Accepted Manuscript

A conjoint analysis of circular economy value propositions for consumers: Using "washing machines in Stockholm" as a case study

Michael Lieder, Farazee M.A. Asif, Amir Rashid, Aleš Mihelič, Simon Kotnik

PII: S0959-6526(17)32453-8

DOI: 10.1016/j.jclepro.2017.10.147

Reference: JCLP 10939

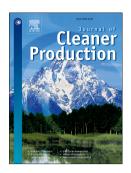
To appear in: Journal of Cleaner Production

Received Date: 9 March 2017

Revised Date: 12 October 2017 Accepted Date: 13 October 2017

Please cite this article as: Lieder M, Asif FMA, Rashid A, Mihelič Aleš, Kotnik S, A conjoint analysis of circular economy value propositions for consumers: Using "washing machines in Stockholm" as a case study, *Journal of Cleaner Production* (2017), doi: 10.1016/j.jclepro.2017.10.147.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



ACCEPTED MANUSCRIPT

Title

A conjoint analysis of circular economy value propositions for consumers: using "washing machines in Stockholm" as a case study

Authors

Michael Lieder^a, Farazee M.A. Asif^a, Amir Rashid^{a,*}, Aleš Mihelič^b, Simon Kotnik^c

e-mail: <u>lieder@kth.se</u>
Farazee M.A. Asif

e-mail: aasi@kth.se

*Corresponding author:

Amir Rashid

e-mail: <u>amirr@kth.se</u> phone: +46 8 790 63 73

Aleš Mihelič

e-mail: ales.mihelic@gorenje.com

Simon Kotnik

e-mail: simon.kotnik@gorenje.com

^aDepartment of Production Engineering, KTH Royal Institute of Technology, Brinellvägen 68, SE-100 44 Stockholm, Sweden

^bR&D Competence Centre Laundry Care, Gorenje d.d., Partizanska 12, SI- 3320 Velenje, Slovenja

Abstract

Background: In industrial practice a transition from a linear (take-make-dispose) to a circular product system (considering reuse/remanufacturing/recycling) requires the change of business models through new value propositions. In doing so the focus of the value proposition shifts from selling a physical product to providing access to functionality through business innovation. One key factor related to circular business transitions is market acceptance. It is particularly challenging to understand what complexity a new concept like circular economy (CE) brings to established businesses where the success and the failure of the business is dependent on customer's acceptance of new value propositions.

Purpose: This paper empirically explores the opportunities of a circular business approach for washing machines in the city of Stockholm by quantifying and assessing customer preferences for CE value propositions for a business to customer (B2C) scenario.

Method: This study uses the method of choice-based conjoint analysis to investigate preferences based on the attributes price and payment scheme, environmental friendliness as well as service level.

Originality: This paper is the first of its kind to assess customer preferences from the CE market acceptance point of view using a conjoint approach and provides insight to what extent new CE value propositions may be adopted.

Findings: Results indicate that there is general interest in paying for access rather than for ownership. Service levels have the strongest impact on customer utility of a washing machine offer. If associated with reduction in CO_2 emissions the number of remanufacturing cycles can increase purchase probability. As a method choice-based conjoint analysis is highlighted as beneficial to break down CE value propositions and to identify to what extent particular service-related attributes and product-related attributes contribute to overall customer utility.

Keywords

Circular Economy; Customer preferences; Customer acceptance; Business models; Conjoint analysis; Washing machines

^cJoint R&D Centre, Gorenje d.d., Partizanska 12, SI- 3320 Velenje, Slovenia

دريافت فورى ب

ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
 - ✓ امكان دانلود نسخه ترجمه شده مقالات
 - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
 - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
 - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
 - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات