Women's work in ICTs in Europe
How to explain disparities?

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ICWES14
Lille, 15-18 juillet

Plan

Situation in Europe: some figures

The European research WWW-ICT

Improving women's choices and careers in ICT

Questions about the efficiency of campaigns and actions

Situation in Europe

- **Sources:**
  - Community survey on ICT usage in households and by individuals, EU-25, Eurostat, 2006.
    Population aged 16 to 74.
  - Eurostat, Labour force survey, 2nd quarter 2006.
  - EU15 Eurobarometer survey 59.2 "Special eurobarometer 194: Internet"; Eurobaromter 2003.3. June 2003.
    Population > 15 years old.

Gender differences in the use of computers and the internet
Women and men having used a computer or internet on average once every day or almost every day in the last 3 months in the EU-25, 2006 (% in age group)
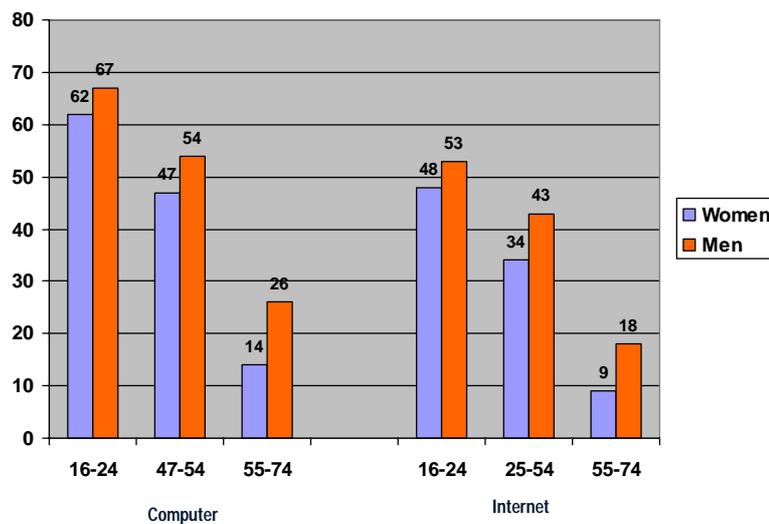
Gender differences in the use of computers and the internet

- Gender differences are less significant than age / financial or educational differences.
- Gender differences concern more private life than working life.
  - During education and at work, there are few differences between men and women in the uses of ICTs.
- Uses of ICTs at work determine private uses of ICTs.
- Gender differences are more problematical if we look at:
  - The place of women in ICT work
  - The place of women in ICT training

Place of women in ICT work

% in employment working in computing activities by sex, 2001 and 2006
Isco categories 213, 312, LFS 2006

	2001		2006		% point change 2001-06	
	Women	Men	Women	Men	Women	Men
EU 25	0.7	2.3	0.7	2.6	0.0	0.3
SE	1.4	5.2	1.5	4.9	0.0	- 0.3
DK	0.9	3.2	1.1	3.8	0.2	0.6
UK	1.0	3.4	0.8	3.3	- 0.2	- 0.2
DE	0.7	2.5	0.7	2.9	0.0	0.4
FR	0.7	2.8	0.7	2.6	0.0	- 0.1
ES	0.6	1.4	0.6	2.0	0.0	0.5
IT	0.6	1.4	0.6	1.9	0.0	0.5
HU	0.6	1.6	0.5	2.4	0.0	0.8

Place of women in ICT work

% in employment working in computing activities by sex and age, 2006

Isco categories 213, 312, LFS 2006

	< 40 years old		> 40 years old	
	Women	Men	Women	Men
EU 25	0.8	3.5	0.5	1.8
SE	1.7	6.4	1.3	3.8
UK	0.9	4.4	0.6	2.4
DE	0.8	3.6	0.6	2.3
FR	1.0	3.5	0.5	1.8
ES	0.8	2.8	0.4	1.0
IT	0.9	2.7	0.3	1.2

Place of women in ICT work

- **Employment in ICT sector**
  - 28% of women in IT services (EU15, 2003)
  - Until 2001, employment creation was favourable to women
  - Management / leadership positions: less women in ICT sector than in the whole economy
- **Employment in ICT jobs** (all sectors, not only IT sector)
  - 17% in ICTs jobs (ISCO 213, EU15, 20003)
  - The proportion of women decreases all over Europe
  - The distribution of jobs (professions) between men and women is partly different. More women in emergent jobs/professions.
- **European comparison: no correlation between the female employment rate and the percentage of women in ICT jobs.**
- **Despite many awareness campaigns, the proportion of women is not better (even worse).**

Place of women in ICT training

- ICT tertiary education: difficult comparison
  - 9% in Belgium, 25% to 30 % in France and UK, 40% in Italy and Portugal...
  - BUT no convergence between countries due to a lack of hamonisation in statistics: some countries give figures that gather IT and mathematics, others gather IT and sciences, others focus only on IT...
- However, some common trends:
  - The proportion of women is decreasing everywhere
  - More women in orientations with management or multimedia content
  - Women who have an IT degree have proportionnaly higher degrees than men.
  - In continued education and vocational training the % of women is higher than in initial training.
    - More women in ICT jobs than women holding a degree in ICT

The European research
WWW-ICT Widening Women's Work in ICT

- A European project 2002-2004 funded under the IST programme within FP5, aiming at bridging the gender gap and improving equal opportunities in ICT professions.
- The approach of WWW-ICT:
  - Integrating explicative factors linked to
    - education and training,
    - working and employment conditions,
    - professional and technical culture.
  - Taking into account both computer professions and new professions linked to new communication technology.
  - Covering both initial training and vocational training.

The European research WWW-ICT

- Integrated theoretical framework
- Strong empirical investigation in 7 countries
  Austria, Belgium, France, Italy, Ireland, Portugal, UK
  - 140 biographies of women (and men) in ICT professions
  - 28 case studies of enterprises and sectoral overviews in two areas: IT services and e-publishing
  - Looking for "good practices" aiming at reducing gender disparities in ICT professions (60)
- Conclusions and recommendations
- Dissemination: emphasis on agents of change

Why do women not choose ICT careers?

- Girls are under-represented in 'feeder' subjects at school (maths, sciences, computer science)
- They do not have accurate information about what is involved
- We do not find them put off by the technical aspects of IT work

Enduring stereotypes of nerds
The black-boxing of IT professions

- "When you talk to women, going out to universities or whatever, and say 'How do you envisage the work? What might my job be about?', they say 'You sit in front of a computer all day. You probably wouldn't talk to anyone.' They have this beard-and-sandals and men image. They don't actually think about what we do."

- Stereotypes seem more "hard" in education than in work.

What problems do women have in developing IT careers?

Structural problems

- Accessing a mixture of on-the-job training and development
- Working through opaque promotion systems
- Managing the demands of IT work with their private lives

Cultural problems

- Valuing and promoting their own skills
- Overcoming discrimination (from managers, from peers)
- Dealing with gender-blind organisational cultures

Points of intervention to attract and retain women

- In schooling and higher education
- At the point of recruitment to the labour market
- Within organisations

In schooling and higher education

- Careers advice and awareness of career options
- Giving girls' direct experience of IT work (company visits, daughters to work days)
- Establishing networks between schools, universities and employing organisations

At the point of recruitment

- Widening the pool of applicants (relaxing technical selection criteria, drawing from other disciplines, offering conversion courses for arts graduates, identifying other skills requirements)
- Advertising jobs where women will see them
- Developing gender-aware recruitment processes (job specifications, interviewing procedures, mentoring potential women entrants)

Within organisations (structural innovations)

- Offering mixture of formal training and informal learning opportunities
- Work-Life Balance/flexible working policies (promotion not based on visibility or long hours)
- Offering varied career paths (including technical careers)
- Developing gender-aware progression systems (transparent with clear criteria)
- Retaining women after maternity and in their 40s

Within organisations (structural innovations)

- Establishing peer support systems (mentoring, coaching, women's networks)
- Recognising women's problems of self-advocacy in career management
- Developing organisations' awareness of their established gender cultures (drinking clubs, exclusive male groups)

Why still so few women in ICT work despite so many campaigns and actions?

- Overview of 60 good practices / 7 countries
- Which lessons from the overview of good practices?
  - Questions regarding target audiences
  - Questions regarding the messages
  - Questions regarding means to take action

Questions regarding target audiences

- Most of the initiatives target girls and women, as if they were the only agent of change. This supports the idea that it is up to the women to adapt to the IT labour market rather than the reverse.
- Messages that try to convince women that they are "capable" of doing such a job (it is not demonstrate that women are not capable). Counter efficient message.
- Less than 20% of the actions are initiated by enterprises
- Employers, recruiters, HR manager, social partners, advisers / orientations centres are all agents of change.

Questions regarding the messages

- No clear vision of occupations / professions.
- No clear distinction between occupations or professions belonging to the "hard core" of informatics and other occupational groups for which IT knowledge is one component of the required knowledge (graphic design, ERP, e-publishing…).
- New curricula in which IT are a "tool" for other disciplines (biotechnology, publishing, library, information…).
- Make clear: transversal competencies, applied informatics, possible passage between professions / occupations.

Questions regarding means to take action

- **Many initiatives only target one aspect of the problem:**
  - Example: fighting against stereotypes with no attention to working conditions; promoting access to IT professions without giving a clear picture of these jobs; encouraging women to choice IT curricula without any change in recruitment strategies.
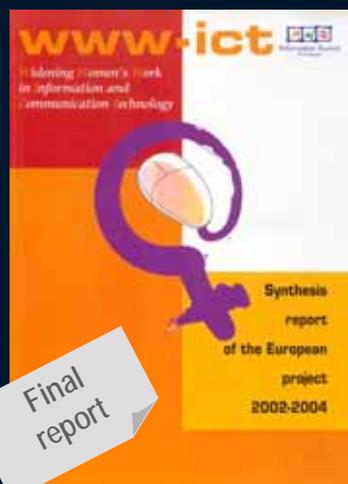
Final report

Leaflets for agents of change

WWW-ICT publications downloadable from www.ftu-namur.org/www-ict