New Strategies for Sustainable Textiles and Fashion in the European Market
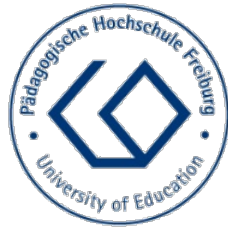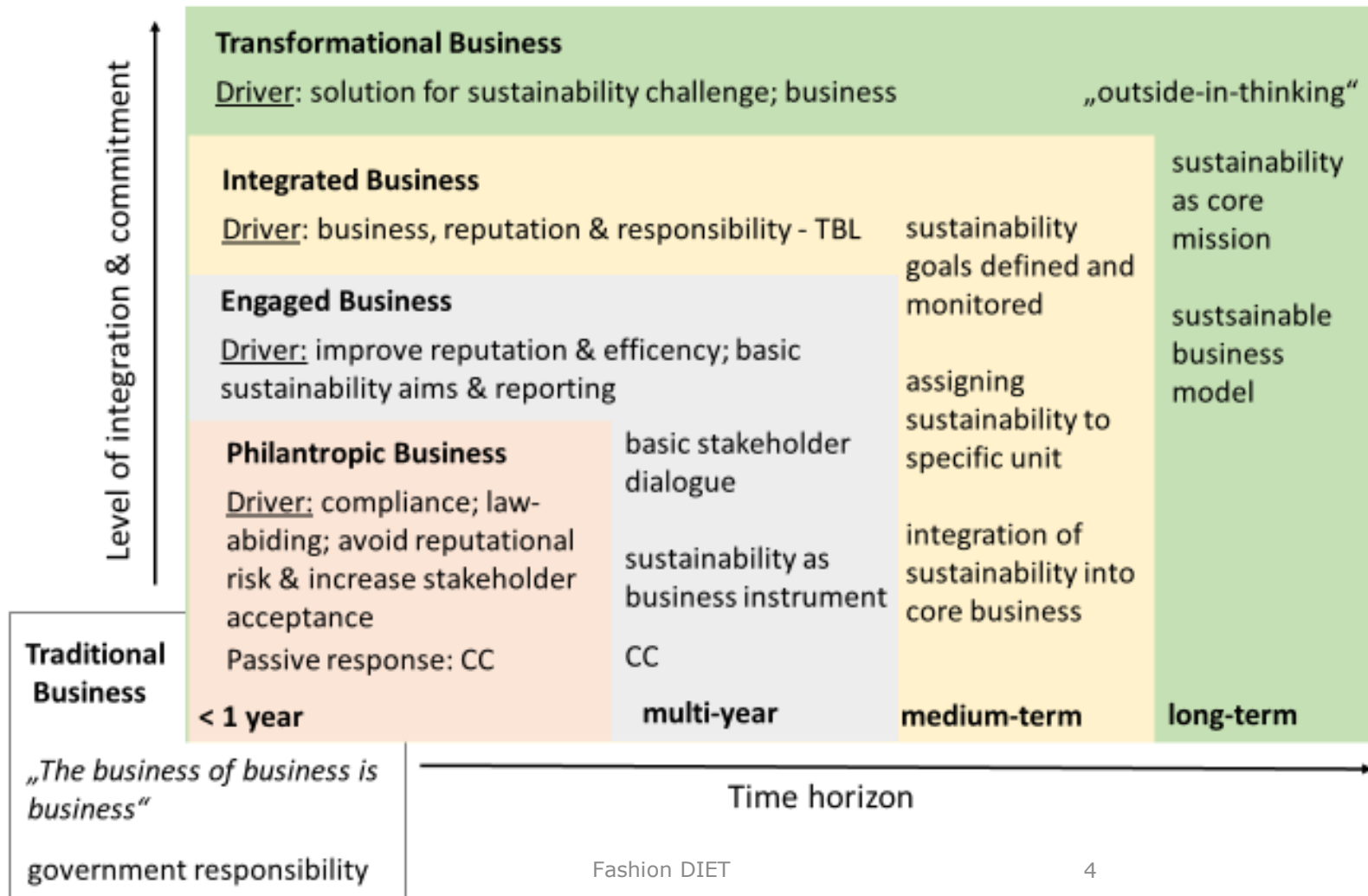
Learning Objectives

After this lecture you should be able to:

- Differentiate the sustainability initiatives of companies
- Describe how companies can contribute to sustainability
- Explain the role that employees play for corporate sustainable development
- Outline the concept of Product-Service Systems (PSS)
- Explain different capabilities that are conducive to PSS implementation
- Describe what Circular Economy (CE) is and how CE initiatives can be implemented

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Stages of Corporate Sustainability (CS)

Stages of Corporate Sustainability (CS)

Level of integration & commitment →

Transformational Business

Driver: solution for sustainability challenge; business — „outside-in-thinking"

Integrated Business

Driver: business, reputation & responsibility - TBL

Engaged Business

Driver: improve reputation & efficency; basic sustainability aims & reporting

Philantropic Business

Driver: compliance; law-abiding; avoid reputational risk & increase stakeholder acceptance

Passive response: CC

sustainability as core mission

sustsainable business model

sustainability goals defined and monitored

assigning sustainability to specific unit

integration of sustainability into core business

basic stakeholder dialogue

sustainability as business instrument

CC

Traditional Business

< 1 year   **multi-year**   **medium-term**   **long-term**

„The business of business is business"

Time horizon →

government responsibility

Traditional Business

- Economic model: only purpose of business is to increase its profits
- By doing so companies contribute to social welfare: creation of products or services that make our lifes better, more efficient, healthier, safer etc. + creation of employment
- If companies focus on other issues (e.g. sustainability): competitors will replace them → unemployment + government spending increase
- Solving the sustainability problem is the responsibility of the government: make laws and regultaion
- Within this regulative environment companies can freely operate and have no further responsibility but stick to laws

Philantropic Business

- Compliance-driven: organization sticks to existing laws and does not try to circumvent them

- Companies try to increase stakeholder acceptance and avoid reputational risks

- Corporate Citizenship such as sponsoring, donations, foundations and engagement within the (local) community

- The core business and how the company operates to achieve its economic goals is not affected by the measures

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Engaged Business

- Basic understanding and awareness of sustainability within the organization

- Basic sustainability reporting: company reports what it does (but not what it does not)

- Marketing and promotion of its sustainability initiatives and its sustainable products

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Engaged Business

- Sustainability as a means for the purpose of being economically successful:

- increase attractiveness as employer, differentiate from competitors, increase profit (because sustainable products can be sold at a higher price), sell more products (because sustainable products can be sold more easily)...

Integrated Business

- Sustainability unit is anchored within the organization with the purpose to foster sustainability engagement

- Advanced sustainability reporting

- Triple Bottom Line implemented: ecological and social goals are defined (besides economic goals) → Problem: not possible to equally quantify and balance all three pillars

- Problem: often results in a lot of single measures that make the product more sustainable but the question remains open if the product is needed at all

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Transformational Business

- Change of perspective: from „inside-out-perspective" towards „outside-in-perspective"

- Instead of producing any product and throwing it on the market, the company looks outside: observes what societal problems exist, what products are needed and tries to solve the problem

- Only products are created that are really needed

Cornerstones of Corporate Sustainability

Transparency, comprehensive communication, and disclosure of nonfinancial information

- External and internal communication to provide different stakeholders information on challenges, achievements, and the progress of the CS policy

- On a basic level: external communication through sustainability reporting in the form of a stand-alone sustainability report, or integrated into the annual report following standardized reporting and disclosure frameworks

- On a more advanced level: based on a two-way communication by inviting stakeholders to comment on critical aspects of the firm's business activities → improves identification with the company and generates trust

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Transparency, comprehensive communication, and disclosure of nonfinancial information

- Internal communication is essential for facilitating internal adoption of CS: Employees can only understand and commit to the firm's sustainability mission if the related strategies, objectives, and measures are communicated clearly and transparently

- For this purpose companies utilize different communication channels such as intranet, email, booklets, presentation, and direct communication between managers and employees

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Stakeholder dialogue

One of the most important cornerstones of corporate sustainability

- Understanding stakeholder expectations and integrating stakeholder interests into business consideration

- Stakeholders can be internal or external to an organization:
    - *Internal stakeholders* = people/groups with a direct relationship to the firm, such as employment, ownership, or investment
    - *External stakeholders* = people/groups who do not directly work with a company but are affected in different ways by the actions and outcomes of its operations such as suppliers, creditors, and public groups

Stakeholder dialogue

- Companies face mutually exclusive demands and ambiguous expectations between different stakeholder groups: each company is involved with a wide range of heterogeneous stakeholders

- Participatory approaches facilitate managing interdependencies

- Shift away from one-way communication to an interactive dialogue that is based on mutual learning processes with feedback loops

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Stakeholder dialogue

- Examples: one-to-one dialogue, working groups, roundtables, conferences, web-based forums, social auditing, or collaborative projects

- Such approaches embrace close, long-term relationships and are compatible with the key competencies and the vision of a company

Organizational learning

- Holistic CS is in accordance with the prevailing organizational norms, values, and beliefs

- Cannot be achieved overnight and requires working within a more long-term-oriented time horizon

- CS is considered as an evolutionary and circular activity: implies constant improvement of organizational learning capabilities to constantly react to environmental changes

  →companies with sophisticated CS have an implemented knowledge management system that facilitates developing, maintaining, transferring, applying, and measuring knowledge
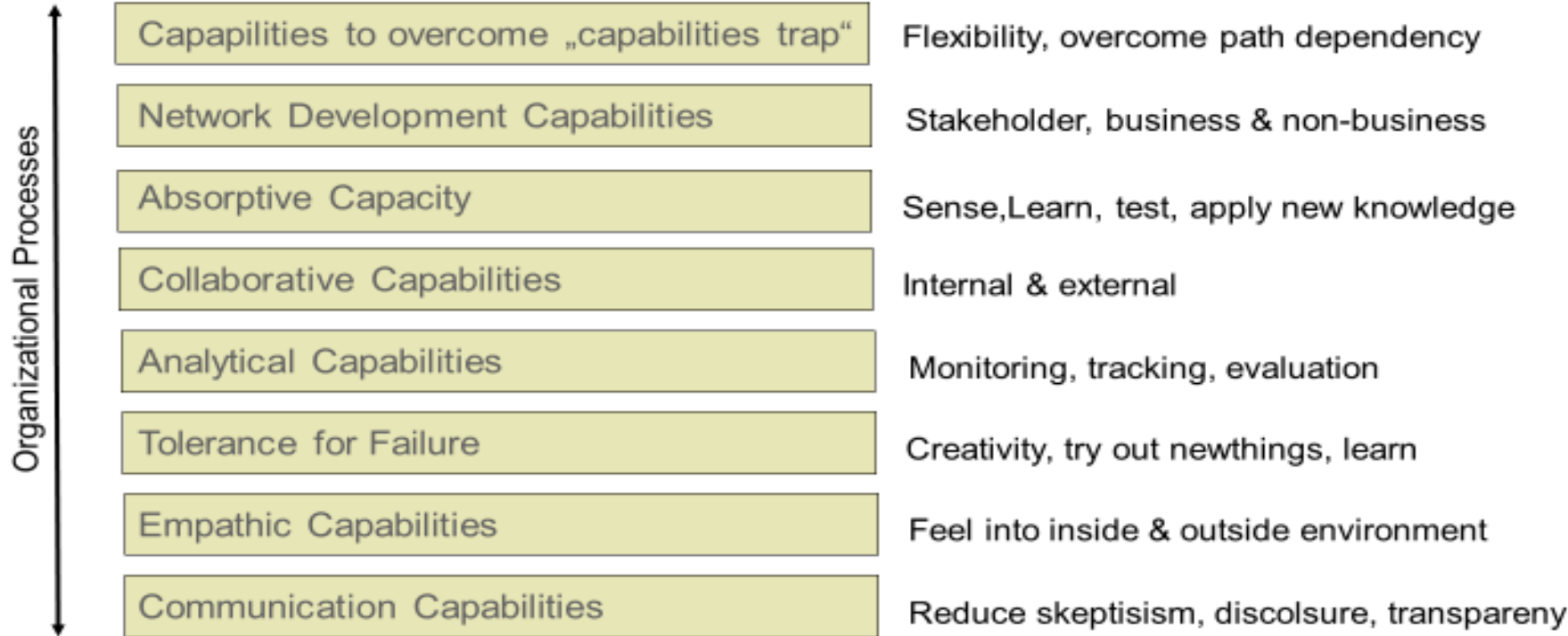
Organizational learning

- Monetary and nonmonetary incentive system: links individual rewards with sustainability goals of an organization by rewarding employees and managers for good environmental behavior or sustainable initiatives

- Implies mature structures of personnel environmental training and the empowerment of employees to participate in sustainability problem-solving initiatives

Key Capabilities for Corporate Sustainability

Fashion DIET

Organizational Structures

Organizational Processes

Capability	Description
Capapilities to overcome „capabilities trap"	Flexibility, overcome path dependency
Network Development Capabilities	Stakeholder, business & non-business
Absorptive Capacity	Sense, Learn, test, apply new knowledge
Collaborative Capabilities	Internal & external
Analytical Capabilities	Monitoring, tracking, evaluation
Tolerance for Failure	Creativity, try out newthings, learn
Empathic Capabilities	Feel into inside & outside environment
Communication Capabilities	Reduce skeptisism, discolsure, transpareny

Trust, long-term, co-creation, loyalty

Prospect of success rests in individuals of the organization

The Role of Employees in Corporate Sustainability Strategies
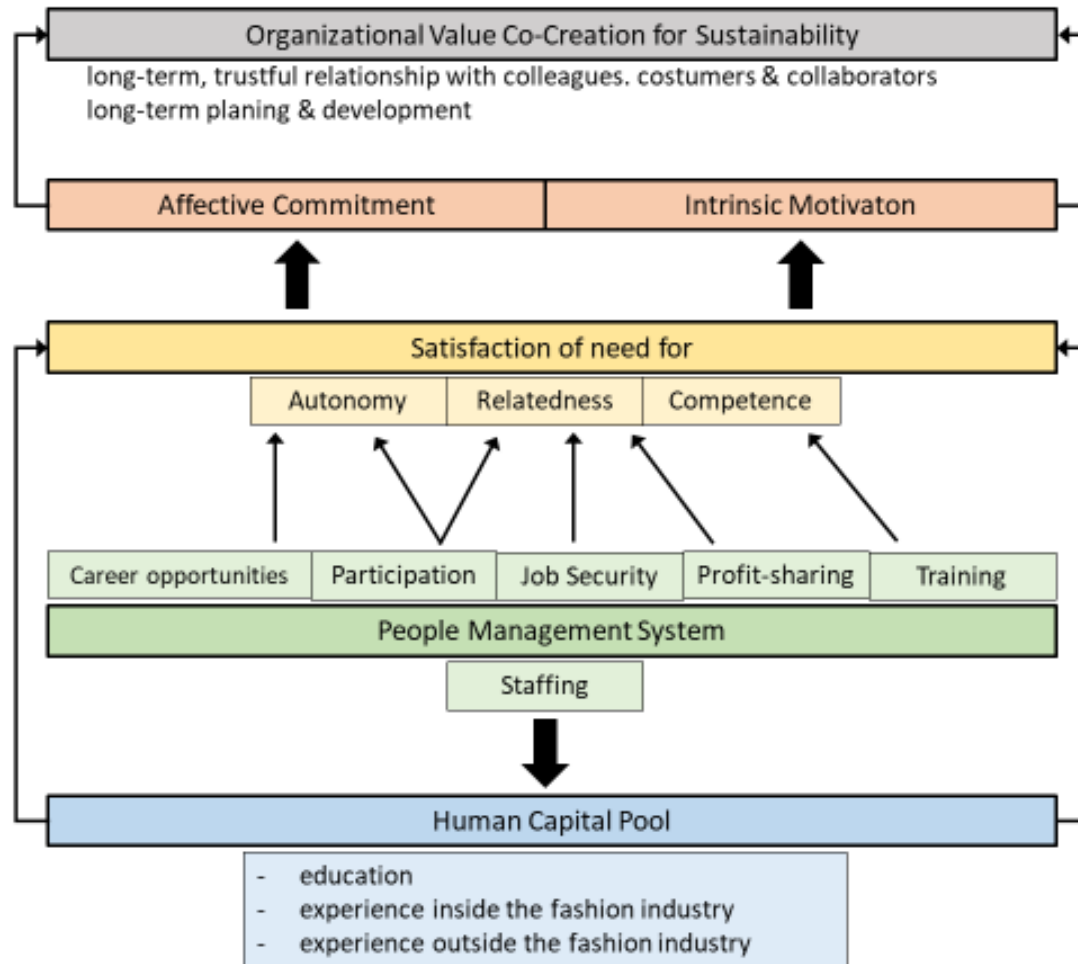
Get Employees involved

- Employees play decisive role for CS: A company cannot exist without employess: they need to support the CR directive and put it into actual practice

- Huge potential for CS lies in employees:
  - Many live a sustainable lifestyle in their private lifes and like to transfer their way of living to their professional life
  - Many bring in a lot of education and experience that could and should be exploited
  - Employees are the major point of intersection between firm and customers and thus represent the firm`s values in the eye of the customer

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Employee Attitude Towards Sustainability

N=2763 employees / 102 fashion companies / 7 countries / 71,8% < 50 Mio EUR TO / May-August 2016 / online survey; Scale: 1=strongly disagree / 5=strongly agree

Question	Mean	SD
Sustainability is important to me	4.07	.68
In my everyday life I live a sustainable lifestyle	3.71	1.26
I know a lot about sustainability	3.28	1.01
I want to learn more about sustainability	4.22	.59
Sustainability is important for the company I work for	2.03	.98
Sustainability is part of my daily tasks at work	1.71	.76
The company I work for should focus more on sustainability	4.26	.83
I would like to be involved into sustainability projects in the company I work for	4.13	.92

Adam (2016)

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The role of human resource management (HRM) for CS

Organizational Value Co-Creation for Sustainability

long-term, trustful relationship with colleagues. costumers & collaborators
long-term planing & development

| Affective Commitment | Intrinsic Motivaton |

Satisfaction of need for

| Autonomy | Relatedness | Competence |

| Career opportunities | Participation | Job Security | Profit-sharing | Training |

People Management System

Staffing

Human Capital Pool

- education
- experience inside the fashion industry
- experience outside the fashion industry

Human Capital

- Comprises characteristics such as skills, education and experience possessed by an organization´s individuals at a given time

- It can be aggregated to a unit-level resource that contains the accumulative individual human capital within teams, groups or the entire organization in a way that creates value for the firm

- This stock changes over time and needs to be aligned with the strategic orientation of a firm

- Compared to physical and financial capital, the uniqueness of human capital resides in the fact that employees cannot be separated from their personal skills, knowledge and capabilities

Employee Commitment

- High level of human capital is not necessarily beneficial for the firm and CS → If not all members of the human capital pool engage in behavior that is beneficial for the firm, human resources are not efficiently deployed

- Regardless of their personal skills, employees take individual decisions on their behavior and commitment to the firm

- Commitment plays a significant role for organizational innovation

- Commitment can be separated into *affective commitment* and *continuance commitment*

Affective commitment

- Employees with a strong affective commitment have an emotional bond with the organization and stay with it because they want to

- It is reflected in identification with the firm, pride to be part of the firm, and the desire and willingness to exert efforts so that the firm achieves its goals

- Employees develop affective commitment to a firm if associating with this particular firm allows them to satisfy their primary needs, provides prestige, responsibilities, challenges, and enables them to achieve their personal career goals

Continuance commitment

- Refers to an employees propensity to stay with the firm because leaving the firm could entail a potential loss or costs for them

- Employees whose primary attachment to the firm is based on the need to stay, have little inducement to generate value for the firm

- Continuous commitment is, therefore, assumed to be negatively or unrelated to job performance

- Only employees who are emotionally attached to the firm will fully utilize their skills and exploit their potential

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People Management Systems

- The human capital pool is built and employee commitment is elicited through various Human Resource (HR) practices

- HR practices comprise of activities such as staffing, training, rewards, career opportunities, employment security, profit-sharing and participation

People Management Systems

This bundle of practices can be referred to as the "people management system":

- Combines human capital elements with employee behavior, and shapes elements beyond the control of HR functions, such as culture, competencies and attitudes
- Builds up the human capital pool and influences employees' willingness to exploit their personal potential

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People Management Systems

- Firms that implement CS score high on people management systems

- Measures such as training, profit-sharing, participation, employment security and career opportunities contribute to nurture employees' intrinsic motivation

- The intrinsic motivation of employees has is a critical determinant for CS implementation

Self-determination theory

- *Self-determination theory* (Deci & Ryan, 2008) proposes three universal and innate needs of individuals that are essential for psychological health and personal well-being: the need for autonomy, competence, and relatedness

- *Need for autonomy:* met if individuals perceive their behavior as freely chosen and volitional

- *Need for competence:* met if they feel skillful, effective and confident in the activities they perform

- *Need for relatedness:* met if individuals feel accepted, understood and socially attached to a wider system

Deci & Ryan (2008)

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Self-determination theory

→They are nutriments for intrinsic motivation and people will actualize their intrinsic motivation if those needs are satisfied

→To optimally nurture and elicit the intrinsic motivation of employees, firms should create a work environment that allows employees to satisfy those needs

→Firms that implement CS have adopted various HR practices for that purpose

Deci & Ryan (2008)

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Strategies & measures

Satisfaction of the need for relatedness

- *Employee participation:* being involved in the decision making of the firm → ability to influence working conditions and contribute to the firm's success

- Indicates being significant to others and implies an experience of trust and recognition for the work performed

Strategies & measures

Satisfaction of the need for relatedness

- *Job security:* Employees that develop a mutual history with their organization, take on responsibility and suggest improvements without the fear of job loss

- *Profit-sharing:* makes employees more aware of the firm's interests and promotes the perception of shared values → strengthens the bond between employees and organization

Strategies & measures

Satisfaction of the need for competence

- *Training:* ability to further improve personal competences makes employees feel more secure in terms of employability and their future career → increases their confidence to apply their skills and proactively engage in new challenges

- Feeling of being important and taken care of by their organization

Strategies & measures

Satisfaction of the need for autonomy

- Satisfied if employees experience their work as fulfilling + perceive the tasks they perform as meaningful, exciting and personally interesting → feeling of not being controlled/pressured; high degree of freedom of choice

- *Extensive training opportunities + participation* foster autonomy → employees become capable and empowered to independently make decisions and assume responsibility

Strategies & measures

Satisfaction of the need for autonomy

- *Internal career opportunities*: specific interests of individual employees are taken into consideration when job vacancies need to be filled

- Allows employees to freely decide on their future career path → enables them to put their effort into quality initiatives rather than concerns about their career

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Product-Service Systems (PSS)

Instead of selling solely tangible products PSS focus on **fulfilling final customer needs** through offering complementary service elements

→ Products alone not valuable - serve as vehicle to address customer needs. Companies only offer value propositions - value creation occurs as co-creation in networks
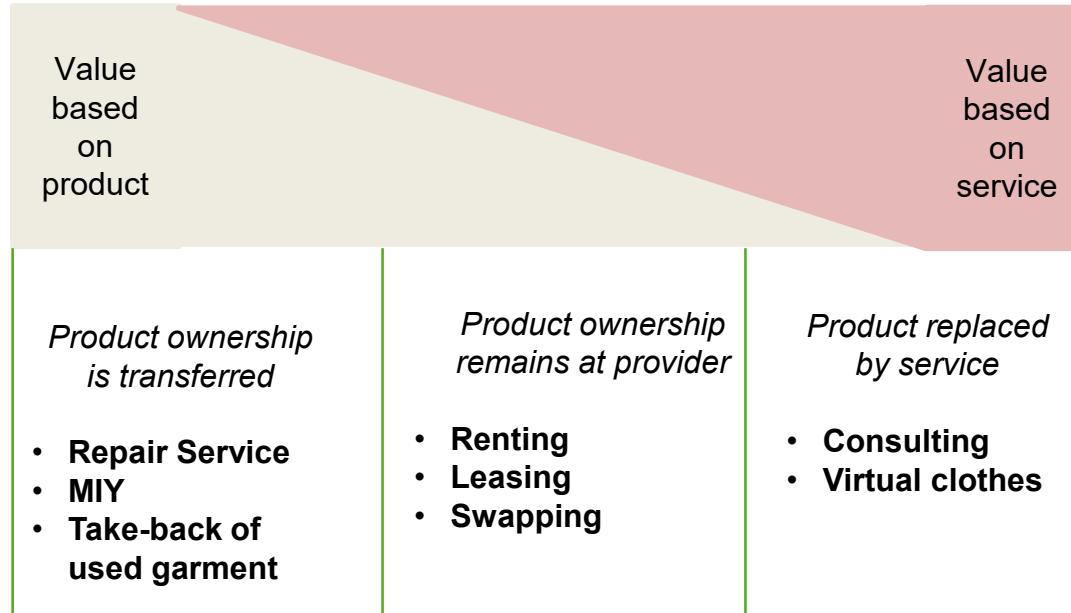
Benefits for the environment
Customer satisfaction decoupled from material consumption
  → fewer material resource input is required for corporate value creation

Benefits for companies (especially in high competitive industries)

- differentiation

- compete with cost pressure

- mitigate risk of being imitated by rivals

- enhance customer relationships

PSS in the range between pure products and pure services

Value based on product		Value based on service
Product ownership is transferred	*Product ownership remains at provider*	*Product replaced by service*
• **Repair Service** • **MIY** • **Take-back of used garment**	• **Renting** • **Leasing** • **Swapping**	• **Consulting** • **Virtual clothes**

Tukker, 2004; Tukker & Tischner, 2006; Baines et al. 2007

→ PSS contradict the traditional, linear fashion business model: Implementation requires new distribution channels, revenue streams, logistics and expertise

PSS Types

1. Product-oriented

- Products are sold in a traditional manner but supplemented by extra services, such as after-sales services, that ensure long-term functionality (e.g., maintenance and repair services) or optimized application of the product (e.g., training and consulting)

- Customer satisfaction is still gained by ownership but enhanced by the convenient feeling of possessing an enriched product

Examples Product-oriented PSS

Repair

Levi's or Patagonia's repair initiatives are among the first and most popular examples of product-oriented PSS on a large scale.

→Repair or redesign offers intensify the use and extent the garment's lifespan

→Particularly in the outdoor segment, repair services are gaining more and more attention.

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Examples Product-oriented PSS

Take-back schemes

- Allow customers to bring their used garments to the retailer and receive a voucher or discount per donated bag

- Received clothes are not disposed but passed into a close loop system to be sorted, reused and recycled

- Take-back of used clothes has recently gained a certain popularity when it was introduced by large retailers like H&M or C&A

Examples Product-oriented PSS

Make-it-yourself concept

- Among others, sportswear manufacturers like Nike, Adidas, New Balance and Reebok have launched initiatives that allow customers the opportunity to create and personalize their individual sneaker

- Customers develop an emotional bond with the fashion item and are less likely to dispose it soon.

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PSS Types

2. Use-oriented

- The use or functionality of a product is sold while the ownership of the product remains at the company that offers

- Thus, customer satisfaction is achieved through appreciating the inherent function of a product rather than through its physical possession

- Frequently cited examples are sharing or renting programs

Examples use-oriented PSS

- Offers to **rent apparel** or

- **Platform that allows customers to swap clothes**

- **Fashion libraries** (increasingly in city centers)

- **Online platforms** where consumers can rent particular fashion items for a special occasion

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Examples use-oriented PSS

- Instead of purchasing new apparel, consumers share already existing fashion items → Hence, the effective use of the garment is intensified

- This is especially successful for garments that are rarely worn like bridal wear or skiwear, or for babies who periodically outgrow their clothes

- Examples also embrace luxury and premium products: "Rent the Runway" has led the way and with "Prêt-à-Louer", "Dresscoded", "Chic by Choice" and "Le Tote", other global firms are successful with offers to rent premium and luxury clothes

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PSS Types

3. Result-oriented

- The company sells a result, a capability, or a competency that underlies a product while the respective product still remains the property of the company

- Examples may be selling laundered clothes (instead of a washing machine), web services (instead of a dictionary), or transportation (instead of a bus)

Capabilities & Strategies to implement PSS

Network development capability

- ability to develop and utilize relationships with entities outside the firm

- sharing ideas

- openness for improvement suggestions from external parties

- discussing and reflecting ideas with close social contacts

- conveying enthusiasm for the idea to close contacts

Adam et al. (2018), p.55

Capabilities & Strategies to implement PSS

Network governance capability

- establishing contacts with fashion bloggers, artist, consultants, designers etc. to learn about the feasibility of the idea

- relational skills to build up high-trust and amicable relationships

- initial contacts through face-to-face meetings

- asking openly and directly for advices, illustrating their idea in greater details and explaining the reason for the visit

- exchange with competitors

- uncomplicated straightforward demeanor

Adam et al. (2018), p.55

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Capabilities & Strategies to implement PSS

Empathic capabilities

- empathically observing consumers: deep understanding of customers´ specific feelings, every day practices, desires, lifestyles

- exchanging with consumers on a personal and amicable basis

- encouraging consumers to disclose personal feelings and behavior

- creating a relaxed atmosphere - make customers feel comfortable

- sharing similar values, needs and problems with customers

- evaluating and incorporating gained knowledge on customers

Adam et al. (2018), p.55

Capabilities & Strategies to implement PSS

Ability to collaborate

- delegating specific tasks to third parties: focusing on core competencies

- efficiently coordinating partnerships to obtain and assemble resources

- purposefully selecting required partners required and establishing reliable and long-term cooperations

- repeatedly working together on informal relationships with little bureaucratic administration and implicit, open-ended contracts

- creating trust

Adam et al. (2018), p.55

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Capabilities & Strategies to implement PSS

Customer-focused communication

- finding the right words and ways to address skepticism

- quickness, ability to interact promptly

- reducing uncertainties: presenting motives, liabilities and benefits transparently

- establishing and maintaining reciprocal lines of communication

Adam et al. (2018), p.55

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Capabilities & Strategies to implement PSS

Customer integration capabilities

- understanding existing consumer habits, influential factors of consumer satisfaction, major barriers for adopting novel solutions

- close supplier-customer interaction; early involvement of customers

- continually seeking customer feedback: customer interaction as a natural and every day task.

- absorbing, systematically evaluating and testing customer feedback for feasibility

- relaxed and open-minded interaction with customers to gain honest feedback

Adam et al. (2018), p.55

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Capabilities & Strategies to implement PSS

Network Learning Capabilities

- creating new knowledge from external networks and sharing information

- accepting knowledge spillovers

- acquisition of knowledge through collaboration with universities

Adam et al. (2018), p.55

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Capabilities & Strategies to implement PSS

Governance and Orchestrating of PSS

- maintaining flat hierarchies to remain flexible

- corporate culture based on a shared open-minded and passionate mindset

- client-focused learning capabilities

- episodic learning capabilities

- ability to unlearn familiar routines

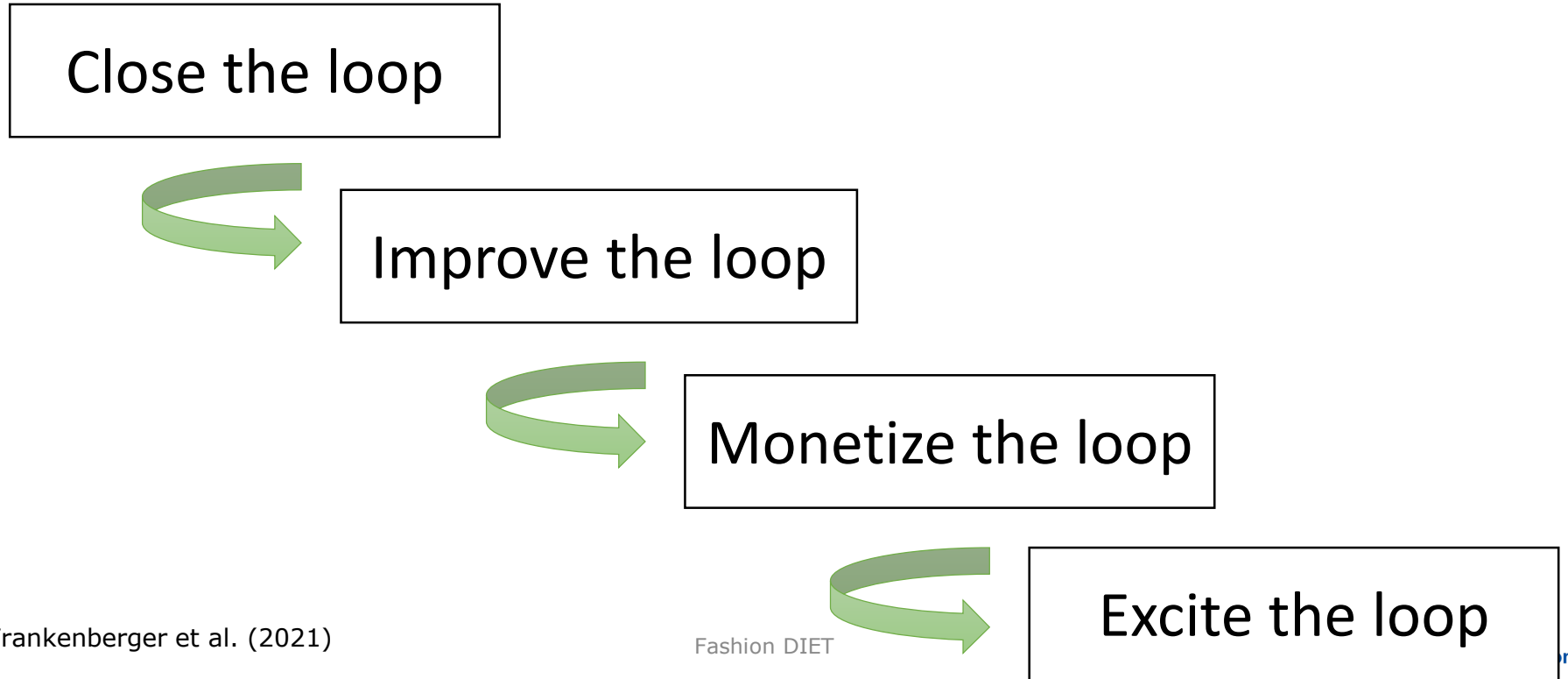- long-term orientation and promoting responsible fashion consumption

Adam et al. (2018), p.55

Strategies towards a Circular Economy (CE)

Four main steps companies can follow to implement a CE approach

Close the loop

Improve the loop

Monetize the loop

Excite the loop

Frankenberger et al. (2021)

Step 1: Close the Loop

The loop can be closed by direct reuse of products, by part-reuse measures such as refurbishment or traditional recycling, or through biodegradability:

Use an intelligent product design

- Modularity, reversible connection techniques, and the avoidance of mixed materials: simplifies assembly and disassembly and helps to recover the product at the end of life

Frankenberger et al. (2021), para. 2

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Step 1: Close the Loop

- Requires close collaboration with all partners along the circular value chain, as it is unlikely and often inefficient for a single firm to realize all the different activities (production, take back, disassembly, etc.) on its own

Collaborate closely with partners

- Companies are not used to interacting with all the companies in the loop, but have rather focused on direct supplier or customer relationships

Frankenberger et al. (2021), para. 2

Step 2: Improve the Loop

Reducing the amount of resources and slowing down the flow of resources in the loop

→includes patterns like reparability, local production, and the use of renewable energies

→Firms need to dive deep into their own, as well as their partners', production processes and customer activities to understand the ecological footprint along the entire loop.

Frankenberger et al. (2021), para. 3

Step 2: Improve the Loop

This holistic view results in trade-off decisions, which are often not easy to make:

- The choice of a specific material might reduce the environmental footprint of your company
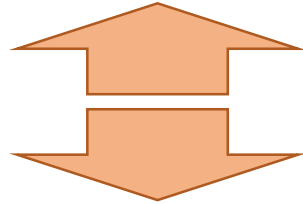
- It might increase the technical complexity and costs of another company in the ecosystem

→ Technology such as RFID can help.

Frankenberger et al. (2021), para. 3

Step 3: Monetize the Loop

How to capture the value of the circular product?

Key challenges:

- Firms need to break the dominant logic in the industry and develop a radically new revenue model
- Firms need to invest enough time in the creation of the revenue model
- Many companies put a lot of effort in the development of technologies, products, and processes

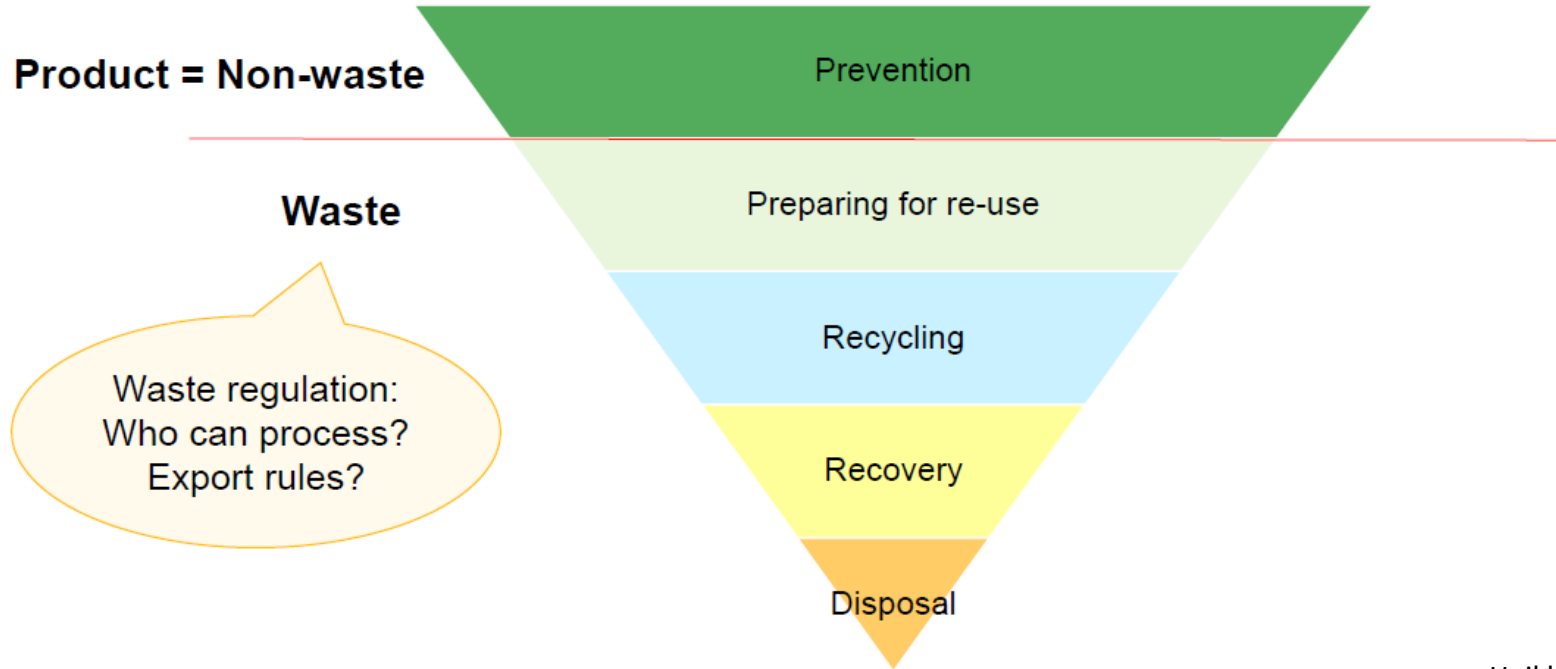Frankenberger et al. (2021), para. 4

Step 3: Monetize the Loop

! BUT: companies often forget the development of the right revenue model

→ Even the best circular product is of no value if the revenue model is not attractive for the customer

→ e.g. performance-based contracting revenue model: customers only pay for the performance of a product but not for the product itself

Frankenberger et al. (2021), para. 4

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Step 4: Excite the Loop

- Create attractive value propositions which go beyond the fact that the product is circular

→e.g. experience selling can lead to higher customer demand

→ how can a company create additional value for its customers by offering not only the product but an entire experience with its product?

Frankenberger et al. (2021), para.5

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Waste Hierarchy

Product = Non-waste

Prevention

Preparing for re-use

Waste

Recycling

Recovery

Disposal

Waste regulation:
Who can process?
Export rules?

Heikkilä, P. (2018), p.8

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Adopted Waste Hierarchy and Textiles

Lengthening of product life

Reduction of waste by consumption/shopping habits, repairing, tuning…

Reuse by donation, second hand stores and flee markets, renting, leasing…

New life for materials

Recycling 1) as fabrics, 2) as fibres or 3) as fibre raw materials

Other uses for fibres

End of life

Energy / thermal recovery

Consumers has large role in lengthening of product life

Service based businesses

Best option according LCA

Heikkilä, P. (2018), p.9

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Adopted Waste Hierarchy and Textiles
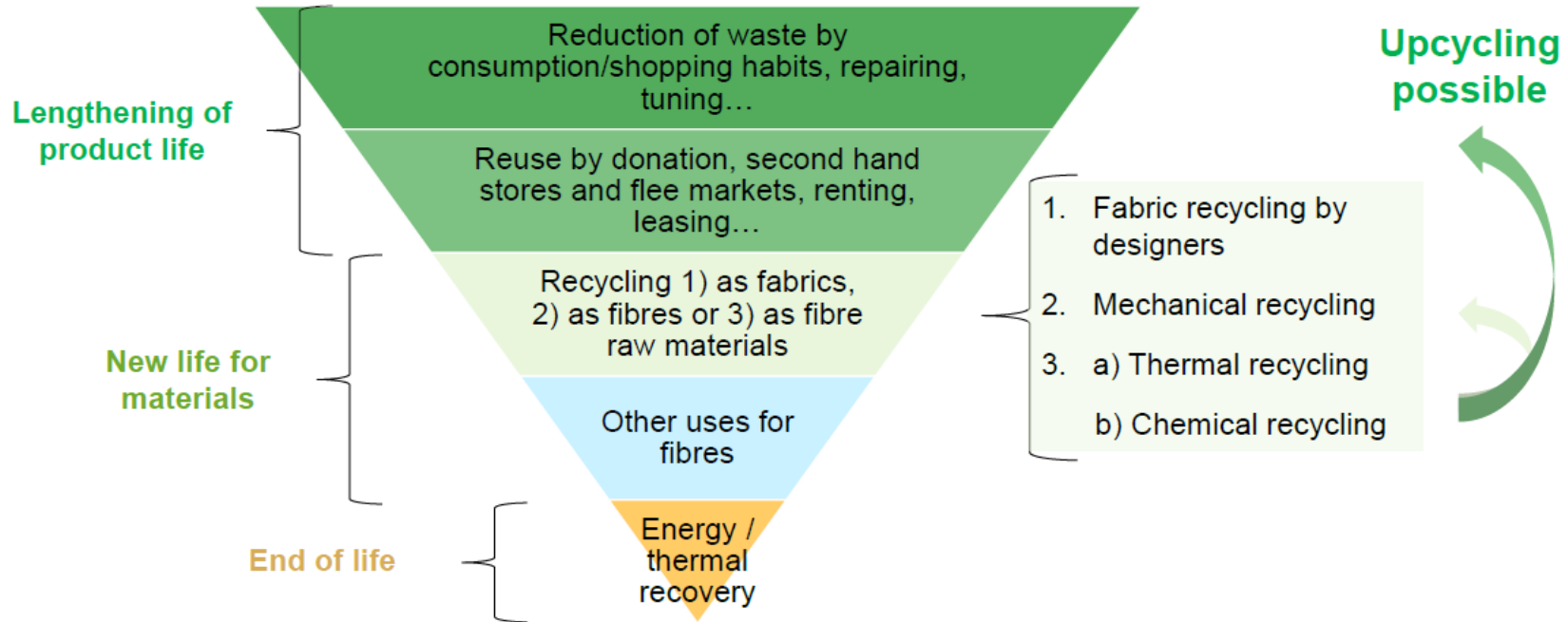
Heikkilä, P. (2018), p.10

Adopted Waste Hierarchy and Textiles

Lengthening of product life

Reduction of waste by consumption/shopping habits, repairing, tuning…

Reuse by donation, second hand stores and flee markets, renting, leasing…

New life for materials

Recycling 1) as fabrics, 2) as fibres or 3) as fibre raw materials

Other uses for fibres

End of life

Energy / thermal recovery

Wiping & absorbing products

Fibres as fillers in composites

Pyrolysis and gasification processes for producing chemicals

Heikkilä, P. (2018), p.11

Towards Circular Economy

- Textile reuse loops should be strengthened

    → business opportunities for forerunner companies

- Brands are interested in more sustainable/recycled materials, but supply still limited

- Rising consumer awareness helps in creation and increase of markets

- Multidisciplinary skills needed: digitalization and service based business models essential

Heikkilä, P. (2018), p.20

Fashion DIET

Towards Circular Economy

- Missing pieces of the value chain needs to be developed: Collecting system; sorting system; Upscaling of recycling technologies

- Regulation needs to be updated (waste, chemical, etc.)

- Public incentives and financial support could fasten transition to circular economy, and the building of new ecosystems

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The Future Sustainable Company

Let`s work!

How can *the* sustainable company in the future look like?

Discuss different attributes, behaviour, values and norms...

Future: The ~~sustainable~~ company.....

...is embedded in a society with new norms and values

...operates in a responsible capital market

- ...does not understand economic growth as only success
- ...produces less
- ...makes less profit (new work schemes & salaries gaps)
- ...is humble ... but not complacent (tap into new ideas/technologies)
- ...solves societal problems
- ...satisfies basic needs
- ...is fullly transparent and controllable
- ...empowers employees (control mechanism and innovative force)
- ...is coupled with a variety of external entities
- ...is diverse (different perspectives)

...is embedded in an equal society

...is embedded in a political system that globally enforces rigid sustainability laws

Contact

Dr. Marcus Adam

Marcus.adam@reutlingen-university.de

Prof. Dr. Jochen Strähle

Jochen.straehle@reutlingen-university.de