Bob Dylan Was Right: The Times They Are a-Changin’

Committee on the Future of Voting
The National Academies of Science, Engineering and Medicine

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Times are changing

New technology
15 years since HAVA
Blossoming of research and best practices
Slow pace, yes
Complex environment, yes
Change is real, yes
Agenda

About Hart
Modernization
Certification
Challenges
Recommendations
Hart InterCivic

Austin, Texas
Since 1912
Voting technology in 18 states

Hart Voting System (first generation)
Verity (all-new, second generation, 2015)

Traditional paper ballots
By-Mail/high-speed scanning
Direct Record Electronic (DRE)

Multiple federal EAC certifications, certified in 12 states
Now

Jurisdictions are refreshing their technology

Increased professionalization and diversity of practices

Increased focus on voter services

Innovations: voting methods; human factors; auditability

AND/BUT

Lack of funding

Technological change = increased complexity
Modernization

New technology is available

A decade of research – security; human factors; auditability; technology; accessibility; election administration

Human-centered design

Is the voting system easy to use?

Will the voting system last a long time?

How do I know if it’s working correctly?
Usability
Common software interfaces across the platform
Plain language philosophy
Universal-design accessible devices that provide maximum choices

Versatility
“All politics is local”
Different laws, rules, political cultures; not one market, but 50
One system, any kind of election – with flexibility for the future

Integrity
Equal parts security & transparency
Digital signatures; whitelisting
Auditability: trace human-readable CVRs to individual paper records or images; plain language audit logs
Certification

Complex environment: federal VVSG standards, EAC program, VSTLs, state-specific laws and administrative rules

Managing trade-offs and unintended consequences:

Does it help to increase quality?

Does it help or hinder the healthy flow of technology to improve access and satisfaction with voting?

Does it reduce or increase the costs – fiscal and human – of running elections?
Challenges

Usability, versatility, transparency >> increased complexity

Increased complexity >> more demands on election administrators

Election administrators >> must also become technology experts

More technology >> pressure on costs and ease of use

Policy makers and technologists:
  Everyone wants usable, versatile, trusted voting systems
  Voting system buyers also demand affordability, operating efficiency
  It’s both-and
  All of the above
Recommendations

Policy
Keep doing what you’re doing
Advancing change is fundamentally a challenge of priorities, not technology

Certification
Certify what’s necessary – no more, no less
Leave design to the technologists; don’t over-prescribe
Acknowledge the diversity of election practices
Remember that buyers care about cost, choice, flexibility, and agility, too

Collaboration
Keep an open mind, and learn about all of the trade-offs
Let it sink in that it’s more complicated than you may think
Stay optimistic. Lots of good people care, and the times are a-changin.’
thank you
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