



Trust

Marketing

Economics

Deal Making

Accountability

Policy Research

Empowered Staff

AASHTO

NCHRP



(Conduct of Research Committee)



Federal Highway
Administration

SEVEN KEYS TO BUILDING A ROBUST RESEARCH PROGRAM



This is a unique, landmark guide that is must reading for CAOs and DOT research managers. Using interviews with public and private sector chief executives and research directors from highly regarded programs, this report describes, through appropriate examples, what it takes to develop, maintain, and effectively use a robust R&D program. This brochure offers only a glimpse of the wealth of information in this guide.

Delivering timely, high-quality products, though essential, is not enough. To be robust, research programs must be perceived by top management as delivering an essential service. Because this perception is often achieved through human factor and marketing means, research personnel are often at a loss on how to gain the support of top management. In addition, top management frequently misses the opportunity to help build a strong, effective research and innovation program.

Help Is on the Way

The National Cooperative Highway Research Program's Synthesis of Practice 280, *Seven Keys to Building a Robust Research Program*, provides research managers and CAOs with the keys to making the research program a vital part of the organization. Top and middle management, legislators, academics, and the private sector will then be advocates for the program at critical milestones, as, for example, when new top management arrives on the scene or downsizing and budget cutting occur.

The Seven Keys

1. Found It on Trust

Trust between upper management and the research program is the ultimate goal. With it, a program prospers. Without it, a program becomes marginalized and ineffective, despite its other strengths. Trust can be fostered through a variety of attitudes and activities and can be injured by the careless or inattentive action of either party. *Learn how DuPont turned research into a vital part of the company.*

2. Market Boldly

Research managers must become effective advocates for their program. Marketing is needed at every stage of the process: in soliciting problems, in anticipating research needs, in selling the need for research, in justifying the time and budget required, in persuading others to test the product, in arguing for deployment, and in advertising successful products. A strong focus on the customer and the customer's needs is at the heart of the process. *See how one of the world's largest transportation research organizations turned its program around.*

3. Root It in Economics

As public officials, top DOT managers typically care about the economic use of taxpayer resources. In contrast, research managers often focus primarily on the program content. *But managers of robust programs are sensitive to the need to use an economic rationale to ensure appropriate programs and their justification.*

4. Make Deals Unabashedly

Directors of robust programs boldly cultivate alliances of all types. Partnerships and alliances add scale to programs struggling with insufficient resources and expand the program's constituency. Directors can often enhance programs by establishing relationships with other research entities. *Learn how from the best deal makers in the business.*

5. Insist on Accountability

The uncertainty of the research process sometimes makes it difficult to require accountability in the same terms CAOs demand of other functions. Nevertheless, CAOs have a responsibility to set the strategic direction for research to ensure alignment with departmental goals, communicate this strategy to stakeholders, provide resources to accomplish the research required, and give their personal influence and support for appropriate research. Absent such requirements, research managers must find ways to become accountable. *Failure to insist on accountability gradually erodes trust in the program, permitting it to spin away from and become irrelevant to the parent unit.*

6. Embrace Policy Research

Policy research provides a communications channel between research and top management. Although research on pavements, bridges, and operations is crucial, top management is often more concerned about broad finance and administrative matters. Thus, a research unit that doesn't include policy research will have a more difficult task marketing its usefulness to a top management concerned primarily with policy issues. *See what CAOs have to say about this.*

7. Empower the Staff

Robust research requires a climate that fosters novel ideas. Researchers need to feel free to interact with other professionals across organizational and institutional lines, either indirectly or in person. *Learn from the successful managers and executives about 3rd, 4th, and 5th generation research programs.*

Make Your Research Program More Effective Today

All robust research programs may not employ all seven keys, and the emphasis placed on each will vary. But this report shows that more is better: All keys lead to the enhancement of trust, the most important, or to an improved output, which is essential.

Get NCHRP Synthesis of Practice 280, *Seven Keys to Building a Robust Research Program*, today. It's available from:

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and can be ordered or downloaded via the Internet at:

http://trb.org/news/blurb_detail.asp?id=3279

