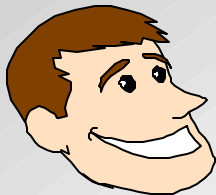


Test Automation Snake Oil!

James Bach, Personal Testing Consultant
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“Step right up!”

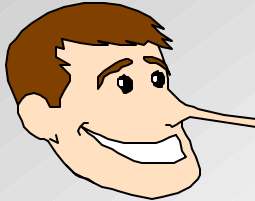
“Automated tests execute
a sequence of actions
without human intervention.”



Actual text from a
Microsoft whitepaper
on automated testing

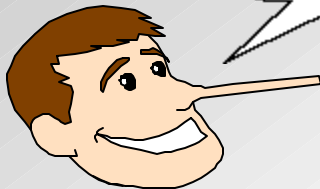
“Step right up!”

“This approach helps eliminate human error, and provides faster results. ”



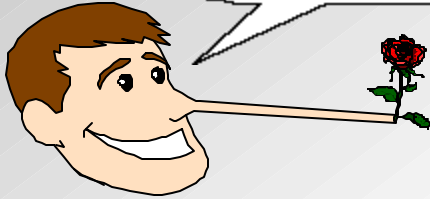
“Step right up!”

“Since most products require tests to be run many times, automated testing generally leads to significant labor cost savings over time. ”

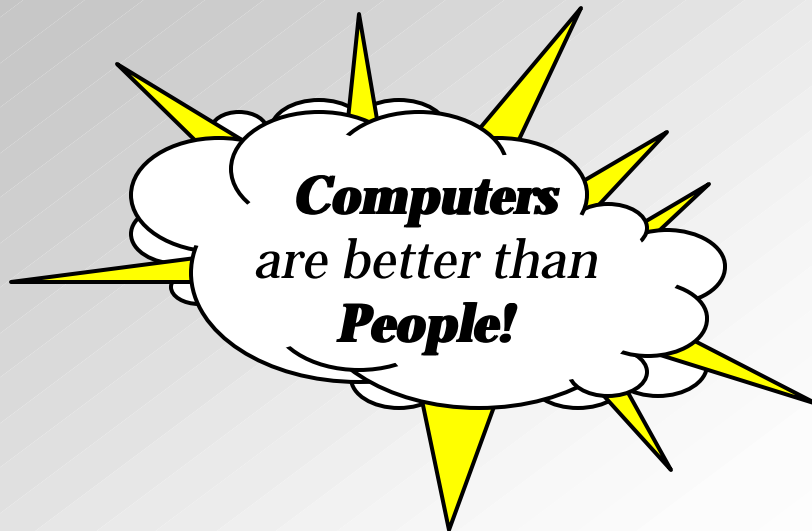


“Step right up!”

“Typically a company will pass the break-even point for labor costs after just two or three runs of an automated test.”



This argument boils down to:



Reckless Assumptions

①

Testing is a “sequence of actions”

Actually, testing is better viewed as an interactive cognitive process.

Reckless Assumptions

②

Testing means repeating the same actions over and over.

Testing has repetitive elements, but it isn't as repetitive as it seems, and variety is critical to the process.

Reckless Assumptions

3

We can automate testing actions.

Actually, in most cases we can only automate a subset of testing actions, for the rest, we need human testers.

Reckless Assumptions

4

An automated test is faster, because it needs no human intervention.

Faster simulation of keystrokes & clicks is not the same as faster testing.

Human intervention is reduced during execution, but increased during diagnosis.

Reckless Assumptions

5

Automation reduces human error.

*It reduces one kind of human error,
but it multiplies other kinds of error.*

Reckless Assumptions

6

We can quantify the costs and benefits
of manual vs. automated testing.

*Manual testing and automated testing
involve very different costs and benefits,
many of which are hidden.*

Reckless Assumptions

7

Automation will lead to
"significant labor cost savings."

*Because test automation augments,
but does not replace manual testing,
it almost always **increases** labor cost.*

Reckless Assumptions

8

Automation will not harm the test project.

*Test automation often distracts testers,
obscures the true test strategy,
and provides a false sense of security.*

Key Points:

- Testing is cognitive, not just clerical.
- Test automation is software development.
- Automation skill isn't cheap.
- Automation projects aren't cheap.
- Automation tends to worsen a poor test process.
- Test automation is a promising idea that often falls far short of its promise.
- *I mean to be cautionary, not discouraging:
You can be successful in test automation if you
successfully cope with these problems.*