

# Key issues in ethics and ICT

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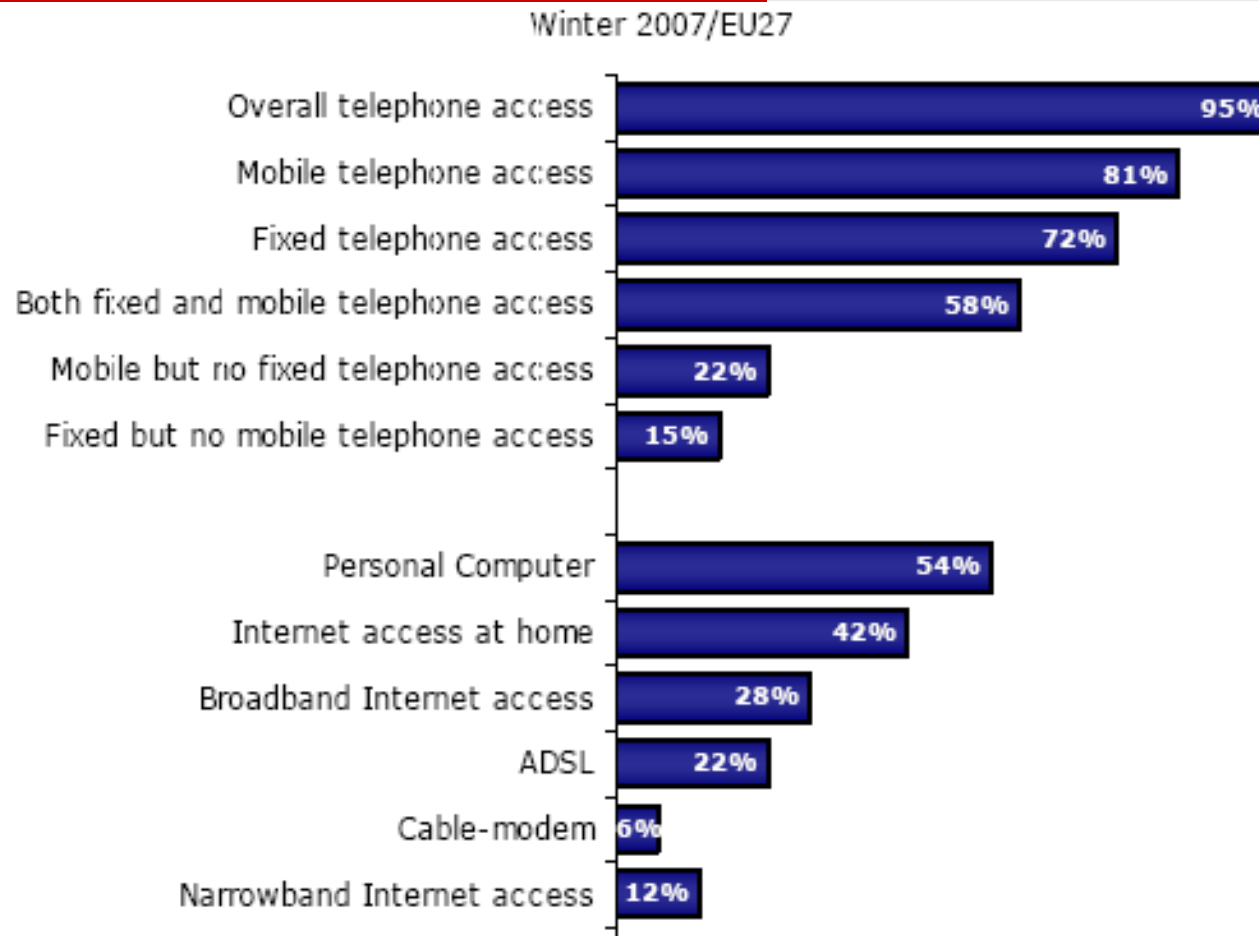


# Political drivers

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- ❑ many Europeans still reap few or no benefits from ICT and there are resilient gaps in ICT use [1]
- ❑ “eInclusion” means both inclusive ICT and the use of ICT to achieve wider inclusion objectives [1]
- ❑ realising increased quality of life, autonomy and safety, while respecting *privacy and ethical* requirements [1]
- ❑ trustworthy, secure and reliable ICT are crucial for a wide take up of converging digital services [2]

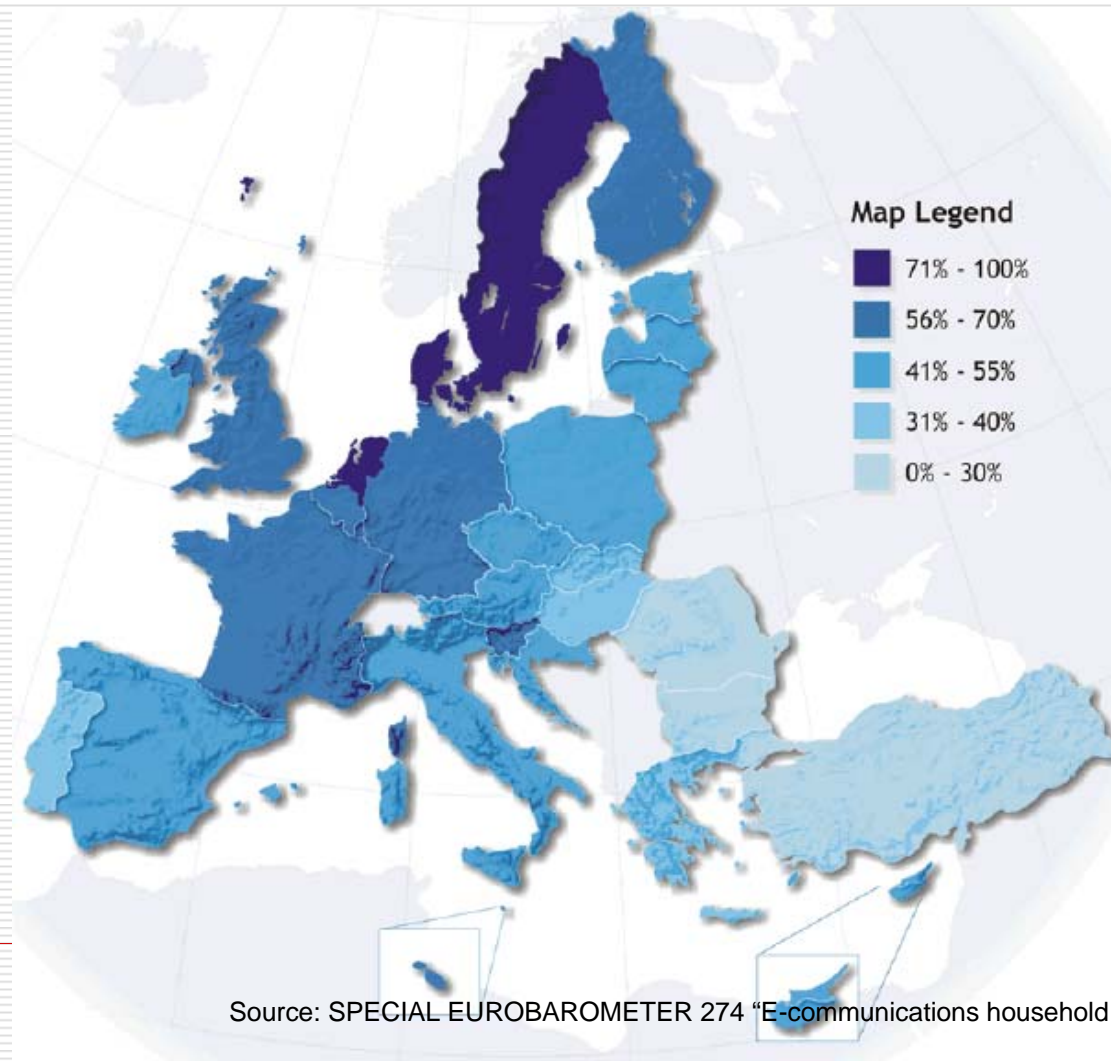
# Technology in the EU



Source: SPECIAL EUROBAROMETER 274 "E-communications household survey – Wave II", April 2007

# Households with at least one computer

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# The disparity

- Proportion of households with at least one computer

	TOTAL	Household composition				Subjective urbanisation		
		1	2	3	4+	Rural	Urban	Metro
<b>EU27</b>	54%	36%	49%	68%	72%	50%	54%	59%
<b>EU15</b>	58%	39%	53%	72%	78%	56%	57%	61%
<b>NMS12</b>	39%	20%	25%	55%	55%	28%	41%	51%

- Single households by age with at least one computer

EU27			EU15			NMS12		
-29	30-59	60+	-29	30-59	60+	-29	30-59	60+
72%	53%	15%	73%	57%	17%	70%	29%	6%

Source: SPECIAL EUROBAROMETER 274 "E-communications household survey – Wave II", April 2007

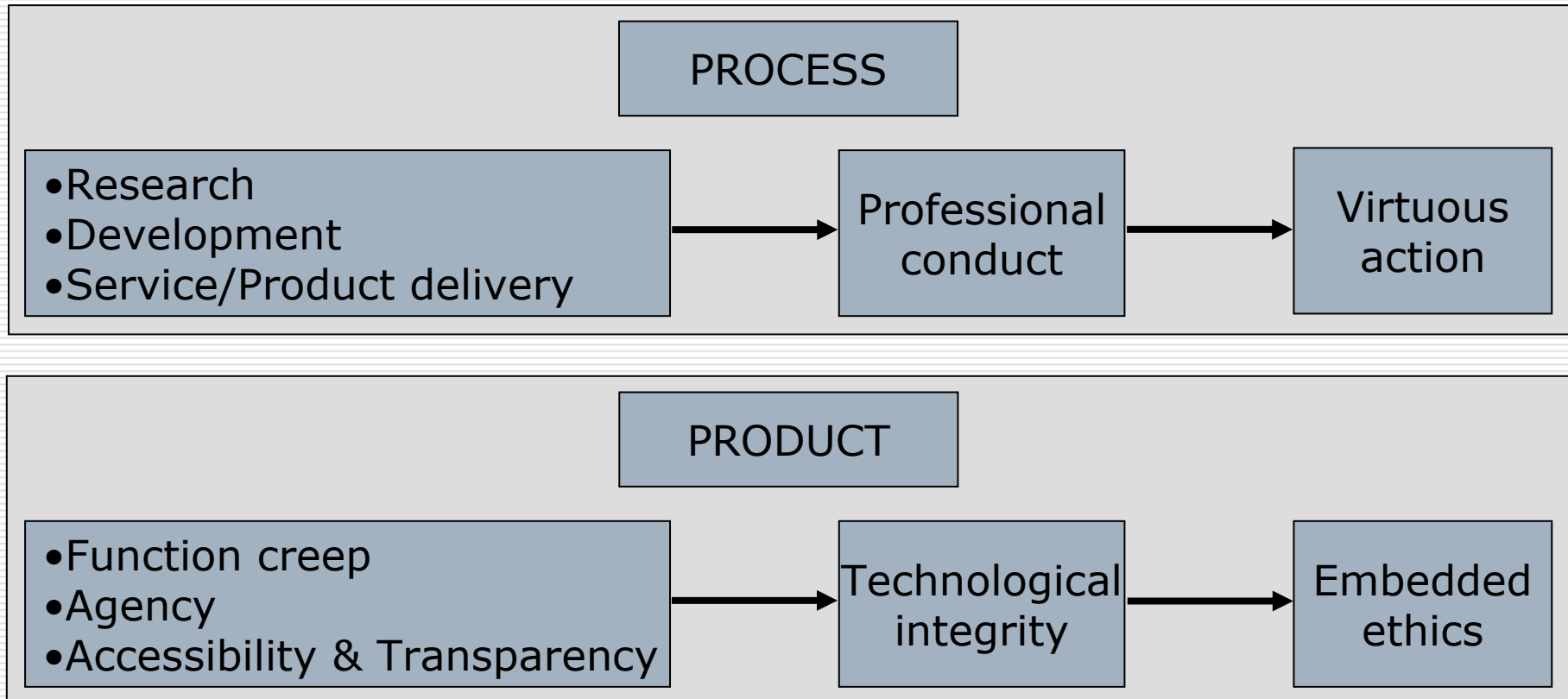
# ICT ethics

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- To integrate ICT and human values in such a way that ICT advances and protects human values, rather than doing damage to them
  - formulation and justification of policies for the ethical use of ICT
  - carefully considered, transparent and justified actions leading to ICT outcomes

# Process and product

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# Beyond the obvious: *ICT ethics is not just privacy*

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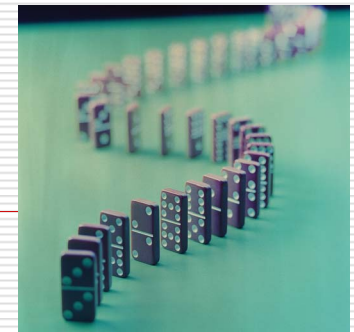
- Access and Accessibility
- Choice
- Conduct
- Identity
- Misuse
  - Harmful content, Spam, Virus, Id theft, Hacking, ...
- Privacy
  - Informed consent, security, ...
- Responsibility and Obligation
- Rights
  - Equality, Autonomy, Inclusion, Representation, Self determination ...
- Transparency
- Trust
- ...



# Impact of ICT systems

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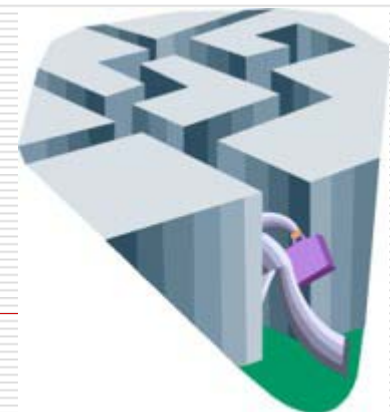
- People
  - behaviour/work process will be affected by the development or delivery of ICT systems
  - circumstance/job will be affected by the development or delivery of ICT systems
  - experiences will be affected by the development or delivery of ICT systems
- Environment
  - carbon footprint
- Non-human species



# Fit-for-purpose ICT

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- ICT to fit users' needs rather than users fit ICT's needs
- Adding goodness
  - Costs and Benefits
  - Rights and Justice
  - Care and Empathy



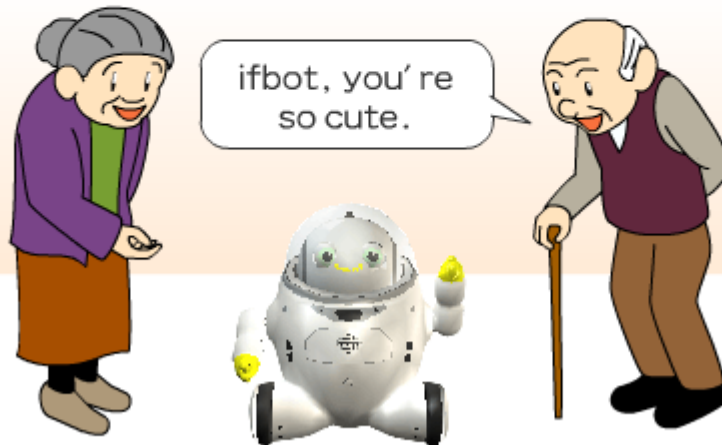
# Unfit-for-purpose ICT

ifbot. ifbot Memu ifbot's Profile **Do you want to chat?** Body Parts

Situation  
3

ifbot and the  
Elderly

❗ Please select and click on a person.  
Please turn on your speakers to listen to  
ifbot's responses.



"The residents liked ifbot for about a month before they lost interest. Stuffed animals are more popular" Yasuko Sawada, director of a Japanese nursing home

# Fit-for-purpose ICT

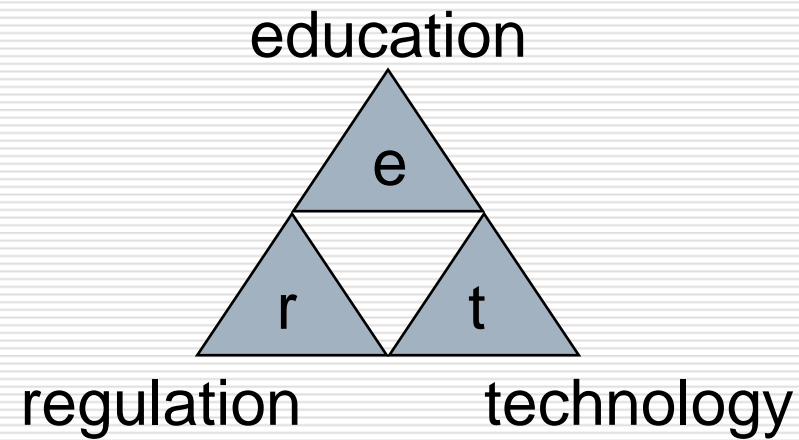
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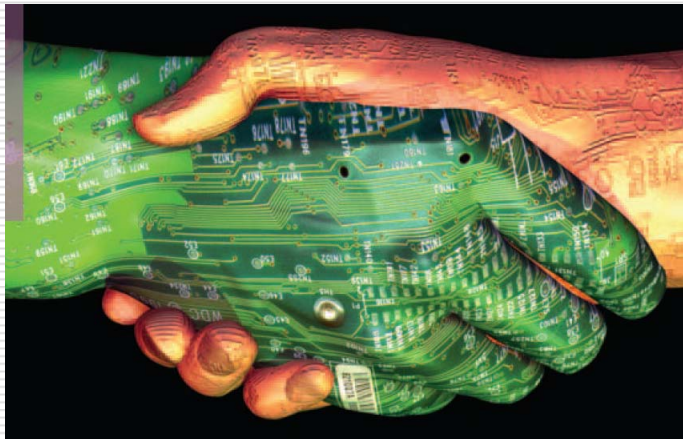


The IBM mouse treats the hand tremors as noise, and uses algorithms based on image-stabilization systems used in digital cameras

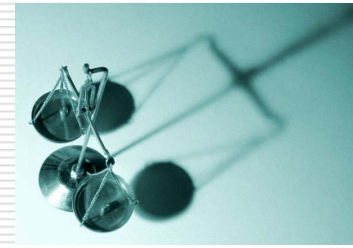
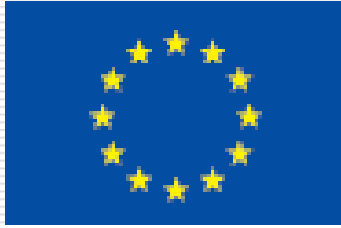
# Addressing ICT ethics

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# Fundamental ethical principles related to ICT for Inclusion

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# Charter of Fundamental Rights of the European Union

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Conscious of its spiritual and moral heritage, the Union is founded on **the indivisible, universal values of human dignity, freedom, equality and solidarity**; it is based on the principles of democracy and the rule of law. It places the **individual at the heart** of its activities, by establishing the citizenship of the Union and by creating an area of **freedom, security and justice**.



# Three ethical perspectives

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Utilitarian



Aristotelian



Kantian



# General Utilitarian Principles

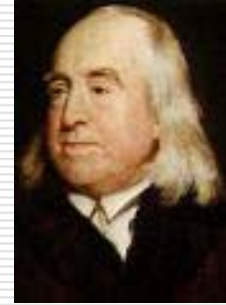
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*The Principle of Utility* — Something is good ethically to the extent that it tends to promote benefit, bad ethically to the extent that it tends to promote harm.

*The Principle of Equality* — Regardless of a person's station in life, everyone counts the same when benefits and harms are added up.

*Overall Utilitarian Strategy* — Try to bring about, for the greatest number of people, treating everyone equally, the most benefit and the least harm.

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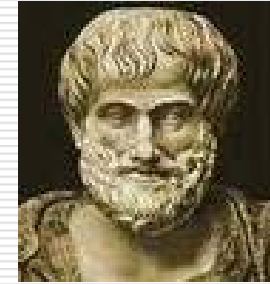
# Utilitarian questions

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- ❑ How can equality of treatment and opportunity in the context of ICT be achieved?
  - ❑ In line with equality of access for all, how can mainstream ICT products be made usable of the elderly and should this be the product start-up default?
  - ❑ In order to promote equality of access, how can affordable ICT be achieved?
  - ❑ Is it right to force on-line services on those who prefer off-line interaction with government or who are technophobes?
  - ❑ To what extent is stigmatism of disaffected groups a barrier to using ICT to address social inclusion?
  - ❑ What are the obligations regarding affordability of ICT and whose obligations are they?
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# General Aristotelian Principles

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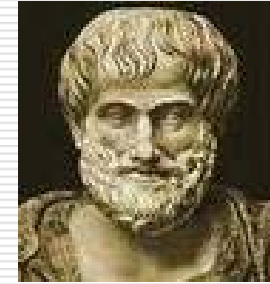


The Aristotelian Virtues — Examples include *courage, integrity, honesty, compassion, reliability, generosity, responsibility, prudence, temperance, modesty, justness and persistence.*

The Aristotelian Vices — Examples include *cowardice, dishonesty, callousness, unreliability, greed, irresponsibility, imprudence, intemperance, arrogance, unjustness and lack of persistence.*

Overall Aristotelian Strategy — Raise children and citizens who regularly act virtuously and avoid the vices.

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# Aristotelian questions

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- ❑ How are self-determination and risk taking by the elderly incompatible with current e-inclusion thinking?
  - ❑ In order to promote self-determination, how all citizens be involved in the development of e-services that promote social inclusion?
  - ❑ Is it acceptable that assistive technologies that exceed human abilities are developed and in particular for those people with disabilities?
  - ❑ Is it defensible that those people who, for whatever reason, have no or limited access to on-line services are disadvantaged?
  - ❑ To what extent are on-line government services perceived as untrustworthy by disaffected groups?
  - ❑ What is the balance between sustaining individual privacy and promoting e-inclusion?
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# General Kantian Principle

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*The Categorical Imperative* — Always treat every person, including yourself, as a being who has *worth in himself or herself*, never merely as a being to be used to advance someone else's goals.

*Overall Kantian Strategy* — Always respect the *worth and dignity* of a person, never merely use him or her. Allow and encourage people to be *autonomous agents* responsibly in charge of their own lives and actions.



# Kantian questions

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- ❑ How can government on-line services be implemented in a way that respects the EU as a heterogeneous population in terms of culture, economic prosperity and age?
  - ❑ How can public access points to on-line government be de-stigmatised?
  - ❑ How can the design of human interfaces for smart environments ensure people with sensorial, physical or cognitive restrictions are treated with worth and dignity?
  - ❑ In order to promote ICT acceptance and effectiveness, how can respect for cultural diversity be realised in generalised ICT products and services?
  - ❑ In order to treat people with dignity, how can e-inclusion initiatives cater for changing requirements and preferences as people get older?
  - ❑ Regarding e-inclusions what is special about informed consent for people with disabilities?
  - ❑ What is important about an individual's autonomy and dignity when planning e-inclusion initiatives?
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