

# Distribution Systems and Service Supply Chains

Dr. Hans Joachim Schramm  
Ekstern Lektor

# Agenda

## TOPICS OF TODAY

### Distribution Systems

- Distribution Channels
- Online versus Brick-and-Mortar Selling
- Multi- and OmniChannels
- Things to know about customs when you are traveling / when you do cross-border online shopping

### Case Study: Sell Direct-to-Consumer or Through Amazon?

### Service Supply Chains

- Servitization – Service Dominant Logic
- Reverse Logistics Systems

## READINGS

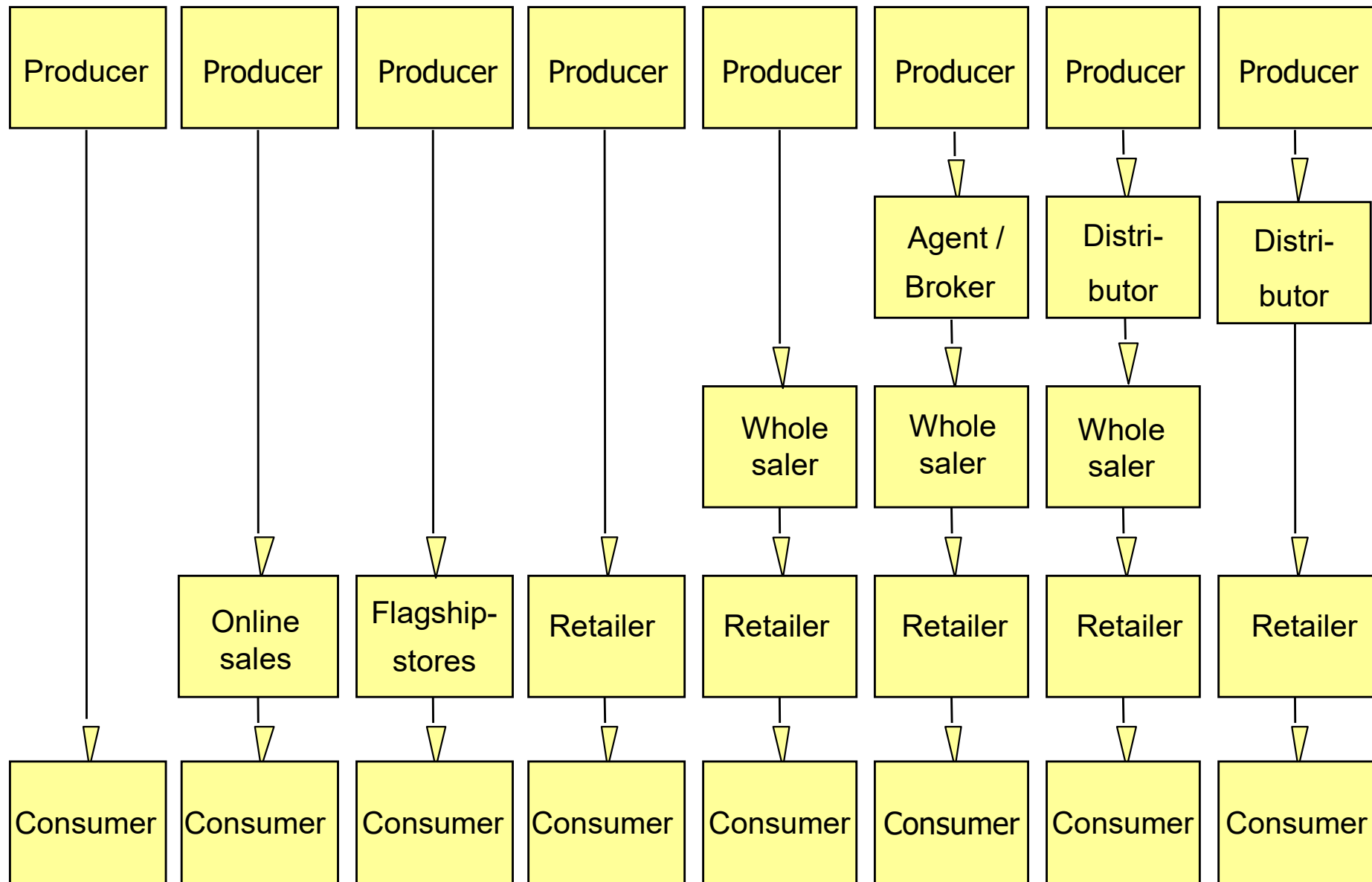
### Textbook 4<sup>th</sup> ed. Chapter 4, 16 (about reverse logistics)

Rigby, D. (2011): The Future of Shopping. *Harvard Business Review* Vol. 89, 12, pp. 64-75.

Verhoef, P. C., Noordhoff, C. S. and Sloot, L. (2023): Reflections and predictions on effects of COVID-19 pandemic on retailing, *Journal of Service Management* Vol.34, 2, pp. 274-293<sup>2</sup>



# Distribution Channels



# „OLD“ Brick-and-Mortar...



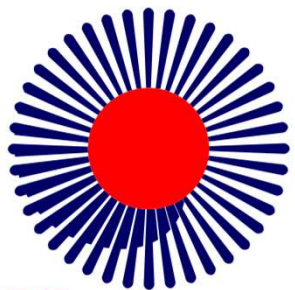
M&S

EST. 1884



RadioShack.

WOOLWORTH



HERTIE

sears

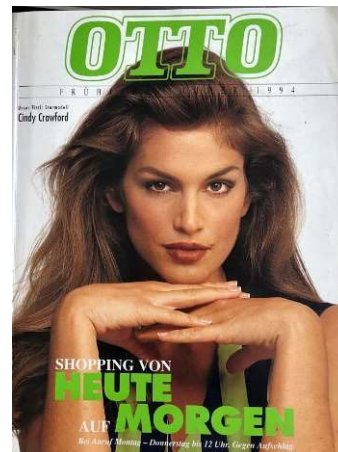
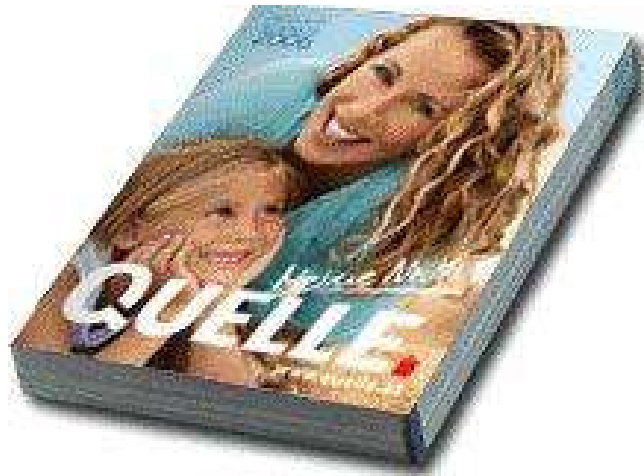
FONA



SCHLECKER

# ... Catalogue Sales ...

# Quelle



# OTTO

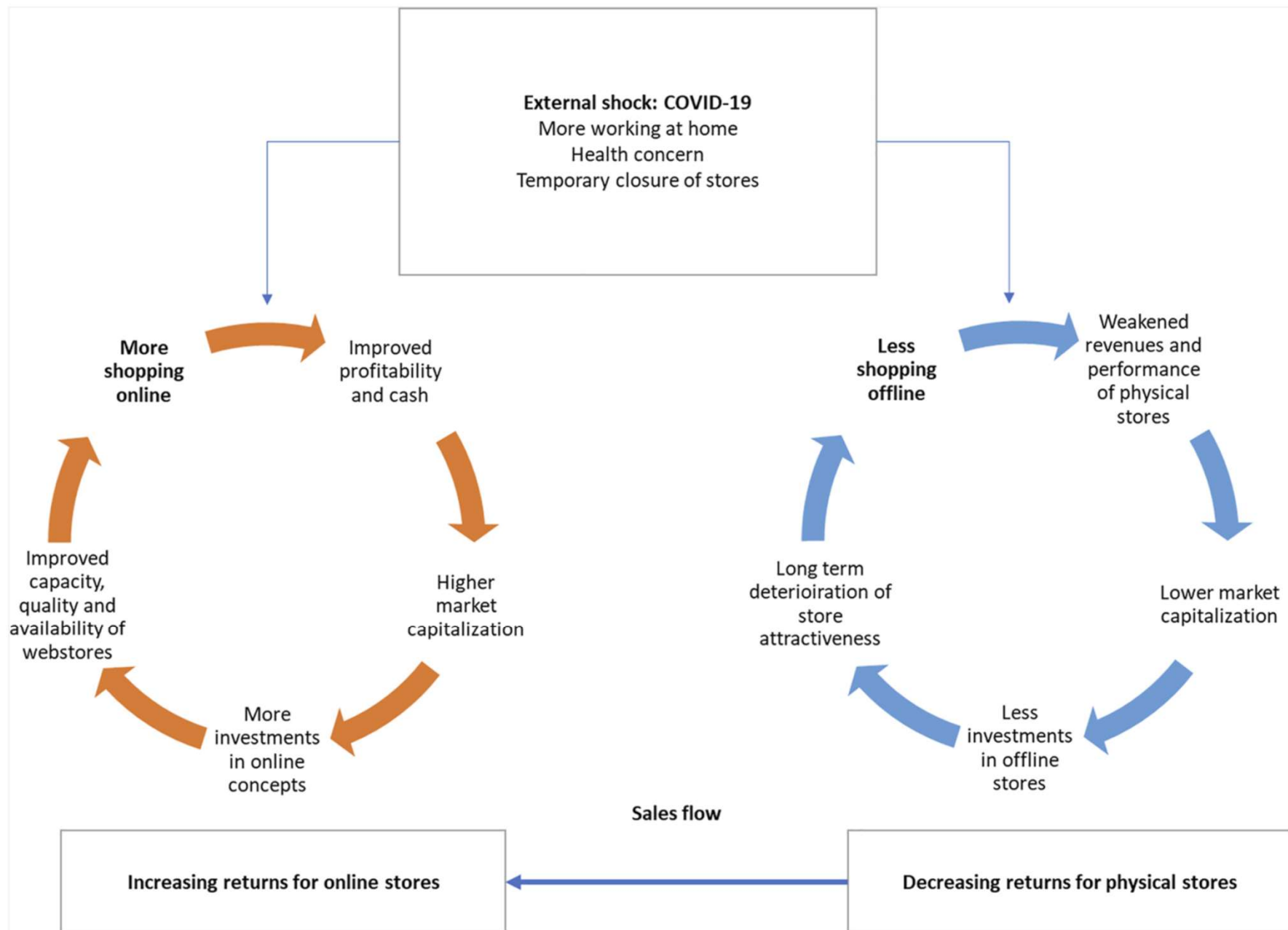
# BEST



# ... and „New“ Online Selling



# Potential Pandemic Effect on Online and Offline Retailing



Source: Verhoef et al. 2022

# Multi- vs. OmniChannel

## Multichannel

A non-integrated way to approach customers and inventory holdings.

## OmniChannel

Coherent and absolute inventory integration of both online and offline

Good examples how to do it right are as follows:





# New Formats in Retail

## IKEA in the city

City-centre IKEA concept stores  
with instant home delivery



<https://www.thelocal.fr/20190506/paris-gets-worlds-first-city-centre-ikea-store>

## Amazon go / fresh

Cash-less grab-and-go shops

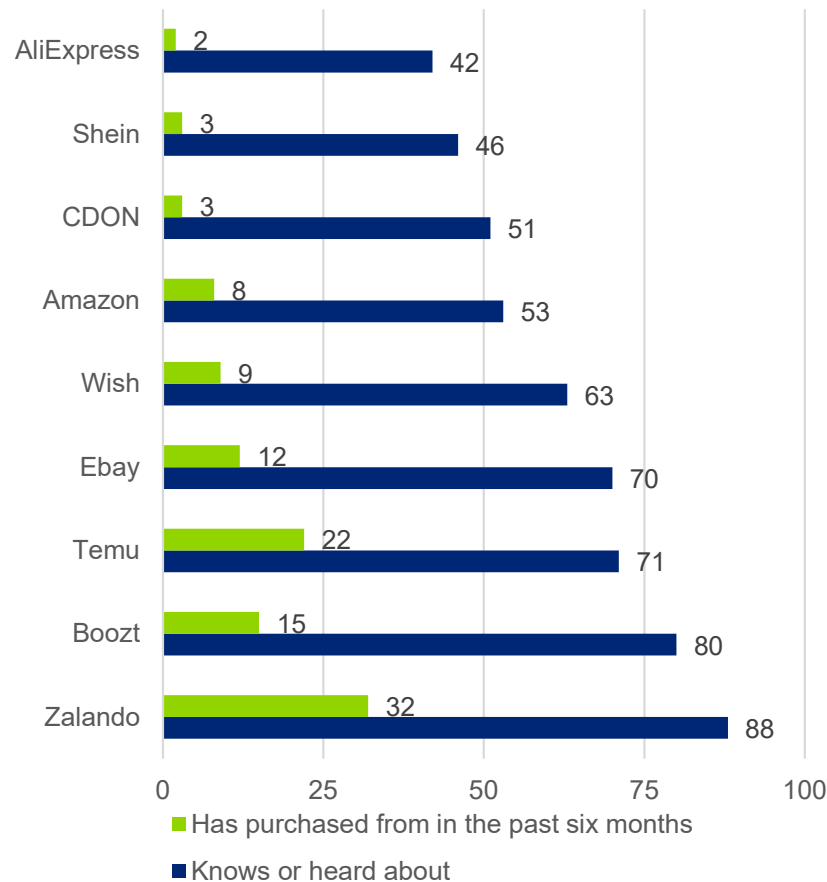


<https://www.cnbc.com/2019/05/07/amazon-go-opens-at-brookfield-place-in-downtown-new-york-accepts-cash.html>

<https://www.amazon.com/find-your-store/b/?node=17608448011>

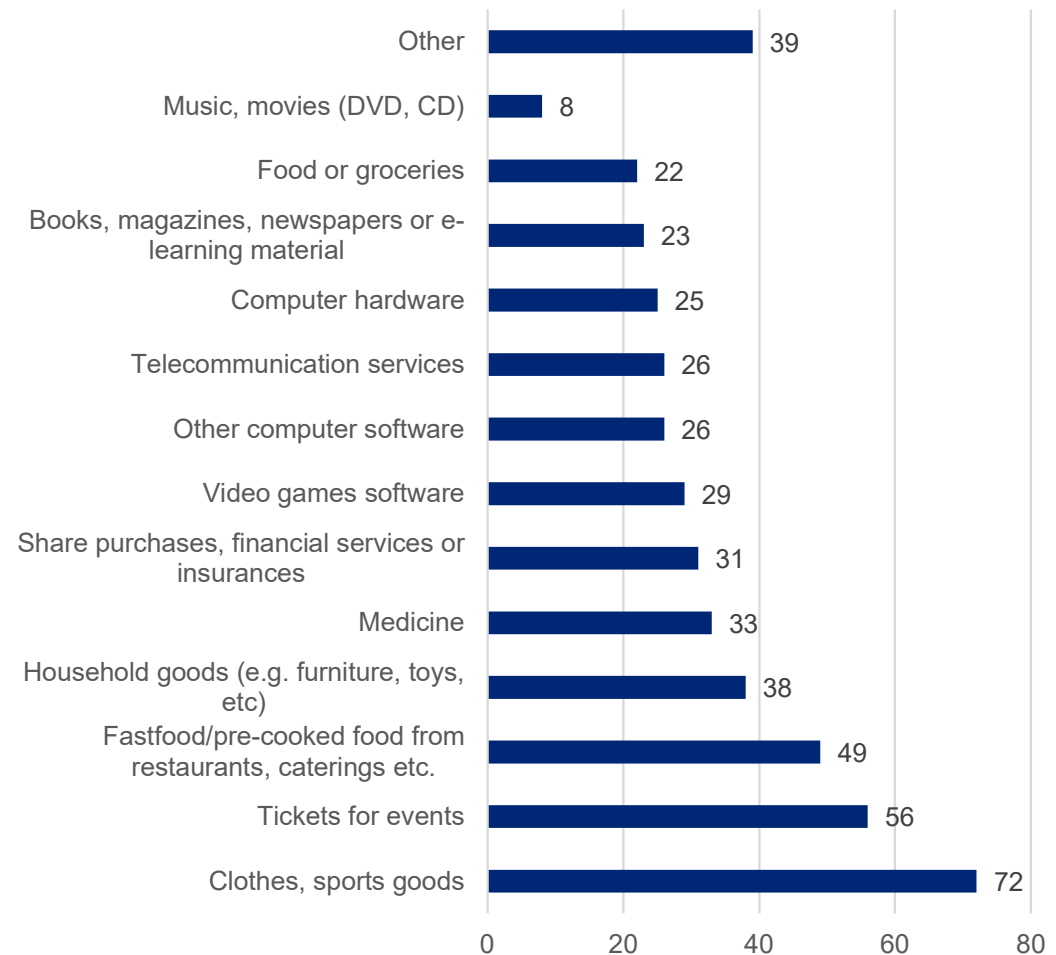
## Most popular online marketplaces in DK 2024 by % of online shoppers

Source: DI – Dansk Industri



## Leading products and services bought online in Denmark 2023 in %

Source: Statistics Denmark



## Percentage of e-commerce consumers that have shopped from abroad

Percentage who shopped online more often due to coronavirus

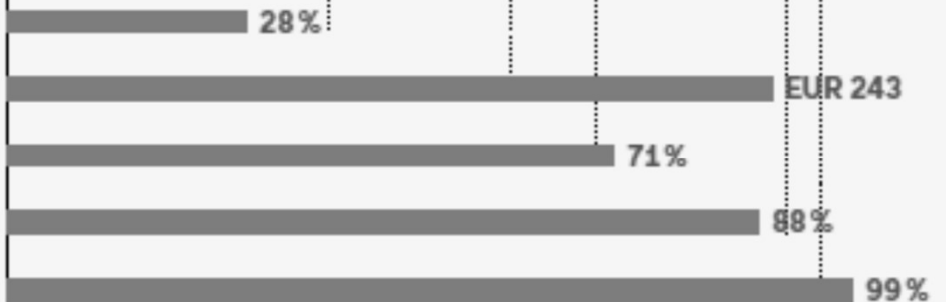
Average purchase per month (EUR)

Percentage of e-commerce consumers abroad

Percentage of e-commerce consumers

Internet penetration

Average for Europe



## Percentage of e-commerce consumers who have made purchases from each respective product category over the past year.



## From which of the following e-commerce sites have you shopped online in the past year?

Zalando

42 %

eBay

22 %

Amazon

20 %

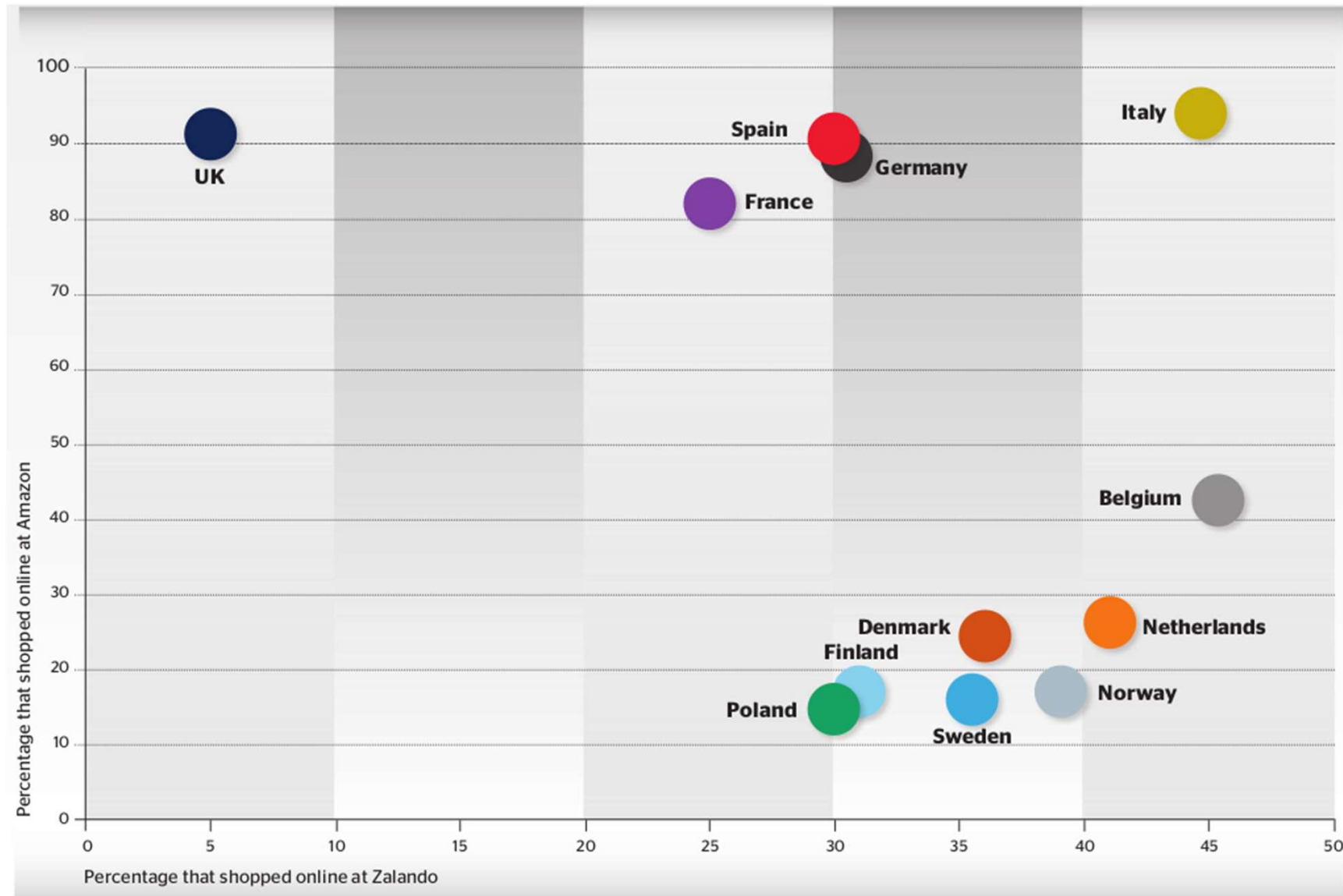
Basis: Have shopped online

Source: PostNord, eCommerce in Europe

For more detailed data, see also

<https://oosga.com/e-commerce/dnk/>

# So far a Battle Amazon vs. Zalando



Source: DirectLink, <https://www.directlink.com/amazon-and-zalando-dominate-european-marketplaces/>



## ...and now Temu and Shein

According to European Commission, around **4.6 billion low-value consignments**, i.e. goods with a value not exceeding €150, entered the EU market equalling to **12 million parcels per day in 2024**.

This is twice as many as in 2023 and three times as many as in 2022, and many of these goods have found to be non-compliant with European legislation....

Sources:

[https://ec.europa.eu/commission/presscorner/detail/en/ip\\_25\\_410](https://ec.europa.eu/commission/presscorner/detail/en/ip_25_410)

<https://www.dw.com/en/will-eu-finally-rein-in-chinese-online-retailer-temu/a-70852973>





# Things to know about customs when you are travelling

If you are entering or leaving the EU  
**WITH €10,000 or more**

**BY**

**AIR** **SEA** **TRAIN** **ROAD**

**YOU MUST DECLARE IT TO CUSTOMS**

**NOTHING TO DECLARE** **DECLARE GOODS HERE**

<http://ec.europa.eu/eucashcontrols>

**KEEP PLANT PESTS AND DISEASES OUT OF THE EUROPEAN UNION**

You are **NOT** allowed to bring plants, fruits\*, vegetables, flowers or seeds into the European Union without a phytosanitary certificate\*\*.

\*Bananas, coconuts, dates, pineapples and durians can be brought into the EU without a certificate.  
\*\*You do not need a certificate when the plants, fruits, vegetables, flowers or seeds come from Switzerland or Liechtenstein.  
\*\*\*You will need a certificate when they come from the following EU territories: Ceuta, Melilla, the Canary Islands, Guadeloupe, French Guiana, Martinique, Mayotte, Réunion, Saint Barthélemy and Saint Martin.

**BMF**  
**FEDERAL MINISTRY OF FINANCE**

Importing duty-free goods when entering from a non-EU state:

The following goods may be imported free of customs or other duties with your luggage each calendar day for personal use or consumption, use or consumption by family members, or as a gift when entering from non-EU states:

<b>Tobacco products</b> (age 17 or older) 200 pieces cigarettes <b>or</b> 100 pieces cigarillos <b>or</b> 50 pieces cigars <b>or</b> 250 grams of smoking tobacco <b>or</b> an assortment of these goods	<b>Other goods</b> Up to a total value of <b>EUR 430</b> for air travellers, or <b>EUR 300</b> for all other travellers. The allowance is reduced to <b>EUR 150</b> for travellers <b>younger than 15</b> . Import restrictions and prohibitions must, however, also be observed for these goods.
<b>Alcoholic beverages</b> (age 17 or older) 1 litre of alcohol and alcoholic beverages of an alcoholic strength exceeding 22 % vol, or undenaturated ethyl alcohol of 80 % vol or more <b>or</b> 2 litres of alcohol and alcoholic beverages of an alcoholic strength of up to 22 % vol <b>or</b> a proportionate assortment of these goods <b>and in addition</b> 4 litres of still wines and 16 litres of beer	<b>Medicines</b> Amounts consistent with your personal needs during the trip. <b>Note:</b> Only up to three retail packages per person of medicines purchased abroad may be imported without approval (for travellers resident in the EU). <b>Note</b> Special import restrictions and prohibitions apply to animals, plants, food products, weapons and many other goods. Further information is available at our customs information flyer, at <a href="http://www.bmf.gv.at">www.bmf.gv.at</a> and using our BMF app.

**BMF The BMF app:**  
Mobile and compact, it can be used to find information on customs regulations for entry into Austria. The Customs app is integrated into the BMF app and also functions in offline mode, making it easy to use outside the country. The BMF app can be downloaded free of charge from the app store for your smartphone: Google Play, iTunes, Windows App Store or Blackberry World.

For more details see:  
<https://toldst.dk/en-us/individuals/travel>

# Thing to know about customs when you do cross-border online shopping

**Until recently**, goods with a total intrinsic value  $\leq 150$  EUR were exempt from import duties, and goods having a total value  $\leq 10$  EUR should be exempt from VAT on importation. EU Member States may also grant an exemption on VAT for imported goods which have a minimum total value 10 - 22 EUR (Council Directive 2009/132/EC of 19/10/2009).

Hence, goods were systematically declared below the VAT threshold (22 EUR) to avoid VAT, customs duties and customs formalities.

CUSTOMS DECLARATION  
DÉCLARATION EN DOUANE  
United Kingdom  
May be opened officially  
Peut être ouvert d'office  
CN22  
Commercial sample (Echantillon commercial)  
Other (Autre)  
Quantity and detailed description of contents  
Description Détaillée Quantité et de contenu  
400 x Max Star, 51g  
Weight  
Poids (kg)  
20.40  
Value  
Valeur (€)  
100.00  
For commercial items only  
If known, add tariff number and country of origin of goods  
No tariff to be added if goods are of origin of the country of origin  
1002285, PL  
Total Weight  
Poids total (kg)  
20.40  
Total Value  
Valeur totale (€)  
100.00  
I, the undersigned whose name and address are given at the top, certify that the particulars given in this declaration are correct and that the items do not contain any dangerous articles or articles prohibited by legislation or by postal or customs regulations  
Date and sender's signature  
20 July 2019  
G. Thompson

## Since 15/04/2021

All imported small consignments transported by postal service and express operators by air must be covered by an **electronic safety & security and a customs declaration**.

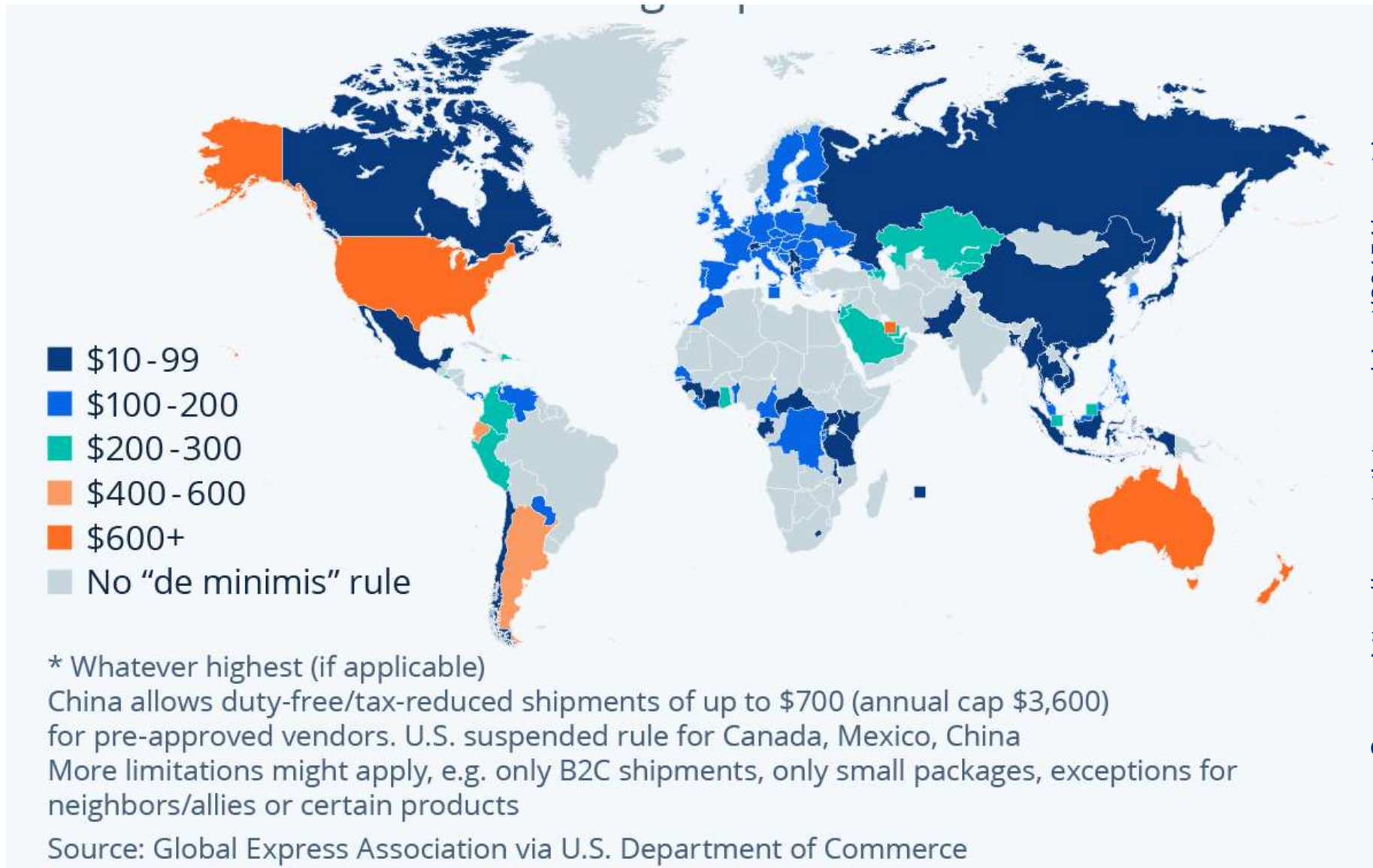
**Reduced data set for goods  $\leq 150$  EUR not subject to excise duties or restrictions.**

## Since 01/07/2021

**All goods imported have to be declared** and VAT to be collected (including  $< 22$  EUR goods). **Import One Stop Shop (IOSS)** system **to collect VAT at purchase** will make a faster release at customs. Whenever IOSS is not used by the seller/shipper, VAT will be charged at import (however, special arrangements for postal service etc. provided)

More about?, See [https://vat-one-stop-shop.ec.europa.eu/index\\_en](https://vat-one-stop-shop.ec.europa.eu/index_en) and more details at <https://toldst.dk/en-us/individuals/online-shopping>

# De Minimis Exemptions Worldwide



Source: <https://www.statista.com/chart/20154/countries-applying-a-%2522de-minimis%2522-exception-of-taxes-and-or-duties/>



## Sell Direct-to-Consumer or Through Amazon? Questions:

- 1.) Discuss pro's and con's for selling through Amazon!
- 2.) Which bikes should Pedal Spark sell through Amazon?
  - a) The present luxury ebike for \$ 4,000
  - b) The new budget ebike for \$ 899
- 3.) Which option offered by Amazon may be better for Pedal Spark?
  - a) Sell products to Amazon for it to resell.
  - b) Sell bikes themselves on Amazon and let them handle warehousing and shipping.
  - c) List them on Amazon and ship them on their own.





**What are the pro's and con's  
for selling through Amazon?**



# Servitization (or Products as a Service)

## Printer Ink Subscription

Never run out of ink to print!



<https://instantink.hpconnected.com/uk/en/l/v2>

## Car Sharing Systems

Pay-as-you-use principle



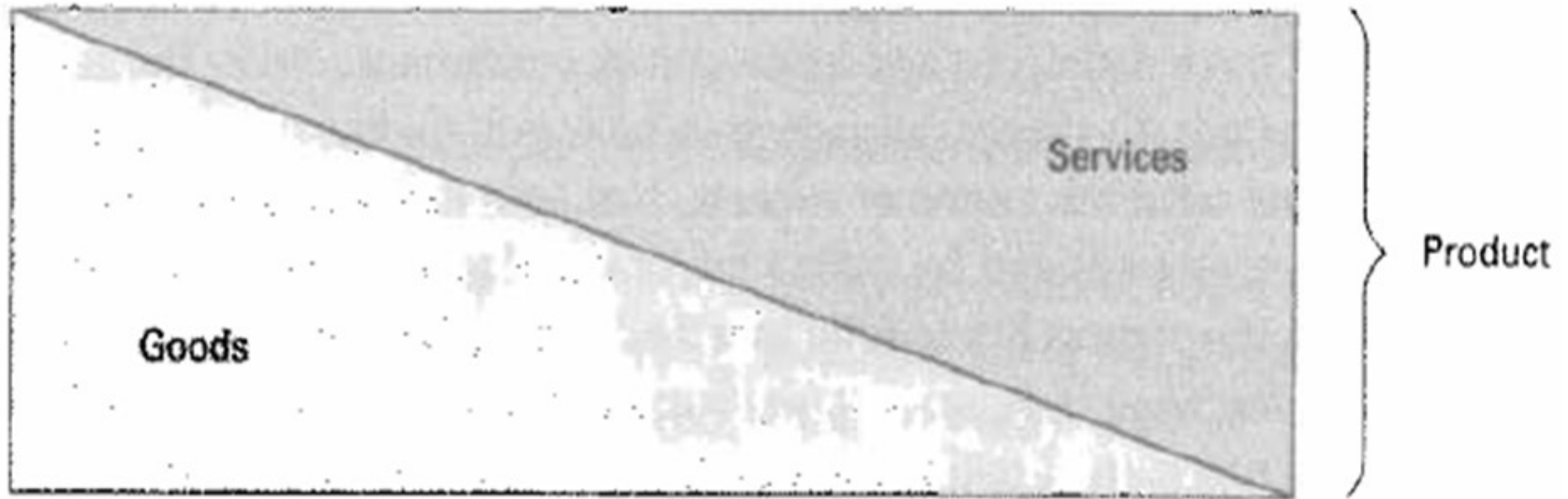
Free2move



<https://www.free2move.com/de/en/car-sharing/>

<https://kinto.services/dk/kinto-share/>

# Products as a Mix between Goods and Services



Today, for many products peripheral services are needed to add value to the product for the customer – e.g. mobile phones, electronic game plays, but also business and manufacturing equipment. Product and peripheral services together create customer service.

Source: Jonsson 2008

# Ten Foundational Premises of Service-Dominant-Logic

1. Service is the fundamental basis of exchange.
2. Indirect exchange masks the fundamental basis of exchange.
3. Goods are a distribution mechanism for service provision.
4. Operant resources are the fundamental source of competitive advantage.
5. All economies are service economies.
6. The customer is always a co-creator of value.
7. The enterprise cannot deliver value but only offer value propositions.
8. A service-centered view is inherently customer oriented and relational.
9. All social and economic actors are resource integrators.
10. Value is always uniquely and phenomenologically determined by the beneficiary

Service-Dominant (S-D) Logic is a mindset for a unified understanding of the purpose and nature of organizations, markets and society.

More about? See: <http://www.sdlogic.net/index.html>

# Manufacturing Supply Chains vs. Service Supply Chains

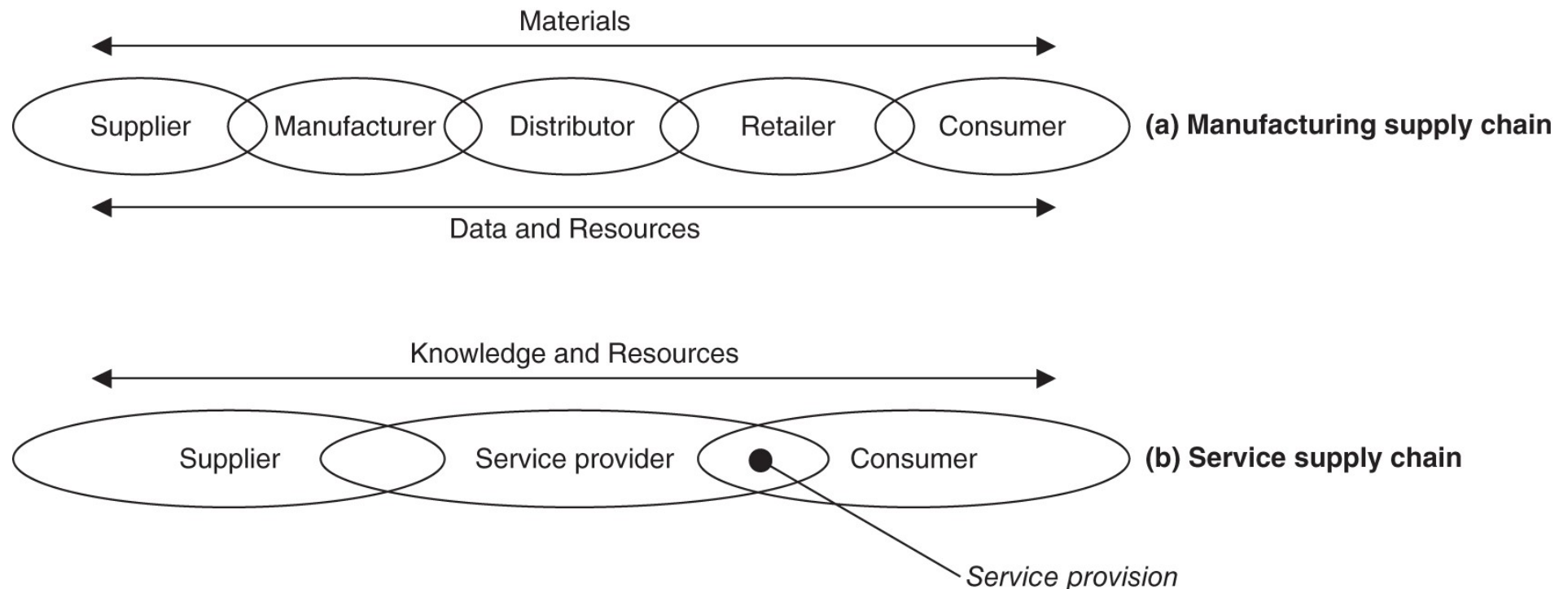
A **manufacturing supply chain** creates value through the provision of standardised, repeatable processes that ensure the delivery of freight to the end-customer in a timely fashion. In a **service supply chain**, standardisation and repeatability are less easy to achieve because customers require more variety and in some cases bespoke solutions.

Services are:

- Less tangible
- More heterogeneous
- More perishable
- Inseparable from the point of consumption

Therefore, service supply chains need to be managed differently than manufacturing supply chains

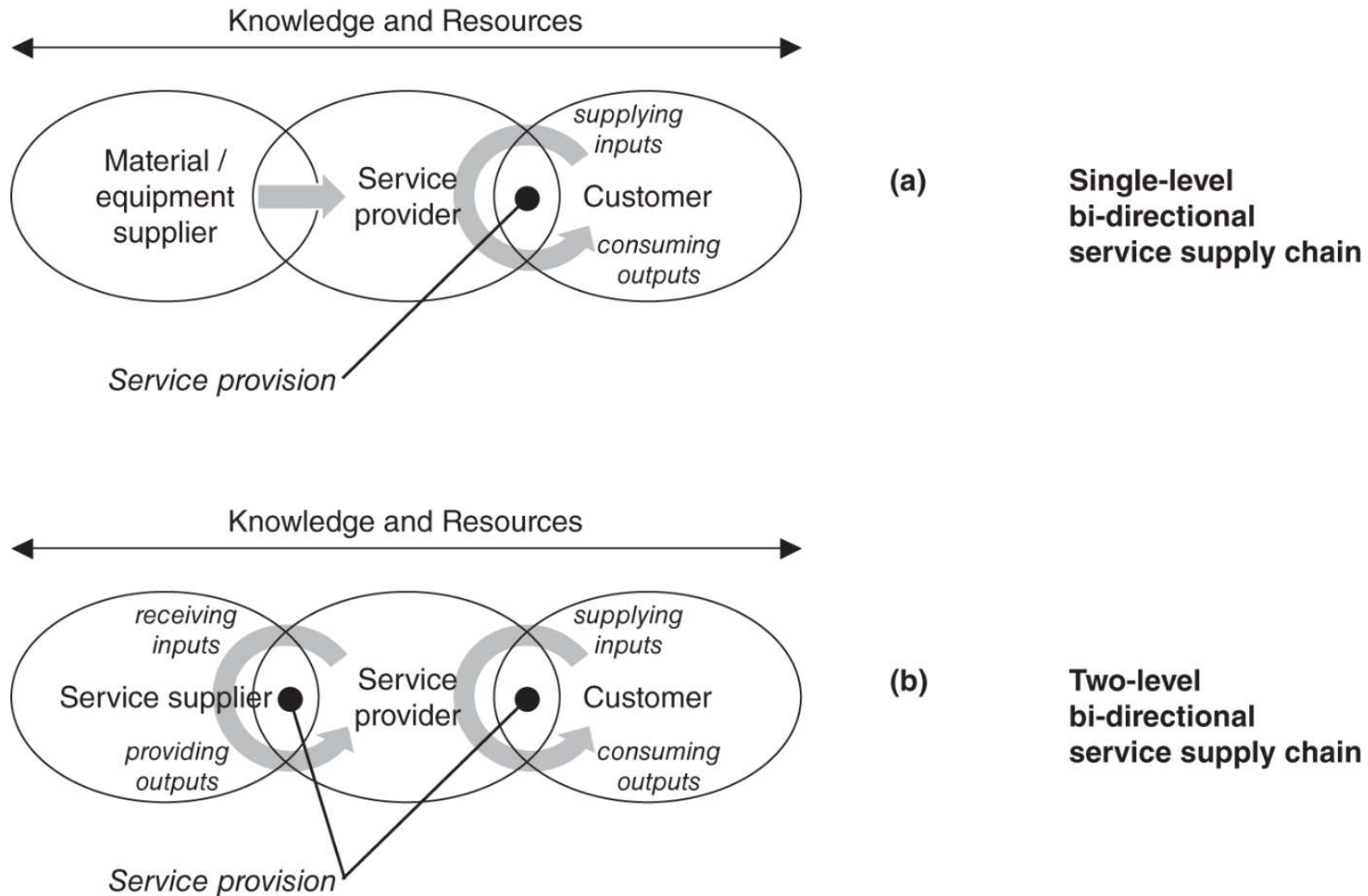
# Manufacturing Supply Chain vs. Service Supply Chain Model



The customer/client (who is also normally the consumer) is directly and simultaneously involved in the service. Hence the **service provision** usually occurs when the service provider is in direct contact with the consumer.



# Supplier-customer Duality and Bi-directional Service Supply Chains



# Reverse Logistics

“The process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods, and related information from the point of consumption to the point of origin for the purpose of recapturing or creating value or proper disposal”

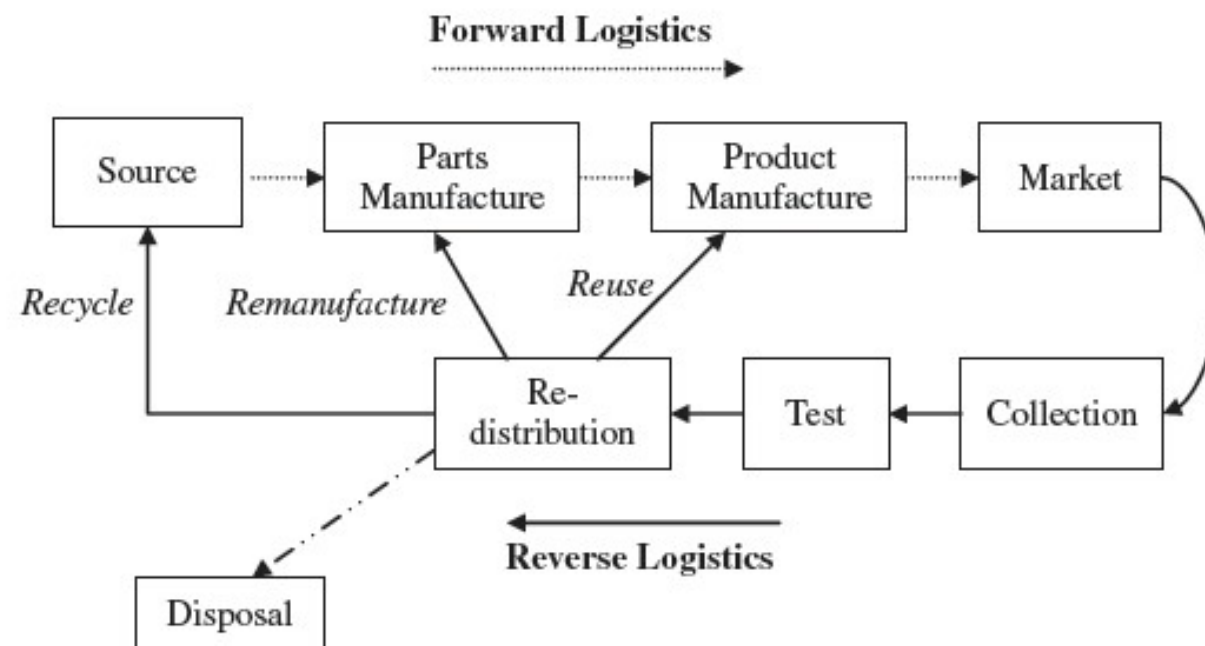


Figure 15.1 A generic reverse logistics system with recovery options

# Recovery Options

## Reuse

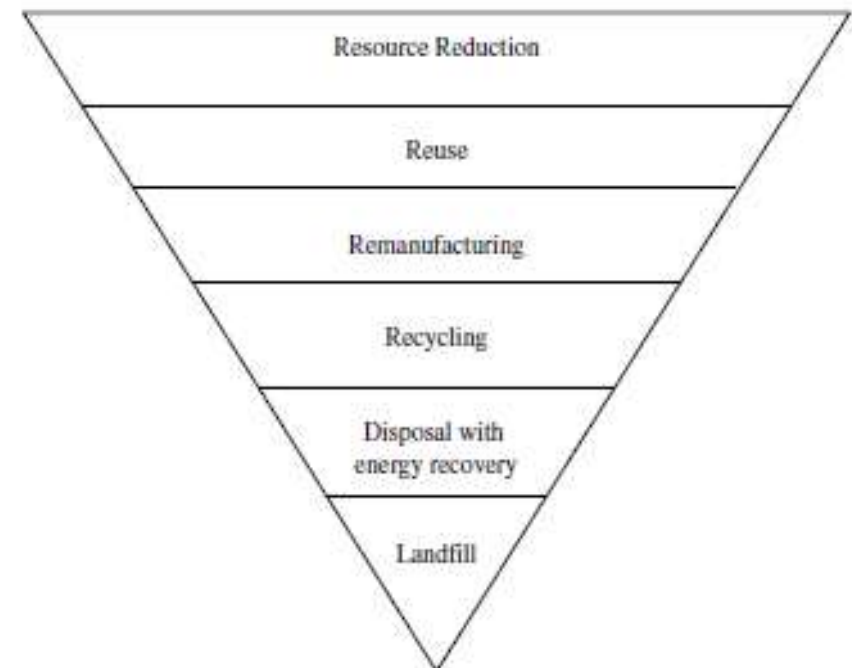
- Reuse refers to a process in which the recovered product is used again for a purpose similar to the one for which it was originally designed.

## Remanufacturing

- Remanufacturing involves a process of reducing a product into its constituent parts. It requires more extensive work, often complete disassembly of the product.

## Recycling

- Recycling is the process of collecting and disassembling used products, components and materials, and separating them into categories of like materials, such as plastic, glass etc., and then processing them into recycled materials.



# Closed-Loop vs- Open Loop Reverse Logistics Systems

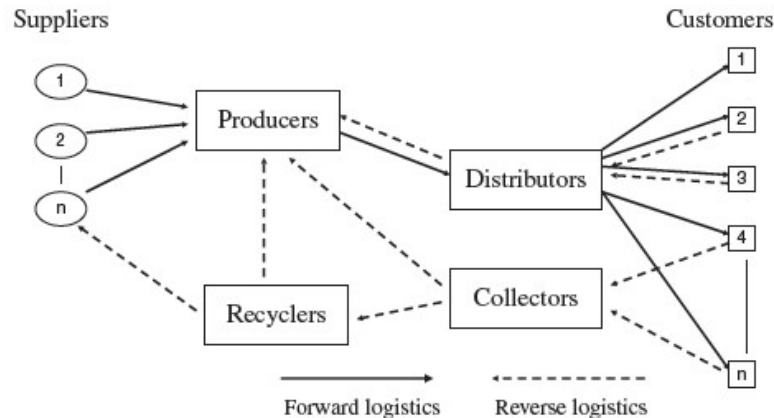


Figure 15.3 Illustration of a closed-loop reverse logistics system

Companies collect their used products and either refurbish and resell or remanufacture them or they recycle them.

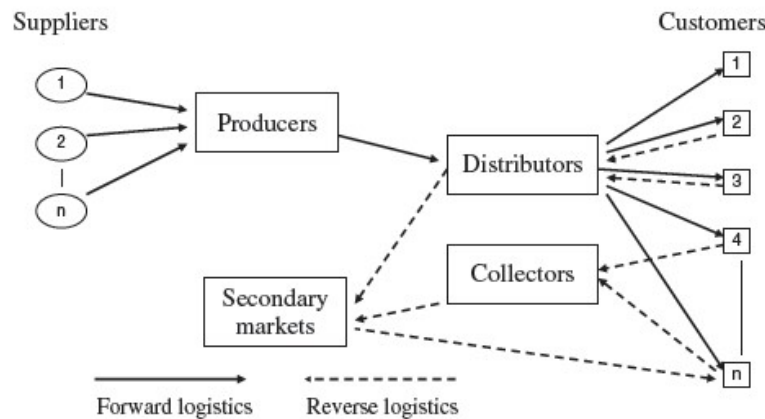


Figure 15.4 Illustration of an open-loop reverse logistics system

Companies using this system might assume responsibility for collecting and finding markets for their products, but do not use the recovered materials for themselves.

# Motivations for Reverse Logistics

## Government Policy and Legislation

Packaging Ordinance, Recycling and Waste Control Acts, WEEE Directive etc.

## Economic Considerations

Disposal costs

'Urban Mining' to cover raw resources



## Environmental Considerations

Complicance with legislation,

'Green' companies like Wiema Sko => <http://www.duckfeet.com>

## Shift Towards Buying Sets of Services

Selling services instead of products, including maintenance and take-back of end-of-life products => Servitization