PRODUCT SERVICE SYSTEMS: MAIN AND SUB-CATEGORIES

Product-based value	PRODUCT SERVICE SYSTEM (PSS) Value based on combination of product and service			Service based value
Pure Product	**Product Oriented**	**Use Oriented**	**Result Oriented**	**Pure Service**

Product-based value

PRODUCT SERVICE SYSTEM (PSS)
Value based on combination of product and service

Service based value

Pure Product

PRODUCT SALE
THE OWNERSHIP OF THE PRODUCT CHANGES

Product Oriented

PRODUCT RELATED SERVICE
SELLING A PRODUCT COMBINED WITH A PRODUCT RELATED SERVICE (EXAMPLE: MAINTENANCE CONTRACT).

PRODUCT RELATED ADVICE
SELLING A PRODUCT WITH A USE RELATED SERVICE (EXAMPLE: ECO-DRIVING COURSE).

Use Oriented

PRODUCT LEASE
EXCLUSIVE USE OF A PRODUCT WITHOUT BEING THE OWNER.

PRODUCT SHARING/RENTING
NON EXCLUSIVE USE OF A PRODUCT. CONSUMER IS OWNER (SHARING) OR PROVIDER IS OWNER (RENTING).

Product Pooling
THE PRODUCT IS SIMUTANEOUSLY USED.

Pay-per-service unit
THE USER PAYS FOR THE OUTPUT OF THE PRODUCT ACCORDING TO THE USE LEVEL.

Result Oriented

OUTSOURCING
A THIRD PARTY OWNS THE PRODUCT AND PROVIDES A PRODUCT RELATED SERVICE.

FUNCTIONAL RESULT
A SERVICE PROVIDER DELIVERS A SPECIFIC RESULT. THE TYPE OF PRODUCT IS SECONDARY.

Pure Service

SERVICE PROVIDING
AN ACTIVITY IS PROVIDED WITHOUT THE USE OF ANY PRODUCT. FOR EXAMPLE: TELEPORTATION.

Legend

All business models are illustrated. The central product in the illustrations is a car. The central service is transportation.

- manufacturer and/or providor

lease
service
sell
advice

- value based transaction
- product user
- service provider: owns the product and valorizes a specific service
- potential environmental impact compared to a product based business model.

source: A. Tukker and U. Tischner, ed. (2006). New Business for Old Europe: product-service development competitiveness and sustainability. Sheffield: Greenleaf Publishing.

CIRCULAR FLANDERS

Potential environmental impacts of PSS

- shortening of the products useful lifetime due to careless use
- lower material and energy consumption during production and use phase
- potential for environmental benefits through economies of scale
- leaner manufacturing as products are more valuable
- greater producer responsibility
- sharing, renting, pooling,... and other PSS lower the total stock of product required to satisfy a specific need
- more professional care of the product, resulting in a longer product life time and higher quality endstock
- manufacturer/provider remaining product owner will have no incentive to sell excess material
- collection of end-of-life product may be significantly easier thus increasing the rate of uitilisation of end-of-life products
- easier upgrading to more eco-efficient technologies