

## Comment

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Dillman's article has two predominant themes: (1) vertical organizations are bad, and (2) cognitive and related behavioral research are not sufficiently appreciated or adequately funded in government statistical agencies. Dillman generalizes his observations to global "government statistical agencies" throughout his article, even though his relatively short tenure was at the U.S. Census Bureau, one of a number of major statistical agencies in the United States – a statistical system notorious for its lack of common practice. The article suggests a lack of familiarity with practices in other statistical agencies, and even with some parts of the Census Bureau. Thus, it is a risky business to make assertions regarding generic statistical agencies based on a few examples from one agency.

Dillman asserts that innovation is difficult in surveys. He presents a variety of examples to buttress those assertions, which are useful in setting the context. On the whole, Dillman's steps toward reducing the barriers to innovation are quite sound. For example, with respect to his first recommendation, an understanding of nonsampling error certainly needs to be broadened and professionals with the relevant training must be incorporated into the staffs of survey organizations. But this has been long recognized. My own organization, the U.S. Bureau of Labor Statistics (BLS), has been hiring professionals from the fields of cognitive psychology and survey methodology for more than a decade to complement its traditional core staff of economists and statisticians. These relatively recent additions to the staff have greatly enhanced our ability to develop, test, and implement surveys. In addition, as Dillman mentions, expanding educational opportunities in the Washington, D.C. area in the field of survey methodology permit greater professional development of existing staff.

He also strikes a responsive and timely cord in his analysis leading to the recommendation for reconsidering the hierarchy of survey organizations. But the article does not convincingly demonstrate that government hierarchies are the villains who prevent needed improvements. There is little evidence that private survey organizations, even those in our universities, are doing any better in adopting ideas of survey methodologists for reducing measurement and nonresponse error. To the extent his assertion is true, it is true and endemic to survey management wherever it is housed.

Rather than wringing our hands over the problem, or suggesting major unneeded

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overhauls, we have a unique opportunity today to fix the problems that confront our business. Great strides in communication, data processing, and other workplace technologies allow organizations to share information quickly among a wide audience. At the same time, a broad-based shift in the philosophy of the workplace is a central tenet of the quality improvement revolution, moving all organizations towards Deming's model of less structure and more worker control. The emphasis on quality management and partnership is driving a great many changes in the way government agencies and others conduct their business. These developments have become imperatives because of budget constraints and have already significantly affected survey operations.

Innovation and organization, while important, are only a couple of the aspects of statistical programs that managers confront. Other major issues that must be dealt with by managers of most government programs who are responsible for designing the substance of surveys and for analyzing the data once collected are not discussed by Dillman. How do we retain historical comparability for ongoing series? Are the concepts employed appropriate for the ways in which the data are used? Is the survey content appropriate as various aspects of the economy change? What efforts are the best use of resources in a period of tight budgets?

Survey management is a careful balancing act between constraints and demands. By giving examples of only certain important aspects of survey design and implementation, Dillman does not convincingly demonstrate that too little attention is given to the improvements he promotes, compared to all of the competing demands in programs facing budget constraints.

Dillman also asserts that the research culture is dominated by the discipline of statistics relative to cognitive psychology, influence psychology, and sociology. Had he been at BLS, his complaint would likely have been that the research culture is dominated by the discipline of economics. We have heard these complaints for years, but how accurate are they? Is the amount of research by the other-than-statistician survey methodologists relative to statisticians smaller in government than in academic institutions? Is there a significant body of research on survey methods in the other-than-statistician disciplines that is being ignored in survey work?

I suggest that the disciplines which Dillman perceives as overlooked are, indeed, central to today's survey design and implementation, and I propose, as Exhibit A, the experience of the recently completed redesign of the Current Population Survey. This was a large scale, high visibility undertaking that consumed leadership at BLS and the Census Bureau for nearly eight years. It is a project with which Dillman should have been acquainted, but since he does not refer to this major effort in his article, I will use the CPS redesign as an example of the way Dillman says things should happen.

Since 1959, the CPS has been a joint project of two agencies – the Bureau of the Census, which collects and processes the data, and the BLS, which analyzes and disseminates the data. Prior to 1994, the CPS had not gone through a major revision since 1967. Since then, sweeping changes in the U.S. economy and society, as well as major advances in survey collection and methodology, made a major survey overhaul imperative. Efforts began in the mid-1980s with an interagency task force to identify areas needing improvement. Every aspect of the survey was examined, including the sample design, processing system, and questionnaire. A major outcome was the

fielding of a new, fully-automated questionnaire. As with all other areas of the redesign, the new survey instrument was the product of an interagency effort, in which two quite different survey organizations – each located in a separate Federal department and each with the powerful traditions which Dillman suggests inhibit innovation – collaborated to produce an amazingly innovative result.

The new questionnaire was the result of cooperation and interaction of BLS and Census Bureau staff. It is fair to say that no decision of any significance was made without the input of both agencies and all the disciplines. The effort was guided by a committee comprised of senior staff from the two agencies which was empowered to make virtually all decisions related to shaping the new instrument. In this way, the process drew on an institutional memory of the design, conduct, and analysis related to the survey; knowledge of the economic, statistical, and methodological issues; and a strong commitment – and authority – to change.

As is implicit in the division of labor between the two agencies, the operations culture may be thought to reside in the Census Bureau and the research culture in BLS. But the structures are mutually supportive, not restrictive. Indeed, the Census Bureau also has a sizable statistical research staff and does a considerable amount of high-quality economic analysis based on the CPS and other surveys it conducts. More to the point, a major participant in the redesign was its Center for Survey Methods Research, a survey research and development unit. Likewise, BLS employs a sizable staff involved in survey operations.<sup>2</sup>

The CPS redesign put this unusual arrangement to best advantage. Far from posing an obstacle to change, our “multi-cultural” approach provided a richness of knowledge, experience, and outlook. Research and operations considerations both received their due. For instance, we were able to develop scientifically equivalent questionnaires using focus groups and test panels and then test the designs with control groups even as we simultaneously “practiced” the highly complex operational aspects of an automated instrument. Throughout the process, communication was maintained with experts inside and outside the two agencies, as well as with data users. This redesign of the CPS has shown that it is possible to achieve innovation in a large survey while maintaining high standards of data quality.

In the context of the CPS, for the foreseeable future, the research and operations cultures will continue to reside, for the most part, in two separate agencies. The challenge is to maintain our constant collaboration and communication so that the strengths of each organization continue to complement our efforts to sustain a state-of-the-art labor force survey.

In summary, the CPS redesign was the cross-disciplinary product of the combined efforts of statisticians, economists, sociologists, psychologists, linguists, computer scientists, technology experts; you name the profession, it was represented in the design and implementation of the redesign effort. Dillman fails to acknowledge

<sup>2</sup> The contractual arrangement with the Census Bureau to collect and process the CPS is unique among the BLS statistical programs. Typically, BLS staff are closely involved in the collection of data, either by conducting the survey directly (used for the Consumer Price Index, Producer Price Index, and wage and benefits surveys) or through cooperative programs with State agencies (used for the Current Employment Statistics and Occupational Employment Statistics surveys).

that there has been a considerable growth of the role of these survey methodologists at least in BLS and the Census Bureau in recent years, a period where there has not been a corresponding growth in budgets. Progress in meeting important needs, such as greater information for the service sector, has admittedly been slow but we must blame the budget, not the system. Moreover, projects like the CPS redesign provide a new paradigm that Dillman overlooks altogether. By overlooking obvious cases, Dillman's otherwise useful call for increased attention to cross-disciplinary survey design is diluted. His case for the need for change is weakened as much of that change is already taking place.

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