1. Record Nr. UNINA9910139167803321

Autore Betz Frederick <1937->

Titolo Managing technological innovation [[electronic resource]]: competitive

advantage from change / / Frederick Betz

Pubbl/distr/stampa Hoboken, NJ, : J. Wiley & Sons, 2011

ISBN 1-283-02553-1

9786613025531 0-470-92756-9 0-470-92758-5 0-470-92757-7

Edizione [3rd ed.]

Descrizione fisica 1 online resource (380 p.)

Disciplina 658.4062

658.5/14

Soggetti Technological innovations - Management

Research, Industrial - Management

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Includes bibliography and index.

Nota di contenuto Managing Technological Innovation: Competitive Advantage from

Change; Contents; Preface; I. Technology Competitiveness- Business Base of Innovation; 1: Technological Innovation; Timeline of Science, Technology, and Industrialization; Innovation Process; Technology and Wealth; Technical Savvy and Financial Savvy; Technical Personnel and Business Personnel; 2: Innovation and Economy; Economic Scale of Innovations; Economic Long Waves; Measuring the Economic Impact of Technological Innovation in an Economy; Core Technologies of an

Industry; Industrial Life Cycle

Industrial Standards and First Movers in a New IndustryCommodity Industry; 3: Innovation and National Systems; Science Bases for

Technology; Computer Technology; National Innovation System; Radical Innovation at the Macro and Micro-Levels; Radical Innovation and Next-Generation Product Lines; Circular Interactions in a National Innovation System; Performance of National Innovation Systems; 4: Innovation Research; Logic of Research for Innovation; Logic of Radical Innovation-

Technology Research; Logic of Radical Innovation-Engineering

Research; Logic of Radical Innovation-Commercialization Costs of Innovation5: Innovation and Corporate R&D; Institutionalization of Scientific Technology; Objectives of Corporate Research: Planning Incremental Innovation: Two Cultures-Research Laboratory and Business Division; Evaluating Corporate R&D; 6: Innovation and Markets; Business Model-Price and Value; Designing a Product for a Market; Completing High-Tech Products for Applications; Market Positioning; Proprietary Technology; Market Niches; 7: Innovation and Product Development; Market-Pull or Technology-Push Innovation; Incremental Innovation in Product Development Delays in a Product Development ProcessProduct Quality; 8: Innovation and Strategy; Micro-level Innovation in a Business; Top-down and Bottom-up Strategy in Innovation; Top-level Innovation Strategy; Midlevel Innovation Strategy-New High-tech Business Ventures: Lower Level of Innovation Strategy-Technical Programs; Bottom Level of Innovation Strategy-Technical Projects: II. Technology Strategy-Technical Base of Innovation: 9: Integrating Technology and Business Strategy; Industrial Value Chain; Technology Strategy; Technology and Application Systems; Product-Line Planning Product-Line Platforms10: Inventing Technology; Technology and Potentials of Nature: Next-Generation Technologies: Innovation Process of Next-Generation-Technology Products; Types of Technologies; 11: Technology Systems: Technology System: Physical Technology S-Curve: Technology Performance Parameters; Software Technologies; Planning Technology Discontinuities; Technological Progress; Systems Analysis for Alternative Technology Configurations; 12: Product Systems; Sikorsky's Helicopter: Hardware Product System: Systems Analysis in Hardware-Product Design; Specialized Languages in Science Computer-Assisted Networks

Sommario/riassunto

Written by the author who helped crystalize the field of technology management and the management of innovation with the first two editions of Managing Technological Innovation, this Third Edition brings the subject in line with current business strategy. It also presents information in a newer organized format that aligns more closely with how the topics are presented and discussed in the classroom. Also included is a wider discussion of how science and technology interact with the global economy.