

A Changing Survey Landscape

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The Golden Age of Survey Research 1960-1975

- Probability sampling well established in most countries (Neyman 1934)
- Nonresponse rate above 10-15% suggested that the survey was bad
- Cost situation was reasonable
- A limited number of modes available
- Things were allowed to take time
- Some error sources were unknown

Drivers of Major Developments Since 1975

- More advanced computers and software
- More sophisticated users
- New modes such as CATI and Voice Recognition
- Increasing nonresponse
- Increasing costs
- The cognitive revolution (CASM)
- Model-assisted surveys
- The quality movement

A changing survey landscape

- Users want more timely and richer data
- Increased nonresponse and costs in surveys
- Demands for reduced respondent burden
- New data sources, new actors and new technology
- Combining different data sources
- Nonprobability samples and inferential issues
- New data collection modes and mixed modes
- New storage requirements

Examples of Sources of Data

- Censuses
- Other survey programs
- Administrative data systems
- Medical records systems
- Commercially compiled data
- Financial data
- Satellite imagery
- GPS and GIS
- Social media
- Mobile devices
- Wearable measurement devices
- Sensors (Internet of Things)
- Visual data: pictures and video
- Genetic profile data
- Transactional data systems

Nonprobability Sampling

- Relatively common since 1934
- Rare and hard to sample populations
- Opt-in panels
- Combinations of probability and nonprobability sampling
- Pretests and pilot surveys
- Conferences/workshops

Until the purpose is stated, there is no right or wrong way of going about the survey

Deming, W. E. (1944)

User Demands

- More timely data
- Not just estimates
- Advanced products such as interactive features
- Surveys not great for complex concepts (religion, loneliness, happiness, existential issues, health, hypothetical questions)

Quality

- Nonresponse is up
- Costs are up
- Face-to-face almost gone
- Margin of error understated
- Missing at random not a very realistic assumption
- In Sweden only SCB is ISO 20252 certified
- New version of ISO released soon with access panels included
- New ideas involving responsive design have had limited success
- Quality management is struggling
- Lots of bad surveys out there

Five formidable challenges for official statistics: wider, deeper, better, quicker, cheaper.

Holt, D. 2007

We need to move from a probability sampling paradigm to a multiple data source paradigm and then move backwards from concepts to best data sources.

Citro, C. 2014