Record Nr. UNINA9910172247103321 Autore Churella Albert J. <1964-> Titolo From steam to diesel: managerial customs and organizational capabilities in the twentieth-century American locomotive industry / / Albert J. Churella Princeton, NJ,: Princeton University Press, c1998 Pubbl/distr/stampa **ISBN** 1-282-75351-7 9786612753510 1-4008-2268-8 1-4008-1123-6 Edizione [Core Textbook] Descrizione fisica 1 online resource (224 p.) Princeton studies in business and technology Collana Disciplina 338.4/762526/0973 Locomotive industry - United States - Management - History - 20th Soggetti century Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Revision of the author's thesis (Ph.D.)--Ohio State University, 1994. Note generali Includes bibliographical references (p. 155-211) and index. Nota di bibliografia Nota di contenuto Front matter -- Contents -- Acknowledgments -- Introduction -- I. Steam vs. Diesel: Capabilities and Requirements of a Radically New Technology -- II. Internal-Combustion Railcars: Springboard to Participation in the Diesel Locomotive Industry -- III. First-Mover Advantages and the Decentralized Corporation -- IV. ALCo and Baldwin: Established Companies, New Technologies -- V. Policy and

Production during World War II -- VI. Postwar Dieselization and Industry Shakeout -- VII. The Era of Oligopoly -- Conclusion -- Notes -- Bibliography -- Index

Sommario/riassunto

This overview of the leading locomotive producers in the United States during the twentieth century shows how they responded to a radical technological change: the replacement of steam locomotives by diesels. The locomotive industry provides a valuable case study of business practices and dramatic shifts in innovation patterns, since two companies--General Motors and General Electric--that had no traditional ties to locomotive production demolished established steam locomotive manufacturers. Albert Churella uses many previously untapped sources to illustrate how producers responded to technological change, particularly between the 1920's and the 1960's.

Companies discussed include the American Locomotive Company (ALCo), the Baldwin Locomotive Works, the Lima Locomotive Works, Fairbanks-Morse, the Electro-Motive Division of General Motors, and General Electric. A comparative work of business history and the history of technology, the book is not a complete history of any locomotive builder, nor does it explore the origins of the diesel engine in great detail. What it does, and does superbly, is to demonstrate how managers addressed radical shifts in technology and production methods. Churella reveals that managerial culture and corporate organizational routines, more than technological competency per se, allowed some companies to succeed, yet constrained the actions of others. He details the shift from small-batch custom manufacturing techniques in the steam locomotive industry to mass-production methods in the diesel locomotive industry. He also explains that chance events and fortuitous technological linkages helped to shape competitive patterns in the locomotive industry.