Record Nr. UNINA9910785785003321 Autore Leonardi Paul M. <1979-> Titolo Car crashes without cars: lessons about simulation technology and organizational change from automotive design / / Paul M. Leonardi Cambridge, Mass., : MIT Press, ©2012 Pubbl/distr/stampa 1-283-58722-X **ISBN** 9786613899675 0-262-30577-1 Descrizione fisica 1 online resource (345 p.) Collana Acting with technology Disciplina 629.28/26 Automobiles - Design and construction - Data processing Soggetti Automobiles - Computer simulation Technology - Social aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Perceptions of inevitability -- Toward a theory of sociomaterial Nota di contenuto imbrication -- Crashworthiness analysis at autoworks -- Developing problems and solving technologies -- Articulating visions of technology and organization -- Interpreting relationships between the social and the material -- Appropriating material features to change work -- Organizing as a process of sociomaterial imbrication. Sommario/riassunto Every workday we wrestle with cumbersome and unintuitive technologies. Our response is usually "That's just the way it is." Even technology designers and workplace managers believe that certain technological changes are inevitable and that they will bring specific, unavoidable organizational changes. In this book, Paul Leonardi offers a new conceptual framework for understanding why technologies and organizations change as they do and why people think those changes had to occur as they did. He argues that technologies and the organizations in which they are developed and used are not separate entities; rather, they are made up of the same building blocks: social agency and material agency. Over time, social agency and material agency become imbricated--gradually interlocked--in ways that

produce some changes we call "technological" and others we call

"organizational." Drawing on a detailed field study of engineers at a U. S. auto company, Leonardi shows that as the engineers developed and used a a new computer-based simulation technology for automotive design, they chose to change how their work was organized, which then brought new changes to the technology. Each imbrication of the social and the material obscured the actors' previous choices, making the resulting technological and organizational structures appear as if they were inevitable. Leonardi suggests that treating organizing as a process of sociomaterial imbrication allows us to recognize and act on the flexibility of information technologies and to create more effective work organizations.