

# **Learning How to Respond to Anti-branding Communities: Designing a Dilemma-based Serious Game for Online Marketing Management**

## **Abstract**

Numerous examples have shown that mass participation in online anti-branding communities can affect marketing managers' decisions by forcing firms to change their behaviour. Prior research has shown that incorrect responses can worsen reputational damage. This paper presents a new method to train and research marketing managers' behaviour with respect to online communities, deploying a dilemma-based serious game. It has been developed through research into effective strategies for handling online anti-branding communities, including activism. In the serious game, players are presented with five dilemmas in an online activism scenario and asked to choose between alternatives for handling the situation. An explorative study of the approach indicates that the serious game facilitates the learning process, improving participants' understanding of the issues involved in handling online activism.

**Keywords:** *Anti-branding, Online Activism, Serious Gaming, Marketing Education, Experiment*

**Track:** *Marketing Education*

## **1. Introduction**

In the marketing literature there has been increasing attention for the effects of the internet in general and social media in particular on the way that consumers choose their products (Senecal & Nantel, 2004), influence each other (Brown, Broderick, & Lee, 2007), and communicate with firms (Hatch & Schultz, 2010). Moreover, an increasing number of marketing studies are focusing on anti-branding communities (Krishnamurthy & Kucuk, 2009; Braunsberger & Buckler, 2011; Chavis & Leslie, 2009; Rezabakhsh et al., 2006). These online consumer protests urge marketing managers to quickly respond to claims and push them to decide between market or social value. Consequently, firms seem to struggle with this groundswell of negative opinion, which urges firms to develop sufficient marketing capabilities to create a dialogue with their consumers (Day, 2011).

Serious gaming seems to be an effective tool to develop these capabilities, as this is an experienced-based learning instrument that aims to educate and train professionals rather than entertain them (Michael & Chen, 2006). Hence, serious games are increasingly applied to transfer the knowledge and skills from management studies, such as marketing, to professionals in those fields (Faria et al, 2009).

We study in this paper to what extent a serious game can help to increase awareness about anti-branding communities among marketing professionals and improve their online marketing management capabilities. To do so, we present a new method to train and research marketing managers' behaviour with respect to online consumer protests, deploying a dilemma-based serious game. Firstly, we describe the application and effectiveness of serious games to train marketing managers in ethical dilemmas. Secondly, we describe the methodological steps of how we developed the serious game. This paper concludes with exploratory results of how the serious game facilitates the learning process by improving participants' understanding of the issues involved in handling online activism.

## **2. Serious Games as a Training Instrument for Ethical Decision-Making**

Serious games that simulate the business reality and are developed for management and marketing training are called business games (Keys & Wolfe, 1990; Faria et al, 2009). It is posed that these games permit the learner to gain experience in a number of skills and acquire knowledge (Thijssen et al, 2008) before encountering the simulated situation in real life.

Therefore, a vital question in literature is how effective business games are as a training instrument (Wolfe, 1997). First of all, business games are claimed to increase the knowledge level of the participants. However, the methods to assess the effectiveness of business games lack consistency, so the evidence of the effectiveness remains tentative (Gosen & Washbush, 2004; Whiteley & Faria, 1989). Methodological limitations are the experimental designs, the sample sizes, and the measurement approaches used in the various studies (Whiteley & Faria, 1989). Despite the problems to measure the effectiveness of business games, Wolfe (1997) found in an extensive literature review that most studies conclude that business games are better in transferring knowledge than case-based methods. The effectiveness, however, depends on several success factors (Adobor & Daneshfar, 2006; Knotts & Keys, 1997; Whitely & Faria, 1989; Wolfe, 1997). Firstly, the team should be well-selected: small enough for discussion, high cohesion between the players, including cooperative and enthusiastic players. Secondly, the instruction during the game should be timely, focus on experiential learning, comprehensive and provide feedback on the performance. Thirdly, the design of the game should be interactive, facilitate real life situations and easy to be used by the players. Lastly, the task provided by the game should be not too complex and balance conflict / compromise between players.

Usually, most business games do not include ethical decisions (Wolfe & Fritzsche, 1998), even though real life business situations often need qualitative reasoning for ethical decision making. Therefore, Wolfe & Fritzsche (1998) use vignettes of ethical dilemmas, which are short, impressionistic scenes that focus on one moment or give a particular insight into a character, idea, or setting. These are used at every turn of the game, and include one scenario, one dilemma and one choice. The consequences are calculated in a decision tree. By incorporating ethical dilemmas into a computer-based business game, instructors can bring additional qualitative aspects of behaviour into the game (Schumann et al, 2006). Schumann et al (2006) suggest that this approach helps to implement marketing research into the training of complex ethical decision-making. Similarly, several scholars have stressed the importance of serious games as an instrument for marketing research (Keys & Wolfe, 1990), next to their primary training function. Marketing managers often lack the time for filling out surveys or taking part in experiments, especially with their own marketing teams. Hence, business games might be an interesting research instrument to study complex decision-making by managers, as the simulation offers an unobtrusive way to observe their behaviour.

### 3. Methods

Firstly, we analysed the critical requirements for a successful business games through the literature review (see previous section).

Secondly, the game engine was developed based on these requirements and an experiment was carried out, which facilitated the development of real life game scenarios. In this experiment we assessed the public behaviour on companies' online response strategies through a two factor between subjects design, based on four corporate response strategies (Oliver, 1991): moving with (complying), moving toward (accommodating), moving against (countering) and moving away (ignoring). The subjects (n=201) were asked to indicate their preference for a dairy brand and were then shown a protest website targeting this brand followed by either no firm response or an online news item describing the firm's response. One control group saw no protest website. The experiment tested a model with the consequences of each of the firm's responses on consumer attitude and behavioural intention (Figure 1).

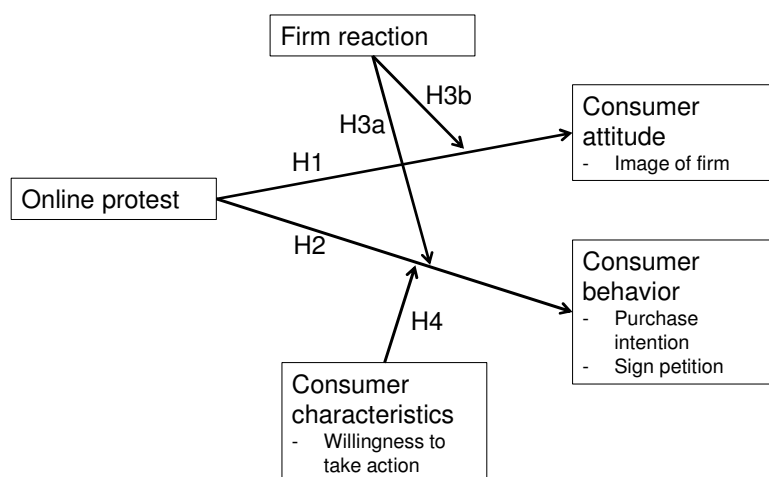


Figure 1 Research model of the experiment

Based on the insights gained from the analysis of the experiment, we formulated marketing scenarios, dilemmas and feedback tables that together form the foundation for the game engine (Wolfe & Fritzsche, 1998).

Thirdly, we built a demonstrator game to gain insight in the functionality and interface features of the game engine design.

Finally, the demonstrator game has undergone an initial evaluation, through a small-scale user test (n=6) followed by a semi-structured group interview, focusing on the user experience, the lessons learned and perceived usefulness of the serious game for handling online activism.

## 4. Results

### 4.1 Requirement analysis

In the first phase, the requirements of the game were analysed. Firstly, we set the main objective of the game: increase awareness and critical thinking of marketing managers when faced with protests from online consumer communities. Secondly, a literature review (see section 2) guided us in translating this objective in requirements a small team size (n<6), careful instruction that focuses on reflection, qualitative feedback on the choices made, easy to use interface, a realistic scenario and dilemmas with sufficient task complexity. As we focus on critical thinking, the ‘vignette’ design of Wolfe & Fritzsche (1998), which includes scenarios, dilemmas and choices, was chosen.

### 4.2 Game engine development

The second phase aimed at designing the game engine by means of an experiment and feedback tables. The experimental results are summarized in Table 1. The main findings are that the online protest had a negative influence on the consumers' attitude toward the brand, no matter what the firm's response. However, when the firm employed the ‘moving away’ strategy (i.e. ignore the protest) then the consumers' attitude toward the brand was damaged even more. Consumers' purchase intention was also damaged by the protest, although this could be mitigated by a positive firm response. In this case, we also found that consumers who scored high on the trait, Willingness to take action, had a stronger negative effect on purchase intention when exposed to an online protest.

Table 1. Effects of protests and firm responses on consumer attitude and purchase intention

<i>Dependent</i>	<i>Condition</i>	<i>Mean (SD)</i>	<i>Condition</i>	<i>Mean (SD)</i>	<i>p</i>
Attitude Toward the Brand	Zero measurement	5.60 (1.12)	Moving with	4.51 (1.42)	.003
			Moving toward	4.68 (1.07)	.006
			Moving against	4.41 (1.18)	< .001
			Moving away	3.36 (.85)	< .001
	Attack	4.78 (1.06)	Attack	4.78 (1.06)	.026
			Moving away	3.36 (.85)	.030
Image (Product And Service Quality)	Moving away	4.32 (.87)	Moving toward	5.05 (.78)	.017
			Zero measurement	5.31 (1.02)	< .001
Image (Environment)	Zero measurement	4.66 (.87)	Moving with	3.83 (1.20)	.047
			Moving against	3.76 (1.34)	.009
			Moving away	3.44 (1.08)	< .001
			Attack	3.90 (1.01)	.049
	Moving away	3.44 (1.08)	Moving toward	4.24 (1.02)	.024
			Zero measurement	5.31 (1.02)	< .001
Purchase intention	Zero measurement	4.94 (1.97)	Moving against	3.20 (1.80)	.002
			Moving away	3.24 (1.75)	.002
			Attack	3.17 (1.86)	.002

The results of the experiment were translated in a game engine, featuring a scenario with five dilemmas, requiring one choice per dilemma. An example of a developed scenario is how you, as a bank manager, would deal with an online consumer group that wants your bank to bail out home owners with negative equity due to the financial crisis. The different response strategies were linked to three types of feedback: customer value, shareholder value and corporate social responsibility value (CSR). Customer value was based on the effects on brand image and purchase intention, shareholder value on the 'costs' to implement the claim made by the protest group and CSR value was based on the environmental image of the firm, as measured in the experiment. The choice (Yes or No) represented two opposite response strategies (e.g. Moving With vs. Moving Away). The table below shows the feedback table for one dilemma.

Table 2. Example of feedback on five indicators given to the player, based on their choice

Choice made in reaction to dilemma:	Customer value		Shareholder value	CSR value
	Brand image	Purchase intention	Share price	Environmental image
Move with / toward	+	0	-	+
Move against / away	0	0	0	-

#### 4.3 Demonstrator game

The third phase aimed at developing a demonstrator game. The game engine was used as the foundation for the design of the demonstrator game. Given the requirement analysis, we designed a web-based game that is played by a team up to 6 players and facilitated by one instructor. To create a realistic situation, players need to solve the presented dilemmas regarding online activism under time pressure, and with help of assistants that each highlight a response strategy. Both the instructor and the game give feedback on the individual performance of the players, and give room to group discussion on the ethical choices made. Figure 2 shows the interface design of the demonstrator game.



Figure 2 The interface of the demonstrator game

#### 4.4 Evaluation of the demonstrator game

The demonstrator was played by a team of six marketing specialists and business developers and one instructor. After playing the game (45 minutes), a group interview (75 minutes) was

conducted to get feedback from the players on (1) setup of the game, e.g. team composition (2) instruction, e.g. timeliness and comprehensiveness (3) design, interactivity and easiness of use (4) the task, e.g. complexity. Over all, the game elicited thorough discussion of the dilemmas by the participants. They indicated that the game helped them to see the different perspectives on responding to protest from online anti-branding communities. In the group interview, participants indicated that game could be improved by feedback and reflection after every dilemma, by increasing online design elements (e.g. Facebook likes or Tweets) in the interface and introducing role-based, multiplayer gaming.

## **5. Conclusions and Managerial Implications**

In the current paper, we aimed to study to what extent a serious game can help to increase awareness about online anti-branding communities among marketing professionals and improve self-reflection of marketing managers on how they respond. This paper contributes to marketing research in three ways. Firstly, the success factors of serious gaming for marketing were analysed. The team, task, instruction and interface are the most important factors when designing a business game. Secondly, we provide a method to design the serious game that includes requirement analysis, game engine modelling, developing a demonstrator game and qualitative validation with a group interview. Thirdly, we present an experiment that demonstrated that the online protest had a negative influence on the consumers' attitude toward the brand, no matter what the firm's response. However, ignoring the protest damages the consumers' attitude toward the brand even more. Consumers' purchase intention was also damaged by the protest, although this could be mitigated by a positive firm response. Lastly, we show how empirical results from marketing research, in our case an experiment, can be translated to a game engine. Explorative analysis shows that the developed game has value for training marketing professionals. However, this evaluation of the serious game has, as yet, only been carried out on a small scale.

Future research could focus on a quantitative assessment of the learning effect, multi-player / role-based designs, simulation of feedback, e.g. based on agent-based modelling and adding online elements to the game. Next, the serious game can be used as a research instrument to study marketing managers' behaviour when faced with the dilemmas originating from online activism.

The serious game can be a useful tool for companies to informally train their marketing professionals in state of the art knowledge about how to handle online activism.

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