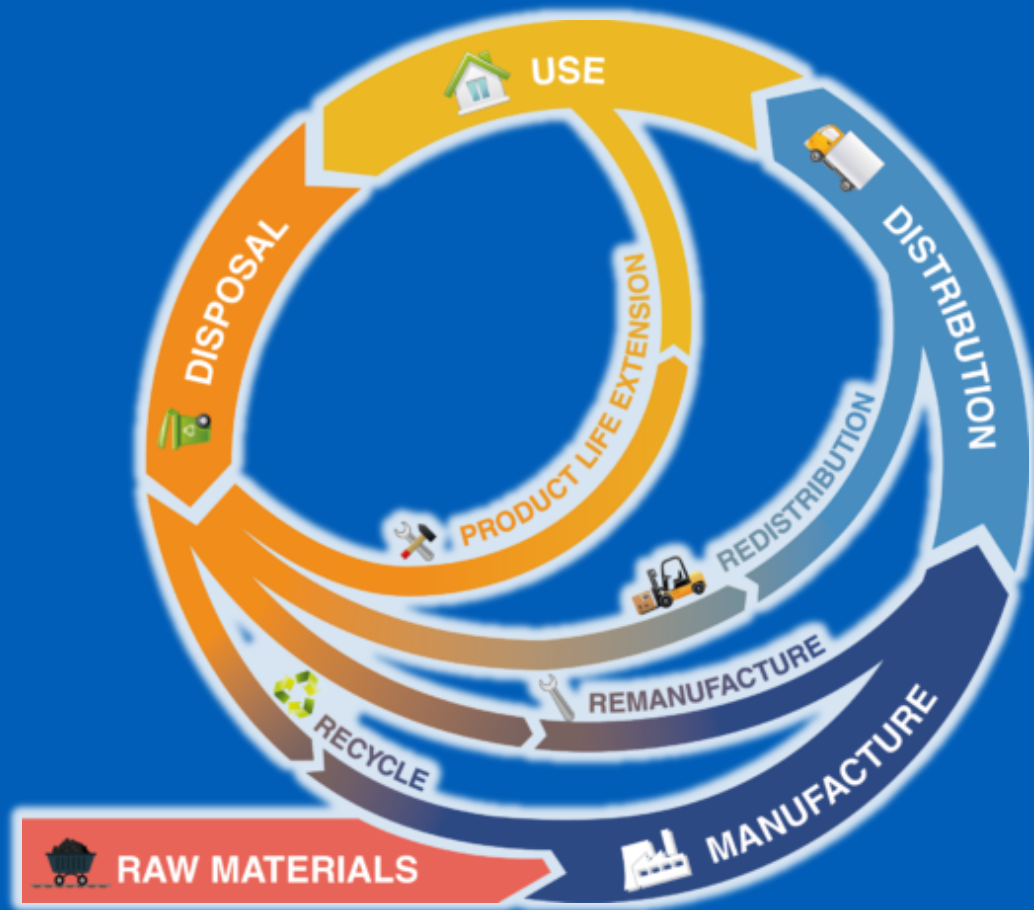


Kestävä liiketoiminta ja kiertotalouden liiketoimintamallit

Olli Sahimaa
Tutkijatohtori, TkT
9.2.2022



OLLI SAHIMAA

Olli Sahimaa toimii tutkijatohtorina Aalto-yliopiston kauppakorkeakoulussa Vastuullisen liiketoiminnan ryhmässä. Hänen erikoisalaansa ovat systeeminen muutos kiertotalouteen ja kiertotalouden liiketoimintamallit.

Sahimaa opettaa Aalto-yliopiston kauppakorkeakoulussa Kiertotalouden strategiat ja johtaminen -kurssia. FINIX-hankkeen tutkijana hän on perehtynyt erityisesti tekstiilialan systeemiin haasteisiin kiertotalouden näkökulmasta. Opetus- ja tutkimustehtävissään Sahimaa pyrkii monitieteiseen ja laajalaiseen lähestymistapaan.

Sahimaan työ- ja koulutustaustassa yhdistyvät insinööritieteet, kauppatieteet ja vastuullisuus. Hän on väitellyt tohtoriksi Aalto-yliopistosta ympäristötekniikan alalta.



Tutkijatohtori, TkT

Vastuullinen liiketoiminta

Johtamisen laitos

**Aalto-yliopiston
kauppakorkeakoulu**

Sisältö

1. Kiertotalousliiketoiminnan määrittelyä
2. Erilaiset kiertotalouden liiketoimintamallit
3. Kiertotalousliiketoiminnan haasteet ja mahdollisuudet pk-yrityksille

1. Kiertotalousliiketoiminnan määrittelyä

Määritelmät: liiketoimintamalli

Liiketoimintamalli määrittelee kuinka yritys muodostaa kilpailustrategiansa tuote- ja palvelusunnittelun, hinnoittelun, tuotantokulujen ja kilpailijoista erottautumisen kautta sekä millä tavalla yritys integroi arvoketjunsä muiden yritysten kanssa.

-Rasmussen (2007)

Liiketoimintamallin osa-alueet - kanvaasi

The Business Model Canvas

Designed for:

Designed by:

Date:

Version:

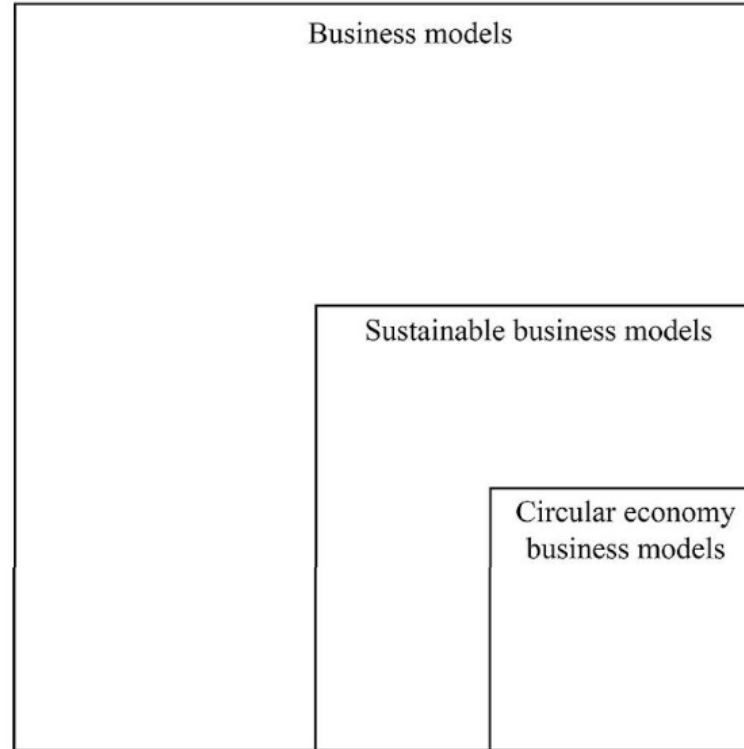
Key Partners  Who are our Key Partners? Who are our key suppliers? Which Key Resources are we acquiring from partners? Which Key Activities do partners perform? MOTIVATIONS FOR PARTNERSHIPS Optimization and economy Reduction of risk and uncertainty Acquisition of particular resources and activities	Key Activities  What Key Activities do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue streams? CATEGORIES Production Problem Solving Platform/Network Key Resources  What Key Resources do our Value Propositions require? Our Distribution Channels? Customer Relationships? Revenue Streams? TYPES OF RESOURCES Physical Intellectual (brand, patents, copyrights, data) Human Financial	Value Propositions  What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying? CHARACTERISTICS Newness Performance Customization "Getting the job done" Design Brand/Status Price Cost Reduction Risk Reduction Accessibility Convenience/Usability	Customer Relationships  What type of relationship does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? How are they integrated with the rest of our business model? How costly are they? EXAMPLES Personal assistance Dedicated Personal Assistance Self Service Automated Services Communities Co-creation Channels  Through which Channels do our Customer Segments want to be reached? How are we reaching them now? How are our Channels integrated? Which ones work best? Which ones are most cost-efficient? How are we integrating them with customer routines? CHANNEL MODES 1. Awareness How do we raise awareness about our company's products and services? 2. Evaluation How do we help customers evaluate our organization's Value Proposition? 3. Purchase How do we allow customers to purchase specific products and services? 4. Delivery How do we deliver a Value Proposition to customers? 5. After sales How do we provide post-purchase customer support?	Customer Segments  For whom are we creating value? Who are our most important customers? Mass Market niche Segment Segmented Diversified Multi-sided Platform
Cost Structure  What are the most important costs inherent in our business model? Which Key Resources are most expensive? Which Key Activities are most expensive? IS YOUR BUSINESS MODEL Cost Driven (lowest cost structure, low price value proposition, maximum automation, extensive outsourcing) Value Driven (Focused on value creation, premium value proposition) SAMPLE CATEGORIES Fixed Costs (Salaries, rents, utilities) Variable costs Economies of scale Economies of scope	Revenue Streams  For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How would they prefer to pay? How much does each Revenue Stream contribute to overall revenues? <table><tr><td>TYPES Asset sale Lump fee Subscription Fees Licensing/licensing/Leasing Licensing Brokerage fees Advertising</td><td>PRICING List Price Product feature dependent Customer segment dependent Volume dependent</td><td>STREAMS MODELS Negotiation (Bargaining) Help Management Real-time Market</td></tr></table>	TYPES Asset sale Lump fee Subscription Fees Licensing/licensing/Leasing Licensing Brokerage fees Advertising	PRICING List Price Product feature dependent Customer segment dependent Volume dependent	STREAMS MODELS Negotiation (Bargaining) Help Management Real-time Market
TYPES Asset sale Lump fee Subscription Fees Licensing/licensing/Leasing Licensing Brokerage fees Advertising	PRICING List Price Product feature dependent Customer segment dependent Volume dependent	STREAMS MODELS Negotiation (Bargaining) Help Management Real-time Market		

Määritelmä: kestävä liiketoimintamalli

“Kestävä liiketoimintamalli luo kilpailuetua korkealla asiakasarvolla ja edistää yrityksen ja yhteiskunnan kestäväää kehitystä.

-Lüdeke-Freund (2010)

Kiertotalouden liiketoimintamallit ovat osa kestäviä liiketoimintamalleja



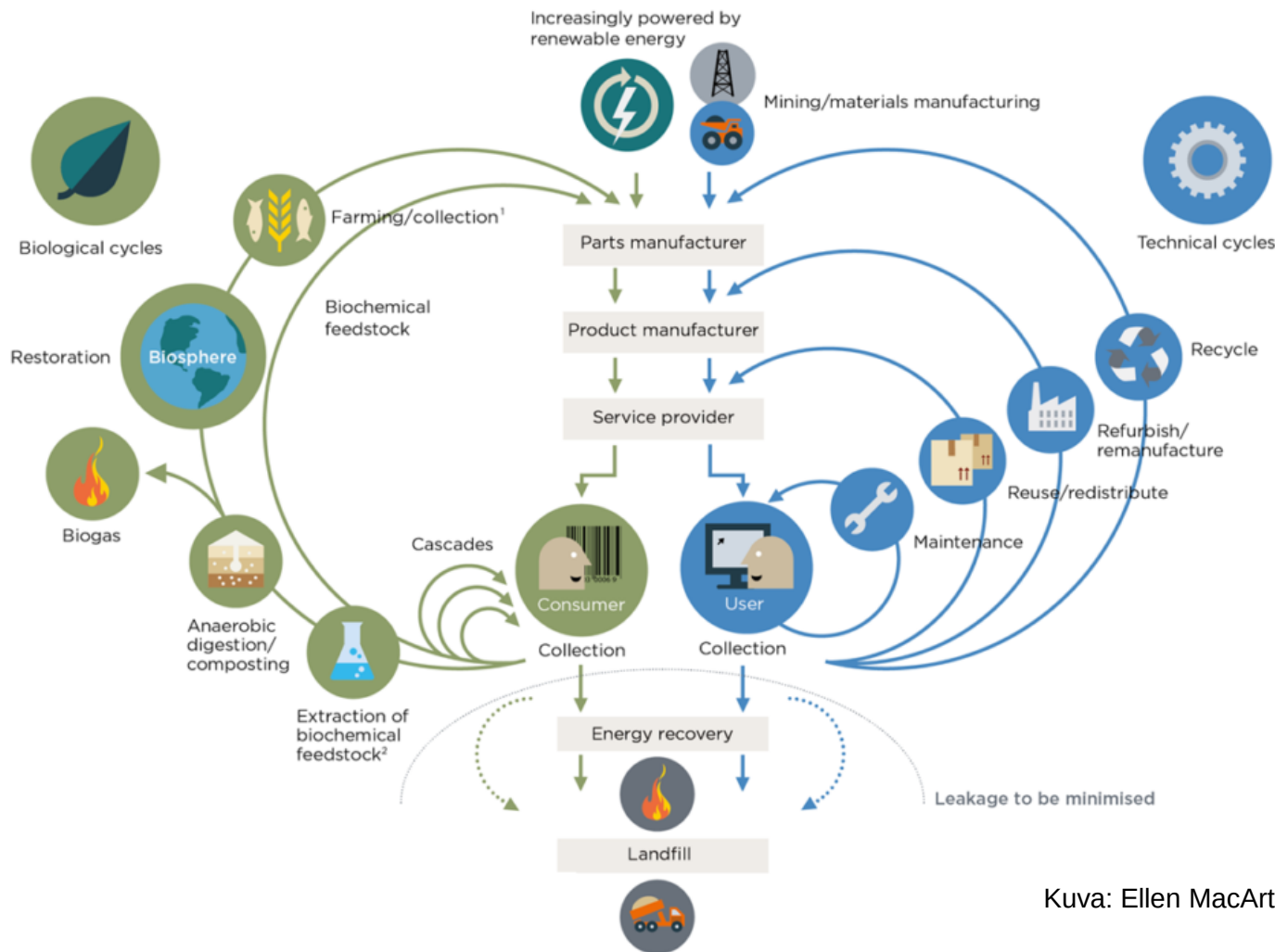
Miller (2018)

Määritelmät: kiertotalouden liiketoimintamalli

“Kiertotalouden liiketoimintamalli määrittelee millä tavalla yritys luo, tuottaa ja toimittaa arvoa resurssitehokkaalla arvonluonnin logiikalla, joka on suunniteltu **pidentämään tuotteiden ja osien käyttöikää** (esim. pitkäikäisyys, korjaus, uudelleenvalmistus) ja **sulkemaan materiaalikierrot.**”

-Nußholz (2017)

Kiertotalouden “perhoskuvaaja”



Kiertotalouden liiketoimintakanvaasi



KEY PARTNERSHIPS

How might you strengthen your partnerships with organisations across the value chain to benefit from circularity (flows of materials, information and capital) in the system?

What new or unexpected partnerships can you form to grow circularity within your organisation and the system?



KEY ACTIVITIES

What activities might best help you achieve your value proposition?

What might be the positive externalities (i.e. the consequences of your actions on others) of your activities? And how might you monitor and design out any negative externalities?

How might you create new forms of human, natural or financial capital?



KEY RESOURCES

How might you build a multi-disciplinary team within or across organisations to create value in a circular economy? How might you embrace connectivity?

What capabilities do you need to enable circular flows and feedback mechanisms and run your organisation successfully in the short and long term?

Where will your resources come from (renewable or finite source) and what will happen to them after use?



VALUE PROPOSITION

Start by asking yourself: what are the needs you are aiming to meet? Is it a product or is a service required to fulfil these needs?

Is there anything associated with your product/service that has potential value to others?

How will you create a compelling story about your value proposition?

How might you enhance your value proposition from the outset by designing for adaptability and continuous evolution?



CUSTOMER RELATIONSHIPS

What feedback loops will you build in with your customers to become more nimble and adaptable to their feedback?

How might you connect customers with other parts of the journey of your product/service or materials?



CUSTOMER SEGMENTS

Who will be the main customers or users of your product/service?

Who else might benefit from or will be affected by your materials/product/service? Also consider beneficiaries beyond your immediate value chain and industry.



CHANNELS

How might you redesign your relationship with your supply chain?

How might you build feedback loops directly into your product/service that allow you to identify new opportunities?

What role could you play in the reverse logistics chain?



COSTS

Which costs could be shared or lowered through other users and partners?

Could you shift from an ownership model of under-utilised assets to payment for access and usage?

How might you reduce cost volatility and dependence on the use of finite resources? What can you do to mitigate risk?



REVENUES

How might you diversify opportunities to increase resilience, growth and innovation?

How might "growing the pie" (through value creation elsewhere in the system) impact favourably on your own future success?

How might your business model help create other types of value? Human, social or natural capital?

How might new services increase revenue from existing products, assets or your delivery systems?

Kiertotalouden liiketoimintakanvaasi - kysymykset



KEY PARTNERSHIPS

Mitä uusia ja odottamattomia kumppanuuksia voit muodostaa kasvattaaksesi kiertotaloustoimintaa?



KEY RESOURCES

Mitä kyvykkyyksiä tarvitset mahdollistaaksesi materiaalien kierron ja johtaaksesi organisaatiota menestyksekkäästi lyhyellä ja pitkällä aikavälillä?

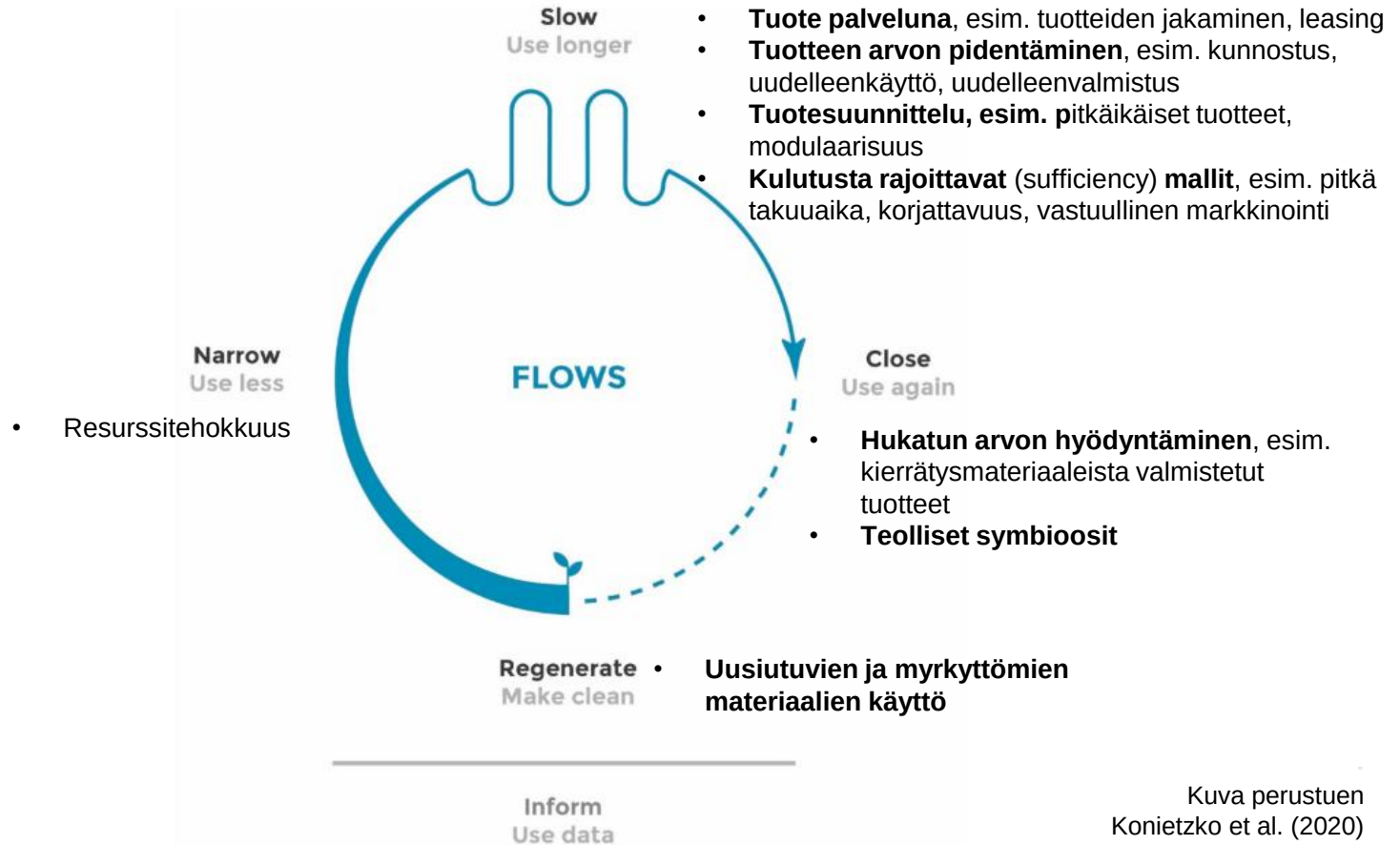


REVENUES

Kuinka liiketoimintamalli voisi luoda taloudellisen arvon ohella muunlaista arvoa (esim. sosiaalinen, ympäristö)?

2. Kiertotalouden liiketoimintamallien jäsentely

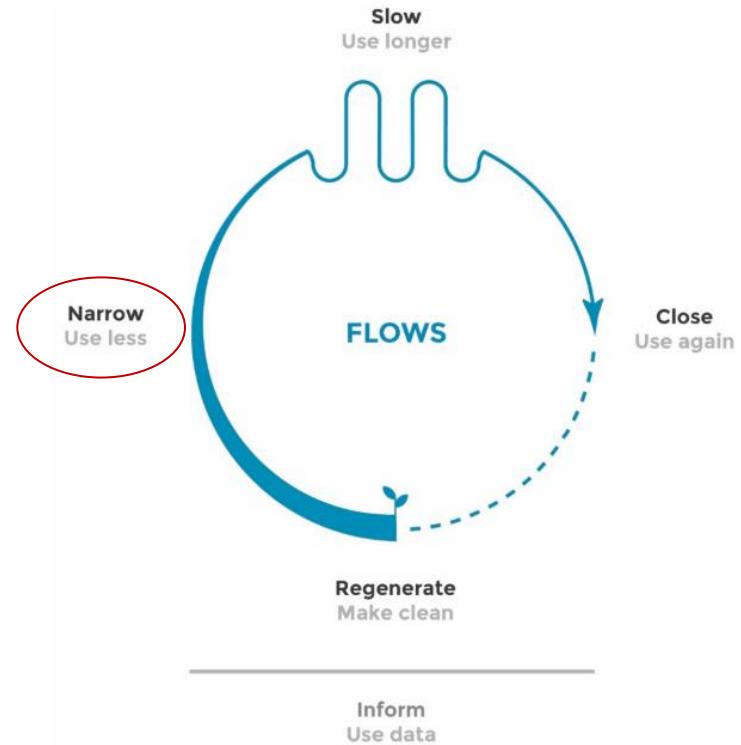
Viitekehys kiertotalouden liiketoimintamalleille



Kuva perustuen
Konietzko et al. (2020)
Bocken et al. (2016)



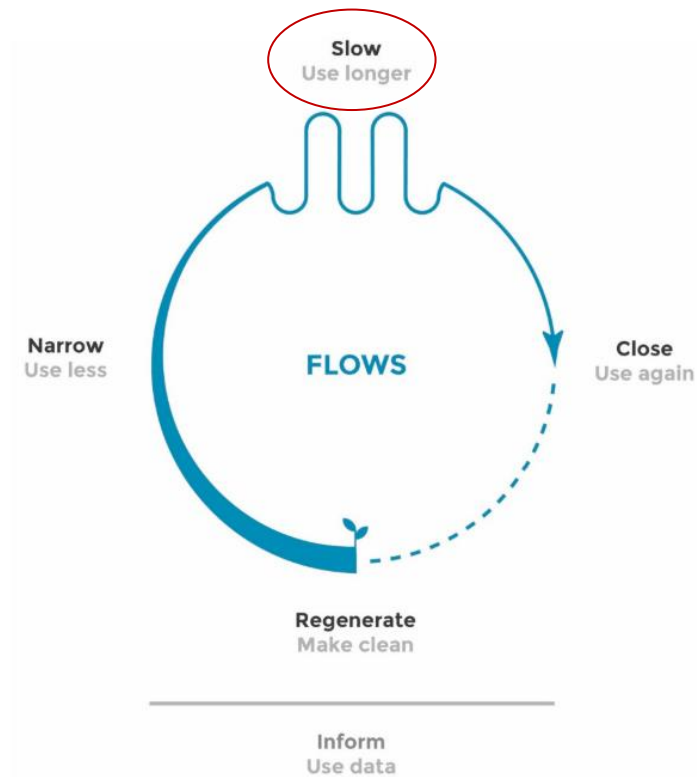
Resurssitehokkuus: Lean-filosofia autonvalmistuksessa





VALTRA

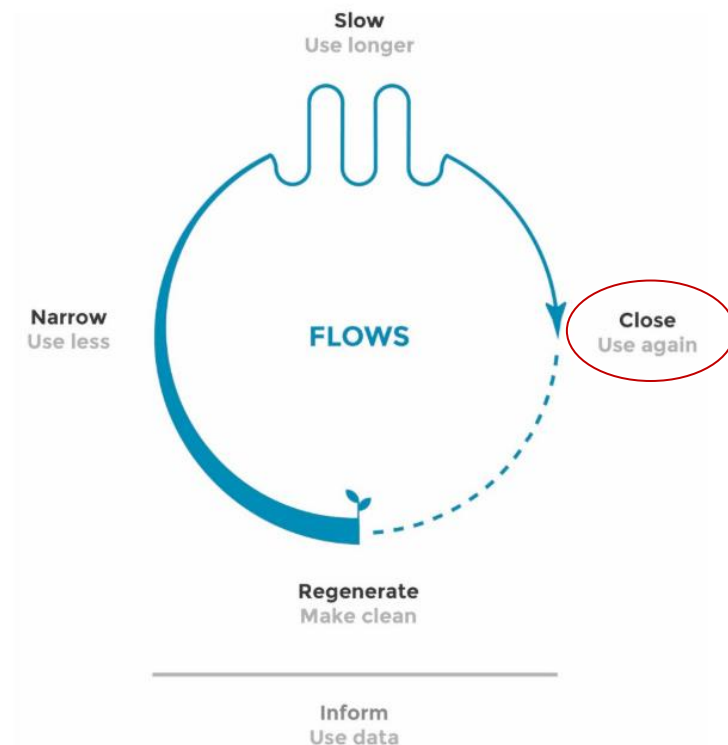
Uudelleenvalmistus:
Tehdaskunnostetut Valtra Reman-
vaihteistot ja moottorit traktoreihin





Interface[®]

Hukatun arvon valjastaminen:
Hylätyistä kalastusverkoista
kokolattiamatoiksi

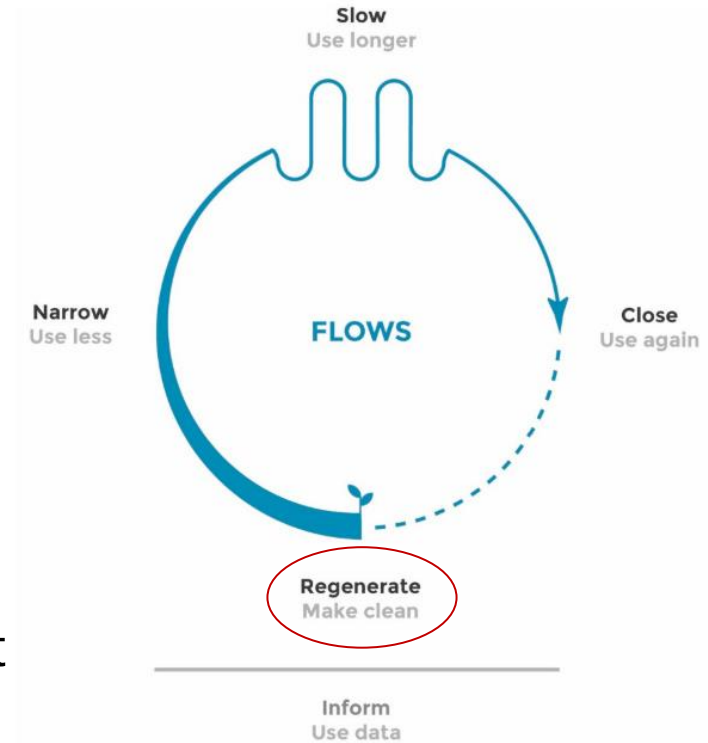




SONO MOTORS

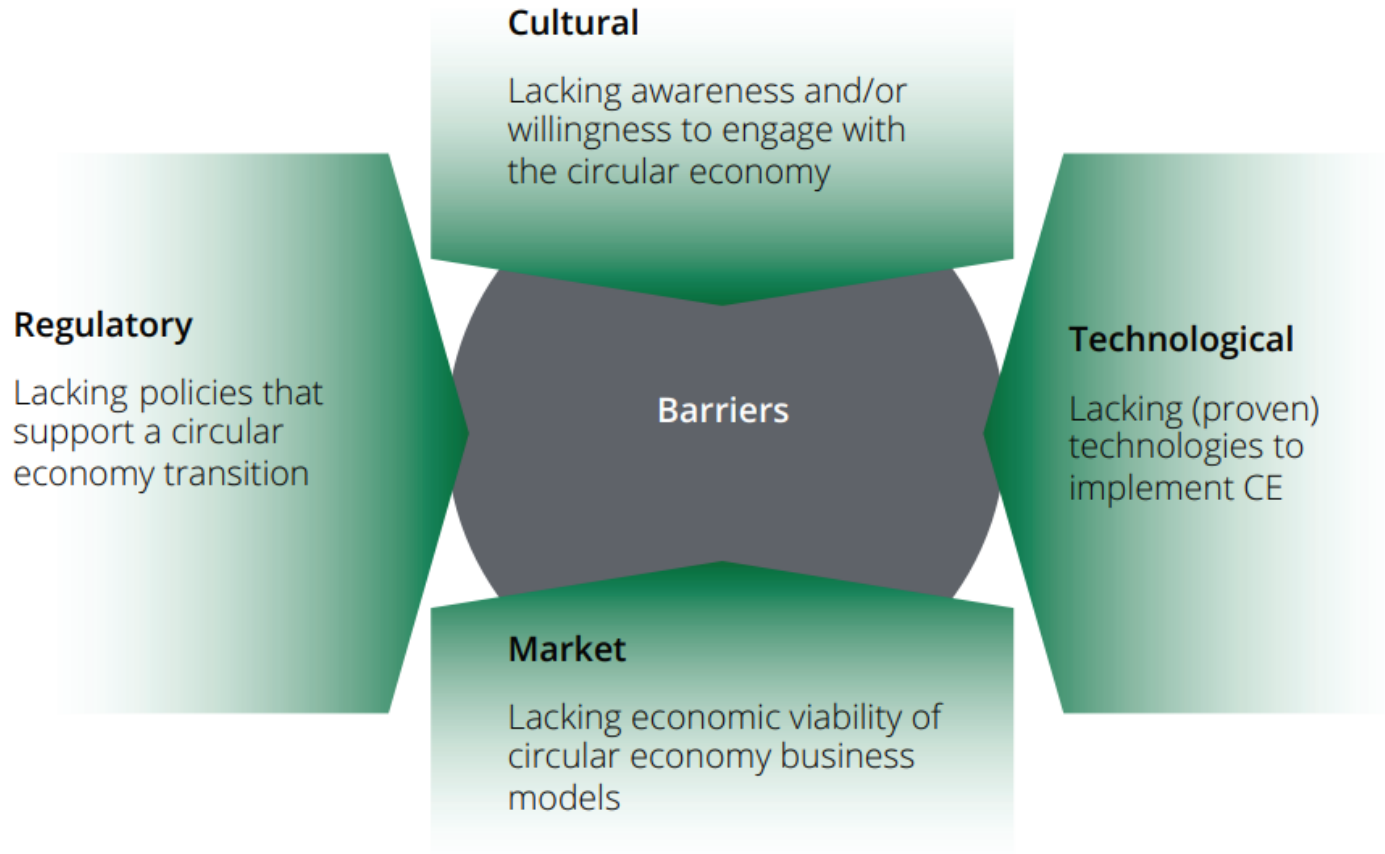
Uusiutuva energia:

Sono Motorsin sähköautoon integroidut aurinkopaneelit lataavat auton akkua

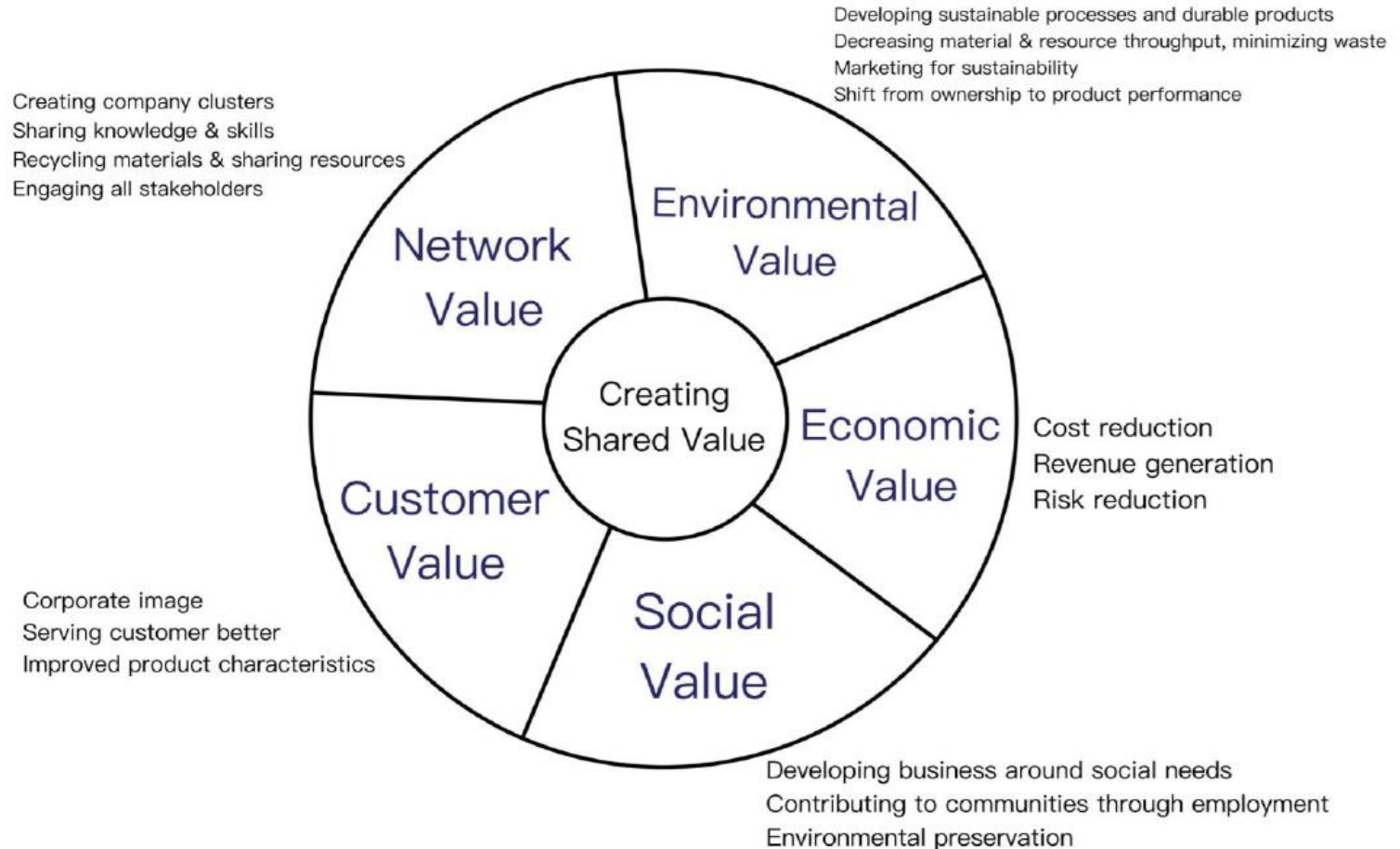


3. Kiertotalousliiketoiminnan haasteet ja mahdollisuudet pk-yrityksille

Kiertotalousliiketoiminnan haasteita

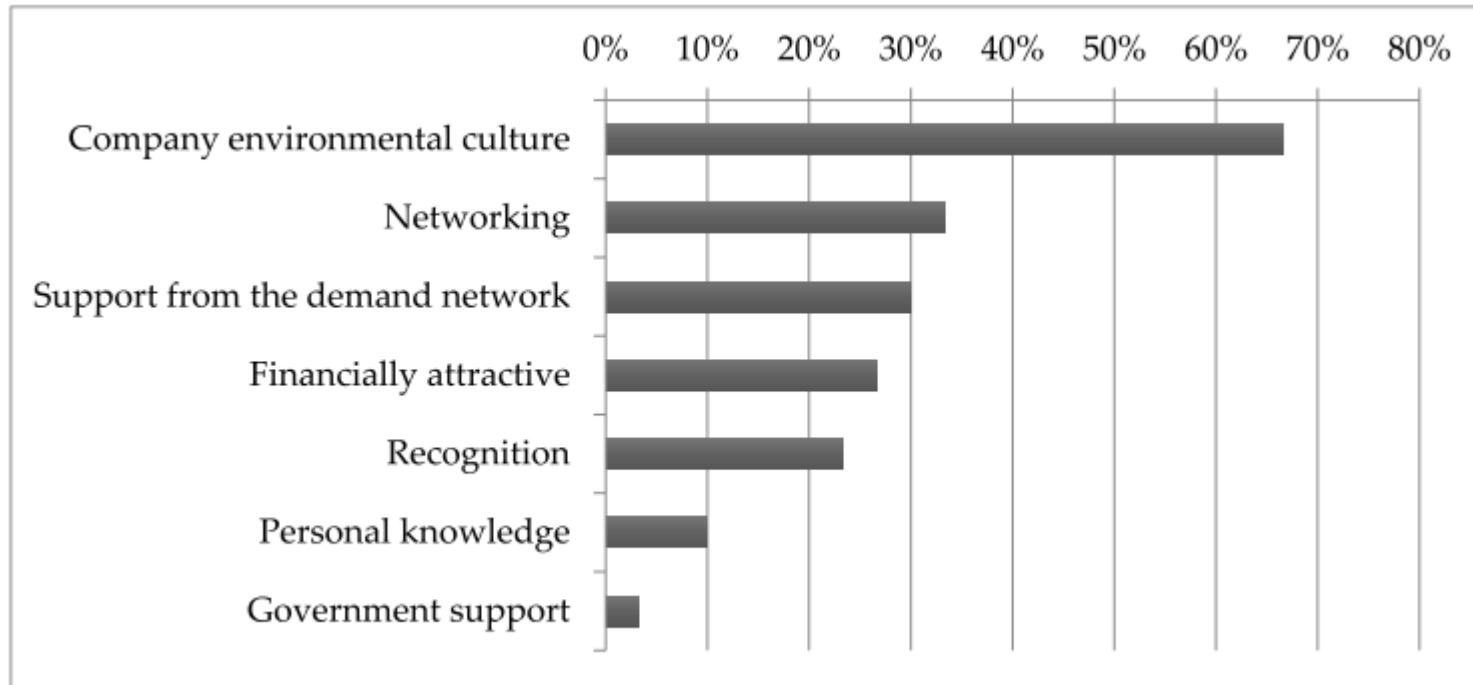


Kiertotalouden mahdollisuudet uuden arvonluonnin kautta



Kiertotalousliiketoiminnan mahdollistajat

Vastaajana 30 eurooppalaista pk-kiertotalousyritystä



Rizos, V., Behrens, A., Van der Gaast, W. et al. (2016). Implementation of circular economy business models by small and medium-sized enterprises (SMEs): Barriers and enablers. *Sustainability*, 8(11), 1212.



Aalto University
School of Business

“An important [circular economy business] enabler is company leadership that goes beyond pure everyday management and that considers a circular business model to be more effective and efficient in the longer run.”

-Rizos et al. (2016)

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Kiitos!



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