Why we need career changers

Information and Communication Technology (ICT) industries have seen impressive growth over the past few years. Digitalisation is reshaping economies across the world and it is a significant driver of increasing demand for ICT specialists – both in the ICT sector and across many other sectors of the economy. However, a shortage of skilled ICT workers is becoming a major concern for governments, and employers' and workers' organisations in many countries. (Düll 19)

In order to remain competitive and innovative, Switzerland needs a qualified workforce in ICT. Considering expats and the people currently on the way into the ICT sector (students and apprentices) are unable to fill all required positions in Switzerland, we need career changers (lateral entrants) to fill the gap of around 38'700 ICT workers by 2030 (IWSB 2022).

Addressing major challenges of career changers

In addition to our research, our team has conducted three workshops with 1) Classical career changers, 2) Students without ICT background and 3) Interested companies to hire career changers. The objective of our workshop was to gain more insights about the topic of career changes into ICT.

Design Thinking Workshop with 1) career changers and 2) students addressing lead question:
1) *How can we help future career changers?* **and**
2) *How can we help students entering into ICT and make ICT career paths more attractive?*

⇒
- Persons who changed successfully into ICT
- Interested Non-ICT students

Workshop with companies to discuss topics like
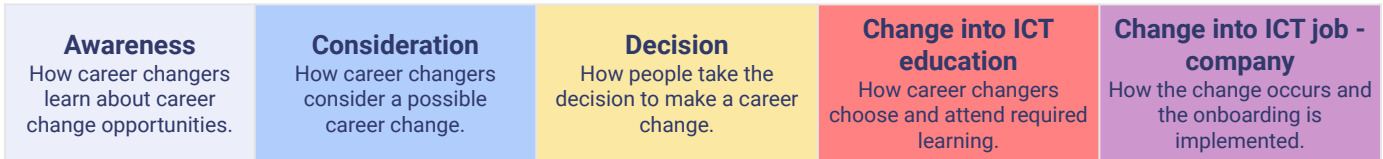- Collaboration
- Value of career changers

⇒
- Interested companies
- Educational institutions
- SwissICT

"Journey to ICT"

With the insights of our workshops, we developed the "Journey to ICT". The journey includes five major steps from awareness to the final onboarding in companies.

Awareness	Consideration	Decision	Change into ICT education	Change into ICT job - company
How career changers learn about career change opportunities.	How career changers consider a possible career change.	How people take the decision to make a career change.	How career changers choose and attend required learning.	How the change occurs and the onboarding is implemented.

Needs of classical career changers
- Support and guidance for a possible application, incl. identification of possible gaps in terms of education
- Role models to overcome ICT stereotypes and increase attractiveness of the jobs
- Mentoring and Guidance
- Trainings

Needs of student career changers
- Awareness of possibilities
- Knowledge about ICT and ICT-Jobs

→ In-depth insights from all workshops can be found in the **Appendix.**

digitalswitzerland plans interventions along the journey to ICT by supporting both the career changers and the companies to enable a smooth process and increase the number of career changers in ICT positions. The next steps are:

Career changer
Definition of **interventions** to increase awareness and attractiveness of ICT and ICT-Job positions, e.g.
- Online and physical awareness campaign, career changer hub
- "first-taste" programmes
- Event participation such as job fairs
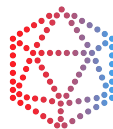
Companies
Development of a **guideline** incl. best-practises to implement regarding, e.g.
- Specific career-changer programmes
  - Job descriptions
  - Required processes
  - Onboarding
  - Learning opportunities
  - Facilitating culture change
- Creating attractive entry-level positions
- Joint actions across companies

Join us and enable career changers to work in ICT

The "Move to ICT" project by digitalswitzerland raises awareness for career paths into ICT for employees and students with a Non-ICT background and gives structured guidelines and opportunities to facilitate the change.

With the project, we play an active role in **increasing the number of professionals and diversity in ICT.**

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**TRANSFORMING SWITZERLAND
INTO A LEADING DIGITAL NATION**

Appendix

Detailed insights from the workshops with main challenges and possible solutions to enable career changers in ICT from our workshops with:

- Companies
- Career Changers
- Students with a non ICT background

Enabling career changers and students & graduates to work in ICT-Jobs

The "Move to ICT" project raises awareness for new career paths into ICT for employees and students with a Non-ICT background. It develops a concept for companies and individuals on how to best tackle the challenges of career changers and gives structured guidelines and opportunities to facilitate the change.

Workshop with companies - 08.05.2023

Advantages and challenges of integrating career changers in ICT from a company perspective

Advantages
- Foster diversity
- Experience with "problem solving" out of experience with career changer
- High motivation
- Different mindsets
- Available workforce

Challenges
- No experience in specific work area / lack of hard skills
- Difficulties to include in day-to-day activities from the beginning (e.g. business language barrier)
- "Burden" of extra time-invest regarding mentoring career changers
- Fair payments in comparison with experienced employees

Proposed focus areas
- Align and get buy-in from management
- Foster DEI & Implement specific KPIs
- Hiring process: Suitable adaptation of job description
- Role models / show successful examples
- Share best practices examples
- Increase awareness for DEI

Workshop with companies - 08.05.2023

Recruiting and Onboarding

Optimal Channels for Recruiting
- Online
- RAV
- Collaboration with other companies & partners like universities, etc.
- Content "marketing", leverage role models, introduction videos of job positions, examples of personal experiences

Recruiting/Hiring process
- Hiring for potential not for experiences → Change mindset of HR & Business → Up-Skilling Recruiters
- Overcome technical interviews → Check if technical questions are useful or not
- AI Screening? → problems with buzzwords
- Define transferable skills

Onboarding
- "Shadowing" → gain practical experiences (projects)
- Mentoring

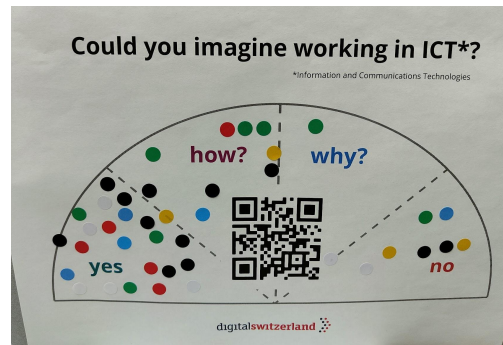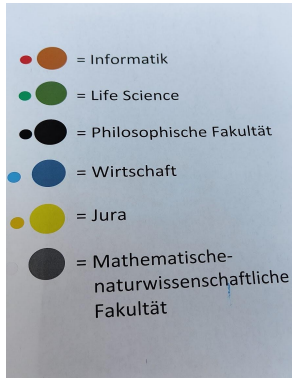### Collaboration across companies

- Overview of programmes regarding career changers → install overview on website
- Coaching
- Presentation of ICT and ICT-Jobs
- Offer checklist for career changers to gain knowledge of their own skills
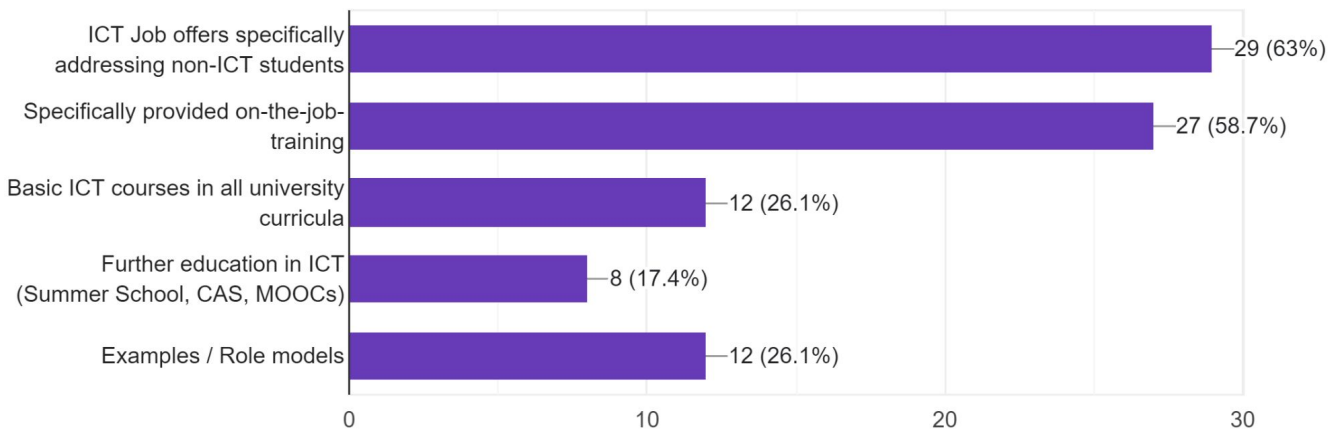
Interview, Survey and Workshop with students

The team participated in the UZH Job Hub and found a high interest of students to move into ICT-Jobs. The survey and the design thinking workshop confirmed the interest.
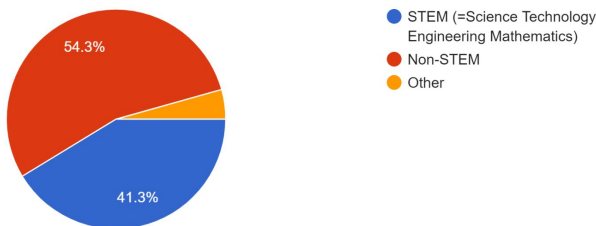

Legend:
- = Informatik
- = Life Science
- = Philosophische Fakultät
- = Wirtschaft
- = Jura
- = Mathematische-naturwissenschaftliche Fakultät

Could you imagine working in ICT*?
*Information and Communications Technologies
how? why? yes no

What would you need to start a career in ICT?
46 responses

ICT Job offers specifically addressing non-ICT students	29 (63%)
Specifically provided on-the-job-training	27 (58.7%)
Basic ICT courses in all university curricula	12 (26.1%)
Further education in ICT (Summer School, CAS, MOOCs)	8 (17.4%)
Examples / Role models	12 (26.1%)

What's your field of study?
46 responses

- STEM (=Science Technology Engineering Mathematics) — 41.3%
- Non-STEM — 54.3%
- Other

Workshop with students - 16.05.2023

### Key Take-aways to focus on

Lack of Awareness around ICT jobs
- What is ICT?
- What are ICT-Jobs?
- What skills are needed to move into ICT positions?
- Overcoming the ICT stereotype (not creative, not social, etc.)

Wishes by Generation Z
- A place to feel comfortable
- Balanced workload
- Etc.

Employer Attractiveness
- Diversity & Inclusion (women shall be taken serious from the beginning)
- Mentoring
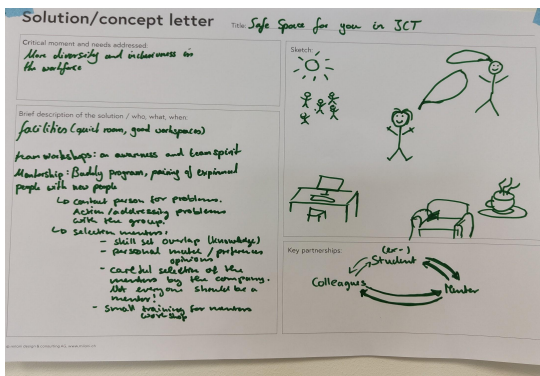
Getting the input from previous career changers

Our design thinking workshop with previous career changers gave us insights into the unique challenges of career changers and how they could best be addressed. This resulted in the "Journey to ICT"

Awareness	**Consideration**	**Decision**	**Change into ICT education**	**Change into ICT job - company**
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Key Challenges

Lack of role models and network
- Reality check: What is possible for me?
- There are currently limited role models who lead the way
- Lack of contacts to consult or reach out for advice

Challenging preparation for job market
- Lack of soft and/or hard skills
- Unawareness which skills are transferable
- Lack of ICT business vocabulary and basic business concepts
- Lack of support in the application and interview process
- HR systems might automatically disqualify career changers

Challenging job onboarding
- No support for transitioning into the new role
- Additional support needed to get up to speed with the new role, company and industry language and culture, etc.

Possible Ideas to Address

Role models and network
- Career changers network
- Career changers' hub - central point of contact
- 1:1 lunches/meetings with previous career changers
- Mentoring
- Job fairs specifically targeted to career changers

Preparation for the Job market
- Independent bootcamps
- Internal corporate trainings
- Basic ICT know-how & language trainings
- Soft-skills, CV, and interview preparation coaching

Ensuring a smooth onboarding
- Mentoring programmes within the company
- Step-by-step onboarding programme specifically for career changers
- On the job training programmes