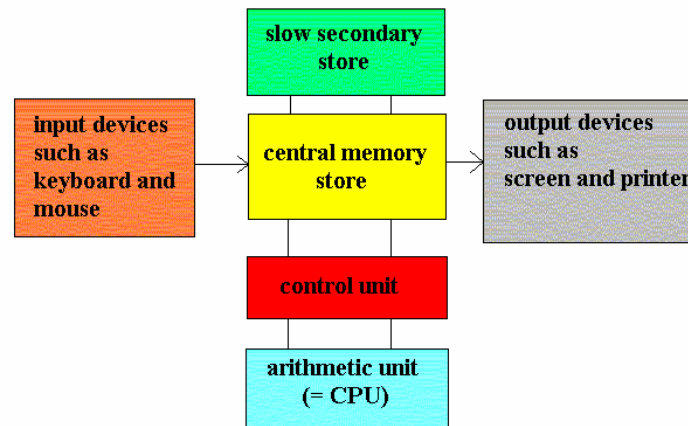


Trust and the Myth of a Unified Agent

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SIG on on-line trust
CHI 2007
San Jose, CA
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Object of Trust in Two Domains

- High Performance Computing Tools: Trust is complexly related to a number of components
 - Connectivity to high performance facilities
 - Documentation veracity and completeness
 - Tool functionality and side-effects
- End User Programming via Widget Composition
 - Widget descriptions are accurate
 - Composition facility works as stated without hidden side-effects
 - Ability to comprehend facility
 - Ability to choose, compose, test, debug



Risks

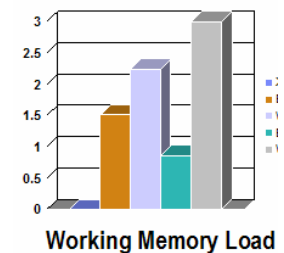
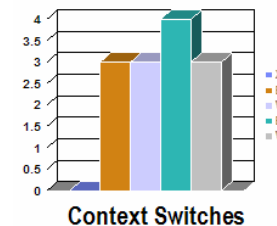
- High Performance Computing
 - Wasted time → missed deadlines → low performance rating | critical failure
 - Undetected error → low performance rating | critical failure
 - Feeling incompetent, fooled, guilty
- End User Programming
 - Wasted time → missed deadlines → low performance rating
 - Undetected error → low performance rating
 - Feeling incompetent, fooled
- Modeling focuses on productivity and complexity
 - Assumption is that if the tools actually “work,” users will come to trust the systems.
 - Risk minimization comes from careful design, coding, and testing.



NOTICE OF TERMINATION

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Myth of a Unified Agent

- In ordinary speech and writing, we pretend individuals are unitary agents; yet, experience shows this is not true (and advertisers, among others, take advantage of this).
 - E.g., “Do you want to lose weight (quit smoking, exercise more, etc.) or not?”
 - “Do you trust me (or this system or this company) or not?”
- In actuality, different environmental frames as well as different emotional states can substantially *change* our actual behavior.
- After the fact, we try to generate coherent and consistent “stories” to make us appear unitary and rational.
- Important in at least two ways, with respect to trust.
 - How issues are framed and when someone is asked can have huge influence on choices with respect to trust.
 - Once the person “agrees” to trust, that agreement itself becomes a kind of “two-edged sword.”
 - On the one hand, the fact of agreement can distort memory and perception to make that agreement of trust rational.
 - On the other hand, beyond some threshold of irrefutable evidence, the person tends to “switch” to an even less trustful and more hostile stance than if they had never agreed to trust, especially if there is insight into the manipulations of frame and emotion that led to original decision

Implications of Multi-agency

- If the desire is to have a truly informed consent, one could try to make sure that the user is asked in several real or imagined contexts and asked to “put them together.”
- On the other hand, if the system is trustworthy “enough,” such a thorough procedure might scare away potentially satisfied and productive users.

