

Full Length Research Paper

The emergence of mobile communication in sub-Saharan Africa: Descriptive analysis of Cameroonian mobile consumers' reactions and conditions of acceptance of advertising SMSs

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Mobile communication is very often materialized by the use of mobile Internet, SMS and MMS by companies to send advertising messages via mobile phones. SMS and MMS are a genuine social phenomenon. Furthermore, companies have found a new opportunity to operate in terms of targeted communication. Indeed, mobile communication is a fast and effective way of communication at lower cost. Many studies have already been undertaken on this topic in Europe, America and Asia. These studies have indicated that mobile marketing is more efficient than other contact modes with the permission that is in standards given in advance by the consumer to be sought. But in Sub-Saharan Africa in general and in Cameroon in particular, there is still a timid interest among the researchers on the field of mobile marketing. Despite a high penetration rate (71% in 2014) of mobile phone holders and a growing use of more advertising SMSs by enterprises, there is not yet legislation text in the sector of mobile communication in Cameroon. This explains why there is a misuse of advertising SMSs by Cameroonian enterprises. That is why the objective of this paper is to describe the reactions of Cameroonian mobile phone consumers toward advertising SMSs and the conditions of acceptance of advertising. The results have shown that the way Cameroonian mobile companies exploit this means of communication push them to adopt negative behaviors or negative reactions towards mobile advertising. For instance, 22.7% of Cameroonian mobile phone consumers delete advertising SMSs without reading them. In addition, in the absence of permission, the consumers condition receiving advertising SMSs by their entertaining and informative character.

Key words: Mobile marketing, advertising SMSs, intrusiveness, consumer's reactions, conditions of acceptance, privacy, behavioral control.

INTRODUCTION

In recent years, the world has attained an exponential evolution of technologies. The behaviour and education of consumers are therefore in full metamorphosis.

Companies feel compelled to blend in new trends in order to be close to the consumer regardless of the turn taken by the economical and technological world. We are also

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witnessing the development and the increase in the rate of consumers for more sophisticated communication tools (Smartphone, Ipad, tablets, etc.). Mobile phone consumers in Cameroon are not left out, because increasingly fierce competition is observed among Cameroonian mobile operators (ORANGE, MTN¹, CAMTEL² and the newcomer NEXTEL) through exciting services offers. Thus, a new concept in marketing has arisen, not only through this "technological boom" and opportunities, but also because of the intense growing competition in the world of mobile phone: it is the "mobile marketing" (Jacob and Lienard, 2010).

Mobile marketing attracts practitioners' attention for many reasons. First of all, fixed lines tend to be increasingly abandoned in favor of mobile connections (Buellinger and Woerter, 2004). In addition, we may well realize that the segment of people with only a mobile phone is growing (71% rate of penetration in Cameroon in 2014). For marketing practitioners, this means that a new channel of customer's contact is available, because some of these customers, particularly young adults, may only be contacted by this channel in a secure and permanent way. The mobile channel (which includes of course not only phone but also mobile internet) is to be incorporated into a multi-channel approach to customer relationship management. It also offers a more playful, more lightweight and more interactive way to maintain customer relationship than traditional alternative channels. Furthermore, many studies have indicated that mobile marketing is more efficient than other contact modes with the permission that is in standards given in advance by the consumer to be sought (Bauer et al., 2005; Gauzente, 2006; Hérault, 2010). In the field of mobile marketing, the main tool is based on the sending of text messages, SMS and online mobile content. The convergence of technologies (iPod, tablets, computer laptop, mobile phone, etc.) in Africa in general and in Cameroon in particular offers many opportunities in the mobile sector. However, the absence of permission of mobile consumers in Cameroon pushes mobile operators to sail before the wind with their pervasiveness among consumers through advertising SMSs. The behavior of these operators does not leave consumers indifferent about the abusive presence of these advertising SMSs in their private surroundings. The expected consequences of such a perception of intrusiveness are negative views towards the announcement and/or the advertiser. *The purpose of this paper is thus the comprehension and description of Cameroonian consumers' reactions towards the invasion of advertising SMSs in their personal environment. At the same time, we will describe in which conditions these consumers accept to receive advertising SMSs.* To solve this problem, following research questions can be asked:

1. What are the reactions of Cameroonian consumers

against advertising SMSs?

2. What are the conditions of acceptance of advertising SMSs by Cameroonian consumers?

This paper considers two points. The first refers to a conceptual and critical literature analysis and the second analyzes and presents empirical results.

Conceptual foundations and problematic

Definitions and theoretical recall

According to the FAMM³ (French Association of Mobile Multimedia), "mobile marketing is the use of mobile phone to reach the consumer and to cause him to react in a targeted way, at the right time, where he is located". In other words, it is the use of mobile phone to reach the largest number of consumers, seeking in a targeted way, that is, the right person at the right time, wherever he is. Mobile marketing combines a variety of mobile tools at the service of marketing operations and various communication devices. It brings together all of the marketing techniques based on the use of mobile terminals, including the mobile phone and other mobile devices. In a broader sense, mobile marketing can also be defined as the set of marketing actions undertaken for individuals in a mobility situation⁴. From this definition, mobile communication can be seen as any advertising action addressed to consumers via mobile phone (Barnes and Scornavacca, 2004).

The practice of mobile marketing requires a certain type of tools. With the development of new technologies, new needs have emerged. Marketing decision-makers must therefore take into account these new needs and offer new tools for the consumer who does not cease to have a weakness for new experiences. Thus, advertisers have multiple tools for a rich and personalized dialogue with consumers via their mobile phone. These tools are amongst other: mobile Internet, SMS, MMS⁵, flash code (also called 'QR code' or 'Quick response Code'), mobile advertising and other innovative tools such as NFC (Near Field Communication) technology. Used together or separately, through occasional or repeated actions or sustainable, alone or in complement with other media, these mobile tools allow advertisers to effectively reach all types of marketing objectives (Gauzente, 2006).

Companies engaged in the mobile marketing generally adopt two types of strategies: the pull and the push strategy. The first is to develop optimized tools that adapt to new patterns of the mobile that users will find it hard to live without. It is the process whereby the consumer himself initiates the first exchange with the brand via his mobile phone. Tools like flash code, image recognition, or

¹ MTN (Mobile Telecommunication Networks)

² CAMTEL (Cameroon Telecommunications)

³ <http://afmm.fullsix.com/Marketing-Mobile/Definition-et-objectifs>

⁴ <http://www.definitions-marketing.com/Definition-Marketing-mobile>

⁵ "MMS" is a contracted form of Multimedia Messaging Services

mobile applications, fit within the “pull” marketing strategy; for instance when a mobile phone consumer pays his electricity bill or some other services via his phone. The second, the “push” marketing strategy, is to get in touch with the consumer under the condition of his consent. It is the process whereby the brand itself seeks the consumer in order to promote its products or services, or to communicate on its image. The advertiser sends the information to the individual on his mobile phone. It is such a marketing strategy that interests us in this paper because it seems intrusive to consumers if certain conditions are not met. In the African context in general, and Cameroon in particular, mobile marketing is already present and is more and more requested by companies and especially the mobile operators themselves. However, advertising is usually sent to the client without him requesting. This is even more serious when it is a political figure, seeking a mobile operator to send campaign SMS to consumers of his electoral district without their permission. It is this lack of permission that makes advertising SMSs intrusive to consumers.

Critical analysis of the literature and research issues

Advertising SMSs towards the mobile phone consumers

Little research currently exists in the field of mobile advertising which would clearly define components, determinants and consequences of intrusiveness of mobile advertising (Gauzente, 2006; Hérault, 2010). At a time when consumers in general and persons exposed to mobile advertisement in particular develop important behaviors of resistance, study precise conditions of occurrence of these behaviors become a major imperative. In a context of advertising persuasion, these behavioral changes give rise on the one hand to the formation of negative attitudes and on the other hand to strongest behaviours of avoidance (Elliot and Speck, 1997). With regards to the intrusive nature, researchers have argued the importance of perceived control of the individual (Stewart and Pavlou, 2002). Thus, less the individual might be able to control everything with regard to the publicity received on his mobile, over the perceived intrusiveness could be very dominant, more it could give rise to resistant behaviors to communication. In the context of definition of advertising intrusion, Perraud (2011) defines *advertising intrusion* as a “*negative orientation of an individual caused by non-compliance with what he considers as its own space*”. The consequences expected of a perception of the intrusiveness are negative reactions and negative views towards the announcement and/or the advertiser.

That said, the SMS is intrusive when it is sent to a number of mobile staff, when the user does not expect to receive commercial message and thus be “spammed” in what it is called “the private sphere”. Advertising SMSs are considered as forced invitations, especially when they

arrive uncontrollably untargeted and inconsistent hours, interrupting consumers in their daily activities. The receptivity of the advertising SMSs depends on some parameters such as usefulness, context, control, credibility and many other elements, of course beneficial to the consumer. Once the consumer cannot find gratification in advertising SMSs, he displays a negative attitude towards them and therefore is not at all receptive, i.e. he is not happy to receive advertising SMSs and thereby he avoid them. Cameroonian consumers face more and more this omnipresence of advertising SMSs in their private sphere because the mobile operators have seen marketing opportunities to operate at any price especially with a constantly growing rate of subscribers to mobile phone.

Penetration rate of mobile phone in Africa and new targeted communication opportunities for firms

The mobile phone seems to be the means of communication increasingly sought nowadays. Indeed, its penetration rate is growing. With a rate of 40% in 2010, Africa's growth potential remains strong as the population increases at a pace two times higher than in the other regions of the world (Ledjou, 2010; Dahmani and Ledjou, 2012). On the other hand, the average rate of penetration of mobile in Africa could increase to 61% or more by 2018 (Ledjou, 2010). Indeed, for the French Development Agency (2015), this rate was evaluated at 70% in late 2014. In Cameroon, the general director of the telecommunications regulatory agency, Jean Louis Beh Mengue, specified the distribution in a paper dedicated to the sector of telecommunications in 2014: “*subscribers are divided essentially between the operators MTN Cameroon and Orange Cameroon, for a penetration rate according to our latest estimates of 71%⁶*”. Thus, for companies, taking the mobile phone as a new solution for communication with their customers and exploiting the potential of the mobile advertising have become essential. It allows communication to the closest client, in a personal way and often targeted. The goal is to reach and to make the consumer react by the transmission of a message, in order to lure him more to information which he alone is the actor (Hérault, 2010). The opportunity to exploit this new channel of targeted communication needs to take into consideration the privacy of mobile phone consumers and to permit them to have control of their private surrounding.

Respect for privacy and behavioral control towards SMSs: conditions of acceptance of SMSs by mobile consumers

Experts foresee an important growing market of mobile

⁶Quoted by Eugène C. « en 2013, le taux de pénétration du mobile au Cameroun était évalué à 36% », <http://www.journalducameroun.com/article.php?aid=19900, Shema - 09/04/2015>

advertising for years. But researchers and practitioners agree on the fact that individuals are increasingly more concerned with preserving their privacy and the use made by the enterprises of their personal data (Becker, 2005). Moreover, people would like to be able to control and maintain their privacy, be in control of all the messages they receive on their mobiles. Indeed, the perceived control plays an important role in the process of acceptance of mobile advertising as validated by a few works (Barnes and Scornavacca, 2004; Merisavo et al., 2007). Then, problems of respect of individual's opinions before performing advertising actions in their mobile phones, respecting their privacy, advertising congestion or even advertising saturation, can lead to avoidance phenomena. To do this, Fishbein and Ajzen (1975) stipulate that: *"more an individual perceives a mobile advertising as intrusive, more his overall assessment towards mobile advertising will be unfavourable"*. Some studies have suggested that avoidance is based on perceived intrusion of advertising (Cronin and Menelly, 1992; Roux, 2007). On the other hand, some others studies have revealed that 81% of consumers who have given their permission, have manifested a positive attitude while reading SMSs they received (Barwise and Strong, 2002; Carroll et al., 2007).

Companies which make recourse to this form of proximity communication must worry about its effectiveness. Thus, two types of content for the creation of value have especially been taken into account concerning attitudes of consumers towards mobile advertising: informative and entertainment (Okazaki and Taylor, 2008; Eighmey, 1997). These two contents refer to the quality of the perceived information. Authors propose both entertainment and informative to positively influence attitudes towards mobile marketing. Indeed, consumers are interested in receiving messages that are relevant for them (Milne and Gordon, 1993).

We can be tempted to think that, although the use of this communication channel is requested and effective, all consumers don't always accept the imposing way Cameroonian advertisers proceed. Therefore, consumers do not necessarily appreciate the frequency of receiving advertising SMSs which arrive in their phones and especially their excessive repetition of information. The exploration of the performances around the commercial use of SMSs is also necessary, especially with the preferred targets of mobile marketing (teenagers and young adults). It comes to mobile marketing agencies and advertisers to take into consideration most importantly respect for privacy and behavioral control in the deployment of their campaigns to mobile advertising (Morimoto and Chang, 2006). Moreover, the consumer holds to have control over the advertising SMSs on his mobile.

In Europe, for example, there is a European directive that fixes conditions for advertising campaigns by phone. Also, to promote the development of a healthy marketing, MMA (Mobile Marketing Association) is charged to

establish the rules of conduct to be respected by advertisers. For this, the subscriber agreement is essential (Bamba and Barnes, 2006). These regulations do not yet exist in Cameroon and even in sub-Saharan Africa, at least to our knowledge. Cameroonian consumers receive advertisements from mobile phone companies or even from other companies via these mobile companies, without having given their permission, very regularly and uncontrolled. It is true that for some time, some advertising SMSs arrive to ask permission to receive information in the future. For instance, the mobile phone company MTN Cameroon sent to some subscribers this SMS: *"Dear customer! You have the exclusive right to receive a free week of quote! Send "OK" to 8715 and win 1 SMS quote per day"*. If the consumer valid with "OK", this message will follow: *«welcome!» You are rewarded a week quote on MTN: get 1 SMS quote per day! To stop it, send "STOP" to 8715. After, 100 F/day"*. Similarly, Orange Cameroon sent this SMS to consumers: *"Orange gave you 1 (one) week for testing Facebook free by Dialing #186 #. Renewal auto on pass week PROMO (100 F). "STOP" by SMS to 8986 to stop it"*. In reality, according to Bauer (2005), *"the communication of content via a mobile media can be effective, unless consumers allow the regular reception of advertising messages on their mobile phone and to be able to stop everything"*.

In the Cameroonian context, the mobile phone operators have not yet understood the interest to join the consumer to the use of this communication channel and to make it formal and effective. In addition, very little research is conducted in this field in Cameroon, at least to our knowledge, in order to attract the attention of companies who use this channel of communication to reach the targeted consumer easily and quickly. Taking into account the personal character associated with the mobile phone, includes questions related to the respect for privacy and the behavioral control seems to be unavoidable to explain reactions and conditions of acceptance of consumers towards advertising SMSs in Cameroon.

METHODOLOGY

Methodological framework

Research conducted on the advertising SMSs about their acceptability and characteristics have allowed one to ponder about the behavior of Cameroonian consumers towards advertising SMSs. In this paper, the descriptive research method is chosen according to fixed objectives. The term descriptive research refers to the type of research question, design, and data analysis that will be applied to a given topic. Descriptive statistics tell what is, while inferential statistics try to determine cause and effect. This descriptive study seeks to specify important properties of the consumers towards advertising SMSs. In fact, descriptive studies measure rather independently concepts or variables to which they refer (Sampieri et al., 2010). This methodology is part of the methods for exploratory research (Garcia-Perret et al., 2008) and tests of frequency and the principal component analysis will be

carried out to describe the reactions of Cameroonian consumers towards advertising SMSs. The main concepts of this paper were measured with Likert scale's where they were asked to respond to each statement in terms of their own degree of agreement or disagreement. Typically, they were instructed to select one of five responses: strongly agree, agree, undecided, disagree, or strongly disagree. Data analysis was made with statistical tool SPSS⁷ 20.0.

All principal components analysis were made according to the standardization of Kaiser where all eigenvalues above 1(one) were selected and with Varimax rotation. The factors that are retained are equipped with strong communalities (all greater than 0.7), strong correlation coefficients and thus fulfilling the required conditions. Reliability tests were analyzed through the Cronbach's alpha (which must be greater than 0.6)⁸. Different mobilized concepts in this research have been taken from existing scales. For instance, the "intrusiveness" has been operationalized in accordance with Gauzente (2006, 2008) and Li et al. (2002) 's works. Items from "perceived utility" of mobile advertising are derived from Bauer's (2005) and Merisavo et al. (2007)'s scales as "the attitude" towards mobile advertising and "intend" to use are inspired by Muehling's (1987) scale. Lastly, those likely to moderate the attitude or behaviour of the individual come from Shavitt & al., (1998). The measurement of the variables is an important step in the research process, since the challenge is to build reliable and valid measures (Tsapi, 1997).

This study population consists of mobile consumers in Cameroon and it is diversified according to their age, their socio-professional category, gender and level of education. For this purpose, we ultimately administered 430 questionnaires in the face-to-face method in three major cities of Cameroon (Douala, Yaounde and Ngaoundere) that represent all the social features of the Cameroonian population. A sorted flat allowed to eliminate the poorly answered questionnaires and finally 383 valid questionnaires representing 89.30% of response rate were retained. Furthermore, the frequency analysis allows realizing that this study sample is composed of 50.1% of men and 49.9% of women. For their ages, 23% of respondents are aged between 15-24 years; 45.2% between 25-49 years and 31.9% above 50 years. Moreover, their level of study has revealed that 10.2 % of respondents have a level of primary study, 34.3% have a secondary level and 55.6% for a higher level. This comes to justify the high rate of school enrolment met in Cameroon. In fact, according to UNICEF the rate of school enrolment in Cameroon is over 84% in 2013⁹. The profession of study sample is composed of 15.5% of unemployed persons, 30% of students, 31.3% of civil servants and 23.2 % of people with liberal activity.

DISCUSSION OF RESULTS

Cameroonian enterprises care about the communication and the promotion of their different offers and services. But the development and use of advertising SMSs do not really feel in all companies. All respondents admitted having a cell phone (100%). Indeed, it should be added that for the whole of the Cameroonian population (estimated at more than twenty-one million people according

to latest statistics on the population¹⁰), Cameroon has nearly 65.71% subscribers to the mobile phone in 2014 as against 51.38% subscribers in 2012, according to official statistics of the telecommunications regulatory agency. Besides, Cameroon phone numbers rose to 9 digits from 21/11/2014 for a forecast of 800 million subscribers and more. Thus, given to this high rate of possession of mobile phone as a tool, 99.74 % of respondents confirmed receiving advertising SMSs.

This brings us to think that Cameroonian companies have become aware of the importance of mobile marketing that plays precisely on the relational proximity between a company and its customers. For this, it was requested to the studied population to compile a profile of companies that send advertising SMSs and the results showed that 30.4 % correspond to mobile phones companies of, 26.1% to NGOs (Non-Governmental Organization), 25.5% for the Government¹¹, 13.3% for banks and finally 4.8% for other companies. A conclusion that can be drawn from these results is that this means of communication is still under-exploited by businesses in Cameroon out of mobile phones companies. Thus, it makes sense to describe the reactions of the Cameroonian consumer facing mobile communication. It could be firstly important to describe the determinants of intrusive advertising SMSs.

Behavioral control and privacy of Cameroonian consumers towards mobile communication

The first principal component analysis on four items, allowed evaluating how the desire to control their phone could be important for mobile users. However, two items¹² (Table 1) have been eliminated because of their low communalities. Results are summarized in Table 1.

Interpretation shows that retained factor (CON_COMP) includes variables that tend to explain different wishes or expectations that users would like to have in the context of sending the advertising SMSs by businesses. For these users, receiving SMS for which they gave their permission would be very useful. Several expectations of mobile phone users go to this sense of getting permission. This can be named "The desire to have control on their mobile phone". In conclusion, Cameroonian mobile consumers want to have control over the receiving of advertising SMSs on their mobile. Moreover

¹⁰ Ibidem

¹¹ We note that the rate of sending advertising SMS by NGOs (26.1%) in Cameroon and the Cameroonian government (25.5%) are very close, simply because their messages focused on health problems and these SMSs are in the majority of cases cosigned by NGOs (World Health Organization) and the Government (Minister of Public Health). The cosigned SMSs are often sent interchangeably by both organizations at the same time through the same mobile operator to the same consumer. These repeated SMSs predispose the Cameroonian mobile consumers for negative reactions.

¹² "I expect to only receive on my mobile, advertising for which I gave my permission" and "the biggest problem in the field of advertising is the loss of control"

⁷ SPSS (Statistical Package of Social Sciences) is one of the most analysis tools used in data analysis in social sciences such as management, marketing and others.

⁸ George and Mallery (2003) provide the following rules of thumb : " $\alpha > 0.9$ – Excellent, $\alpha > 0.8$ – Good, $\alpha > 0.7$ – Acceptable, $\alpha > 0.6$ – Questionable, $\alpha > 0.5$ – Poor, and $\alpha < 0.5$ – Unacceptable"

⁹ www.unicef.org/french/infobycountry/cameroon_statistics.html

Table 1. Perception of Cameroonians' behavioral control towards advertising SMSs.

Items	Component CON_COMP	Communalities
It is important for me to control the authorization to receive advertising on my mobile	0.87	0.76
It is important for me to be able to opt out of receiving advertising on my mobile	0.87	0.76
<i>Eigenvalues</i>	1.51	
<i>% of variance</i>	75.92	
<i>cumulative %</i>	75.92	
<i>Cronbach's Alpha</i>	0.54	

Source: results of our surveys. ¹The value of Cronbach's alpha (0.54), which measures the reliability of the items, is below the minimum threshold (0.6) because the analysis is carried out on a very small number of items (two). But the threshold limit is 0.5. It can be concluded that there is still an internal consistency between items.

68.4% of these consumers would expect to only receive, on their mobile, advertising for which they gave their permission.

According to respect of privacy, the mobile phone is a personal and private tool. It became the companion of individual and contains personal and often confidential information. Moreover, who said confidential said not within the reach of everyone. In addition, the phone follows its owner everywhere he goes, and can strike at any time, even at the times of rest. The consumer must be sure not to be bothered in his workplace or during his rest times by SMSs. Two items¹³ (Table 2) were also eliminated because of their low communalities. The results are summarized in Table 2.

Interpretation: The factor (PRIVACY) brings together the variables which are criteria that we usually associate with privacy and the professional activity of an individual. Indeed nobody would like to be disturbed in his personal and professional environment without giving his permission. This is also true for the mobile phone of an individual. Taking into consideration this parameter is not easy to implement by Cameroonian enterprises. This is why these companies tend to exaggerate in their way of communicating by SMS. These items put together can be characterized as *"the invasion of privacy by advertising SMSs"*. In conclusion, *for the Cameroonian mobile phone consumers, advertising SMSs are considered as pervasive, especially in the absence of permission. Moreover, 57.7% would like, if it was possible or if there was permission, to be able to set schedule times for the receipt of advertisements on their mobile.*

These two determinants concerning the personal environment of Cameroonian mobile consumers expose them to consider advertising SMSs as intrusive and to adopt negative behaviors.

Intrusive advertising SMSs as determinant of negative consumer's reaction

To understand what Cameroonian mobile phone users think of advertising intrusion, a principal component analysis was done on the intrusive character of advertising SMSs; Table 3 shows the summary of the obtained results.

The first retained factor (INTRU1) includes variables that tend to explain the feeling that an individual can have when he is in front of the advertising SMSs for which he has not given previously his permission. The unexpectedly arriving advertising SMSs would be in this context disruptive for users. Cameroonian mobile consumers think advertising SMSs are at first disruptive elements that can finally, if they are persistent, prevent to be productive at work. This factor could be described as: *"advertising SMSs disrupt work"*. In addition to being disruptive, the second factor (INTRU2) which has a single item with a high explanatory power (26.11% of variance) shows that, for Cameroonian consumer, advertising SMSs may even lead to a complete hang up of the work that is to run. This factor can be described as: *"advertising SMSs hinder work"*. In conclusion, *the advertising SMSs are considered by Cameroonian consumers of mobile phone as disruptive elements in their social environment and that can even prevent the user from doing other things.*

In any case, Cameroonian mobile consumers actually became aware of the disruptive factors of advertising SMSs when they violated their private space while threatening the control of their behaviour. When advertising SMSs are considered as disruptive or hindering, this exposes the consumer to adopt negative reactions toward advertising SMSs.

Cameroonian consumer's reactions towards advertising SMSs

This point shows the behavior of individuals facing advertising SMSs regardless of their content (Table 4).

¹³ " Personalized advertising messages to my profile would be useful for me " and "I wish, I could define schedule times of reception of the advertising on my mobile".

Table 2. Cameroonian consumer's privacy facing advertising SMSs.

Items	Component	Communalities
	PRIVACY	
The biggest problem for mobile advertising is no right of privacy	0.87	0.76
The biggest problem for mobile advertising is that they is not more distinction between my home, work and leisure	0.87	0.76
Eigenvalues	1.52	
% of variance	76.16	
Cumulative %	76.16	
Cronbach's Alpha	0.69	

Source: results of our surveys.

Table 3. Opinions of Cameroonian consumers towards the mobile communication.

Items	Components		Communalities
	INTRU1	INTRU2	
It is intrusive	0.66		0.62
It is disturbing	0.81		0.68
This distracted what we are doing	0.83		0.73
This prevents us from doing something else		0.91	0.84
Eigenvalues	1.84	1.04	
% of variance	45.91	26.11	
Cumulative %	45.91	72.01	
Cronbach's Alpha	0.66		

Source: results of our surveys.

Table 4. Reactions of individuals facing advertising SMSs.

Items	Components			Communalities
	FAC1_React	FAC2_React	FAC3_React	
When I receive advertising SMSs, I read and do not delete them.	0.94			0.79
When I receive advertising SMSs, I read and delete them.	-0.93			0.82
When I receive advertising SMSs, I do not read them and do not delete them.		0.88		0.95
In general, I like to receive advertising SMSs on my mobile.		-0.83		0.89
In general, I don't like to receive advertising SMSs on my mobile.			0.97	0.88
Eigenvalues	2.06	1.23	1.03	
% of variance	41.27	24.66	20.66	
Cumulative %	41.27	65.93	86.59	
Cronbach's Alpha	0.77			

Source: results of our surveys.

This analysis was also done in order to understand their reactions after receiving advertising SMSs. Table 4 summarizes the results.

The first selected factor (FAC1_React) includes the category of consumers who still read advertising messages they received, but they have a shared view on the conservation of these SMSs after reading. This factor can be called: *"the reading of advertising SMSs"*. The

second factor (FAC2_React) describes a behaviour which is difficult to understand among Cameroonian consumers against advertising SMSs. Indeed, a high negative and high positive loading, of the two items, show the sharing of consumers' point of view according to the reading and the conservation or removal of received advertising SMSs. This factor is named: *"indifference or interest for advertising SMSs"*. The third retained factor

Table 5. Description of consumer’s reactions after receiving advertising SMSs.

Items	Agreed		Kurtosis	Skewness
	Number	%		
When I receive advertising SMSs, I read and do not delete them.	114	29,8	-1,427	0,685
When I receive advertising SMSs, I read and delete them.	266	69,5	-0,633	-1,093
When I receive advertising SMSs, I do not read them and do not delete them.	64	16,7	-0,865	0,753
When I receive advertising SMSs, I do not read them and delete them.	87	22,7	-1,187	0,682
In general, I like to receive advertising SMSs on my mobile.	146	38,1	-1,639	-0,055
In general, I don't like to receive advertising SMSs on my mobile.	125	32,6	-1,538	0,059

Source: results of our surveys.

(FAC3_React) with a high proportion in the total variance refers to behavior of those who hate receiving advertising SMSs on their mobile. This factor may be named “*Anti advertising SMSs*”. This behavior concerns consumers who would not like to be disturbed by external phenomena to their activity. In conclusion, *despite the shared opinion between reading or not advertising SMSs, deletion or conservation, some Cameroonian mobile consumers would not like to receive at all advertising SMSs (32.6 %) of companies on their mobile.*

This consumer’s reaction was measured using a scale of 6 items. Consumers were asked to answer the following question: *What is your behavior when you receive an advertising SMS?* Considering those who “Agree”, the result is summarized in Table 5.

Reading this table, it can be said overall that the Cameroonian mobile consumers react negatively when they receive an advertising SMS. With the exception of variables “*when I receive advertising SMS, I read and delete them*” and “*in general, I like to receive advertising SMSs on my mobile*”, all the symmetry coefficients (“*Skewness*”) have positive values. This means that, compared to the normal distribution, observations are rather concentrated on the lower values. However, all concentrated coefficients are negative (“*negative Kurtosis*»). This means that opinions are rather divided at the level of the desire to receive advertising SMSs by Cameroonian consumers and the reaction after receiving these advertising SMSs. Furthermore, the most significant inputs on the reaction of Cameroonian mobile phone consumers are negative reactions toward advertising SMSs and often they erase these SMSs without reading.

The intrusiveness of advertising SMSs that can be considered as determinants of negative reactions have pushed Cameroonians to have stereotyped apprehension on the advertising SMSs in Cameroon. But they may have another way of seeing things if these SMSs brought to them meaningful or rewarding information.

Conditions for acceptance of advertising SMSs

The nature of the message would be an important

condition to allow a consumer to be attentive to advertising SMSs (Table 6). Thus, this analysis will enable to understand the tolerance of Cameroonian consumers for advertising SMSs through its contents. Table 6 summarizes the various results.

The first factor (Util_1) includes the category of consumers for whom advertising SMSs utility must provide lessons. Consumers would like to learn more through advertising SMSs; for instance, SMSs that inform them how to avoid diseases, information about a problem that concerns them and so on. This factor can be called: “*educational advertising SMSs*”. The second factor (Util_2) describes the case of Cameroonian consumers who accept advertising SMSs because they can provide them a gain in terms of services or gain from participation in a free lottery. This factor can be named: “*winning advertising SMSs*”. The third factor (Util_3) with a small proportion in the total variance (only 14.37%) refers to the group of consumers who are waiting for entertainment or information beside the advertising SMSs on their mobile. This factor may be named: “*informative or distractive advertising SMSs*”. In conclusion, *we can say that the tolerance of the advertising SMSs by the vast majority of Cameroonian consumers depends on the usefulness of advertising SMSs in terms of education, earnings and information. Thus, any advertising SMS which does not provide learning, gain or is not entertaining is not welcome by Cameroonian consumers of the mobile phone.*

Conclusion

In any case, although advertising SMSs seem to be very important in communication within companies in Cameroon, some companies are still lagging behind in this method of communication which is a virtue of marketing. We found that only the mobile operators and the NGOs/ the Cameroonian Government send advertising SMSs regularly to consumers to promote their various services and to inform them. Despite the lack of enthusiasm of the firms concerning the use of mobile communication, there is a problem of excessive and

Table 6. Conditions of acceptance of advertising SMSs by consumers.

Items	Components			Communalities
	UTIL _1	UTIL _2	UTIL _3	
If I get SMSs that can increase my knowledge in a field that interests me, I could tolerate even if they are intrusive.	0.93			0.76
If I get SMSs that give me information about a problem that concerns me, I could tolerate even if they are intrusive.	0.85			0.89
If I get SMSs that inform me on precautions to avoid diseases, I could tolerate even if they are intrusive.	0.82			0.70
If I get SMSs that inform me that I can participate in a lottery for free via my cell phone, I could tolerate even if they are intrusive.		0.87		0.65
If I get every day at any time the same SMSs, which inform me on the subscription of a service, I could tolerate their intrusion.		0.74		0.78
If I get every day, at any time, the same SMSs which inform me on my Bank, I could tolerate their intrusion.			0.86	0.69
If I find some SMSs entertaining, I could accept them even if they are intrusive.			0.72	0.80
Eigenvalues	2.79	1.47	1.01	
% of variance	39.91	21.03	14.37	
Cumulative %	39.91	60.94	75.30	
Cronbach's Alpha		0.86		

Source: results of our surveys.

disorderly use of mobile marketing.

The analysis of our results allowed us to enumerate several items concerning the practice of advertising SMSs in Cameroon. Thus, we have identified the most involved companies in this type of communication. These results have also allowed us to understand the conditions of tolerance by Cameroonian consumers and especially their reactions towards the advertising SMSs. Advertising SMSs would be very important for the communication of companies' offers and services, for humanitarian causes and many others. But, they would apparently be more interesting if they were not intrusive or if they meet certain conditions as information and/or entertainment. Taking this aspect into account would be really beneficial for companies to reduce the risk of avoidance of advertising SMSs by consumers. These results have also allowed us to see the limits of advertising SMSs through the complaints and prejudices of consumers towards mobile advertising. Companies in Cameroon have not yet had mobile communication regulations and therefore the consumer can not complain. This is why the mobile phone companies allow themselves to abusively use this means of communication and to place the Cameroonian consumer in uncomfortable position where he would avoid advertising SMSs on his mobile by not reading them or by just deleting them.

Although companies are quite interested in mobile marketing in Cameroon, they have not yet successfully passed to "opt-in" mode as in Europe. These negative reactions of Cameroonian consumers allow us to focus

our future researches on the impact of the intrusiveness levels of advertising SMSs on acceptance of mobile communication by mobile consumers in Cameroon.

Conflict of Interests

The authors have not declared any conflict of interests.

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