Record Nr. UNINA9910298562103321

Autore Wieczorek Martin

Titolo Systems and Software Quality: The next step for industrialisation / / by

Martin Wieczorek, Diederik Vos, Heinz Bons

Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer,

, 2014

ISBN 3-642-39971-1

Edizione [1st ed. 2014.]

Descrizione fisica 1 online resource (204 p.)

Disciplina 004

005.1 650.0285

Soggetti Software engineering

Software Engineering

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Description based upon print version of record.

Nota di bibliografia Includes bibliographical references at the end of each chapters.

Nota di contenuto Forewords -- Preface -- Introduction -- What is right software and

systems quality? -- How can we establish right quality at an enterprise level -- How can we implement a framework for right quality -- Right quality promoting industrialisation -- Appendix -- Glossary --

References.

Sommario/riassunto Software and systems quality is playing an increasingly important role

in the growth of almost all profit and non-profit organisations. Quality is vital to the success of enterprises in their markets. Most small trade and repair businesses use software systems in their administration and marketing processes. Every doctor's surgery is managing its patients using software. Banking is no longer conceivable without software. Aircraft, trucks and cars use more and more software to handle their increasingly complex technical systems. Innovation, competition and cost pressure are always present in on-going business decisions. The question facing all these organisations is how to achieve the right quality of their software-based systems and products; how to get the required level of quality, a level that the market will reward, a level that mitigates the organisation's risks, and a level that the organisation is willing to pay for. Although a number of good practices

are in place, there is still room for huge improvements. Thus, let us

take a look into the two worlds of "Embedded systems" and "ICT systems" and let us learn from both worlds, from overlaps and individual solutions. The next step for industrialisation in the software industry is required now. Hence, three pillars will be focused in this book: (1) a fundamental notion of right software and systems quality (RiSSQ); (2) portfolio management, quality governance, quality management, and quality engineering as holistic approach over the three layers of an enterprise, i.e. strategic, tactical, and operational layer; and (3) an industrialisation framework for implementing our approach.