

ESL Adoption: Winning Strategies for the Organization

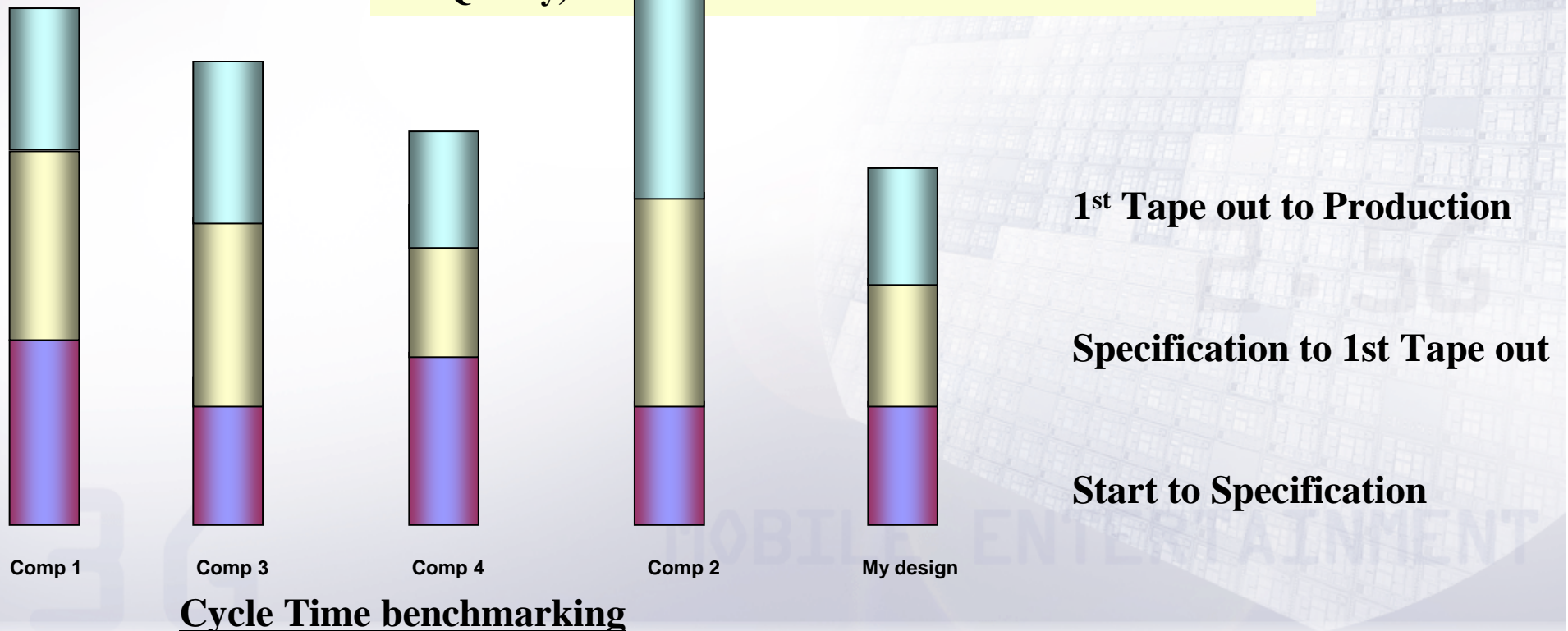
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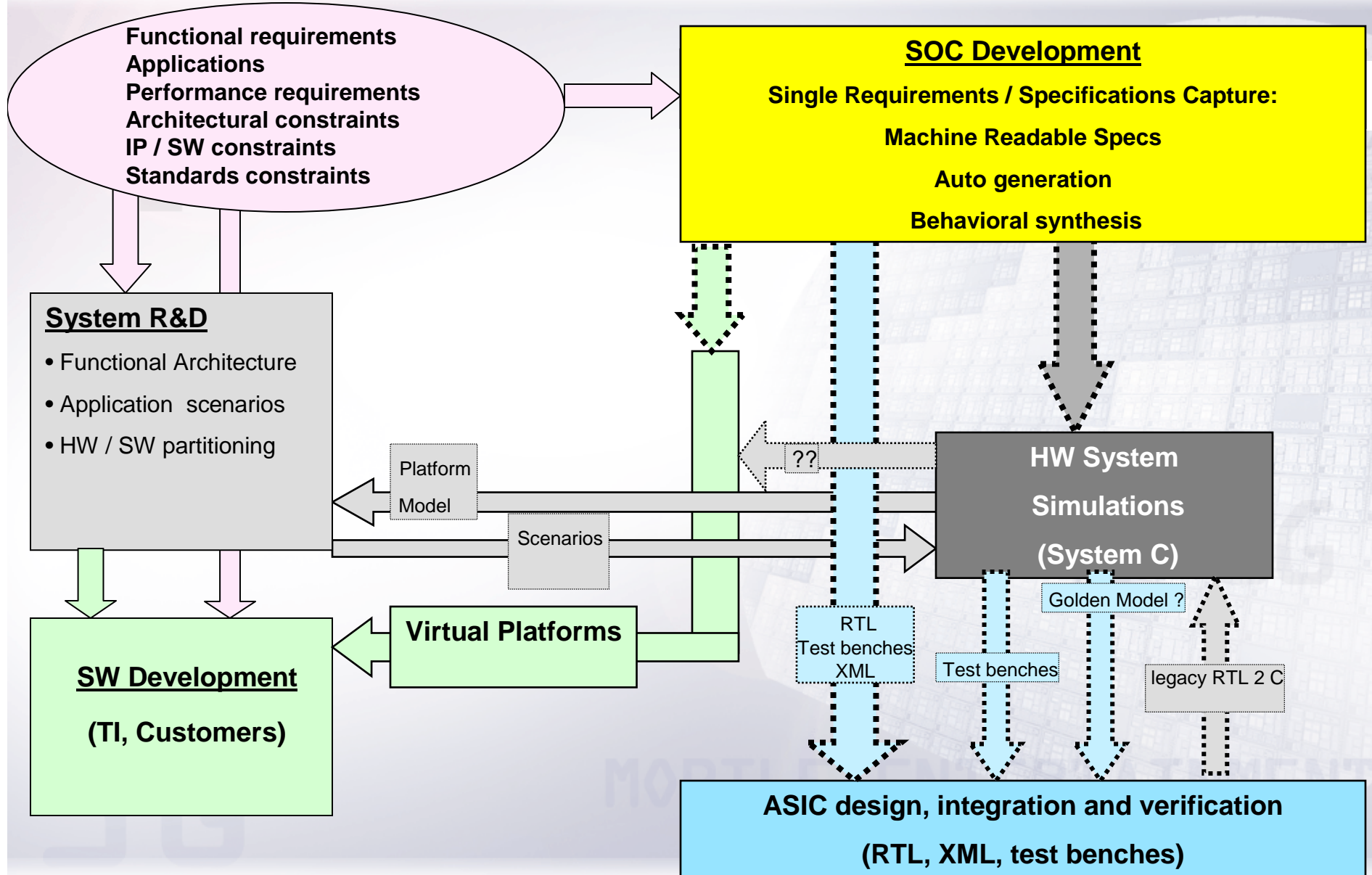
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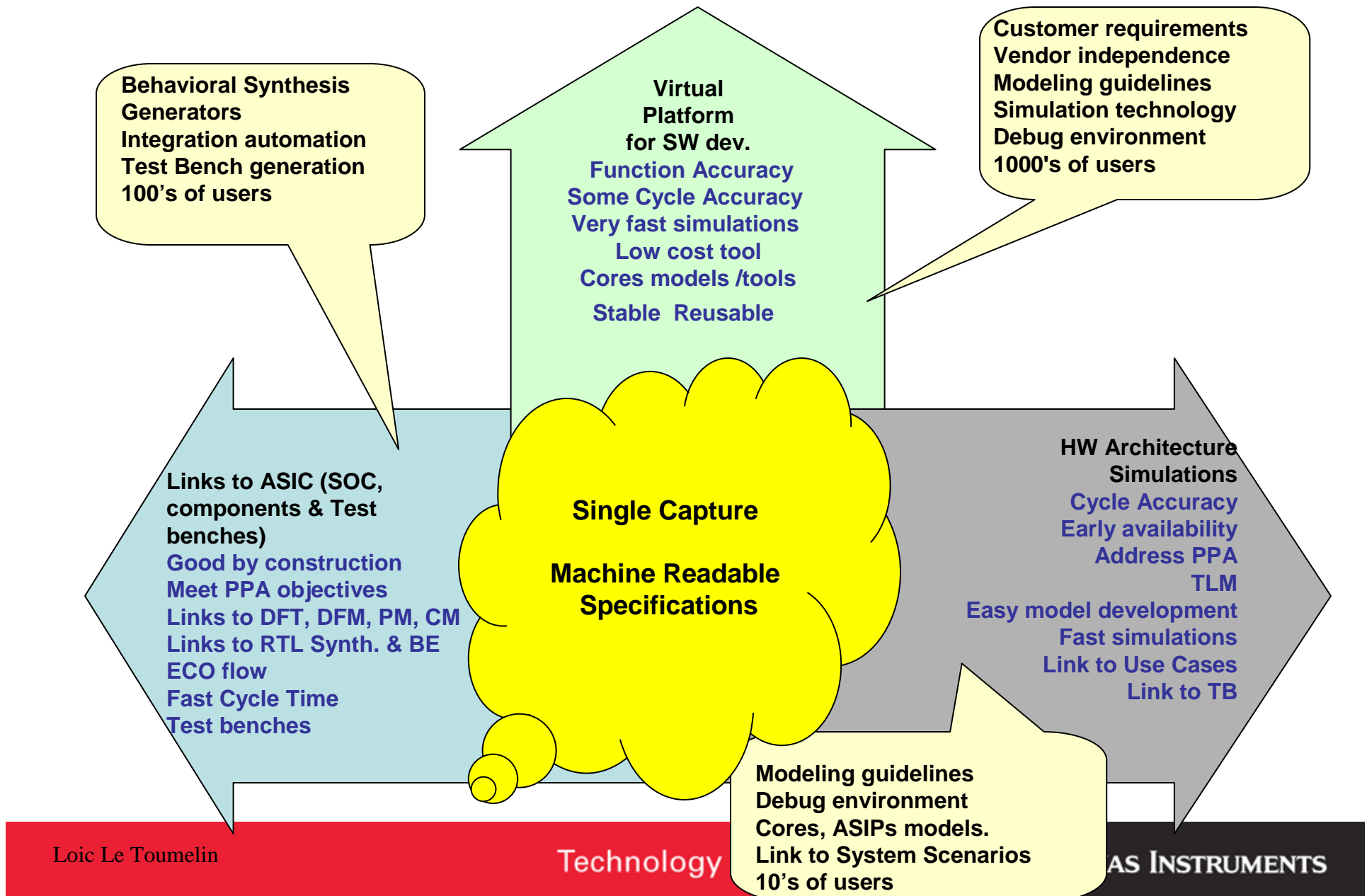
#1: Development Efficiency Improvements drive ESL adoption

1. Total SOC Development Cycle Time
 2. Revisions number
 3. Overall Resources
 4. Throughput
- (Without any compromise on Power Performance Area nor Quality)





The 3 ESL Vectors



ESL experience

- **Public standards are essential for TI**
 - for (System C) busses interfaces, configuration interfaces, debug interfaces, profiling interfaces
 - for IC components (IP) non-functional interfaces (emulation, power, test, clock and reset...).
- **Models vendor-independence is essential for TI.**
 - Constellation of coding styles / simulators speed is not fully explored / maybe too large.
- **We experienced “Behavioral Synthesis” tools**
 - **Yes** they work
 - **Yes** they provide efficiency improvement (faster capture, easier verification, less bugs, etc..)
 - **But:**
 - one need different tools for different styles (control, algorithm, ASIP),
 - different tools start from different abstractions levels,
 - tools have different input languages and formats,
 - most tools miss incremental synthesis/ ECO flow.
 - most tools miss multi clock, multi power, multi supply domains easy management