Co-Creating a Standard for Circularity: An iterative, collaborative approach.
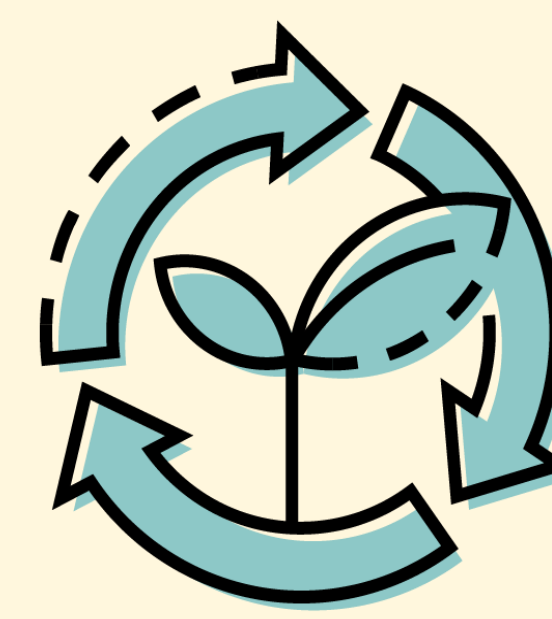
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[1] RISE Research Institutes of Sweden
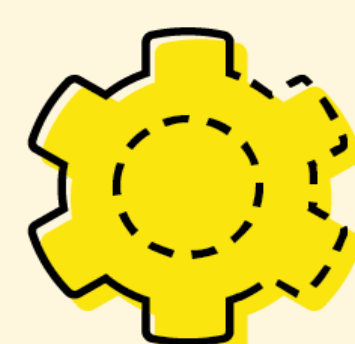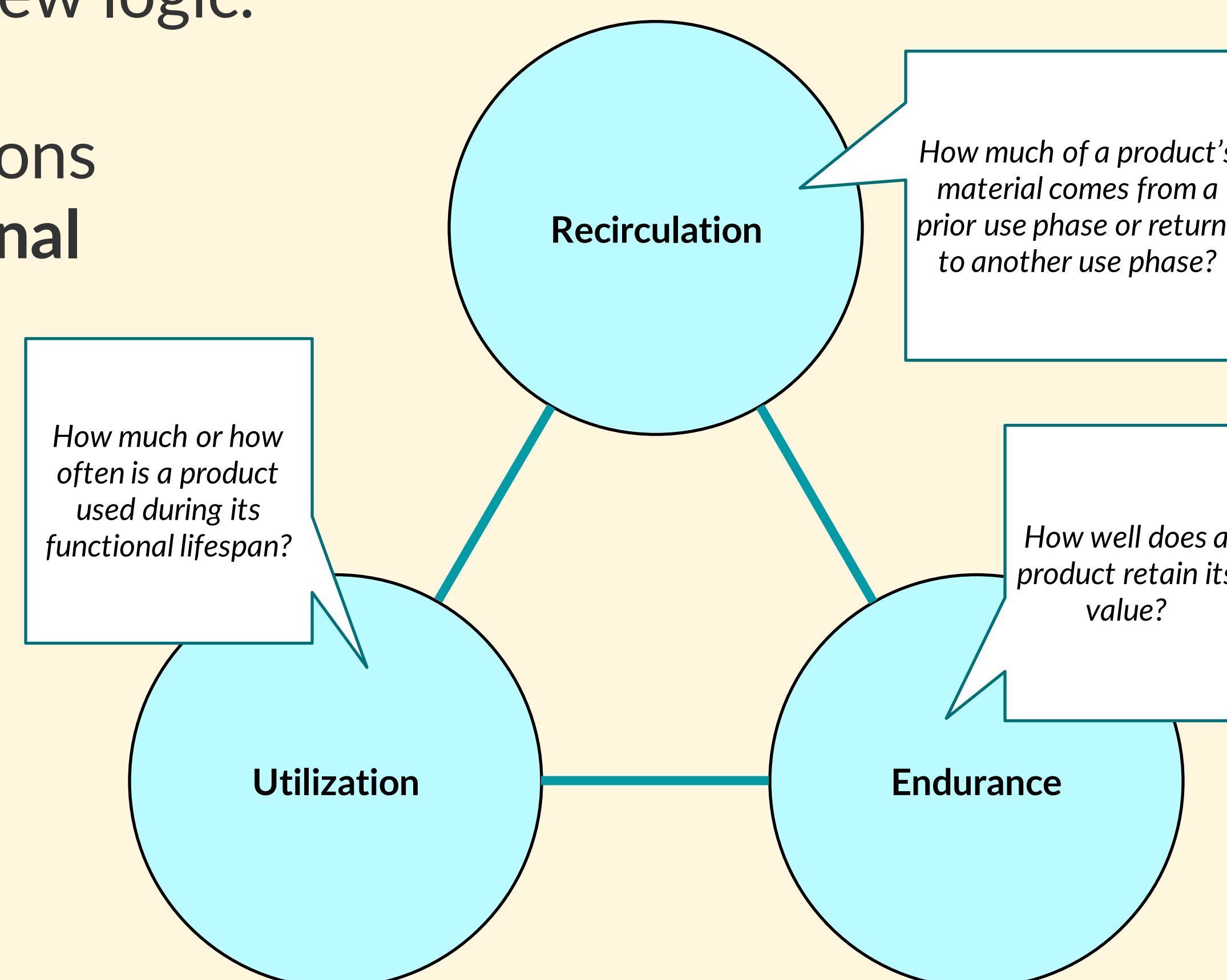[2] Linköping University
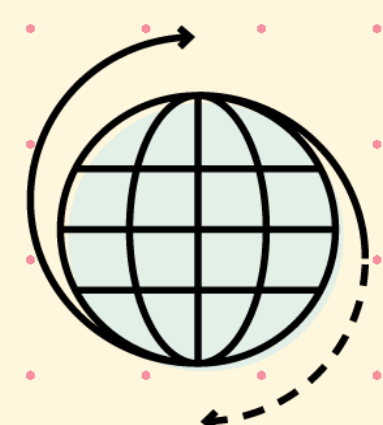
Background / State-of-the-art

We are in a turbulent time and the interest in circular economy (CE) has increased, but the linear economy logic is still the predominant logic. Implementing 'circular logic' demands that business leaders and policy makers instigate circular business models and systems to support them but there is need for new ways of measuring success that are more suitable to the new logic.

A transition towards more resource efficient and circular solutions requires **verifiable, broadly adopted and recognised international standards for assessing circularity**. This in order to;
• lowering the risk of competitors adopting lower standards;
• lowering the risk that policy makers and governments implement conflicting standards; and
• make customers more confident in the validity of CE claims.

Recirculation — How much of a product's material comes from a prior use phase or returns to another use phase?

Utilization — How much or how often is a product used during its functional lifespan?

Endurance — How well does a product retain its value?

Methodology

In a VINNOVA* funded project (2020-04410) RISE AB, Linköping University and SKF RecondOil develop a way to express and quantify **circularity**. The research process involves iterative dialogue and data collection via first, semi-structured dialogue with company employees, then more focused data collection, and ultimately a test of the standard at a broader scale, within other companies and sectors.
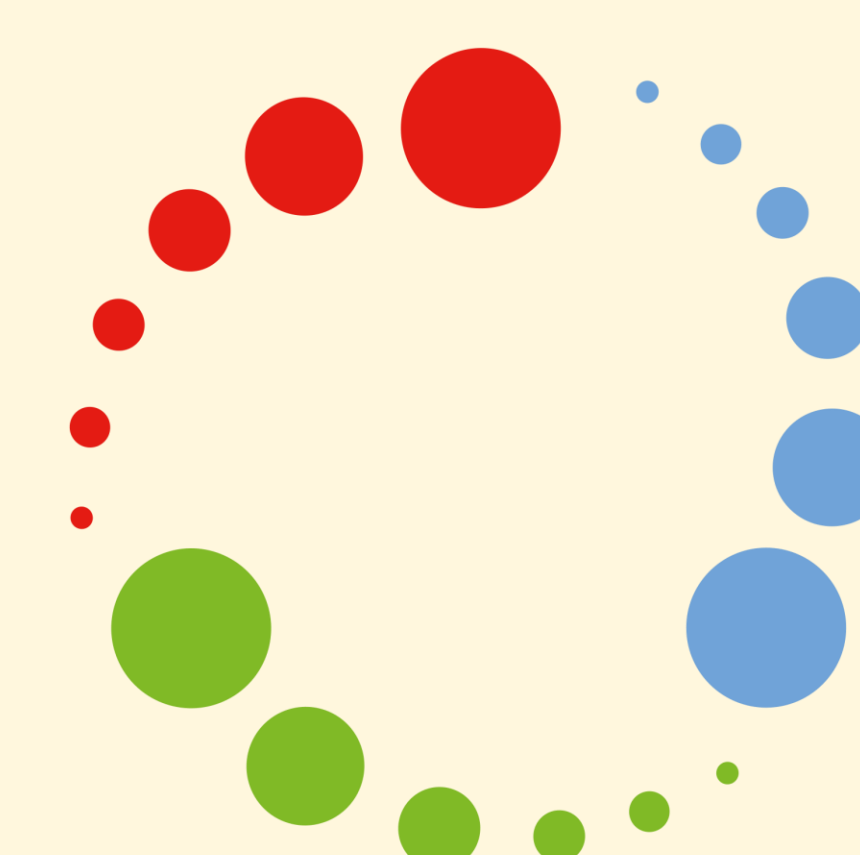
*The Swedish Innovation Agency

Results

Researchers in this study are involved in ongoing standardisation work (ISO 59020 – Circular Economy – Measurement and assessment of circularity) and learnings from this study are to be considered in standard work and vice versa.

Discussion

While a harmonised quantification for circularity can facilitate the transition towards a CE, harmonisation and standardisation must overcome multiple challenges, besides the practical realities of today's predominantly linear economy:
• How to balance quantification of resource circulation and losses in relation to value creation
• What levels of circularity strategy decisions should be supported: company level, product and business model design, value network
• What data may reliably and universally be accessible and so to realistically expect a quantification choice to establish a standard.