Hard Real Time Design

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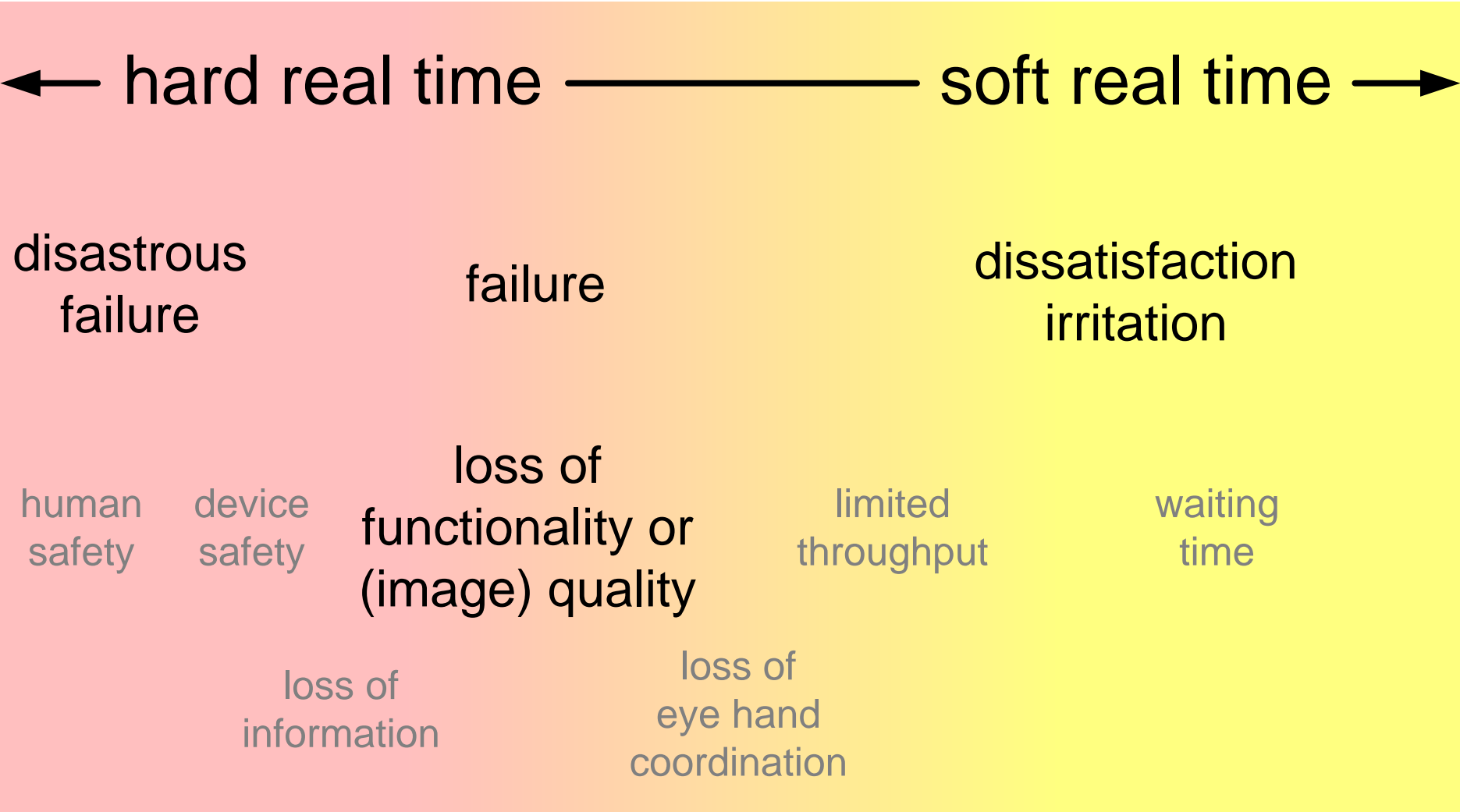
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Abstract

Hard Real Time design is the fundament of system performance. We will use a television as case to show hard real time design strategies, starting with a straight-forward analog television based on a synchronous design and incrementally extending the television to become a full-fledged digital TV with many concurrent functions.

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Hard Real Time Design

← hard real time ——————— soft real time →

disastrous failure

failure

dissatisfaction irritation

human safety

device safety

loss of functionality or (image) quality

limited throughput

waiting time

loss of information

loss of eye hand coordination

USN ESI

Colofon

The ASP^{TM} course is partially derived from the EXARCH course developed at *Philips CTT* by *Ton Kostelijk* and *Gerrit Muller*.

Extensions and additional slides have been developed at *ESI* by *Teun Hendriks*, *Roland Mathijssen* and *Gerrit Muller*.