Evaluation of Speech Synthesis Technology

Method of evaluation depends on the horizont (H1, H2, H3) you inspect the technology

H1 (choose product): products are evaluated wrt. their suitability for a specific application (e.g. speech enabled navigation in car)

H2 (speed up development): system modules and add-on functionalities are optimized for application fields (e.g. telephone server applications) and evaluated; (ECESS/FAVIA approach*)

H3 (measure progress in research): basic new functionalities are explored; evaluation criteria and procedures have to be found (Nick's approach)

*Has been adopted by TC-STAR

H2: ECESS/FAVIA Approach

- Speech synthesis systems are built up by three modules: text processing, prosody, acoustic synthesis*

- Functionality, interface and evaluation criteria are specified for each module and for the whole system

- Each module and the whole system is evaluated

- Modules and systems meeting the evaluation criteria are exchanged for research use

- **Impact**: small R&D groups can build complete high performance systems. System integrators can use the modules to built commercial systems leading to more competition and progress in HLT

*within FAVIA additionally modules for talking heads and speaker characterization are treated