



# *Policy Recommendations for Improving e-Government Use Among Low Socio-Economic Status Groups*

---



Niv Ahituv & Yoel Raban  
Tel Aviv University



# Goal

---

- Providing policy Recommendations for increasing the usage of e-Government services by LSGs. Based on:
  - Addressing the specific barriers & needs of LSGs
  - Exploitation of new technological developments
  - Training and education programs
  - Setting priorities for further e-Government related R&D programs



# Methodology

---

- Integrating data of previous deliverables
- Researching policy options
- Policy design brainstorming
- National feedback workshops
- Final policy recommendations



## The problem with existing policy

---

- ❑ e-Inclusion policy is already under way but still far from targets set by Riga Declaration
- ❑ e-Government policy do not address specific needs of LSGs (in most countries)
- ❑ As a result, LSGs usage is still very low

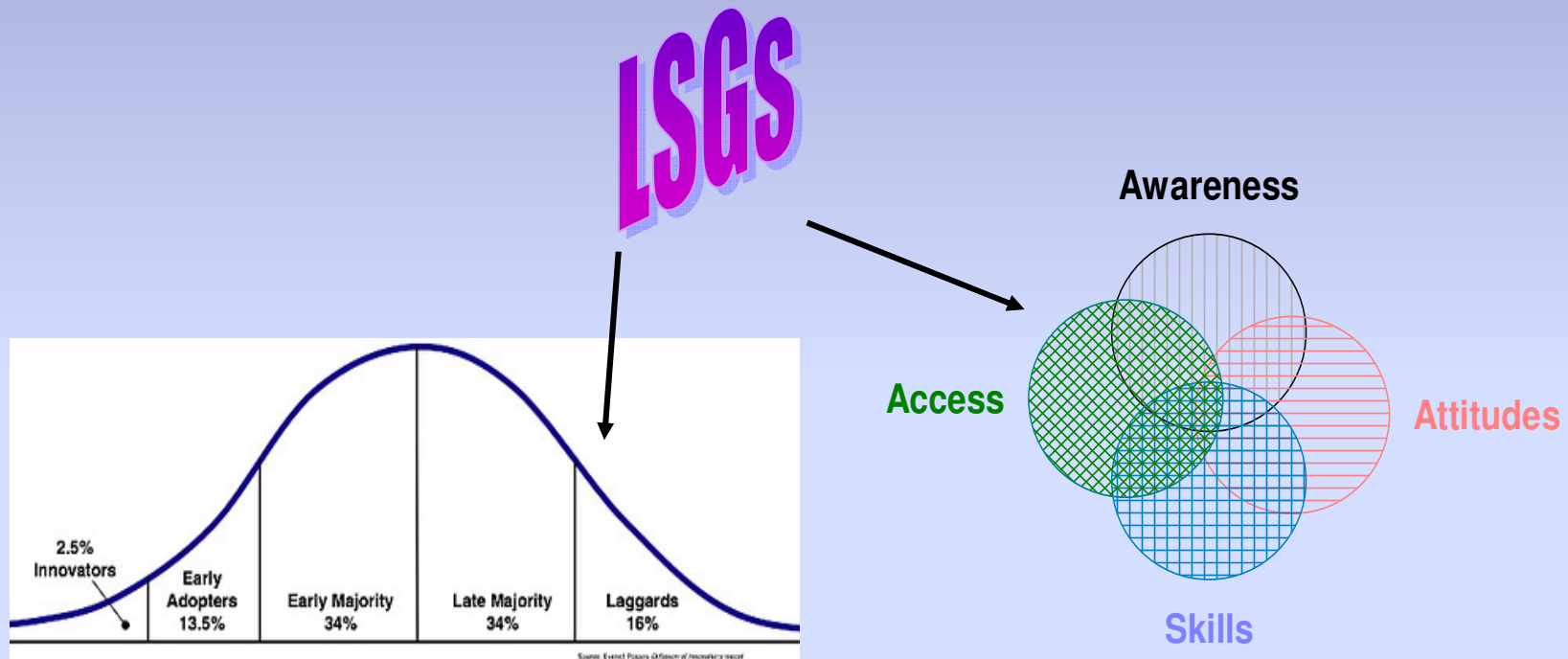


# Key ELOST Findings

- ❑ Internet usage rate among LSGs is quite low (20%-30%), e-Government usage rate is less than 10%.
- ❑ Groups of people within LSGs have specific barriers/needs (age is the most distinct differentiator)
- ❑ Older LSGs, those with a low level of education, retired, and poorer LSGs are less likely to use the internet
- ❑ The most common reasons for not using the internet were attitudinal ('do not need the internet')
- ❑ e-Government is viewed (among users) as difficult to use (without human support), not safe and reliable as the alternative
- ❑ Skill-related barriers were the second most common reason for not using the internet



# The Reasons – Usage Barriers



**LSGs are clearly among the last groups of citizens to embrace information technologies**



# Types of Barriers

---

- ❑ Lack of **Awareness** to Internet and e-Government applications & services
- ❑ Inability to **Access** the Internet & e-Government services due to lack of access mode (or means to obtain it), poor accessibility, etc.
- ❑ Lack of digital **skills** needed to use the Internet and e-Government services
- ❑ Negative **attitudes** towards using Internet or e-Government due to many reasons (technophobia, perceived lack of security & privacy, distrusting the government, etc.)



# Changing Attitudes

- ❑ Most LSGs (non users) have negative attitudes towards Internet and e-Government (also towards government initiatives in general)
- ❑ Negative attitudes pose the most difficult problem – and take time and efforts to change
- ❑ This is key to e-Government take up by LSGs
- ❑ There is a need for a structured process to change attitudes, based on DOI model (Rogers)

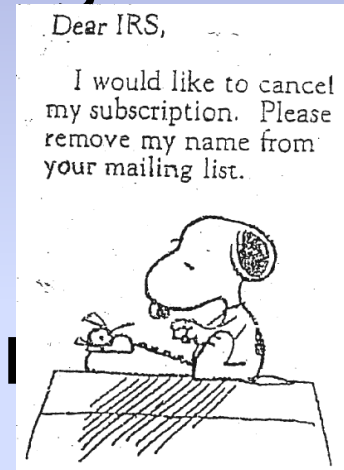






# Examples

- ❑ Human intermediaries in Portugal assist with tax fillings
- ❑ In Israel a special rabbinical commission for media issues approves “Kosher” Internet for orthodox Jews
- ❑ UK: Community volunteers promote e-Government services in North Cornwall





# Attitude Changing Guidelines

---

- ❑ Develop unified measures for attitude change
- ❑ Identify intermediaries (opinion leaders & change agents) for each group
- ❑ Develop education and incentives programmes for intermediaries
- ❑ Develop applications (IT) to assist change agents
- ❑ Get started, measure outputs, change scheme if needed



# Access Solutions

- ❑ The problem: main access mode (PC) is not user-friendly to most LSGs
- ❑ Access mode must match affordability & skills requirements
- ❑ Different interfaces needed for young & old



PIAPs





# Guidelines for Providing Access

---

- ❑ Gather Internet and e-Government usage data for LSGs
- ❑ Research access interfaces for LSGs (ITV, mobile, language processing, touch screens)
- ❑ Develop plan and roadmap for access options for LSGs
- ❑ Make sure that every citizen will have access to an electronic channel
- ❑ Study & use incentive systems in order to persuade LSGs to access Internet & e-Government



# Digital Skills

- ❑ The problem: Most LSGs lack digital skills that are essential for using e-Government services.
- ❑ Digital knowledge levels required from LSGs for e-Government use may be group-specific (age is an important factor).
- ❑ Different training techniques are exercised – examples to learn from (peer to peer, intergenerational..)





# Digital Skills Guidelines

---

- Study current training techniques
- Determine skill levels required for e-Government use
- Develop digital skills training programmes
- Create motivation and incentive system for learners



# Integrated Inclusive Policy

---

- Identify the groups that belong to the LSG category
- Determine the priority among the groups
- Determine the priorities of needed services within each group
- Identify the barriers within each group
- Choose the technologies and solutions that best fit the group and the services
- Prepare an implementation plan with timetable, budget and resource allocation
- Prepare criteria of success
- Form the organizational structure
- Launch the project



# Example: Integrated Inclusive Policy (for Younger & Older)

| <b>Group<br/>Barrier type</b> | <b>Young people at<br/>risk</b> | <b>Elderly people</b>                       |
|-------------------------------|---------------------------------|---|
| <b>Access</b>                 | <b>PC/Laptop</b>                | <b>DTV, KIOSK, Family<br/>member</b>        |
| <b>Skills</b>                 | <b>Schools, PIAPs</b>           | <b>Peer-to-peer, Life long<br/>learning</b> |
| <b>Awareness</b>              | <b>Viral marketing</b>          | <b>TV ad campaign</b>                       |
| <b>Attitude<br/>change</b>    | <b>Opinion leaders</b>          | <b>Community change<br/>agents</b>          |



# Barriers and solution types: Example

| Measures and Solutions:<br><u>Barriers</u> | Technological tools and infrastructure   | distribution of means   | Education, training and support  | Attitude change  |
|--|--|---|--|--|
| <b>Access</b>                              | Wide variety of access means (e.g., DTV, PC, cell phone) and appropriate infrastructure                | Wide distribution of access equipment; PIAPs; use community centres, school and post offices as communication centres | , e.g., allocate support personnel to elder people, use human (social) intermediaries where necessary. |  |
| <b>Literacy and skills</b>                 | Friendly interfaces; take a ride on prevailing means such as TV and cell phones; face-to-face meetings |   | Provision of courses, workshops, instructors to individuals and to small groups, call centres          | Provide small group workshops and motivation sessions; build easy learning resources, such as lessons and teaching aids. |
| <b>Awareness</b>                           |  | Install equipment in public places with clear operation manuals   | TV and radio programs on the benefits of e-Government and its easy availability                        |  |
| <b>Attitudes</b>                           | Friendly interface   | Subsidized price of technology and usage  | Promotion on TV and radio, training, guides at site  | Locate and influence community leaders; develop a reward mechanism   |



## Example: two services in India

---

- Health services to remote villages
- Harvest purchase services to farmers in remote villages in order to bypass the intermediate buyers



# Priorities

---

**Attitude Change**

**Digital Skills**

***New Access Modes***

**Awareness raising**



Time



# Specific policy guidelines

| <b>Guidelines/actions</b>                                | <b>Leadership*</b> |
|--|--------------------|
| <b>1. General</b>  |                    |
| Identification and study of groups needs and barriers    | EC, G              |
| Prioritization of groups for inclusion                   | G, LA              |
| Inclusive e-Government implementation plan               | EC, G              |
| Form organizational structure to implement the plan      | EC, G, LA          |
| <b>2. Attitude change:</b>                               |                    |
| Study attitude change processes in LSGs                  | EC                 |
| Develop unified measures for attitude change             | EC                 |
| Set goals for attitude change                            | EC, G              |
| Identify intermediaries (opinion leaders, change agents) | G, LA              |



# Specific policy guidelines (cont')

|   |                  |
|---|------------------|
| Develop education & incentive programmes for intermediaries | <b>EC</b>        |
| Develop IT applications to assist change agents             | <b>EC</b>        |
| Prepare plans for attitude change campaigns                 | <b>G, LA</b>     |
| <b>3. Awareness raising</b>                                 |                  |
| Study media habits of LSGs                                  | <b>EC, G</b>     |
| Develop awareness building campaigns                        | <b>EC, G, LA</b> |
| <b>4. Digital skills</b>                                    |                  |
| Study current training techniques                           | <b>EC, G</b>     |
| Determine skill levels required for e-Government use        | <b>EC, G</b>     |
| Develop digital skills training programmes                  | <b>EC, G</b>     |
| Develop education & incentive programmes for intermediaries | <b>EC</b>        |



# Specific policy guidelines (cont')

## 5. Access

|   |       |
|---|-------|
| Gather Internet and e-Government usage data for LSGs                | EC, G |
| Research access options for LSGs                                    | EC, G |
| Develop plan and roadmap for access options for LSGs                | EC, G |
| Make sure that every citizen will have access to electronic channel | EC, G |

## 6. Technologies

|  |       |
|--|-------|
| Research future LSG-friendly affordable interfaces             | EC, G |
| Develop inclusive e-Government applications (ITV, mobile..)    | EC, G |
| Improved synchronisation of diverse types of information flows | EC, G |

\* EC – European Commission, Government – G, Local authorities - LA



# Major Contributions

---

- ❑ Policy recommendations are aimed at mitigating all usage barriers found in ELOST (access, awareness, skills and attitudes)
- ❑ Priority is given to attitude change processes that are a necessary step to increase LSGs use significantly.
- ❑ The design of inclusive solutions takes into account barriers & needs of different groups
- ❑ An integrated approach to inclusive e-Government policy will speed up adoption by LSGs. Guidelines are provided.



# Thank you

---

