

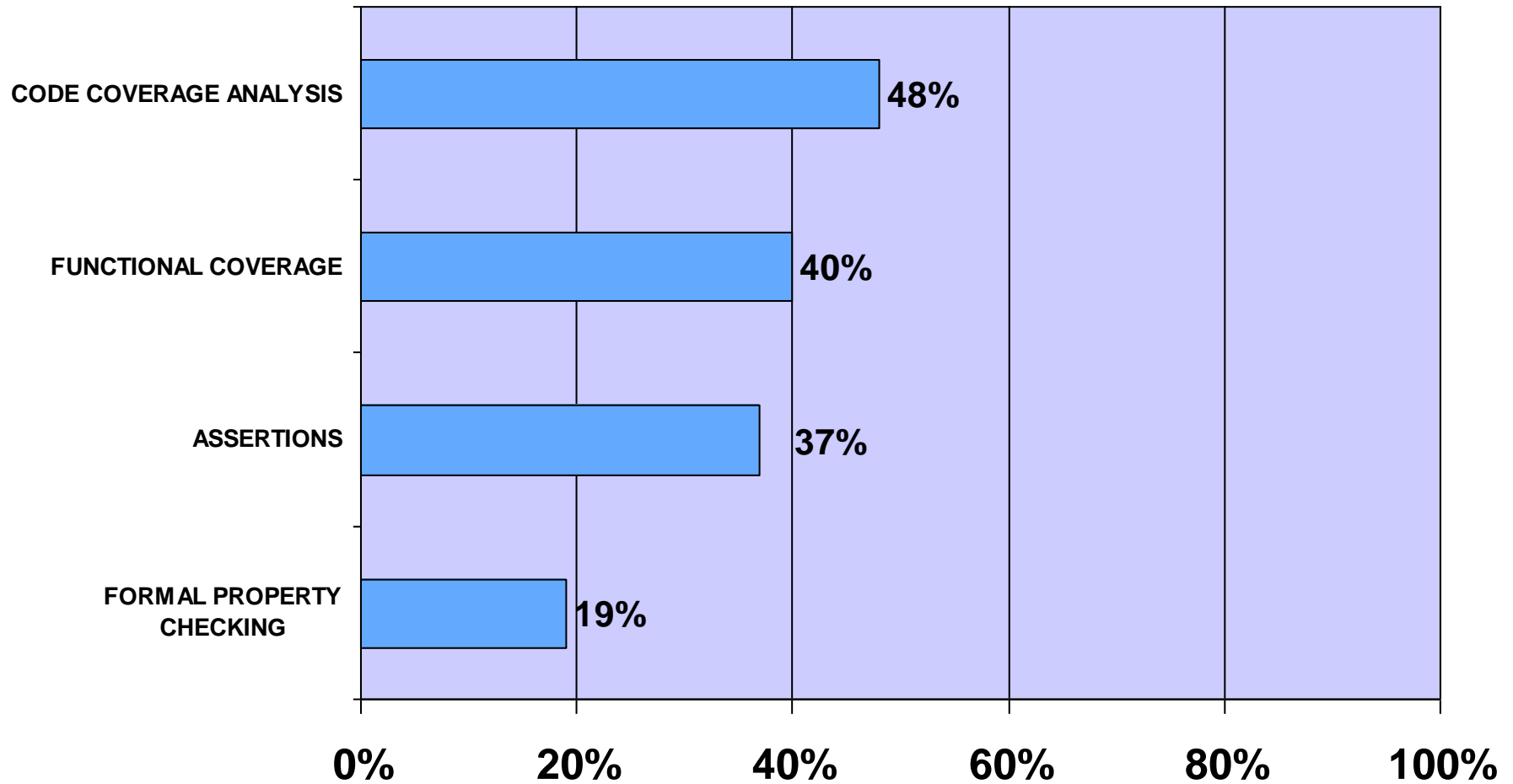
**If this stuff is so great, then
why isn't everybody doing it?**



Harry Foster
Chief Verification Scientist

**Mentor
Graphics®**

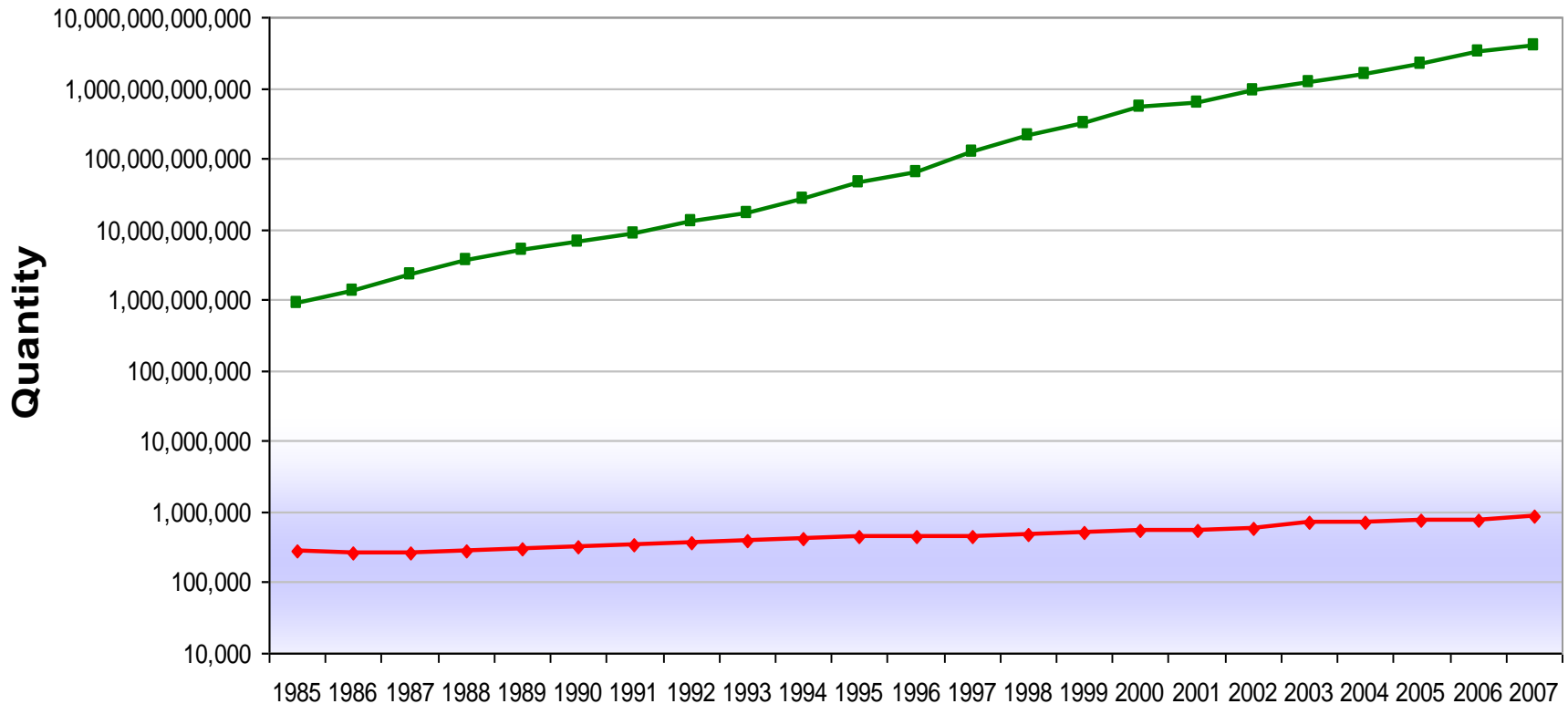
Functional Verification Technique Adoption



Farwest Research and Mentor Graphics, 2008

Transistors Produced per Hardware Developer Nearly 4-Orders of Magnitude since 1985

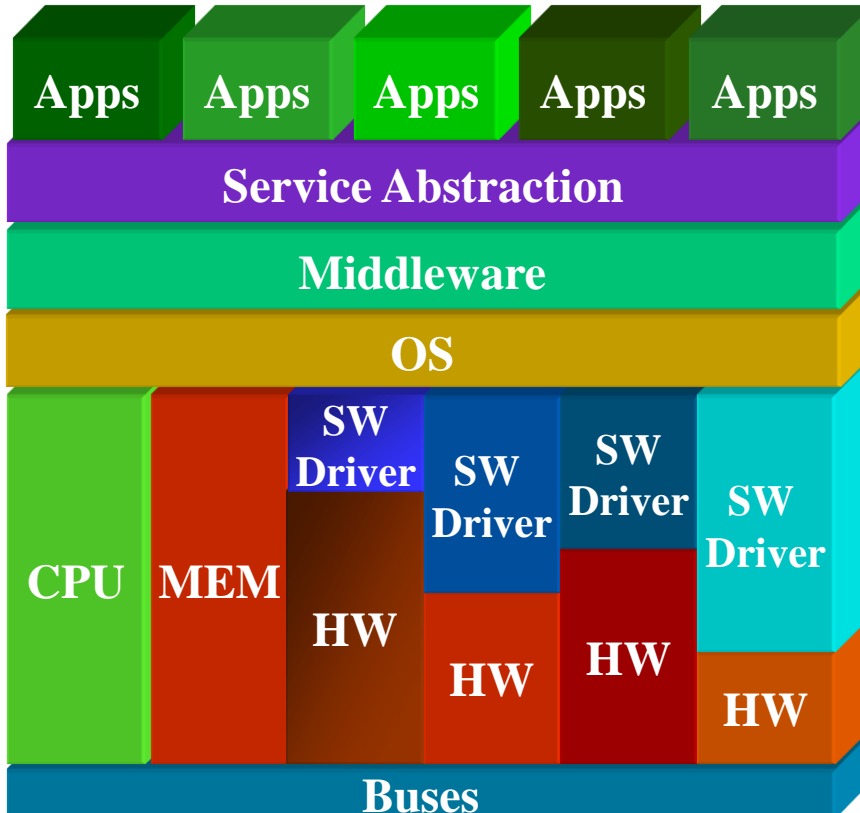
—■ Transistors/Engineer —◆ Total Engineers



Source: Technology Research Group – EDA Database, 1986, EDA TAM, 1989 & Gartner/Dataquest 2005 Seat Count Report, Gary Smith EDA, 2008 Seat Count Analysis VLSI Research, 2008 - Transistors Produced Analysis

Need for Software Development Automation

System Design Has Shifted to the Semiconductor Suppliers



To solve the rising cost of complex chip design will require more automation in the software development process!

How can formal help here?

Needed Solutions and Research...

- **Lack of confidence metrics....**
 - **Industry wants solutions that allow them to merge and analyze coverage(?) across many different *system* domains...**



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