GREENSWEEP: Guided Recognition and EvaluatioN of SoftWare Energy hotsPots

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Challenges of
Software
Energy Efficiency

Hardware/software interactions are chaotic.

Measuring the energy impact of software is complex.

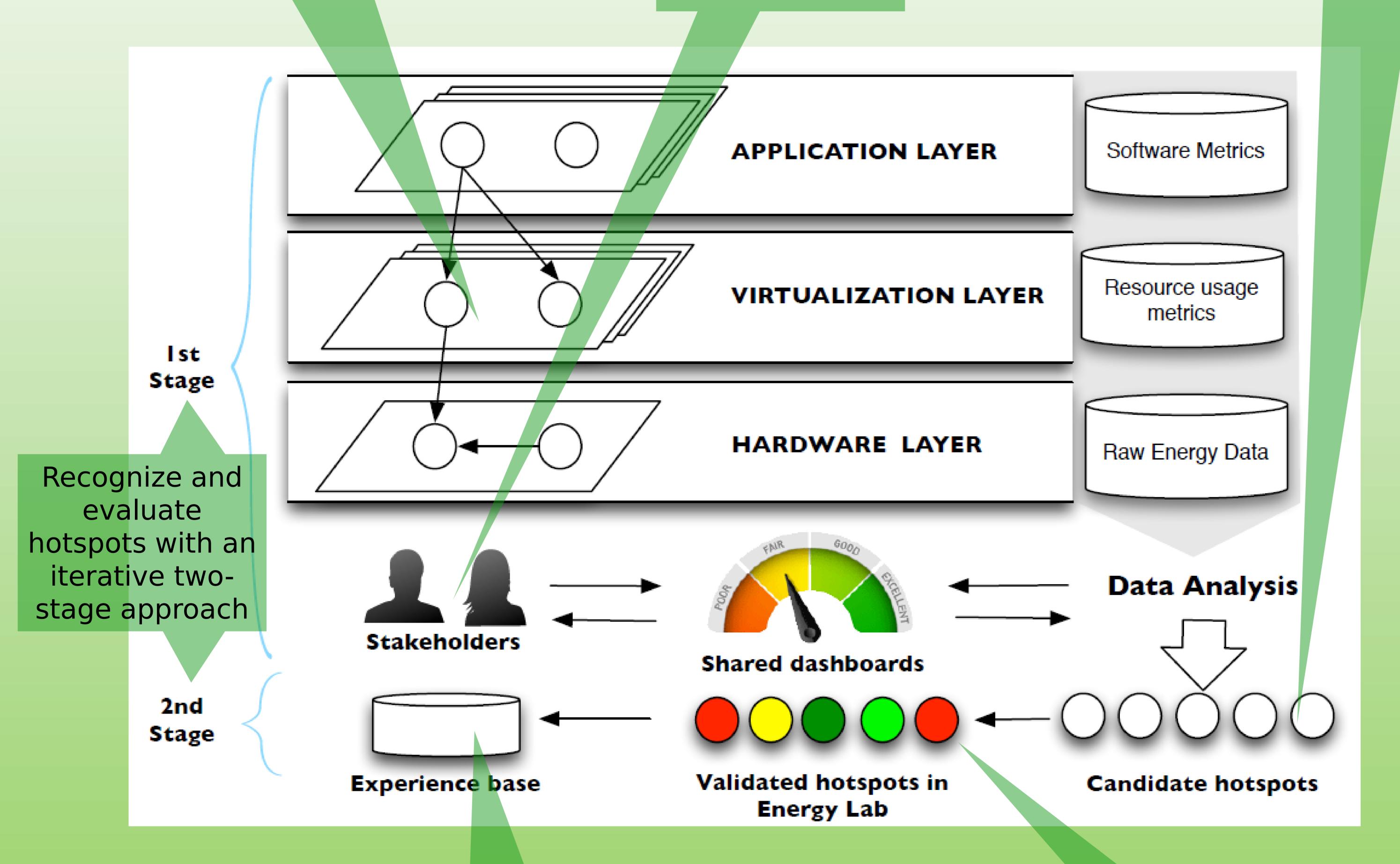
Evidence so far is anecdotal and not generalizable.

There is no unified research approach.

Gather data from *all* abstraction and physical layers

Guide the analysis through stakeholders' domain knowledge

Apply data mining techniques to identify candidate hotspots



Build an experience base for energy-efficient software

Validate the impact of the hotspots in a controlled environment



