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ASEKOMEH, A.

2022



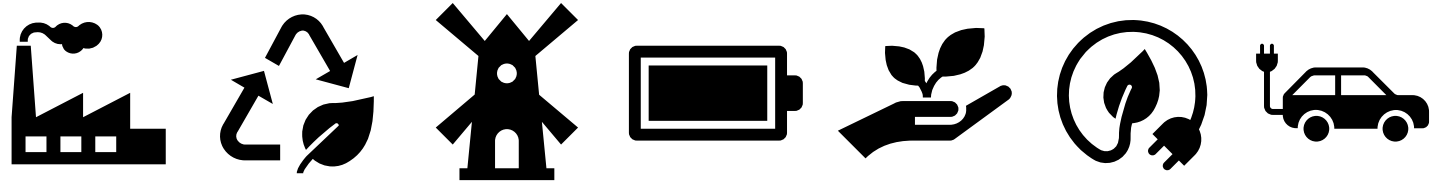
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Is the energy crisis creating a transition
hesitancy?

Towards an energy transition acceptance and
governance model

Dr Ayodele Asekomeh

Presented at the Academy of Sustainable Finance, Accounting,
Accountability & Governance (ASFAAG) 2nd Annual Conference 2022
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Outline

- Motivation (1) – The energy crisis
- Motivation (2) – Anecdotal evidence of hesitancy
- Research Questions/study aim/expected contributions
- The Technology Acceptance Model and its limitations
- A conceptual framework – Transition Acceptance and Governance Model (TrAGM)
- Next steps

Motivation (1) – The energy crisis

- High wholesale gas prices with supply crunch, due to (Ahlijian, 2021):
 - Efforts to decarbonise.
 - Lack of capital to natural gas drillers.
 - Unexpectedly low output from Russia (worsened by the invasion of Ukraine and subsequent sanctions in February 2022).

Motivation (2) – Anecdotal evidence of hesitancy

- UK review of fracking as part of energy review ordered in April 2022:
 - “...there will be an ongoing demand for oil and gas over the coming decades as we transition to cheap renewable energy and nuclear power...it [is] absolutely necessary that we explore all possible domestic energy sources.” (Kwarteng, 2022).
- Revival of coal mining (FT, 2022) with new projects planned/announced in China, India, Australia and Russia.

Motivation (2) – Anecdotal evidence (cont'd)

- A lot of big banks (Espiner, 2022) continue to fund new oil and gas exploration despite net zero pledges. There has been huge windfall profits in the current climate of high prices.
- Issuance of new oil and gas prospecting licenses not ruled out in the UK in the North Sea Transition Deal (Greenpeace, 2021).
- COP26 targets already slipping.

Research questions and study aim (conceptual)

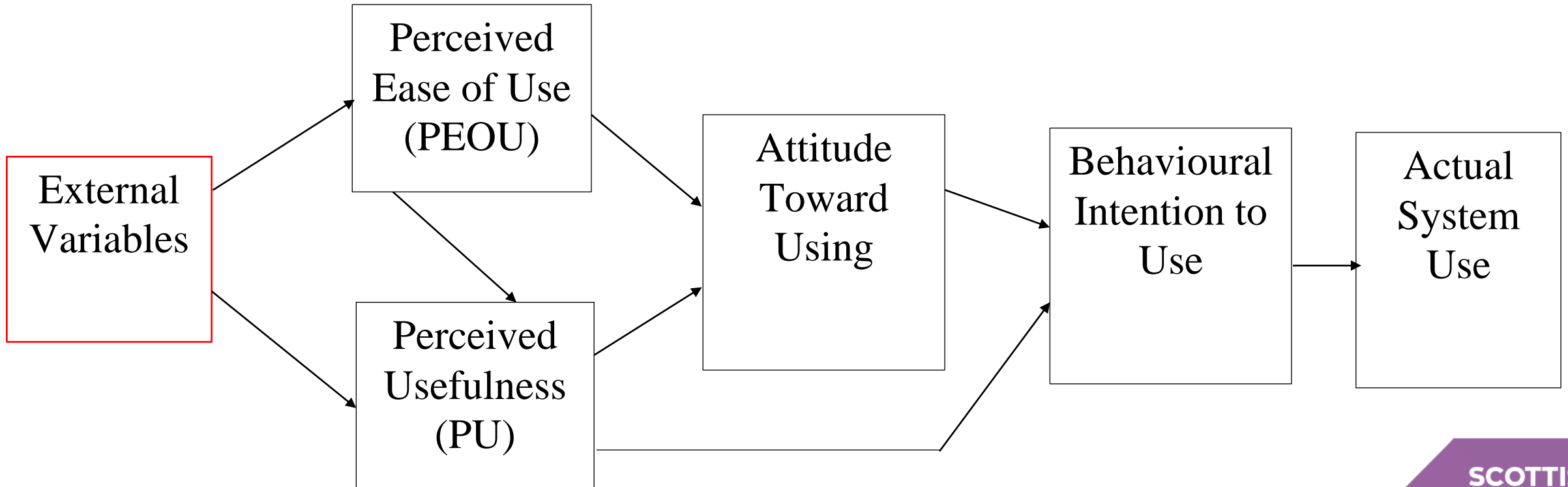
- How is the outlook of energy companies to transition changing as a result of the energy crisis?
- What are the aspects of accounting, finance and governance that will reveal an hesitancy to transition and thus help to develop a framework for transition acceptance and governance?

The aim is to use the technology acceptance model (TAM) (Davis, 1986; see Chuttur, 2009) as the building block for a Transition Acceptance and Governance Model (TrAGM).

Expected contribution(s)

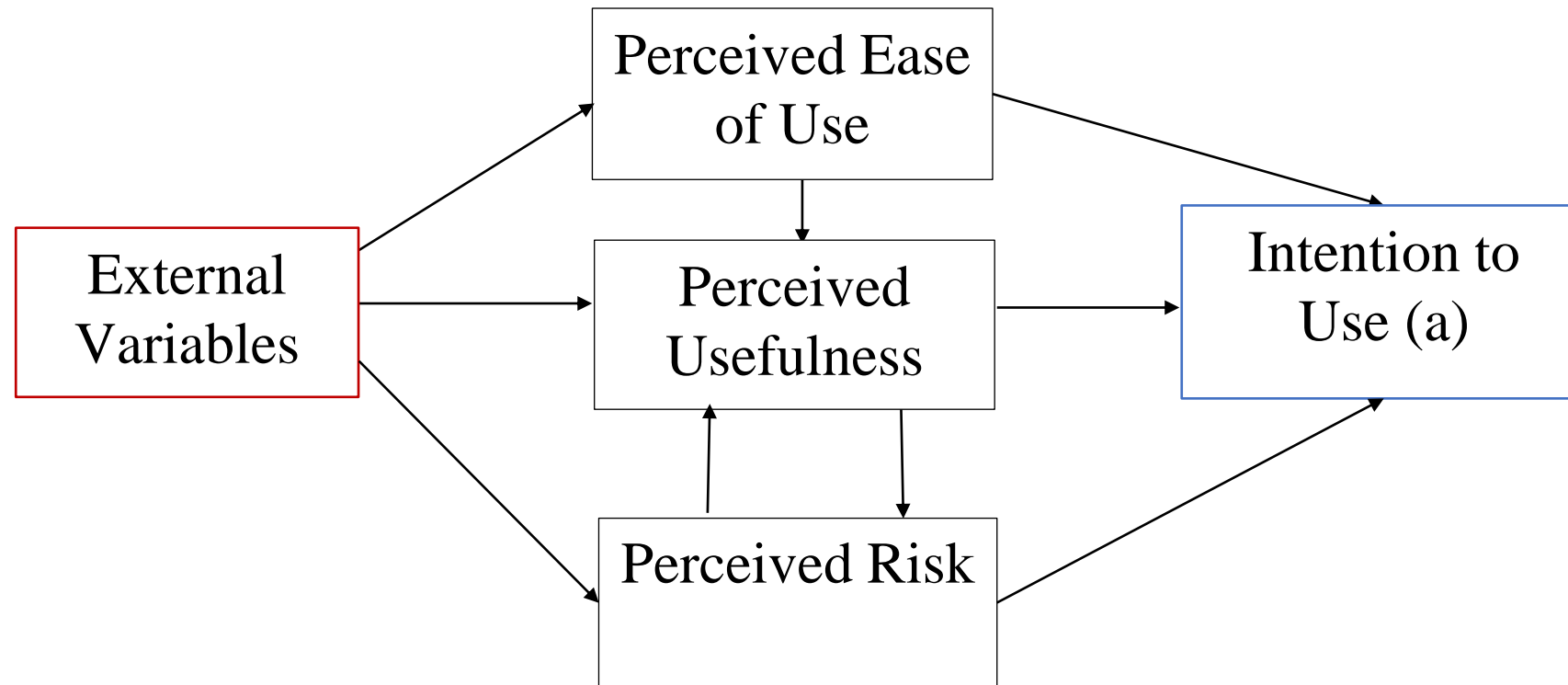
- Provide clear indication of the role of accounting, finance and governance in the energy transition.
- Offer critical understanding of “transition hesitancy” factors (cf: vaccine hesitancy) and how to manage them.

The Technology Acceptance Model (TAM) [1]



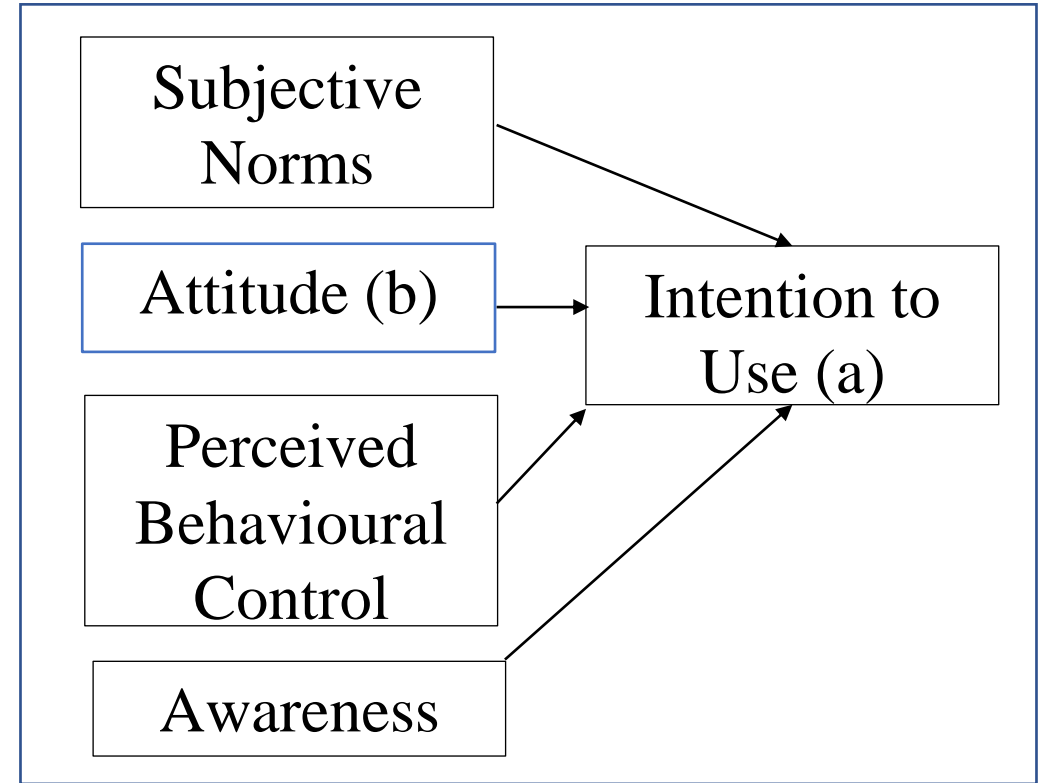
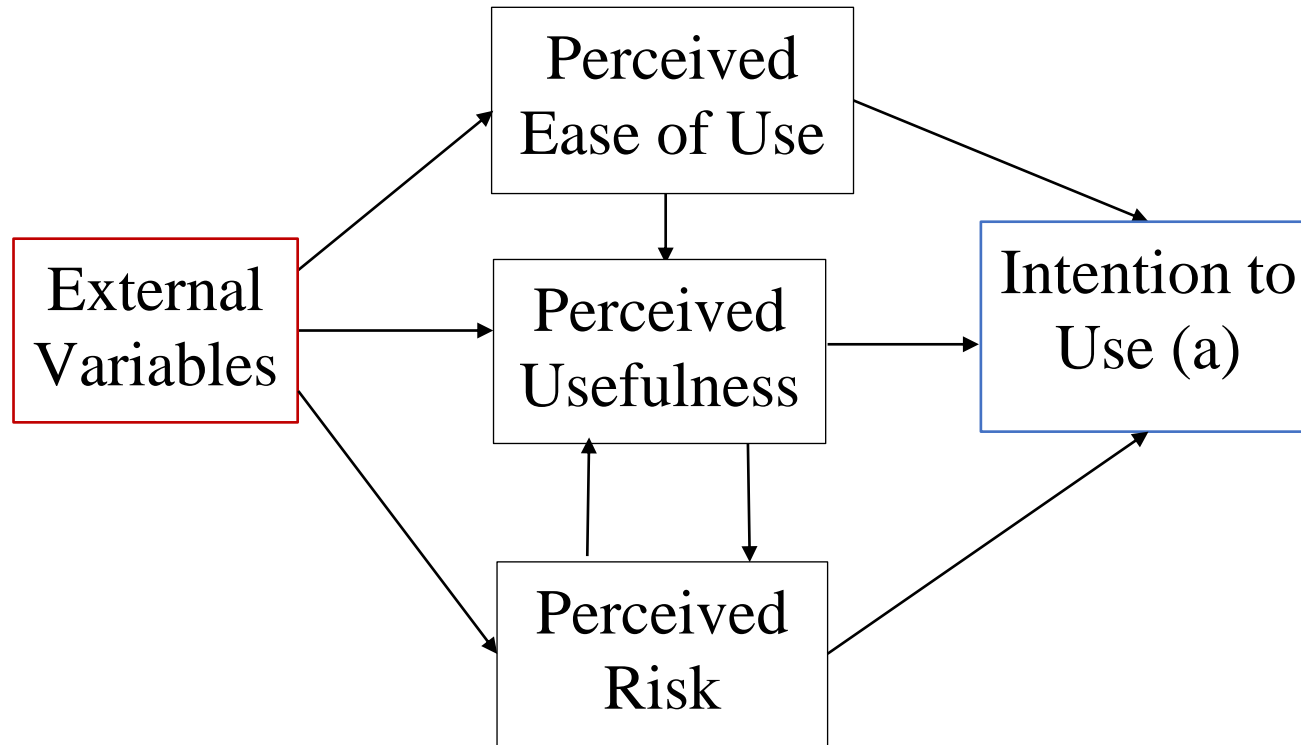
Davis (1986) and various subsequent refinements and contributions

TAM [2]



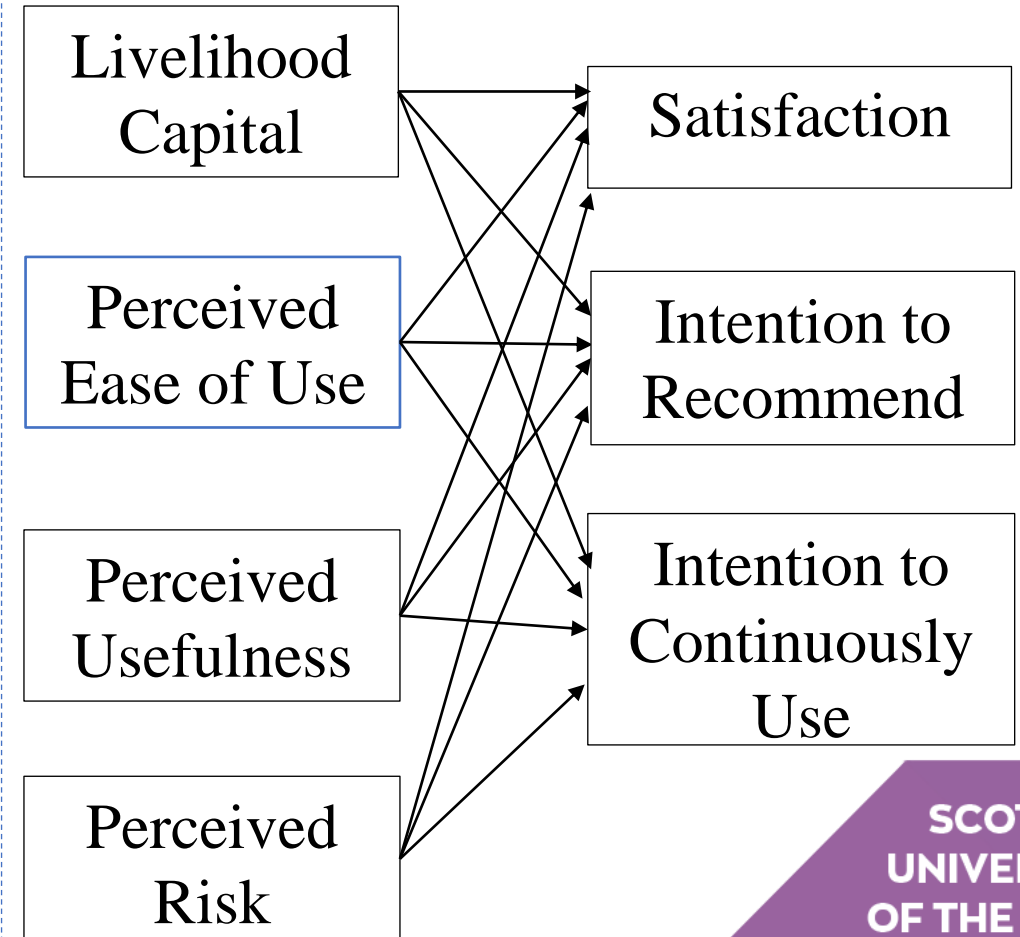
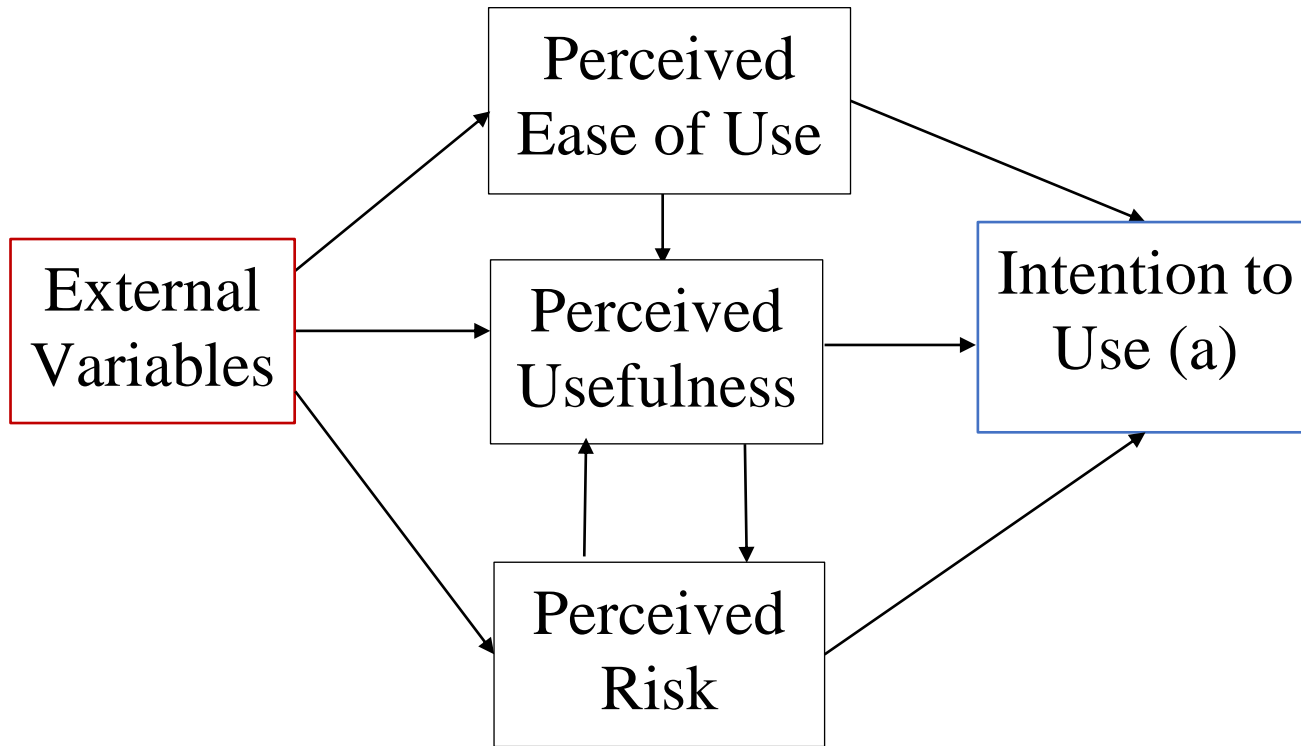
Park et al (2014) – Risk Integrated TAM

TAM [3]



Fatoki (2022) [Extended TAM with Theory of Planned Behaviour (TPB)]

TAM [4]



Liu et al (2022) [Livelihood Capital Integrated TAM [LCITAM]]

Limitations of the TAM (in energy applications)

1. “Intention to use” does not mean “actual use”; data based on adopters’ self-reported use rather than actual use data.
2. Focus usually on adoption of single renewable energy technology or source; no expressed intention/ preference for alternatives.

Limitations of the TAM (2)

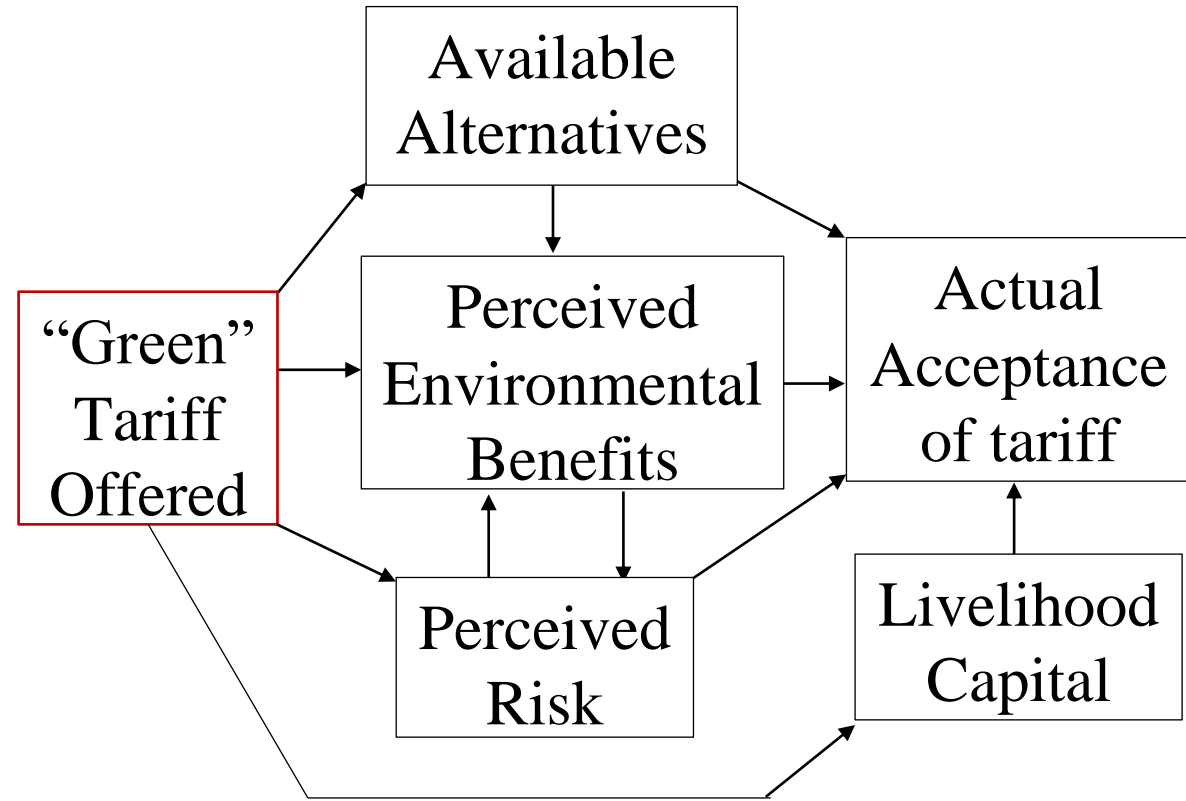
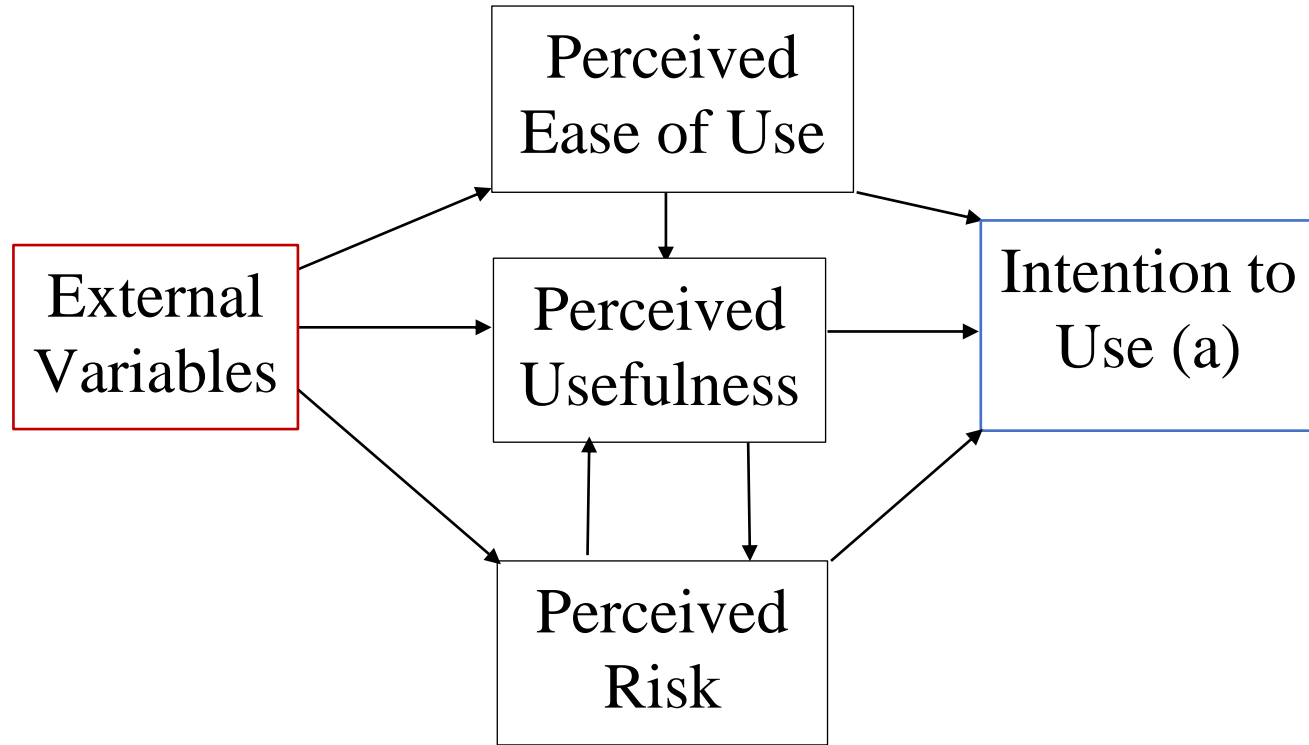
3. TAM is employed in studies where the renewable energy technology (RET) being considered is voluntary:

- Difficult to mandate RET or outlaw some carbon-emitting fuel sources due to infrastructure deficit.
- Perceived ease of use (PEOU) more important than perceived usefulness (PU) in acceptance of a system in a mandatory setting (Yousafzai, 2007).

Limitations of the TAM (3)

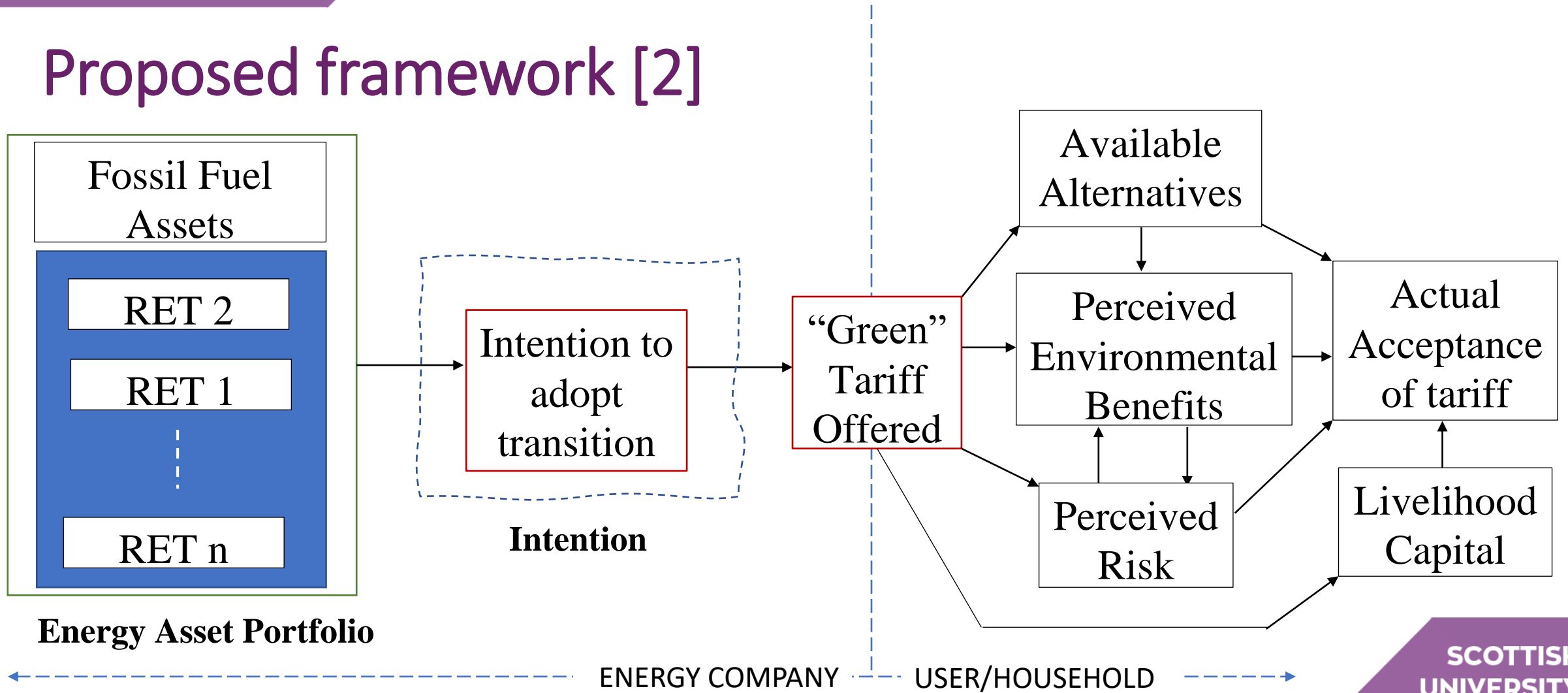
4. Application of TAM to energy systems implicitly assumes users/households are in usually off-grid settings where they have a freedom to choose RET (conditions permitting). However, most users/households in grid settings get to accept the tariffs that are offered, including choosing between perceived beneficial 'green' (but likely more expensive) tariffs and dirty (but likely cheaper) tariffs.
 - The RET/energy mix decision is taken at the company/corporate level and passed down to users/households.

Proposed framework [1]



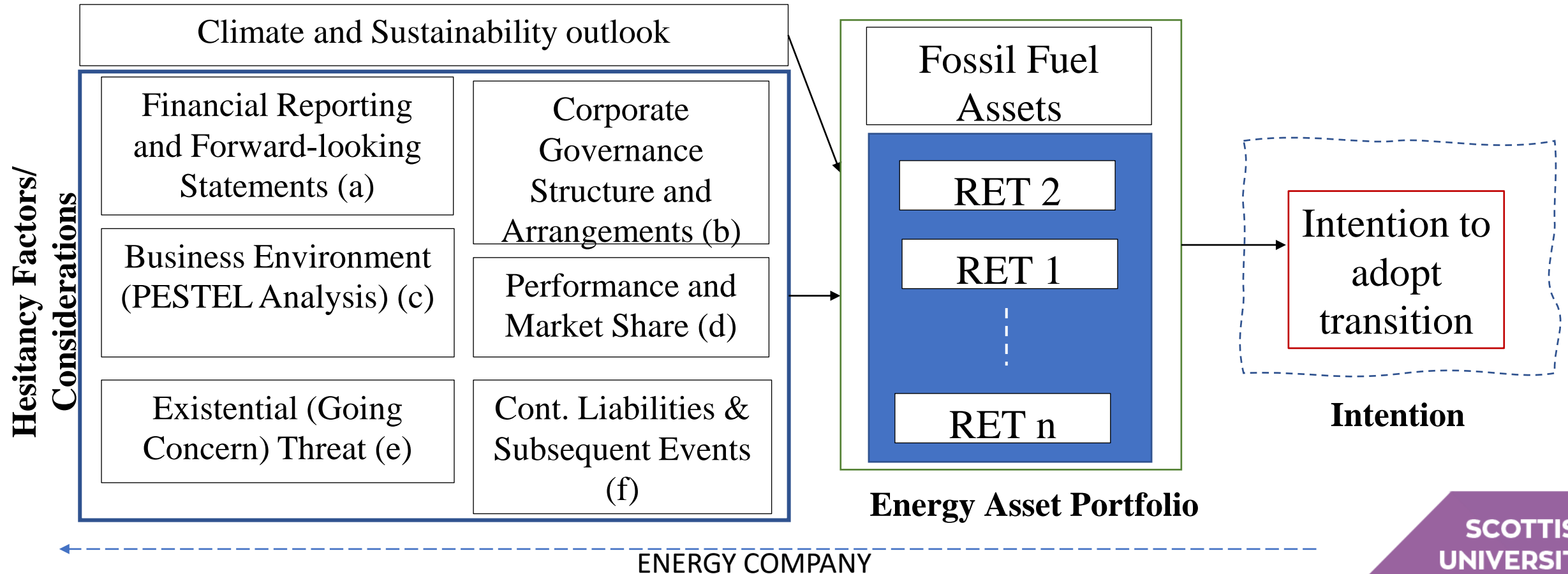
Conceptual Framework for TrAGM – Replacing “intention to use” with “actual use”

Proposed framework [2]



Conceptual Framework for TrAGM – From user/household focus to company focus (Grid vs Off-Grid)

Proposed framework [3]



Conceptual Framework for TrAGM – Hesitancy factors (from Accounting, Finance & Governance)

Proposed framework [4] – Hesitancy Hypothesis

- a) Forward-looking statements will constrain transition efforts or strategies of companies (H1).
- b) Corporate Governance arrangements will reveal attitude to transition (H2).
- c) The business environment in an energy crisis will dampen enthusiasm for transition (H3).
- d) A company's performance/market share will dictate energy mix strategy (H4).

Proposed framework [4] – Hesitancy Hypothesis (cont'd)

- e) Going concern considerations will affect a company's energy transition strategies (H5).
- f) Hesitant companies will make more than usual adjustments for contingent liabilities and disclose subsequent events differently (H6).

Next steps...

- Design empirical study to test hypotheses
 - Content analysis of financial statements.
 - Survey of energy companies offering green tariffs and users/households subscribed to such tariffs.
 - Partial Least Squares Structural Equation Modelling (PLS-SEQ) of survey responses to understand relationships between/among hesitancy factors.
 - Explore energy transition policy, governance, project financing and standard-setting implications.

Thanks!



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