The Use of Computer Games for Promotional Purposes

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This study is focused on computer game series *Need for Speed (NFS)* in terms of its use in promotion of products and brands. We believe that computer games are no longer the domain of a small group of enthusiasts. In recent years, this kind of entertainment has became a global phenomenon, which is reflected both on professional and scientific levels. This study focuses on in-game advertising possibilities, identification, function, and logic in the *NFS* computer game series. We conduct a content analysis of three releases of *NFS* to identify its use for promotional purposes in real terms.

Keywords: in-game advertising, advergaming, ludology, computer games, video games, *Need for Speed (NFS)*

Introduction

Computer[1] games studies have got to the center of media studies and marketing communications for several reasons. Traditional media, e.g., radio and television, have limited possibilities of conceptual expansion (Svahn, 2005). Computer games as a kind of new media, however, expand across a wide range of communication media. Even in the late 1990s, computer games have been influenced by growing, but still limiting number of personal computers and specially purposed game consoles. In recent years, the large corporations (Sony, Microsoft...) understood the potential of computer games expansion and made them an equal part of the media environment of Western society, and hence a component of pop culture. The side effect was a diffusion of traditional media audiences. This situation is a challenge for marketers, who identify segments of computer games audiences (gamers).

According to a survey of the Entertainment Software Association (ESA) from 2010, computer games are played in up to 67% of American households. Average age of gamers was 34, while 49% were in the age of 19-49, which is the most powerful demographic group in terms of earning money. From a gender perspective, despite the former stereotypical attitudes of computer gamers, men represented only 60% of the total number of players (ESA, 2010; other examples of new media users' segmentation can be found in Fichnová, Mikuláš, & Wojciechowski, 2012).

The use of the computer games in the marketing communications is primarily aimed on two techniques: advergaming and in-game advertising. In general, advergaming refers to any marketing and communication activity in the area of computer games. In more strict sense, advergaming refers to the creation of computer games aimed at promoting the brand or product. Svahn (2005) defined advergaming as:

> A goal-directed and competitive activity conducted within a framework of agreed rules wholly or partially designed

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[1] In this paper, we understand computer games as a wide group of gaming products of virtual character, regardless of the platform for which they are intended, including video games, console games, etc..

and produced with the intent of actively or passively assisting in the carrying and dissemination of a message designed to persuade the player to change a behavior in the world outside the magic circle of the game.

A computer game produced for this kind of commercial aim is called advergame[2]. Since advergames include identifiable products/brands, advergame is not only a vehicle, but also a purpose of communication. Advergames are useful in communicating a wide range of messages: from Nesquick bunny children games to socially relevant messages, e.g., Euro currency implementation in Slovakia.

In-game advertising is significantly more expanded implementation of commercial messages into the virtual environment of computer games. This technique is partly based on importing of marketing inventions arising from audio-visual media. In this context, we refer to the product placement—placement of commercial messages (visual or audial) directly into the media texts. A specific feature of computer games, however, is high degree of interaction and ludic or the "game" character, which moves the product placement to a higher level, even to the level of personal—albeit virtual—experience[3].

Today, in-game advertising does not have to be only an integral feature of the game fixedly implemented in its code as it has been in times of the first attempts to use commercial potential of computer games. On the contrary, a big advantage of today's in-game advertising is the possibility of targeting, based on demographic characteristics of the recipient. Based on current trends, we can predict the near future implementation of mechanisms, which will allow the recipient to direct response to the marketing stimulus. It can lead to a deeper level of integration of advertising in computer games.

On the most general level, we can distinguish two types of in-game advertising: static and dynamic (Marolf, 2006). Static one consists of advertising in computer games, which is fixedly implemented in the program code; therefore, it cannot be changed depending on variables (player, position, level of difficulty, etc.). This type of product or brand propagation is literally timeless and it is determined only by the current and future popularity of the game. Dynamic in-game advertising moves possibilities of advertising to a qualitatively higher level and leads to the diversification of advertisements (ads) inside the certain computer game. For example, commercials can be focused on demographic characteristics of the player's gender, age, location, etc.. This type of communication desires constant internet connection, which, however, is already supported by most of the computer games equipment.

Research

We designed a research to explore marketing use of the static in-game advertising of the *Need for Speed (NFS)* series. *NFS* was released by Electronic Arts (EA). First part of the series was made in 1994 and thereafter there is a new *NFS* game released every year. The game is aimed on, as indicated in its name, automobile racing. Moreover, in most releases it has a surrealist nature with links to action games. The main goal of *NFS* is entertainment. Gamer has a possibility to try fast, stunting and dangerous driving from comfortable and safe surroundings of a computer or game console. Each release of NFS also provides an attractive story, sophisticated graphic design, and original music soundtrack. The popularity of this series has

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[2] The term was created as a combination of the words "advertising" and "game". Sometimes, similar terms with the same meaning are used, such as serious-gaming, propagaming, game-vertising, etc..

[3] As already indicated by Chen and Ringel (2001, as cited in Svahn, 2005), while reflecting the relationship gamer-product along the lines of computer games, alongside the illustrative function, we can also consider the demonstrative function. NFS series is a good example of the demonstrative use in computer game medium, because it communicates car brands not only via its placement inside the game (illustrative level), but especially by the virtual experience with them (demonstrative level).

grown so much that it even became a motif for movie series *The Fast and the Furious* (*The Fast and the Furious*, 2001, 2009; *2 Fast 2 Furious*, 2003; *The Fast and the Furious: Tokyo Drift*, 2006; *Fast Five*, 2011).

The subjects of our research mainly lay in the techniques of products/brands presentation (product placement) in the *NFS* series, types of products that were given space for advertising and the mechanism and logic of in-game advertising presented. We used the method of content analysis. While applicating this method, we encountered methodological problem of content analysis use in the area of computer games research. "Ludology", a theory of computer games, divides computer game into the two components: narrations (story line) and rules of the game. By doing so, ludology is able to offer more valid and relevant study of computer games surroundings. Our approach was based on Arseth theory of cybertext, which distinguishes two levels of text: texton and scripton. While texton presents the storyline existing in game text, scripton presents storyline actually seen by particular gamer. The gamer is able not only interpret game, but he or she can also remake it according to his or her intentions. These users' possibilities are called "ergodic functions" (Aarseth, 1997, as cited in Švelch, 2008). Moreover, Aarseth theory of cybertext argues that computer games cannot be appropriate examined by the method of content analysis, because text as the data flow is separated from the text that is presented to the gamer (Aarseth, 1997). But our goal was not to study the game itself. We have focused only on scripton level of text, specifically in the area where the commercial messages can be identified.

We analyzed three NFS games released between 2003 and 2008. Indicated time period includes these games: *NFS: Underground* (EA Black Box, 2003), *NFS: Underground 2* (EA Black Box, 2004), *NFS: Most Wanted* (EA Black Box, 2005), *NFS: Carbon* (EA Black Box, 2006), and *NFS: Undercover* (EA Black Box, 2008). In addition to these parts of the series, in 2007, *NFS: Pro Street* (EA Black Box, 2007) was released. As it was a simulator genre, not an action game, to avoid possible inaccuracies in the later conclusions, we decided not to include this game to the research field.

As we wanted to incorporate time period as effectively as possible and at the same time to show convincing differences in the use of in-game advertising between different releases of *NFS*, we decided to select just three games because of the large range of data analyzed. We selected these releases: *NFS: Underground* (2003), *NFS: Most Wanted* (2005), and *NFS: Undercover* (2008). Since this is a selection of games in the range from two to three years, the results obtained can be considered sufficiently valid and it is possible to derive framework trends of in-game advertising in *NFS* series.

In the content analysis, we set the research units: forms of a product presentation (see Figure 1, left side). Based on previous experience of playing computer games we included: billboards, light billboards, messages on buildings, informational boards, traffic, shops, airships, posters, 3D billboards and banners. At the same time we set the categories of related products (see Figure 1, right side): cars, tuning, and accessories, clothes and shoes, models of cars, meals and fast-food, self-promotion, cosmetic products (drugstore), telecommunications, jewelry, and watches. Due to the interactive nature of games, we considered only those types of virtual ads (research units), whose location was not possible to change by gamer's activity (e.g., choosing of particular brand of a car, having a sponsor logo on the car, using of a mobile operator which allows the game player to interact with other characters, etc.), i.e., elements of a static in-game advertising.

We assume that the number of advertisements in examined games will increase with every new release of the *NFS*, as computer games are becoming more and more popular medium for marketing communications (ESA, 2010; Svahn, 2005; Švelch, 2008). The form of advertisements placed in the game will probably meet the real world conditions, because *NFS* in very broad meaning tries to simulate the real environments. The

speed at which the game is played assumes use of expressive virtual ads. We assume, therefore, that although *NFS* uses virtual media with technically unlimited possibilities, forms of ads will be similar to real world conditions. At the same time, however, we admit a certain level of experimentation with advertising, but again mainly due to the increase of realism.

Product presentation / virtual ads		Product categories	
Billboard		Cars, Tuning, Accessories	
Light Board		Clothes, Shoes	
Ads on buildings		Models of cars	
Information Board		Meals, Fast-food	
Traffic / Ads on trucks		Self-promotion	
Shop		Cosmetic products (Drugstore)	
Airship		Telecommunications	
Banner		Jewelry, Watches	
3D Billboard			
Poster			

Figure 1. Specification of units and categories for a content analysis.

We assume that the product segments used in the game (or types of brands) will correspond with the

theme of the games, i.e., cars and equipment, secondly, we assume the use of brands corresponding with lifestyle of target group: fashion accessories, food, and so on.

Quantification of data was as follows. First, we passed the game from the beginning to the end. Then, in the free ride mode we systematically rode around the whole city (game environment), where the story has taken place. While doing so, we put points with ads (locations of ads) to the copy of the game map (see Figure 2). By using print screen function, we captured each identifiable visual advertisement. Points on the map (according to the legend) have different colors (unique color for each product) and a different shape (form of a product presentation). This was followed by quantification of individual points (commercial ads) and the creation of statistical tables and charts that we used when interpreting the results. This structure was the same for all games investigated, but the details were adapted to the requirements of each separately.

Figure 2. Mapping of ads in *NFS*: Most wanted.

According to Kollárik and Sollárová (2004), to partially eliminate the risk of inaccuracies in the content analysis, it was necessary to point out factors that could cause potential bias. We have identified at least these factors:

(1) Time factor. As the researched games were released couple of years prior our analysis, some of the advertised brands would not have already been existing, which could cause actual brands that have been be labeled as fictitious;

(2) Cultural differences. *NFS* series was created in the U.S., and thus its environments have been influenced by American cultural conditions. As the games were researched by "non-American", it might be problem to recognize if presented brands were real or fictitious;

(3) Problem of perception. While playing the computer game players perceive 3D game environment

through 2D monitor and it could lead to disorientation, disruption of spatial perception, and thus cause measurement errors (failing to record all ads);

(4) One observer. Although the measurements and calculations were verified several times, the analysis involved only one observer. Independent analysis would increase validity and reliability of results.

Our analysis focused only on the absolute number of advertisements, not the relative amount of their views, which is based on very subjective conditions, e.g., skills of player.

NFS: Underground

While researching *NFS: Underground*, we encountered a problem that complicated the mapping of commercial communications—the absence of a free ride mode. We were forced to adapt a specific analysis procedure. From the http://www.needforspeed.sk, we downloaded the flash application with individual maps of trails and we played fast ride mode (equivalent to free ride). During mapping, application helped us to refine the position of the car and thus the in-game ads. Next steps have already matched given analysis procedure.

We found that a total of 90 in-game ads are placed in *NFS: Underground*, presenting 22 different brands. In accordance with our assumptions, prevailing brand category was "Automobiles, tuning, and accessories". This was followed by category "Models of cars" and the third most frequent category was, surprisingly, "Cloths and shoes". There were seven different brands of fashion clothing and footwear for young people placed in the game (mostly of street nature). These three categories represented 76% of all ads in the game (see Figure 3), and all other product groups were represented more or less marginally. The basic billboard ads were dominant with 87% percepts (see Figure 4). More interesting form of ads was presented by the light boards, periodically changing their content, but in the whole game only two examples of such ads were identified.
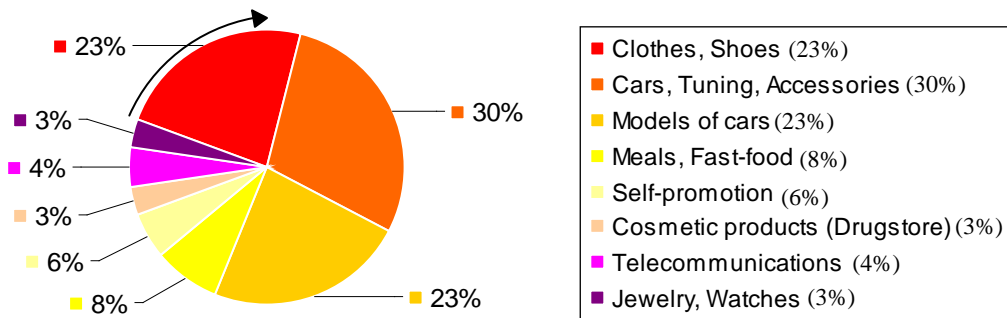

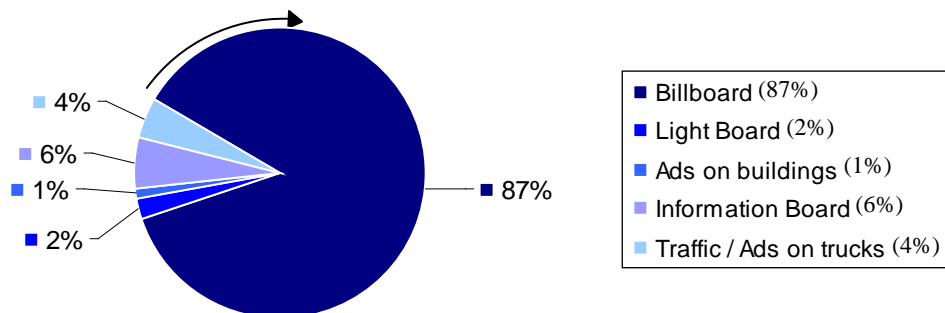*Figure 3.* Proportion of ad placements in *NFS*: Underground by the product category.

- Clothes, Shoes (23%)
- Cars, Tuning, Accessories (30%)
- Models of cars (23%)
- Meals, Fast-food (8%)
- Self-promotion (6%)
- Cosmetic products (Drugstore) (3%)
- Telecommunications (4%)
- Jewelry, Watches (3%)

Figure 4. Forms of product presentation in *NFS*: Underground.

- Billboard (87%)
- Light Board (2%)
- Ads on buildings (1%)
- Information Board (6%)
- Traffic / Ads on trucks (4%)

NFS: Most Wanted

Unlike *NFS: Underground*, *NFS: Most Wanted* takes place during the day, not at night, so the environment (and promotion) has more details and could be clearly perceived. There was a police presence in the game which was a complication for mapping ads and it caused that analysis took much more time.

There were a total of 98 ads promoting the 10 brands placed in game. This time the proportion of brands has been more balanced than in *NFS: Underground* (see Figure 5). As we expected, there was domination (42%) of products from category: Automobiles, tuning, and accessories. Partly surprising percentage of ads was observed in category Cosmetic products (22%). The following two categories with the largest share were represented by only one brand. Meals and fast-food with 16% were represented by the fast-food chain Burger King and category Telecommunication with 12% share was represented by American operator Cingular (Cingular was renamed to AT&T in 2007).

The total number of advertised brands has decreased, but at the same time the variability of product presentation has increased (see Figure 6). Again, billboard was a prevailed type of product presentation, although not so markedly (64%). Other categories remained relatively fragmented and individually did not exceed 11%.
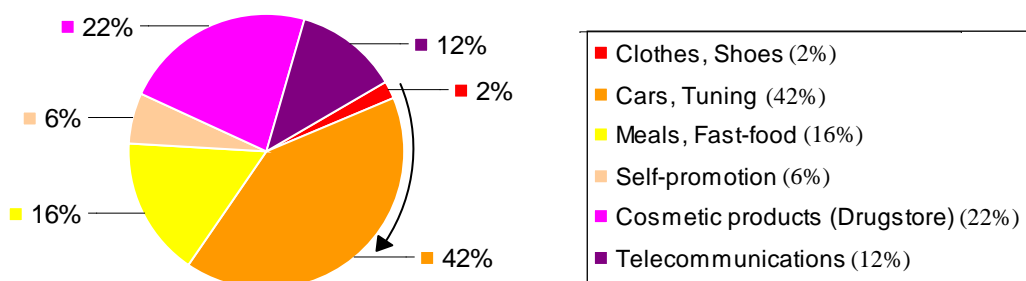

Figure 5. Proportion of ad placements in *NFS*: Most wanted by the product category.
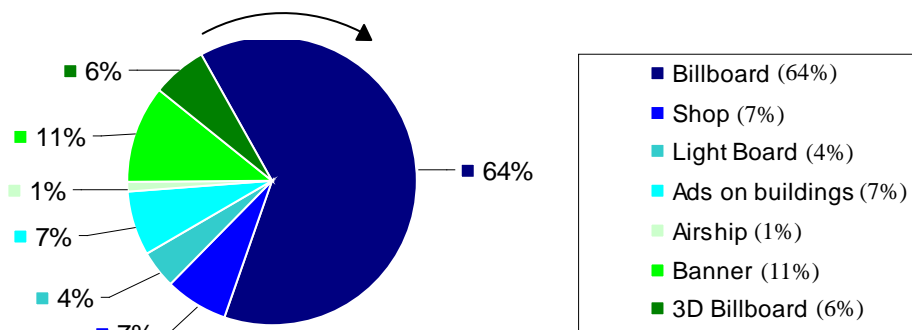

Figure 6. Forms of product presentation in *NFS*: Most wanted.

NFS: Undercover

NFS: Undercover was a continuation and innovation of the popular series, especially in terms of graphics. There were short videos shot with professional actors (Maggie Q, Christina Milian, Joshua Alba, and others) staged as part of the story. Therefore, we can talk about the convergence of film and computer games. In previous parts of the *NFS* series, real actors' characters were used as templates, but the videos were prepared by

computer graphics. During the analysis of the game *NFS: Undercover,* we encountered two problems: police presence and considerably larger area of the city, in which the game takes place.

There were 193 ads placed in the game, presenting six brands. The number of product categories decreased just to two, while 84% ads were in the Automobiles, tuning, and accessories and 16% in the Telecommunications (see Figure 7). We also identified decrease of the product presentation techniques: There were only five different types. Again, a dominant type of virtual ad was billboard with 61% (see Figure 8). We have identified one kind of virtual ad which was not included in the research categories: Some cars that were part of the traffic simulation had placed a logo of Progressive (car insurance) at the sides of their bodyworks. Because of the unpredictability of this kind of ads, we decided not to include this technique in the analysis.
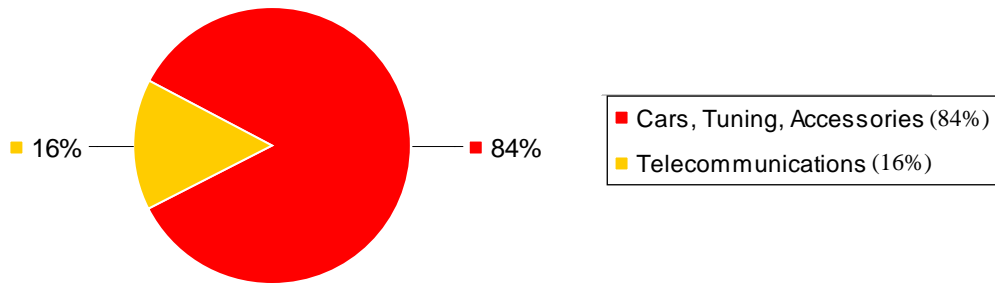

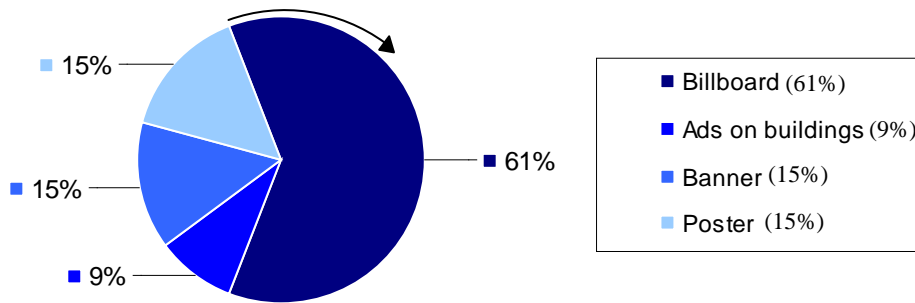*Figure 7.* Proportion of ad placements in *NFS*: Undercover by the product category.

Figure 8. Forms of product presentation in *NFS*: Undercover.

Conclusions

Overall, in analyzed games of the *NFS* series we identified total number of 381 in-game advertisements, presenting 38 brands (some of them were presented in more than one game). Overall results are presented below (see Table 1, Figure 9, and Figure 10).

Table 1

Advertisements in Researched Parts of NFS Series

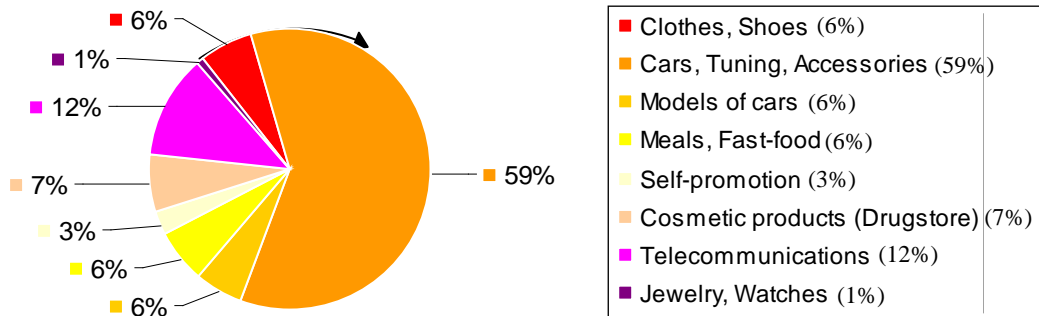| Advertisements in *NFS*	*NFS*			
	Underground	Most wanted	Undercover	Total
A number of products/ brands placed in game	22	10	6	38
Total number of in-game ads	90	98	193	381

Figure 9. Proportion of ad placements in *NFS*: Underground, *NFS*: Most wanted, and *NFS*: Undercover.

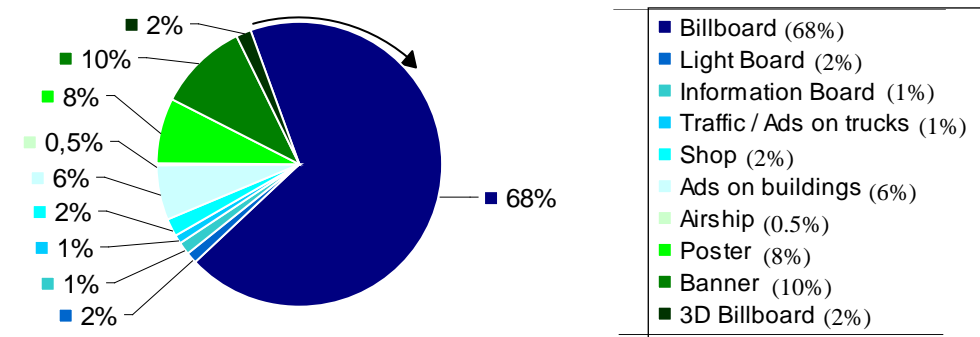*Figure 10.* Forms of product presentation in *NFS*: Underground, NFS: Most wanted, and NFS: Undercover.

From the overall results, we can clearly see that the number of brands placed in the analyzed *NFS* games declined with each continuing part. In both cases, the decrease is about half of the products/brands. At first sight, this result may be regarded as surprising because it suggests that the volume of in-game advertising decreases by every new release of the *NFS*. However, at the same time we can pick another tendency: The total number of ad placements is on a clear rise. During the research period of seven years, there was nearly a twofold increase of commerce type of content. This trend alone, leaving aside the substantial reduction of placed products/brands, could be explained by the much more complex and more spacious virtual space of games (as stated above, the city where the game took place has been much larger in each new release of the *NFS*), which encourages the placement for more massive amount of advertising. Simultaneous presence of two relatively contradictory trends can be explained by the advertisers' need for as obvious presence in the game plot as possible. This tactic allows minimizing potential clutter. While many products/brands in the *NFS: Underground* have only "showed up" (on average, there were only four ads for each brand), significantly less brands in the *NFS: Undercover* have been presented much more clearly (on average, up to 32 ads for each brand). Overall, we can talk about eightfold increase of the brand in-game presence.

Furthermore, it is noteworthy that the number of product categories decreases in each new release of *NFS*, while in *NFS: Undercover* it dropped just into two categories. This may indicate that the *NFS* game did not work to promote all kinds of products, and after initial experiments, a relatively narrow category of advertisers has profiled, for whom this form of marketing communications has been adequate way to fulfill their communication goals. In this context, we could talk about development of the target group focusing or targeting of the in-game advertising. Assumptions outlined that this type of targeting would be appropriate to support by

the analysis of other parts of *NFS* or other games in the genre.

In our analysis, in-game ads were generally communicated by 10 different ways. Billboard clearly dominated in all of the games analyzed; generally, it has been used in more than two thirds of the cases. Besides billboard, three more virtual ads have been used the most: banner (10%), poster (8%), and ads on buildings (6%), and all media of the traditional (non-virtual) marketing communication. Other forms of in-game advertising are generally used rather rarely. Thus, static in-game advertising in *NFS* has not banked on presenting innovative forms of commercial content, but rather on the verified forms of the traditional marketing communications transposed to a digital form. But it is also necessary to point out that, as noted above, some forms of the marketing communications of *NFS* remained outside content analysis for methodological reasons.

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