



Eesti Töötukassa

Decision Support Tool - OTT

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27.04.2022

Estonian Unemployment Insurance Fund – who we are and what we do?

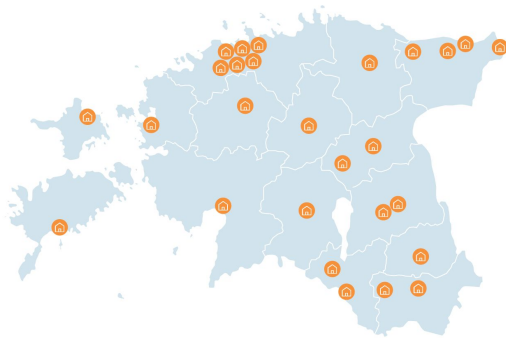


Independent public body with
tripartite management

Government
Employers
Trade Unions

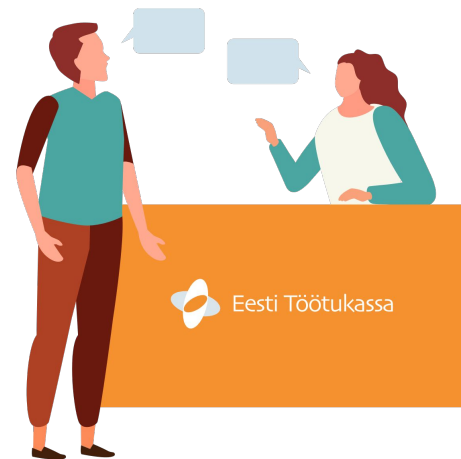
Service-points all over Estonia

~1000 employees



Our clients

Jobseekers
People in employment
Young people/students
Employers



Our business-strands

Service provision

We help jobseekers find job
and employers find employees
(

Benefits

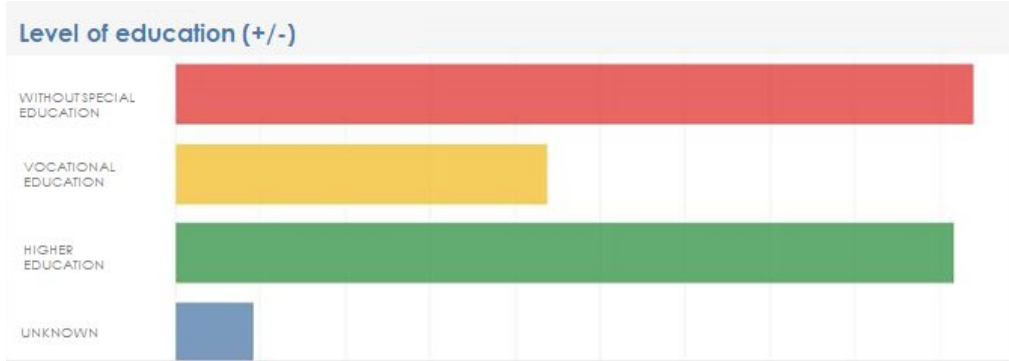
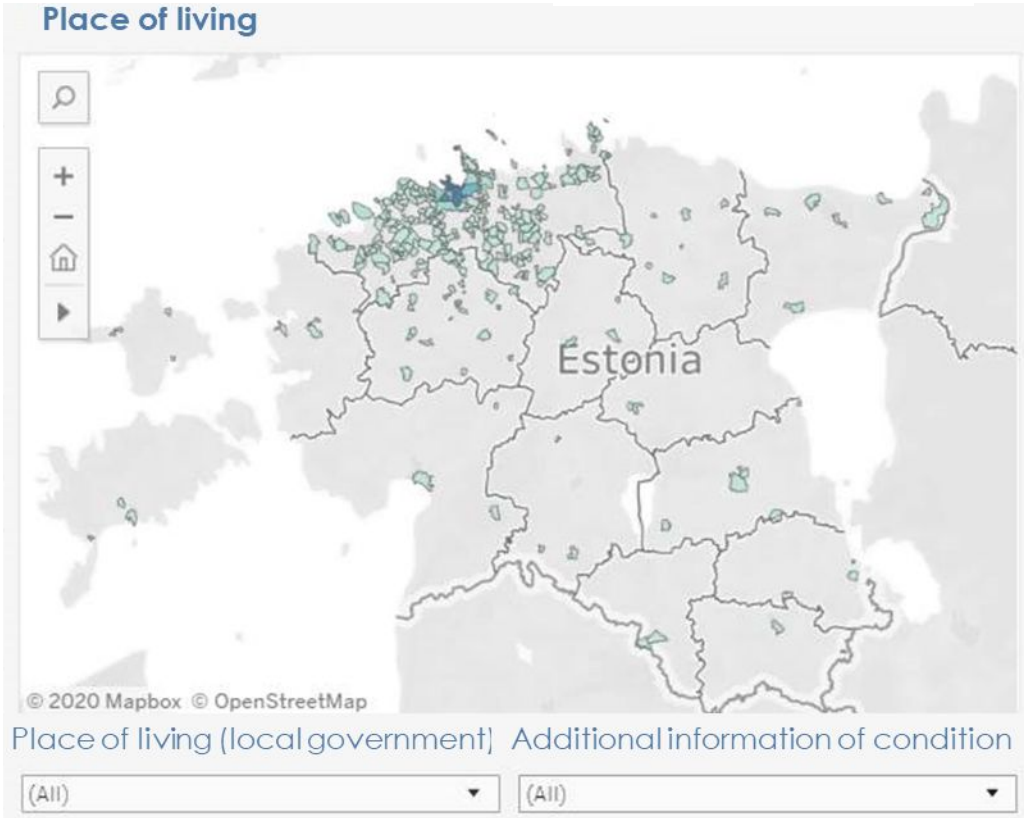
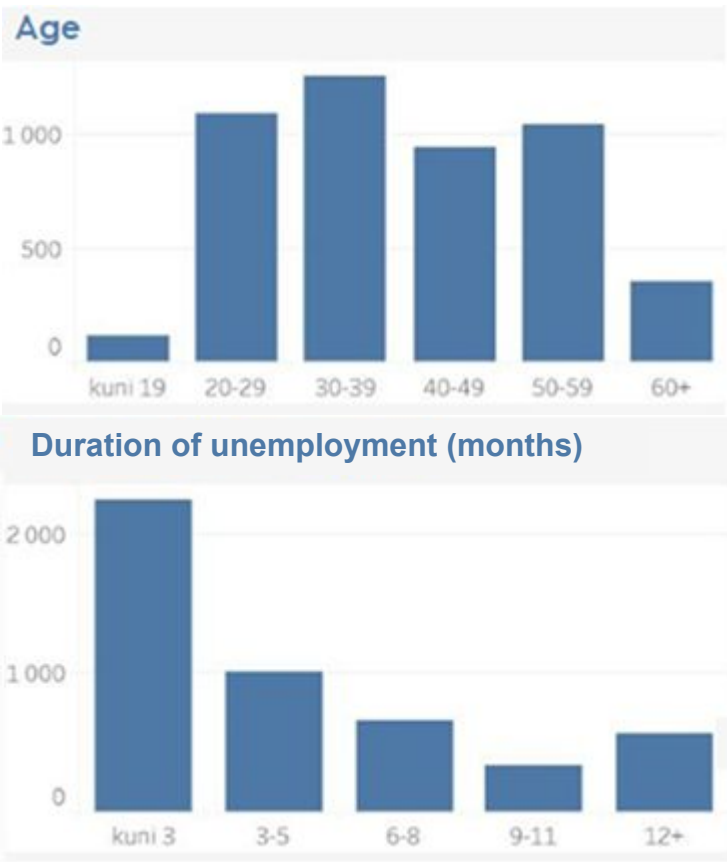
We pay benefits and
allowances

Work capability assessment

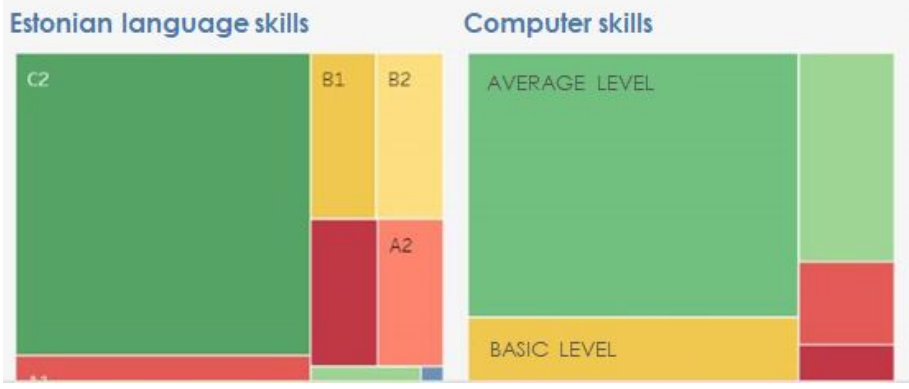
We assess work capability



NEW DIGITAL TOOLS: DATA- WAREHOUSE DASHBOARD



Dashboard view of one bureau (capital region)



DECISION SUPPORT TOOL – WHY?

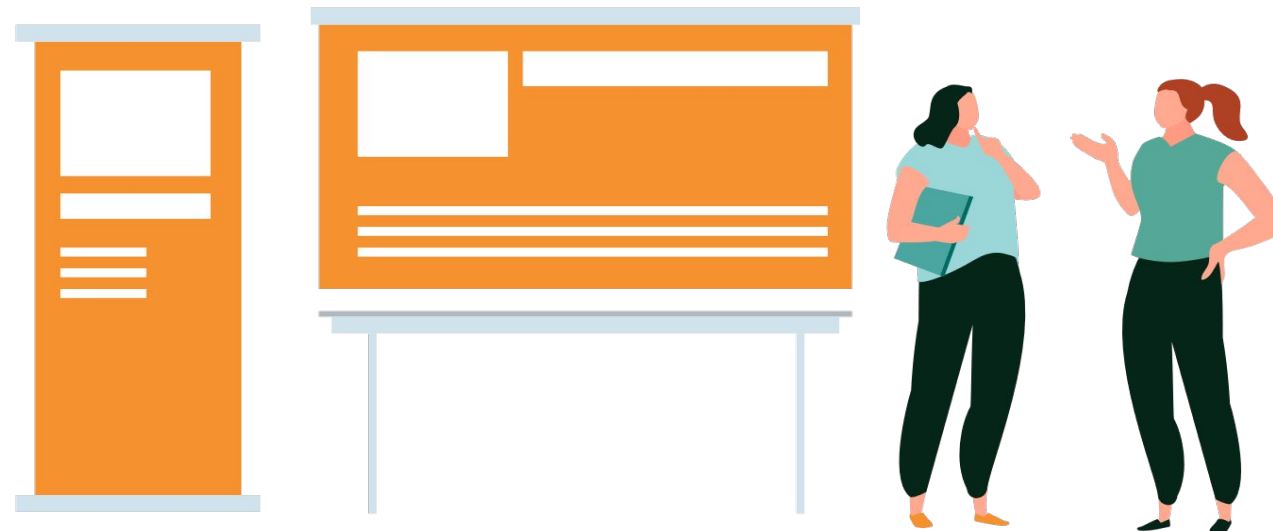
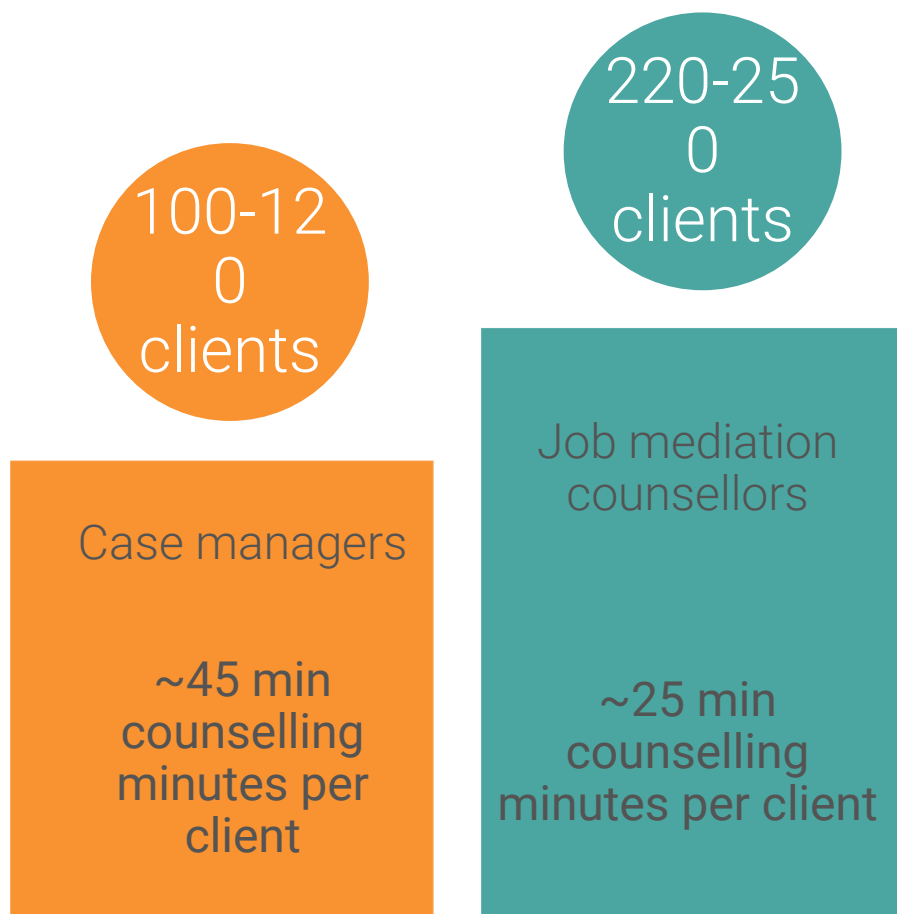
Continuous inflow of new jobseekers, some of whom will easily transition to a new job **without any support**, whereas **others need intensive counselling** and guidance.

Counsellors need time to figure out the needs of every individual, possibly causing:

- ▣ **excessive support** and services to ones who would have found a job in any case
- ▣ **lack of support** for or late notice of individuals who need extra guidance



TWO-TIER EMPLOYMENT COUNSELLING 2022 SPRING



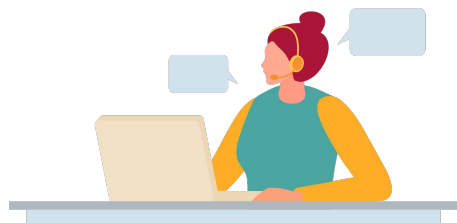
Employers' counsellors, career specialists

TWO-TIER EMPLOYMENT COUNSELLING 2022 SPRING

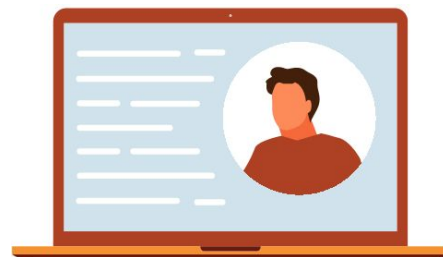
Various channels for counselling:



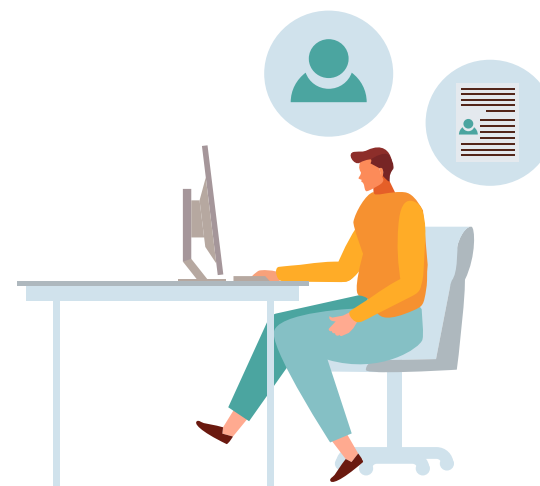
Face-to-face
at the employment
office



Contacting by
phone or MS Teams



Independent
jobseeker



Using
e-töötukassa

2022
Incorporating
video counselling



BENEFITS FOR COUNSELLORS

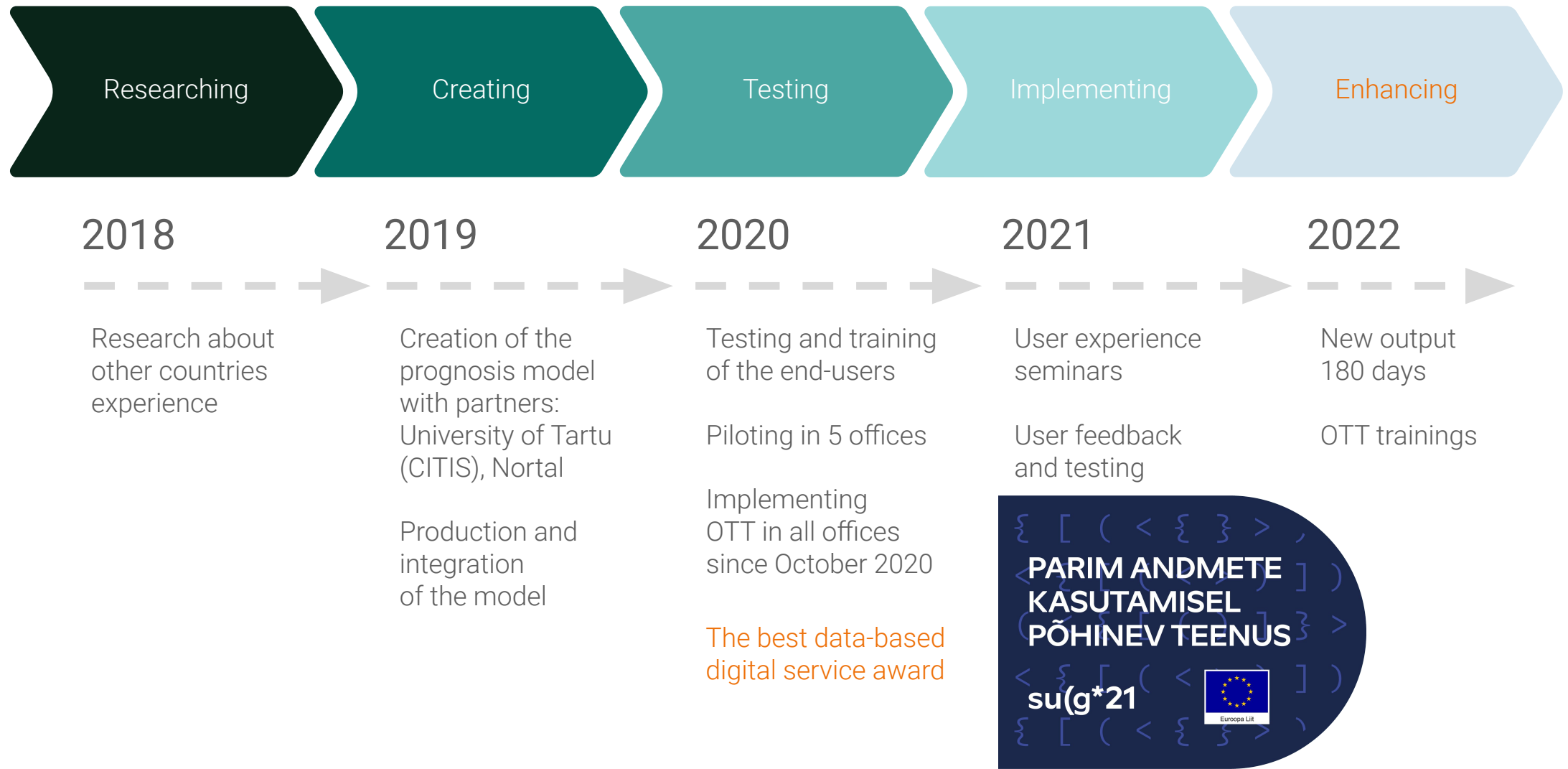
Decision support tool supports counsellors with:

- choosing the best support channel (online counselling, phone counselling or real-life meetings) for their clients
- deciding upon the frequency of contact with clients
- noticing the most important factors affecting the client's job seeking journey
- deciding on any possible interventions to client's activities
- getting an overview of their portfolio and risk level of their clients
- planning their schedules and workload

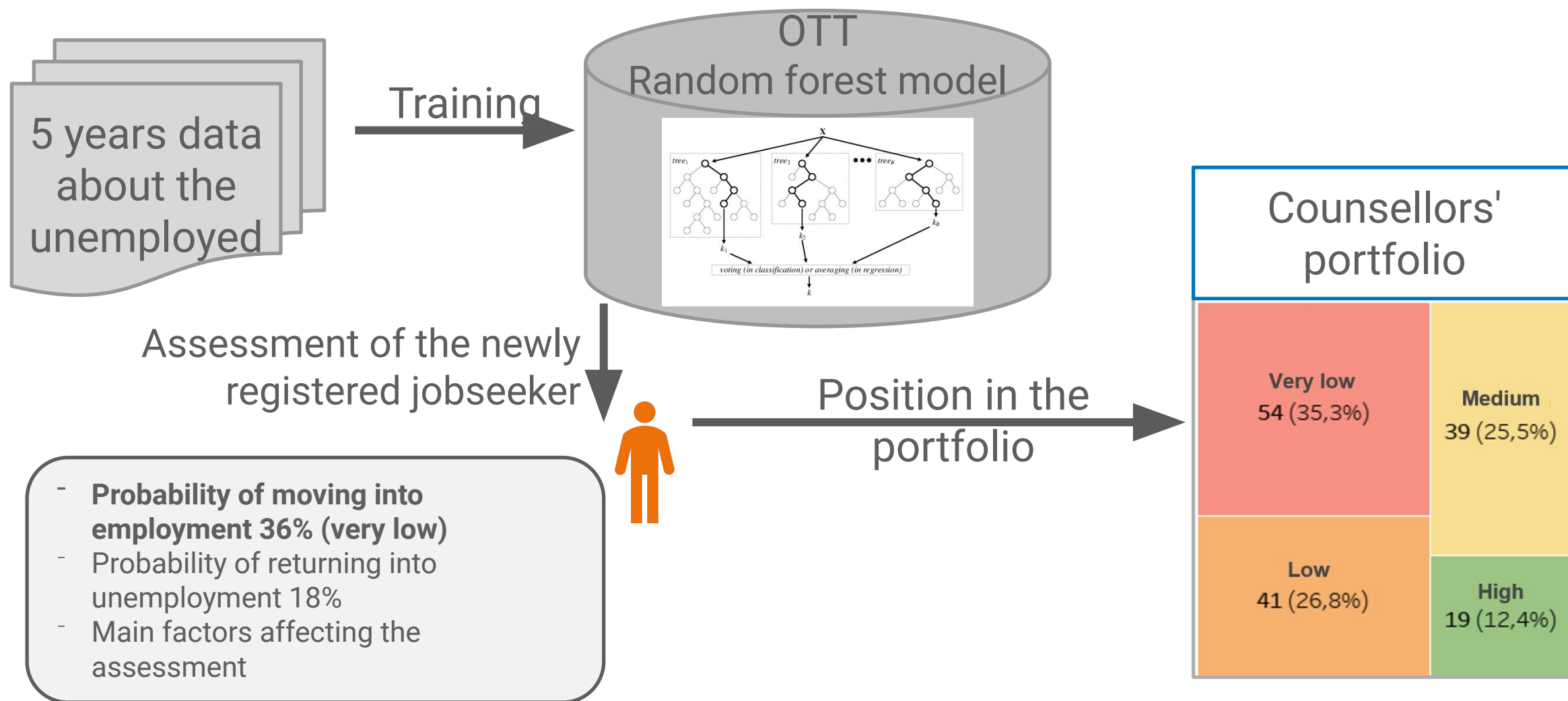
Decision support tool has only a supporting role
and nothing will be decided solely based on the model output!

OTT

Decision Support Tool timeline



OTT INTEGRATES A MACHINE LEARNING MODEL INTO THE DAILY PROCESSED OF THE COUNSELLOR



DECISION SUPPORT TOOL ON JOBSEEKER'S PROFILE

Decision support tool

Show all

Probability of moving into employment	Probability of moving into employment risk level	Position in counsellors portfolio	Evaluation date	Counsellors feedback	Factors influencing the probability of moving into employment	Probability of returning into unemployment risk level	Period of unemployment
74%	High	5	05.10.2021	06.10.2021	Look	Low	01.09.2021–

Evaluated clients/all clients: 71/81

Days of unemployment: 48

Probability of moving into employment affecting factors

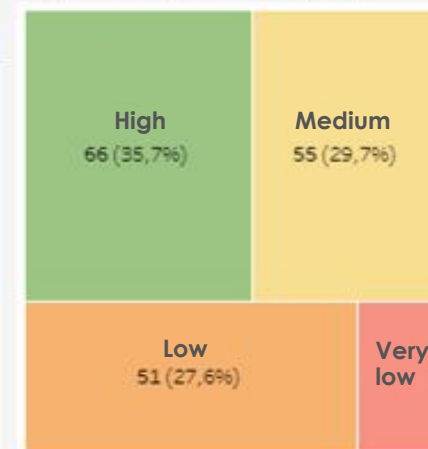


Number	Factors	Value	Direction
1	viimase 3 aasta töösuhete arv	1	Vähendab
2	vabade töökohtade ja sarnaste töösoovide suhe	0	Vähendab
3	viimase 3 aasta tööandjate arv	1	Vähendab
4	aeg viimase hõive lõpust	kuni 3 kuud	Suurendab
5	viimase tegevuse liik	töötas töölepingu alusel	Suurendab
6	töötutoetuse kestus päevades	0	Vähendab
7	samal ajal arvele tulnud klientide arv Eestis	10	Suurendab
8	viimase töösuhete lõpetamise põhjus	võlaõigusliku lepingu lõppemine	Suurendab
9	samal ajal arvelt maha tööle läinud klientide osakaal Eestis	0%	Suurendab
10	töövõime	töövõime ei ole vähenenud	Suurendab

Kokku: 10

Not evaluated 93

Counsellors portfolio distributed into risk levels by moving into employment



Vali klient oma portfelist või sisesta kliendikaardi number: 1 klient

JRK_NR	Factor	Value	
1	3 a jooksul töötuna arvel olnud päevade arv	738	Suurenda
2	arvutioskus	spetsialisti tase	Vähenda
3	varasemad töötused 3 a jooksul	1	Vähenda
4	B-kategooria juhtimisõigus	Ei	Suurenda
5	alla 3-kuuliste töösuhete arv 3 a jooksul	0	Vähenda
6	viimase hõive valdkond	tervishoid (õed)	Suurenda
7	samal ajal arvele tulnud klientide arv Eestis	5172	Vähenda
8	haridustase	magister	Vähenda

MANAGERS VIEW IN TARU

Overview of decision support tool, user Karina Leinuste

Unemployed
today in your
department/office

4 179

Evaluated
clients

3 860

Average of
moving into
employment

56,2%

Büroo

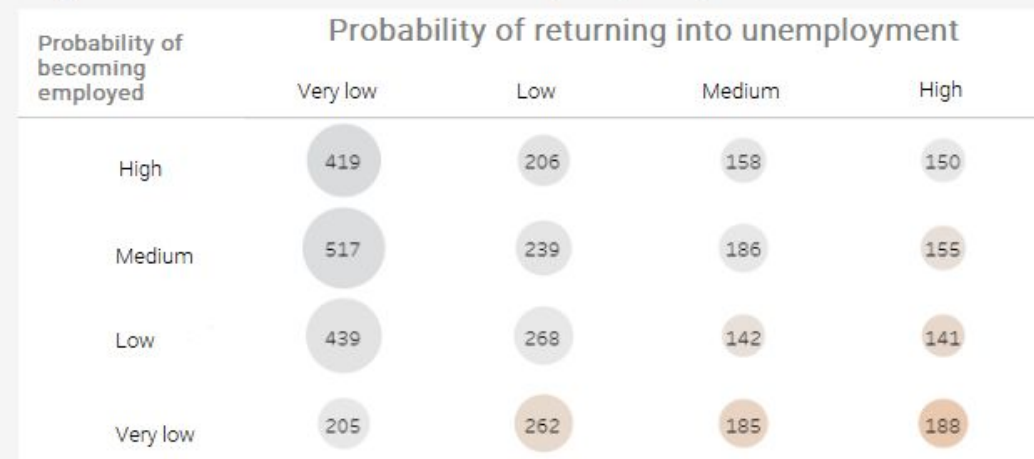
Office name

Valim

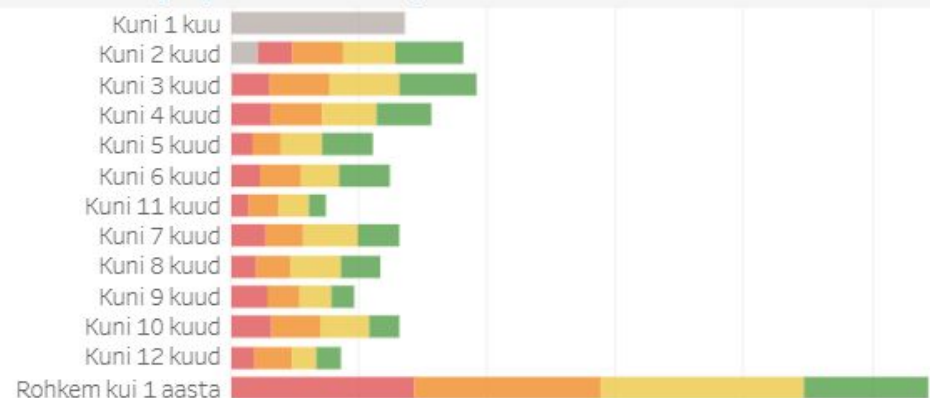
All unemployed

Otsustustoe portfelli jaotus büroo / ametikoha / töötaja lõikes (+/-)

All jobseekers with score have been grouped by the risk level



Period of unemployed as of today



Office	Position	Counsellor	Probability of moving into employment				
			Very low	Low	Medium	High	Not evaluated
Office name	Chief consultant	Name			100,0%		
	Case manager	Counsellor 1	25,9%	25,3%	26,5%	16,5%	5,9%
			38,8%	25,7%	21,3%	13,1%	1,1%
			11,5%	31,1%	31,1%	18,0%	8,2%
			39,4%	25,6%	18,3%	16,7%	
			18,1%	25,7%	31,0%	17,5%	7,6%
			33,0%	24,6%	22,9%	19,6%	
			11,1%	33,3%	16,7%	16,7%	22,2%
	Case manager II	Counsellor 1	44,6%	22,3%	14,3%	8,9%	9,8%
			41,7%	22,3%	26,2%	7,8%	1,9%
			38,2%	27,3%	20,0%	9,1%	5,5%
			43,0%	20,2%	22,8%	13,2%	0,9%
			49,1%	14,8%	14,8%	13,9%	7,4%
			33,3%	31,5%	19,4%	10,2%	5,6%
	Job mediation counsellor	Counsellor 1	13,2%	21,7%	29,3%	24,6%	11,1%
			13,0%	26,3%	26,8%	26,6%	7,3%
			6,7%	23,5%	30,8%	29,0%	10,0%
			9,7%	20,5%	36,1%	23,5%	10,3%
			10,9%	24,1%	25,8%	26,9%	12,3%
			10,1%	24,2%	26,3%	30,4%	9,0%
			11,9%	20,2%	28,5%	30,9%	8,6%
			14,2%	24,5%	23,2%	28,4%	9,7%

FEEDBACK

- Counsellor's feedback is mandatory
- Feedback can be provided up to the **65th day** of registration as unemployed



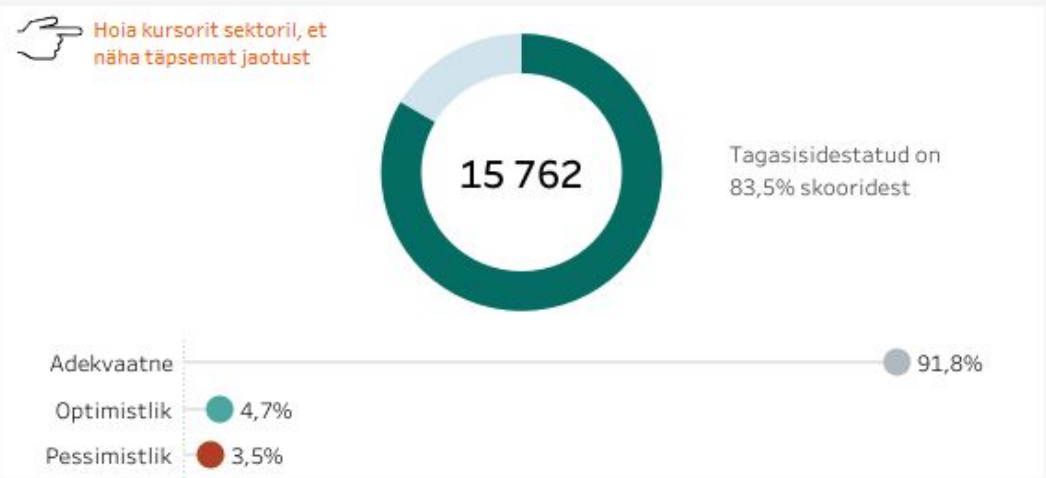
Decision support tool		Show all					
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Counsellors feedback to OTT scores

Feedback proportion and distribution



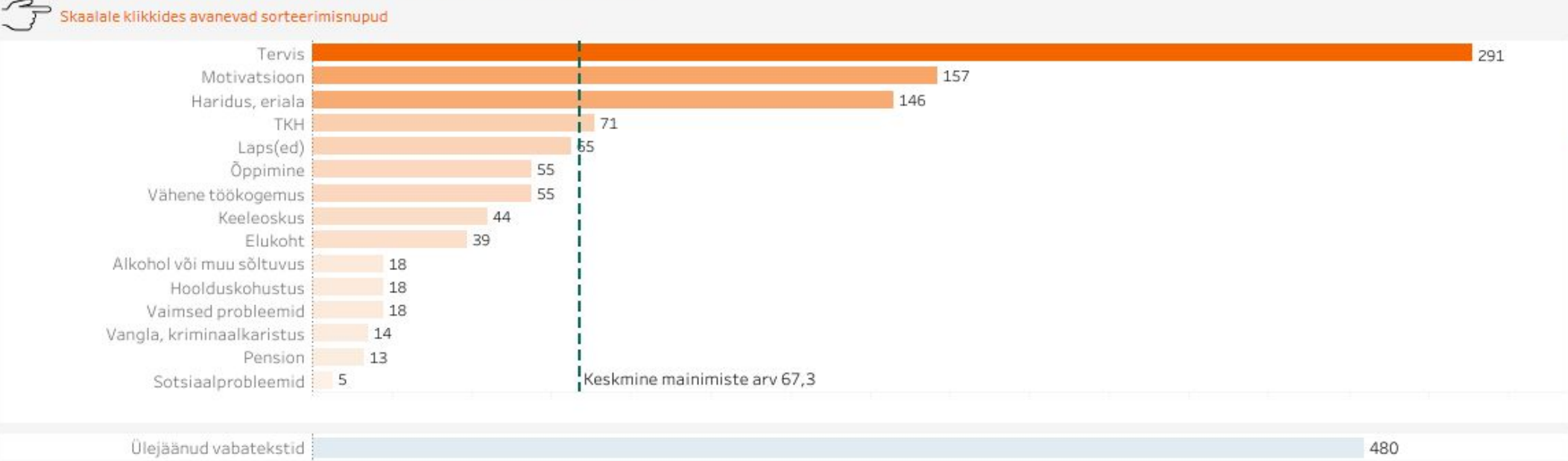
LISAINFO

- Vali periood
- ☐ Jooksev kuu
 - ☐ Eelmine kuu
 - ☒ Jooksev aasta
 - ☐ Eelmine aasta
 - ☐ Viimane poolaasta
 - ☐ Vabalt valitud kuupäevad

Perioodi algus
20.01.2022

Perioodi lõpp
15.03.2022

Feedback keywords



OSAKOND
(All)

BÜROO
(All)

AMETIKOHT
(All)

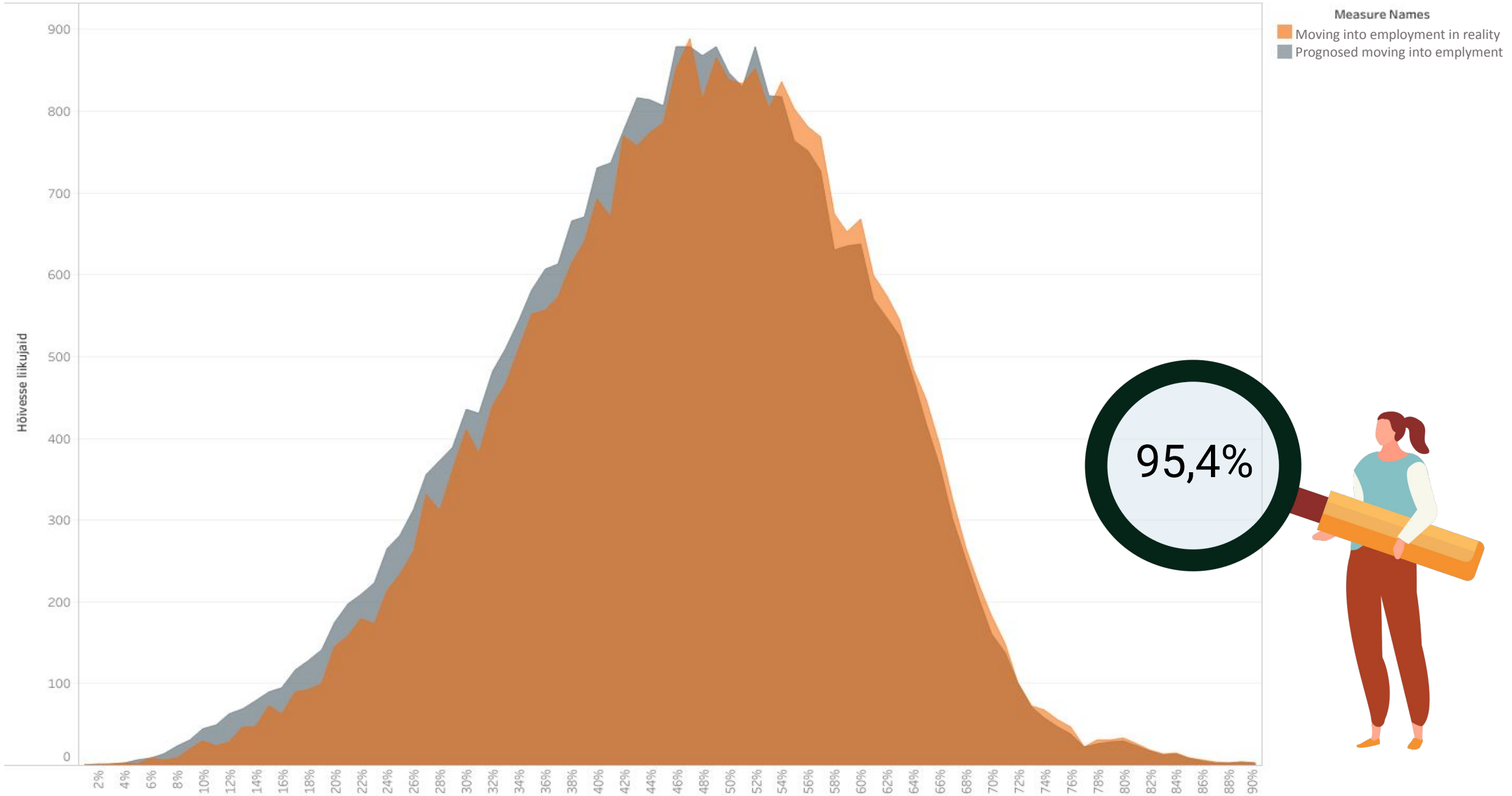
NÕUSTAJA
(All)

Feedback comments

Vali ülevalt märksõna, et tagasisidesid filtreerida

Näita: ☒ Jah ☐ Ei

Prognosis vs Reality in moving into employment



LESSONS LEARNT

- After 6 months OTT had been in live, we started holding seminars for/with counsellors, to learn, how counsellors use OTT daily
- The implementation of OTT fell at the same time as the new information system was introduced
- Experienced counsellors are hesitant about OTT
- Some TARU dashboards are complicated to use
- As a result, we learned that knowledge is patchy and that we need trainings, because the user manual alone is not enough
- New tools need time to get used to and should not be done in a hurry or simultaneously
- Analyzing and practicing in training helps to break bias
- Creating and improving dashboards and OTT renewing factors



Thank you!

ETHICS, GDPR etc

- OTT is supporting the decisions, not taking them
- A data protection impact assessment was carried out beforehand
- The main idea is to target the need for support
- The job-seekers are informed about the use of their data for assessing the probability in the general terms of conditions for data protection (we use your data in a prognosis model in order to find the most suitable way to help you, no automated decisions are taken by the model)
- We are considering sharing the results of the tool with the job seekers in our self-service portal
- No explicit legal ground for OTT

