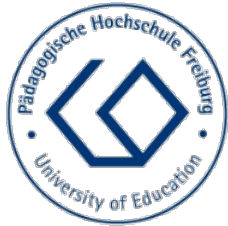


The Impacts of E-Commerce and Media on Sustainable Fashion



Hochschule Reutlingen
Reutlingen University



Co-funded by
the European Union

Learning Objectives

After this course students should be able to...

- Describe how communication has developed over the last decades
- Explain the role of media for sustainable development
- Outline the impact of e-commerce on the environment

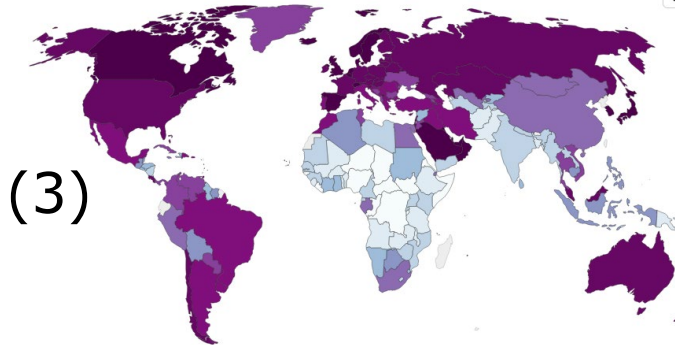
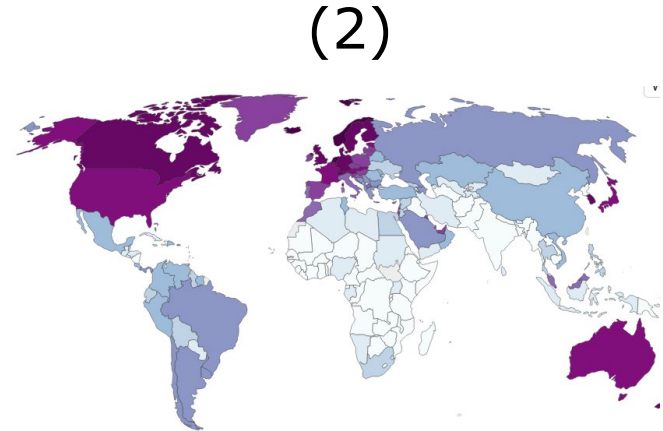
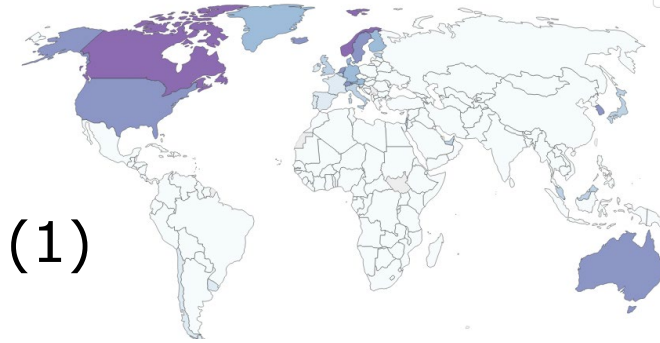
Improvements of communications

- The internet and mobile technology have allowed greater communication between people in different countries



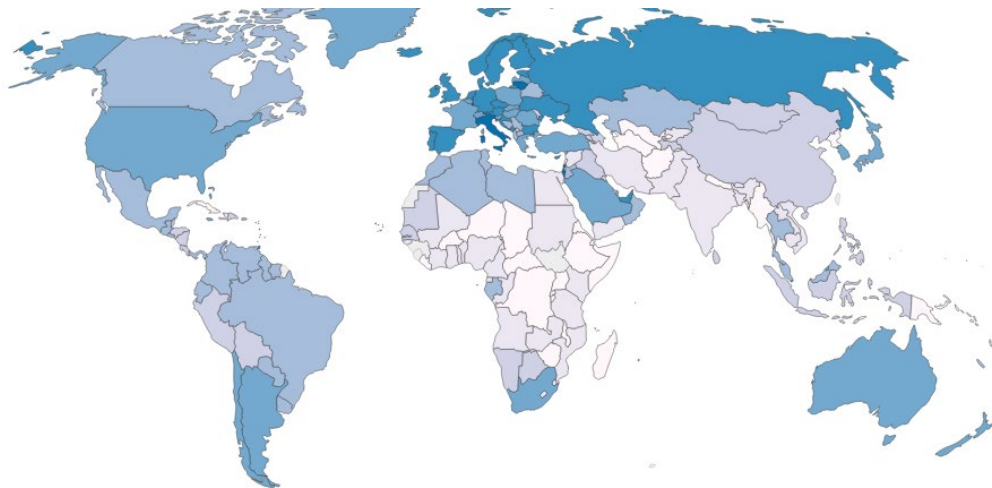
- The „global Village“: individual technology orientation leads to global networks
- Development of e-commerce

Share of the population that uses the internet in (1) 2000, (2) 2010, (3) 2020

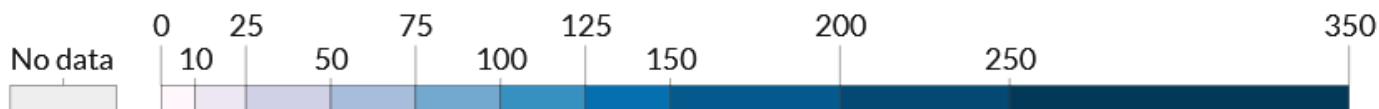
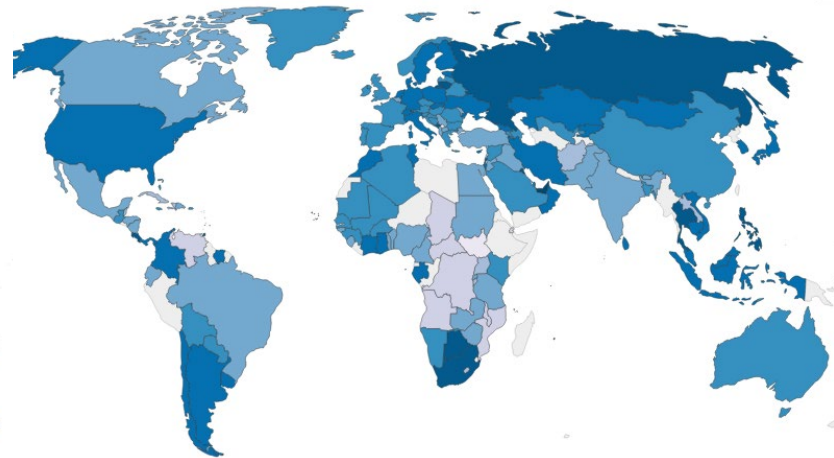


Mobile phone subscriptions, measured as the number per 100 people

Mobile phone subscriptions, 2006



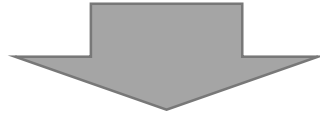
Mobile phone subscriptions, 2019



Our World in Data (2022)

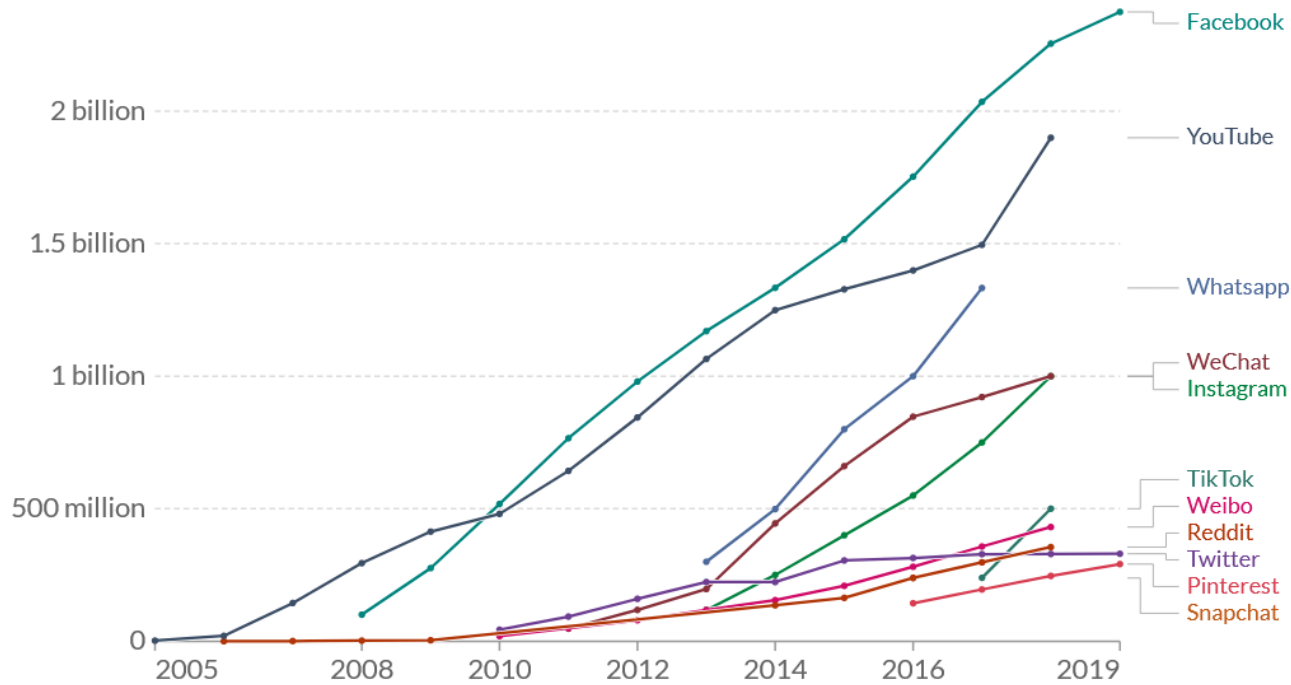
Development of social media

Advancement of technology



- No matter in which part of the world (potential) customers and stakeholders are located social media platforms are increasingly used to promote products, services, and content
- Celebrities can influence the consumers` intention to purchase sustainable products
- Influencers: trustworthiness and attractiveness are found to influence consumers` adoption of sustainable products and lifestyles

Number of people using social media worldwide



Our World in Data (2022)

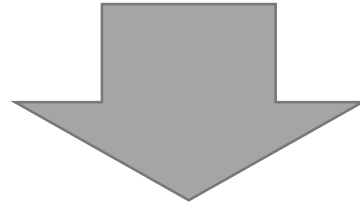
Sustainability and the media

“Fish may die, or human beings swimming in lakes and rivers may cause illnesses, no more oil may come from the pumps, and average temperatures may rise or fall, but as long as this is not communicated it does not have any effect on society”

Luhmann (1988), pp. 28–29

Sustainability and the media

- Social movements and journalists collect experiences, document sweatshop and unsustainable production circumstances
- targeting the most visible actors in the supply chain as the ones with key responsibility



Politicization and responsabilization

Guercini, , & Runfola (2004)

Role of media for sustainability awareness

- Provide understanding of geographical knowledge to people: What is happening in which country right now? What is the background? What is the impact? ...
- Report and educate people about activities and behavior that negatively impact our ecological environment and explain the reasons
- Educate about environmental protection: What can be done? What can every single person do? What should be demanded from governments, companies...

Role of media for sustainability awareness

- Dissemination of sustainability information through different media (internet articles, printed articles, social media coverage, TV, online streams, podcasts and other audio formats...) to reach different groups in a society
- Spread vocational and professional information
- Educate people about the role they play within a society and empower them

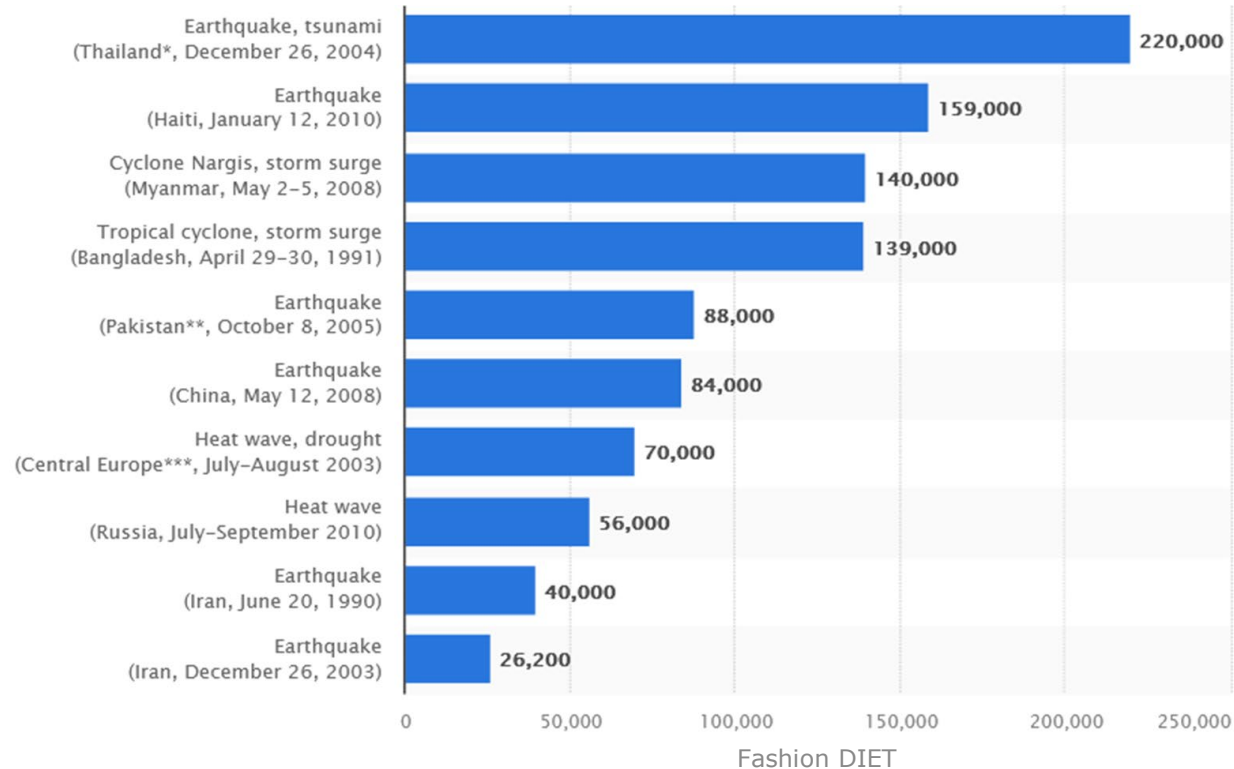
Example natural disasters

- Media can create awareness of disastrous events in faraway parts of the world
 - People in any country are quickly made aware of natural disasters and can provide help and/or donate
 - This is greatly needed: In some countries there is more development aid than government spending
- See next slides

Number of recorded natural disasters

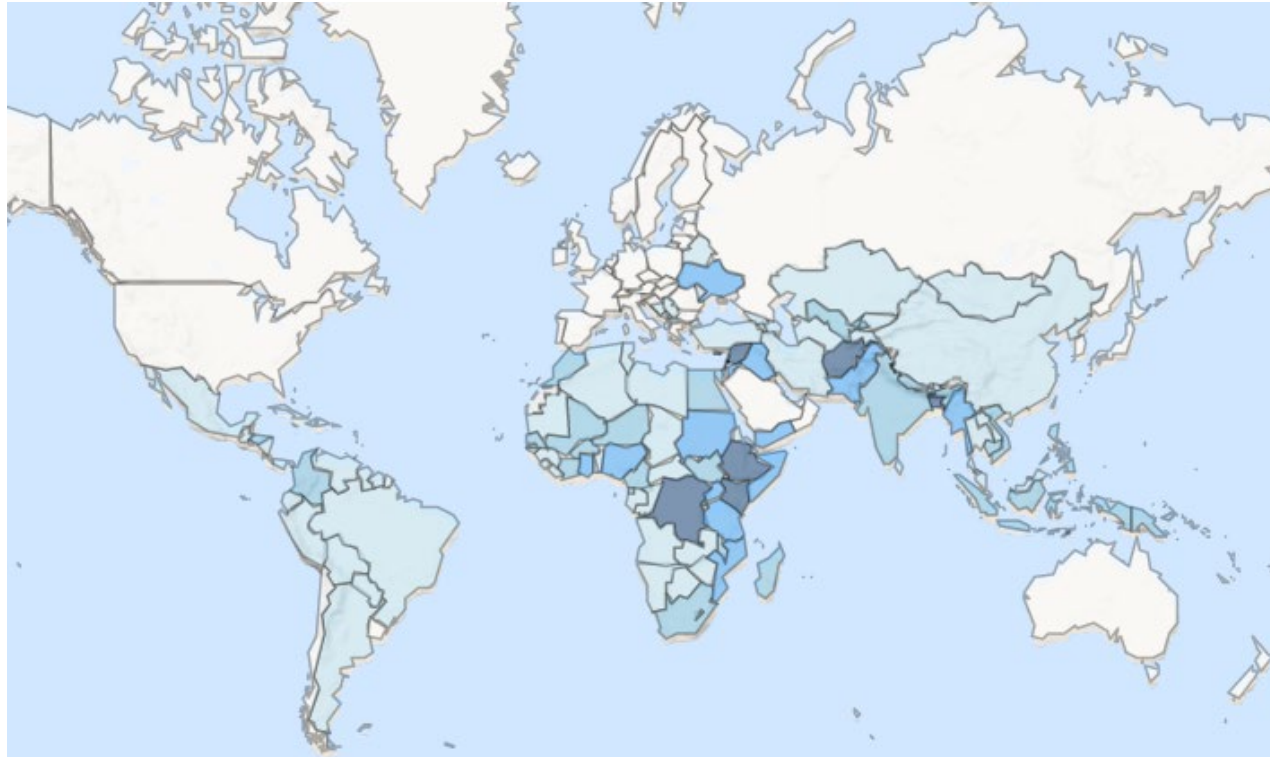


The 10 most significant natural disasters worldwide by death toll from 1980 to 2022

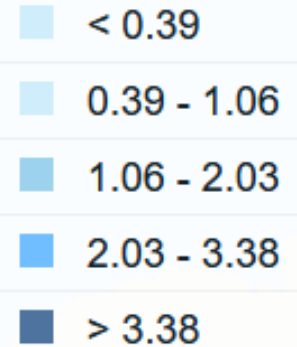


Statista (2022)

Net official development assistance and official aid received (USD)

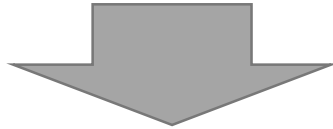


Billions



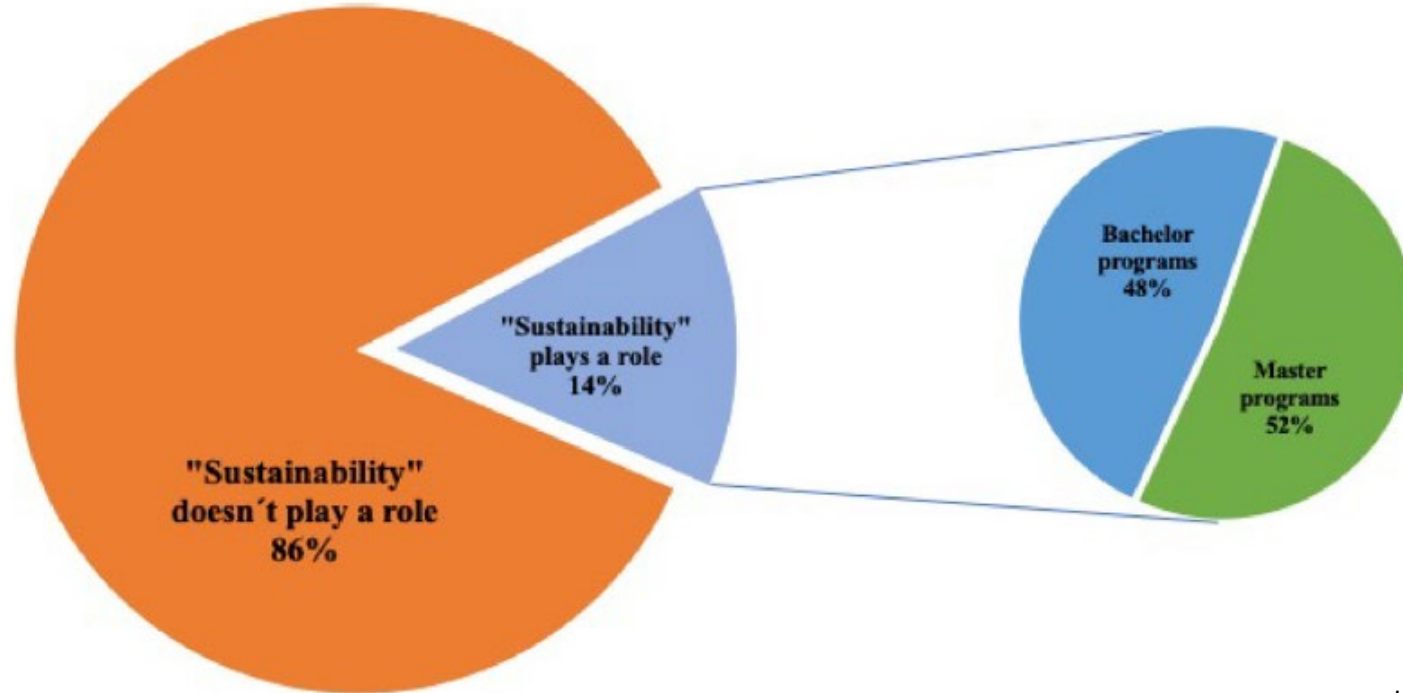
Role of media for sustainability awareness

- In order to report and educate people on sustainability, journalists of any media outlet need to be educated in sustainability themselves
- Sustainability is a complex and holistic area with many diverse information: deep knowledge is needed



- Sustainability has to be implemented in the curricula of any media and communication study program

Media and Communication Curricula throughout Europe



Note: Total $n = 1,068$ "Media & Communication" curricula

Media and Communication Curricula throughout Europe

- The level of curricular integration of sustainability aspects in the field of media and communication is low
- In most cases, sustainability remains an abstract guiding principle that is not translated into a dedicated course offer
- Shows the difficulty of operationalizing sustainability

Given the social relevance and responsibility of the discipline, sustainability communication should be more strongly institutionalized:

- In terms of curricular integration
- Development of respective study programs

Karmasin & Voci (2021),

E-Commerce

- Brings consumers the convenience to buy products at any place and at any time
- Allows consumers a great choice of products from all parts of the world
- Increases availability of rare items
- Better comparison of products and lower prices for consumers
- Opened business opportunities also for SMEs with tight budgets
- The Internet and social media allow relatively easy promotion of products

Online Retail Sales 2018-2020

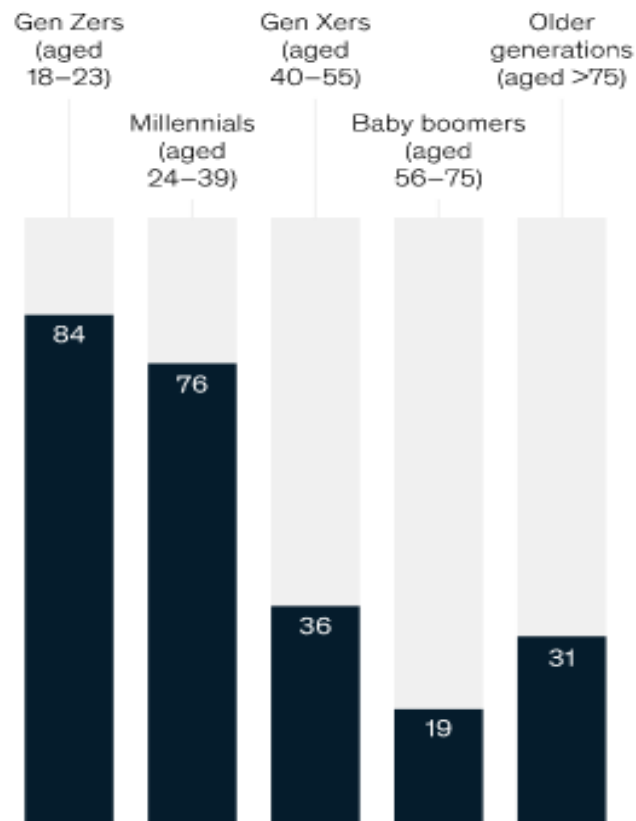
Economy	Online retail sales (\$ billions)			Retail sales (\$ billions)			Online share (% of retail sales)		
	2018	2019	2020	2018	2019	2020	2018	2019	2020
Australia	13.5	14.4	22.9	239	229	242	5.6	6.3	9.4
Canada	13.9	16.5	28.1	467	462	452	3.0	3.6	6.2
China	1,060.4	1,233.6	1,414.3	5,755	5,957	5,681	18.4	20.7	24.9
Korea (Rep.)	76.8	84.3	104.4	423	406	403	18.2	20.8	25.9
Singapore	1.6	1.9	3.2	34	32	27	4.7	5.9	11.7
United Kingdom	84.0	89.0	130.6	565	564	560	14.9	15.8	23.3
United States	519.6	598.0	791.7	5,269	5,452	5,638	9.9	11.0	14.0
Economies above	1,770	2,038	2,495	12,752	13,102	13,003	14	16	19

UNCTAD (2021)

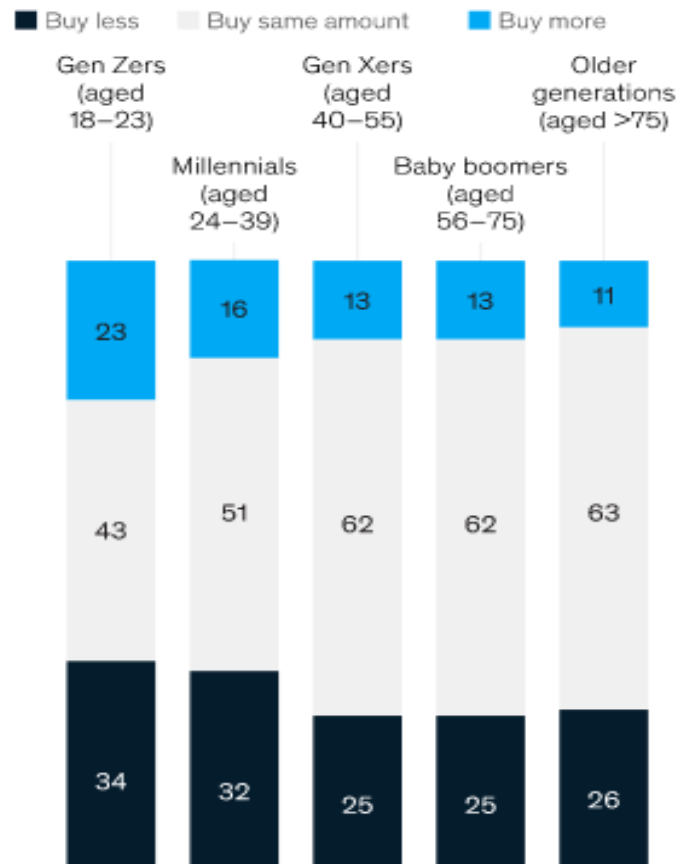
E-Commerce and the Covid-19 pandemic

- The Covid-19 pandemic has boosted online shopping
- Many physical stores were forced to start selling online
- This trend is unlikely to be reversed in the future
- Shift in consumer behavior: some purchased something online for their first time

Have started using online channels for fashion purchases since start of COVID-19 crisis, % of respondents¹



Expected use of physical channels for fashion purposes after COVID-19 crisis, % of respondents²



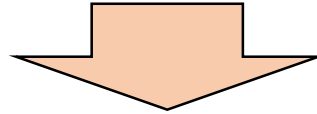
Granskog et al. (2020)



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E-commerce: Environmental Impact

- E-commerce grows in many developed countries
- Market penetration will have increased by up to 25% by the year 2026



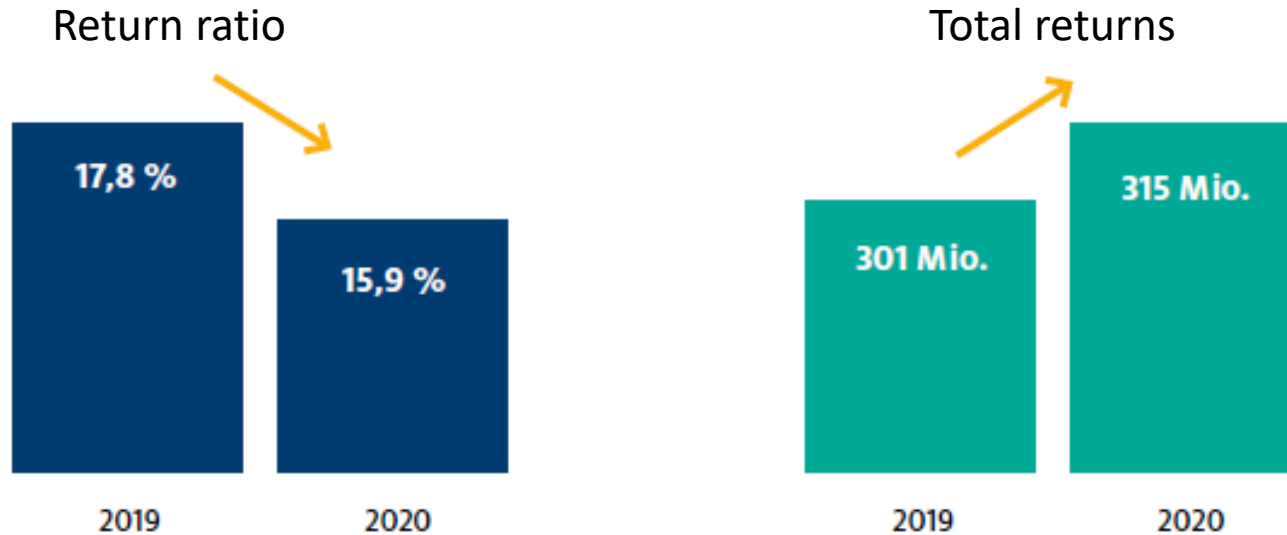
- Visible environmental impacts (e.g. packaging) and invisible environmental impacts (e.g. carbon dioxide emitted in transportation)
- Many companies are not taking responsibility or at least considering the environmental impact

E-commerce: Environmental Impact

- Brick and mortar retailing (buying at physical stores) can reduce CO₂ emissions by up to 84% in some cases
- E-commerce is an effective choice for non-urban delivery over long distances → avoids using private means of transport
- Amount, weight and volume of packaging play an important role because they influence energy use for transport

Escursell et al. (2021)

The return ratio decreases but the total number of returns increases in Germany



HDE Handelsverband Deutschland (2021)

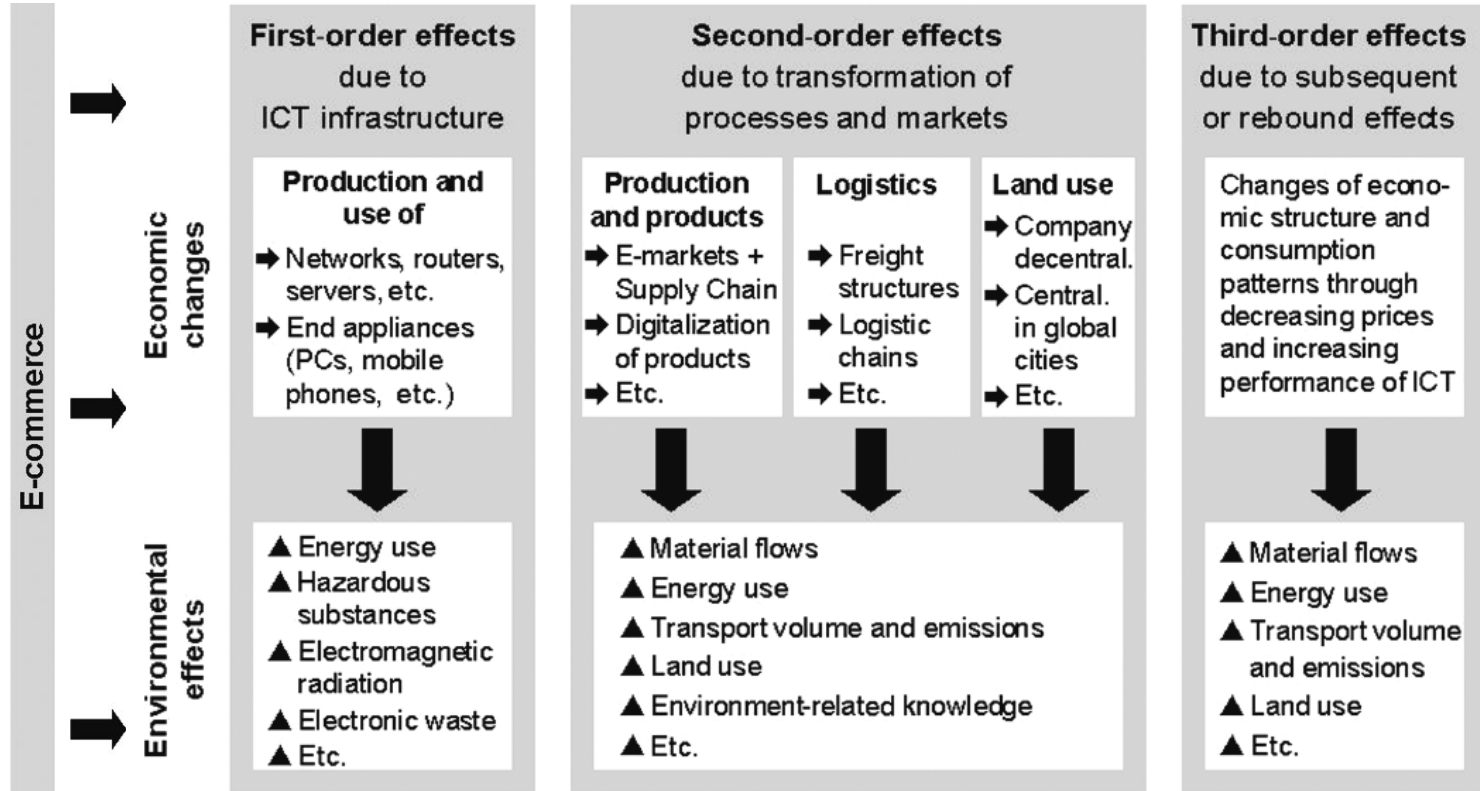
Environmental effects of e-commerce

Three main categories of environmental effects of e-commerce:

- **First-order effects:** Availability of an ICT infrastructure required (PCs, mobile phones, servers, routers, etc.) → production and use of the ICT infrastructure: material flows, use of hazardous substances, energy consumption, electronic waste
- **Second-order effects:** E-markets, virtual business networks, digitalization of products → environmental impact: productivity, transportation, land use
- **Third-order effects:** Structural change of the economy, lifestyles and consumption patterns → e.g. rebound effect

Fichter (2002)

Environmental effects of e-commerce



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