

Design Technology Institute

Department of Industrial and Systems Engineering

IEEE Engineering Management Society, Singapore Chapter

Joint Seminar

Testing Strategies in Highly Dynamic Iterative Design Processes

Speaker

Professor Aarnout Brombacher (DTI)

Date/Time

13th May 2005 (Friday)/ 4.00 pm to 6.00 pm

Venue

EA-06-04, Seminar Room, Faculty of Engineering, NUS

(Directions can be obtained via: <http://www.nus.edu.sg/campusmap/>)

Abstract

Testing strategies are commonly used as integrated part of the design process of innovative (consumer electronics) products. The problem with modern product creation processes are as follows:

- Specifications are not stable until very late in the design process
- Sufficiently large numbers of products are not available for testing purposes until very late in the design process
- There is a high degree of uncertainty with respect to customer requirements until the product reaches the market (especially with highly innovative products)

The objective of this seminar is to explain the above-mentioned problems in the context of a number of trends in modern industry and to present strategies that can be followed to face the challenges mentioned above. It will present the concept of "studio labs" as an environment to come to highly dynamic, iterative processes suited also for highly volatile markets.

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Biography:

Professor Aarnout C. Brombacher was born in Rotterdam, The Netherlands on 20th September 1961. He obtained a BSc, MSc (cum laude) in Electrical Engineering and a PhD in Engineering Science at Twente University of Technology. Professor Brombacher has experience in industrial quality and reliability improvement projects as well as the development of quality and reliability analysis methods and tools. He has authored and co-authored over fifty papers on these subjects and has written a book with the title "Reliability by Design".

Professor Brombacher is a professor in "Quality and Reliability Management" in the Faculty of Technology Management of Eindhoven University of Technology and professor in the same field at the Department of Industrial and Systems Engineering of the National University of Singapore. He is responsible for research and education in the fields :

- a) Quality and Reliability of (high-volume) consumer products and
- b) Reliability and Safety in process industry.

He is also a Senior Consultant to Philips CFT Industrial and Innovation Support (IIS). The main task of this department is to conduct research as well as the application of new methods and techniques for quality and reliability management, quality and reliability engineering, reliability automation and robust design - especially for the early phases of the development process.

Professor Brombacher is currently one of the directors of the Design Technology Institute - a joint research institute of the National University of Singapore and Eindhoven University of Technology.