and Recommendation System

# Chatbot as a Library Assistant

Meet Ellie:

- "The right person" to answer all user questions 24/7
- Average number of questions answered monthly - 600 to 1200
- Extremely high number of returning users - 92%



# Evaluation and Assessment

## **Automatic metric**

- Wrong words
- BLEU (Bilingual Evaluation Understudy)

## **Metrics based on human judgment**

- Pairwise comparison of answers
- Rating on 5- or 7-point Likert scale

## **Performance assessment**

- Number of reference transactions
- Quality of the responses provided
- User satisfaction

# Objections against Chatbots

A significant number of library professionals consider:

- Interaction human-to-human better than human-to-chatbot
- Machines could displace workers
- Issues of cybersecurity and access control

# The Future of AI in Libraries

## DigiGid – a Digital AI Guide

- Book readings recommendations
- Navigation through the real and virtual library space
- Book location (room and shelf)
- Various search options (Title, Author, Subject headings, genre, etc.)
- Book annotations and short summaries
- Personal reading list creation
- Personalized learning pathways
- Book ratings

# Conclusions / Advantages

- Better service
- Accessibility and inclusivity
- Extend working hours
- Improving the user satisfaction
- Performance of specific library functions
- Increase activity and attract users
- Increase the social networks communication



# Conclusions / Disadvantages

- Inconsistent responses
- How to negotiate
- Training and Education



**Thank you for your attention!**

Radka Kalcheva

'Pencho Slaeveykov' Public Library  
Varna, Bulgaria

[kalcheva@libvar.bg](mailto:kalcheva@libvar.bg)

Veselina Spasova

'Nikola Vaptsarov' Naval Academy  
Varna, Bulgaria

[v.spasova@naval-acad.bg](mailto:v.spasova@naval-acad.bg)