

ASIGURAREA CALITĂȚII – QUALITY ASSURANCE

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Instrumente manageriale în asigurarea securității sistemelor informatice

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Abstract

The risk management in information security area involves a range of economic issues, with direct implications in the development of decision-making process in an organization. Operationally, cost-benefit analysis is a common practice to justify investment in security. This article makes an analysis of methodology to quantify the security with economic cost-benefit models (ROI – Return on Investment, NPV – Net Present Value and IRR – Internal Rate of Return). The models are analyzed in terms of possible uses, popularity and complexity.

Keywords: security, risk, decision, management, cost-benefit analysis

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Quality Management Fads and Organisational Change

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Abstract

This paper uses theory from the areas of organisational change and motivation to suggest hypotheses regarding fad development. Research has been undertaken on the use of management fads in organisations and how those fads drive organisations towards business improvements. The research consists of two parts. One part justifies the choice of quality management as an area to look for fads. The other part of the research focuses on the development of the two fads themselves.

Keywords: Quality, Quality Management, Management Fads, ISO 9000 Series, Self Assessment, Organisational Change

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Mechanical Stability of Thin Film On Substrate Systems

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Abstract

A method for analysis of the mechanical stability of a film on a substrate system is presented. This analysis is based on in-situ microtensile tests, which allow to follow how the film develops irreversible damage (cracking and deadhesion), when progressively pulled in tension. Following „in-situ“ this degradation, the critical parameters which correspond to the initiation of a irreversible damage mechanism can be determined. Associated to analytical models, the determined parameters allow to compare a predictive behaviour of the film on substrate system, to the real one, which is given by the experiments.

Keywords: Reliability, Analysis, Mechanical stability, Thin film, Failure analysis, Microtensile tests.

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Total Quality of Knowledge Content

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Abstract

The paper proposes a framework for the total quality assessment of the knowledge content provided by organizations that are part of the e-economy. The assumption that knowledge differs from information is discussed in detail and a clearcut distinction between the two is made. The factors and criteria of knowledge quality are defined and analyzed. The five-level maturity model of quality assessment is then applied to cognizant enterprises.

Keywords: Quality, Total Quality, Quality assessment, Knowledge content.

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Predicția fiabilității bazată pe fizica defectării

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Abstract

First, some methodologies used for reliability predictions are shown, in order to highlight the advantages of using the physics-of-failure (PoF) and, as an example of such methodologies, the procedure called SYRP (Synergetic Reliability Prediction) is detailed. Then, in the largest part of the paper, as a first step in using SYRP for reliability predictions, the typical failure mechanisms of integrated circuits are presented.

Keywords: reliability prediction, failure mechanisms, physics of failure.

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Cryptographic Techniques for Secure Communications

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Abstract

This paper analyses the use of cryptographic techniques for secure communications. Encryption is the process of transforming a plaintext message into a format that can be understood only by its rightful recipient. Even if the encrypted message would be intercepted by unauthorized persons, it will be necessary to be decrypted. By cryptography we can restrict access to computing systems using mathematical methods to transform data in intent to hide their contents and protect them from modification.

Keywords: algorithms, encryption, cryptography, security.

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