
WELCOME

Personalization of the intelligent
technology-based migrant services

**2nd Joint Migration Policy Workshop
– Towards sustainability and adoption –**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 870930

The Consortium



an NTT DATA Company



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WELCOME

Personalization is one of the main goals in WELCOME

“WELCOME will develop immersive and intelligent services in which conversational agents act as dedicated **personal assistants** of Third Country Nationals (TCNs) and **gather information** to support the decisions of actors in the host countries.”

Why personalization and how can we achieve it?



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Why personalization in WELCOME?

- TCNs do not form one homogeneous group; they have diverse educational, cultural, and social backgrounds.
- Each TCN has their own communication skills, their own unique experiences, their own needs and values, and their individual capacities and capabilities.
- TCNs are often required to deal with more complex (and specific) documentation than migrants from other European Economic Areas.

WELCOME aims to provide services that facilitate and support the reception, integration and daily life of TCNs in the host country.



Services in WELCOME that call for personalization

Inform. provision

- ▶ Legal info (asylum procedures, rights of refugees, asylum seekers, UAMs, ...)
- ▶ First reception procedures and courses
- ▶ Health / emergency services
- ▶ Gender equality info / empowerment of women in inclusion
- ▶ Schooling system info

Coaching

- ▶ First reception (filling out forms, providing guidance, follow up of participation)
- ▶ Job application
- ▶ Legal (pre-registration to a consultation service, renewal of residence permit, ...)
- ▶ Booking an appointment with an officer
- ▶ Supporting TCNs to find room-/flatmates
- ▶ Supporting instructors to group TCNs in language courses

Training

- ▶ Making appointments
- ▶ Job interviews
- ▶ Language training
 - For all of the coaching and training scenarios



Personalization

Personalization in Conversational Agents

Dimension	Description
Construction of the user model	Implicitly (derived from the conversations) vs. Explicitly (info solicited from the user)
Targets	Individuals vs. Categories of people with similar profiles
Personalized features	Content / User interface / delivery channel / ...
Purpose	Increasing engagement / more targeted support / ...
Measuring the effect of personalization	Success rate of the user in performance of a task / satisfaction with the service / ...
Evaluation	Questionnaires / interviews / ...

Kocaballi et al., 2019. The Personalization of Conversational Agents in Health Care: Systematic Review. *J. of Medical Internet Research*, 21(11).



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Personalization: The case of WELCOME

Dimension	Description
Construction of the user model	Implicitly (derived from the conversations) & explicitly (provided by the user)
Targets	Individuals & Categories of people with similar profiles
Personalized features	Content & delivery channel
Purpose	More targeted support
Measuring the effect of personalization	Success rate of the user in performance of a task & satisfaction with the service
Evaluation	Questionnaires & interviews



How is personalization achieved?

- The user profile contains biographic data and the state of the completion of different procedures (registration, courses, ...)



- Facilitates individual coaching / training
- Allows for recommendations and reminders

- Services are needs-driven



- Allows for category-wise personalization (specific groups of TCNs have specific needs)
- Facilitates coaching towards the achievement of a specific task

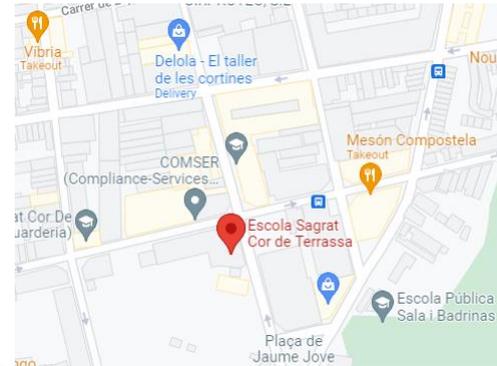


How is personalization achieved?

U: *I would like to apply for the First Reception Service.*

A: *Fine! For your registration, I need some personal data from you. Please tell me your name, age, country of origin, your current residence address, ...*

A: *...at Escola Sagrat Cor, which is close to where you live, a language course is offered on Mondays and Fridays from 19:00 to 21:00.*



U: *I applied for asylum six months ago, but do not have any notice from the Asylum Office yet.*

A: ...

U: *How can I renew my residence permit?*

A: *As asylum seeker, you ...*



Lessons learned so far

- Service personalization is crucial for successful reception and integration of TCNs (different needs cannot be addressed by a “one-solution-for-all” approach)
- Personalization category-wise is less critical from the perspective of data privacy than individual-oriented personalization and is less complex.
- The assignment of a distinct personal agent to each TCN upon registration is instrumental for data privacy and data protection measures



Challenges of personalization in WELCOME

Two of the key challenges in personalization are that

- we need to deal with highly sensitive data

This has consequences for

- Personal data acquisition procedures
- Data privacy awareness and data protection measures

- we are expected to cope with a vast variety of concerns, needs, and questions of the TCNs

This has consequences for

- Design of system-TCN interaction patterns
- Knowledge acquisition procedures



**Thank you very much for your
attention!**

<http://www.welcome-h2020.eu>



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