

Comment

*Barbara Everitt Bryant*¹

Innovation is difficult in government sample surveys and censuses. Indeed, I agree with Donald Dillman. I also agree with Dillman that a major inhibitor of change is the different perspectives of those in the research culture and those in the operations culture. However, I identify several other major road blocks to innovation as well, road blocks that I will discuss after first addressing Dillman's tenet. Dillman cites the co-existence of research and operational cultures, their different value systems, and the difficulties of resolving their differences as obstacles to making change.

Dillman and I came into government at the same place, the U.S. Bureau of the Census, but from careers in different survey research sectors. He came from academic survey research, I from private sector survey and market research. We were brought to the Census Bureau for different reasons: I as an administrator (Director, 1989–1993), and he as a purposeful part of my administration to bring change through interaction of several of the best academic survey researchers in the nation with the excellent research staff at the Census Bureau. Seeking change was not confined to the research area. On the operational side, two expert panels brought best practices from the statistical offices of other governments, and from private and academic survey organizations to the initiative which resulted in CASIC (computer assisted survey information collection). All of us, the Director, the academic researchers, and those externally and internally who initiated CASIC found change difficult to accomplish, and often not as extensive as we might have wished. Change is possible – it is just harder to accomplish in hierarchical government agencies.

Research versus Operations Cultures

Let us turn first to Dillman's thesis that there is a conflict between the two cultures. Because of the scale of many large government surveys, those who operationalize the taking of such surveys tend to be more dominant than they would be in academic or private sector survey research. The drive to make a large survey project run smoothly often overrides the researchers' priorities. Making fundamental change is risky when success is measured in terms of getting a very large project completed on time and on budget. Incremental change in existing procedures is far safer than embarking on an experimental approach which might, or might not, make a significant difference in reducing coverage, sampling, measurement, or nonresponse errors. Researchers can never promise certainty. In private and academic sector survey research, by con-

¹ University of Michigan, School of Business Administration, Ann Arbor, MI 48109, U.S.A.

trast, research designers are more likely to hold precedence over operational implementers.

Tensions between research and operations can lead to beneficial discourse and changed procedures, but – as Dillman points out – are harder to resolve in hierarchical organizations. Innovation is not the exclusive province of either research or operations personnel. Researchers, by definition, are meant to be innovators. However, positive innovations that ultimately have improved the quality of data have also risen from the operations side. (For example, computer assisted telephone interviewing (CATI) was an operational improvement which arose in the private sector and was resisted in its early years by academic researchers. Later they came to appreciate the opportunities CATI opened for greater quality control of interviewing and for more complex questionnaires.) In general, however, researchers drive to gather the kinds of information which can only come from respondents in a way that minimizes error. Operations' focus is on getting the job done.

What large government agencies need – and the private sector quality movement is the source of the leading edge thinking – is to work in a new way. Establish a team at the outset of any project (or at the start of a new cycle of an ongoing one). All disciplines and staff at many levels need to be represented. Such a team cuts across the organization so it must be empowered to make decisions without excessive hierarchical review. The team comes to agreement on the goals – research goals, operational goals, budget goals – at the front end. The team determines what has to be done to achieve those goals in terms of resources, time, personnel and processes. Then it sees that the work gets done, modifying procedures when obstacles arise, but always keeping a focus on the agreed upon goals.

Other Barriers to Innovation in Government Surveys

I see other obstacles to innovation in government surveys, and will describe these briefly.

The caution over changes in measurement of economic indicators

With only a few exceptions, academic and private sector surveys do not move financial markets. Economic indicator measurement does. A change in an indicator may immediately affect the stock market, decisions of the Federal Reserve Board, or the equivalents in other free market nations. The result is that those in government agencies are extremely cautious about making changes in survey methods, even when they recognize errors in measurement. A case in point is the Current Population Survey (CPS, i.e., the U.S. labor force survey), from which the monthly figures on employment and unemployment come. I was amazed when I came to the Census Bureau to discover that the Census Bureau and the Bureau of Labor Statistics were working on revisions to the questionnaire *for the first time in a generation* – a generation in which the composition of the labor force had changed dramatically with the greater participation of women and increased racial and ethnic diversity of the workforce. Everyone involved with CPS had recognized for years that the wordings of some questions were completely out-of-date, resulting in significant measurement

errors. Any survey organization other than a government one would have revised the questionnaire a number of times in the generation time period. When change was finally put in place, three major changes were made at once: new questionnaire, shift from paper and pencil to computer assisted personal interviewing (CAPI), and new sampling frame based on the 1990 census adjusted for undercount. There was recognition that this much change was bound to change the unemployment rate for methodological rather than actual reasons (it went up one-half percent). Therefore, the Census Bureau and Bureau of Labor Statistics did a long period of overlap surveys so they could explain the change when it occurred. But the outdated questionnaire should have been taken care of years before, using split samples or overlap surveys to gauge the effect. Innovation delayed brought with it years of measurement error.

Lack of cross-fertilization of personnel with outside thinking

Government employees tend to have longevity in government. A 42-year old statistician or demographer typically has been in the federal statistical system 20 years, having joined right after receiving a bachelor's degree, and done any graduate work as night school courses since. Forty-two year old academics are much more likely to have been at several universities and, perhaps, had a stint in the private sector as well. Private sector researchers are likely to have been in several companies – and learned from each. Longevity of service has benefits of stability to the organization. It has the disadvantage that the government researcher knows little of what is going on in his or her discipline beyond the government system in which he or she is embedded. This inhibits innovation and the import of fresh ideas. Dillman himself may have opened windows on the world for a few years, but this happens far too rarely.

Small scale experiments are not part of the culture

Because of the scale of most projects, those who conduct government surveys are not oriented to the fast turnaround, small scale studies – often with split samples or control groups – so effective for testing a variable or two or alternative question wordings. Instead they set up each project with all the requirements for hierarchical approvals from many divisions and, therefore, overhead costs and time delays, with which they would set up a major survey or census.

Long budget cycle inhibits innovation

It takes three to four years from the idea for an innovation, and six levels of approval ((1) Under Secretary, (2) Secretary, (3) Office of Management and Budget, (4) House of Representatives Appropriations Committee, (5) Senate Appropriations Committee, and (6) House-Senate Conference Committee.) to get the innovation into the budget for a U.S. statistical agency. The long budget development and approval cycle inhibits the timeliness of change.

Received November 1995