

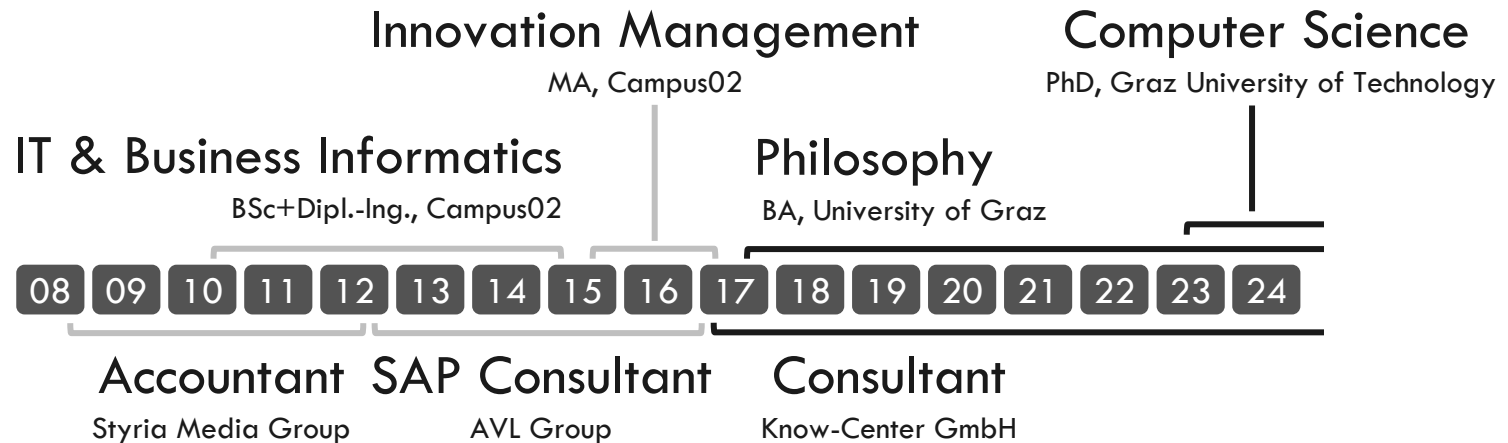
Societal Impact and Ethical Challenges of AI

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AMS (Arbeitsmarktservice)



Arbeitsmarktservice
Österreich

- Austria's primary labor market service institution
- Operates at federal, state, and regional levels with headquarters in Vienna.
- Provides job placement, counseling, information, training, and financial support for job seekers and employers.
- Collaborates with social partners, including the Chamber of Commerce and the Austrian Trade Union Federation.
- Employs around 6,000 staff (ongoing budgetary adjustments and planned reductions)

Goals

Increased Efficiency

The use of algorithms is aimed at streamlining processes by automating routine tasks, aligning with service rationalization trends.

Effective Allocation of Resources

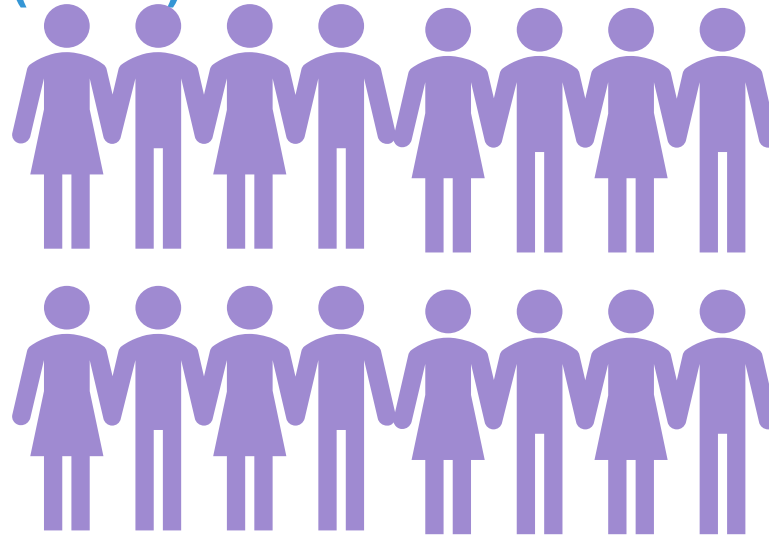
Resources needs to be well-spent.

Objectivity

Assessments need to be fair and unbiased to offer everyone equal access to the job market.

A decorative footer bar at the bottom right of the slide, consisting of four colored segments: blue, green, teal, and purple.

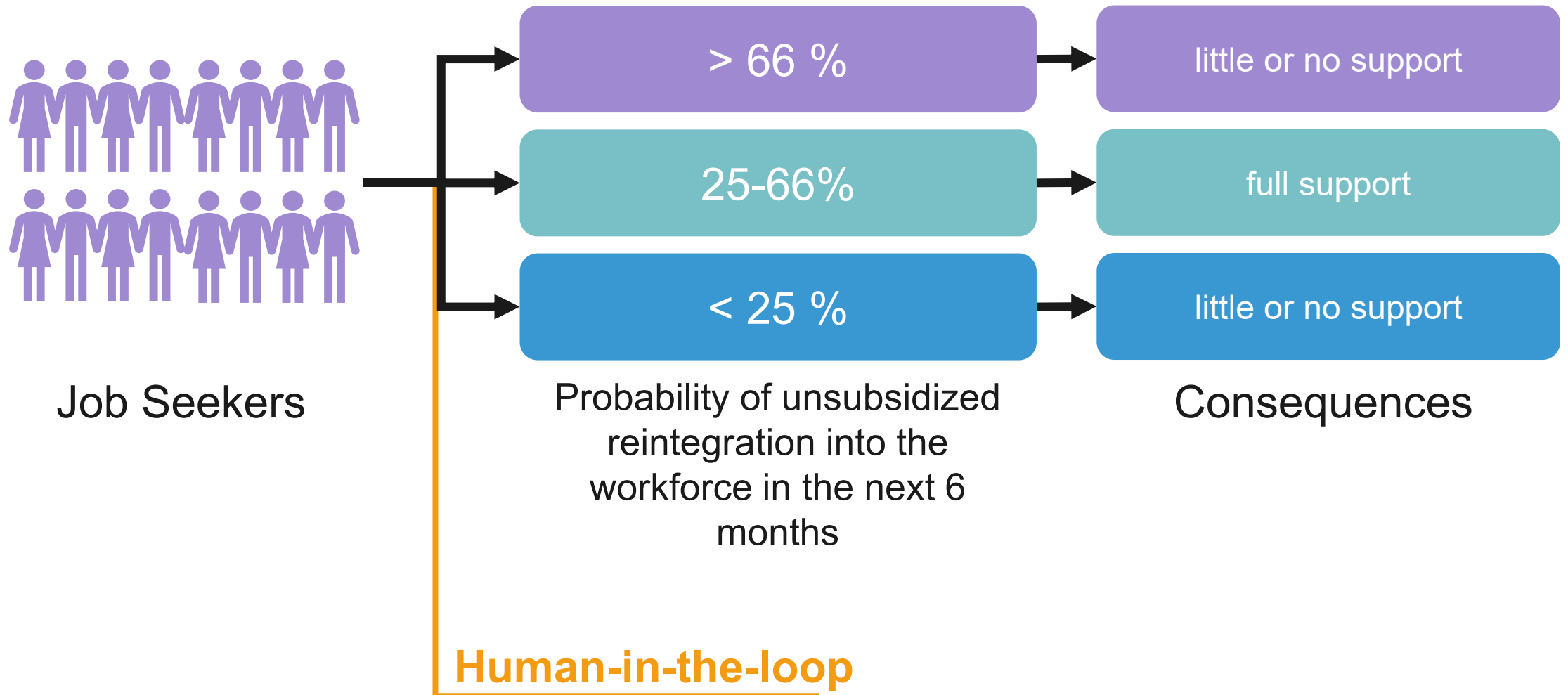
Case #1: AMS Algorithm (2020)



Job Seekers

Gender, age group, country group, education, health impairment, support obligations, occupational group, employment rate in the last 4 years, frequency and duration of contact with the AMS, participation in programs, duration of current unemployment, etc.

Case #1: AMS Algorithm (2020)



Case #1: AMS Algorithm

Reinforcement of Social Inequities

- Results tend to perpetuate existing social structures.

Bias

- Gender bias observed; "female" scores lower than "male" under identical conditions.

Lack of Transparency

- Unclear how results are generated and classifications are made.

No Recourse

- No (planned) options to dispute or appeal assigned scores.

→ Project was scrapped!

Case #2: AMS Berufsinformat

The screenshot shows a chat window titled "Berufsinformat" with a header bar containing icons for search, delete, menu, and close. The main content area has a title "Frag dich schlau..." and a timestamp "Fr., 09:36". A message from a user with a profile icon "u" reads: "... zu Beruf und Ausbildung. Aber bitte gib aus Datenschutzgründen keine persönlichen Daten ein, ich benötige diese nicht - [mehr dazu hier](#). Ich bin kein echter Mensch sondern eine Maschine und ich kann mich auch manchmal irren oder fehlerhafte Antworten geben. [Mehr Infos](#)." Below the message are three rounded rectangular input prompts: "Ist Lehre oder Schule besser?", "Welche Kompetenzen sind bei einem Elektrotechniker wichtig?", and "Ich spiele gerne Computergames. Gibt es auch Jobs in diesem Bereich?". At the bottom, there is a text input field labeled "Nachricht eingeben" and a send icon.

Case #2: AMS Berufsinformat



I'm a 16 year old male.
What line of work do you
recommend I pursue?

Mechanic!



I'm a 16 year old female.
What line of work do you
recommend I pursue?

Hairdresser!



Arbeitsmarktservice
Österreich

What could they have done better?

- **Bias Mitigation in Data**
- **Transparent Algorithm Design**
- **Explainability and Transparency**
- **Ethical Oversight and Auditing**
- **User Control and Feedback Mechanisms**
- **Promote Equity in Outcomes**

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