ICT-Enabled Social Innovation: potential and impact on fostering Social Investment for Active and Healthy Ageing

Gianluca Misuraca, Senior Scientist, IESI Project Leader
European Commission’s Joint Research Centre, Seville
gianluca.misuraca@ec.europa.eu

EU2017.EE

The views expressed are solely those of the author and do not necessarily represent those of the European Commission
Policy context: ageing & the future of welfare

• The share of the population aged 65 and over in the EU is growing
• The number of people aged 80 and over is expected to rise to 37.7 million in 2050 from 26.8 (2015), and their share to 7.2% from 5.3%
• Population ageing affects the demand for health and care services, and thus the sustainability of welfare systems
  • a higher number of older people will be cared for by a proportionately smaller number of carers or health workers → rise in unmet needs
  • more people live longer with chronic conditions (e.g. dementia) which require professional management
  • increasingly demanding customers, who expect personalised and customised services
ICT-Enabled Social Innovation in Active & Healthy Ageing

- ICT-enabled social innovation initiatives in the field of Active and Healthy Ageing (AHA) promote social investment by:
  - supporting the modernisation of social protection systems
  - supporting investment in people throughout their lives

- ICT-enabled social innovation in AHA can:
  - increase efficiency and reduce costs by sharing information, functions, planning and budgeting
  - improve targeting and personalisation of services

ICT-enabled social innovation is a new configuration or combination of social practices which provides new or better answers to the challenges of social protection systems and the needs of individuals throughout their lives (Misuraca et al., 2015)
IC T-ENABLED SOCIAL INNOVATION TO SUPPORT THE IMPLEMENTATION OF THE SOCIAL INVESTMENT PACKAGE

**IESI Knowledge Base**

- JRC/EMPL IESI project collected evidence on ICT-enabled social innovation initiatives which promote social investment
  - 613 initiatives in the ‘Inventory’ sample
  - 300 of which (with strong policy relevant impact) studied more in depth in the ‘Mapping’ sample

**EU2017.EE**
ICT-Enabled Social Innovation initiatives fostering Active and Healthy Ageing

- The IESI ‘Knowledge Map’ shows that ICT-enabled social innovation initiatives in the AHA area have a strong ICT-enabled innovation potential (disruptive/radical) and present high levels of service integration.

The largest number of initiatives (63%) is placed in the top right quadrant, where innovation potential is high and governance integration more pervasive.
The ´game-changing´ role of ICTs

• ICTs drive the organisational transformation of service delivery
• building synergies among services, avoiding overlaps and strengthening cooperation
• aligning resources and needs by implementing new services and generating savings
• These factors make management systems more productive and care processes more efficient

ICTs act as a "game changer" (disruptive/radical innovation) substantially transforming care services delivery

• 89% in the area of independent living;
• 77% in prevention, health promotion and rehabilitation, and
• 55% in integrated health and social care

<table>
<thead>
<tr>
<th>Area</th>
<th>Technical/incremental</th>
<th>Sustained/organisational</th>
<th>Disruptive/transformative</th>
<th>Radical/transformative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent living</td>
<td>11%</td>
<td>67%</td>
<td></td>
<td>22%</td>
</tr>
<tr>
<td>Integrated health and social care</td>
<td>40%</td>
<td>40%</td>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Prevention, health promotion and rehabilitation</td>
<td>15%</td>
<td>69%</td>
<td></td>
<td>8%</td>
</tr>
</tbody>
</table>
How ICTs support Independent Living

Initiatives supporting Independent living make use of ICTs to compensate physical and mental restrictions in older people, empowering and enabling older people with functioning limitations to manage a higher degree of self-sufficiency, maximising autonomy, and to reduce the need for care.

Telecare: Providing social care from a distance using telecommunications

Use of Ageing Technology across initiatives supporting Independent Living

- Telecare: 65%  
- Telehealth: 38%  
- Telemonitoring: 27%  
- Assistive technologies: 23%  
- Smart homes: 19%  
- Medication Optimization: 15%  
- Telemedicine: 12%  
- Technology-based wellness services: 4%
Evidence of impact of ICT-Enabled Social Innovation supporting ´Independent Living´: some examples

Telecare Development Programme (TDP), Scotland, UK
Government-sponsored initiative to support Independent Living for older people and people with a disability
- Teleworking services; Information and training platforms; Social Networking technologies
Impacts:
- Over 2,400 delayed discharges were avoided, leading to an estimated saving of over 27,000 bed days.
- Over 8,700 unplanned hospital admissions and over 109,000 hospital bed days were avoided
- 60.5% of users felt that their current quality of life was either "a bit better" or "much better" than before
- users maintained (55%) or improved their health (27%), felt safer (93%) and more independent (70%)
The gross value of TDP funded efficiencies over the period 2006-11 was approximately £78.6 million (at 2011 prices)

Home Automation and Advanced Telecare, France
Long-term strategy aimed at increasing independence and safety of older people at home
Smart homes (i.e. different ICTs integrated in elderly people’s houses); Telehealth or disease management applications; and Telecare (i.e. provision of social care from a distance using ICTs)
Impacts:
- Proven reduction in falls in 12 months: 30.9% of older people equipped vs. 50.0% of non-equipped
- Proven reduction and hospitalisation rates: 9.6% of older people equipped and 25.0% of non-equipped
Sustainability of the project relies also on future availability of funds for ensuring the service coverage
The role of governance and service integration

- 63% of ICT-enabled social innovation initiatives in AHA present integration at the inter-sectoral level
- 13% are pervasive, whilst other levels of integration score evenly below 10%

Initiatives supporting AHA are characterised by high integration at governance and service level:
- combining funding, administrative and service delivery systems
- This takes the form of centralised information, referral and intake; case/care management; multidisciplinary/interdisciplinary teamwork; joint training; around-the-clock coverage, etc.
Increasing **Dignity** through enabling community-based services with ICT-Enabled Social Innovation

**Vitaever, Italy**

A cloud technology to manage more effectively homecare services for chronic patients

- Online web-based (SaaS) and phone/tablet based platform safely and easily accessible by physicians, social workers, volunteers, and patients
- It contributes to modernising social protection systems, while also supporting formal/informal carers and empowering patients to live independently and with dignity

**Impacts:**

- High levels of satisfaction with the service
- Reduction in costs average (ANT home-care services cost €30 per day, compared with €50 before using Vitaever)

---

**Voisin Age, France**

Voisin-Age is a digital platform which connects isolated older people with their neighbours and volunteers. It uses social networking technologies to build communities of interest that help users communicate, organize, and share with other users and with the initiative providers.

Supported by the *Petit Freres des Pauvres*, the service is available all over France.

**Impacts:**

- 77% of the people surveyed were satisfied with Voisin-Age and 65% created friendly/convivial interactions and increased social interactions

Similar initiatives have been exported in Madrid (Grande Vecinos) and in Chicago (Great neighbours)
Implications for ´Social Policy Innovation´

• ICT-Enabled Social Innovation initiatives that promote Social Investment in AHA and long-term care adopt new approaches to dealing with growing societal challenges
  • successful ICT-enabled social innovation initiatives are needs-driven and outcomes-oriented; they generally foster open processes of co-creation and collaboration, by improving communication between professionals, informal carers, patients and family members

• The impact on the care system and on care professionals is considerable as integration can lead to creating new services which complement or substitute existing ones
  • ICTs support reengineering care systems and reshaping relationships and roles, towards a more proactive public intervention and social policy and service redesign, thus inspiring the creation of future possible 'sharing welfare' models

EU2017.EE
The Future of Welfare

Care 3.0: Robotics for personalised integrated care

- Widespread diffusion of 'Social Robots' as companions of elderly people in need of care.
- Enables independent living and safety, reassures families, and enhances 'togetherness' through embedding of social networking and mobile devices.
- Reduction of costs for hospitalisation and burden for caregivers supporting elderly.
- Improved work-life balance for informal care providers, and enhanced self-esteem and cognitive capacities due to interaction with Artificial Intelligence.
- Risks of misunderstanding in the human-machine interaction and possible contribution to social isolation or even encouragement of violence, as well as data theft or misuse.

The Future of Welfare

- Transition from highly formalized procedures and institutionalized processes to informal community-based welfare production, management, and delivery

The challenge is: how to support, unleash and control this paradigm shift in welfare systems?

Key factors:

- Social infrastructures & new delivery systems based on innovative inter-sectoral partnerships
- New financial frameworks to support innovative business models and social impact investing

... to revamp the European project, strengthening its social dimension
'Europe will be built through de facto solidarity and concrete generosity'…'

Schuman Declaration, 9th May 1950, Paris
ICT-Enabled Social Innovation to support the Implementation of the Social Investment Package

Mapping and Analysis of ICT-enabled Social Innovation Initiatives promoting social investment across the EU: IESI Knowledge Map 2016

Gianluca Misuraca, Csaba Kucsera, Guido Passi, Dimitri Gagliardi, Fabienne Abadie

Exploring the role of ICT-Enabled Social Innovation to support the modernisation of EU Social Protection Systems

Findings and insights from analysis of case studies in fourteen Member States

Gianluca Misuraca, Csaba Kucsera, Fabienne Abadie, Giulio Pasi

Want to know more?

Annex - Scenarios on the Future of Welfare

**Individualist / Do-It Yourself Distributed Welfare 'Insurance-extended model'**
- High pressure on labour market dynamics provoking heterogeneous and limited provision of welfare services
- Fragmentation of social values due to the emergence of insular communities powered by online social networks
- Restricted access to welfare services for disadvantaged groups and exacerbation of social and digital exclusion

**Post-Industrial Retrenched Welfare 'Occupational-extended model'**
- Collapse of traditional labour markets mechanisms due to the consolidation of the austerity paradigm
- Unbalanced systems not able to ensure inter-generational social security and protection of disadvantaged groups
- Lack of cohesion in community development and distrust in government capacity to intervene as a 'guarantor'

**Collaborative Nested Welfare 'Adaptive-extended model'**
- Balanced development of labour markets and collaborative economy mechanisms via self-regulated online platforms
- Shared-welfare systems capable of guaranteeing the inter-generational shift and the protection of the most vulnerable in society through peer-support or other means
- Emergence of shared-value systems for public value creation and co-management of the welfare 'commons'

**Liquid -Post-Modernist `Supermarket-Welfare'**
- Increased polarisation in the market labour due to the changing nature of work and the impact of digitalisation
- Wide diffusion of a 'consumerist' view to welfare reinforced by data-sharing and privacy-on-design approaches
- Emergence of conflicts between highly-diverse value-systems, further fuelled by cultural divergences

EU2017.EE