Data Article

Data modelling consumer-generated content usage for apparel shopping

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Abstract

This data article presents raw inferential statistical data which determine the use of consumer-generated content for online fashion apparel shopping among young adult consumers in South Africa. The data was gathered from consumers within the Gauteng Province metropolitan area of Johannesburg. Structural equation modelling approach using partial least squares statistical software (Smart PLS) was used to test the posited hypotheses in the conceptual research model. Structured questionnaires were distributed to consumers within the Johannesburg Metropolitan area. This data set show that perceived usefulness, perceived trustworthy, knowledge and competence has a major statistical impact on attitude towards the use of consumer generated content. The data also suggested a statistically significant relationship between attitude and intention to use consumer generated content as a source of information for online apparel shopping. In addition, the data showed that the perceived usefulness and trustworthiness had a statically marginal impact on usage intention. The data also shows that the perceived enjoyment of user generated content by users has had a negative and statically insignificant impact on attitude, while attitude has had a positive and significant effect on consumer behavioural intentions.

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**Specification Table**

| Subject                  | Business and Marketing          |
|--------------------------|---------------------------------|
| Specific subject area    | Consumer Behaviour, Retailing   |
| Types of data            | Figure and Tables               |
| How data were acquired   | Survey questionnaire (included in supplementary material) |
| Data format              | Raw, analysed.                  |
| Parameters for data collection | Respondents were conveniently selected for the survey, but exclusively young adults living within the Johannesburg Metropolitan area. |
| Description of data collection | The surveys were administered to young adults at public facilities (university campus, local mall) between May and August 2019, resulting in 300 valid responses. |
| Data source location     | Area: Johannesburg Metropolitan area  |
|                          | Province: Gauteng                |
|                          | Country: South Africa            |
|                          | 26.2041° S, 28.0473° E          |
| Data accessibility       | Data is included in this article |

**Value of Data**

- The data can be used to reveal the impact of psychological factors on attitudes and consumer behavioural intentions.
- The data is useful in providing insights into advertising potential of content created by users on social media.
- The data provide practitioners with important evidence for creating more effective consumer-generated content marketing strategies that focus on gender disparities.
- The data can be used to facilitate further discussion on marketing campaigns which could be used by retail and marketing managers to maintain and influence apparel consumption.
- The data is timely and valid with the support of quantitative methodology and therefore provide invaluable reference for future researchers in retail marketing seeking reference for technology adoption within fashion retailing.
- The data described in this article shall be made widely accessible to facilitate extended analysis.

**1. Data description**

Following a post-positivist paradigm, this data article adopted a quantitative data collection approach and analysis. A cross-sectional research survey design is adopted to deduce the correlation between selected psychological factors and behavioural intention to use consumer generated content as a source of information for fashion apparel shopping. This paper integrates the technology acceptance model measures proposed by Davis [1] covering perceived ease of use, perceived ease of use, attitude and motivational theory measures proposed by Sheth, Newman & Gross [11], covering perceived trustworthiness, knowledge and competence. Proper modifications are made so that the reflective measures fit the research context and purpose. Perceived usefulness and perceived ease of use uses a five-item scale measure adapted from Pavlou [9]: attitude indicators use measures proposed by Kim and Forsythe [7]. Perceived enjoyment uses five-item scale measure adapted from Kim and Forsythe [7]. Trustworthiness uses a five item scale measure proposed by Escobar-Rodriguez and Carvajal-Trujillo [2]. Knowledge and competence uses a five-item scale measure adapted from Ohanian [8]. Finally, measures for intention to use consumer generated content (CGC) construct were adapted from Vankatesh, Thong and Xu [12]. Validity and reliability of the proposed model was tested to determine if the data fits well with the conceptual model.

Data validated the outer model by checking the reliability, convergent and discriminant validity of constructs using the composite reliability (CR) and Cronbach’s α value. The internal (structural) model is tested to determine the hypothesised relationships between constructs and
Table 1
Measurement Accuracy assessment.

| Construct                      | Items          | Loadings | Std Beta | Cronbach’s α | AVE  | CR   | rho_A |
|-------------------------------|----------------|----------|----------|---------------|------|------|-------|
| Perceived Ease of use         | PEOU1          | 0.809    | 0.807    | 0.634         | 0.874| 0.809|
|                               | PEOU2          | 0.844    |          |               |      |      |       |
|                               | PEOU3          | 0.775    |          |               |      |      |       |
|                               | PEOU4          | 0.775    |          |               |      |      |       |
| Perceived usefulness          | PU1            | 0.715    | 0.744    | 0.655         | 0.849| 0.840|
|                               | PU2            | 0.892    |          |               |      |      |       |
|                               | PU3            | 0.811    |          |               |      |      |       |
| Perceived Trustworthiness     | PT1            | 0.647    | 0.746    | 0.573         | 0.841| 0.794|
|                               | PT2            | 0.662    |          |               |      |      |       |
|                               | PT3            | 0.828    |          |               |      |      |       |
| Knowledge & Competence        | KC3            | 0.839    | 0.850    | 0.768         | 0.908| 0.906|
|                               | KC4            | 0.847    |          |               |      |      |       |
|                               | KC5            | 0.939    |          |               |      |      |       |
| Perceived Enjoyment           | PE1            | 0.691    | 0.819    | 0.626         | 0.829| 0.940|
|                               | PE2            | 0.990    |          |               |      |      |       |
|                               | PE3            | 0.649    |          |               |      |      |       |
| Attitude towards the use of CGC | ATT1        | 0.832    | 0.699    | 0.558         | 0.785| 0.665|
|                               | ATT2           | 0.832    |          |               |      |      |       |
|                               | ATT3           | 0.537    |          |               |      |      |       |
| Behavioural intention         | INT1           | 0.842    | 0.706    | 0.632         | 0.835| 0.771|

Fig. 1. Measurement and Structural Model results.

to evaluate the overall prediction of the proposed model. SmartPLS performs confirmatory factor analysis (CFA) while estimating the structural model. The confirmatory factor analysis results are presented in Table 1 and Fig. 1, while the structural equation results are presented in Table 4. Table 1 shows that all reliability measures exceeded the recommended threshold of 0.7 [6], thus indicating satisfactory levels of internal consistency. The discriminant validity of the
Table 2
Inter-construct correlation matrix.

|                  | ATT     | INT     | KC      | PEOU    | PE      | PT      | PU      |
|------------------|---------|---------|---------|---------|---------|---------|---------|
| Attitude         | (0.747) |         |         |         |         |         |         |
| Intention        | 0.528   | (0.795) |         |         |         |         |         |
| Knowledge & Competence | 0.321   | 0.129   | (0.876) |         |         |         |         |
| Perceived ease of use | 0.379   | 0.189   | 0.133   | (0.796) |         |         |         |
| Perceived enjoyment | 0.103   | 0.055   | 0.031   | 0.212   | (0.791) |         |         |
| Perceived trustworthiness | 1.028   | 0.341   | 0.196   | 0.403   | 0.136   | (0.757) |         |
| Perceived Usefulness | 0.426   | 0.159   | 0.104   | 0.769   | 0.769   | 0.378   | (0.809) |

Note. Square roots of AVE presented on bold diagonal. HTMT values shown below the diagonal.

Table 3
Respondents profile.

|                          |       |
|--------------------------|-------|
| Age                      | %     |
| 18–24                    | 72    |
| 25–31                    | 25    |
| 32–40                    | 3     |
| Monthly Expense          |       |
| <1000                    | 28    |
| 1001–2000                | 46    |
| >2000                    | 26    |
| Year of online shopping  |       |
| <1 year                  | 10.1  |
| 1–2 year                 | 66.8  |
| >3 years                 | 23.1  |
| Internet Frequency       |       |
| Once a day               | 15    |
| Several times a day      | 80    |
| A few times a week       | 5     |

seven constructs was tested using heterotrait-monotrait (HTMT) ratio and the square root of the AVE of each latent construct [1]. Table 2 below confirms that satisfactory discriminant validity was achieved as indicated by HTMT values lower than 0.9 [5]. Discriminant validity was further confirmed using the Fornell and Larker criterion, whereby a latent construct should share more variance with its assigned indicators than with any other latent variable and the square root of the AVE of each latent construct should be greater than the construct’s highest correlation with any other latent construct as shown on Table 2 [6]. Fig. 1, displays the structural model showing all the outcomes of the proposed hypothesised relationships. Table 3 displays the sample profile showing the demographic data of the participants. Ultimately, Table 4 shows the structural equation model analysis of the data.

1.1. Path model

After the validation test, Partial Least Squares Structural Equation modelling technique (PLS-SEM) is used to determine the explanatory power and predictive validity of the proposed model, as well as the scope of the path coefficients and the significance of the hypothesised relationships as shown on Fig. 1 [10]. To compute the cross-validated redundancy measure $Q^2$, the blind-folding procedure was applied. All $Q^2$ values for the model vary significantly above zero, thus indicating high predictive capacity of the exogenous constructs. Using the The Standardized Root Mean Square Residual (SRMR) for model fit estimation indicated a satisfactory model fit to the data [3]. Multi-group analysis output showed that significant differences only existed within one
Table 4
Structural equation model analysis output.

| Hypothesis relationship                  | Path Coefficient | t-Value | Decision          |
|------------------------------------------|------------------|---------|-------------------|
| H1 Perceived Usefulness->Attitude        | 0.129            | 2.694*  | Supported         |
| H2 Perceived Usefulness->Intention       | −0.075           | 1.119   | Not supported     |
| H3 Perceived Ease of Use->Attitude       | −0.028           | 0.542   | Not supported     |
| H4 Attitude->Intention                   | 0.283            | 2.897*  | Supported         |
| H5 Perceived Enjoyment->Attitude         | −0.082           | 1.309   | Not supported     |
| H6 Perceived Trustworthiness->Attitude   | 0.708            | 20.630**| Supported         |
| H7 Perceived Trustworthiness->Intention  | 0.085            | 0.800   | Supported         |
| H8 Knowledge & Competence->Attitude      | 0.103            | 2.313*  | Supported         |
| H9 Perceived Trustworthiness*Gender*Intention | 0.335          | 1.249   | Supported/insignificant |
| H10 Perceived Usefulness*Gender*Intention | 0.584           | 2.417*  | Supported         |
| H11 Attitude*Gender*Intention            | 0.295            | 1.039   | Supported         |

Note: *Significant p<0.05; p<0.01**.

path of the proposed model. The output of the multi-group and permutation tests revealed relationships moderated by gender.

2. Experimental design, materials and methods

The sample was composed of young adult internet users who have at least visited an e-shopping site, consequently were able to provide valuable information with regards to the survey questions. 300 usable questionnaires were collected for final data analysis. The demographic data presented information on age, internet visit frequency and period since they started shopping online. Due to difficulty in obtaining a sample frame, non-probability purposive and snowball sampling technique was used in recruiting the participants within Johannesburg metropolitan area. Based on the ‘ten-time rule’ for sample size calculations proposed by Hair, Sarstedt and Ringle [4], 300 collected survey instruments were considered appropriate number of samples for the dataset. Table 3 displays demographic data of the participants. It is important to note that photo-elicitation technique was used to assist participants make meaning of the fashion apparel phenomenon and stimulate emotions and memory. The collected data was coded and analysed using SPSS version 26 and analysed using descriptive and inferential tests.

3. Ethical considerations

Ethical considerations in data collection were adhered to during the data collection process. The researchers ensured that the respondents were well informed about the purpose of the research and the participation process. Ethical norms, that is, voluntary participation, observing privacy and anonymity and confidentiality were communicated to the respondents and adhered to.

4. Academic, practical and policy implications of this data article

Several managerial implications emerge from this data. While it broadens the scope of fashion marketing research and technological application, it validates the important role of psychological factors in predicting consumer behaviours. Thus, for academics in the field of marketing and retail marketing, this data introduces additional constructs from communication and marketing studies that illustrate the dynamic context of user generated e-shopping content applications. The framework can enable managers understand how UGC websites are evaluated by customers. The data offers insights into the area of focus that platform managers are supposed
to tackle as they seek to exploit social media in retail settings. At policy level, this data has implications on the integrity of online shared information. Existing policies governing virtual marketing can be updated to incorporate the principles outlined in this data report.

**Declaration of Competing Interest**

The authors declare that they have no known competing interests which have, or could be perceived to have influence the work reported in this article. Ethics clearance to conduct the research was awarded by the University of the Witwatersrand, Johannesburg.

**Supplementary materials**

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.dib.2020.106035.

**CRediT authorship contribution statement**

Elizabeth Kempen: Writing - review & editing.

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