### Mapping elderly citizen's computer and ICT use in a small-sized Norwegian Municipality

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## Background

- Information and communication technology (ICT)
  - Entertainment
  - Communication
  - Social interaction health and wellbeing
  - Access to services and information
- $\rightarrow$  Independent living

## Europe 2020 - Flagship initiatives

#### • Smart growth

- digital agenda for Europe: <u>http://ec.europa.eu/digital-agenda/en/policies-ageing-well-ict</u>
- innovation Union
- Youth on the move
- Sustainable growth
  - resource efficient Europe
  - an industrial policy for the globalisation era
- Inclusive growth
  - an agenda for new skills and jobs
  - European platform against poverty

## Digital divide



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## Quality of life



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## Research questions

• To what extent are Norwegian elderly people users of computers and the Internet?

• What motivates their use/non-use of the Internet?

• In what areas are there needs for training?



 Interreg IVB program for the North Sea Region (2012 – 2014)

 promote e-inclusion among the increasing ageing population in Europe to keep them active and facilitating their participation in social and work life

## Grandma on web

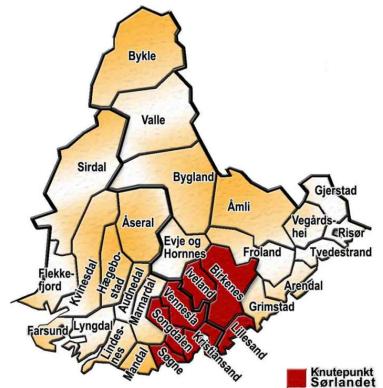
 Get insight in ICT-use of elderly people, the motivational factors for such use and to specify their needs as technology users

 design, implementation and evaluation of educational programs to instruct elderly people in ICT use and increase their digital competence

## Knutepunkt Sørlandet

http://www.knutepunktsorlandet.no/artikkel.aspx?AId=753&back=1&MId1=200

### The municipalities of Lillesand and Vennesla







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## University of Agder

www.uia.no/senter-ognettverk/senter-for-ehelse-ogomsorgsteknologi

http://www.uia.no/forskning/helseog-idrettsvitenskap/ehelse



#### UiA, Campus Grimstad



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#### Methods

- Survey about ICT-use and needs
  - Distributed to 500 inhabitants in Lillesand
  - 178 answers
- Group interviews about ICT-use and needs
  3 focus group interviews in Lillesand (10
  - informants)

## Results

## Access to and use of computer

#### Survey:

- 91% had access to computer
- 80% used the computer frequently (daily or weekly)
- 20% used the computer infrequently or never

#### Focus groups:

- All had access to computer
- All had "some" or "lot of experience" in ICT use

## Use

- Extensive experience
  - Online banking
  - Email
  - Sending attachments
  - Reading online newspapers
  - Finding phone numbers
  - Factual information

## Barriers to use ICT

• Non-users:

Lack of interest

- Users:
  - Lack of interest
  - No need for further training
  - Having other people doing it for them
  - Poor offering of courses
  - Experiences of low usability/episodes of difficulty

## Attitudes towards use of ICT

- Reasons starting using Internet
  - Introduced through job or education
  - Order goods/trips
  - To get access to services
- Reasons to continue to use Internet
  - Necessary to follow along
  - Maintain social contact
  - To be included in society

## Attitudes towards use of ICT

- Increase quality of life
  - Social life
  - Mental health
- Contribute to self-development and increased self-reliance

Contribute to inactivity and social isolation

## Improvement of ICT-skills

- Survey
  - Ca 75% had "some" or "considerable" need to strengthen their skills
  - Ca 50% wanted to attend courses
- Suggested training topics
  - Genealogy
  - Skype
  - Use of search engines
  - Image processing
  - Organising and editing files
  - Book and order trips
  - Social media and entertainment application

# How to facilitate ICT-use among elderly people?

• Initiatives from local municipalities

• Make courses attractive

• Home tuition

• Engage volunteers and schools

### Discussion

## Access and use of ICT

- Survey:
  - 91% of the participants had access to a computer
  - 80% of the participants were frequent users

## **Statistics Norway**

Bruk av PC og Internett de siste 3 md (prosent), etter kjønn, alder, tid og statistikkvariabel

	2014
	Bruk av PC siste 3 mnd
Begge kjønn	
65-74 år	76
75-79 år	62
Menn	
65-74 år	86
75-79 år	76
Kvinner	
65-74 år	67
75-79 år	50

## Access and use of ICT

- Still a significant proportion of non-users
- Few advanced users
- unused potential when it comes to social media

## $\rightarrow$ Inform elderly people about the potential of ICT

## Barriers

- Lack of knowledge of ICT benefits
- Low usability
- Men more active users
- $\rightarrow$  educate about the benefits of ICT use
- →taking elderly users into account when designing and updating ICT software
- $\rightarrow$  Provide training specifically aimed at older women

## Attitudes

• Internet a positive contribution

• General skepticism to ICT

→Technology's duality
→Strengthen social and independent lives
→Contributes to social isolation and passivity

# Improvement of ICT skills and facilitating ICT-use

- Offer ICT-courses
  - Non-users
  - Advanced users
- Raise awareness about ICT contribution to social participation and self-efficacy
- Focus on how to reach non-users
  - Low level courses
  - Low course fee
  - Creative arrangements
  - Use younger generations as door-openers: <u>http://www.ep.liu.se/ecp/102/002/ecp14102002.pdf</u>