Accessibility

# Making digital accessibility reachable for organizations

Factors influencing implementation and maturity

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# Research source

Velleman, E.M. (2018). [The implementation of web accessibility standards by Dutch municipalities, factors of resistance and support](). Twente University, Enschede. DOI: 10.3990/1.9789036546690.

Phd-advisor: J.A.G.M. van Dijk and W.E. Ebbers.

# Fundamental design of the web

- The web is fundamentally designed to work for all people, whatever their hardware, software, language, culture, location, or physical or mental ability.

The impact of disability is radically changed on the web, because the web removes barriers to communication and interaction that many people face in the physical world.

# Accessibility

- Websites, software, mobile applications and the internet (Web) of things are *Perceivable, Operable, Understandable,* and *Robust* for all people, whatever their hardware, software, language, location, or ability.

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# Persons with disabilities

| | Disabilities | | | | | | ADL, 55 y & older | IADL, 55 y & older | Assisitive devices | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Persons with a GALI disability | EOCD disabilities, 12 years and older | | | | | | | | | |
| | | Persons with min. 1 disabil. | Number of disabi-lities. pp | Hearing disabili-ties | Visual disabili-ties | Motor disabili-ties | Number of disabi-lities pp | Number of disabi-lities pp | For hearing < 4 years | For vision < 4 years | For move-ment <12 years |
| | % | % | Number | % | % | % | Number | Number | % | % | % |
| All persons | 27,2 | 12,3 | 2 | 3,1 | 3,2 | 9,4 | 2,8 | 2 | 4,7 | 63,3 | 6 |
| Men | 23,8 | 9,4 | 1,9 | 3 | 2,7 | 6 | 2,5 | 1,9 | 5,2 | 58,6 | 4,2 |
| Women | 30,6 | 15,2 | 2 | 3,2 | 3,8 | 12,8 | 2,9 | 2 | 4,3 | 67,8 | 7,9 |

Health and healthcare use    (period: 2016)
Period: 2016

- In Netherlands: 2.2 million persons
- In Europe: 80 million persons
- And: growing number of elderly
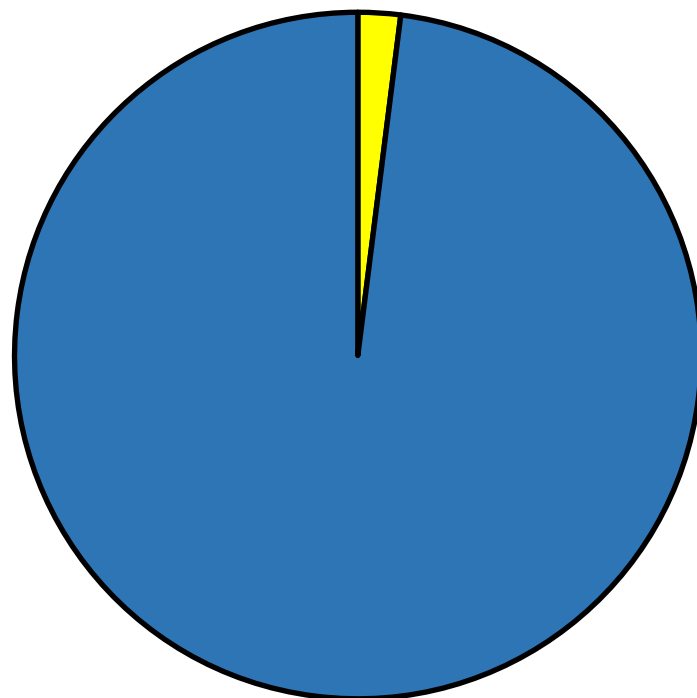- And: temporary and situational disabilities

# Respondents: reasons for accessibility

- Better quality of their website (81%)
- They want to be accessibility for all citizens
- Better findability in search engines (59%)
- Less complaints about website or app (39%)
- Less questions through other channels (38%)
- Citizens must be able to digitally interact with government

# Respondents: reasons for accessibility

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- Citizens must be able to digitally interact with government
- And: Tijdelijk Besluit digitale toegankelijkheid; Article 429q WvS; Jeugdwet (2014); WMO(2015); UN Convention; EU Directive 2016/2102; WGBH/cz (ext. in 2017); European Accessibility Act (2019?) Toename van zelfstandigheid personen met een beperking (93%); Section 508; etc.
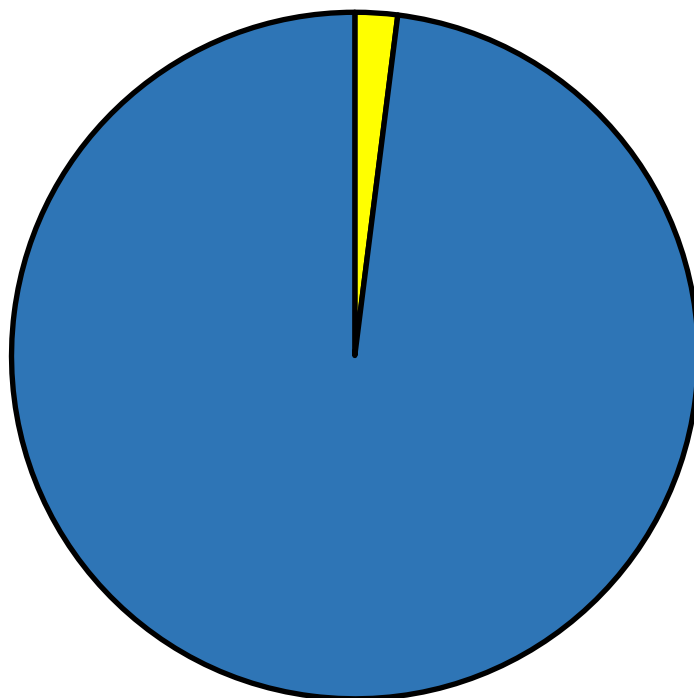
# Actual situation
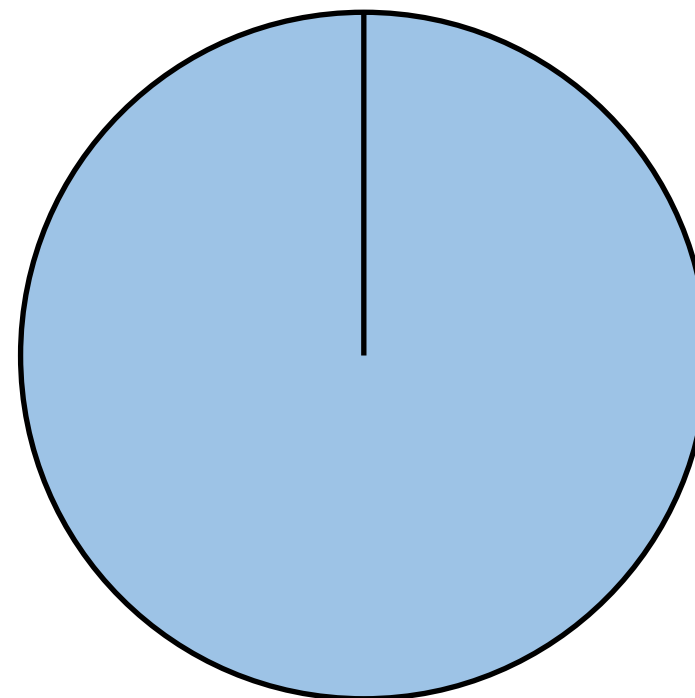
in 2006



□ Voldoen   ■ Voldoen niet

# Actual situation
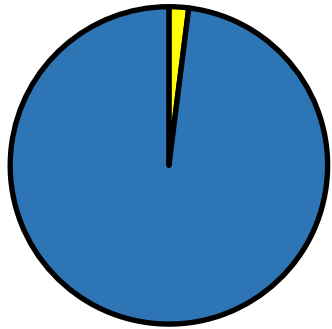
in 2006

in 2018



□ Voldoen  ■ Voldoen niet
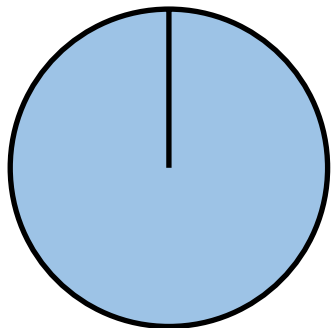
□ Voldoen  □ Voldoen niet

# What do these numbers tell us?

in 2006



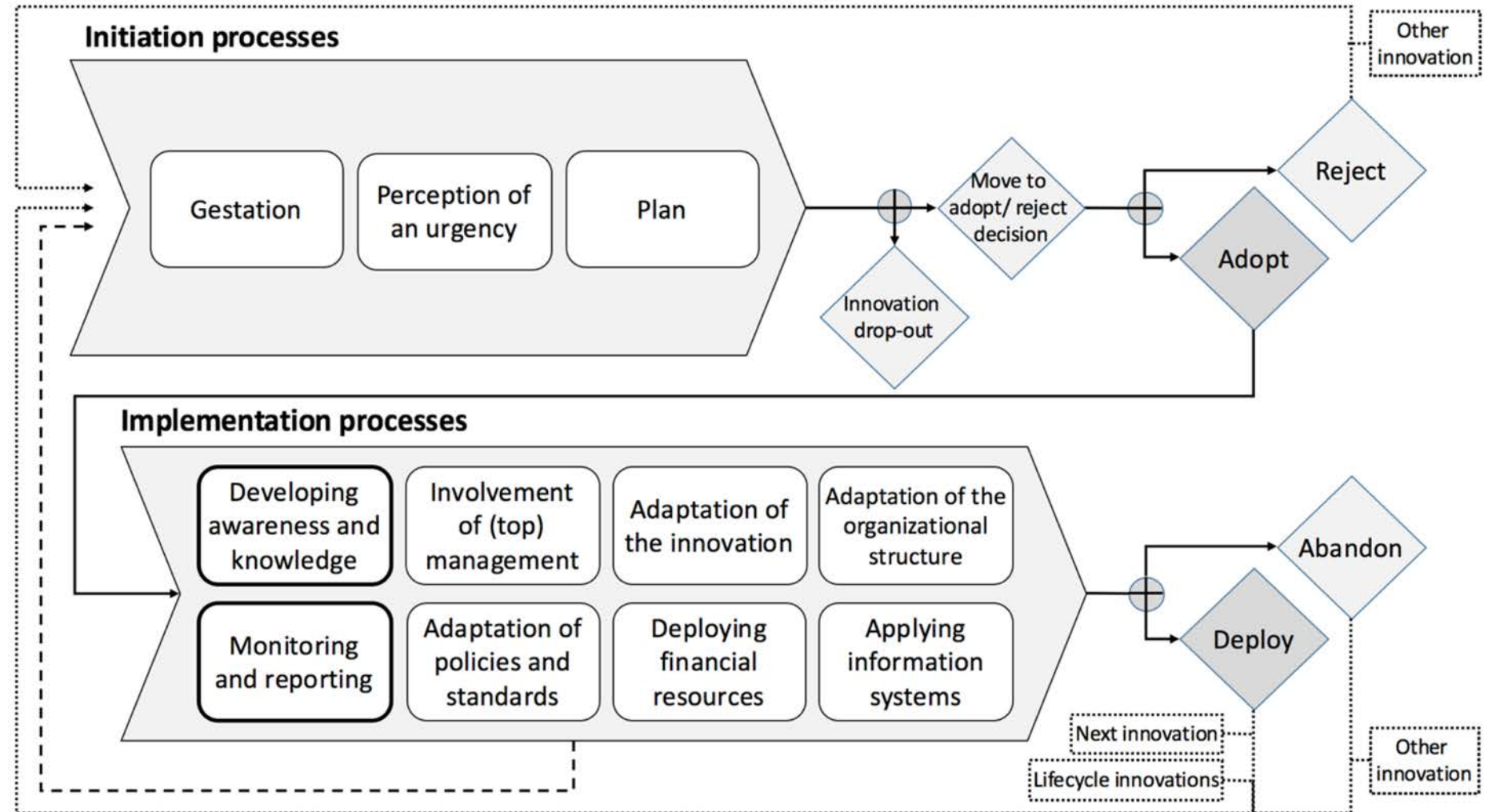☐ Voldoen  ☐ Voldoen niet

in 2018



☐ Voldoen  ☐ Voldoen niet

*"Accessibility is not a technical but an organizational issue"*

- Report 2 failed Success Criteria (compliance) or
- Report process and measures (pdca cycle)

# Factors influencing implementation/maturity

- proces

- factors

- indicators

- indices

- questions

- maturity

# Processes influencing implementation

- Developing knowledge and awareness +
- Involvement of (top) management +
- Adaptation of organizational plans/structures +
- Legal (adaptation of policies and standards)
- Monitoring and reporting +
- Deploying financial resources
- Applying information systems +
- Involvement of PWD

# Indicators

- Rules and standards
- Support/documentation
- Information and tools
- Training and skills
- Current status
- Perceived advantages
- External collaboration
- Top manager
- Urgency
- Task delegation
- Performance evaluation
- Drafting of plans

- Rules and procedures
- Stakeholder involvement
- Network and collaboration
- Dependencies
- Legal measures
- Technical standards
- Time and capacity
- Continuous control/repair
- Influence of software and ready-to-use solutions
- Monitoring test-plan
- Technical testing
- Functional testing
- Availability of tools
- Screenreader software

- User feedback
- Audits
- New content
- Quality Assurance
- Reporting
- Statement
- Budget and costs
- Sunk-cost
- Collaboration (scale)
- Quality of procurement
- Legacy
- Compatibility
- Persons with disabilities

# Maturity grid based on the study

5 levels

8 processes

Indicators

Indices

questions

| | Bewustwording en kennis | Betrokkenheid van (top) management | Monitoring en rapportage | Organisatorische inrichting | beleid en standaarden | Toepassen van informatiesystemen | Financiën | Initiële processen |
|---|---|---|---|---|---|---|---|---|
| Niveau 5 Geoptimaliseerd | | | | | | | | |
| Niveau 4 Gemanaged | | | | | | | | |
| Niveau 3 Vastgelegd | | | green | green | | | | green |
| Niveau 2 Basis op orde | green | green | green | green | green | | | green |
| Niveau 1 Ad Hoc | blue | blue | blue | blue | blue | blue | blue | blue |

# A few practical tips 'for today' (pdca)

- Appoint a person with (top) management responsibility. E.g. Chief Accessibility Officer / Chief Compliance Officer.

- Provide a realistic and phased plan and start with low hanging fruits

- Include accessibility in SLA, acquisition, procurement contracts, task descriptions, plans, rules and procedures and check delivered goods.

- Organize yearly monitoring, awareness, information and knowledge, training and skills about digital accessibility.

- Involve persons with disabilities

- Tools only measure 5-15% of the WCAG2.1 AA guidelines

- Provide an up-to-date accessibility statement

# Thank you

Accessibility

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