Execution is a Requirement

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Reason no. 1
High Fidelity – No transformations needed

Reason no. 2
Quick Turnaround – Immediate measurements

Reason no. 3
Automation – Test and measure multiple times
LabVIEW is a graphical programming language

AND

LabVIEW is a modeling language
LabVIEW is a graphical programming language

AND

LabVIEW is a dataflow modeling language
Question
Computer Scientists and Software Engineers
Computer Scientists and Software Engineers
Electrical Engineers  Civil Engineers
Biomedical Engineers  Neuroscientists
Test Technicians    Medical Professionals

And many more...
Why are executable models a requirement?
LabVIEW 1 on an early Macintosh in 1986
Do for engineers and scientists what the spreadsheet did for financial analysts
Box instruments
Reason no. 1

High Fidelity – No transformations needed
Config HW → Acquire Data → Analyze
G Source Code → LabVIEW NXG Compiler → Binary

Graph Transformations
Reason no. 2

Quick Turnaround – Immediate measurements
Reason no. 3

Automation – Test and measure multiple times
Without execution, you’re just drawing