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**How do Customers Value the Use of Inner City Shopping? An Empirical  
Analysis**

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**Abstract:**

The aim of this study is to identify and empirically validate relevant benefits and costs of perceived value in use of an inner city shopping trip. Moreover, we examine the relevance of customers' value perceptions for four behavioral outcomes. We identified relevant benefit and cost components as well as behavioral outcomes through a literature review and a qualitative pre-study (n=29) and developed a higher-order conceptualization of the perceived value in use. We tested our research model by conducting a variance-based structural equation modeling (PLS-SEM) approach (n=314). Our findings suggest both retail-related and inner city-related benefits are important value components, which indicate that inner city retailers and city management must cooperate to increase customers' value perceptions. Furthermore, our results demonstrate the importance of a high value in use of inner city shopping trips to generate competitive advantages over online retailers and peripheral shopping malls.

**Keywords:** Inner City Retailing, Inner City Customer Behavior, Value in Use

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## 1. Introduction

High streets and the inner city highly contribute to the attractiveness of a city for its residents and visitors and therefore have an important impact on regional development and both city growth and revenues. However, recent changes in customers' shopping behavior, induced by digital technologies and the structural changes due to inner city shopping malls, pose a threat for high street and inner city retailers alike (Hughes & Jackson, 2015; Teller & Reutterer, 2008). In order to increase their patronage, inner city retailers, which include high street retailers henceforth, must offer consumers a higher value compared to other purchase channels (e.g. online retailers and shopping agglomerations like peripheral shopping malls). To compete against both online retailers and other shopping agglomerations, inner city retailers need insight into which aspects of an inner city shopping trip customers perceive as benefits and which aspects cause them to perceive costs.

A managerial relevant construct dealing with both benefits and costs and which has met substantial scientific research in the past is customer perceived value. This construct in this paper is defined as the overall assessment of the net benefit a customer perceives after mentally accounting for the perception of what he gains and the monetary and non-monetary costs (Zeithaml, 1988) he has to invest. Since customer perceived value of an inner city shopping trip is an evaluation of a specific usage context, this evaluation is an assessment about which aspects promoted (benefit) or hindered (cost) the achievement of the customer's goals of the shopping trip. This understanding of perceived value matches the definition of value in use (Macdonald, Kleinaltenkamp, and Wilson, 2016) which has been used in recent empirical studies concerning customer usage processes and value in use (e.g. Sweeney, Plewa, and Zurbruegg, 2018).

Although many empirical studies focus on the conceptualization and operationalization of customer perceived value, only a few empirical studies exist dealing specifically with value in use as well as its positive and negative aspects (Sweeney, Plewa & Zurbruegg, 2018). Even though some research on customers' evaluation of inner city retailers as an agglomeration exists (e.g. Teller & Reutterer, 2008), to the best of our knowledge, no prior study applies the concept of value in use to the context of customers' inner city shopping trip evaluations. Our study therefore **contributes** to existing research by conceptualizing and empirically testing a multidimensional construct of value in use in this context and testing its influence on four managerial relevant customer-behavioral outcomes. Since we include positive and negative aspects of value in use, the findings of our paper will demonstrate their importance for perceived value in use perceptions and therefore contribute to future research in this area and will also allow for the development of implications to address inner city retailers' customers.

Therefore, the **first objective** of this paper is to develop a conceptualization of value in use of an inner city shopping trip, taking into consideration both positive and negative aspects and to empirically test this conceptualization. The **second objective** is to empirically test the effects of the value in use on four customer behavior-related outcomes relevant to inner city retailers. The **third objective** is to provide managerial implications for inner city retailers and city managers as well as implications for future research. In order to reach these objectives the paper is structured as follows. First, we develop our conceptualization of value in use of an inner city shopping trip. Second, we develop and empirically test our research model and present our

results. Finally, we further discuss our contribution to existing research and develop managerial and research implications.

## 2. Conceptualization of Customer Perceived Value in Use of an Inner City Shopping Trip and Hypothesis Development

Based on our understanding of the value in use as a trade-off between the overall assessment of the perception of benefits and monetary and non-monetary costs (Zeithaml, 1988), we further *differentiate both perceived benefits and perceived costs of value in use*. Therefore, we conceptualize the value in use of an inner city shopping trip as a multi-dimensional, fourth-order formative construct.

In order to identify relevant benefit and cost components, we conducted a literature review of research regarding (a) customers' perceived aspects of value in use in other research contexts, (b) the assessment and characteristics of inner city retailers (c) as well as retail agglomerations and (d) customers' selection of a shopping location including shopping goals. The literature review revealed 11 benefit components, which can be categorized into three previously identified major benefit categories. The first major benefit category customers evaluate are *inner city-related* benefits in general. For example, inner city atmosphere and accessibility (e.g. via car or public transport) are important characteristics of inner cities, over which inner city retailers exert only limited control. The limited control is the key feature distinguishing the first category from the second category the literature review revealed, which are *retail-related* benefits. Retailers influence and are able to control customers' perceptions of the retailer characteristics, like the overall perception of the merchandise quality and customer service. The third category identified in the literature review are *customer-related* benefits. They deal primarily with hedonic and social shopping motivations, which the other two categories have not yet sufficiently addressed. In addition to these three major benefit categories, the literature review also revealed five specific monetary and non-monetary cost components. Additionally, we conducted a *qualitative pre-study* (n = 29) using semi-structured interviews and qualitative content analysis to supplement the findings of the literature review and to gain a deeper understanding of the perception and assessments of inner cities and its retailers. The results support the initial findings of our literature review.

In accordance with those findings, we categorized all of the 11 supported benefit components into one of the three major benefit categories, which in turn form the **perceived benefits component** (see figure 1 for an overview over the entire value in use construct). *Inner city-related benefits* include three benefit components: *normative benefits* (e.g. Holbrook, 1994), *convenience benefits* (e.g. Reimers & Chao, 2014) and *atmospheric benefits* (e.g. Rayburn & Voss, 2013). Normative benefits refer to customers' positive beliefs, that they support the inner city, its retailers and local products by shopping there. Convenience benefits, which is considered a formative construct based on its characteristics, is formed by benefit perceptions concerning the *agglomeration of retailers* (e.g. Teller & Reutterer, 2008), the *time convenience* (e.g. Reimers & Chao, 2014) of the shopping trip and the perception of *effort reduction* the inner city provides for a customer. Atmospheric benefits refer to the pleasantness of the architecture and the atmosphere in the inner city. Four components form *retail-related benefits*.

The first component refers to benefits through the *fulfillment of the need for touch* (e.g. Peck & Childers, 2003), the second *benefit through merchandise quality*. The third component of retail-related benefits refers to the *benefit through direct interactions with salespeople* (e.g. Davis & Hodges, 2012) and the fourth to the *benefit through customer orientation*. The component *customer-related benefits* consist of four other components: *hedonic benefits* (e.g. Holbrook, 1994; Scarpi, Pizzi, and Visentin, 2014), *gratification benefits*, *epistemic benefits*, and *benefits through social interactions* (with friends, family members and/or other visitors) (e.g. Davis & Hodges, 2012).

All five cost components were supported in our qualitative study and form the **perceived costs component**. *Monetary costs* as first cost component include the perception of customers that they have to *pay higher prices* (e.g. Bezes, 2016) while shopping in inner cities and that the shopping trip might entail further monetary costs (e.g. for parking), which result in *extra costs*. Therefore, the construct of monetary costs is formative. *Physical effort* as second cost component refers to efforts like physical exertion (e.g. Verhoef & Langerak, 2001) to carry ones purchases or moving through the inner city. The third cost component, termed *performance risks* (e.g. Bezes, 2016), deals with perceived risks like unavailability of desired products or the risk that the shopping trip might not meet the customers' expectations. *Crowding costs* (e.g. Mehta, 2013), which is the fourth cost component, means a customer's perception of too many people being in the inner city or the stores at the same time. The last cost component, termed *accessibility costs*, is an aggregation of three aspects and therefore a formative construct itself. Accessibility costs contain the assessment of the effort regarding the *accessibility* of the inner city (e.g. Teller & Reutterer, 2008), the perceived degree of the limitation of *parking space* (e.g. Reimers & Chao, 2014) and *opening hours* (not) matching customer needs.

Based on empirical evidence, which suggests that value in use effects relevant behavioral intentions of customers, we will derive hypotheses for the following behavioral outcomes. (1) The *willingness to pay a price premium* is a highly relevant customer intention for inner city retailers, as many customers view online retailers' prices as lower than brick-and-mortar stores (Bezes, 2016). Inner city retailers have higher operating costs than online retailers, which means that inner city retail customers need to be willing to pay a price premium. Empirical research suggests that high value perceptions lead to a higher willingness to pay a price premium (e.g. Eggert & Ulaga, 2002). (2) The *intention to revisit* is the second of those managerial relevant outcomes, as it is a prerequisite for forming long-lasting relationships between retailers and their customers (e.g. Jung, Kim, and Kim, 2014). Studies also show a positive effect of customer perceived value in different contexts (e.g. Eggert & Ulaga, 2002) on the intention to revisit. (3) A third customer related behavioral intention analyzed in studies regarding the effect of value in use is word-of-mouth (WOM) intention. Empirical results show a positive link between a high value in use and *WOM intentions* (e.g. Sweeney, Plewa, and Zurbruegg, 2018), which is highly relevant for inner city retailers, who compete with other purchase channels like shopping malls and online retailers. (4) In order to compete against those other purchase channels, the *attractiveness of these shopping alternatives* has to be lower in comparison to an inner city shopping trip. Eggert and Ulaga (2002) show that a high customer perceived value negatively affects the search for alternatives. These empirical findings lead us to the following hypotheses:

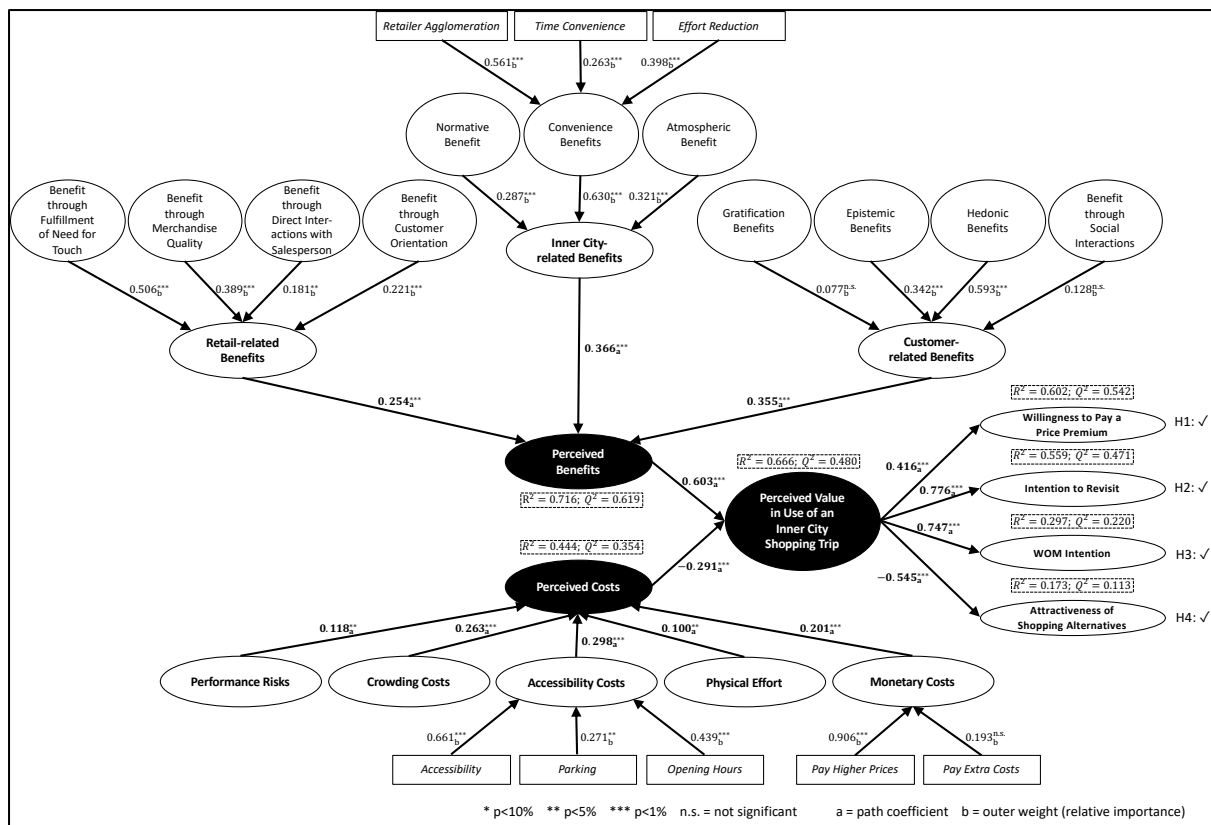
H 1-3: A customers' perceived value in use of an inner city shopping trip has a positive effect on *willingness to pay a price premium* (H1), *intention to revisit* the inner city (H2) and *WOM intentions* (H3) regarding the inner city.

H4: Value in use has a negative impact on the attractiveness of shopping alternatives.

### 3. Empirical quantitative study

We empirically tested the research model using a standardized online questionnaire. Participants were asked to remember their past inner city shopping trips while making their judgments in respect of perceived benefits, costs and consequences of inner city shopping. The constructs were measured with reflective as well as with formative multi-item scales (6-point likert scales and "don't know"-category). The *two-stage approach* (Hair, Sarstedt, Ringle, and Gudergan, 2018) was used to measure the three higher order constructs "retail-related", "inner city-related" and "customer-related" benefits. All scales were based either on established scales identified in relevant studies or, if not yet existent, on our qualitative analysis. In a *pilot study* (n=14) we pretested the questionnaire and refined it based on received feedbacks. The final sample consists of 314 German participants (31% men, 65% women, 1% other, 3% missing) and represents a wide range of age (between 14 and over 70 years), income, education level and residence (82 German cities). To analyze the data, variance-based structural equation modeling (PLS-SEM) was used because of the model complexity (both reflective and formative measurement models) and the nonnormally distributed dataset. To evaluate the formative measurement model's validity in terms of the perceived value in use of an inner city shopping trip, we applied a *MIMIC approach* to the first and second order measurements (Diamantopoulos, Riefler & Roth, 2008).

We used the software application "SmartPLS 3" for data analysis and followed the guidelines by Hair, Hult, Ringle, and Sarstedt (2017) and Hair et al. (2018). The measures employed in our research model performed well according to established psychometric criteria. All **reflective measures** exhibit internal consistency reliability (Cronbach's alpha > 0.7; Composite reliability > 0.7), convergent validity (outer loadings > 0.708; AVE > 0.5) and discriminant validity (cross-loadings, Fornell-Larcker and HTMT criterion). Furthermore, all **formative measures** meet the established standards (outer VIF values < 5, significant outer weights). Only three formative indicators show non-significant outer weights, thus no relative importance. The inspection of the outer loadings (significant outer loadings > 0.5), which showed their absolute importance for their constructs, led us to retain them. After examining the measurement model, we evaluated the structural model. No set of predictor constructs of the structural model exhibit collinearity (inner VIF values < 5). We included a test for *common method bias* by employing the Harman's single factor test and the latent marker variable approach (Chin, Thatcher, Wright, and Steel, 2013). The results show no common method bias exists. In line with Chin (1998), explanatory power ( $R^2$ ) of all dependent variables ranged from "moderate" ( $0.33 < R^2 \leq 0.66$ ) to "substantial" ( $R^2 > 0.66$ ). In addition, blindfolding showed that all Stone-Geisser ( $Q^2$ ) values were larger than zero. According to these results, we conclude that the structural model represents the above specified concept well. Figure 1 shows our results, including the path coefficients and the outer weights.



**Figure 1.** Research model with PLS estimates

Our findings point out that perceived value in use of an inner city shopping trip is associated with *perceived benefits* (0.603 p<1%) as well as *perceived costs* (-0.291 p<1%), which consumers offset against each other. The results demonstrate that all three benefit components are important, with inner city-related benefits as well as customer-related benefits being the most important benefit components. Furthermore, we show that *inner city-related benefits* are largely formed by convenience benefits, consisting of perceived retailer agglomeration, time convenience and effort reduction. Results also show that *customer-related benefits* are determined by hedonic and epistemic benefits of inner city shopping trips. Furthermore, *retail-related benefits* are formed by merchandise quality and the given opportunity to touch and feel the merchandise of inner city retailers. Moreover, all specified cost components affect the perceived costs of an inner city shopping trip. Both *accessibility costs* as well as *crowding costs* are essential to form customer perceived costs. It is evident that accessibility of the inner city is a strong cost component for customers, while it is surprising that parking facilities has the lowest relative importance to accessibility costs. Additionally, *monetary costs* are another important perceived cost component. Our results indicate that customers believe that they have to pay a higher price if they shop in the inner city, which the high relative importance of the indicator within the monetary costs construct demonstrates. *Performance risks* and *physical efforts* are also significant cost components, but only play a minor role. Moreover, our findings provide evidence for the relevance of perceived value in use of inner city shopping trips on different customer behavioral outcomes. This is shown by the fact that all hypotheses are supported. Perceived value in use has a positive effect on customer's *willingness to pay a premium price* (H1), *revisit intention* (H2) and *WOM intention* (H3). On the other hand,



*attractiveness of other shopping alternatives* is declining with increasing perceived value in use (H4).

#### **4. Conclusion and Implications**

Based on these findings our study offers several important insights, which are relevant for both inner city retailers and the city management. Dealing with customer's perceptions of benefits and costs of an inner city shopping trip and the associated perceived value in use is important to generate competitive advantages over online retailers and shopping malls in peripheral regions. Additionally, increasing customers' perceived value in use could improve the frequency of inner cities. To achieve this, inner city retailers as well as city management should cooperate and address key themes together. For instance, to promote customer perceived benefits, inner city retailers should increase merchandise quality and coordinate product and service range in retailer cooperation. This ensures an optimal merchandise-mix for customers during the inner city shopping trip. Furthermore, retailers should improve the fulfillment of customers' need for touch by creating opportunities of physical experiences with products. Even the city management could increase the customer perceived benefits of an inner city shopping trip by enhancing shopping convenience. Moreover, the city management must ensure that the cityscape is clean and visually attractive designed, so that customers feel comfortable during a shopping trip. In cooperation with inner city retailers, the city management should manage the diversity of inner city providers while maintaining a reasonable balance between different product and service categories. By means of common management of customer information and inner city events, both city management and inner city retailer together, could address customer related benefits such as hedonic or epistemic benefits. Another way to increase perceived value in use of inner city shopping trips is to reduce customers' perceptions of costs related to inner city shopping. To achieve this, the city management should improve accessibility of the inner city. This could be done by extending local public transport and parking facilities as well as by deregulation of shop opening hours.

Our study **contributes** to existing literature by providing further insights into the construct of perceived value in use of inner city shopping trips and its specific benefits and costs components. Additionally, we empirically analyzed the importance of customer perceptions of value in use to different customer behavioral outcomes, filling a research gap in this area. **Further research** should replicate our research model with a higher sample size and could analyze regional, cultural and individual differences regarding value perception. Moreover, research could analyze different value types and control for patterns based on unobserved heterogeneity.

## References

- Bezes, C. (2016). Comparing Online and In-Store Risks in Multichannel Shopping. *International Journal of Retail & Distribution Management*, 44(3), 284-300.
- Chin, W.W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. *Modern Methods for Business Research*, 295(2), 295-336.
- Chin, W.W., Thatcher, J.B., Wright, R.T., & Steel, D. (2013). Controlling for Common Method Variance in PLS Analysis: The Measured Latent Marker Variable Approach. In H. Abdi, W.W. Chin, V. Esposito Vinzi, G. Russolillo, & L. Trinchera (eds.), *New Perspectives in Partial Least Squares and Related Methods* (pp. 231-239). New York, NY, Springer.
- Davis, L., & Hodges, N. (2012). Consumer Shopping Value: An Investigation of Shopping Trip Value, Instore Shopping Value and Retail Format. *Journal of Retailing and Consumer Services*, 19(2), 229-239.
- Diamantopoulos, A., Riefler, P., & Roth, K.P. (2008). Advancing Formative Measurement Models. *Journal of Business Research*, 61(12), 1203-1218.
- Eggert, A., & Ulaga, W. (2002). Customer Perceived Value: A Substitute for Satisfaction in Business Markets? *Journal of Business & Industrial Marketing*, 17(2/3), 107-118.
- Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM): 2nd Edition* Thousand Oaks, CA: Sage.
- Hair, J.F., Sarstedt, M., Ringle, C.M., & Gudergan, S.P. (2018). *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM)* Thousand Oaks, CA: Sage.
- Holbrook, M.B. (1994). The Nature of Customer Value: An Axiology of Services in the Consumption Experience. In R.T. Rust, & R.L. Oliver (eds.), *Service Quality: New Directions in Theory and Practice* (pp. 21-71). Thousand Oaks, CA: Sage.
- Hughes, C., & Jackson, C. (2015). Death of the High Street: Identification, Prevention, Reinvention. *Regional Studies, Regional Science*, 2(1), 237-256.
- Jung, N.Y., Kim, S., & Kim, S. (2014). Influence of Consumer Attitude Toward Online Brand Community on Revisit Intention and Brand Trust. *Journal of Retailing and Consumer Services*, 21(4), 581-589.
- Macdonald, E.K., Kleinaltenkamp, M., & Wilson, H.N. (2016). How Business Customers Judge Solutions: Solution Quality and Value in Use. *Journal of Marketing*, 80(3), 96-120.
- Mehta, R. (2013). Understanding Perceived Retail Crowding: A Critical Review and Research Agenda. *Journal of Retailing and Consumer Services*, 20(6), 642-649.
- Peck, J., & Childers, T.L. (2003). Individual Differences in Haptic Information Processing: The "Need for Touch" Scale. *Journal of Consumer Research*, 30(3), 430-442.
- Rayburn, S.W., & Voss, K.E. (2013): A Model of Consumer's Retail Atmosphere Perceptions. *Journal of Retailing and Consumer Services*, 20(4), 400-407.

- Reimers, V., & Chao, F. (2014). The Role of Convenience in a Recreational Shopping Trip. *European Journal of Marketing*, 48(11/12), 2213-2236.
- Scarpi, D., Pizzi, G., & Visentin, M. (2014). Shopping for Fun or Shopping to Buy: Is It Different Online and Offline? *Journal of Retailing and Consumer Services*, 21(3), 258-267.
- Sweeney, J.C., Plewa, C., & Zurbruegg, R. (2018). Examining Positive and Negative Value-in-Use in a Complex Service Setting. *European Journal of Marketing*, 52(5/6), 1084-1106.
- Teller, C., & Reutterer, T. (2008). The Evolving Concept of Retail Attractiveness: What Makes Retail Agglomerations Attractive when Customers Shop at Them? *Journal of Retailing and Consumer Services*, 15, 127-143.
- Verhoef, P.C., & Langerak, F. (2001). Possible Determinants of Consumers' Adoption of Electronic Grocery Shopping in the Netherlands. *Journal of Retailing and Consumer Services*, 8(5), 275-285.
- Zeithaml, V.A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52, 2-22.

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