Record Nr. UNINA9910733717403321 Autore Caron Franco Titolo Managing the continuum: certainty, uncertainty, unpredictability in large engineering projects / / Franco Caron New York, : Springer, 2013 Pubbl/distr/stampa 9788847052444 **ISBN** 8847052440 Edizione [1st ed.] Descrizione fisica 1 online resource (89 p.) Collana SpringerBriefs in applied sciences and technology, PoliMi SpringerBriefs Disciplina 620.00681 Soggetti Project management Risk management Uncertainity Lingua di pubblicazione Inglese Formato Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Introduction -- Large Engineering Projects Strategy -- Large Engineering Projects - the Oil and Gas Case -- Project Management --Improving the Forecasting Process in Project Control -- Robustness and Flexibility -- Project Risk Analysis and Management -- Real Options --Stakeholders as Uncertainty Sources -- Project Organizational Model --Introduction to Project Risk -- Project Risk Analysis -- Project Risk Management -- Quantitative Analysis of Project Risks -- Conclusions. Sommario/riassunto The brief will describe how to develop a risk analysis applied to a project, through a sequence of steps: risk management planning, risk identification, risk classification, risk assessment, risk quantification, risk response planning, risk monitoring and control, process close out and lessons learning. The project risk analysis and management process will be applied to large engineering projects, in particular related to the oil and gas industry. The brief will address the overall range of possible events affecting the project moving from certainty (project issues) through uncertainty (project risks) to unpredictability (unforeseeable events), considering both negative and positive events.

Some quantitative techniques (simulation, event tree, Bayesian inference, etc.) will be used to develop risk quantification. The brief addresses a typical subject in the area of project management, with

reference to large engineering projects concerning the realization of large plants and infrastructures. These projects are characterized by a high level of change, uncertainty, complexity and ambiguity. The brief represents an extension of the material developed for the course Project Risk Analysis and Management of the Master in Strategic Project Management (Erasmus Mundus) developed jointly by Politecnico di Milano, Heriot Watt University (Edimburgh) and Umea (Sweden). The brief may be used both in courses addressing project management subjects and by practitioners as a guide for developing an effective project risk management plan.