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Nota di contenuto	Introduction -- Characteristics and Characterization of Information Networks -- Drivers of the Telecommunication Industry -- Graph Theoretic Characterization of Communication Networks -- Small World and Scale-free Networks -- Characterization of Telecommunication Traffic -- Bandwidth and Throughput of Networks: Circuit Switched Networks -- Bandwidth and Throughput of Networks: Packet Switched Networks -- Pricing of Telecommunication Services -- Pricing of Circuit Switched Services -- Pricing of Packet Switched Services -- Regulation -- Net Neutrality -- Game Theory and its Application to Communication Networks -- Multi-service Network Models -- Subsidy-free prices in Class-based Networks -- Market-clearing prices in Class-based Networks -- A Constant Revenue Model for Net Neutrality -- A Constant Revenue Model for Packet Switched Networks -- A Two-step Quality of Service Provisioning in Multi-class Networks -- Network of the Future -- Conclusion.
Sommario/riassunto	This textbook characterizes the economics of telecommunication services from an engineering perspective. The authors bring out the fundamental drivers of the industry and characterize networks from a graph theoretic perspective, including random, small world, and scale free networks. The authors relate the topology of a telecommunication

network using circuit and packet switched architectures to throughput and other performance parameters. The pricing model proposed in this book is based on the cost of displaced opportunity as opposed to the cost of the elements of the network engaged in delivering a service. The displaced opportunity is characterized by the revenue associated with the service that the network could have alternatively delivered most efficiently using an identical level of resources. The book addresses other topics such as regulation in legacy networks, and net neutrality. Finally, the book introduces the application of game theory in a multi-vendor, multi-services competitive marketplace. The book aims to bridge the gap between the science of economics as practiced by economists and practice of pricing from a telecommunication engineer's perspective. This book is suitable for use by senior undergraduate or graduate students of telecommunication engineering or researchers and practitioners in telecommunication engineering. Addresses the void that exists in understanding the economics of telecommunication networking from a technology perspective; Addresses the technological underpinnings of a competitive and fast evolving multi-service and multi-vendor environment; Includes illustrative examples and problems for each chapter, a solutions manual and PowerPoint slides.