



DIGITIZATION
IN THE
SLOVAK NATIONAL LIBRARY

PAST **PRESENT** **FUTURE**



I. PAST



PAST: PRE-PILOT

PRE-PROJECT PERIOD

2000s

- early thoughts about digitization of SNL's legal deposits

2008 – 2009

- first installations
- preparing of Digitization Complex in Vrútky
 - preparation of documents for digitization/digitization/coservation after digitization
- test operations

2009 – 2012

- market and solutions research – scanning devices, image-processing tools
- acquisitions of solutions
- systems and processes set up - Infrastructure preparing, Work-efficiency testing







PAST: PILOT

DIGITAL LIBRARY DIGITAL & ARCHIVE PROJECT

03/2012

- Launch of National Project Digital Library and Digital Archive („Project“)
- Quantitative criteria of the Project:
 - 800 000 articles from scientific journals and almanacs
 - 350 000 issues of periodical prints
 - 100 000 volumes of monographs / book prints
 - 10 000 units of special documents – postcards, posters, invitations, etc.

04/2012 – 02/2013

- Origin of digitization in Digitizing Centre in Vrútky
 - Scanning - 2x DL 3003's and 2x Treventuses
 - Processing – simple image editing in ScanTailor
 - Backup of digitization outputs in tape library

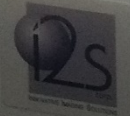


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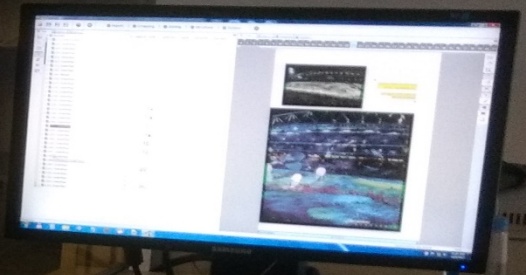
SWISS MADE

Digitizing Unit



4DigitalBooks™

DL 3000





TREVENTUS





PAST: PRODUCTION

I. STAGE: - BEFORE DOCWORKS

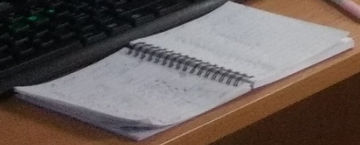
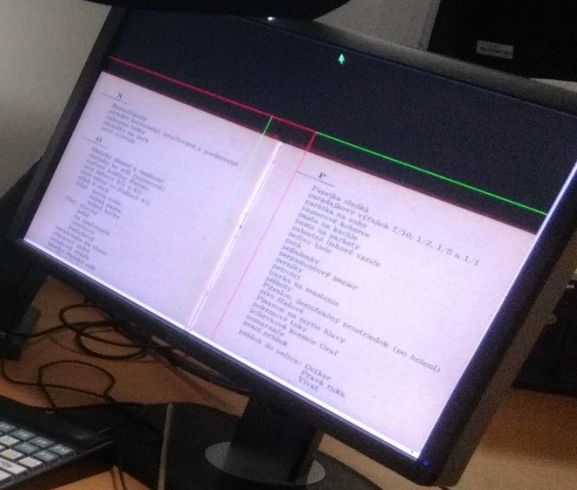
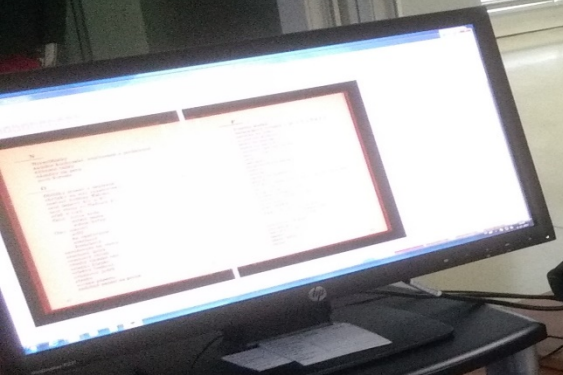
02/2013 – 04/2014

- implementation of new work-shift (from 40 e-yees to 80 e-yees)
 - full production mode from 6am to 10pm
- digitization of articles – external supplier
- new definition of metadata standards for digitized outputs – PSPs
- new scanners:
 - 5 CopiBooks (early 2013)
 - 2 S2Ps (early 2013)
 - 6 DLmini's (late 2013)



10

4



DigitalBooks™

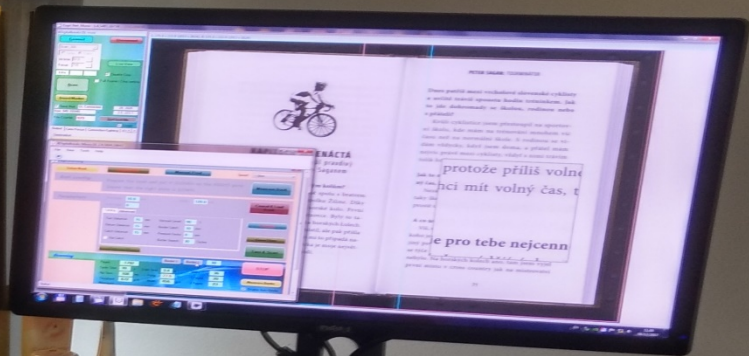
scan2page

6





4DigitalBooks™



SWISS MADE



PAST: PRODUCTION

II. STAGE: - IMPLEMENTATION OF DOCWORKS

04/2014 – 11/2014

- implementation automated digitizing WorkFlow – DocWorks (CCS) with following systems:
 - ItemTracking - Tracking system that supervises transport and logistic of document batches
 - System covering all digitizing processes:
 - Scanning/Image processing/Content processing/Rework and Post-processing actions
- customization of profiles according to the SNL's needs
 - generating of SNL's digital outputs (PSPs) in accordance with accepted standard
 - UC, MC, TXT, ALTO, AMDSec, info.xml, MD5, METS.xml



PAST: PRODUCTION

II. STAGE: - MEETING QUANTITATIVE INDICATORS

11-12/2014

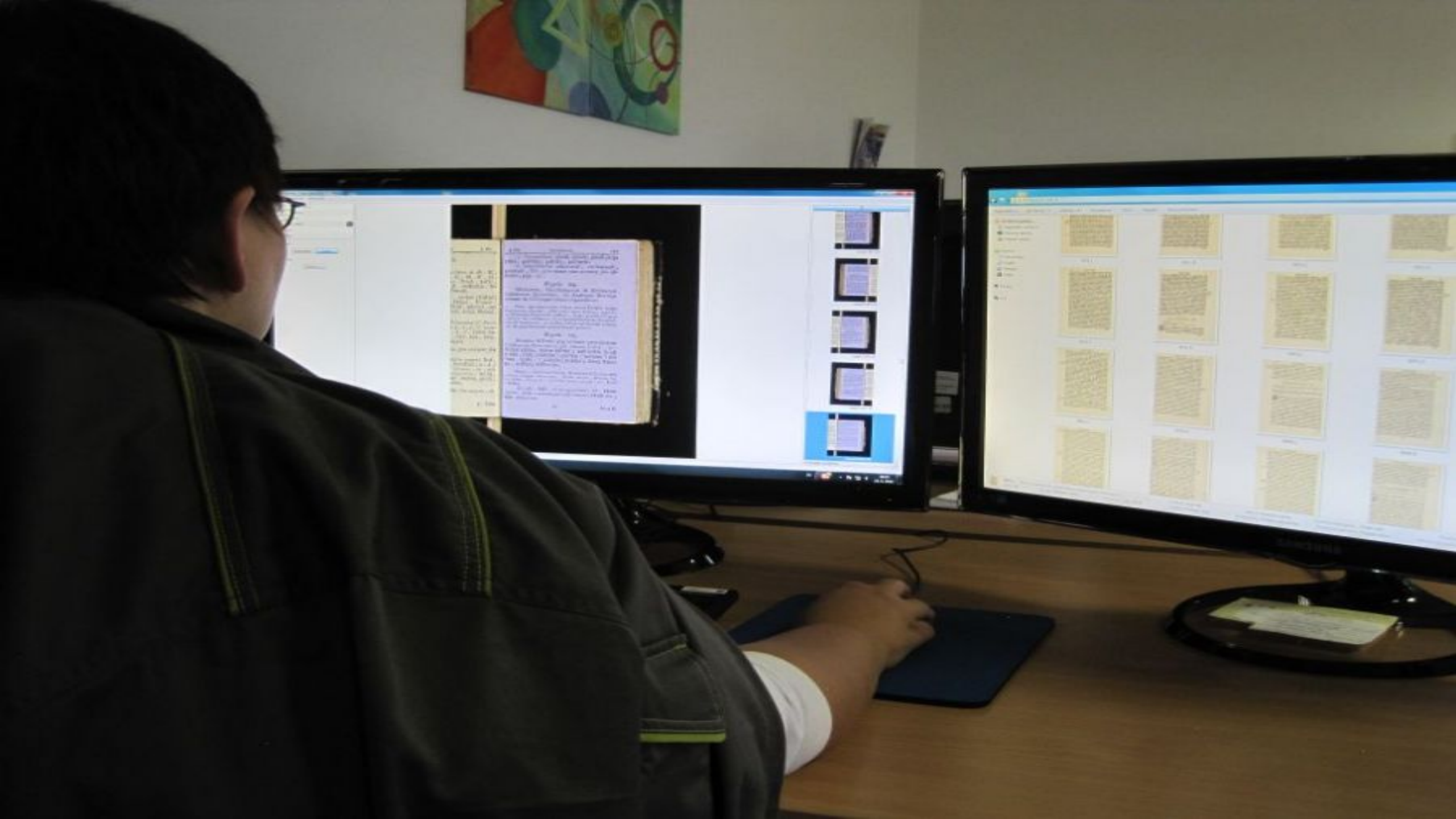
- generation of first valid digital outputs of digitization (PSPs)

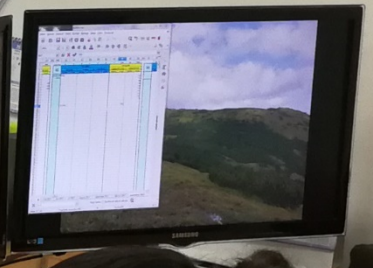
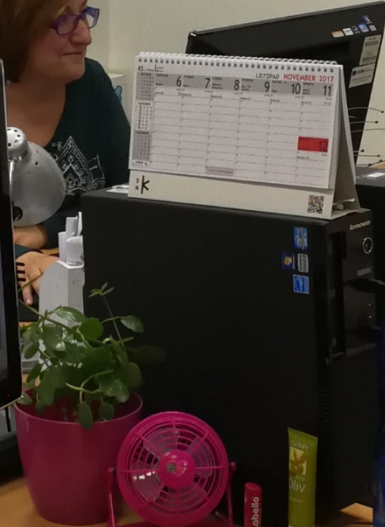
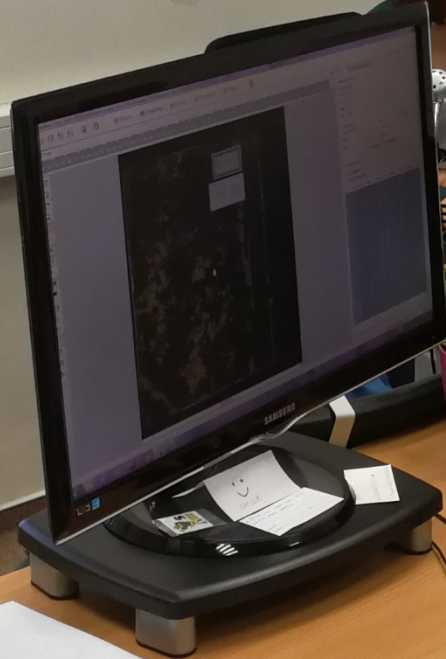
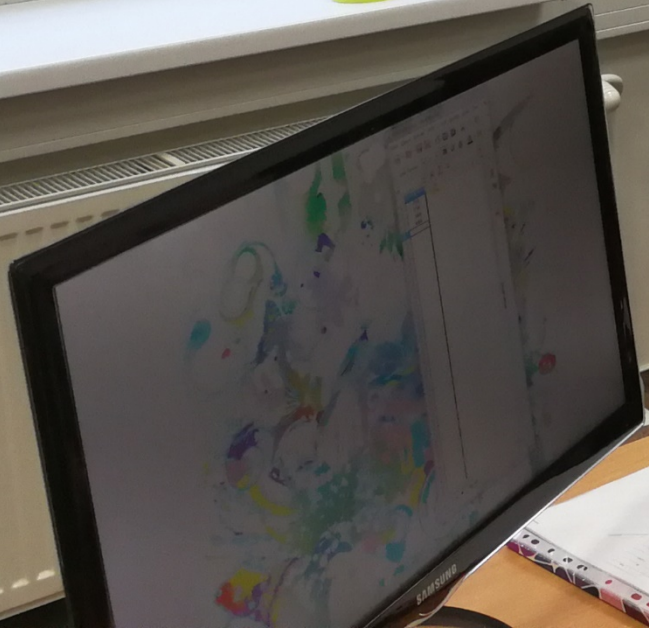
03/2015 – 08/2015

- finalization of Project

09/2015

- meeting the quantitative criteria of the 'Project'
- initiation of SNL's 'local' Digital Library







II. PRESENT



PRESENT

SUSTAINABILITY

Sustainability phase of the Project

- Started 01/2016 and will be finished 12/2020
- Quantitative criteria – digitization of 5 mil. of pages / each year – 25 mil. together

Year 2017

- Currently digitized objects:
 - legal deposits of actual year and Historical prints from Literary Museum and Literary Archive
- Development of automated post-processing solution
 - it covers:
 - *data release from the DocWorks systems,*
 - *distribution of derivatives to the contracted partners*
 - *rework of the already processed documents*



III. FUTURE



FUTURE

IMPROVEMENTS OF USER EXPERIENCE

Future customization of the DocWorks

- General Improvements
 - new processing profiles – for different types of documents - e.g. newspapers, articles...
- Specific Improvements
 - new Metadata Management – for multi-issued periodical prints, articles, ...
 - upgrade of logical structure map – adding of links to ALTO blocks
 - generation of downloadable derivatives – PDF, partly also EPUB
 - backup of notes describing physical status of document

Reprocessing of „old production“

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BEACONS FOR LIBRARY

I. WHAT IS IT?

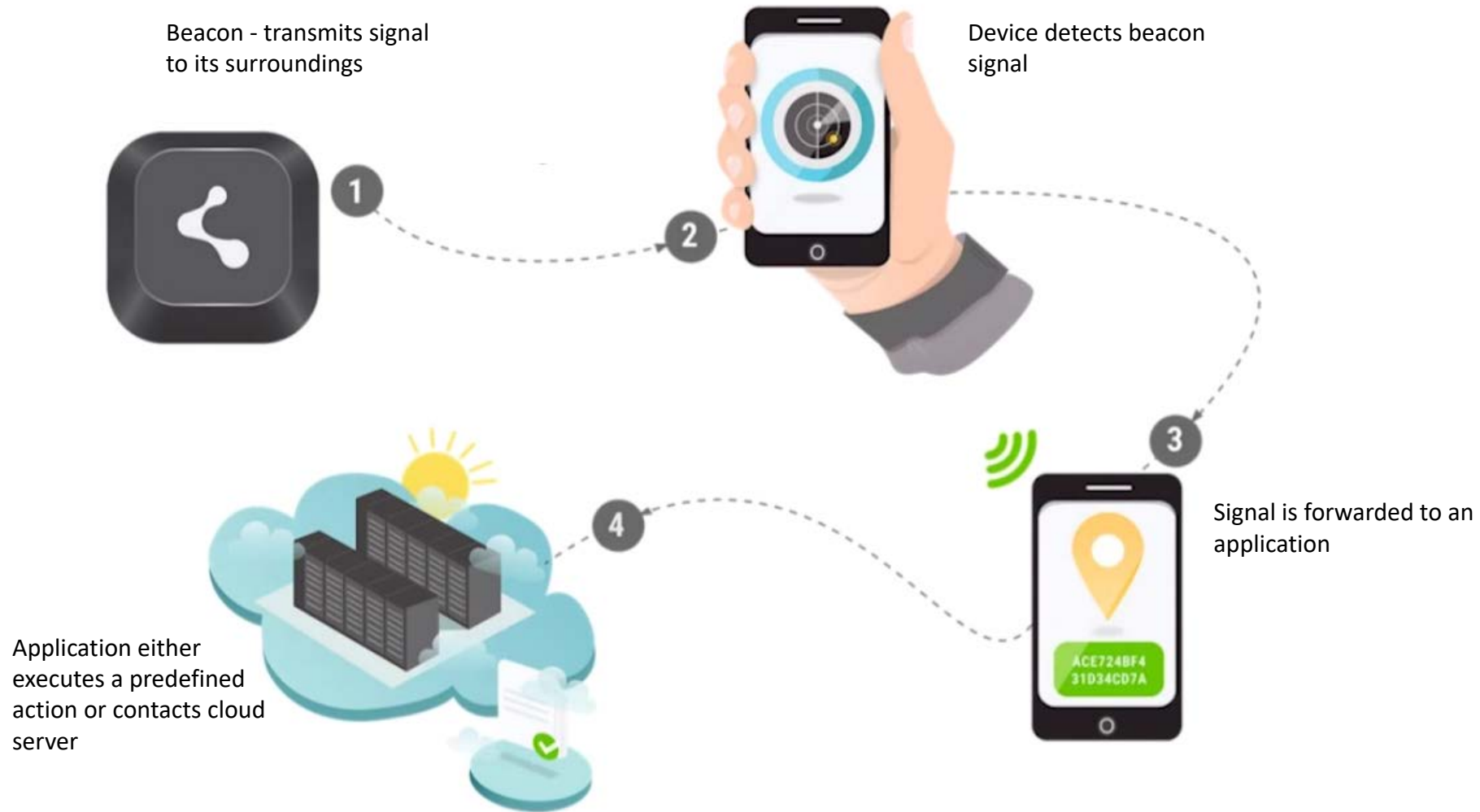
WHAT

IS A BLE BEACON

- ▶ Bluetooth Low Energy device
- ▶ data packet transmitter
- ▶ iBeacon & Eddystone format
- ▶ 2.5GHz frequency (Wifi frequency)
- ▶ about 50 meters range
- ▶ up to 5 years battery life



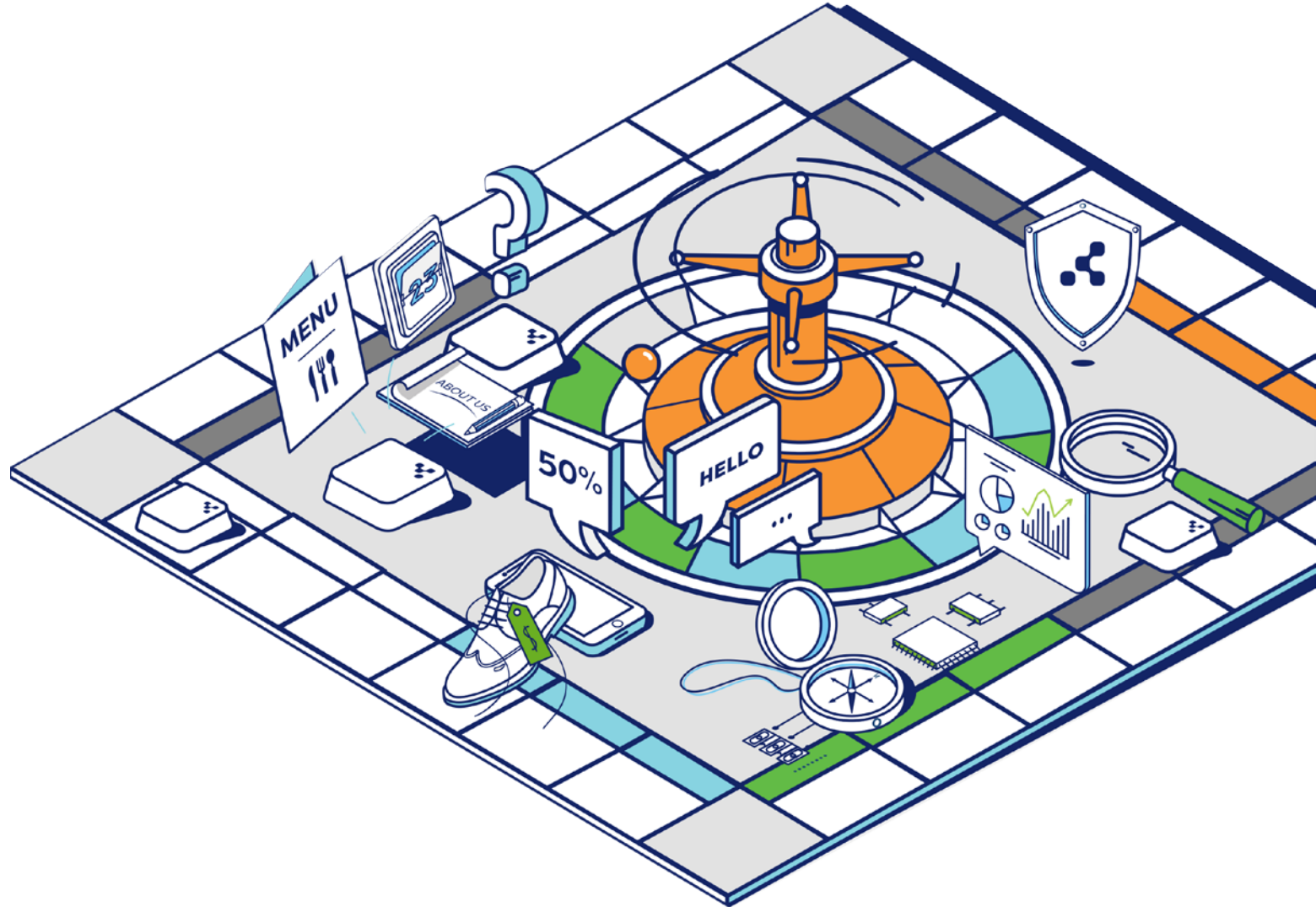
HOW DOES IT WORK



WHERE

CAN BE USED

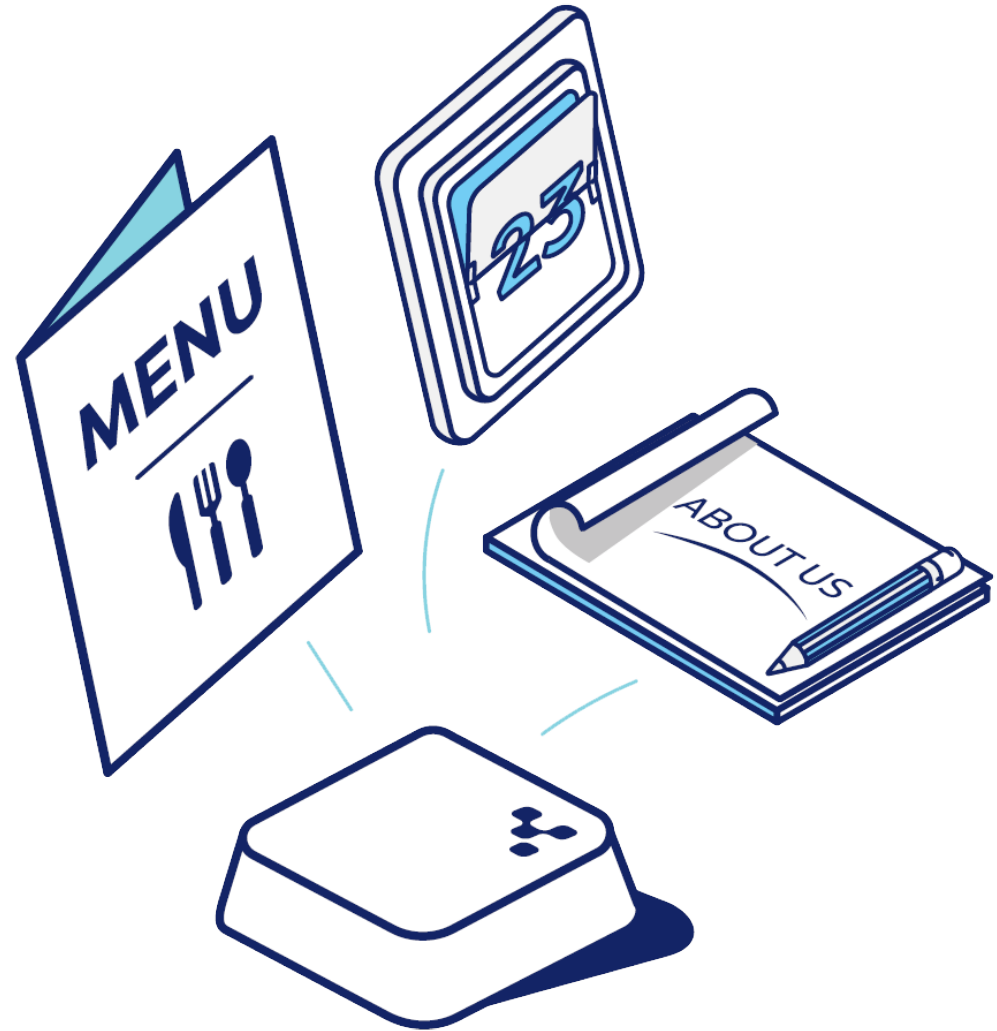
- ▶ Information
- ▶ Navigation
- ▶ Monitoring
- ▶ Analytics
- ▶ Security



WHAT

IS IT FOR

- ▶ Attract nearby visitors to your premises
- ▶ Share information with your visitors
- ▶ Grab and focus attention
- ▶ Targeted personalized marketing
- ▶ Push content based on user location and behavior



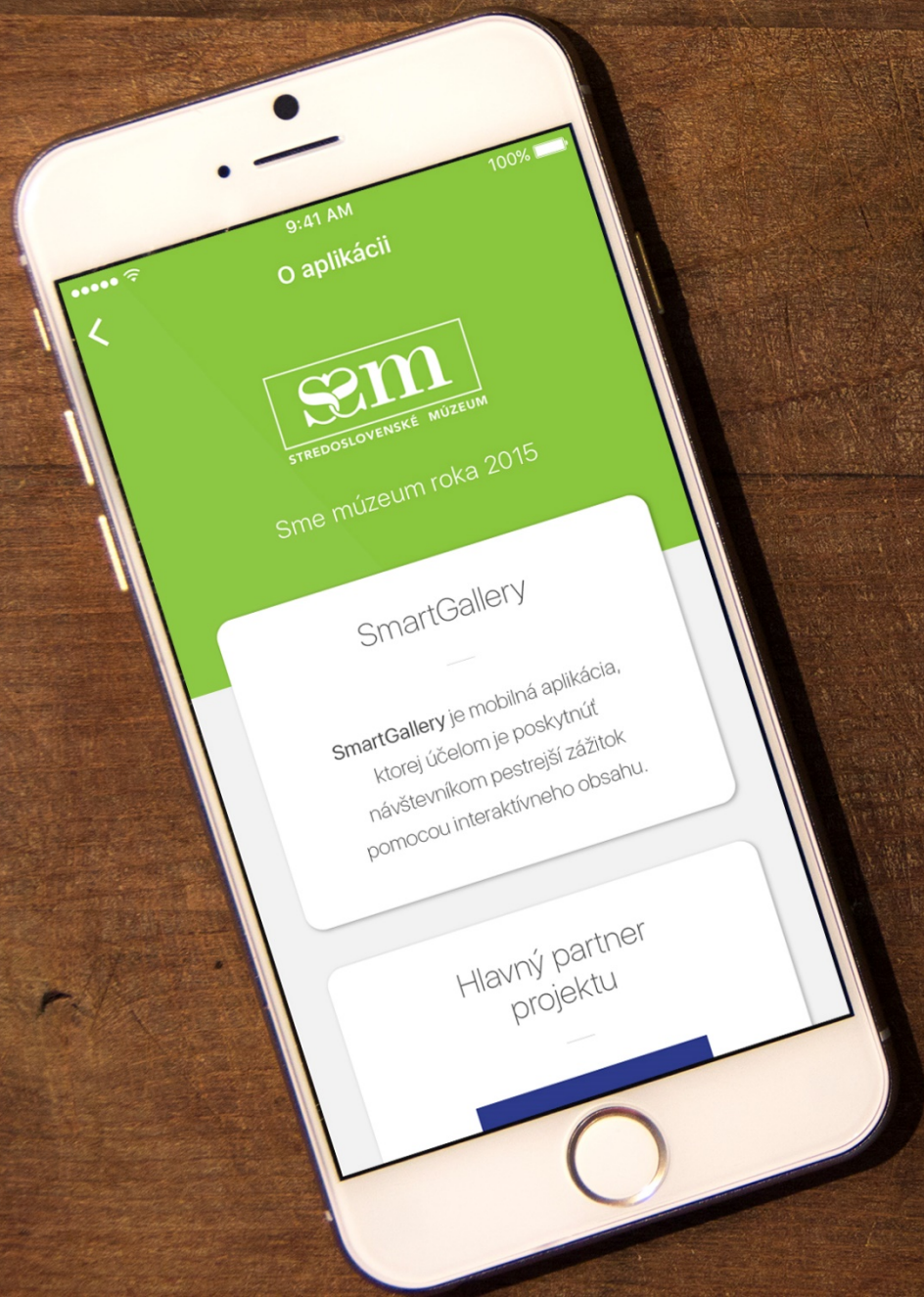
II. WHAT IS THERE FOR LIBRARIES?

PRESENT

SUSTAINABILITY

- Libraries and museums are using beacons to alert patrons with notices about services and exhibits when they are in physical proximity of the devices.
- Beacon 1 “Ask a Library” – Can’t find information you need? Ask a library! Visit www.spytajtesakniznice.sk.
- Beacon 2 “Literature retrieval” service allow researchers to find specific papers. Ask online at: [www.snk.sk/literature retrieval](http://www.snk.sk/literature%20retrieval).
- Beacon 3 “Scanners for free” Ask about free scanners at Services department desk
- Beacon 4 “Quiet zone” Please be mindful, that person next to you is studying

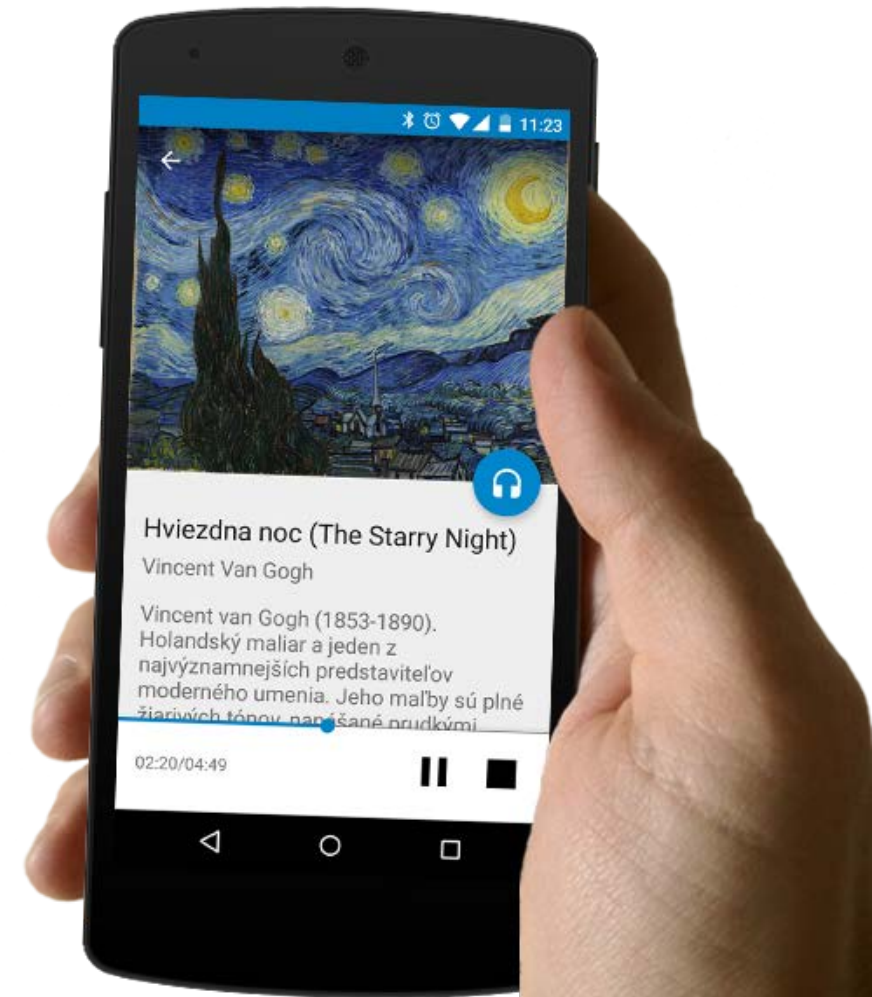
III. SMART GALLERY



SMART GALLERY

APPLICATION

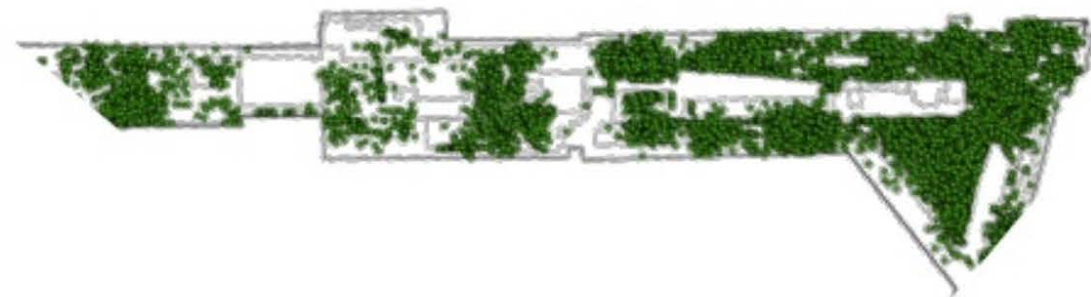
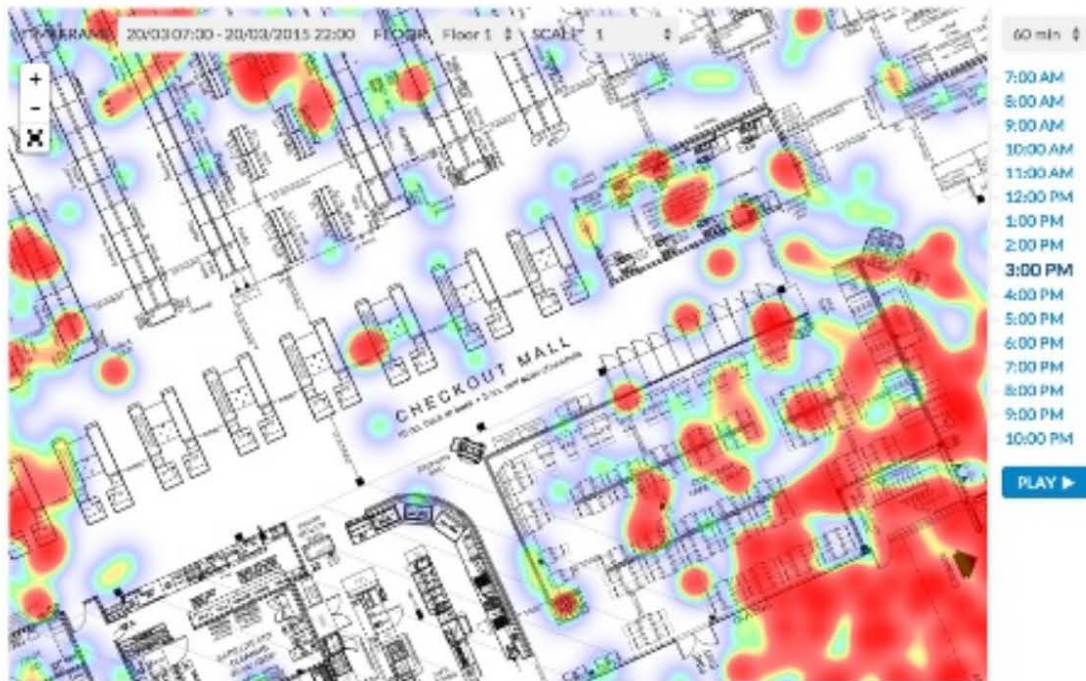
- ▶ Audio guide
- ▶ Detail digital content
- ▶ Simple phone automation – silent mode in gallery premises and normal mode when outside
- ▶ Time-tracking - record arrival and departure times of visitors



SMART GALLERY

APPLICATION

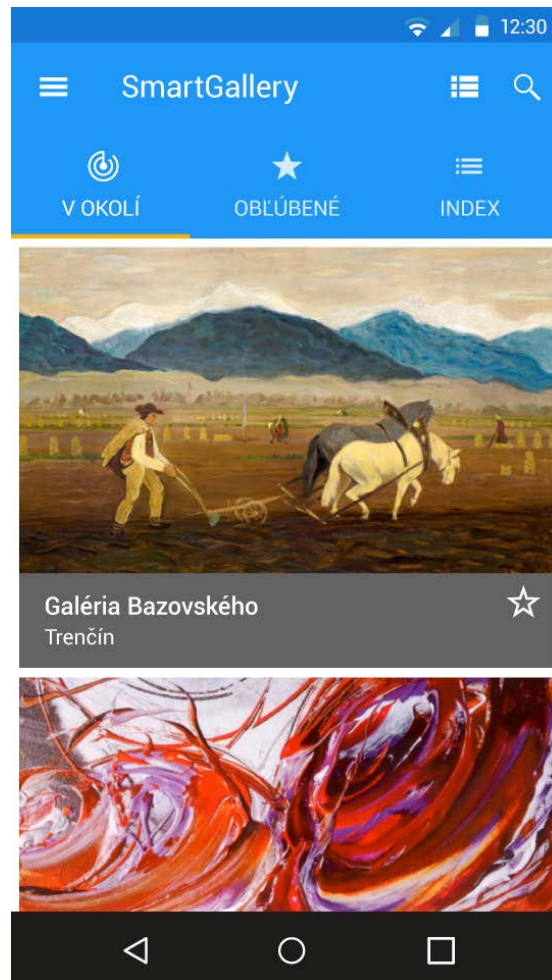
HEAT MAP



08:00	59	63	58	70	58	42		
09:00	96	86	129	139	139	109		
10:00	147	153	264	180	268	248		
11:00	210	282	199	301	312	277		
12:00	242	193	290	232	308	363	178	
13:00	205	182	209	306	386	464	204	
14:00	265	323	386	428	466	531	257	
15:00	336	296	353	309	434	576	252	
16:00	401	301	440	453	578	430	249	
17:00	443	432	380	412	500	272	263	
18:00	364	427	384	432	576			
19:00	260	347	291	303	325			
20:00	136	459	122	176	214			

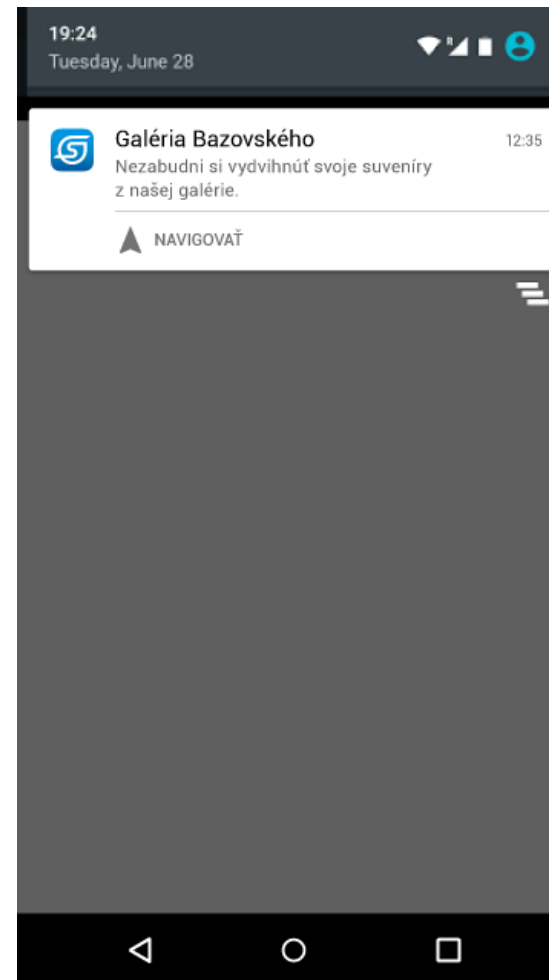
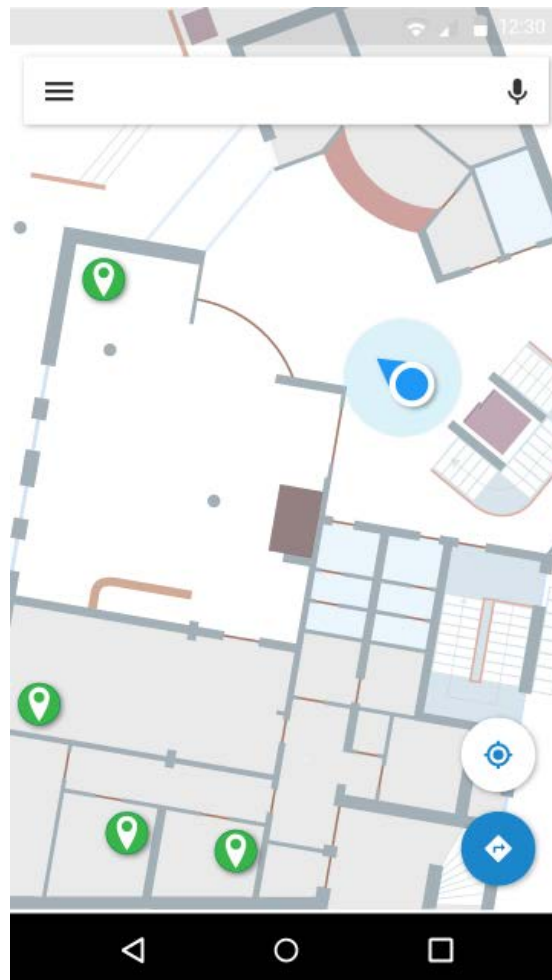
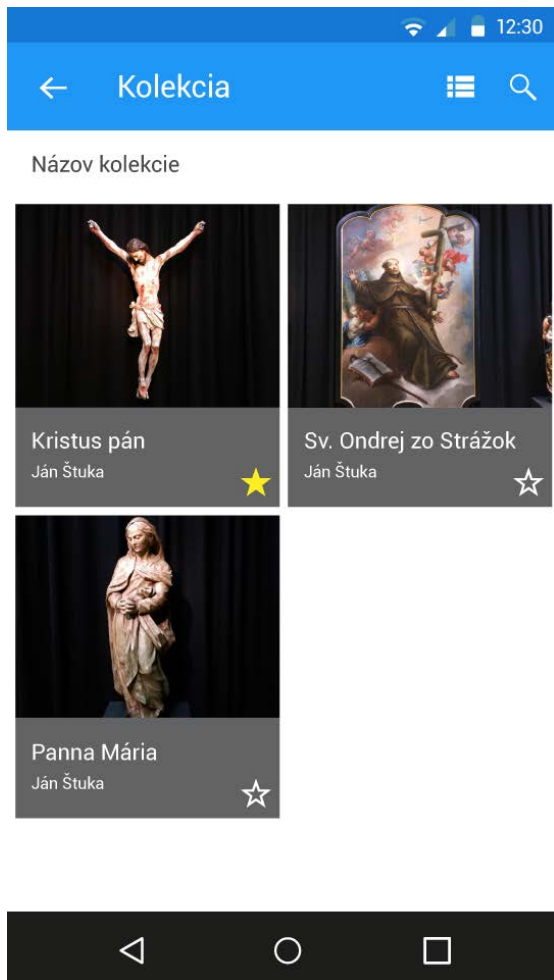
SMART GALLERY

APPLICATION



SMART GALLERY

APPLICATION



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I T m a k e s s e n s e

