

ANZMAC 2017 Submission Example

Customer Participation in Co-Configuration: Antecedents and Outcomes

Jessica Pallant, Ingo Karpen, Emily Chung, RMIT University,

Sean Sands, Monash University

Short Abstract:

Customers are increasingly demanding products that directly fit their individual needs. Organisations have responded to these demands by offering individualised products through mass customisation. As a strategy, customisation is becoming a key driver of competitive advantage, yet most research has considered the organisational view of customisation. In contrast there is relatively limited research from a customer perspective, with a small number focusing on customers as co-producers of value in the design and production process, and on satisfaction post-customisation. Hence, the aim of this research is to gain a more detailed understanding of the customer perspective. Specifically, this research focuses on co-configuration; a type of mass customisation.. This study explores the customer's participation intentions for the configuration of products, as well as the outcomes of such participation. We find participation in customisation depends on an individual's Need for Uniqueness, Product Involvement and Perceived Behavioural Control, and significantly influences perceived aesthetics.

Keywords: Mass Customisation, Co-configuration, Brand Engagement

Introduction and Research Aim

Customers are increasingly demanding products that directly fit their individual needs (Hunt, Radford & Evans 2013). As a result, Mass Customisation is becoming a key driver of competitive advantage, yet most research has only considered an organisational view (Gilmore & Pine 1997; Lampel & Mintzberg 1996). Given mass customisation is centred on providing products that fit individual customer needs, a deeper understanding from a customer perspective is imperative.

While there are many types of mass customisation, past research has focused on only a select few. This research has studied co-construction (Udwadia & Ravi Kumar 1991) or co-design (Sanders & Stappers 2008), both of which involve the customer at an early stage of the customisation process, such as prototyping or product/service creation. However, firms are increasingly offering a type of mass customisation in which the customer is involved at a later stage, such as choosing from a pre-determined set of attributes. Successful examples include mainstream brands, such as Nike iD that offer co-configuration of men's, women's and children's shoes, and start-ups such as Shoes of Prey who have received \$US26.4 million investment funding for their concept that allows women to co-configure their perfect shoes, and the expansion in to handbags (Business Insider 2015). Given these developments, there is a need to further understand this kind of mass customisation, which we define as co-configuration. While the term co-design (Duray et al. 2000; Lee & Chang 2011), has been used in existing literature, we use the term co-configuration to define the process whereby the customer designs a product or service from a pre-determined list of components. Co-design implies a broader involvement, often including innovation and not just configuration of components processes (Sanders & Stappers 2008).

The aim of this study is:

To investigate the drivers for customers' co-configuration of product/service solutions, as well as the subsequent outcomes of co-configuration.

We address two research questions in line with this aim:

RQ1: What factors affect a customer's intention to participate in co-configuration?

RQ2: What impact does co-configuration have on customer perceptions of products?

Conceptual Model

In order to answer the research questions, a conceptual model is proposed based on the Theory of Planned Behaviour, which suggests intention to perform a behaviour can be predicted in part by attitude, subjective norm and perceived behavioural control (Ajzen 1991). In addition to these antecedents, we also test for other relevant factors from existing literature. For instance, we test for product involvement and shopping enjoyment (Koufaris 2002) as both have been shown to impact online purchase behaviour and intention to return. Similarly, we include brand related antecedents including brand love (Carroll & Ahuvia 2006) and brand uniqueness (Liljedal & Dahlén 2015) as they both have been found to have impacts on customer interactions with brands and products.

One of the aims of this study is to consider the outcomes of participating in co-configuration. This will be measured through Product Aesthetics, Functionality, and Symbolism (Homburg, Schwemmler & Kuehnl 2015). Previous research has shown that a desire for enhanced aesthetics, functionality and symbolism are antecedents to intention to purchase products (Homburg, Schwemmler & Kuehnl 2015). This study will consider how participating in customisation may impact these dimensions. This research will also investigate the individual outcome, repurchase intention, and brand outcome Brand Engagement (Hollebeek 2011).

Method and Analysis

Online data collection was conducted via an online survey distributed via direct email to a database of customers sourced from an industry partner. The industry partner manufactures and sells reusable coffee cups, offering customisation. Total usable sample for the study is 438 respondents.

Preliminary analysis for this research was conducted. We run descriptive statistics to obtain mean scores and compare these using t-tests across three groups: customers who have co-configured and purchased, customers who have co-configured but not purchased, and customers who have never co-configured. A Bonferroni adjustment was applied to reduce the chance of a Type 1 error. Using the same analysis technique, we compare the scores of outcomes across the same three customer types.

We also test which of the antecedents significantly influence the likelihood of customer's participation in co-configuration. We estimate a logistic regression model with the dependent variable a binary indicator of participation and each antecedent as an independent variable. We then remove non-significant variables and re-estimate the final coefficients.

Results, Discussion and Contributions

Preliminary analysis indicates co-configuring products leads to higher future purchase intention, suggesting there are benefits of co-configuring to both the customer and the firm. In addition to this, there are a number of potential practical and academic implications of this research.

Given the value of customers participating in customisation, this study will identify the antecedents of this behaviour, providing marketers insights as to how to encourage more customers to customise products. Preliminary results suggest that consumers who are more involved with a product category are more likely to customise products, suggesting marketers should target frequent purchasers of a particular product category. However, the findings also suggest that the simplicity of the industry partner's customisation tool reduces customer intentions to customise products again in the future. Hence, these findings may be used to re-design the customisation tool to provide better perceived value to customers.

It is interesting to note that of the Product Outcomes tested, only Aesthetics differed between customers who purchased a configured product and those who purchased a standard product. In research undertaken by Homburg, Schwemmle and Kuehnl (2015), Aesthetics was the only variable to not have a significant impact on purchase intention, so it is interesting it is the only variable to have a significant difference as an outcome of co-configuration. This presents a surprising result and an interesting area for future research to compare the outcomes of participating in co-configuration across product categories.

In summary, this research extends our understanding of mass customisation, by examining the antecedents and outcomes of participating in the specific area of co-configuration. While supporting some findings of existing literature, this study's initial findings also present some contrasts in results that highlight inconsistencies from existing literature and suggest potentially fruitful avenues for further research.

References

- Ajzen, I 1991, 'The theory of planned behavior', *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179-211.
- Business Insider 2015, *Shoes of Prey secures \$US15.5m to fund US expansion and move into handbags*, Business Insider, viewed 18 July 2016, <<http://www.businessinsider.com.au/shoes-of-prey-secures-us15-5m-to-fund-us-expansion-and-take-on-the-handbag-market-2015-12>>.
- Carroll, BA & Ahuvia, AC 2006, 'Some antecedents and outcomes of brand love', *Marketing Letters*, vol. 17, no. 2, pp. 79-89.
- Duray, R, Ward, PT, Milligan, GW & Berry, WL 2000, 'Approaches to mass customization: configurations and empirical validation', *Journal of Operations Management*, vol. 18, no. 6, pp. 605-25.
- Gilmore, JH & Pine, B 1997, 'The four faces of mass customization', *Harvard business review*, vol. 75, no. 1, pp. 91-101.
- Hollebeek, L 2011, 'Exploring customer brand engagement: definition and themes', *Journal of strategic Marketing*, vol. 19, no. 7, pp. 555-73.
- Homburg, C, Schwemmler, M & Kuehnl, C 2015, 'New Product Design: Concept, Measurement, and Consequences', *Journal of Marketing*, vol. 79, no. 3, pp. 41-56.
- Hunt, DM, Radford, SK & Evans, KR 2013, 'Individual differences in consumer value for mass customized products', *Journal of Consumer Behaviour*, vol. 12, no. 4, pp. 327-36.
- Koufaris, M 2002, 'Applying the Technology Acceptance Model and Flow Theory to Online Consumer Behavior', *Information Systems Research*, vol. 13, no. 2, pp. 205-23.
- Lampel, J & Mintzberg, H 1996, 'Customizing customization', *MIT Sloan Management Review*, vol. 38, no. 1, p. 21.
- Lee, HH & Chang, E 2011, 'Consumer attitudes toward online mass customization: An application of extended technology acceptance model', *Journal of Computer- Mediated Communication*, vol. 16, no. 2, pp. 171-200.
- Liljedal, KT & Dahlén, M 2015, 'Consumers' response to other consumers' participation in new product development', *Journal of Marketing Communications*, no. ahead-of-print, pp. 1-13.
- Sanders, EB-N & Stappers, PJ 2008, 'Co-creation and the new landscapes of design', *Co-design*, vol. 4, no. 1, pp. 5-18.
- Udwadia, FE & Ravi Kumar, K 1991, 'Impact of customer coconstruction in product/service markets', *Technological Forecasting and Social Change*, vol. 40, no. 3, pp. 261-72.