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Nota di contenuto	Historical overview of optical networks -- Optical switching networks -- Building blocks -- Optical wide area networks -- Generalized multiprotocol label switching -- Waveband switching -- Photonic slot routing -- Optical flow switching -- Optical burst switching -- Optical packet switching -- Optical metropolitan area networks -- Resilient packet ring -- WDM ring networks -- RINGOSTAR -- Optical access and local area networks -- EPON -- WDM EPON -- STARGATE -- Gigabit ethernet -- Radio-over-fiber networks -- Testbeds -- What worked and what didn't -- Testbed activities.
Sommario/riassunto	Optical Switching Networks describes all the major switching paradigms developed for modern optical networks, discussing their operation, advantages, disadvantages and implementation. Following a review of

the evolution of optical WDM networks, an overview of the future trends out. The latest developments in optical access, local, metropolitan, and wide area networks are covered, including detailed technical descriptions of generalized multiprotocol label switching, waveband switching, photonic slot routing, optical flow, burst and packet switching. The convergence of optical and wireless access networks is also discussed, as are the IEEE 802.17 Resilient Packet Ring and IEEE 802.3ah Ethernet passive optical network standards and their WDM upgraded derivatives. The feasibility, challenges and potential of next-generation optical networks are described in a survey of state-of-the-art optical networking testbeds. Animations showing how the key optical switching techniques work are available via the web, as are lecture slides (www.cambridge.org/9780521868006).