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Titolo	Capturing change in science, technology, and innovation : improving indicators to inform policy // Panel on Developing Science, Technology, and Innovation Indicators for the Future ; Robert E. Litan, Andrew W. Wyckoff, and Kaye Husbands Fealing, editors ; Committee on National Statistics ; Division of Behavioral and Social Sciences and Education ; Board on Science, Technology, and Economic Policy ; Division of Policy and Global Affairs ; National Research Council of the National Academies
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Concepts and Uses of Indicators -- Data Resources for Indicators -- Measuring Innovation -- Measuring the Three K's: Knowledge Generation, Knowledge Networks, and Knowledge Flows -- Measuring Human Capital -- A Paradigm Shift in Data Collection and Analysis -- Informing the Strategic Planning Process -- References -- Appendix A: Biographical Sketches of Panel Members and Staff -- Appendix B: Users of Science, Technology, and Innovation (STI) Data and Indicators and Their Questions and Requests for STI Indicators -- Appendix C: Workshop on Developing Science, Technology, and Innovation Indicators for the Future Agenda and Participants -- Appendix D: OECD-National Experts on Science and Technology Indicators (NESTI)

Workshop and Attendees -- Appendix E: National Center for Science and Engineering Statistics Research Abstracts 2012 -- Appendix F: Science, Technology, and Innovation Databases and Heat Map Analysis -- Appendix G: 2011 BRDIS Results -- Appendix H: 2011 BRDIS Table 46 -- Appendix I: 2011 BRDIS Table 47 -- Appendix J: 2011 BRDIS Table 48 -- Appendix K: 2011 BRDIS Table 49.

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## Sommario/riassunto

"Since the 1950s, under congressional mandate, the U.S. National Science Foundation (NSF) - through its National Center for Science and Engineering Statistics (NCSES) and predecessor agencies - has produced regularly updated measures of research and development expenditures, employment and training in science and engineering, and other indicators of the state of U.S. science and technology. A more recent focus has been on measuring innovation in the corporate sector. NCSES collects its own data on science, technology, and innovation (STI) activities and also incorporates data from other agencies to produce indicators that are used for monitoring purposes - including comparisons among sectors, regions, and with other countries - and for identifying trends that may require policy attention and generate research needs. NCSES also provides extensive tabulations and microdata files for in-depth analysis. Capturing Change in Science, Technology, and Innovation assesses and provides recommendations regarding the need for revised, refocused, and newly developed indicators of STI activities that would enable NCSES to respond to changing policy concerns. This report also identifies and assesses both existing and potential data resources and tools that NCSES could exploit to further develop its indicators program. Finally, the report considers strategic pathways for NCSES to move forward with an improved STI indicators program. The recommendations offered in Capturing Change in Science, Technology, and Innovation are intended to serve as the basis for a strategic program of work that will enhance NCSES's ability to produce indicators that capture change in science, technology, and innovation to inform policy and optimally meet the needs of its user community."--

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