ELECTRONIC MEDIA USE: TOWARDS AN INTEGRATIVE MODEL

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ABSTRACT:
The objective of the study is to propose and test a model to understand the factors that impact the use of electronic media in Brazil. A survey was conducted, capturing perceptions about five electronic media – Broadcast TV, Pay-TV, Internet, Mobile Phones and Game Consoles. A sample of 1000 cases was collected by personal interviews in six cities and analyzed using SEM. Attitude is influenced by Image, Entertainment and Content, followed by Communication and Habit. The model explained 80% of Attitude and 90% of Satisfaction. Attitude is a strong predictor of Satisfaction. Attention is explained by Entertainment and Satisfaction.
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INTRODUCTION

After 50 years of leadership, broadcast TV hegemony is under threat for the first time. Emerging new media compete for people’s attention and advertisers’ budgets, creating an increasingly challenging environment. Furthermore, the television model based on a passive audience sitting in front of a TV screen is challenged by the advent and proliferation of broadband, anytime, anywhere, consumer-controlled alternatives. More than 42% of US households have high-speed broadband access and more than 10 million have DVR devices (Bradley & Bartlett, 2007). Indeed, new information and communication technologies (ICTs) are reconfiguring the media landscape, shifting industry boundaries towards comprehensive ecosystems which integrate previously separated industries such as content, telecommunications, electronics, computers etc. (Iyer, Lee, & Venkatraman, 2006; Jenkins, 2006; Wirtz, 2001). Further, new ICTs can be considered emergent and disruptive technologies in the media ecosystem (Christensen, 1997) because of their huge impact on markets and business models.

The Brazilian media environment is quite unique in relation to both audience behavior and advertising expenditures. Broadcast TV is present in 98% of Brazilian households. On the other hand, paid TV, considering both cable and satellite, is present only in 12%, but rising steadily. Internet penetration is growing fast, especially in lower income classes. In 2008, only 18% of households had Internet access, rising to 27% in 2010 (CETIC.br, 2011). As can be inferred, broadcast TV plays a dominant role. It is present in almost every single Brazilian household, regardless of social class or region, and it has a long-running leader: Globo Television Network. The Globo model relies mainly on establishing an organized programming grid around primetime, beginning at 6pm with a soap opera (“telenovela”) which is followed by local news, a second “telenovela”, national news and a third “telenovela”, ending around 11pm. The impact of this model on audience behavior was astonishing. Globo set the standard, captured most of Brazilian audience and has kept it ever since. In 2009, Globo concentrated approximately 60% of medium audience (IBOPE, 2009). During 2010, the top five broadcasters combined for an audience of 55% in the UK, 65% in France and 66.2% in Italy (Lange, 2012). The top three US networks combined, ABC, CBS and NBC, accounted for 32% of audience in 2005 (Hindman & Wiegand, 2008).

Dissemination of new media such as the Internet, cell phones and videogame consoles has direct impact on the way people entertain and inform themselves. Broadcast TV audience has steadily decreased over the last few years. In 2005, 38.2% of Brazilian households watched broadcast TV daily, but only 36% did in 2008 (IBOPE, 2009). This poses real competition for advertisers’ wallets and jeopardizes broadcast TV business model. Nevertheless, investment in broadcast TV still grows above market average. The Brazilian advertising market grew 13.9% from 2010 to 2011, reaching US$17 billion. In contrast, the local economy grew far less during that same period: 2.7%. Broadcast TV captured an outstanding 63.3% share and grew 14.6% YoY, even though audience levels fell. The Internet grew considerably (24.8% YoY), but captured only 5.10% of total share (Projeto Intermeios, 2012).

The global landscape is very different. Worldwide advertising spending rose by 7.3% from 2010 to 2011, far less than in the Brazilian market (13.9%). Both North America and Europe showed worrying numbers. The North American market increased only 1.8% from 2010 to 2011. In Europe, ad spending declined -0.4%, with larger decreases in Greece (-13.1%), Italy (-4.0%) and Spain (-9.7%) (Nielsen, 2012). The year of 2011 was a tough for the global economy, but Brazil outperformed the global market, showing great momentum.
Given the complexity and peculiarities of the Brazilian market and the lack of recent literature about it, it is key to better understand which factors lead the consumer to use a certain medium. Within a scenario of many changes and uncertainties, this study seeks to shed light on the possible future of Brazilian TV given changes in consumer behavior and the advent of new technologies that create new media. To this end, this research will answer the following question: Which factors influence electronic media use? The objective of the study is to propose and test a model that allows us to understand the factors that impact the use of audio-visual electronic media in Brazil, focusing on broadcast TV and on transformations caused by the introduction of new media such as pay TV, Internet, mobile phones and videogames.

THEORETICAL BACKGROUND

Decision making about the use of technology is a central topic, related to distinct fields of literature. In the theoretical background section, we briefly discuss the most relevant theories that explain media and ICT use. The media Uses and Gratifications Theory and the related Media Substitution Theory were developed by communications scholars. Marketing and MIS scholars have adopted the Diffusion Theory to study how innovations can be successfully introduced to markets. Technology scholars explain technology choices and uses with theories adapted from psychology, such as the Technology Acceptance Model and the Unified Models. In this section, we discuss the main ideas behind those theories, seeking an integrative approach that allows us to propose a robust and unified theoretical model.

The Uses and Gratifications Theory emerged during the late 50’s as a communications research paradigm that determines motivations by focusing on what people do with mass media (Katz, 1959). The theory takes a user-level view in understanding media use, even though it is applied to the study of mass media innovations (Klapper, 1963). During the 70’s and 80’s, the theory was used by many media researchers (Katz, Blumler, & Gurevitch, 1974; Rosengren, Wenner, & Palmgreen, 1985) and gratifications have been conceptualized as the utilities that explain media choice by consumers.

Studies about new uses and gratifications provided by new media highlight some key aspects which can influence the choice and use of a specific medium: content gratification, including information or entertainment (D’Ambra & Rice, 2001; Hunter, 1996; Kaye, 1998; Kaye & Johnson, 2003; Stafford, S斯塔ford, & S斯塔ford, 1996; Stafford & S斯塔ckade, 2004), process gratification, including playing with the technology, browsing, affective needs such as esthetic, pleasurable and emotional experiences (Hunter, 1996), personal integrative needs, including credibility, confidence, stability and individual status (Hunter, 1996), social integrative needs such as contact with family, friends and the world (D’Ambra & Rice, 2001; Hunter, 1996; Kaye, 1998; Stafford, Stafford, & S斯塔ckade, 2004), escapist needs, related to escape, tension release and desire for diversion (D’Ambra & Rice, 2001; Hunter, 1996; Kaye, 1998; Lin, 2001b) and convenience (Kaye & Johnson, 2001; Papacharissi & Rubin, 2000).

The Media Substitution Theory states that media sources compete for a finite amount of resources in terms of advertising dollars and consumer time, and that competition could drive weaker species toward extinction (McCombs, 1972). It assumes that people have the ability to evaluate, rank, order and select the medium that best gratifies their needs (Jeffres, 1978), and, in this sense, it follows the Uses and Gratification theoretical line of research. A new medium perceived to be more convenient, less costly or to have superior content will displace functionally similar traditional media (Kaye & Medoff, 2001; Lin 2001). On the other hand, if media are functionally dissimilar, new media might complement existing media (Lin, 2001).

Recent studies add a new concept to this field: fragmentation (Webster & Ksiazek, 2012). The most fundamental question about fragmentation is how far the process can go.
Some authors believe cultural consumption will continue to be characterized by “winner-takes-all” markets (Eisemann, 2007) and offer reasons why audiences are likely to remain concentrated in the digital media marketplace: differential quality of media products, social desirability of media selections, and media measures that inform user choices (Webster & Ksiazek, 2012).

On the field of Technology Use Theories, the Theory of Reasoned action (TRA), proposed by Fishbein and Ajzen (1975) and Ajzen & Fishbein (1980), is one of the most influential theories about human behavior based on social psychology. Soon after its inception, TRA began being used to explain various types of behavior, but Davis et al. (1989) were the first to apply this theory in the modeling of individual acceptance of technology. He used TRA as the basis for his Technology Acceptance Model (TAM), whose objective was to understand the factors that led employees of a company to accept and use computers and other new technologies introduced in the company. The author developed his model so that the one’s attitude with respect to use of a technology and to its perceived usefulness are the independent variables that influence the intention to use that technology, which in turn influences its adoption and actual use. Most research using the TAM concerns the application of information systems in business environments. Legris et al. (2003) conducted a review of work applying Davis’ model (1989). According to TAM, external variables influence Perceived Usefulness and Perceived Ease of Use.

Venkatesh, Morris, Davis & Davis (2003) formulated the Unified Theory of Acceptance and Use of Technology (UTAUT), a broader and more comprehensive system that integrated into a unified model several aspects of TAM, diffusion theory, motivation theory and self-efficacy so as to explain the perceptions and attitudes that lead to usage intentions. According to this model, four key constructs (performance expectancy, effort expectancy, social influence and facilitating conditions) are direct determinants of usage intention and behavior. Gender, age, experience and voluntariness of use are posited to mediate construct impact on usage intention and behavior.

Rogers (1995) studied the process by which an innovation is communicated through certain channels over time among members of a social system. The Diffusion Theory describes five characteristics of an innovation that influence one’s decision to adopt or reject it: Relative Advantage, Compatibility, Complexity, Triability and Observability. Image was also included (Moore & Benbasat, 2001) as a relevant and distinct factor. It is worth noting that Rogers had considered Image as part of Relative Advantage, pointing out that desire to gain social status is one of the most important motivations for an individual to adopt an innovation.

Social psychologists’ interest in attitudes and attitude change (Albarracin, Johnson, & Zanna, 2005) stems, to a large extent, from the supposition that attitudes predict behavior (Petty & Cacioppo, 1986). Recent studies indicate that the relationship between attitude and behavior might be weaker than previous research suggested (Foxall, Oliveira-Castro, James, & Schrezenmaier, 2011). The Behavioral Perspective Model locates consumer behavior at the intersection of consumers’ learning history and current behavior setting, providing an environmental perspective to consumer behavior. In behavioral terms, consumer behavior, the dependent variable, is a function of one’s learning history related to a given type of consumption, to behavior setting and to the consequences of that behavior (Foxall et al., 2011). Moreover, studies have argued that the attitude changes that result mostly from processing issue-relevant arguments (central route) will show greater temporal persistence, greater behavior prediction and greater resistance to counterpersuasion than attitude changes that result mostly from peripheral cues (Petty & Cacioppo, 1986, p. 175). Pijpers & Montfort (2005) study results support the core TAM model as an adequate and parsimonious conceptualization of acceptance behavior and the salience of usefulness and ease of use.
beliefs. However, this research also found variables that directly influence attitude and use. Perhaps the most significant finding is the key role that fun/enjoyment plays as an external variable in influencing beliefs, attitude and usage. This research corroborates the general tendency to focus on a system's fun component, which appears to have been encouraged by the rapid growth of the Internet (Pijpers & Montfort, 2005).

In spite of the fact that this is a traditional field of study, a review of the literature showed that there are not many integrative models and, further, that no model tries to explain the continuous use of a medium based on its characteristics. The present study is thus relevant because it aims to address a gap in the literature, proposing and testing an integrative model for electronic media choice and use.

THE RESEARCH MODEL

The present work aims to be an integrative study about media choice and use. In this sense, we integrate different perspectives into a comprehensive model which tries to explain why people use electronic media. Most of the independent constructs are addressed by the communication literature and their relationship with Use is mediated by Attitude, according to technology and marketing studies.

To clarify the hypotheses posited in this study, it is important to describe the constructs addressed, which are the result of a consolidation of relevant literature. The literature addresses many constructs dealing with the same set of variables that were grouped in a smaller number of constructs, preserving, however, the integrity of the original information. It was possible to considerably reduce an extensive list of dimensions, thus making this study feasible and contributing to the parsimony of the final model. Furthermore, some constructs were discarded during scale development and testing because they did not suit the model or were only marginally relevant. The proposed model is thus parsimonious and final constructs are the following:

The Communication construct refers to the ability to interact with others by means of a certain medium. Dimensions that gave rise to this construct are Sociability Gratification and Social Integrative Needs (D’Ambra & Rice, 2001; Dimmick, Kline, & Stafford, 2000; Hunter, 1996; Kaye, 1998; Lin, 2001; Stafford, Stafford, & Schkade, 2004). The relationship between Communication and Attitude was studied in several domains (Glasman & Albarracin, 2002, 2003; Greenwald, 1968; Hovland, Janis, & Kelley, 1953; McGuire, 1960).

Content considers people's perceptions about the quality and quantity of content offered by each medium investigated. Its dimension was adapted from Content Gratification (D’Ambra & Rice, 2001; Hunter, 1996; Kaye, 1998; Lin, 2001; Kaye & Johnson, 2003; Lin, 2006; Stafford & Skaa, 1996; Stafford, Stafford, & Schkade, 2004). Attitude scholars have studied the direct relationship between Content and Attitude (Casey & Gallagher, 1996; Fishbein & Ajzen, 1975; Johnson & Eagly, 1989; Johnson et al., 2004; Maio & Olson, 1995a; Petty & Cacioppo, 1986; Wood, Kallgren, & Preisler, 1985).

The Entertainment construct relates to people's perceptions of how each media provides fun, entertainment and fulfill escapist needs (D’Ambra & Rice, 2001; Dimmick, Kine, & Stafford, 2000; Hunter, 1996; Kaye, 1998; Kaye & Johnson, 2003; Lin, 2001; Lin, 2006). In the Uses and Gratification tradition, it can be an antecedent of Attention towards a medium. Pijpers & Montfort (2005) studies based on the TAM model suggest that Entertainment directly influences Attitude and Attentive Use. Elliot & Speck (2005) found that Entertainment was also significant in explaining Attitude to a retail web site.

Habit evaluates for how long a certain medium is part of one's life. Habit results exclusively from behavioral repetition. “One can develop attitudes, norm perceptions, and control beliefs about a behavior without experiencing the behavior directly, but Habit is derived solely from past behavior” (Jaccard & Blanton, 2005, p. 144). Ouellette & Wood
(1998) conducted an experiment with undergraduate students concerning TV watching and recycling. The authors concluded that Habit depends on learning, difficulty and conditions of occurrence. When a certain action is well learned, easy to repeat and when conditions of occurrence are stable, one might automatically respond in the future in the same way he or she did in the past. On the other hand, if an action is not well learned, hard and conditions of occurrence are unstable, past behavior may rely on influences mediated by attitudes and intentions. For this reason, the relationship between Habit and Use is tested both with the mediation of attitude and directly.

Image relates to one’s belief that use of a specific medium can help improve or worsen the way he or she is viewed by his or her peers. This construct is adapted from Hunter’s research about the status of the individual (Hunter, 1996) and from the Image dimension of the Diffusion Theory (Moore & Benbasat, 2001; Rogers, 1995), being considered an antecedent variable to Attitude.

Attitude is a set of evaluative judgments measured via categorization on a continuum involving several attribute dimensions whose formation may stem from qualitatively different processes (Argyriou & Melewar, 2011). It is considered by Technology Use scholars as a mediated construct (Ajzen & Fishbein, 1980; Davis, 1989; Fishbein & Ajzen, 1975). In this study, it plays a central role between a medium’s characteristics and its satisfaction and use. It refers to the positive or negative predisposition that one has in relation to an object, product, brand etc. (Ajzen & Fishbein, 1980; Davis, 1989; Fishbein & Ajzen, 1975; Solomon, 2002). Based on the literature review presented above, the following hypotheses are proposed:

H1a: Communication provided by a medium influences Attitude towards that medium.
H1b: The Image that a medium transfers to its users influences Attitude towards that medium.
H1c: Content provided by a medium influences Attitude towards that medium.
H1d: Entertainment provided by a medium influences Attitude towards that medium.
H1e: One’s Habit in relation to a medium influences Attitude towards that medium.

According to Niche Theory studies, the broader the niche of a medium on the gratification opportunities dimension, the greatest its users Satisfaction (Dimmick et al., 2000; Dimmick et al., 2004). In the proposed model, we considered Attitude as an integrative construct and propose the following hypothesis:

H2: Attitude towards a medium influences Satisfaction with that medium.

Media Use is the dependent variable of most Uses and Gratification or Media Substitution studies (Dimmick et al., 2004; Kaye & Johnson, 2003; Lin, 2006; Yoon & Kim, 2001). The relationship between Attention, Use and Attitude is described by many scholars (Mackie & Worth, 1989; Neuberg & Fiske, 1987; Wegener & Carlston, 2005). People can deliberately choose to “expose themselves to information consistent rather than inconsistent with their attitudes” (Wegener & Carlston, 2005, p.521). Incentives were said to increase the likelihood of paying attention to a message (a motivational effect). Further, the manipulation, through distraction, of the ability to process (Petty, Wells, & Brock, 1976) is essentially an attentional manipulation. Attention would also be implicated in motivational biases in processing, where motivation essentially focuses attention on certain types of informational content (Sherman, 1987). Based on that, the following hypotheses are proposed:

H3a: Entertainment provided by a medium influences Attention dedicated to that medium.
H3b: Satisfaction provided by a medium influences Attention dedicated to that medium.
H4a: One’s Habit in relation to a medium influences Use of that medium.
H4b: The Attention that a person dedicates to a medium influences Use of that medium.

Several authors relate the importance of demographic variables in understanding media consumption (Ahlers & Hessen, 2005; Ferle, Edwards, & Lee, 2001; Grant, 2005; Hill-Wood, Wellington, & Rossi, 2009; Loges & Jung, 2001). The studies of Lin (2006), Kaye & Johnson (2003) and Bouwman & Wijngaert (2002) point to age and level of education as
relevant for understanding people’s use of media. Analysis of the literature allowed the development of the following hypotheses about the moderating effect of variables related to consumer characteristics:

**H5:** Age moderates the relationship between the characteristics of a medium and Attitude, Satisfaction, Attention and Use of that medium.

**H6:** Education level moderates the relationship between the characteristics of a medium and Attitude, Satisfaction, Attention and Use of that medium.

The research model can be seen in figure 1. The main theoretical contribution of the proposed model is the integration of constructs originating from different branches of research and areas of knowledge, such as Uses and Gratifications, Technology Acceptance Models and Diffusion Theory. It also contributes with the study of Attention and Use in integrative models, incorporating a continuum metric measure in order to mitigate common method bias problems (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003). The fact that this study’s results are close to those provided by secondary data collected directly from TV and Internet measure devices (IBOPE, 2009) indicates that it meets the cross-validation criterion.

![Research Model Diagram](image)

**Figure 1 – Research Model**

**METHOD**

This project has characteristics of both descriptive and causal studies (Babbie, 2001; Malhotra, 2011). This research can be characterized as descriptive because it discusses factors that influence Attitude, Satisfaction and Use in relation to media. It also has causal elements, since the model assumes cause and effect relationships between theoretical constructs. Although the concept of causality has generated much controversy over the years (Bagozzi, Yi, & Linn, 1991), authors such as Jöreskog and Sörbom (1989) and Byrne (1994) advocate...
the use of non-experimental data for causal models in social science, given the difficulties in achieving the accuracy required to conduct experiments in this area.

The population of this study consists of Brazilian TV consumers. The chosen mode of observation was the survey, with a structured questionnaire (Babbie, 2001) capturing perceptions about five electronic media – Broadcast TV, Pay-TV, Internet, Mobile Phones and Game Consoles. A statistical sample of 1000 cases was drawn and data was collected by means of personal interviews in six large Brazilian cities (São Paulo, Rio de Janeiro, Porto Alegre, Goiânia, Recife and Fortaleza), producing 980 valid cases. Most questionnaire items are measured by a 6 point scale in a two-stage process (Albaum, 1997): the respondent agrees or disagrees with a statement and then specifies the correspondent intensity level – slight, moderate or complete. Ordinal scales like these can be used as an interval, according to Aaker, Kumar, & Day (1995) and Hair, Black, Babin, & Anderson (2009), allowing Structural Equation Model (SEM) analysis. Use is a ratio variable measured by declared usage (in hours, both in weekdays and weekends). The research instrument was developed and tested for validity and reliability in compliance with Aaker, Kumar, & Day (1995), Churchill (1979) and Hair et al. (2009). Content validity was achieved by pretests with four specialists in the field, allowing the identification of potential problems and the improvement of the questionnaire. The final version of the instrument measures nine constructs through 45 items. Construct, convergent, discriminant and nomologic validity (Hair et al., 2009; Bagozzi et al. 1991; DeVellis, 1991; Garver and Mentzer, 1999) was assessed using CFA (Kline, 1998; Byrne, 2001). Construct reliability was also estimated. All statistics yielded adequate values, indicating that constructs and the complete structural model were valid and reliable. Analysis was performed using SPSS and Amos softwares.

RESULTS

Fit was examined by means of absolute, incremental and parsimonious fit measures, whose results are shown in Table 1. The absolute fit measure chi-square is 9.83, above the usually accepted level. According to Hair et al. (2009) and Byrne (2001), this coefficient is inflated when there are more than 200 cases (we have more than 950), for which reason the Goodness of Fit Index (GFI) and the Root Mean Square Error of Approximation (RMSEA) should provide a better assessment of absolute fit. Indeed, both measures for this model are in compliance with standard levels. The incremental fit measures AGFI and NFI also show the statistical consistency between predicted and actual models. The same holds true for the parsimonious fit measure CFI. Based on these values, the model is acceptable.

Table 1 - Model Fit Indices

<table>
<thead>
<tr>
<th>Measures</th>
<th>Research Model</th>
</tr>
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<tbody>
<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>0.043</td>
</tr>
<tr>
<td>Goodness of Fit Index (GFI)</td>
<td>0.917</td>
</tr>
<tr>
<td>Adjusted Goodness of Fit Index (AGFI)</td>
<td>0.900</td>
</tr>
<tr>
<td>Normed Fit Index (NFI)</td>
<td>0.962</td>
</tr>
<tr>
<td>Comparative Fit Index (CFI)</td>
<td>0.966</td>
</tr>
</tbody>
</table>

Path coefficients obtained by Maximum Likelihood Estimation and bootstrapping with 200 sub-samples were used to estimate errors and two-tailed bias corrected confidence intervals.

Table 2 - Hypotheses Testing

<table>
<thead>
<tr>
<th>H_i Path</th>
<th>Standardized Estimate</th>
<th>Error</th>
<th>P</th>
<th>Result</th>
</tr>
</thead>
</table>

8
All hypotheses were supported at the p<0.02 level. Acceptance of these hypotheses indicates that Attitude is influenced mainly by Image, Entertainment and Content, followed by Communication and Habit. These results could mean that Attitude is formed by what the media actually brings and by how someone is perceived when using it, with Communication and previous Consumption Pattern having a lower effect. The model explained more than 80% of Attitude’s variance. Attitude is a strong predictor of Satisfaction (0.945, significant at p<0.010) mediating the influence of Communication, Image, Content and Habit on Satisfaction, Attention and Use. This variable alone explained more than 90% of Satisfaction’s variance. Attention’s variance is explained mostly by Entertainment directly (0.761 significant at p<0.012), followed by Satisfaction (0.209 significant at p<0.009). Current Use of a medium depends primarily on previous Consumption Pattern (0.552 significant at p<0.010) and on Attention (0.189 significant at p<0.012). This result corroborates an inertial usage of the medium (Use was measured by hours of use, not necessarily hours interacting with the device).

DISCUSSION

The main contribution of the present study is the proposition of an integrative model for media Satisfaction, Attention and Use based on three main theories: Uses and Gratification, Media Substitution and the Technology Acceptance Models. Attitude becomes the mediator between a medium’s characteristics (Communication, Image, Content and Entertainment) and the Satisfaction it gives, which is a predictor of Attention and Use.

People seem to respond to two distinct stimuli in media consumption: the first is related to their reference group (friends, co-workers, family), encompassing Communication, Habit and Image aspects that use of a specific medium projects on its users; the second, direct media assessment, addresses the richness and relevance of Content presented by the medium and also how entertaining it is perceived to be.

Analysis revealed that Content, although important, is not the main attribute of a medium, as postulated by some authors (Kaye & Medoff, 2001; Lin 2001; Eveland, 2003)). Habit and Image, less used in this field, are important variables to one’s Attitude towards a medium. Entertainment is an important influencer of Attitude and bears a strong direct influence on Attention. This result suggests that, despite all other features, one choose a medium mainly to relax and forget his or her problems. This is consistent with the findings of Pijpers & Montfort (2005) and Elliot & Speck (2005).

Another finding is the direct influence of Habit on Use, suggesting an inertial media consumer behavior that would slow down the adoption of so-called new media (based on data networks – Internet in computers, cell phones and other mobile devices and also game consoles).
Media companies that want to change the status quo (TV dominance) must invest on those aspects that influence Attitude the most, directing customers to the Central Route (Petty & Cacioppo, 1986) and breaking the strong Peripheral Route that makes people repeat systemic media use behaviors without thinking rationally about the choices they make (Petty, Cacioppo, & Schumann, 1983; Melyk, Van Herpen, Fischer, & Trijp, 2011). In special, new media companies must focus on the Central Route, emphasizing their entertainment and communication features, content richness and the image the new media bestow on their consumers. This strategy would create a positive attitude that would lead to higher Satisfaction, Attention and Use.

CONCLUSION AND IMPLICATIONS
As already seen, two major issues impact the ICT landscape in Brazil. The first one is the convergence of the IT, media and telecommunication industries (Wirtz, 2001). According to the author, changes in technologies, regulation and consumer behavior have impacted those industries, creating a convergent environment in which industry boundaries no longer exist. This is especially true in Brazil, where major telecommunication companies are also key media service providers. A model that integrates different perspectives can thus be very useful for companies acting in this ecosystem, helping them understand consumer choices between rival platforms. For instance, content and entertainment are key success factors for ICT based platforms such as e-readers, music players, and software. In fact, the model indicates that platform success is strongly influenced by its complementsors, such as content providers, in accordance with Shapiro & Varian (1999) and Eisenmann (2007).

The second issue deals with the unique Brazilian media and ICT landscape. As stated earlier, broadcast TV has been by far the most important medium for Brazilians for the last 40 years, with more than 98% of households having at least one TV set. Brazilians watch more than 5 hours of TV every day and daily audience for the leading TV network equals a Superbowl final every night, with more than 50% of share. In view of these unique characteristics, a new entrant will find it very difficult to become relevant in the Brazilian context. This is due to many reasons. The first one is that Globo Network, the leader in the leading media, is also the greatest content producer in Latin America, creating more than 4 hours of primetime content in Portuguese every day. Because Content and Entertainment are important factors for media usage, Globo holds a strong position. The second one is that Globo has been the leader for many decades and, because Habit is an important factor for media usage, this also helps maintaining the status quo. The third factor has to do with the availability of broadband across the country. Brazil is a huge, continental country and TV is more disseminated than new media. Telecommunication and Internet companies have Communication and Image in their favor, because these attributes tend to be better evaluated for those media.

From an academic standpoint, this study expands the understanding of Satisfaction, Attention and Use of electronic media, contributing to the research in the field. Major contributions are:
1. Development and validation of a medium characteristics scale.
2. Proposition and testing of a model that explains Satisfaction, Attention and Use of an electronic medium (Broadcast TV, Pay TV, Internet, Mobile and Game Consoles) based on its characteristics.

From a managerial viewpoint, this research helps the strategic positioning of media and ICT companies operating or willing to enter in the Brazilian business ecosystem. They should develop skills that level Attitude, Satisfaction, Attention and Use. Further recommendations:
1. Delivery of quality content and greater variety.
2. Development of tools that allow viewers to interact with others through the medium.

3. Creation and acquisition of content that may be delivered in TV and IP based platforms.

4. Content delivery in the usual fixed schedule (program grid) and also on demand.

5. Monitoring attention in addition to audience in order to compare TV based metrics with Internet based ones. The advertising industry prices its products based on audience but this could change in the near future in favor of action based metrics (cost per click and cost per action). This study suggests that there is no identity between attention and audience.

Although some of the characteristics presented in the model and in the Brazilian landscape can be seen to work in favor of TV incumbents, analysis of the media ecosystem and of possible future scenarios raises a warning sign for broadcast TV networks. If attention becomes the key for advertisers, the medium that is perceived to have the better image and to provide the greater satisfaction will get the largest share of their budgets. Even in a scenario in which the traditional business model is maintained, broadcast TV loses ground to new media with greater interaction capacity and content richness. In a future where more TV content may be distributed over the Internet (Bradley & Bartlett, 2007), TV networks need to expand their ability to serve the public in a customized manner, knowing the public better and segmenting their schedules accordingly and also extending content distribution and business models beyond the boundaries of television.

This research suggests that broadcast TV needs to reconfigure itself to improve people’s perception of its ability to allow social interaction and the image it lends to those who use it. One strategic possibility is transmedia content production, being able to deliver it in each and every available platform, not limited to those under a broadcaster’s direct control. However, such an approach would weaken broadcast TV nodal position in the business ecosystem as it loses control over the last mile, where direct contact with the consumer takes place and data on consumer habits are gathered via CRM tools. This would prevent TV networks from identifying new business opportunities.

The future and technological innovations bring not only threats to incumbent broadcasters. There are opportunities such as specific advertising tailored to each home. With this technology, a media company could charge more for its services to advertisers. As this is a two sided market, with cross sided effects, segmented advertising could enhance user experience and reduce dispersion. Both opportunities need strong CRM support and will not be possible if incumbents decide to focus solely on production. The problem is that while all these changes begin to happen, TV networks are struggling to keep their control over the advertising market without upgrading their offers to advertisers and consumers, in other words, without changing their business model. This would require incumbents to change their strategic focus from the product to the customer (consumers and advertisers as this is a two sided platform).

In spite of its contributions, this study does have limitations. A theoretical model is always a simplification of reality, so that the model does not encompass all factors that drive media or ICT choice such as political, regulatory and cultural issues, which may be addressed in future research.

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