Record Nr. UNINA9910410048703321 Autore Rosen Clive **Titolo** Guide to Software Systems Development: Connecting Novel Theory and Current Practice / / by Clive Rosen Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 **ISBN** 3-030-39730-0 Edizione [1st ed. 2020.] 1 online resource (XIV, 201 p. 27 illus., 17 illus. in color.) Descrizione fisica 005.1 Disciplina Software engineering Soggetti Management information systems Computer science Computers Software Engineering Management of Computing and Information Systems Software Management Models and Principles Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. A New Approach to Software Systems Development -- 2. The Nature of the Beast -- 3. Software Systems Development - An Open Systems Perspective -- 4. Team Management -- 5. Project Management Decision Making -- 6. Software Systems Quality Assurance and Evaluation -- 7. So What?. This book argues that the key problems of software systems Sommario/riassunto development (SSD) are socio-technical rather than purely technical in nature. Software systems are unique. They are the only human artefacts that are both intangible and determinant. This presents unprecedented problems for the development process both in determining what is required and how it is developed. Primarily this is a problem of communications between stakeholders and developers, and of communications within the development team. Current solutions are

not only inadequate in expressing the technical problem, they also evade the communications problems almost entirely. Whilst the book

addresses the theoretical aspects of the process, its fundamental philosophy is anchored in the practical problems of everyday software development. It therefore offers both a better understanding of the problems of SSD and practical suggestions of how to deal with those problems. It is intended as a guide for practising IT project managers, particularly those who are relatively new to the position or do not have a strong IT development background. The book will also benefit students in computing and computer-related disciplines who need to know how to develop high quality systems. Software systems development (particularly of large projects) has a notoriously poor track record of delivering projects on time, on budget, and of meeting user needs. Proponents of software engineering suggest that this is because too few project managers actually comply with the disciplines demanded of the process. It is time to ask the question, if this is the case, why might this be? Perhaps instead, it is not the project managers who are wrong, but the definition of the process. The new understanding of the SSD presented here offers alternative models that can help project managers address the difficulties they face and better achieve the targets they are set. This book argues that time is up for the software engineering paradigm of SSD and that it should be replaced with a socio-technical paradigm based on open systems thinking. Dr Clive CH Rosen is Director of the management consultancy Passerelle Systems, Newcastle-under-Lyme, UK, a senior fellow of the Higher Education Academy and a Masters Dissertation Supervisor at Warwick University, Coventry, UK. His other publications include the Springer titles Higher Education Computer Science: A Manual of Practical Approaches and Transnational Higher Education in Computing Courses: Experiences and Reflections.