

Sustainable business models & Business model innovation



Haley Knudson, 13 February 2020
AI 521316 Sustainable Business Development

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About me

- BA in Sociology, University of California Santa Barbara
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- Researcher, Department of Industrial Economics and Technology Management (2014-2018)
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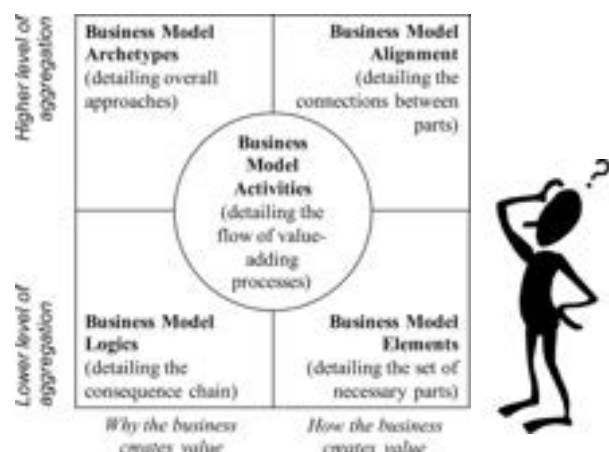
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Today's lecture objectives

- To understand and describe business models and their parts
- To be introduced to the field of *sustainable business models*
- To recognize ways to introduce sustainable value into companies' operations
- To be able to map and explain your case company's business model and suggest areas for business model innovation for sustainability

Multiple definitions and ideas about what a business model is...

- A representation
- A conceptual tool/model
- An architecture
- A pattern
- A framework
- A story
- A system



Some definitions

- **The reflection of a firm's strategy**
(Casadesus-Masanell & Ricart, 2010; Richardson, 2008; Seddon et al., 2004; Shafer et al., 2005)
- **"The story of how the company exploits business opportunities to create, deliver and capture value"**
(Jørgensen & Pedersen, 2015, 67)
- Describes **the rationale** of how an organization creates, delivers and captures value, and provides the organizational and financial **'architecture'** of a business and its understanding of its customers and their needs
(Teece, 2010)
- **"The content, structure, and governance of transactions** designed so as to create value through the exploitation of business opportunities"
(Amit & Zott, 2001)

Business models: Often framed around three value elements



Based on Richardson (2008) and Bocken et al. (2014)

BM definitions from your reading

- A conceptual tool to help understand how a firm does business
(Osterwalder & Pigneur, 2005; Bocken et al., 2014)
- Simplified representations of the value proposition, value creation and delivery, and value capture elements and the interactions between these elements within an organizational unit
(Geissdoerfer et al., 2018)

Value proposition

Solving customers' problems

“[a]n industry is a customer-satisfying process, not a goods-producing process”

(Levitt, 1960, p. 19 as cited in Jørgensen & Pedersen, 2015, p. 70)

- A product or service that helps customers to do a job or solve a problem more effectively, reliably, conveniently or affordably at a given price
- What problem does the product or service solve for the customer?
- What customer need does the product or service meet?

Value creation & delivery

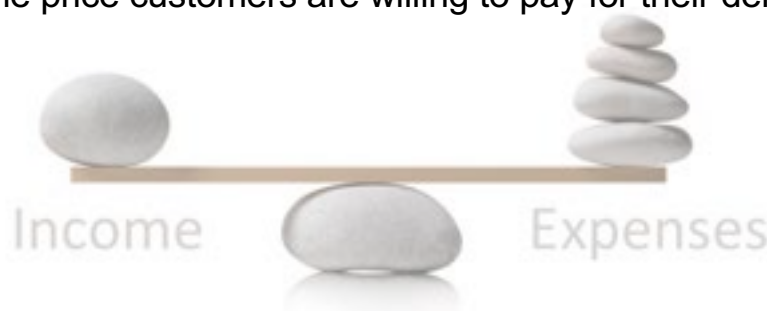
Utilizing resources and activities to deliver the greatest value to the customer

- the combination of the company's resources and activities that create and deliver the product or service to the customer
- **How** the company meets customer needs, solves their problems or does a job for them
- Different resources create different values – allows some companies to become more profitable or competitive than others

Value capture

Balancing costs and income

- How the company manages or structures the balance between its costs (associated with delivering value to the customer) and its income (the price customers are willing to pay for their delivered value)



To summarize

Value proposition

Product/ service,
customer
segments and
relationships

The product or
service provided to
the customer to
help them solve a
problem or carry
out a task or job

Value creation & delivery

Key activities,
resources,
channels,
partners,
technology

The company's key
resources and
activities necessary
for delivering the
product or service
to the customers





Value capture

Cost structure
and revenue
streams

How the company
achieves profitability

Based on Richardson (2008), Bocken
et al. (2014), Osterwalder & Pigneur
(2005)

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Value Proposition	<ul style="list-style-type: none"> Books Give customers the chance to shop from a wide choice of items at a lower price from home 	<ul style="list-style-type: none"> Books Bankrupt in 2011, acquired by Barnes & Noble Changed original value proposition when necessary 	<ul style="list-style-type: none"> Books Megastores, discounts, Publish own books Changed original value proposition from 'bricks & mortar' to 'bricks & clicks'
Value Creation & Delivery	<ul style="list-style-type: none"> Delivered through internet-based solutions Provide lower cost through good relationships with publisher & wholesalers – didn't have to have all stock on hand 	<ul style="list-style-type: none"> Continued building stores and formed alliance with amazon Did not invest in improving their own value creation 	<ul style="list-style-type: none"> Invested in own online shop Some M&As, but still bookstore with largest number of retail outlets in the US
Value Capture	<ul style="list-style-type: none"> Good margins between costs and income because of lower costs, lower prices and high volumes 	<ul style="list-style-type: none"> Profitably decreased because of the continued high costs associated with running stores and the reduction in income 	<ul style="list-style-type: none"> Reduced costs and increased income with fewer stores, while increasing income by coming in early to the online shopping space

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The business model canvas (Osterwalder & Pigneur, 2010)



Nine “building blocks” of a BM

- Offering
 - Value proposition
- Infrastructure
 - Key partners
 - Key activities
 - Key resources
- Customers
 - Customer segments
 - Channels
 - Customer relationships
- Finances
 - Cost structure
 - Revenue streams

- A template to understand and communicate a BM
- Applying the BM concept as an architecture of components

The business model canvas



The business model canvas

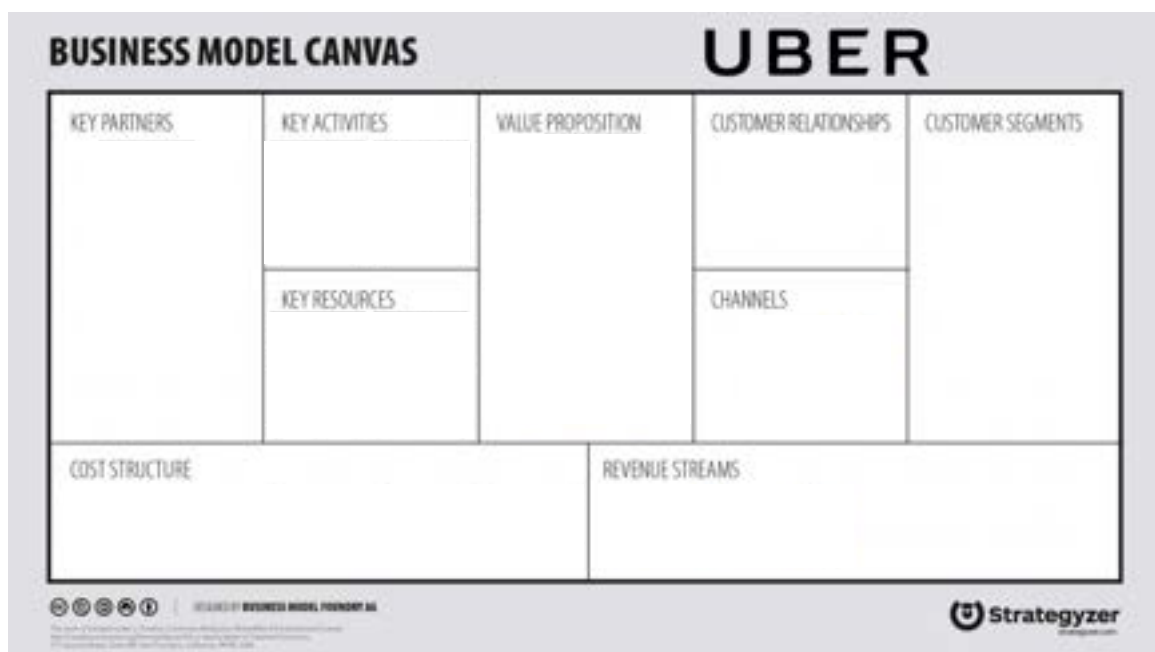
Value proposition

Value creation & delivery

Value capture



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INCORPORATING SUSTAINABILITY

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Sustainable business models (SBMs)

- A developing concept in business management literature
- A way to link *sustainable innovation* to the business model of a firm
- A means for business management to operationalize sustainable activities across its supply chain
- Concept originally conceived to help companies get involved in the needed transition to sustainability
 - Increasingly seen as a source of *competitive advantage*

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Combining strategy and sustainability

Terms to know

Competitive advantage

What allows an organization to outperform its competitors

- Cost advantage: offers same value proposition at lower cost
- Differentiation: better/ more unique value proposition

Porter (1985)

Sustainable innovation

“a process where sustainability considerations (environmental, social, financial) are integrated into company systems from idea generation through to research and development (R&D) and commercialisation” (Charter, 2007)

- applies to products, services, technologies and new business and organisational models

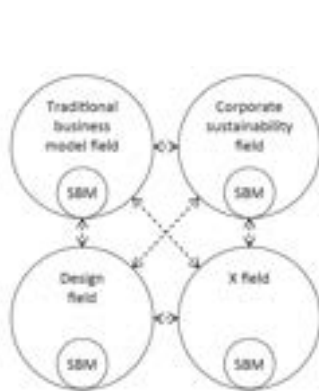
Defining a SBM

A business model for sustainability helps describing, analyzing, managing, and communicating:

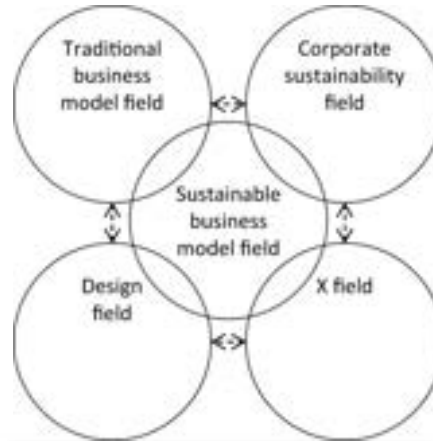
- a company's sustainable value proposition to its customers, and all other stakeholders,
- how it creates and delivers this value,
- and how it captures economic value while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries (Schaltegger, et al., 2015, p. 4)

Incorporating the value of natural resources, the environment and society into the way the firm creates and delivers value

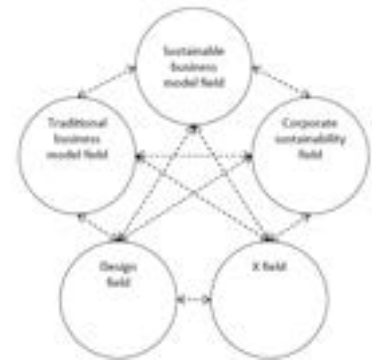
Concept or theory? Research field or buzzword?



Sub-field hypothesis:
SBMs as a niche within
already established
fields



Integration hypothesis: SBMs
as a field that depends on but at
the same time goes beyond
established fields



Stand-alone hypothesis:
SBMs as a field in itself,
distinct from established
fields

From: Lüdeke-Freund & Dembek (2018)

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Takeaways from literature review by *Geissdoerfer et al. (2018)*

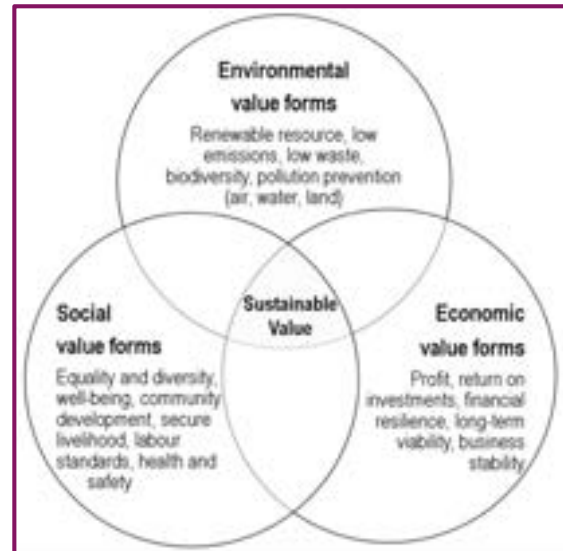
SBMs modify the traditional business model concept by:

1. incorporating concepts, principles and goals aimed at sustainability
- or
2. integrating sustainability into the value proposition, value creation & delivery and/or value capture

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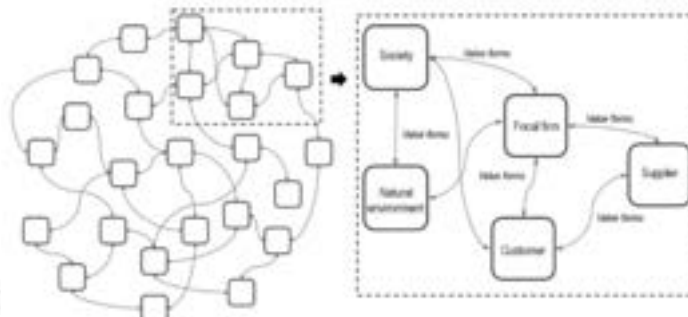
SBMs require

- Both the firm-level and systems-level perspectives
- The incorporation of sustainable value – designing a business model to capture economic value for itself through the capture of social and environmental benefits
- Changing the way business is done – not just what you do and what you offer to the customer
- Consideration of the triple-bottom-line
- Consideration of multiple stakeholders



Propositions of SBMs – trying to unify the literature (From Evans, et al., 2017)

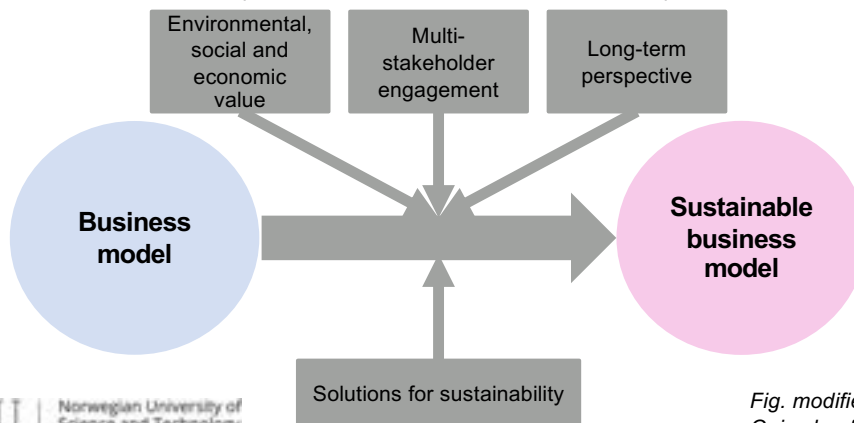
- Sustainable value incorporates economic, social and environmental (triple bottom line) benefits conceptualized as value forms.
- SBMs require a system of sustainable value flows among multiple stakeholders including the natural environment and society as primary stakeholders.
- SBMs require a value network with a new purpose, design, and governance.
- SBMs require a systemic consideration of stakeholder interests and responsibilities for mutual value creation.



Another SBM definition

SBMs are “business models that incorporate pro-active multi-stakeholder management, the creation of monetary and non-monetary value for a broad range of stakeholders, and hold a long-term perspective”

(Geissdoerfer et al., 2018, p. 403).



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Casting light and reducing shadows

The organizations's attempts to cast light (increase positive externalities) and reduce shadow (reduce negative externalities) help to make the sustainable business model work

1. Responsibility is part of the value that is offered and created for the customer, supplier or other stakeholders
2. The responsibility enables the company to access resources or carry out activities that would not otherwise have been possible

The company recognizes that it owns the **externalities** it creates (i.e. the effects of its operations on the environment and society)

By being responsible, is the company able to create and offer value that it would otherwise have not been able to offer?

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Company example: **STORMBERG**

SMÅ TUNER ER OGSÅ STØRRE

Ways the company has innovated to create sustainable value:

- 25% of employees are young people who have dropped out of the labor market due to drug use, convictions or mental disabilities
- Full transparency of where products are manufactured
- 1% of company's revenue (not profit) is used for humanitarian and charitable projects
- Climate neutral production
- Recycle materials (collection and distribution schemes for used products)

Stormberg example (cont'd)

Casts light through an increase in positive externalities:

- Provides jobs to those who need them
- Contributes 1% to humanitarian projects
- Products promote a healthy lifestyle

Reduces shadow by decreasing negative externalities:

- Climate neutral production
- Products last several seasons
- Deposit scheme for exchange of products, old products reused

Sustainable business model elements

Value proposition in a SBM

Provides social and/or environmental value in addition to meeting the customer's need

Value creation & delivery in a SBM

Based on sustainable supply chain processes that reduce ecologic and societal pressures, and consider impacts on stakeholders and environment

Value capture in a SBM

Recognizes the value awarded to the firm in performing in an environmentally and/or socially beneficial way

Based on Richardson (2008) and Bocken, et al. (2014)

Value proposition in a SBM

- Extends beyond its goal of highest economic return (e.g. lowest production cost regardless of resource use) and provides environmental and social value in addition to its economic value
 - Shows that the relationship between the firm and its customers is instead based on an exchange of value (wants and needs), rather than on the product or service itself
 - The firm may realize how changes in its customer's needs (e.g. desire for products or services that use fewer resources, are locally produced, or come from a company that contributes to the environment and community around it) affect the value projected and demand for its product or service

Value creation & delivery in a SBM

- Based on sustainable supply chain processes that reduce ecologic or societal pressure, and may allow the seizing of new opportunities, revenue streams and markets
 - e.g. through recycling and closed-loop systems, or creating new markets based in sustainable and efficient design or production
 - Drawing attention to its position in a larger system, the value creation concept in a SBM shows how the firm's supply of resources and production and transport activities affect a larger network of actors and stakeholders

Value capture in a SBM

- Recognizes the value awarded to the firm in performing in an environmentally and socially beneficial way that meets economic, environmental and social needs, and produces more than monetary profit
 - Value for the stakeholder can be transformed into value for the company
 - Customers may be willing to pay a higher price for the product or service because of the sustainable way it creates value, and firms may even see an increase in profit
 - Firms may reduce costs by reducing resource use
 - Community programs and good working conditions (a cost) create and support a healthy community with committed employees (a benefit)
- Strategic CSR & Shared value creation

Sustainable business model elements

Value proposition in a SBM

Provides social and/or environmental value in addition to meeting the customer's need

Value creation & delivery in a SBM

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Value capture in a SBM

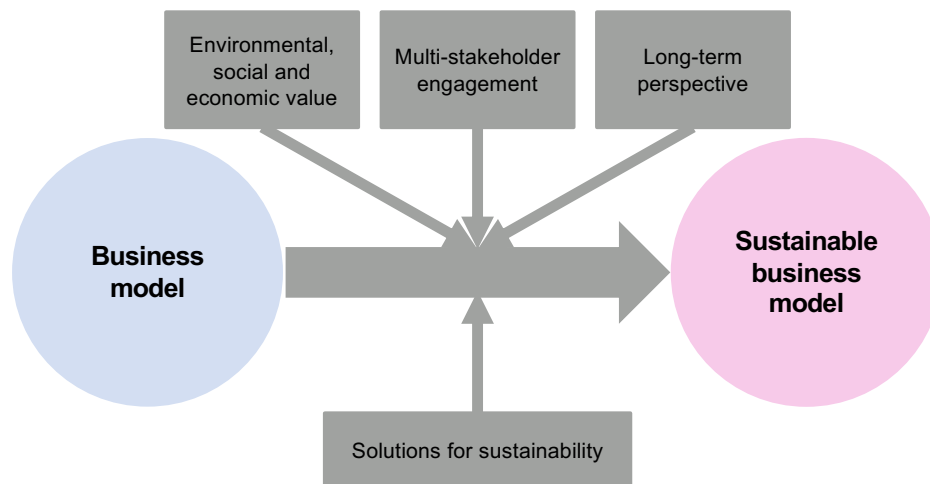
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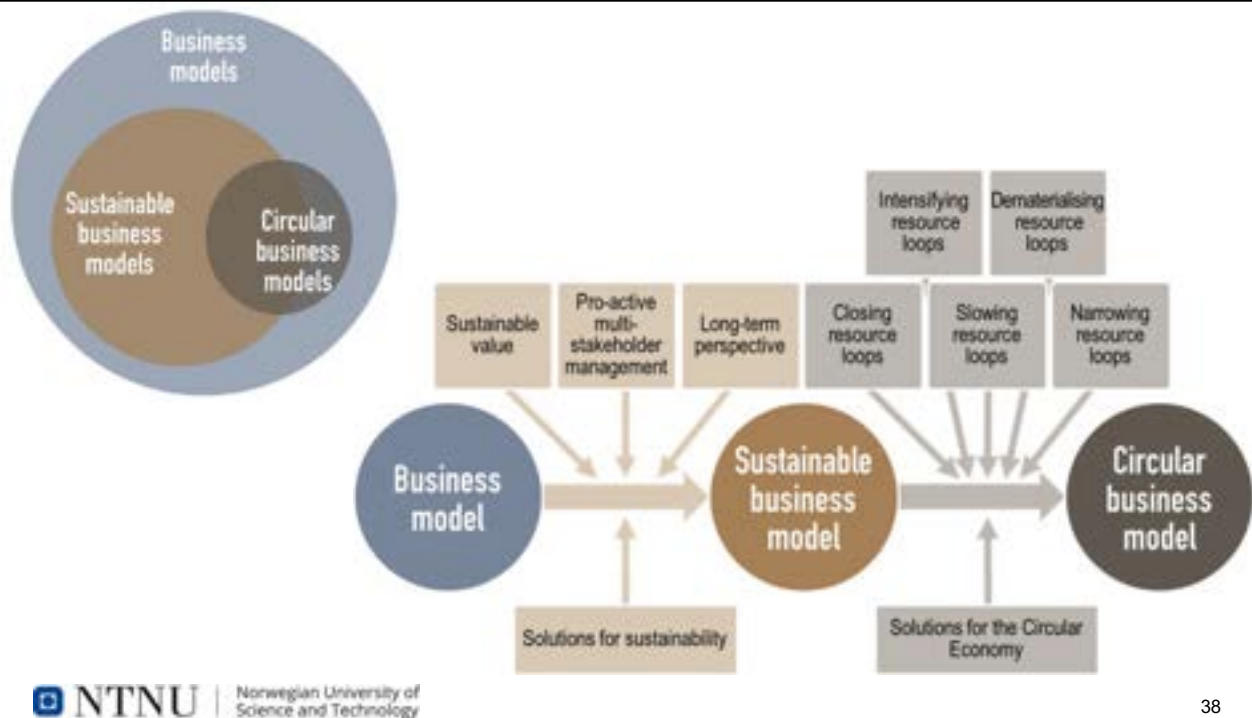
Sustainable business model vs. Business model for sustainability

- What's the difference?
- Remember to define your terms and concepts clearly!

Why have I edited the figure from Geissdoerfer?



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Now that you know what a (sustainable) business model is...

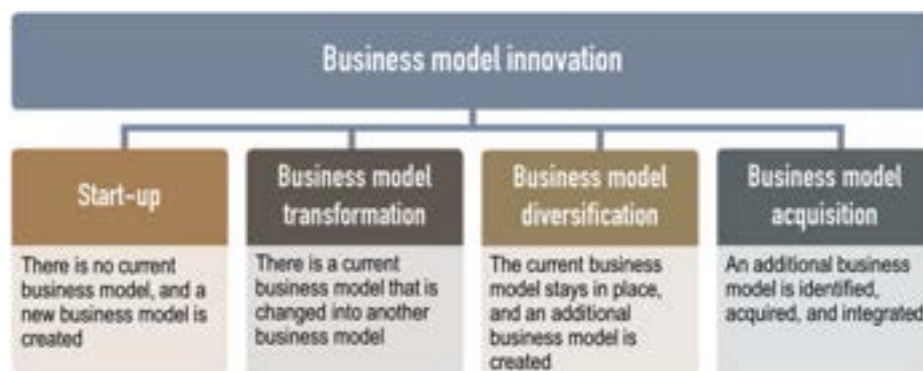
what is **business model innovation** and **sustainable business model innovation**?

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Business model innovation (BMI):
the conceptualization and implementation of new business models



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Business model innovation aimed at sustainability

- Increase in positive or decrease in negative impacts for society, environment and the long-term prosperity of the organization and its stakeholders
- Solutions that support sustainability in business model and network of actors

Sustainable business model innovation (SBMI)

The conceptualization and implementation of sustainable business models.

1. Sustainable start-ups: a new organization with a sustainable business model
2. Sustainable business model transformation: current BM is changed, resulting in sustainable BM
3. Sustainable business model diversification: current business model(s) remain the same, and additional sustainable business model is created
4. Sustainable business model acquisition: an additional SBM is identified, acquired, and integrated into the organization

(Geissdoerfer, et al., 2018)

Example – *Sustainable start-up*



MUD Jeans

- Trying to make a difference in the dirty and resource intensive fashion industry
- Started with jeans on leasing system
- Trouble with leasing due to lacking customer interest and practical issues
→ now jeans on deposit system where worn jeans are returned and recycled into new jeans
- Main objective is sustainability

Example – *SBM diversification*

Bugaboo – baby stroller designer and manufacturer

- Experimenting with new archetype outside their normal sales channel – testing a leasing plan
- Strollers designed to be long lasting → opportunity to prolong lifetime and avoid product being outgrown
- Customers can choose the “flex plan” with the opportunity to change the strollers if need be, returning outgrown strollers to be used again



Business model innovations for sustainability

“Innovations that create significant positive and/or significantly reduced negative impacts for the environment and/or society, through changes in the way the organization and its value-network create, deliver value and capture value (i.e. create economic value) or change their value propositions.”

(Bocken, et al., 2014, p. 44)

Strategies for SBMI

- Defensive: incremental adjustments driven by risk (e.g. regulatory changes) and cost reduction (e.g. eco-efficiency)
- Accommodative: improvements of internal processes that consider, to some degree, environmental and social objectives
- Proactive: redesign of the core business logic

(Originally presented in Schaltegger, et al., 2012)

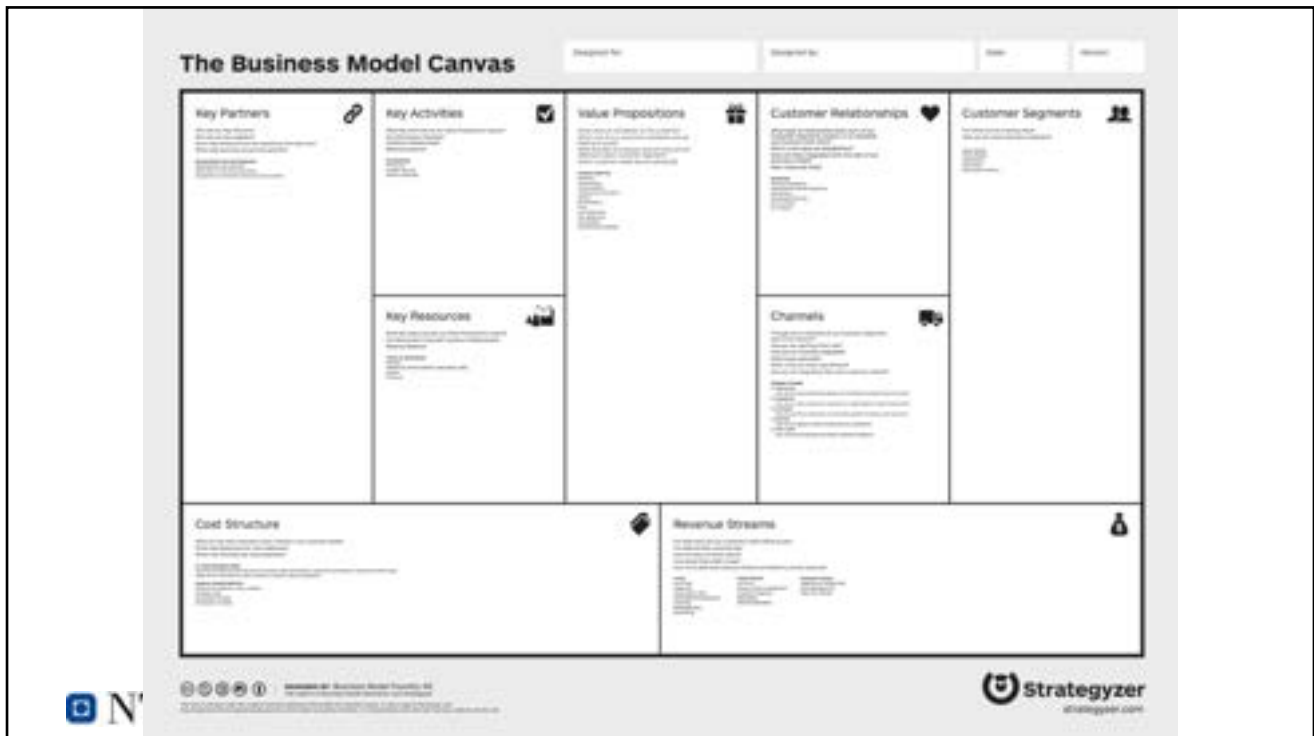
NOTE: Can compare to defensive vs. strategic CSR

More approaches to SBMI

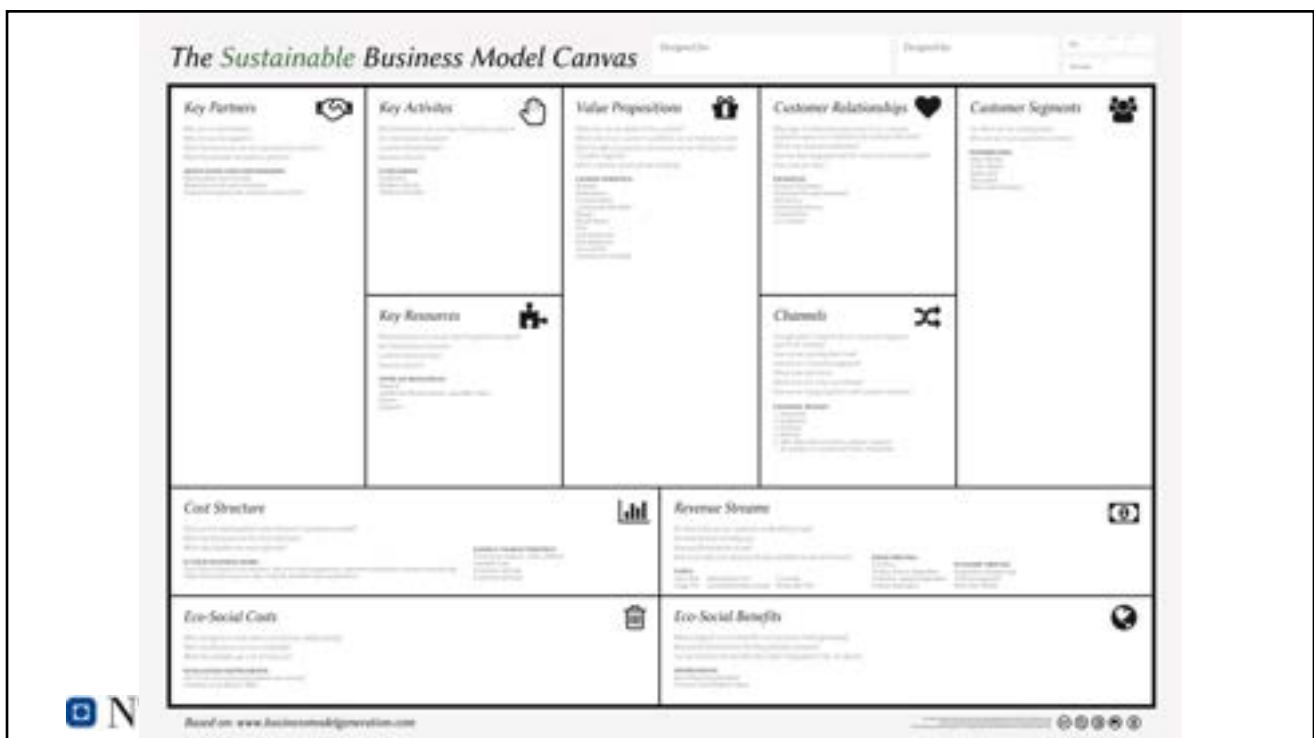
- **Outside-in approach:** an 'outside' business model archetype is adapted or translated to the organization
 - archetypes allow users a relatively easy way to explore the potential impacts of innovating towards different types of business models
- **Inside-out approach:** involves starting with the current elements in the organization. First, one details an organization's existing business model then explores the potential changes to the model.
 - e.g. the business model canvas

Challenges in SBM innovation

- **Triple Bottom Line:** the co-creation of profits, social and environmental benefit can be difficult
- **Shifting mind-sets:** established norms and guidelines (e.g. shareholder primacy) make the introduction of new BMs challenging
- **Resources:** reluctance to redistribute resources or allocate them for BM innovation
- **Complexity of technology innovations:** integrating technology innovation (e.g. clean tech) with BM innovation is multidimensional and complex
- **External relations:** engaging intensely with external stakeholders and new environments requires additional effort
- **Lacking methods and tools:** existing BM modelling methods and tools are few, have their insufficiencies, and are rarely sustainability driven

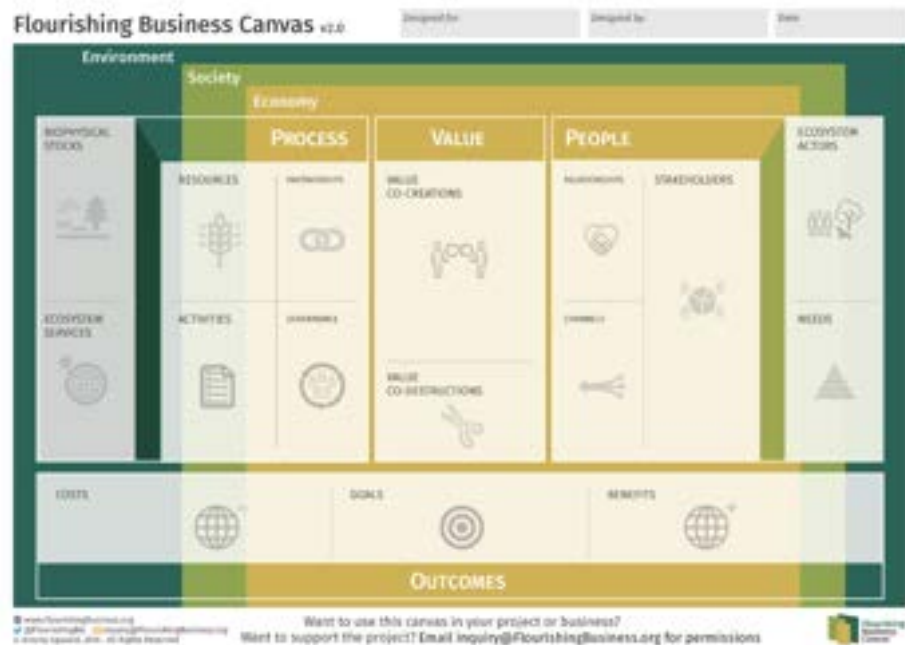


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The flourishing business model canvas



The triple layer business model canvas

(Joyce & Paquin, 2016)

- Extends the original BM canvas (econ- focused) to include layers focused on environmental and social value creation
- Bridges business model innovation with SBM development
- A user-friendly tool to support sustainability-oriented business model innovation
- A concise framework to support visualization, communication and collaboration around innovating more sustainable business models

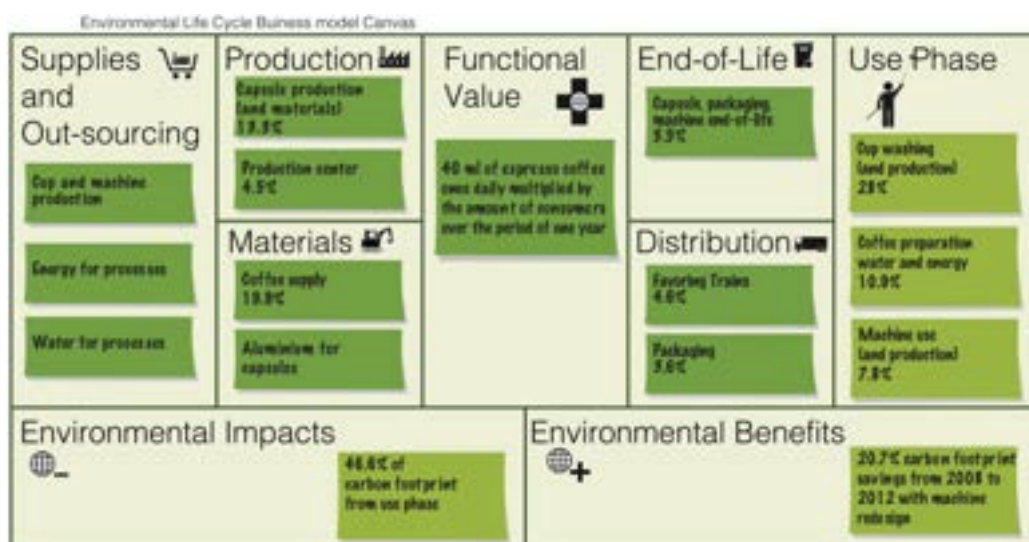


Nespresso example – Economic layer



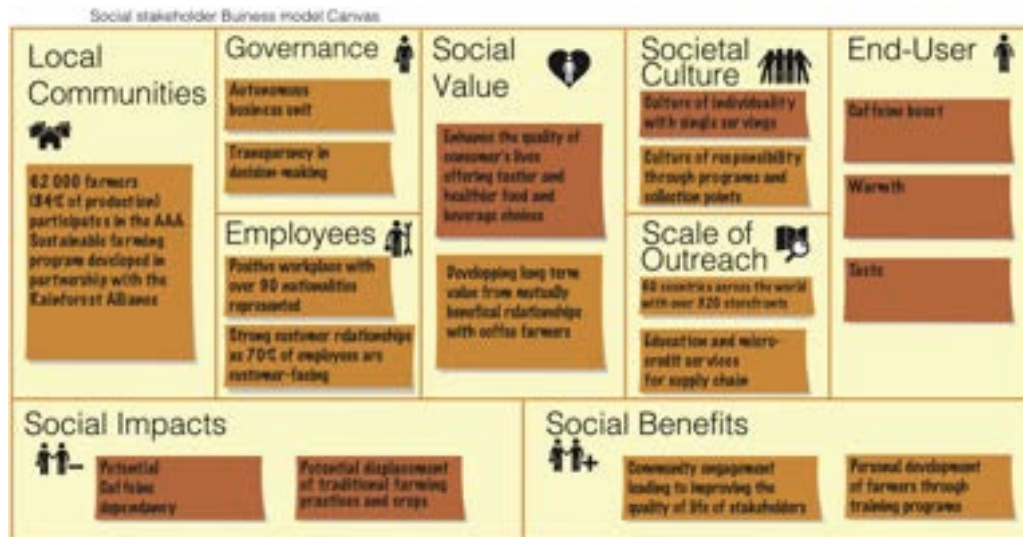
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Nespresso example – Environmental layer



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Nespresso example – Social layer



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SBM archetypes

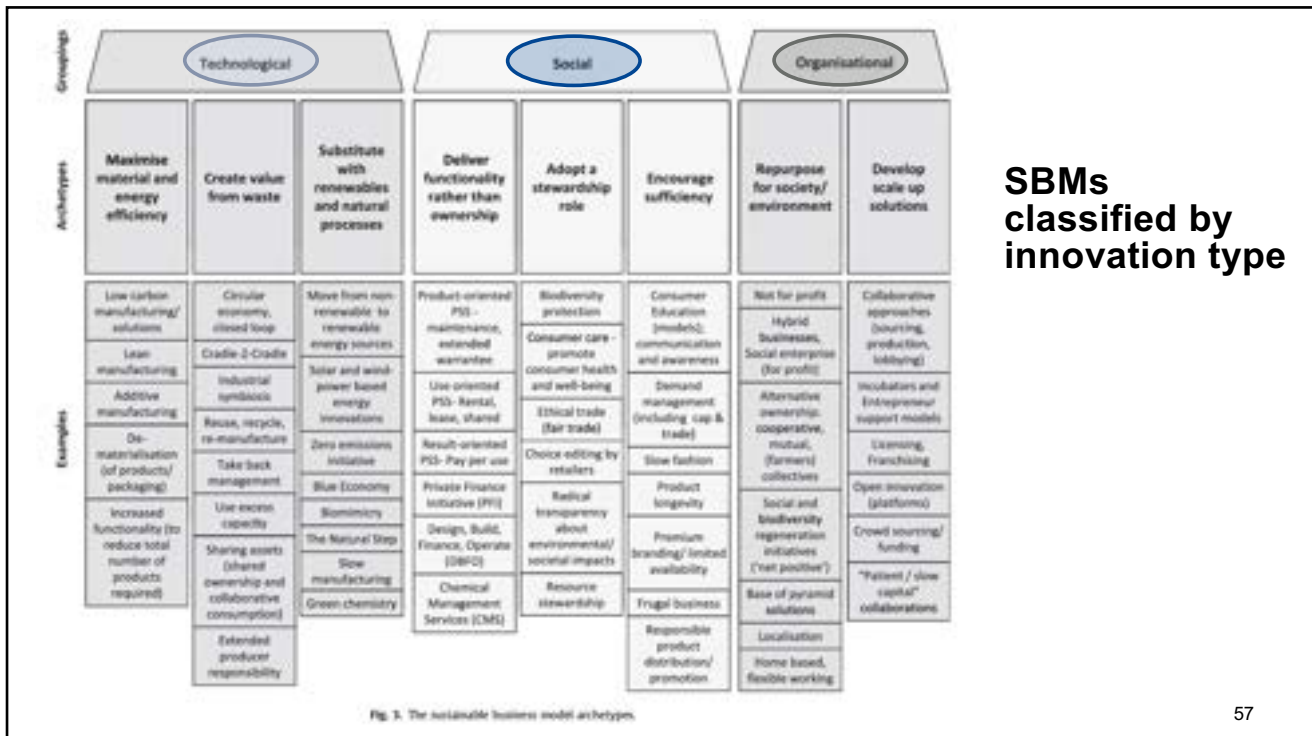
Bocken, et. al. (2014) classify different sustainable business models based on the way(s) the models seek to propose, create and capture ecological value.

Archetypes are grouped by the model's main type of innovation – **technical, social or organizational**



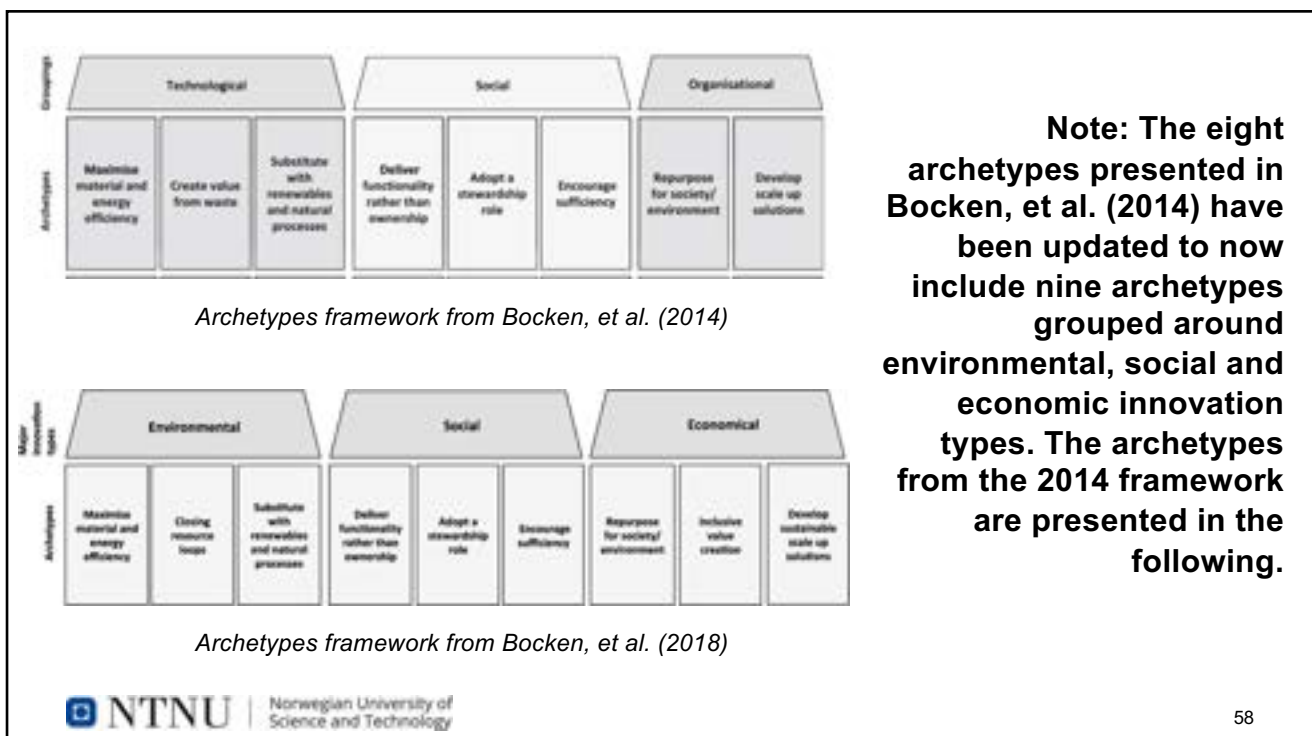
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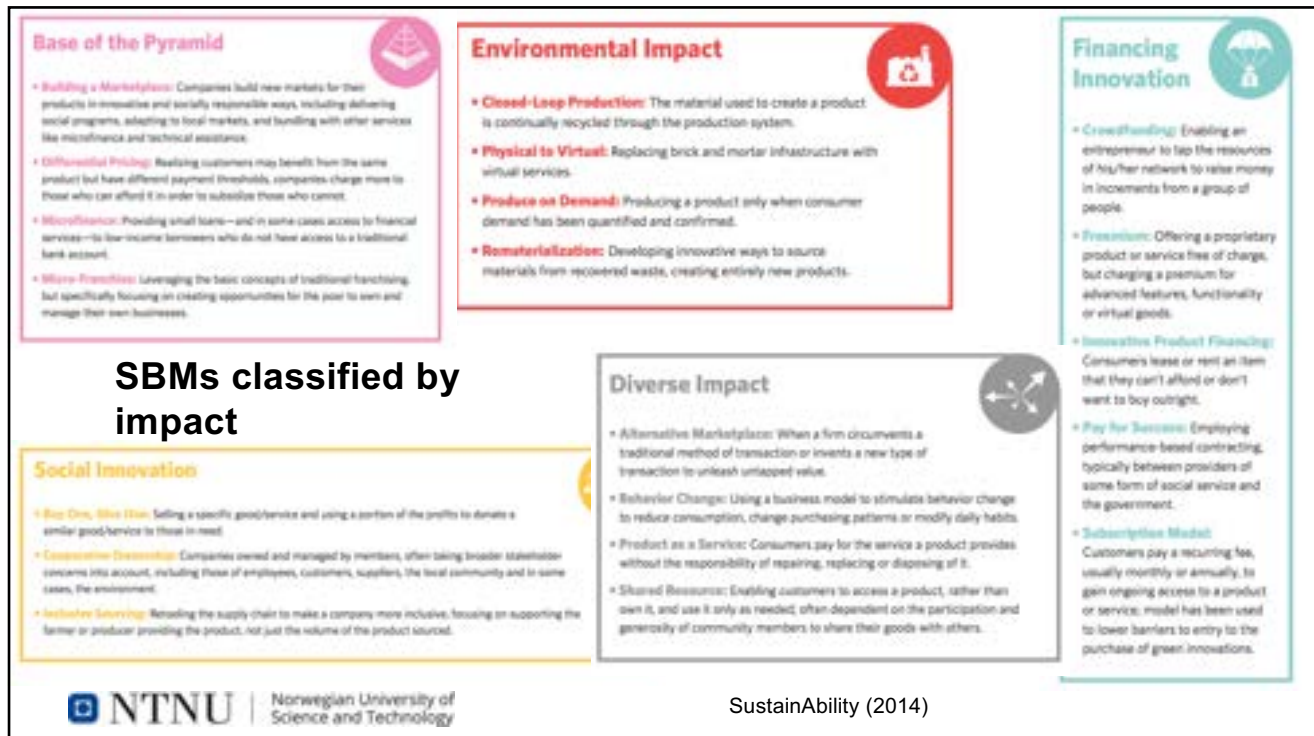
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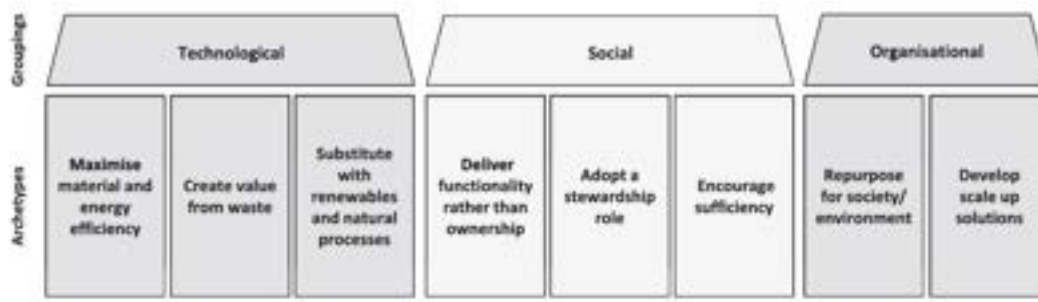
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SBM archetypes



Bocken, et al. (2013)

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TECHNICAL ARCHETYPES

- Characterized by technical innovation in the production processes, design or materials of the product or service to create sustainable (socially and environmentally friendly) value for the business
- For example, design or manufacturing processes that use resources and energy more efficiently



SBM archetype: *Maximize material productivity and energy efficiency*

- Use fewer resources and less energy, especially from nonrenewable sources
- Generate less waste, reduce pollution and emissions to land, sea & air
- Examples:
 - Dematerialization of products and packaging
 - LEAN manufacturing principles
 - Low-carbon manufacturing
 - Increased functionality of products



Archetype example: Maximize material productivity and energy efficiency (Minimizing waste in production process)



CAPTURED CARBON CREATES NEW VALUE

New technology is being used by Indian firm Carbon Clean Solutions to capture carbon dioxide from industrial processes and use it to manufacture new products.

In the effort to decarbonise industries that are emitting a great deal of CO₂, there is an opportunity to make use of the carbon as a resource. Noticing the potential in this symbiotic relationship, Carbon Clean Solutions developed the technology to capture carbon dioxide from industry and use it as a feedstock to produce commercially viable chemicals, bio-oils, materials, and fuels. Carbon Clean Solutions is the only company to have delivered its technology to a site in India without subsidies, and to be showing the potential scalability of its technology everywhere.

From: DNV GL Global Opportunity Report 2018

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SBM archetype: *Create value from waste*



- Waste streams turned into useful and valuable input to other production streams
- Examples:
 - Shared ownership and collaborative consumption (e.g. car sharing)
 - Extended producer responsibility
 - Closed loop systems and circular economy principles

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Archetype example: Create value from waste



TURNING TRASH INTO FASHION

Thread takes trash from some of the poorest neighbourhoods on the planet and transforms it into textiles, providing income opportunities and cleaning the environment.

In 2010, Ian Rosenberger - founder of Thread - wrote in his journal, "If Haiti can turn trash into \$ = good." This sentence was the foundation of Thread, which employs collectors in Haiti and Honduras to pick up plastic bottles that are turned into fabrics along a 100% transparent supply chain. With Thread, 38.9 million plastic bottles have been removed from streets and canals, significantly reducing damage to the environment and marine ecosystems. In addition to providing thousands of income opportunities and limiting plastic waste, Thread also has an interest-free micro-loan programme to keep its suppliers in business.

From: DNV GL Global Opportunity Report 2018

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SBM archetype: *Substitute with renewables and natural processes*

- Reduce environmental impacts and improve company long-term outlook by addressing resource constraints associated with non-renewable resources and current production systems
- Examples:
 - Moving from non-renewable to renewable energy sources
 - Local energy solutions



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Archetype example: Substitute with renewables and natural processes



AIR-CONDITIONING POWERED BY NATURE

Purix's solar air-conditioner is a sustainable alternative to conventional cooling. Powered by the sun, the air-conditioner reduces electricity consumption by up to 85%.

With global living standards improving, the demand for cooling – and corresponding energy use – will increase along with the negative environmental impact. In response to the growing need for alternatives, Purix designed a solar air-conditioner. Unlike conventional ACs, the Purix solar air-conditioner does not include an energy consuming compressor unit. Instead, solar thermal energy absorbed by solar panels produces water vapour, which is used by the Purix chiller as a refrigerant to produce chilled water that is distributed to cooling devices. The water returns to the chiller in a closed-loop system.

From: DNV GL Global Opportunity Report 2018

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SOCIAL ARCHETYPES

- Depend on social innovation to offer sustainable value, e.g. through a change in the functionality they offer the consumer or a change in consumer behavior.
- Social archetypes aim ultimately to restructure consumption and production patterns, or to involve the needs of stakeholders in design and production



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SBM archetype: *Deliver functionality rather than ownership*

- Provide services that satisfy users' needs without having to own physical products
- Examples:
 - Product includes maintenance and extended warranty
 - Product or service is rented, leased or shared
 - Pay per use of product or service

Example - *product as a service*

Bugaboo – baby stroller designer and manufacturer

- Experimenting with new archetype outside their normal sales channel – testing a leasing plan
- Strollers designed to be long lasting → opportunity to prolong lifetime and avoid product being outgrown
- Customers can choose the “flex plan” with the opportunity to change the strollers if need be



Example - *product sharing & pay per use*



SBM archetype: *Adopt a stewardship role*

- Proactively engaging with all stakeholders to ensure their long-term health and well-being
- Examples:
 - Biodiversity protection
 - Consumer care – promoting consumer health and well-being
 - Ethical trade (Fair Trade)
 - Radical transparency about environmental or social impacts
 - Resource stewardship

Note similarities with shared value creation strategies (Porter & Kramer, 2011)

Archetype example: Downstream stewardship



NATURAL ALTERNATIVE TO PLASTIC WRAP

Using simple, organic ingredients, Bee's Wrap produces a sustainable alternative to plastic wrap for food storage that is reusable, biodegradable, and compostable.

Bee's Wrap provides its customers with a plastic-free alternative way to keep food fresh. Combining GOTS certified organic cotton, beeswax sourced from sustainably managed hives in the United States, organic jojoba oil, and tree resin, the result is a malleable food wrap, that can be used again and again. At the end of its lifetime, the wrap can be composted or even used as natural and effective fire starters for wood stoves. Unlike plastic wrap, Bee's Wrap is biodegradable and consequence-free for the environment and marine species.

Archetype example: Upstream stewardship



SUPPLY CHAIN SUSTAINABILITY GUARANTEES RIGHTS

Holistic corporate supply chain policy from Telenor guarantees strong requirements across its entire supply chain of 2.1 million employees.

As a world-leading telecommunications companies, Telenor is working to reduce inequality through a focus on supply chain sustainability, with 97% of its suppliers covered by requirements on health and safety, human and labour rights, environment, and anti-corruption. Capacity building and rigorous monitoring of compliance means that over 80% of non-conformities are mitigated within a year. As the largest telecommunications provider in Myanmar, a country battling with corruption, the policy has been particularly important to improve wages and working conditions, and Telenor has trained over 15,000 workers in the country.

Upstream stewards: The Better Cotton Initiative (BCI)

- BCI aims to transform cotton production worldwide by developing Better Cotton as a sustainable mainstream commodity.
- To achieve this mission, BCI works with a diverse range of stakeholders across the cotton supply chain to promote measurable and continuing improvements for the environment, farming communities and the economies of cotton-producing areas.



BCI Global Reach 2016-2017



SBM archetype: *Encourage sufficiency*

- Solutions that actively seek to reduce consumption and production
- Examples:
 - Consumer education
 - Demand management
 - Product durability and longevity (e.g. Stormberg's design for clothing to last more than one season)
 - Market places for secondhand goods
 - Premium branding/ limited availability
 - Responsible product distribution/ promotion

Archetype example: Downstream stewardship & Encourage sufficiency



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Archetype example: Encourage sufficiency



INTEGRATING REUSE INTO EVERYDAY PURCHASES

This Chilean social enterprise is dedicated to lowering the cost of food and other essential items for low-income families in Chile.

Algramo works directly with manufacturers to sell products in reusable containers, often in bulk, which the company estimates can save up to 50% on consumer costs. In cities where recycling facilities are rare, relying on recycling to reduce plastic waste is unrealistic. This B Corp hopes to foster a reuse and recycling culture, in order to make a dent in the use of single-use plastics. An average Chilean family using Algramo's products has the potential to avert around two kilograms of plastic waste per month.

ORGANIZATIONAL ARCHETYPES

- Based in organizational innovation, such as a restructuring of ownership or increased involvement of stakeholders
- Incorporate innovative processes into the organization of a firm



SBM archetype: *Re-purpose business for society/ environment*

- Prioritizing delivery of social and environmental benefits rather than economic profit maximization, through close integration between the firms and local communities and other stakeholder groups. The traditional business model where the customer is the primary beneficiary may shift
- Examples:
 - Not for profit
 - Hybrid businesses, social enterprise
 - Alternative ownership: cooperatives, (farmers) collectives
 - Social and biodiversity regeneration initiatives
 - Home based, flexible working

Example – *social enterprise*



Grameen Danone Foods (Bangladesh) is guided by four objectives :

1. To develop a product that has high nutritional value and is affordable for the poorest individuals
 2. To improve the community's living conditions by creating jobs that raise the living standard and enhance the social fabric and the region.
 3. To protect the environment and conserve resources
 4. To ensure a sustainable activity while seeking profitability
- Grameen Danone Foods' primary aim is to have a positive social impact ; its pursuit of profitability is based solely on criteria such as improving public health, creating jobs, reducing poverty and protecting the environment.
 - Profits earned by the company are re-invested in expanding and running the business.

SBM archetype: *Develop scale-up solutions*

- Delivering sustainable solutions at a large scale to maximize benefits for society and the environment
- Examples:
 - Collaborative approaches (sourcing, production, lobbying)
 - Incubators and entrepreneur support models
 - Open innovation (platforms)
 - Impact investing
 - Crowd sourcing/ funding
- In many cases, this SBM utilizes the principles of one or more of the other archetypes, but does so in way that encourages and promotes the widespread growth and expansion of business models for sustainability

Discussion

Take a moment to discuss strengths and weaknesses of the field of sustainable business models

- Do you think this research will ease companies' transition to creating, delivering and capturing sustainable value?
- Why or why not?



SBM research considerations

- There are no set approaches, as each company has its own unique combination of resources and make up of stakeholders
- The literature currently takes a normative perspective, which makes it difficult for firms to practically implement the theory within their individual company
 - Companies may be overwhelmed with theory
 - In many cases, day-to-day operations have to be managed while transitioning to a more sustainable model
- Do you think tools like the triple layer business model canvas can help?
 - Why or why not?



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1. Map your company's business model along these three elements
2. Make sure to take note of areas where they currently propose, create or capture *sustainable value*, and areas where they could/should do it in the future (and how).

Value proposition

Product/ service,
customer segments
and relationships

Value creation & delivery

Key activities,
resources, channels,
partners, technology

Value capture

Cost structure and
revenue streams

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Thank you!

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