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Talking about Durables

Abstract

We investigate whether people give advice about durables in the same way that they give advice about services. Using a survey of 349 respondents, we investigate the triggers for word of mouth (WOM) for four durables categories and compare this evidence with previous findings for services. For durables, positive word of mouth (PWOM) is mostly triggered by advertising and customer satisfaction, while negative word of mouth (NWOM) is rare and mostly triggered by coincidental communication or other's perceived needs. Contrastingly, in services, PWOM and NWOM are triggered by similar factors including satisfaction/dissatisfaction, coincidental communication and observation of decision making. These differences have important implications: they suggest that durable ads should be tested to check that they trigger WOM, whereas service providers should pay more attention to the service experience.

1. Introduction

Word of mouth (WOM) can have a potent effect on sales; the Keller Fay Agency (2014) reports that one in eight recommendations results in a sale. For this reason, we should research the triggers of WOM and pay particular attention to those triggers that can be influenced. Bayus (1985), and Graham and Havlena (2007) have shown that one trigger is advertising and Keller and Fay (2012) report that this stimulates about 25 percent of WOM. Despite this evidence, ad testing is not normally conducted to evaluate the carryover of ad exposure into WOM so that ads that are particularly effective at inducing WOM are not identified. A second trigger is satisfaction with the product, as found by East et al. (2015); here, managers can affect the level of WOM by controlling product quality. Managers would have more confidence in their ad spending if they found that it produced a substantial carryover into PWOM and had little impact on NWOM. However, if WOM was found to be more dependent on satisfaction and dissatisfaction, managerial effort might be better directed to raising product quality. Thus the allocation of resources to advertising and product development should take account of how much advertising and satisfaction/dissatisfaction induce WOM. Evidence on such matters does not compel a specific marketing strategy but an absence of such evidence means that judgments are poorly informed.

Research on the triggers of WOM may be gathered by brand, category and product type. We approach this matter by using an established typology to establish the factors that induce PWOM and NWOM on four durable categories. In this way we show the proportions of WOM attributed to advertising, satisfaction and other factors.

2. Triggers of Word of Mouth

The antecedents of WOM may be psychological variables such as motivations and attitudes (e.g. Dichter 1966, Sundarum, Mitra and Webster 1998), features of the product such as quality and reliability (e.g. Anderson 1998, Feng and Zhang 2010), or contextual factors such as the content of conversation and whether the communicator thinks that advice is needed by the receiver. Mangold, Miller and Brockway (1999) developed a typology covering the motivational and contextual factors that stimulated WOM about services; these stimuli included advertising, satisfaction/dissatisfaction with the product, perceived need for advice, conversational content, and joint decision making. East et al. (2015) used this typology to gather data on the relative frequencies of WOM stimuli across four service categories; here, we use the typology to establish the frequencies of the WOM stimuli across four durable categories.

2.1. Comparisons between categories

East et al. (2015) compared the triggers of WOM about restaurants, mobile airtime provision, financial services, and holiday destinations and found little difference between categories in the frequencies of the triggers. The main stimuli were satisfaction in the case of PWOM, dissatisfaction in the case of NWOM and conversation (PWOM and NWOM). Advertising was responsible for only seven percent of both PWOM and NWOM. We have been unable to find recent research relating to the sources of WOM about durables though Day and Ash (1979) noted wide differences in satisfaction in this domain so this might be one basis for differences between categories. The triggers of WOM on durables might also reflect variation in ad budgets but we cannot point to research on which a prediction could be based. We therefore seek to establish facts on this matter with the first research question:

RQ 1: How do the frequencies of factors stimulating WOM differ across durable categories?

2.2. Comparisons between durables and services

The precision manufacture of modern durables has ensured that product failures are now very rare. When faults occur in production, the product can often be withdrawn before sale, thus avoiding dissatisfaction. By contrast, service deficiencies emerge at the point of delivery where they cannot be rectified. The functions of durables can be precisely specified so that buyers have a clear idea of the benefits of the purchase and this again contrasts with services where there may be uncertainty about outcomes. These comparisons suggest that more risk applies to services than durables and that service use may create more consumer dissatisfaction as found by Murray and Schlacter (1990).

One other factor that could produce a difference between durables and services is the effectiveness of advertising when the product is tangible. Benefits from such a product may be easier to communicate and this could raise the impact of ads on durables; if so, we might expect more ad-induced WOM about durables. The research question is:

RQ2. How do the frequencies of factors stimulating WOM differ between durables and services?

2.3. Comparisons between PWOM and NWOM

In their study of services, East et al. (2015) found that the factor frequencies stimulating PWOM were closely similar to those stimulating NWOM (when satisfaction is used for PWOM and dissatisfaction for NWOM). This does not seem likely to apply to durables. If advertising has more effect in stimulating WOM about durables, this will impact mainly on PWOM since advertising is not designed to elicit NWOM. A review by Peterson and Wilson (1992), using data based on a range of goods and services, indicates that satisfaction is much more common than dissatisfaction with a ratio in the region of 10:1 but it seems likely that this ratio will be smaller for services and larger for durables if durables cause little dissatisfaction. The research question is:

RQ3: How do the frequencies of factors stimulating PWOM and NWOM about durables differ? More specifically, does satisfaction stimulate more PWOM than dissatisfaction stimulates NWOM?

3. Study

3.1. Questionnaire items and survey

As in the earlier work by East et al. (2015), we presented nine factors from the typology of Mangold, Miller and Brockway (1999) as a questionnaire item in a survey. As in the original work by Mangold et al. (1999), the present study was restricted to WOM that had been received, rather than given, by the respondent. (Thus, it is the triggers as assessed by the receiver that we measure).

The four durables were cars, vacuum cleaners, mobile phones and computers. These were chosen because of their high penetration and their different characteristics. Table 1 shows the factors and main question form with the response format, taking cars as the example category. Each item of this form was followed by a question which established whether the advice had been received in the last six months. After the question pair dealing with positive advice on cars, a further pair of questions dealt with negative advice on cars. Then the questioning moved to the next category.

Table 1. Items used in the questionnaire, using car as example

Factor	Item for receiving PWOM*
	<i>Question</i>
	Please think back to the last time you were told something <i>positive</i> about a car when you were considering getting one. What was the <i>main</i> factor behind the other person's advice on this car?
	<i>Response alternatives</i>
Receiver's felt need	He/she thought you needed the advice/comment
Coincidental communication	The advice just arose in conversation
Communicator's dis/satisfaction	He/she was satisfied with this car
Observation of decision making	He/she observed you talking about or considering a car
Two or more people deciding	He/she was trying to decide with you or others about a car
Ad/prom about this provider	He/she was responding to advertising/promotion about this car
Receiver's dis/satisfaction	He/she was responding to your satisfaction with this car
Third party need for a service	It was because a third party needed a car
Ad/prom for another provider	He/she was responding to advertising/promotion that was not about this car
Other (please describe)	
Cannot recall receiving word of mouth	

* For questions on NWOM, *positive* was replaced by *negative* in the question and, in the response format, *satisfied* and *satisfaction* were replaced by *dissatisfied* and *dissatisfaction*

Data from a convenience sample of 349 respondents were gathered in the summer of 2014. The questionnaires were distributed to homes and to people in public spaces such as parks and coffee bars. Nearly all those respondents who agreed to help provided a completed questionnaire. No reward was used. To check on presentation order effects, two versions of the questionnaire were produced. Version A used the items in the order shown in Table 1 while version B reversed the order of the first nine items. The two versions were alternated in the packs given to fieldworkers and this produced 174 returns of version A and 175 responses for version B. The sample was 48% female and the median age was 36.

4. Checks

4.1. Presentation order effect

To check on any bias produced by the order of presentation, we computed a Total WOM measure by taking the means of factor frequencies for PWOM and NWOM on the four categories. The correlation between the frequencies of the first nine items of A and B was 0.96 ($p < .001$), which rules out any substantial presentation order effect. Note that "other" and "cannot recall receiving word of mouth" were always at the end of the response list.

4.2. Age and gender

Demographic differences were checked to see whether the factor frequencies were related to these measures. We compared the Total WOM of those aged less than 36 (49%) with the rest. The correlation between the frequencies for the younger and older segments was 0.96 ($p < .001$). Thus, there is little age-based difference in responses. Using Total WOM again, a

correlation of 0.98 was found between the factor frequencies of men and women, so there is no appreciable gender difference.

4.3. “Other” and “Cannot recall” responses

The “Other” response was used mostly when the durable had not been bought by the respondent. “Other” and “Cannot recall receiving word of mouth” were much more common for NWOM with the result that there were only 246 cases for analysis across the four categories compared with 1106 for PWOM. In the main analysis below, the “Other” and “Cannot recall” responses were excluded.

4.4. Common method bias

When a question form is repeated for different categories in a questionnaire, as in this work, there is a danger that later responses will automatically follow the pattern of earlier responses. As a check on this common method bias, the most common response was selected and those who checked this on category A were examined to see how frequently they checked the same response for categories B, C, and D. For PWOM, the most common response was “ad/prom about the product” which was checked by 44%. On average, of those who selected this response for category A, 39% selected it for other categories showing no sign of common method bias. This test was not conducted on NWOM because the number of respondents selecting the most common response was too low.

5. Findings

5.1. Recall percentages

The first numeric row of Table 2 shows the percentages of respondents who were non-buyers or those who could not recall receiving WOM on the category. This is followed by the number of respondents left for analysis and the percentages are based on this number. NWOM was much less common so that the ‘no recall’ percentages were correspondingly larger.

5.2. RQ 1: How do the frequencies of factors stimulating WOM differ across durable categories?

The individual category data in Table 3 show that, in the case of PWOM, the effects of advertising and communicator dis/satisfaction differ substantially across categories. PWOM about vacuum cleaners is particularly related to the communicator’s satisfaction while PWOM on mobile phones is strongly related to advertising. The computer category is exceptional because PWOM relates most to third party need. In the case of NWOM, the pattern is more uniform and emphasizes third party need, coincidental communication, and the receiver’s need (though vacuum cleaners, with few cases, show a zero score for the receiver’s need). Despite these differences between categories, Cronbach’s alpha for the four categories exceeds 0.7 for both PWOM (0.73) and NWOM (0.83) and, on this basis, we use the mean columns in Table 3 for the comparisons that follow.

Table 2. Factor Percentages by Category for PWOM and NWOM

	PWOM					NWOM				
	Car	Vac. Cl	Mob. Ph	Comp.	Mean	Car	Vac. Cl	Mob. Ph	Comp.	Mean
No recall/other %	14	37	6	23	20	72	93	87	77	82
Leaving N=	298	217	329	262	1106	96	23	47	80	246
	%	%	%	%	%	%	%	%	%	%
Ad/prom about this product	47	9	75	31	41	1	4	13	1	5
Communicator's dis/satis.	19	74	11	20	31	2	0	4	4	3
Third party need	10	8	2	34	14	22	30	9	58	30
Coincidental communication	7	5	4	7	6	37	44	32	15	30
Receiver's felt need	7	0	3	5	4	22	0	17	11	13
Observation of dec. making	4	1	2	2	2	6	4	6	0	4
Two or more people deciding	2	2	1	2	2	4	9	6	0	5
Receiver's dis/satisfaction	2	2	1	1	2	3	4	4	6	4
Ad/prom for another product	2	1	2	0	1	3	4	9	1	4

5.3. RQ2: How do the frequencies of factors stimulating WOM about durables and services differ?

The means from the East et al. (2015) study are compared with those obtained in this study, as shown in Table 3. The correlations between the factor scores for services and durables are close to zero (PWOM, $r = 0.13$, $p = 0.73$; NWOM, $r = 0.01$, $p = 0.98$). Thus services and durables differ with regard to the factors inducing WOM.

Table 3. Percentages attributed to different factors for durables and for services (services from East et al. (2015))

	Durables		Services (East et al. 2015)	
	PWOM	NWOM	PWOM	NWOM
Ad/prom about this provider	41	5	5	4
Communicator's dis/satisfaction	31	3	27	26
Third party need	14	30	5	6
Coincidental communication	6	30	19	19
Receiver's felt need	4	13	7	7
Observation of decision making	2	4	11	11
Two or more deciding	2	5	9	11
Receiver's dis/satisfaction	2	4	13	11
Ad/promo for another provider	1	4	2	3

5.4. RQ3: How do the frequencies of factors stimulating PWOM and NWOM about durables differ? More specifically, does satisfaction stimulate more PWOM than dissatisfaction stimulates NWOM?

Inspecting the data for durables in Table 3, advertising/promotion is a common trigger of PWOM on durables but is rare as a trigger of NWOM. Communicator satisfaction is a major trigger of PWOM but dissatisfaction is rare as a trigger of NWOM; this answers the subsidiary question in the heading. NWOM on durables appears to be based more on coincidental conversation and the perceived needs of others. When the mean frequencies of factors stimulating PWOM and NWOM about durables are correlated there is no significant relationship ($r = -.15$, $p = .69$). When this test is repeated for each category separately the associations are again trivial, except for computers where the correlation approaches significance ($r = 0.58$, $p = 0.1$).

6. Discussion

6.1. The need for facts

Marketing researchers need factual evidence to locate problems and to give context to findings. Usually, relevant facts can be obtained from market research and trade statistics but, in this case, there was no available evidence and we conducted the research ourselves. The results suggest some gaps in our understanding of how products should be supported and in the practice of ad testing, which we discuss below.

6.2. Application: PWOM depends on factors that can be influenced

We show that advertising triggers nearly half the PWOM about the four durables studied. This may relate to Givon and Horsky's (1990) suggestion that PWOM is the vehicle for much of the effect of durable advertising. Second to advertising, PWOM is triggered by satisfaction with the product. After this, a perceived need for information seemed particularly important as a trigger to PWOM in the case of computers. This evidence shows that PWOM about durables should be an important managerial concern because it is triggered by factors that can be influenced. NWOM about durables mostly arises in conversations which may be influenced by the supply of content in marketing communications. Thus, although managers cannot directly control NWOM, they can adapt product form and publicity so that PWOM is promoted and NWOM is deterred. To do this, managers need research on their specific category because our evidence shows substantial variation in the triggers of WOM across categories. Managers also need research should on the elements of advertising and the aspects of products that provide content for PWOM. When advice occurs because potential customers are seen to lack information, research is required to establish which items of information are thought to be needed so that publicity can incorporate this information.

We stress that our evidence points the way but is insufficient on its own. For example, it is not clear whether ads have less impact on PWOM about vacuum cleaners compared with other durables because the ad spending is low, the copy poor, or because satisfaction with the product crowds out the effect of advertising. Thus, further research is needed to clarify the contribution of these factors.

6.3. Durables and services

Our evidence on durables differs sharply from findings on services supplied by East et al. (2015) who, unlike the present study, found uniformity in the trigger frequencies across categories and between PWOM and NWOM. Furthermore, the factors that stimulated WOM about durables differed from those that stimulated WOM about services, particularly with respect to advertising. Why does durable advertising induce PWOM when this effect is largely absent for services? We can speculate that this difference relates to the weight of advertising used and to the effectiveness of ads on tangible products where product functions and benefits can be specified more exactly. We also found a difference between the sectors in the effect of dissatisfaction; the evidence suggests that service providers should be more concerned about avoiding dissatisfaction than durable manufacturers. This was a conclusion reached by Anderson, Fornell and Rust (1997) in modelling that took account of the degree of customization and standardization that was possible in services and durables.

6.4. Ad testing

Our evidence that advertising is the main basis for PWOM about durables suggests that ad copy should be tested for its effect on PWOM because this carryover may add substantially to the sales effect of the advertising. Ad testing has used recall, persuasion, physiological responses such as eye-tracking and measures of actual sales response in test communities such as the BehaviorScan split-cable method developed by Information Resources Incorporated (IRI) (Hu, Lodish, and Krieger 2007); however, it is not known how much an ad that is, say, better recalled is also more likely to be used in WOM. If there is little

association, the effectiveness of the ad will be poorly measured by recall. This is a problem that affects all short-term methods of ad testing. Split-cable tests allow time for WOM to propagate so that the effect of WOM may be included in the test but, when tests are conducted in one community as is the case for IRI's BehaviorScan, the WOM may pass between respondents in the test and control conditions so that the experimental design is compromised. These problems may not matter too much in the grocery field, where much of the split-cable ad testing is done if it is found that there is little ad-induced PWOM in this domain, but a new approach is required for durables that assesses transmissible content. We suggest that one method is to ask respondents to give product advice after hearing ads; the advice can be scored to see how many elements of the ad are incorporated.

6.5. The relative volume of PWOM and NWOM on durables

Average ratios of PWOM to NWOM tend to be in the region of 3 to 1 (e.g. East, Hammond and Wright 2007). Our evidence indicates a higher ratio of 4.5 to 1 if the frequency of receiving PWOM is the same as that for receiving NWOM. However, frequencies tend to fall with penetration (Ehrenberg 1988) and, taking account of this, the ratio will be substantially greater than 4.5 to 1. We suggest that this relatively high ratio occurs because there is little dissatisfaction with modern durables and because ad copy has a strong effect on PWOM but little effect on NWOM in this domain. A practical implication of this finding is that durable manufacturers should be less concerned about reducing NWOM than raising PWOM because there is less NWOM to do damage. Related to this, both East et al. (2008) and Sweeney et al. (2014) found that NWOM had somewhat less impact than PWOM on purchase intention.

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