

# Outlook of Latvian beekeeping – facts and figures



## Facts and figures 20 min.



## BeeKing

# Digital transformation and Voice enabled colony records BeeKing

23/03/2019

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#### Content

- Purpose
- Voice of beekeeper
- Minimum requirements
- Project
- Demo
- Challenges
- Next steps

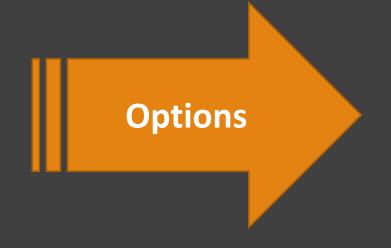


# Need for efficient and user friendly digital hive records













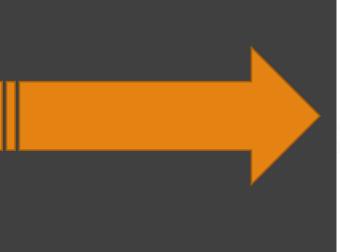




BeePlus

# Digital transformation and influence on \$\footnote{8}\$ the beekeeping







# Gap between traditional and digital hive records is huge









- Requires extra time
- Requires internet access















### Voice of beekeeper

#### Current practices and variety





#### N=560

#### Takes notes:

- regular 44%
- irregular 47%
- not at all 9%

#### Gap:

- Habits
- Skills
- Vocabulary
  - Devices

Digital hive records

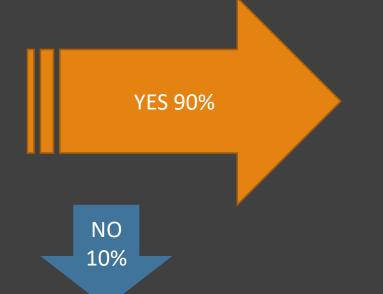


## Voice of beekeeper

#### Readiness for change







- Easy to use
- Efficient
- Brings benefits





## Minimum requirements for a project

- Easy and intuitive to use
- Voice enabled terminology
- Inspection-able without internet
- Multiuser
- Marks and Tasks can be assigned
- Latvian & multilanguage ready
- On-line support and onboarding available









## Project

- February 2018 requirements ready development started
- August 2018 trial started (Latvia, 100+ beekeepers)
- January 2019 beekeeper on-boarding started (Latvia)
  - Training
  - Support
  - Feedback based development
- April 2019 active usage period started for Android
- April 2020 «colony lifecycle» reports use for <u>COLOSS</u>







#### Demo – current functionality

Languages: Latvian (all) / English (app)

Recordings in apiary: Hands-free & manual voice, text

Main sections: Apiary, Hive, Sessions, User Profile, Forum

Access types: -Web browser (registration, administration, monitoring)

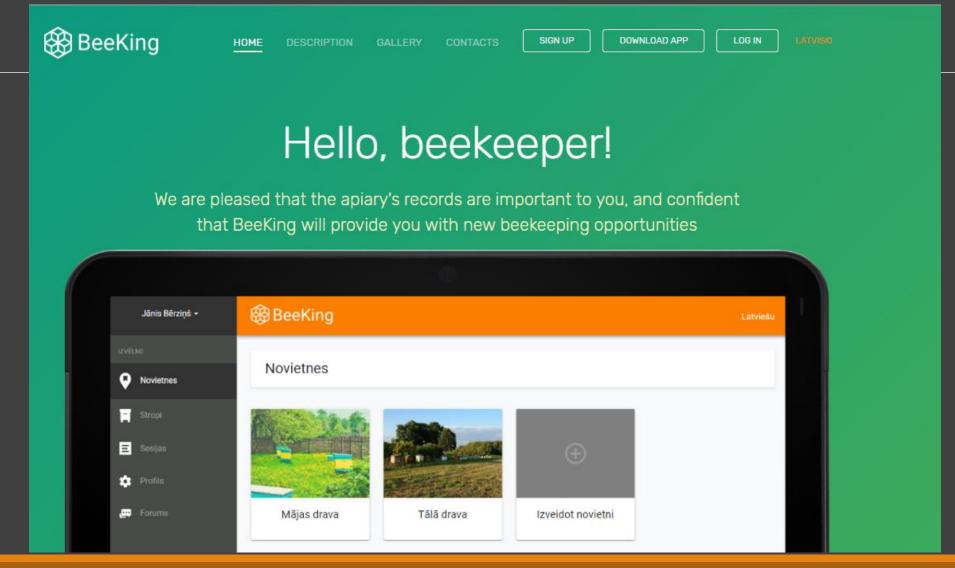
-Android Mobile App (inspections, history, tasks)

Support: Service desk and «On-line» forum / knowledge base



#### Beeking.eu









#### Current challenges

- To keep focusing on:
  - Simplicity
  - Valuable functionality
  - Colony lifecycle approach
- Voice recognition updates
- Beekeeper efficient on-boarding







#### Next steps

#### Continuous development

- BeeKing for iOS users
- Analytics (colony, volume, efficiency)
- 5G capability assessment and Hive monitoring
- Roll-out outside Latvia
  - Beekeeper organizations







## Thank you!

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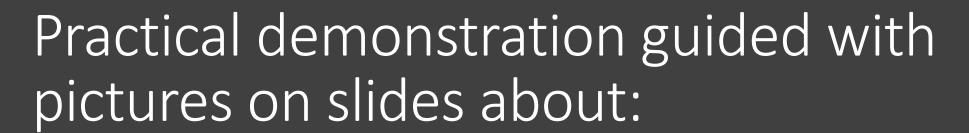
# Queen rearing using modular hives

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- Modular system;
- Filling up NUCs;
- Breeding;
- Merging NUCs.