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MOTIVATIONS AND SOCIO-DEMOGRAPHIC CHARACTERISTICS OF SAFARI HUNTERS: A SOUTH AFRICAN PERSPECTIVE

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ABSTRACT

Although participation in outdoor leisure activities has been the frequent focus of research, very few studies have examined non-resident hunters' motivations for participating in a South African hunting safari. Results of a factor analysis performed following a mail survey of hunters who had hunted in South Africa, indicated that they were motivated to hunt, firstly, by appreciation. Other activity-related motivations were affiliation and achievement. The most important motivations for choosing South Africa as a hunting destination were novelty, and attributes such as the country's natural beauty and abundance of wildlife. External stimuli, for example, promotion in brochures and at exhibitions, played a much smaller role. Pearson's correlation coefficients confirmed the interrelationships between activity-related and destination-related motivations. Analysis of variance indicated that hunters' motivations differed depending on their levels of hunting experience, home environment, country of residence and income.

These results may be of interest to providers of the South African hunting safari because they shed some light on why different groups of hunters participate in hunting, and choose South Africa as a hunting destination. More focused marketing strategies can enhance the industry's competitiveness in an international market characterized by a growing variety of recreation and leisure activities and destinations.

INTRODUCTION

For many people, leisure, recreation and vacation activities are related, and therefore travelling even long distances to participate in a preferred activity is not unusual (Chang & Gibson, 2011). For example, Bryan (1977) observes that, as anglers become more specialized, they tend to use their vacations to travel to other destinations to further practice and develop their angling skills.

Hunters likewise seem to travel considerable distances to participate in a wished-for hunting experience. For example, in 2009, 62% of overseas clients who visited South Africa came from Northern America, 17% from Europe, and 18% from Scandinavia (Carroll, 2010).

South Africa also attracts hunters from countries such as Australia, New Zealand, Croatia, Vietnam, and the United Arab Emirates. European hunters, particularly those from Germany, Austria, Italy, Spain, Denmark, and the Benelux countries, are avid travellers. Popular destinations are Hungary, Poland, other Eastern European countries, and Scandinavia (Brainerd, 2007). In follows that providers of the South African hunting safari have to compete with a variety of countries for the patronage of hunters from abroad. South African safari hunting (also known as sport hunting or trophy hunting) refers to legitimate and organized hunting activities undertaken by individuals, mostly from abroad, whose primary objective is securing trophies from killed animals, birds, and reptiles (Report to the Minister of Environmental Affairs and Tourism, 2005). Trophies are often presented as skull mounts, shoulder mounts, full mounts, tusk mounts, and/or rugs.

An understanding of individuals' motivations (in this instance, those of hunters) is important (O'Connell, 2010; Oh, Uysal & Weaver, 1995; Kruger & Saayman, 2010) for a number of reasons. Firstly, motivation is a fundamental force behind all human behavior as it arouses, directs, and integrates behaviour (Crompton, 1979; Iso-Ahola, 1982; Fodness, 1994). Because motivation is both an impelling and a compelling force behind all behavior (Crompton, 1979; Fodness, 1994) it serves as an initial point in studying tourist and travel behavior (Devesa, Laguna, & Palacois, 2010). Secondly, motivation drives individuals' choice and could therefore help explain their preference for participating in certain leisure activities and their choice of destination for this purpose (Moscardo, Morrison, Pearce, Lang & O'Leary, 1996). It seems reasonable to argue that an understanding of hunters' motivations could also be the starting point in understanding why they participate in this activity and why they travel to South Africa for this purpose. Thirdly, individuals have different needs, and hence a misunderstanding of their intrinsic motivations could hamper the design of appropriate offerings and experiences (Beh & Bruyere, 2007; Crompton & McKay 1997). The provision of less than optimum offerings will impede need fulfillment and consequent customer satisfaction and loyalty (Yoon & Uysal, 2005). The latter typically leads to re-visits and the spreading of positive word-of-mouth communication about the experience (Anderson, 1998; Huo & Miller, 2007). This in turn contributes to the organization's long-term economic success (Akama & Kieti, 2003). Lastly, organizational success is enhanced by effective marketing activities such as segmentation, product and image development, and better-focused promotional activities (Fodness, 1994; Yoon & Uysal, 2005). Identifying and prioritizing hunters' motivations are therefore likely to facilitate the effectiveness of other marketing activities (Crompton & McKay, 1997).

Authors such as Oh et al. (1995) point out that in addition to understanding the impelling ("push") and compelling ("pull") factors of motivation, it is also important to understand the relationship between these motivations. Such knowledge can help destination marketers determine the most successful coupling of motivational factors into tourism bundles (Goodrich, 1977). Similarly, knowledge about hunters' desires for hunting and for choosing South Africa for this activity, may indicate destination attributes that would best satisfy their needs.

In addition to explaining the interrelationship between motivations, a number of studies have also hypothesized that motivations to participate in an activity may differ because of socio-demographic variables. For example, O'Connell (2010) has found differences in motivation to sea kayak based on age, gender and level of experience. Nationality also seems to impact motivations. It can be used for understanding tourists' push factors and preferences in terms of destination attributes (Prayag & Ryan, 2011) and to explain differences in motivation to travel to South Korea, for instance, the length of pre-travel planning, information sources used, and length of stay (Kim & Prideaux, 2005).

Although hunters' motivations have been fairly well researched, they have hardly been investigated in the context of the South African hunting safari. This is surprising given the important contribution safari hunting makes to the economy of the country. For example, in 2009, R607million (US$85million) resulted from daily rates and species fees only; in 2008, the corresponding figure was R973million (US$136million) (Carroll, 2010). This amount excludes taxidermy work, tips, and indirect contributions to other parts of the economy, such as airlines, pre-and post-safari accommodation, and shopping.

The present study had four objectives, namely to: (1) examine non-resident hunters' motivations for participating in hunting; (2) explore their motivations for choosing South Africa as a hunting destination; (3) determine the interrelationship between these motivations; and (4) determine whether motivations differ because of non-motivational factors such as socio-demographics.

In order to place the study into context, the next section provides a brief description of the South African hunting safari. The subsequent review of motivation establishes a conceptual basis for the formulation of the aforementioned research objectives. The remainder of the paper explains the methods applied in collecting and analyzing the primary data, presents and discusses the results, and provides conclusions and managerial implications. Finally, the limitations of the study and suggestions for further research are presented.

REVIEW OF THE LITERATURE

The South African Hunting Safari

Although hunting can be viewed as a food resource, a way of life, or the primary tool for wildlife management agencies to control game populations (Brown et al., 2000 cited by Lindberg, 2010), the South African hunting safari is a typical, wildlife-related, nature-based, outdoor leisure activity.

Even though the hunting safari occurs mainly on privately owned game ranches (Von Brandis & Reilly, 2007), it is regulated by a well-organized game ranching and professional hunting industry (PHASA, 2009). A hunting outfitter typically provides all the services required by the visiting hunter. These include the arrangement of the hunt, obtaining the necessary

hunting permits, dealing with landowners, and seeing to written agreements regarding trophy fees, daily rates, and the species and sex of game offered (PHASA, 2009). Other services relate to ground transportation, accommodation, domestic air charters, actual hunting, and preparation, packaging, and shipping of trophies (Booth, 2009). The outfitter is assisted by trained Professional Hunters (individuals who have attended a registered Professional hunting school, passed the theoretical and practical examinations set by the relevant Provincial Nature Conservation Authorities, and possess the specified knowledge, abilities, skills and experience. The latter includes at least sixty days experience hunting dangerous game).

Hunters can choose a package from a selection of safaris. The final cost of the safari is negotiated and depends on the availability of the hunting area, dates and species, the status of the booking sheet, and the reputation of the outfitter and/or professional hunter. These negotiations can take up to 18 months, with the typical big-game hunter paying over US$100,000 for a 21-day hunting experience (Booth, 2009). This figure excludes costs for additional guests, such as observers or family members, who accompany the hunter.

Motivation

Various theories have been put forward to explain motivation, an often-researched topic in psychology, sociology, consumer behaviour, and tourism (Hung & Petrick, 2010). Crompton and McKay (1997) note three alternative taxonomic frameworks which delineate and order individual motives into categories and serve as the basis for most research. These are Maslow's needs hierarchy, Iso-Ahola's escape-seeking dichotomy, and the notion of "push-pull" factors.

Maslow (1970) classifies needs hierarchically, with physiological needs at the most basic level, self-actualization at the other extreme, and safety, social and esteem needs in-between. This needs classification has found application in the Leisure Motivation Scale which differentiates between four categories of motives: (1) motives with a mental and intellectual component, comprising elements such as learning, exploring, discovering, thinking, or imagining; (2) those with a social component, describing the needs for friendship, interpersonal relationships, and esteem of others; (3) a physical competency-challenge component, represented by a need to achieve, master, challenge, and compete; and (4) a stimulus-avoidance component, reflected in the desire to avoid social contact and seek solitude, calm, and rest (Ragheb & Beard 1982; Ryan 1995).

Iso-Ahola's (1982) theory of motivation has also found application in leisure, recreation and tourism contexts (Snepenger, King, Marshall & Uysal, 2006). This theory holds that motivation comprises two principal components, escaping from routine environments, and seeking intrinsic rewards (Iso-Ahola, 1982).

The escape-seeking dichotomy contributes to the "push-pull" framework (Dann, 1977), which provides a useful approach for examining the motivations underlying tourist and visitation behavior (Kim, Lee & Klenosky, 2003). In this framework, "push" or impelling factors (Baloglu

& Uysal 1996) are primarily related to internal or emotional aspects, such as the desire for escape, rest and relaxation, adventure or social interaction. "Push" factors are reinforced by "pull" factors (Shen, 2009) which describe the external, situational or cognitive aspects associated with the destination itself (Devesa, Laguna & Palacois, 2010). Typical "pull" factors are the features, attractions and attributes of the destination (Kim, et al., 2003), such as leisure infrastructure, cultural or natural features (Devesa et al., 2010), key tourist resources, information, convenience, accessibility and transportation (Kim et al., 2003).

Two important sets of motivations can be identified from the preceding discussion. The first set refers to psychographic, emotional motivations that largely influence the choice of activity, and which for the purposes of this research, are referred to as activity-related factors. The second set of motivations includes external, situational or cognitive motivations that impact on decisions about where such an activity should be undertaken. In this study, these motivations are referred to as destination-related.

The activity-related motivations of hunters have been fairly well documented. Bauer and Herr (2004) suggest that for some people, hunting is an immersion in a basic activity which, from an evolutionary perspective, provides in individuals' primary nutritional needs. While the modern consumer generally no longer depends on hunting for his survival, "the ability to provide a meal from wildlife [still] reflects on a person's status within a family … [something] that … feels good" (Bauer & Herr, 2004: 62). Other motivations for participation in hunting include being in nature, the dream of self-sufficiency (even if for only a few days), the desire for adventure or for honing childhood skills, or simply having a good time with friends and family (Bauer & Herr, 2004; Frawley, 2005; Moscardo et al., 1996).

Commonalities in hunting motivations are found across environments and species. For example, research conducted in North America (Hendee, 1974; Decker et al., 1984; Decker & Connelly, 1989), Europe (Pinet, 1995), and South Africa (Radder & Bech-Larsen, 2008) suggests that hunters are motivated by the wish to achieve, be affiliated with others, and appreciating the environment. Affiliation-motivated hunters desire camaraderie (Pinet, 1995) and strengthening of personal relationships with hunting partners (Decker, et al., 1984). Achievement-motivated individuals hunt to meet a self-determined standard of performance, while appreciation-motivated hunters have a love for nature (Pinet, 1995) and hunt to relax and to escape from everyday concerns (Decker et al., 1984). South African domestic hunters showed similar motivations which, when analyzed on a more abstract level in a means-end study, transposed into personal values of achievement, hedonism, stimulation, universalism, and conformity (Radder & Bech-Larsen, 2008).

Motivations seem to be fairly similar irrespective of the species hunted. Hunters of mourning doves in Alabama are motivated by companionship, nature, exercise, challenge, tradition, escape, and learning (Hayslette, Armstrong & Mirarchi, 2001). Small-game hunters in Michigan cite recreation, being with friends and family, managing wildlife, feeling close to nature, relaxation, and small game being a source of food, as their reasons for hunting (Frawley,

2005). Big-game hunters enjoy the experience, adventure, potential danger and acquisition of the trophy (Bauer & Herr, 2004).

The lack of research into the activity-related motivations of safari hunters and the importance of understanding the interrelationship between activity-related and destination-related motivations (as explained earlier on), led to the first objective of the present study, namely to explore the activity-related motivations for participating in a hunting safari.

In comparison to the research attention given to hunters' motivations for participating in hunting, their motivations for travelling to another country for this purpose, have not been well documented. Bauer and Herr (2004) have suggested that hunters might travel internationally because supply in their home countries does not meet demand, and/or because destination countries offer cheaper, more diverse or more exciting hunting experiences. Brainerd (2007) is of the opinion that hunters who travel to more exotic and unfamiliar destinations may place greater emphasis on adventure and souvenirs (e.g. trophies) than is the case when they are well-acquainted with their destination and familiar with the species they hunt. South Africa is arguably such a sought-after hunting destination, given its wide variety of habitats and landscapes which result in an unusual selection of birds, reptiles, ungulates, and huntable mammals. These include the Big Five (lion, elephant, buffalo, leopard and rhinoceros) which are regarded as the five most dangerous and most difficult animals to hunt on foot in Africa. South Africa and Namibia are also arguably the only countries where both black (*Diceros bicornis*) and white rhinoceroses (*Ceratotherium simum*) can be hunted as trophies.

Up to now, research into the South African hunting safari has focused on perceived risks and rewards (Radder & Han, 2008) and hunters' expectations and satisfaction (Radder & Han, 2010), without paying any attention to destination-related motivations. The second objective of this research was therefore to determine why hunters travel to South Africa for a hunting safari.

A number of authors (e.g. Dann, 1981; Klenosky, 2002) hold that the so-called "push and pull" factors of motivation are two separate decisions made at different points in time. However, others (e.g. Baloglu & Uysal, 1996; Kim et al., 2003) point out that these factors are fundamentally related to each other. In fact, Baloglu and Uysal (1996) argue that knowledge about this interrelationship can help marketers and developers of destination areas create the most successful combination of motivations as tourism product bundles. Given the highly competitive environment of the international hunting industry, and the scarcity of research into the South African hunting safari, it was deemed important to investigate the existence of a relationship between hunters' motivations. This constituted the third objective of the current study.

The impact of socio-demographics on individuals' motivations has been investigated in different contexts (e.g. Kim & Prideaux, 2005; O'Connell, 2010; Prayag & Ryan, 2011). For example, in a hunting context, it was found that the age of the hunter did not change the relative importance of the reasons for involvement in small-game hunting (Frawley, 2005). Similarly, age, current place of residence, and prior experience, had no significant impact on declining

hunter participation after controlling for personal and situational constraints (Miller & Vaske, 2003). On the other hand, Decker and Connelly (1989) found that achievement-oriented deer hunters tended to be younger and had fewer years of hunting experience than other hunters, while hunters seeking affiliation, tended to be older than others. Given that differences in motivations for different socio-demographics can impact visitor satisfaction (Kim et al., 2003), the fourth objective of the present study was to determine whether safari hunters' motivations differ because of socio-demographic factors.

METHODS

Data Collection And Measurement

Three sections of a structured questionnaire designed to solicit data on aspects of the South African hunting safari were pertinent to the current study and are reported here. One section obtained socio-demographic data, while the other two dealt with activity-related and destination-related motivations respectively. An initial pool of statements embodying motivational items was refined into a 29-item list of activity-related motivations and a 13-item list of destination-related motivations. The respondents were asked to use a 6-point forced-choice Likert scale to rate their level of agreement (1 = *strongly disagree* and 6 = *strongly agree*) with each of the statements.

Because of confidentiality reasons, the researchers were not allowed access to hunters' contact details, and the assistance of an official facilitator in the industry was enlisted. His office distributed survey packages (each comprising a questionnaire and a postage-paid reply envelope) to 2 000 conveniently selected potential respondents who had participated in a South African hunting safari in recent years. By the due date, 236 useable questionnaires were returned. This yielded a tolerable overall response rate of 13.2% (Dillon, Madden & Firtle, 1994). However, only 191 respondents answered all the questions relevant to the section dealing with motivations, and the results reported here pertain to these respondents only.

Statistical Analysis

Exploratory Factor Analysis (EFA) helped identify the latent dimensions of hunters' motivations, using Principal Components Analysis (PCA) at the extraction stage, and the OBLIMIN technique at the rotation stage. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (0.817 and 0.781 respectively) and the Bartlett's test of sphericity ($p<0.001$) indicated that both sets of scores were suitable for factor analysis (Sekaran, 2000; Hair, Black, Babin & Anderson, 2010).

The number of factors was determined according to Kaiser's rule (Kaiser, 1960). The results indicated that six factors in the activity-related motivation data, and three factors in the

destination-related motivation data, had eigenvalues greater than one. Six items were deleted because of their unsatisfactory factor loadings. Only three of the remaining items had loadings below 0.4, but they were retained given the exploratory nature of the study. An inspection of the components correlation matrix showed that the resulting factors could be clearly distinguished. Internal consistency was regarded as adequate (Sekaran, 2000; Hair et al., 2010) because the Cronbach's alpha coefficients ranged from 0.64 to 0.82 in the case of the six activity-related factors and from 0.62 and 0.87 in the case of the three destination-related factors.

Pearson's correlation coefficients were calculated to assess the existence of interrelationships between the motivational factors. Analysis of Variance (ANOVA), was performed to determine whether activity-related and destination-related motivations differed by socio-demographic variables.

RESULTS AND DISCUSSION

Profile Of Respondents

Table 1 summarizes the characteristics of the respondents. More than three quarters of the respondents came from the USA. Those classified as non-USA were from countries such as the United Kingdom, Spain, Germany, Australia, New Zealand, Norway, Denmark, Austria, Belgium, France, Italy, Ireland, Croatia, and Mexico. This distribution corresponds to the overall trends indicated by Carroll (2010), namely that the largest proportion of safari hunters who visit South Africa, come from the USA.

The majority of respondents were males, between 40 and 60 years of age. About equal numbers of respondents had a rural and urban childhood, while slightly more resided in rural areas at the time of the survey.

Only about 13% of the respondents had no post-school qualification, compared to the 36% with more than five years post-school education. Of those who answered the question, 41% had an annual gross household income of less than US$100,000, while 27% earned more than US$200,000.

Almost half (47.1%) of the respondents regarded themselves as experienced hunters (Level 4). This seems to confirm the supposition of Bryan (1977) that as individuals become more experienced in their leisure activity, they tend to travel to unfamiliar destinations to further practice and develop their skills.

Table 1: Profile of Respondents		
Variable	Category	Percentage
Country of residence	USA	76.4
	Non-USA	23.6
Gender	Male	97.9
	Female	2.1
Age	20-39	7.9
	40-49	18.9
	50-59	43.2
	60-69	21.1
	$\geq$ 70	8.9
Current home environment	Urban	42.9
	Rural	57.1
Childhood home environment	Urban	50.2
	Rural	49.7
Post-school education	None	12.6
	1 – 5 years	51.3
	> 5 years	36.1
Annual household income	$\leq$ US$100 000	41.4
	US$100 001 – US$200 000	31.5
	>US$200 000	27.1
Hunting experience	Level 1	6.4
	Level 2	18.2
	Level 3	28.3
	Level 4	47.1

Factor Analysis of Activity-Related Motivations

Activity-related motivation items yielded six factors labeled *Personal values, Ego enhancement, Caring for family, Self-awareness, Excitement/challenge*, and *Social interaction/mental stimulation*. See Table 2.

Item Nr	Table 2: Results of Factor Analysis for Activity-Related Motivations	Mean	SD
	Factors and Items		
	Factor 1: Personal values (Cronbach's alpha: 0.75)	**5.35**	**0.65**
01	Hunting allows me to actively contribute to wildlife conservation	5.54	0.75
16	Hunting improves my knowledge of nature	5.51	0.81
05	Hunting is a means to escape from the stress of daily activities	5.50	0.79
02	Hunting is in my blood	5.31	1.09
04	Hunting provides me with good exercise	5.31	0.96
03	Hunting is part of my heritage	5.17	1.30
06	Hunting affords me an opportunity to share a special experience with my loved ones	5.05	1.29
	Factor 2: Ego enhancement (Cronbach's alpha: 0.82)	**3.77**	**1.36**
22	I like it when others admire my trophies resulting from my hunts	4.20	1.51
19	My trophies show that I am a successful hunter	3.71	1.55
23	I enjoy showing off my hunting skills	3.39	1.69
	Factor 3: Caring for family (Cronbach's alpha: 0.64)	**3.27**	**1.44**
17	Hunting is an opportunity to provide my family with food	3.91	1.68

Item Nr	Factors and Items	Mean	SD
	Table 2: Results of Factor Analysis for Activity-Related Motivations		
09	Hunting shows that a man can care for his family	2.62	1.67
	Factor 4: Self-awareness (Cronbach's alpha: 0.70)	**3.15**	**1.15**
14	Hunting is an instinct	4.26	1,43
13	Hunting allows me to get rid of my frustrations	3.05	1.69
07	Hunting reinforces my male identity	2.98	1.72
15	Hunting satisfies man's need to be in control	2.32	1.47
	Factor 5: Excitement/challenge (Cronbach's alpha: 0.80)	**5.11**	**0.81**
21	Every hunt is unique and gives me a new story to tell	5.28	0.95
11	To me, hunting is the most exciting type of adventure sport	5.20	1.01
20	I enjoy the challenge of having to outwit the animal	5.10	1.06
24	I enjoy testing my skills against that of the animal	5.00	1.25
18	I like the "thrill of the chase"	4.99	1.17
	Factor 6: Social interaction/mental stimulation (Cronbach's alpha: 0.68)	**4.94**	**0.93**
25	I often learn a lot from others when on a hunting trip	4.95	1.12
10	Hunting allows me the opportunity to share time with like-minded people	4.93	1.27
12	Hunting trips allow me the opportunity to meet new people	4.93	1.19

The items comprising Factor 1 (*Personal values*) described hunters' desire to contribute to traditional values, conservation, learning, family togetherness, and escape. It is significant that the respondents felt most strongly about the contribution their hunting makes to wildlife conservation (M=5.54). It has been proven in South Africa that the bontebok, black wildebeest, Cape mountain zebra, geometric tortoises and numerous rare plant species were saved from extinction because of the actions of the country's hunting industry and private game ranch owners (Hamman, Lloyd & Stadler, 2005). In addition to saving these species, hunting also contributes to preventing and reducing the costly impacts caused by the overpopulation of certain species (Mauser & Paddon, 2000) particularly in the absence of other predators, as happened with the elephant in certain conservation areas in South Africa.

Factor 2, *Ego enhancement*, gathered items with an outer-focus on the self, while Factor 4, *Self-awareness*, has an inner focus on the self. It is interesting that Factor 2 had a higher factor mean score than Factor 4. A comparison of the item mean scores forming part of *Ego enhancement* seems to indicate that while hunters enjoyed others' admiration of their trophies, they were less likely to equate securing trophies with hunting success. They also did not seem to view hunting as a way to reinforce their male identity or to satisfy a need to be in control.

Factor 3 (*Caring for family*), had a low factor mean score of 3.27 which may confirm the purpose of the hunting safari as securing a trophy, rather than obtaining meat.

Factor 5 (*Excitement/challenge*) grouped together items that describe the excitement and uniqueness of each hunt and the challenge involved in outwitting the animal. It is interesting that *Excitement/Challenge* had a much higher mean score (M=5.11) than that of *Ego enhancement* (M=3.77) or *Self-awareness* (M=3.15). This probably indicates that respondents' motivations to

meet a self-determined standard of performance were more strongly associated with competing against the animal, than competing with other hunters.

The items describing Factor 6 (*Social interaction/mental stimulation*) relate to the camaraderie brought about by hunting and opportunities for mental stimulation. It seems that although hunters participated in hunting for the opportunity of associating with others who had similar interests (M=4.93, Item 10), sharing this experience with family (M=5.05, Item 06), was a stronger motivation.

Upon further examination of the six activity-related motivational factors, it was found that they could be regrouped into three categories: (1), appreciation-oriented motivations, described by *Personal values*; (2) affiliation-oriented motivations, described by *Caring for family* and *Social interaction/mental stimulation*, and (3), achievement-oriented motivations comprising *Ego enhancement*, *Self-awareness* and *Excitement/challenge*. An inspection of the mean scores of the three sets of activity-related motivations shows that the respondents participate in safari hunting, firstly because of appreciation motivations (M=5.35). This is followed by affiliation motivations (M=4.10), while achievement motivations were least important (M=4.01).

Factor Analysis of Destination-Related Motivation

The destination-related motivation items yielded three factors which were labeled *Attributes and features, Novelty,* and *External stimuli* (see Table 3). The high mean scores of *Novelty* (M=5.03) and of *Attributes and features* (M=5.03) indicate that these factors make South Africa a desired hunting destination. Of particular importance were the abundance of game (M=5.41, Item 01) and the natural beauty of the country (M=5.31, Item 03). The results furthermore indicate that hunting in South Africa is viewed as a novelty (unique experience and a dream come true). External stimuli such as recommendations by other hunters and promotional material, in particular, were of lesser importance.

Item Nr	Factors and Items	Mean	SD
Table 3: Results of Factor Analysis for Destination-Related Motivations		
	Factor 1: Attributes and features (Cronbach's alpha: 0.76)	**5.03**	**0.72**
01	South Africa has an abundance of game	5.41	0.82
03	The country has exceptional natural beauty	5.31	0.80
09	The country offers a wide variety of hunting habitats and therefore many different hunting regions	5.13	0.97
07	The country has the best variety of species to hunt	4.75	1.07
08	South Africa offers many cultural attractions apart from hunting	4.55	1.31
	Factor 2: Novelty (Cronbach's alpha: 0.87)	**5.03**	**0.72**
11	Hunting in South Africa is a truly unique experience	5.04	1.11
12	Hunting in South Africa is a dream come true	5.03	1.15

Table 3: Results of Factor Analysis for Destination-Related Motivations			
Item Nr	Factors and Items	Mean	SD
	Factor 3: External stimuli (Cronbach's alpha: 0.62)	**3.88**	**1.23**
06	Recommendations by other hunters persuaded me to hunt in South Africa	4.60	1.31
04	Brochures and other marketing material persuaded me to hunt in South Africa	3.55	1.58
05	Exhibitions at a convention persuaded me to hunt in South Africa	3.48	1.75

Relationship between Activity-Related and Destination-Related Motivations

The third objective of the research was to determine the interrelationships between motivations. The results from Pearson's correlation analyses, reported in Table 4, indicate that the destination-related factor termed *Attributes and features*, had significant positive correlations with four activity-related motivational factors ($p < 0.05$). While the correlations with *Personal values* (0.23) and *Caring for family* (0.15) were fairly weak, those for *Excitement/challenge* (0.31) and *Social interaction/mental stimulation* (0.39) were moderate. This suggests that the natural beauty and diversity typical of the South African hunting environment provides visiting hunters with the desired excitement and challenge of matching their skills against those of the animal. It also provides hunters with the opportunity to meet new people and learn from them.

Table 4: The Relationship Between Activity-Related and Destination-Related Motivations			
Destination-related / Activity-related	Attributes and features	Novelty	External stimuli
Personal values	0.23*	0.13	0.06
Ego enhancement	0.14	0.15*	0.37*
Caring for family	0.15*	0.08	0.07
Self-awareness	0.12	0.07	0.13
Excitement/challenge	0.31*	0.29*	0.16*
Social interaction/mental stimulation	0.39*	0.31*	0.25*
Note:*p<0.05			

Novelty, the second destination-related motivational factor, was significantly correlated, albeit weakly, with *Ego enhancement* (0.15) and *Excitement/challenge* (0.29), and moderately correlated with *Social interaction/mental stimulation* (0.31). It suggests that the South African hunting safari provides hunters with the opportunity to share their dreams and experiences with others, and to learn something new.

External stimuli, the third factor in the destination-related motivation category, indicated a moderate correlation with Ego enhancement (0.37), but a weaker correlation with *Social interaction/mental stimulation* (0.25) and *Excitement/challenge* (0.16). Given the fairly high mean score for Recommendations from other hunters (M=4.60) compared to the non-personal sources of promotional communication (Table 3), the stronger correlation between *External stimuli* and *Ego enhancement* is understandable. It can be readily assumed that hunters would

like to show off their hunting skills and trophies to other hunters in particular, rather than just to anyone.

The Impact of Socio-Demographic Characteristics

The fourth objective was to determine how the activity- and destination-related motivations differed based on hunters' personal characteristics such as age, income, level of education, childhood and current home environments, country of residence and level of hunting experience (See Table 1). Gender was excluded from this analysis because of the small number of females who responded.

Analysis of Variance (ANOVA), and Tukey post-hoc tests indicated that none of the activity-related motivations differed by childhood home environment, age, income, or level of education. Significant differences were, however, found for current home environment, country of residence, and level of hunting experience.

Table 5 indicates that respondents who lived in a rural environment felt more strongly about hunting as a way of caring for family, than urbanites did. *Personal values* played a more important role as an activity-related motivator in the case of USA hunters compared to their non-USA counterparts. Similar results were found for *Ego enhancement*, *Excitement/challenge* and *Social interaction/mental stimulation*. Level of hunting experience served as a differentiator for *Personal values* and for *Excitement/challenge*. The Wilks post-hoc test ($\lambda=0.000$) indicated that differences existed particularly between the role of personal values for least experienced hunters (M=4.73, Level 1) and most experienced hunters (M=5.51, Level 4). Level of experience caused a difference in *Excitement/challenge* between hunters with a Level 2 and a Level 4 hunting experience ($\lambda=0.042$). In both cases, a higher mean score was obtained for the Level 4 (most experienced) hunters.

Age, childhood environment, home environment, and level of education did not show any significant differences in the mean scores of the destination-related factors of motivation. Statistically significant differences were, however, indicated for annual household income, country of residence, and level of hunting experience (Table 6). The Tukey post-hoc test indicated significant differences ($p<0.05$) between hunters with an annual household income of US$100 000 or less and those earning more than US$200 000 ($\lambda=0.023$).

Novelty had a higher mean score (M=5.13) for hunters residing in the USA than those who reside outside of the USA (M=4.72) and showed a significant difference between the two groups. *Novelty* also differed significantly between hunters with a Level 2 hunting experience and those with a Level 4 experience ($\lambda=0.029$). An inspection of the mean scores listed in Table 6 indicates that hunters with a Level 4 hunting experience had a much lower mean score (M=4.88) for novelty than the Level 2 hunters (M=5.47).

Table 5: Significant Differences Between Socio-Demographic Groups: Activity-Related Motivations					
Factor	**Socio-demographic**	**Mean**	**SD**	**F**	**P**
Home environment					
Caring for family	Urban	3.01	1.48	4.469	0.036*
	Rural	3.45	1.38		
Country of residence					
Personal values	USA	5.47	0.57	27.101	0.000**
	Non-USA	4.93	0.72		
Ego enhancement	USA	3.84	1.37	19.263	0.000**
	Non-USA	3.52	1.31		
Excitement/challenge	USA	5.18	0.80	4.797	0.030*
	Non-USA	4.88	0.82		
Social interaction/mental stimulation	USA	5.01	0.92	5.119	0.025*
	Non-USA	4.69	0,94		
Hunting experience					
Personal values	Level 1	4.73	0.65	7.547	0.000**
	Level 2	5.13	0.79		
	Level 3	5.35	0.65		
	Level 4	5.51	0.51		
Excitement/challenge	Level 1	4.67	0.65	3.673	0.013*
	Level 2	4.83	0.83		
	Level 3	5.16	0.86		
	Level 4	5.25	0.76		
Note: *$p<0.05$; **$p<0.001$					

Table 6: Significant Differences Between Socio-Demographic Groups: Destination-Related Motivations					
Factor	**Socio-demographic**	**Mean**	**SD**	**F**	**P**
Income					
Novelty	US$100 000 or less	5.27	0.98	3.630	0.029*
	US$100 001-US$200000	4.97	1.00		
	US$200 001 or more	4.77	1.20		
Country of residence					
Novelty	USA	5.13	1.03	5.119	0.025*
	Non-USA	4.72	1.15		
Hunting experience					
Novelty	Level 1	4.75	1.01	2.877	0.037*
	Level 2	5.47	0.72		
	Level 3	5.07	1.08		
	Level 4	4.88	1.14		
Note:*$p<0.05$					

CONCLUSIONS AND MANAGERIAL IMPLICATIONS

Individuals' general motivations to participate in hunting has been fairly well researched, but less is known about their choice of South Africa for practicing this activity, and hardly any research has explored the interrelationship between these sets of motivations or the effect of socio-demographics on safari hunters' motivations. This research attempted to contribute to the body of knowledge on the motivations of safari hunters in four ways: (1) by exploring the reasons why individuals from abroad who have hunted in South Africa, engage in hunting; (2) by exploring their motivations for traveling to South Africa for this purpose; (3) by examining the relationship between these two sets of motivations; and (4) by examining the relationship between hunters' motivations and their socio-demographic characteristics. Given the competitiveness of the international hunting industry, the results may assist providers of the South African hunting safari to better match hunters' desires, enhance satisfaction and guide marketing strategies such as promotion.

In relation to participation in hunting, the results indicated that "activity-related motivations", is a multi-dimensional phenomenon comprising six motivational factors: *Personal values, Ego enhancement, Caring for family, Self-awareness, Excitement/challenge and Social interaction/mental stimulation*. These factors can be categorized into appreciation-oriented motivations, affiliation-oriented motivations, and achievement-oriented motivations. These categories are thematically similar to those reported in previous research (e.g. Decker et al., 1984; Decker & Connelly, 1989; Hendee, 1974; Pinet, 1995).

Appreciation-oriented motivations included the wish to contribute to traditional values, conservation, learning, family togetherness and escape. These motivations correspond to those suggested by Decker and Connelly (1989: 457), namely "seeking a sense of peace, belonging and familiarity and the resulting stress reduction that they [hunters] have come to associate with the activity", and with those indicated by Frawley (2005), namely managing wildlife, being close to nature, relaxation, and being with family and friends.

Affiliation-oriented motivations, the second category of activity-related motivations, focused on the family and interaction with other hunters. These items correspond to the affiliation motivations described by Decker and Connelly (1989).

Respondents' achievement-related motivations were embedded in excitement, challenge, ego enhancement and self-awareness. Excitement and challenge described the uniqueness of each hunt and the challenge involved in outwitting the animal. The latter corresponds to the achievement-oriented motivation found by Pinet (1995), namely meeting a self-determined standard of performance.

Overall, the hunters who have participated in the current research were motived to hunt, primarily by appreciation-related reasons, and to a lesser degree, by affiliation-oriented- and achievement-oriented reasons. This pattern is in line with that found among hunters elsewhere in the world (Decker & Connelly, 1989; Pinet, 2005). Marketers of the South African hunting

safari can therefore assume, albeit with caution, that these trends are common among most hunters. Hunting experiences that provide visiting hunters with the best opportunity to satisfy their appreciation-oriented motivations are therefore likely to have a competitive advantage over those that focus on satisfying achievement-oriented motivations.

In relation to destination-related or pull factors associated with South Africa, the results again highlighted the multi-dimensionality of motivations. The factor analysis resulted in three factors: *Attributes and features*, *Novelty*, and *External stimuli*. These results confirm those of Bauer and Herr (2004) that hunters travel to other countries because the latter offer more diverse or exciting hunting experiences. It is important from a marketers' perspective that external stimuli such as brochures and exhibitions, generally played a lesser role in pulling hunters to South Africa than did the attributes, features and novelty associated with the destination.

Consistent with other research (e.g. Oh et al., 1995), this research also found a relationship between motivations. For example, the results indicated that South Africa's nature and diversity and the novelty of the destination, offer hunters the excitement and challenges they desire, and the opportunity of meeting new people and learning from them. This has two important managerial implications. First, the natural environment and the diversity it offers must be maintained. South Africa's nature is regarded as the third most diverse in the world (Patterson & Khosa, 2005). The wide variety of habitats supports a selection of huntable species which includes the Big Five. If the country loses this diversity and uniqueness, it may also lose some of its competitive advantage over non-African countries, particularly given the long distances hunters have to travel to reach South Africa. Secondly, the findings may be used in promotional material, to encourage hunters to visit South Africa to experience its unique natural features and satisfy their appreciative desires.

Previous research into the effect of socio-demographics on motivations had mixed results. For example, Decker and Connelly (1989) found that achievement-oriented hunters tended to be younger and had fewer years of hunting experiences than other hunters, while affiliation-oriented hunters are older. Most of the appreciation-oriented hunters were in their middle years and had between 11 and 30 years of experience. In contrast with these findings, the results of the current study indicate that age did not have a significant effect on hunters' motivations. Neither did level of post-school education or childhood environment. Significant differences were, however found between home environment, country of residence, and hunting experience in activity-related motivations. Significant differences were also found between income, hunting experience, country of residence, and destination-related motivations. The latter finding supports those of previous studies (e.g. O'Connell, 2010, Prayag & Ryan, 2011) which indicated a relationship between nationality and motivations. The differences between the groups of hunters may assist marketers in identifying appropriate segments among their clients. Segmentation is a method of categorizing people on the basis of unique as well as shared characteristics. This tool can help marketers design offerings that address the major motivations of a particular segment, and in doing so, greatly enhance the efficacy of their strategies.

LIMITATIONS AND FUTURE RESEARCH

There are a number of limitations to this study. First, the data were collected using a convenience sampling framework. This might have limited the representativeness of the sample. In addition, the response rate was fairly low, which could have resulted in some non-response bias.

Second, three-quarters of the respondents were resident in the USA. While this proportion is more or less in accordance with the proportions of resident countries of hunters who typically visit South Africa, these results should be interpreted with caution. Future researchers may wish to seek out hunters from countries other than the USA to gain a better understanding of their motivations and to allow for generalization.

Finally, level of experience in this study was operationalized as a 6-point semantic scale, having "novice" and "expert", as end-points. These categories were later on transposed into a 4-point scale. Given the subjectivity of this measure, future research could expand on how level of experience is measured. This may provide a clearer distinction of motivations between hunters with differing levels of experience.

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IMPROVING PRICE PERFORMANCE WHEN DEMAND ELASTICITY IS DIFFICULT TO ESTABLISH

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ABSTRACT

This paper presents a case study conducted with a distributor to improve price performance for a national hardware distribution network. This case illustrates a simplified heuristic approach to improving pricing performance in situations where optimal pricing analysis on an individual SKU basis is impractical and IS decision support systems are needed. We find substantial opportunities to improve margins for retailers in this context, particularly among low-margin product families. Our findings are reported with permission of senior management at the distributor, but data have been masked to preserve confidentiality.

INTRODUCTION

Companies are always seeking opportunities to improve their bottom-line. The current volatile economy has only increased the intensity with which such opportunities are sought, evaluated, and implemented. Among several decisions that a company may be faced with, optimizing supply chains is becoming ever more critical to improving operations. Very frequently decision-support tools grounded in advanced statistics and mathematical modeling are employed to help with the decision-making process.

Among several levers that a company can operate to optimize its supply chain, identifying the optimal retail price of the products is crucial. The price of a product is a function of several costs, such as procurement, inventory, transportation, and marketing, and the expected profit margin. One would think that if all factors remaining unchanged, raising price will raise profit margin. However, academic literature and industry practice suggests that price increase is almost always accompanied with demand decrease. The price elasticity of demand is a frequently used metric to quantify the reduction in demand for a unit increase in price.

Models exists that can help determine the optimal price of a product if the demand is elastic to price. The assumption in most of these models is that enough transactional data exists to help determine the elasticity value based on statistical analysis. Though the advancement in information technology has helped in collecting ample data, there are limitations to statistical analysis when SKU counts are very high and transactions per SKU per time period are limited. There are several commercial sectors where transactional data is too limited to derive statistically significant elasticity values. One such segment is wholesale distribution where we observed both

of these phenomena. Through a case study we share insights gained by analyzing their data and deriving elasticity values for several products. We indicate that traditional models for price optimization may not be appropriate in such instances and sound heuristic approaches to price improvement may be required.

The case background is a U.S. national retail network of non-perishable products, with hundreds of retail outlets. Local management has significant autonomy with respect to items carried, prices, and inventory policies. At the national level, management is responsible for sourcing, distribution, back office support, advisory, and monitoring services to improve performance of the overall network. A central information systems (IS) service provides back office support through the company's commercial ERP system. Prices are set at the local level by applying a gross margin percentage (product markup) to product families in the ERP's pricing matrix. Price levels have been established informally at the local level with little guidance from analytic approaches. The ERP system captures detailed point-of-sales (POS) data with several years of history available. Currently the overall organization is profitable, yet central management believes there is potential to improve profitability even further with a more systematic approach to setting prices at the local level, particularly given substantial disparity in performance levels between retail locations in markets deemed comparable in potential.

This paper presents a systematic approach for price improvement recommendations in this context. Our contributions are two-fold:

1. Using a systematic approach towards analyzing actually sales data, we attempt to determine the price elasticity values. We identified several product family and customer type combinations where the demand seems to behave independently of price.. Using a theoretical break-even analysis, we suggest an approach to share with the management insights on the effect of the direction and degree of price change on overall company profitability.
2. To help such managers actually realize benefits, we propose an intuitive and easy-to-implement heuristic to improve their price performance, and in turn their bottom-line.

We first review relevant literature, followed by discussion of the methods employed to develop recommended changes for local-level pricing matrices. In the final section we present conclusions to this case study including potential generalizations from this research.

LITERATURE REVIEW

Price management is an important area for performance improvement in a retail setting. A traditional approach to setting retail prices is "cost plus" or adding a constant percentage increase to input costs (Shipley & Jobber, 2001). This approach is relatively simple and can be applied with minimal reliance on data and models, which makes the approach attractive in many retail contexts where IS support is limited and managers lack the sophistication to understand and implement more technical approaches. As IS support in this realm has become stronger,

traditional cost plus pricing is being supplanted by more theoretically sound approaches to price setting.

Wal-Mart was an early proponent the everyday low pricing (EDLP) approach, which targeted steady price levels both at the retail and wholesale level (Howell, 2005). The intent of the EDLP model was to reduce promotional activity at both retail and wholesale levels, improving flow in the supply chain, which reduces the bullwhip effect and therefore reduces cost levels particularly upstream in the supply chain (Lee, Padmanabhan, & Whang, 1997). While the EDLP pricing strategy has been successfully implemented in practice, several problems with this approach have been identified. It may be quite difficult to identify a product price levels that can be maintained at a steady level as the EDLP model requires, leading Wal-Mart to employ promotional pricing at times to reduce excess stock (Troy, 1997). Kmart also dropped the EDLP model due to implementation problems (Troy, 2002). Hoch et al. (1994) found substantial benefits Hi Low pricing over EDLP pricing in a series of field experiments. In this context the findings suggest that customers were much less price sensitive than perceived by the advocates of EDLP. This study however did not consider the benefits upstream in the supply chain. An implication of this study is the important challenge of setting optimal category prices in the EDLP context. Since prices are intended to relatively static, errors can be expensive.

There has been extensive research on pricing under uncertainty, usually identified as the newsvendor problem. In this problem, the retailer must make a stocking decision prior to realizing random demand for a perishable product in a single selling period. Optimal solutions to this problem involve balancing cost of shortage and cost of excess inventory. This problem can be extended to a multiple-period horizon through dynamic programming. These models are useful when customer price sensitivity is well defined (Petruzzi & Dada, 1999).

A number of papers have proposed optimal pricing models in different contexts generally built on the newsvendor logic and supply chain considerations. Chen and Federgruen (2001) model a two stage supply chain with deterministic demand serviced by retailers in distinct markets. When retailers and the wholesaler separately set price for optimal profit, the system is suboptimal, which is described as the double marginalization problem. Integrated solutions can improve profitability along the supply chain, although these integrated decisions can be analytically difficult due to nonconvexity in problem formulation (Sherali, Desai, & Glickman, 2008). A more recent stream of work in this area has focused on integrating pricing and inventory replenishment decisions in the context of dynamically changing prices (Elmaghraby & Keskinocak, 2003). This stream of research suggests that there is value to updating price through the demand cycle based on revealed information when demand is stochastic, thus utilizing price as a demand management tool to increase overall profitability. Boyaci and Gallego (2002) modeled a two-echelon supply chain with a single wholesaler supplying multiple retailers facing deterministic price-sensitive demand. Analysis of this model suggests that separate lot sizing and price decisions are suboptimal when demand is low. Separate inventory management policies such as vendor managed inventory are necessary to optimize overall profit

under decentralized control. Hamister and Suresh (2008) propose a dynamic pricing model that improves retailer performance when retail demand is autocorrelated. Chen et al. (2010) found that dynamic pricing improves profitability for the retailer, but also affects the functional form of demand experienced by the retailer.

A gap to the practical implementation of the above pricing models is that customer demand functions are assumed to be known and can be described mathematically. These assumptions are reasonably valid in many contexts, particularly for fast-moving consumer goods where there are a large number of separate transactions that tend to be statistically predictable. Category management has been suggested as a managerial improvement under these circumstances (Richard A. Gooner, Morgan, & Perreault, 2011). Category management is defined as "the distributor/supplier process of managing categories as strategic business units, producing enhanced business results by focusing on delivering consumer value (Blattberg & Fox, 1995)." Retail products are divided into a set of product categories, with each category managed as a strategic business unit within the enterprise. The retailer consists of multiple physical locations with each location serving one or more customer segments. Each product category is served by a supply network, with one of the suppliers designated as a Category Captain (CC). The CC plays a key role in the planning and implementation of merchandising plans for the category, including decisions on product selection, placing, promotion, and pricing. Each category is also supported by a distribution network and appropriate information exchange between trading partners. Category plans are formulated with a great deal of input from the Category Captain. Retailers face the risk that plans will favor the Category Captain's products over alternative suppliers' products at the risk of reducing overall category performance. As such, retailer trust in the CM process was found to be an antecedent to plan implementation. Past research has also considered the impact of this close relationship with key suppliers finding a tendency to reduce performance of minor suppliers (Richard A Gooner, 2001). Category management is effective in pricing when the CC has access to extensive demand data through the retail POS system and demand functions are well behaved.

Davenport (2006) describes data analytics as a "killer app" that has great potential for creating competitive analysis for organizations. Data analytics involves the systematic collection and analysis of detailed information extracted from organizational and interorganizational information systems, generally involving the use of optimization techniques described above applied to analytical models based on actual data. Analytic approaches have been applied extensively in the evaluation of complex financial instruments (e.g., (Jia-Hau, Mao-Wei, & Leh-Chyan, 2009; Mazzoni, 2010; Miller & Platen, 2008). Yeoman (2009) provides an overview of the use of data analytics in a retail pricing context. In this review, revenue management models should support improved decisions through modeling: demand seasonality, normalization of data for independent factors, identification of complements and substitutes, segmentation, and prediction of price elasticities. These analytical approaches generally require extensive transaction histories in order to isolate the various factors that affect demand.

No research to date has been published to our knowledge to guide managers in pricing decisions when demand is relatively infrequent and difficult to describe statistically, and the retailer offers a very large number of products where individual item analysis is difficult. Our paper considers the case of a distribution network where unit demand levels tend to be low and difficult to describe with statistical distributions with reasonable accuracy. Furthermore, we also observe that the relationship between price and demand (i.e., elasticity) is difficult to establish, which renders traditional price optimization models based on constant elasticity assumptions non-applicable. To improve pricing performance at such companies, we present an alternative, heuristic approach when demand is not-so-well-behaved with price and/or when statistically significant elasticity values are difficult to obtain.

METHODS

In this section we detail our experience analyzing data at this company and the practical challenges we faced in trying to determine the optimal product prices. This led us to develop an intuitive, easy-to-implement, and yet theoretically sound heuristic for pricing improvement.

ANALYZE EXISTING PRICE DATA

Our first analysis occurred at the SKU level to determine the demand function for individual products at several example retail locations. The purpose of this analysis was to determine price sensitivity of demand to better determine directional change in price levels. To develop some insights into how products were priced at different demand levels, we plotted the number of units sold per transaction against unit price (averaged monthly). Figure 1 shows a plot of units sold per transaction and monthly-averaged unit price for a product (top 5 from a sales volume perspective) at a retailer. Observe the rather inconsistency in the price charged for this product for transactions with the same number of units sold. Given that this relationship is static (i.e., does not account for possible demand autocorrelations), we decided to investigate this further using time-series models.

We adopted a time-series model specification using one-period autoregression to estimate price sensitivity. Time series methods were chosen to account for the potentially dynamic nature of demand in this market and "partial out" spurious relationships between price and units sold (Hamister & Suresh, 2008). The function takes the form:

$$Demand_t = a + b*P_t + c*Demand_{t-1} + error \qquad (1)$$

Figure 1. Price-Demand relationship for a product sold at one of the retailers.
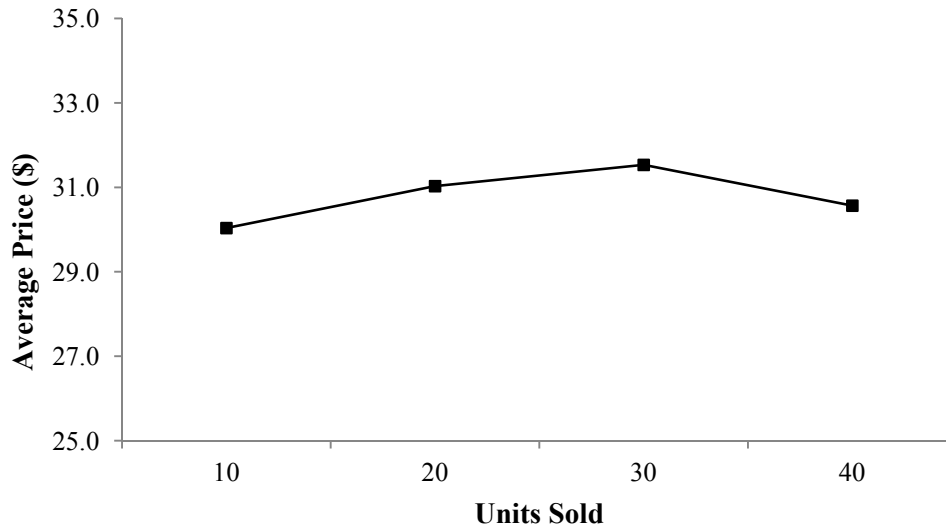
The above function states that demand during period *t* is a function of price during the period and also the demand in the prior period, plus an error term that represents unpredicted demand. POS data is captured on a transactional basis.

Our first analytical decision was to determine an appropriate aggregation of data to develop demand functions. We "bucketed" transactions by one week periods, two week periods, and months to determine the interval that best fits the data. Since prices varied with each transaction we adopted average price in the period as our variable *P*. Results from weekly and biweekly buckets were substantially the same as monthly buckets, and given the relatively infrequent transactions, we believe monthly bucketing is most appropriate for both analytical and managerial purposes.

Our next step was to examine a series of regression analyses using equation (1) as our specification. We selected a retailer from the network with which to conduct this analysis. The retailer chosen was considered as representative of average performance based on market and profitability by our management contacts. Results for these regression analyses are presented in Table 1 below. We selected SKU's with the highest numbers of transactions for the prior 12-month period for analysis. High transaction volumes were needed for adequate statistical estimation.

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Table 1: AR(1) model fit for selected SKU's					
Product Family	*SKU*	*Price coeff (b)*	*Std. Error (b)*	*Auto-regressive coeff (c)*	*Std. Error (c)*
A	0001	-0.88	1.01	-0.64	0.19
A	0002	-0.74	0.53	-0.11	0.21
A	0003	0.33	1.17	-0.29	0.22
A	0004	-0.03	0.37	-0.12	0.39
B	0005	0.43	0.31	-0.49	0.21
B	0006	-0.09	0.21	-0.16	0.22
B	0007	0.03	0.07	-0.31	0.21
B	0008	-0.31	0.24	-0.19	0.23
B	0009	1.16	1.32	-0.08	0.22
B	0010	-0.46	0.43	-0.24	0.21

We found that price sensitivity (parameter *b*) was not statistically different than zero (at a 0.05 significance level) for the products selected. This analysis was repeated at three different retail outlets with similar findings (data not presented). These findings supported the conclusion that in the range of prices in the transaction data, price-demand relationship is difficult to establish (and that demand changes appear to be independent of price changes). This fits the perceived managerial analysis since customer demand is expected to be reasonably price insensitive for these items. Products in these categories are expected to be price insensitive since demand is derived from repair or fabrication needs, and customers generally do not purchase anticipatory inventory.

This conclusion of price insensitivity should be interpreted cautiously. First, we would expect to see demand drop when price reaches some threshold level due to both competitive reasons and customer push-back. In addition, customer evaluation of price may be based on a basket of products rather than based on the individual product. We would expect to see this basket effect with a general price increase, which we will discuss below. Our second observation from this analysis is that autoregressive parameter (*c*) was rarely significant for the 12-month period analyzed. That is, past demand is not a significant predictor of future demand.

Break Even Analysis and Recommended Overall Margin Change

Although the above data analysis indicated to us that demand is relatively insensitive to price, we were not able to determine from the data an estimate of price limitations that could be reasonably determined across the network. However, to guide managerial decision-making, we introduce an analytical tool to determine break even effect of price changes. The concept of break even analysis (Nagle, Hogan, & Zale, 2011) in this context is quite simple and as follows: for a proposed price change, calculate volume effect that would leave the retailer with exactly the same profit, offsetting price effects and volume effects. Price effect is the profit increase expected with a price increase if volume is unchanged. The volume effect is the customer response in volume to a price change. For example, consider a product with 20% gross margin

at current prices. A 5% price increase will yield more profit as long as the volume decrease is less that 20%, as depicted in table 2. Conversely, a 5% price decrease for the same product will increase profitability only when volume increases by more than 33%.

This analytical tool can be used to frame the discussion with retail management to determine overall pricing direction. We consider likely customer volume response at the current margin level and determine an overall price change plan.   Discussion with executive management guided by this analysis determined that an overall margin increase, denoted by delta (δ), would be appropriate in this context.

Table 2: Break-even analysis

Price Change	Gross Margin								
	10%	*20%*	*30%*	*40%*	*50%*	*60%*	*70%*	*80%*	*90%*
35%	-78%	-64%	-54%	-47%	-41%	-37%	-33%	-30%	-28%
25%	-71%	-56%	-45%	-38%	-33%	-29%	-26%	-24%	-22%
15%	-60%	-43%	-33%	-27%	-23%	-20%	-18%	-16%	-14%
5%	-33%	-20%	-14%	-11%	-9%	-8%	-7%	-6%	-5%
-5%	100%	33%	20%	14%	11%	9%	8%	7%	6%
-15%		300%	100%	60%	43%	33%	27%	23%	20%
-25%			500%	167%	100%	71%	56%	45%	38%
-35%				700%	233%	140%	100%	78%	64%

Segment Margin Performance

Since analytical estimates of price sensitivity are not available in the data, we propose a heuristic approach to price improvement. We decided upon the following two objectives for this heuristic: (i) it must be theoretically sound and (ii) it must be practical enough to be implemented across the local retailers by central IS services. First we describe the heuristic, and then we evaluate it against these two criteria. Figure 1 provides the steps we followed as part of this heuristic.

The heuristic is based on historic (one-year) history of average GM% for each product family at the individual retail outlet, and described in figure 2 below. The heuristic is described in the steps below and can be implemented by the centralized IS services organization to provide price matrix recommendations.

Step 1. Extract sales data by product family. The first step is to extract total sales and margin by product family for the individual retailer, and determine overall average GM% for the retailer. We determine the largest sales volume product family and set that item to sales index value of 1, and calculate the relative sales index for product families as a percentage of the

largest sales volume family. An indexing approach is suggested to form comparable analyses across retailers of different scale.

Figure 1. The proposed heuristic for price performance improvement.
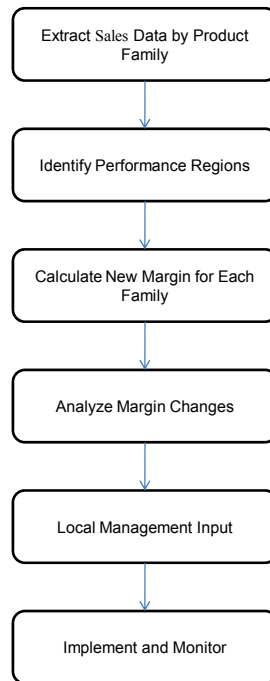
Step 2. Identify performance regions. We can then graph average GM% versus sales index as graphed below. Each point on the graph represents a single product family. The graph is divided into seven performance regions for margin change suggestions. Each region is described below.

Region A: Items with sales index less than or equal to 0.1 and margin less than overall retailer average. These are candidates for the greatest margin increase. Since volumes are relatively low these items are less likely to be highly visible to customers. In addition, competitive pressures on these items are likely to be lower if cost levels at competitors are similar since there is less expected benefit to customers to "shop" these items. In addition, break even analysis suggests that a product with current margin at 10% can break even with a 15% price increase as long as volume decrease is less than 60%. For these reasons, we believe there is justification for an aggressive price increase in this region. Product families in region A have their GM% increased to the average GM% in region E plus the overall increase.

$$GM_A = \overline{GM_E} + \delta \tag{2}$$

Region B. Items with sales index greater than 0.1 and less than or equal to 0.2 and GM below overage GM%. We are somewhat less aggressive with price increases in this region. These product families are higher in volume and potentially more visible both from strategic and customer viewpoints. We increase below average items to overall local retailer overall average GM plus the general margin increase identified above.

$$GM_B = \overline{GM} + \delta \qquad\qquad (3)$$

Region C. Items with sales index greater than or equal to 0.2 and less than 0.5 and below overall average GM%. We are less aggressive with price changes in this region. Volumes are higher and items are correspondingly more visible. We also see less scatter in the data than we see in region A which suggests a bit more price sensitivity. We use the logic here of splitting the difference between overall average and current margin, plus a factor that represents a general price increase.

$$GM'_C = GM_C + 0.5(\overline{GM} - GM_C) + \delta \qquad\qquad (4)$$

Region D. Items with sales index greater than 0.5. These are likely to be the most visible items in the portfolio and are therefore changed the least. Our micro analysis suggests that there is little price elasticity in a sample of these items, yet risk averse in this region is managerially prudent. Local retail managers are likely to be most knowledgeable of price limits in this region given the high visibility, thus these families are more likely to be efficiently priced.

$$GM'_D = GM_D + \delta \qquad\qquad (5)$$

Region E. Items with sales index less than or equal to 0.1, and greater than overall average margin. These are the highly profitable yet low volume product families. These product families are the most likely to benefit from price increase for parallel reasons to those discussed in region A, yet overall margins are already fairly high in this region. The overall average GM% for region E are calculated and recommended margins that are below this level are increased to this overall average plus the general price level increase delta.

$$(6) \quad GM'_E = GM_E + \delta \text{ for product families below } \overline{GM}_E + \delta$$

Figure 2. Application of our proposed heuristic for an example retailer.
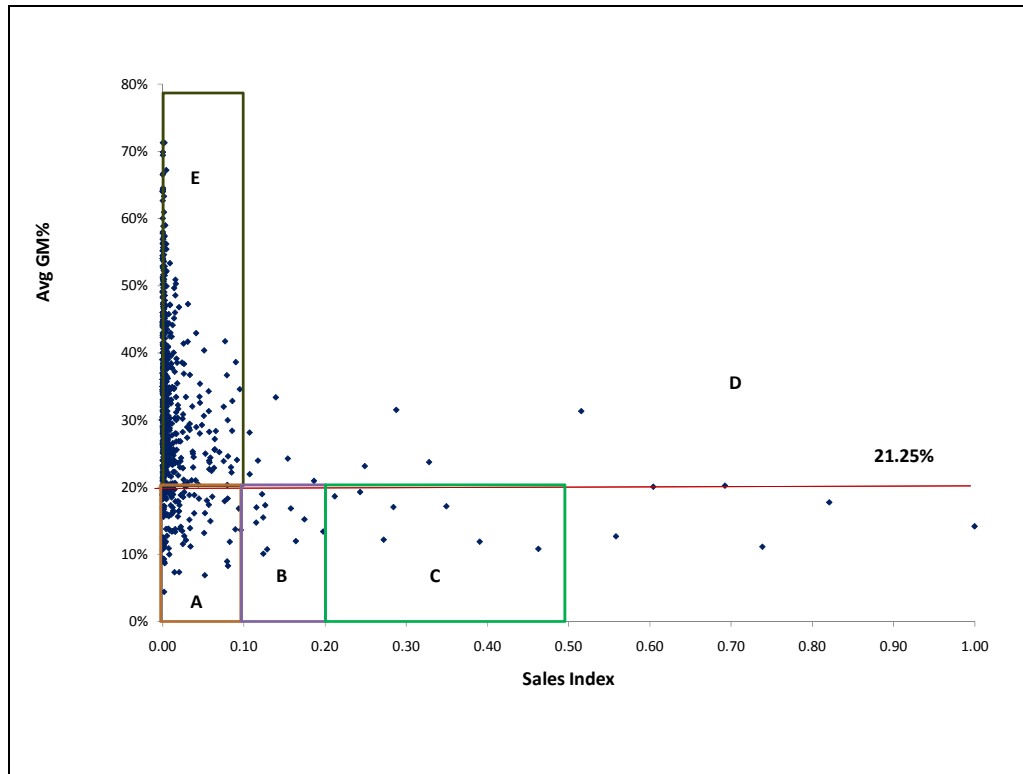
Analyze Margin Changes

The heuristic above creates new suggested margin values for each product family and customer type combination. These values are loaded into a temporary pricing matrix for analysis. Sales and profit levels are simulated at various price elasticities as shown in figure 3 below. The same amount of price elasticity is applied to each SKU, from which volume and profitability impacts are calculated. For example if demand is perfectly inelastic, volume will remain unchanged and profit will increase 4.5% in our stylized example. Our example suggests that as long as overall price elasticity is less than 6, our pricing heuristic will increase profitability for the retailer.

Figure 3: Theoretical relationship between %-increase in profit and elasticity.
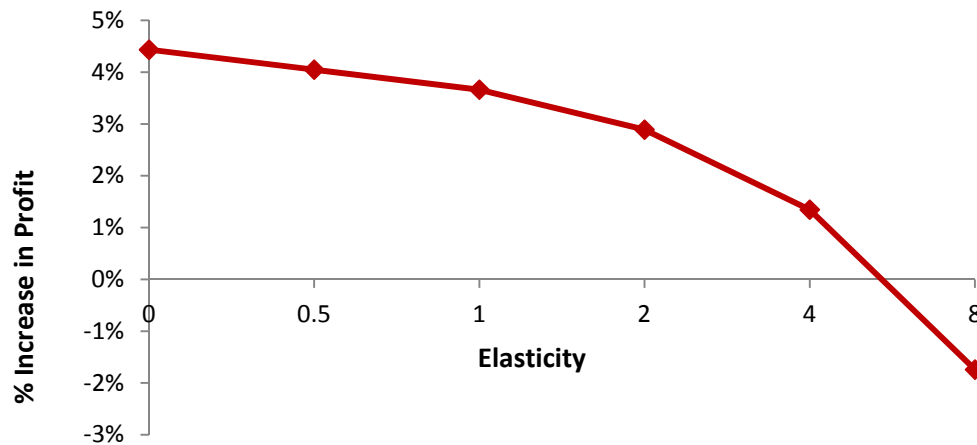
Evaluation of Heuristic

Our first criterion to evaluate the heuristic is that it should be sound based on microeconomic principals. First, the most aggressive margin increases are associated with products that are currently sold at low margins. If cost levels are roughly comparable for the same items, it is less likely that competitors are selling these products for substantially lower prices. Thus for competitive reasons low margin products in this environment can likely withstand price increases. Second, the most aggressive margin increases are associated with low relative sales volume items. These items are likely to be less visible to customers as signals of overall price performance for the specific location, and thus likely to be more acceptable from a customer perspective. Because of lower volumes the relative benefits to customers to incur search cost for better price are less, supporting our contention that these customers will be less price sensitive for these items. Third, our heuristic uses the break-even price change logic. Lower margin products are more highly leveraged as can be seen in table 2. For example a product currently selling at a 10% margin, a 5% price increase will be profitable as long as volume is reduced by less than 33%. On the other hand for a product with a current 50% margin, a 5% price increase is only profitable if volume is reduced by less than 9%. Therefore our heuristic focuses price increases for product categories that are least susceptible to loss if price sensitivity levels are reached.

Our second criterion for this heuristic is that it is implementable. We believe that this heuristic can scale (implemented across the network) for several reasons. First, the heuristic is simple. It can be relatively easily explained to retail managers. Model acceptance is a precondition for a complete roll out. Second, the heuristic is based on POS data. We don't need external data or complex equations to develop recommendations. The IT staff should be able to

implement at a reasonable time investment. This is an important step towards making pricing an *internal* core competency for the central IS services department (Dutta, Zbaracki, & Bergen, 2003). Third, we suggest an override feature to leverage idiosyncratic knowledge and serve a "sanity check" on our recommendations. This will increase buy-in by retail managers as they are given final involvement with implementing recommendations.

This heuristic can be evaluated in practice by implementing the program on a pilot basis. We suggest identifying target retailers in different geographic regions to act as a treatment sample, and equivalent retailers from the same region to act as the control sample. Top and bottom line performance for these pilot cases can be evaluated statistically for change based on historical mean and standard deviations of performance at these locations using an ANOVA model. Using the matched-pair approach allows the separation of pricing effects from changes in economic conditions that may be taking place in each region and allow for a valid analysis of the heuristic on retailer performance.

CONCLUSIONS

We believe our price improvement heuristic can be generalized to any industry segment that either has products or product-families for whom demand is relatively price insensitive or have not yet increased the price to a level from where on the demand is elastic. Industry segments, such as wholesale distribution, where customers do not tend to buy in bulk when prices are low and vice versa, may see demand insensitivity to price. Products such as plumbing, HVAC, specialized medications (e.g., antibiotics), certain consumables on which consumers spend a small fraction of their monthly income or there are no close substitutes (e.g., eggs, milk, bread, salt, and cigarette) may be suited for our heuristic.

There are several limitations to our heuristic that should be considered in evaluating its fitness for use in a given circumstance. First, we assume a constant general price adjustment, parameter delta in our model. We chose a single parameter for managerial simplicity given the large number of SKU's and locations under consideration. Yet additional performance may be available with a separate adjustment in each "region" of our heuristic. Second, the sample of retailers chosen for development of the heuristic may not be representative of the network as a whole. We chose our sample to be representative of the range of performance in the network, consistent with suggestions of Yin (1999), yet there is possibly variation in the network not accounted for in the sampling plan that was available within our research budget.

Future research in this area is two-fold. First, the heuristic that we proposed will be fine-tuned based on the results from the pilot implementations and eventually over the year of practical application evaluated for effectiveness. Mechanisms to track lost sales due to price increases must be set up to accurately capture the demand reductions (if any) due to price increases. We expect that the price changes recommended by our heuristic over the course of the next few months will help us identify the tipping point from where elasticity is significant and

negative. From that point on, traditional price optimization methods may become effective. Second, it is likely that a few months of pilot study data may provide us with enough information to develop a variety of demand distributions and simulate the effect of price changes on company profitability. This way, the company management may avoid several months of expensive pilot and tracking, yet developing enough insights to fine-tune the parameters in the heuristic.

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THE MARKETING ENVIRONMENT: A NEW PARADIGM

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ABSTRACT

It is axiomatic that a firm must continuously monitor and adapt to its business environment. Additionally, it has long been the prevailing viewpoint that the business-to-consumer (B2C) environment is sufficiently different from the business-to-business (B2B) environment that a different model for examining the business environment is warranted. However, while the models are somewhat different in the B2C and B2B arenas, they share a common tendency of focusing on only one entity in the marketing channel. Not only does this have an effect on strategic market planning, but also on the management of channel networks. While most accept that a change in an environmental factor is likely to affect more than one member of a channel, current thinking as depicted in traditional conceptual models tends to downplay the need to understand the differential impact of that change on each firm in the network. This article presents a new paradigm for understanding the environment that is useful to practitioners, scholars, and educators.

INTRODUCTION

A constant challenge facing marketing educators is that of inducing students to think beyond the obvious implications of a situation. Especially in a marketing principles class, where there are both marketing and non-marketing majors, moving beyond the basics can be difficult. While the whys and wherefores of this is an interesting and important topic, it is one best left for another discussion. Suffice it to say that we want marketing and non-marketing majors to understand the implications for business of events occurring in the environment and begin to grasp the role of marketing strategy in addressing those events. Even for marketing majors, who should have a heightened level of interest and awareness of the role of marketing strategy, thinking beyond the obvious implications of a change in the business environment does not come easily.

In addition to the need for marketing educators to move students beyond the obvious, perhaps an equally pressing need is for academicians to provide marketing practitioners with the tools necessary to operate their businesses effectively. It is often the case that marketing managers face such an incredible array of challenges in their day-to-day operations that they do not have the luxury of developing new ways of thinking about marketing issues. Thus, it is

incumbent upon the academic community to develop and share ideas and concepts that will help practitioners more effectively do their jobs.

The importance of monitoring the environmental factors impacting an individual business is fundamental to effective marketing. Issues such as the hostility and uncertainty of the environment have an impact on the innovativeness and the strategic approach employed by organizations (Özsomer, Calantone & Di Benedetto, 1997; Hagberg-Anderson, 2006; Zhao & Cavusgil, 2006). The business literature is replete with examples of companies that failed due to their not adapting to environmental changes in the marketplace. It is axiomatic, then, that adaptation to changes in the business environment is crucial for a business to survive, much less thrive. So, every principles of marketing textbook we have seen devotes some space to adapting to the environmental forces affecting a business. The focus of these discussions is on how changes in the environmental forces can potentially affect the business, and how the company can manipulate the four Ps of marketing while applying the marketing concept to adapt to those changes.

The problem with the models of the business environment presented in current texts is that they ignore the very pertinent issue of the effect the environmental change has on the network of related businesses, both up and downstream, as well as how the change may affect the decision calculus of the end user or final consumer. Educators seem to assume that students are able and willing to make the intuitive leap required for understanding the impact of environmental changes on network partners. Such an assumption is both questionable and short-sighted. The purpose of the paper is to introduce a model of the business environment that brings all the potential channel network members into the equation.

Environmental Scanning

Environmental scanning, the systematic gathering of information pertinent to the organization, not only informs the SWOT analysis conducted by a firm, it also creates an awareness in the organization of the environmental changes it faces. It is an essential part of the strategic planning process (Lozada & Calantone, 1996). Additionally, the developing and sharing of information is a critical element in remaining competitive (Zablah, Bellenger & Johnston, 2004; Chang & Gotcher, 2010; Ling-yee, 2010). The key to effective environmental scanning is to identify trends in the marketplace that will have the greatest impact on the individual organization. Kim & Mauborgne (1999) delineate three characteristics of a trend in the environment that makes that trend worthy of note:

1.   The trend must be central to the business.
2.   The trend must be taking a decided trajectory.
3.   The trend is not likely to quickly reverse itself.

Being central to the business does not necessarily mean that the trend has to initially have a direct impact on the firm, but rather that the trend has an impact on the overall viability of the firm's marketing strategy and channel networks. That is, while the firm must consider the impact of the environmental change on its core business, it must also consider how that same environmental change impacts members of the channel network. For instance, the embargo the U.S. placed on the export of wheat to the former U.S.S.R. to protest their invasion of Afghanistan in the late 70s (change in the Political/Legal & Regulatory Force) certainly was central for and had a direct impact upon wheat farmers in the U.S. It was also central for but had an *indirect* impact on producers of farm implements, rural banks that had loaned money on land values bolstered by projected output rather than real value of the property, and businesses in small farming communities that suffered because of the closing and consolidation of smaller wheat farms.

THEORETICAL UNDERPINNINGS

Researchers have emphasized the importance of considering the level of dynamism in a firm's environment and the difficulty of decision-making in highly dynamic markets (e.g., Maltz & Kohli, 1996). Achrol and Stern (1988) argued that four dimensions—diversity among consumers, dynamism, concentration, and capacity—should be included in any future research on the effects of environments on intrachannel variables. These authors defined environmental dynamism as "the perceived frequency of change and turnover in marketing forces in the output environment" (p. 37). Their research demonstrated that this dimension exerted significant influence on decision-making uncertainty. In later work, Kabadayi, Eyuboglu & Thomas (2007) defined market dynamism as "the frequency of environmental change coupled with the unpredictability of market factors" (p. 197), and recommended that it be considered by practitioners when designing distribution systems.

Complexity

In addition to market dynamism, marketers operate in an environment that is more complex today because firms are increasingly connected to and dependent upon the activities of other firms. Achrol and Stern (1988) defined firm connectedness as "the number and pattern of linkages or connections perceived among relevant organizations," and firm interdependence as "the mutual reactivity and sensitivity to one another's acts perceived to be present among actors competing for output market resources" (p. 37). Kabadayi, Eyuboglu & Thomas (2007) defined market complexity as "the number and diversity of competitors, suppliers, buyers, and other environmental actors that firm decision makers need to consider in formulating their strategies" (p. 197).

Past researchers in channels have argued for development of a broader framework for analyzing the dynamics and complexity of the business environment and its interactions with marketing practice. Achrol and Stern (1988) persuasively argued for "open-system" explanations in channels theory and research that consider the impact of external phenomena on observed channel relationships. Indeed, Stern's seminal work (1967) called for a perspective that included considering channel systems as a whole operating in a complex environment, and not merely as an aligned group of disparate organizations. More recent research has likewise pointed to the need for taking channel members' perspectives into account when making strategic marketing decisions (Wagner & Hansen, 2004; Zhao & Cavusgil, 2006; Samiee, 2008; Mouzas, Henneberg & Naudé, 2008; Hult, Ketchen & Chabowski, 2007; Lai, Bao & Li, 2008; Ling-yee, 2010; Chang & Gotcher, 2010). The proper alignment of marketing strategies with environmental conditions has been shown to be vital to the performance of multi-channel systems (Kabadayi, Eyuboglu & Thomas, 2007).

Unfortunately, many of the tools and paradigms employed for years by both academics and practitioners are simply not sufficient to address the realities of today's marketplace. One of these paradigms that begs for change is the model of the business environment. The model we have employed for years is too simplistic to be of much use today. The purpose of this article is to examine the current models of the business environment and, from that discussion, introduce a new, more comprehensive model of the B2B environment which reflects the dynamic and interconnected nature of the marketplace.

Value Networks

A major force driving marketing strategy is the importance of value creation in attracting and keeping organizational customers. This is especially true for industries that turn out products which are viewed as commodity-like by buyers. Value creation in this setting often amounts to no more than competing on price. Yet, price is only one aspect of value creation, and marketers who can add value to commodity-like products can often avoid or at least diminish the instances of cutthroat price competition. Value creation is essential for marketers to build long-term relationships (Beverland & Lockshin, 2003; Ritter, Wilkinson & Johnston, 2004; Ryssel, Ritter & Geműnden, 2004; Hedaa & Ritter, 2005; Blocker & Flint, 2007). It has been argued that the concept of value creation has morphed into *value networks*, which have their genesis in Customer Relationship Management (CRM) (Ehret, 2004). CRM, according to Srivastava, Shervani & Fahey (1998), is one of the three core business processes. Value networks provide the forum for greater and more complex cooperation between customers and vendors for the purpose of increasing the competitiveness and profitability of both. Additionally, it is incumbent on the marketer to understand value from the customer's perspective (Flint & Woodruff, 2001; Flint, Woodruff & Gardial, 2002; Wagner & Hansen, 2004; Hult, Ketchen & Chabowski, 2007;

Chang & Gotcher, 2010). In effect, it is the B2B marketer's ability to make its customers more profitable that opens the door to future business (Hedaa & Ritter, 2005).

Derived Demand

Another dimension of interconnectedness that is not captured by current models is the concept of *derived demand. Derived demand* has been defined as "… the direct link between the demand for an industrial product and the demand for consumer products: the demand for industrial products is derived from the ultimate demand for consumer products" (Hutt & Speh, 2007, p. 691). That is, the business-to-business marketer is inextricably tied to consumer demand for the products its customer produces. In the words of Meredith (2007):

> *The importance of derived demand to the firm is a function of both the degree of impact exerted by such demand as well as the number of alternative markets available to the business marketer. Managers dependent on a single end-user market should be especially wary of derived-demand issues because their sales base is not sufficiently diversified to mitigate risk should their principal market fail* (p. 213).

In other words, the B2B marketer has a vested interest in helping its customers stimulate the demand for their products. Li (2007) describes one of the common pitfalls in market assessment as "taking input from direct customers only, without looking at demand from customers' customers" (p. 40). If derived demand means anything, it means that B2B marketers must look beyond the needs of their direct customers and consider the needs of end users as well. According to Anderson & Narus (2004):

> *Traditional corporate strategy seeks demand largely through technology push—sell what you can make. Reflecting this strategy, buying and procurement strive to meet the specifications of manufacturing and the forecasts of sales. Advocates of supply management turn this thinking on its head. Relying upon demand pull—make what you can sell—supply management proactively directs the entire supply network to meet the requirements of end-users. Their primary goal is to efficiently deliver the greatest value possible to end-users* (p. 102).

Looking at the business environment as a three-dimensional one in which the various layers in the chain of supply encounter the same economic forces in different ways allows the marketer to view the market holistically.

Network Development

Another critical element in marketing is the relationship between business networks and the strategic planning process. This relationship extends both upstream and downstream—that is, from the supply side through to the distribution side of the firm. To gain the maximum leverage

from this eventuality in marketing, firms need to see those upstream and downstream relationships within the context of the overall network of businesses in which they operate. The situation is characterized by Dwyer & Tanner (2004) thusly:

> *... we focused on the special challenges of developing and safeguarding relationships, which are necessary for the exchange of complex, specialty, and risky products. This focus on buyer-seller relationships can be myopic, however, because the parties are not the only entities in the marketplace. They are connected in a network, a much larger and strategically significant web of organizations* (p. 53).

One-on-one relationships are critical, but to lose sight of the overall network may result in a firm making a decision that, though it helps the individual relationship with a given firm, does so to the detriment of the overall network. Each firm in a network has its own set of goals, and yet all the firms in a network are limited in the power and resources they can bring to bear on solving problems related to providing a satisfactory product to the end user, and thus are interdependent on the other firms in that network (Wilkinson, 2006; Zhao & Cavusgil, 2006; Hult, Ketchen & Chabowski, 2007; Lai, Bao & Li, 2008; Whipple, Lynch & Nyaga, 2010). Garnering the resources of the network is essential to helping customers create products and services that help them compete in their marketplace (Windahl & Lakemond, 2006; Stanko, Bonner & Calantone, 2007; Wittmann, Hunt & Arnett, 2009).

Existing Paradigms

When discussing the environmental forces affecting business in the business-to-consumer (B2C) marketplace, most marketing texts begin by employing a model of the forces similar to that presented in Figure 1.

These forces are described as being interrelated and it is pointed out that though each in their turn will play a more prominent part at a given point in time, they all impact the company's marketing strategy. The point of the discussion is that businesses that are most successful over time are those that adapt best to the changes in these forces. Through effective environmental scanning and/or opportunity and threat analysis, so the argument goes, companies position themselves to make changes that will allow them to address the dynamism in the market. While helpful at some level, these models ignore the impact of the environment on a company's suppliers, distributors, competitors, and the final consumers of the product.

As a response to this deficiency, some B2B marketing theorists have developed models that give recognition to the more critical impact of members of the channel network relative to other factors in the business environment (Figure 2). Consequently, the model shown in Figure 2 is more complete, in the B2B setting, than the one shown in Figure 1. This model also recognizes that changes occurring in and on the four groups included in the inner circle have a larger impact on the marketing organization than those factors shown in the outer ring.

Figure 1: Environmental Forces Impacting Businesses
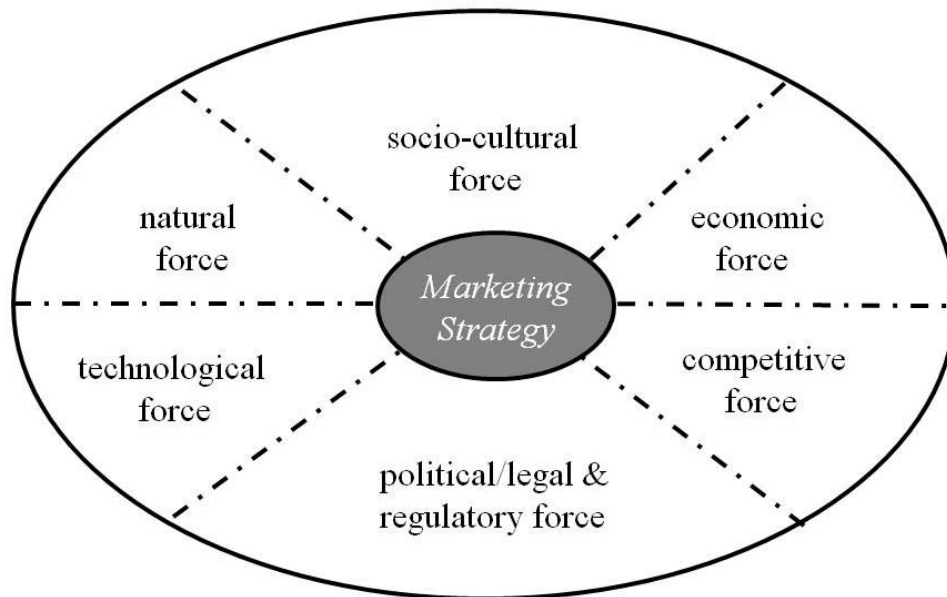
Figure 2: Forces in the B2B Environment
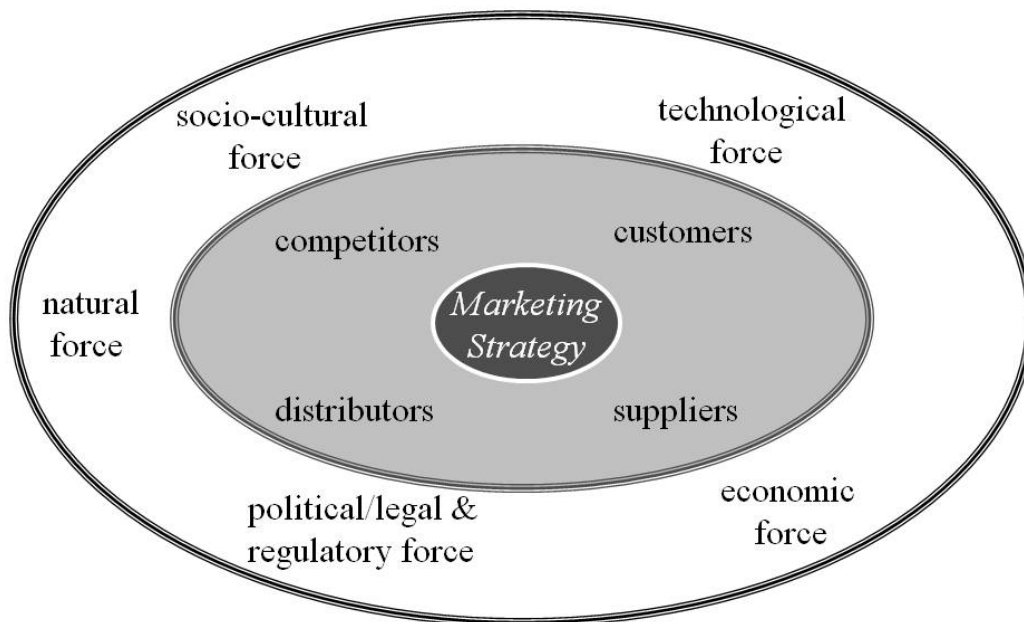
In this model, *customers* are distinct from *distributors* in that the former highlights the concept of *derived demand*. Distributors are customers of the producer, but are not the only customers with which the B2B marketer must be concerned. Because the B2B marketer's success depends on the demand of the final consumers for products, the impact of the environment on the *customer* (final consumer) is critical. Certainly, any environmental force that has a significant impact on distributors' operations will have an impact on the producer. For example, if economic conditions result in an increase in interest rates, distributors will find it more costly to obtain the financing necessary to support their operations and inventory. This could in turn lead to higher distribution costs for the producer. Similarly, technological improvements in logistics or warehouse operations could reduce costs for both the distributor and the producer. Because B2B distribution channels are shorter than B2C channels (Dwyer & Tanner, 2002), the distributors and suppliers that comprise these channels play a more important role in the B2B marketplace.

Suppliers certainly are critical to the operations of the marketer. Strategically managing the relationship with suppliers is a key element to gaining and maintaining a sustainable competitive advantage (Sheth and Sharma, 1997; Zolkiewski and Turnbull, 2002). When the environmental factors affecting business have an inordinate impact on suppliers, the producer is, in turn, impacted. This is especially true if the supplier poses a credible threat of forward integration. That these environmental forces merit special attention in the B2B marketplace seems obvious. However, in a real sense, even the model depicted in Figure 2 is deficient in terms of providing a basis to examine the external environment in the B2B marketplace.

A NEW PARADIGM

To fully grasp the effect of the business environment and the impact of changes in that environment, marketers need to view that environment in a different context than the one traditionally used (Hedaa & Ritter, 2005; Neill, McKee & Rose, 2007; Mouzas, Henneberg & Naudé, 2008). This need is highlighted by Bean and Robinson (2002) when they say, "The notion of embracing new, relevant conceptions of the environment, contrary to the inclination toward the conservative position that sometimes cements academicians to outmoded frameworks, is just one element required in developing renewed efforts toward an updated marketing strategy model to guide the discipline" (pp. 206-207). The expanded model depicted in Figure 2 is certainly an improvement over the traditional model shown in Figure 1 when considering the B2B marketplace. However, it is not sufficient for fully accounting for the differential impact of those environmental variables on the network associated with the marketing firm, nor does the model take into account the impact of these environmental variables on the final consumer. Certainly the producer is affected by the major environmental forces: the *Socio-Cultural Force*; the *Economic Force*; the *Political/Legal & Regulatory Force*; the *Technological Force*; and the *Natural Force*. Additionally, it is generally accepted that the

producer is affected by the *Supplier*, the *Distributor*, *Competitors*, and the *Consumer* as forces in the environment.

However, according to Kim & Maubourgne (1999), a firm needs to recognize that changes in the environment often affect the company very differently than they affect its customers, and that marketers who maintain a competitive advantage understand, appreciate, and account for that differential effect. Expanding on that, we argue that the marketers need to take into account how the environment affects its distributors, suppliers, and ultimate consumers of the product differently than it affects their own firms. Additionally, the producer is directly affected by its suppliers, distributors, and the final consumers of its products as entities in the overall business environment. Wind (2006), while not advocating completely throwing out the models we have used in marketing, has called for a broadening of how we view the B2B market. Figure 3 presents an expanded view of the B2B environment that is representative of this broadened approach.

The model is three-dimensional, depicting the producer, the suppliers, the distributors, and the ultimate consumers as operating on four interconnected, but separate, parallel planes. While the overall channel system is potentially affected by a change in one of the environmental forces, each organization in the channel network is affected uniquely by that change, and therefore when scanning the environment, each member of the network needs to not only think about the implications of this change for his/her own company, but also for other organizations in the network as well as for customers. This implies a broader, channel-level environmental scanning process, where the marketer considers the differential impact of those five overall environmental forces on the suppliers, distributors, competitors, and consumers with an eye toward anticipating their probable reactions to the changes in those forces. The model also takes into account the impact of competitors on the different members of the network as well as on the final consumers.

Suppliers face the same environmental forces that the other members of the network face, albeit those forces will likely have a different manifestation and impact on suppliers than on the other members of the network. Additionally, they are impacted by their other customers who place demands on them, and depending on the relative size of those customers, suppliers must factor them into any decisions they make. At the same time, the supplier faces its own set of competitors who need to be taken into consideration. The manner in which the B2B marketer interacts with its suppliers and distributors has a major impact on whether they engage in opportunistic behavior that is detrimental to that marketer (Ryu & Eyuboglu, 2007; Lai, Bao & Li, 2008). For instance, when dealing with suppliers, it is necessary to consider whether they pose a credible threat of forward integration and what the B2B marketer can do to curtail such an action (Meredith, 2007). In other words, how likely is it that today's suppliers might become tomorrow's direct competitors? Another issue has to do with how supplier adaptations to changes in the environment affect its other customers. For instance, Lewin and Johnston (2008) found that downsizing by suppliers had a deleterious effect on customer service and satisfaction.

Figure 3: The B2B Marketing Environment
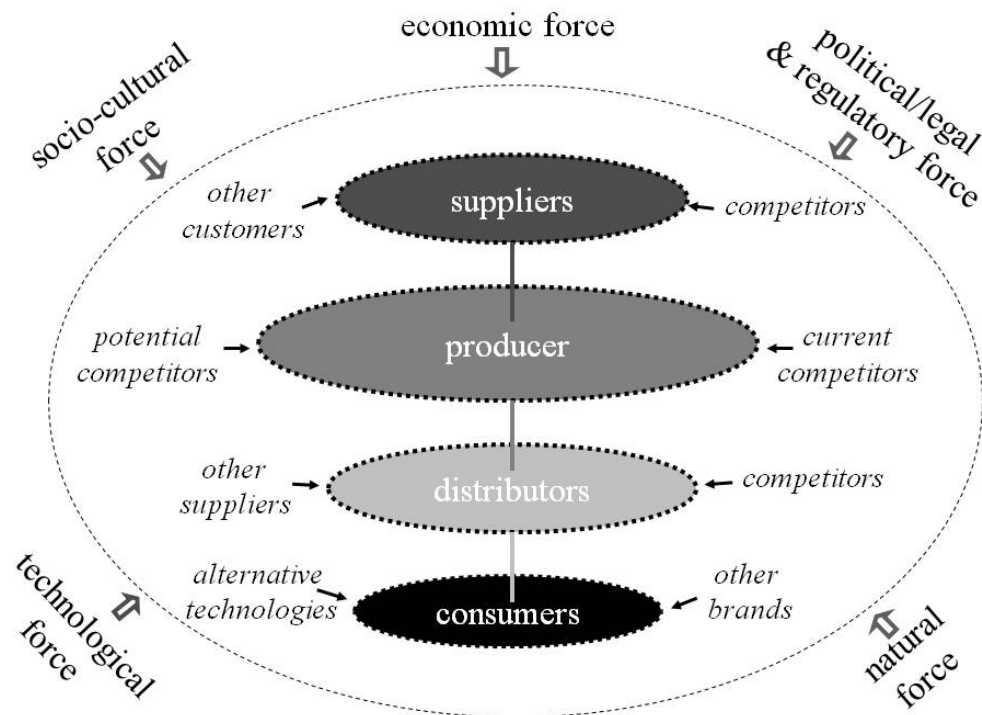
Producers constantly face the challenge of creating, re-creating or enhancing their sustainable competitive advantage. That is, they must continuously create or alter their value proposition. The actions of current competitors are certainly of direct concern to producers; yet, at the same time, there exist in the business environment companies that, given the right set of circumstances, can become competitors. These potential competitors may be drawn from current suppliers and/or current distributors (Meredith, 2007), or they may arise from related or tangential industries. Additionally, there are organizations in the environment who are seeking to enter the producer's industry. So, as producers adapt to the five environmental forces, they must also account for how those forces impact the attractiveness of their own markets. That is, changes in the overall environment impact the barriers to entry and exit in their own market.

Distributors generally carry products from a variety of suppliers, and any alteration in the demands of other suppliers has an impact on the distributors' reaction to the B2B marketer. Space and time are finite assets for distributors and they must constantly assess how those assets are used. Distributors also face a set of direct competitors who play a critical role in their strategic decision-making and whose actions might change the competitive structure of their marketplace in an instant. Additionally, the question of whether the distributor has the wherewithal to backwardly integrate is an important consideration.

As an example of how this paradigm works, let's consider the impact of an increase in fuel prices (economic force) on an automobile manufacturer and its network of relationships.

Consumers. The impact on consumers is the one that portends the greatest pressure on the auto industry. If the price increase is significant enough and if consumers believe the increased gasoline prices will continue in the long term, they will likely adjust their purchase decisions to reflect the new reality. So, the gas mileage of automobiles purchased will become a more important criterion of selection.

Distributors. The car dealerships have to decide the best way to move existing inventory and how to prepare their service departments for changes in the service demands created by a new generation of automobiles that employ different propulsion technologies. The gasoline costs associated with operating the dealerships will also increase, which may lead to an increase in prices. These changes may also require the dealer to do a better job of targeting its efforts to reflect the reality of the local marketplace as well as trying to optimize the outputs versus the inputs related to its use of autos and trucks to operate its business.

Producers. Certainly this increase affects the auto producer and the other channel members directly, in that it will cost more to operate their own fleet of trucks and corporate-owned vehicles. More importantly, the change in gasoline prices will likely mean a change in the design of autos being produced. The next generation of autos may need to be lighter in weight and yet will need to maintain safety factors. They may need to have hybrid engines or engines that can run on a variety of fuels, or even engines that use a completely different form of energy such as hydrogen or electricity.

Suppliers. The increase in gasoline prices will affect suppliers in that the prices they charge the manufacturer will likely rise to compensate for the increased energy costs. Additionally, they will need to adapt the components they produce for auto makers. For instance, these components may need to be made of different materials or a lighter version of the same materials. This change may well alter the mix of suppliers. For instance, if an auto producer desires to sell a line of electric cars, the components to operate and control the engines will be very different than those used on gasoline-powered cars, and will in all likelihood involve the use of suppliers not heretofore used. Current suppliers, to protect their position in the marketplace, may have to make drastic changes in the mix of products they sell.

Another historical example of how this model works is to be found in the area of computer and Internet technology. As computer technology advanced, the Internet developed into a powerful tool that offered substantial benefits to all members of the B2B marketplace. Let's consider the impact of the Internet on the same industry (auto manufacturers):

Consumers. Shopping for cars has been enhanced due to a great deal more information about makes and models of cars, as well as the ability to shop at the websites of multiple dealerships at once, or to actually purchase a car online. An additional

	benefit to consumers of this price transparency brought on by the Internet was cost savings. More information in a marketplace generally leads to lower prices (Sinha, 2000).
Distributors.	Information sharing within dealerships and between the dealerships and the manufacturers has been improved through intranets. Follow-up contact between salespeople and customers via email has improved the level of contact and information sharing.
Producers.	Communication with suppliers and dealerships has been improved, and marketing communication programs targeted to consumers now include web-based offers and email promotions.
Suppliers.	Just-in-time inventory delivery has been aided through intranets as suppliers have aligned their operations with the schedules of major manufacturers. In turn, these suppliers have also improved their purchasing activities with their own set of suppliers of raw materials and component parts.

CONCLUSION

What the previous examples illustrate is the broad effect of environmental changes. They also illustrate the point that such changes have a differential impact on the various levels in chain of supply and production. While this is not presented as some startling revelation, it does illustrate the deficiency in our current models of B2B environments. From a slightly different perspective, it also highlights the impact of environmental changes on channel networks and dynamics.

Market orientation has been defined as an organization-wide generation of market intelligence pertaining to current and future needs of customers, dissemination of intelligence within the organization, and responsiveness to it (Kohli, Jaworski & Kumar, 1993). Siguaw, Simpson and Baker (1998) demonstrated that in B2B markets the adoption of behaviors consistent with market orientation (the generation, dissemination, and responsiveness to market intelligence) is a viable strategy for countering environmental threats and easing channel tensions. This more holistic, multi-layered strategic thinking within B2B markets that has been advocated in this paper builds upon the "benevolent channel leadership" originally advocated by Stern (1967), the "supportive leadership" idea proposed by Schul, Pride & Little (1983), a type of non-market governance (Heide 1994), and the benchmarking and modeling of market orientation behaviors by other firms in the channel (Siguaw, Simpson & Baker, 1998).

Marketing academicians serve the dual purpose of educating future marketing leaders and providing useful insights for marketing practitioners. While the concept of channel networks is not a new one, the model proposed here should prove useful in getting students to understand the dynamic nature and strategic importance of channel networks, and should serve to provide a more cohesive framework for them to examine changes in the business environment. For practitioners, the model should serve as a framework for them to understand changes in the

business environment from the perspective of their channel network partners. Doing so will go a long way toward introducing workable adaptations into business practices.

FUTURE RESEARCH

From the perspective of academic researchers, in light of the prior discussion, it is worthwhile to pose some related research issues that merit future consideration:

1. Does channel-level environmental scanning result in better decision-making for a firm operating in dynamic versus static markets? What about in more complex versus less complex markets?
2. What is the relative effect of the three-dimensional model on different learning styles?
3. What are the most effective approaches for getting students to see beyond the obvious implications of a situation, that is, to analyze things on a deeper level?
4. Is there a variation in firms as to their ability to employ channel-level environmental scanning?
5. Does the level of dependency and interconnectedness in a channel affect how often each channel member should monitor the effects of environmental changes on the other members?

IMPLICATIONS FOR MARKETING MANAGERS

Marketing managers must take an expansive view of the environment, but doing so is a challenge. First, it is a challenge because of the urgency of day-to-day operations that tends to force strategic thinking into the background. That is, in the normal course of events, planning for how to strategically react to the environment requires a step back from handling the more urgent, short-term demands that are omnipresent. The second reason that taking the expansive view is a challenge is that it requires B2B managers to examine the world through the eyes of their distributors, their suppliers, and the final consumers. Employing such a level of empathy is no simple task. It requires the B2B marketer to possess expertise in both upstream and downstream operations as well as in the dynamics of the marketplace at the consumer level. Obviously, in such a setting, having access to multi-faceted marketing intelligence is critical (Trim & Lee, 2006). The importance of environmental scanning with an expansive view takes on a new depth. Marketing managers would do well to implement the following approaches:

1. Appoint individuals to be "Environmental Scanning Czars" for each of the members of the network depicted in Figure 3. That is, have a person who engages in active environmental scanning for the supplier groups that are part of the network, have one for the distributor group in the network, and have one for the final consumer groups that buy the products their customers sell. Obviously, as the diversity of suppliers, distributors, and consumer groups gets larger, a company may need more than one "czar" for each of the constituencies.
2. Subscribe to a set of publications for each of the network groups. These publications should be limited to those that provide a good deal of information about competitive dynamics and changes in that industry. Additionally, subscribing to online information services will be useful. Those publications should go to the person appointed as the czar for that particular network group.

3. Set up a regular series of meetings to examine changes in the B2B marketer's environment. The frequency with which such meetings take place is related to the dynamism in the market. Such a schedule should allow for called meetings in the event of a major shock in one of the network groups that promises to have a residual effect on others.

4. Establish a periodic system of conducting research with the final consumer market. This can be done through distributors, through research houses, or by internal people. Such research should be focused on examining how the consumer context for the product is changing. Additionally, at least some emphasis should be placed on determining how the evoked set for those consumers is changing. Focus groups lend themselves very well to this type of research. Such an effort should not only give the B2B marketer insight into the consumer market and help it design components that make the final product more attractive, it should also serve to give the B2B marketer some insight into ways to help their direct customers meet the needs of final consumers.

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THE ETHICAL IMPLICATIONS OF PUBLISHER'S ACCELERATED REVISIONS TO INTRODUCTORY BUSINESS TEXTBOOKS

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ABSTRACT

Given evidence of accelerated revision cycles for introductory business textbooks, the authors analyze the ethicality of shortened revisions cycles (i.e., 2 year revision cycles) using several different ethical frameworks. Implications of this analysis and directions for future research are also explored.

INTRODUCTION

The cost and affordability of an undergraduate college education in the United States is often a topic of conversation. While the context of cost typically centers on tuition and fees, the cost of college textbooks is also a concern. Estimates of what a typical undergraduate student pays for books ranges from $700 to $1,100 per academic year (Mui & Kinzie, 2008).

Textbooks are essentially a durable good and like most durable goods, a market exists for used books. In most industries producers end up competing with used versions of the new products they sell. However, in the collegiate textbook market, publishers are a durable goods monopolist (Iizuka, 2007). They have the ability to plan obsolescence of previous editions, thus eliminating competition of used books from new book sales. Iizuka's empirical analysis of the textbook industry found that publishers have a tendency to accelerate revisions when competition from the used book marketplace increases. Furthermore, Koch (2006) notes that publishers tend to accelerate revisions to textbooks that sell well and release "new editions."

The basic premise of textbook marketing in a capitalistic economy is that for-profit publishers facilitate the creation, production, distribution, promotion, and pricing of textbooks to facilitate satisfying exchange relationships with customers. As long as publishers obey existing laws and regulations, they are free to manage their product portfolio of books and other learning resources, including additions and deletions of titles as well as modifications of existing titles in the form of "new editions."

However, because of the rare structure of the college textbook market and social value of higher education, this practice of planned obsolescence presents an interesting set of issues for examination: *Is it ethical for college textbook publishers to release "new editions" of textbooks*

used in "introductory" or "principles" undergraduate business courses with slow rates of change every two years for the purpose of making older editions in the used market obsolete?

REVIEW OF BUSINESS AND MARKETING ETHICS LITERATURE

Marketing and Ethics

Nantel and Weeks (1996) and Murphy and Laczniak (1981, 2006) among others have highlighted several examples of marketing ethical problems including consumer behavior, product and services management, advertising management, marketing research, pricing, and international marketing. Vance Packard's (1960) seminal work provoked much discussion about the ethics of planned obsolescence. Subsequently, Hise and McGinnis (1975), Gwinner, Laczniak and Murphy (1977), and Laczniak and Murphy (1985) discussed the ethics of product elimination and obsolescence for the purpose of benefiting from repurchasing. Today, there is renewed interest in the ethics of planned obsolescence primarily driven by the environmental impact of the waste that is generated by functional durable goods (Guiltinan, 2008).

Ethics in Business

Ethics in business is a very complex subject and can be approached from a variety of moral philosophical approaches. Frankena (1963), Barry (1979), Beauchamp (1980) and others categorize the two major theoretical approaches as either teleological or deontological. Utilitarianism is the major category of theory which falls under the teleological approach. It emphasizes the consequences, outcomes or ends of an ethical decision. A decision is ethical if it generates the greatest good for the greatest number of people. Deontological, or duty-based, theories are more concerned about the ethics of the processes, actions or means. Philosopher Emmanuel Kant is often credited with developing the most influential duty-based theory which is based on a foundation of categorical imperatives or universal principles which should guide behaviors regardless of outcomes (Murphy & Laczniak, 2006).

Contract-based theories and virtue-based ethics are the other primary categories of comprehensive ethical theories. Integrative social contracts theory and Rawlsian theory are contract-based theories which have relevance in business ethics situations. The development of moral free space is a key concept in integrative social contracts theory. In essence, groups or business communities form rules of conduct which do not violate hyper norms, but allow managers to keep moral decision options open. Two principles of justice, liberty principle and difference principle, are the key underpinnings of Rawlsian Theory. The difference principle which states "actions should not be taken that will further disadvantage those groups in society which are currently the least well off" (Murphy & Laczniak, 2006, p. 25) is more applicable to business ethics.

Rooted in Greek philosophy, virtue ethics focuses on the individual (or organization) being virtuous rather than the decision to be made. In other words, morality originates from the character of the individual (or organization), rather than from the opinions of others or actions of the individual (or organization). Key components to the application of virtue ethics are that virtuous characteristics can be discovered and learned vicariously by individuals (or organizations) and the concept of ethic of the mean. The mean is essentially an appropriate balance of a virtue, or value, that an individual (or organization) should seek (Murphy & Laczniak, 2006). The American Marketing Association's (AMA's) Ethical Norms and Values for Marketers (2010a) lists honesty, responsibility, fairness, respect, transparency, and citizenship as ethical values or virtuous characteristics which noble marketers and marketing organizations should aspire to.

A discussion of moral philosophies would not be complete without including religious or eternal law perspectives. Judeo-Christian, as well as most of the world's major religions, has moral and ethical precepts. These Judeo-Christian precepts had and continue to have a profound impact on the development of western culture and social norms. While many biblical directives are relatively straight forward, many, particularly those related to business and complex marketing problems are ambiguous (Murphy & Laczniak, 2006).

Ethical Decision Making in Marketing

Several marketing ethical decision making models are found in the literature. These models range from straight forward and simple rules-of-thumb principles or maxims to complex models which incorporate both teleological and deontological moral theories. A review of some of the popular models follows.

Robert Solomon (1994) developed a series of words and phrases which begin with A, B, and C as a simplistic way to examine ethical situations in marketing – The ABCs of Marketing Ethics. The As are "applied," "above the law," and "aspirational;" the Bs are "beneficial," "beyond the bottom line," and "breaking new ground;" and the Cs are "compliance," "consequences," and "contributions." While the ABCs of marketing ethics may seem like a simplistic way to analyze a marketing ethical dilemma, often times the underlying issues are complex.

Murphy and Laczniak (2006) have identified several rule-of-thumb maxims for ethical marketing decision making. These maxims include *the golden rule* and *the professional ethic*. The AMA's Ethical Norms and Values for Marketers (2010a) is an excellent source of guidance for practitioners. Other maxims include *the TV/newspaper test*; *when in doubt, don't*; *slippery slope*; *kid/mother/founder on your shoulder*; and, *never knowingly do harm*. Some of these maxims do not apply to all ethical situations and applying different maxims to some situations may lead to different outcomes.

Shelby Hunt and Scott Vitell (1986) published an article in the *Journal of Macromarketing* containing their original positive general theory of marketing ethics. The theory has since been widely accepted, empirically tested, and coined the Hunt-Vitell (H-V) model. The theory was revised in 1993 and continues to be discussed and tested (Hunt & Vitell, 1993, 2006). The H-V theory is a relatively complex process model which is based on both deontological and teleological ethical backgrounds. Once an ethical situation has been established, the process of the model includes both a deontological evaluation and a teleological evaluation. The deontological evaluation involves comparing alternative behaviors against both hyper and local norms of values or rules of moral behavior. The teleological process includes evaluating the desirability or undesirability of consequences of each alternative across stakeholder groups as well as the importance of each stakeholder group. The individual's ethical judgment or decision is a function of the two evaluations.

Model for Evaluating Textbook Marketing Ethical Question

Murphy and Laczniak (2006) acknowledge that there is little agreement on what constitutes the best way to analyze and solve ethical issues. They propose marketing managers and their firms identify ethical issues, develop a list of questions that encompass relevant ethical theories, and recognize that conflicts are inherent in ethical decision making especially as the number of relevant stakeholders rises.

Although not exhaustive, Murphy and Laczniak (2006) present eight questions which marketing managers should ask, and the author will use, to analyze the collegiate business textbook ethical question. These questions are:

1. The legal test – Does the contemplated action violate the law?
2. The duties test – Is the action contrary to widely accepted moral obligations?
3. The special obligations test – Does the proposed action violate any other special obligations that stem from this type of marketing organization?
4. The motives test – Is the intent of the contemplated action harmful?
5. The consequences test – Is it likely that any major damages to people or organizations will result from the contemplated action?
6. The virtues test – Does this action enhance the ideal of moral community, and is it consonant with what the marketing organization wants to be?
7. The rights test – Does the contemplated action infringe on the rights of the consumer?
8. The justice test – Does the proposed action leave another person or group less well off? Is this group already a member of a relatively underprivileged class?

A point Whisler (2010) raised in his critique of the author's selected model is that it lacked an economic efficiency analysis. In addition to Murphy and Laczniak's eight questions, a ninth question was added to the model.

9.   The economic test – Does the proposed action lead to economic efficiency of how resources are used in a society?

A point Whisler (2010) also raised in his critique of the author's selected model is that many of the decision rules are ambiguous. For instance, what constitutes *major damages*? Hosmer (2008) acknowledges that moral standards of behavior, e.g., the author's analysis and outcome of each question, are subjective by nature. Furthermore, he states that one should "analyze the moral problem . . . to arrive at *your* moral solution."

In the next section, the authors will address each of the questions in the model to arrive at their moral solution of the ethics of a publisher's decision to *release "new editions" of textbooks . . . for the purpose of making older editions in the used market obsolete.* In the context of the analysis the authors included the following primary stakeholders, in no particular order of relevance: textbook publishers, authors, distributors, wholesalers, retailers, purchasers/payers (i.e., students; parents; institutional, private, and government financial aid providers), and business faculty members.

Is Revising and Releasing "New Editions" of Textbooks Every Two Years Ethical?

The legal test – Does the contemplated action violate the law? No. Although a textbook section was added to the Higher Education Opportunity Act of 2008, the new regulations, which will take effect July 2010, do not stipulate any restrictions on the timing of the release of new editions.   The new regulations do call for greater transparency from collegiate textbook companies including providing faculty members with pricing information, copyright dates of the three most recent editions, and an account of substantial revisions to the newest edition (NACS Overview of Higher Education Opportunity Act Textbook Provisions, 2009).

The duties test – Is the action contrary to widely accepted moral obligations? Probably not. Perhaps an argument could be made that publishers are violating duties of fidelity by not being entirely truthful when it comes to what constitutes substantial changes to warrant the release of a new edition. Both the California Public Interest Research Group (2004) and The State Public Interest Research Groups – Higher Education Project (2005) research found that a majority of faculty surveyed did not agree that new editions are justified. On the other hand, the Association of American Publishers (*Why PIRG is Wrong*) reported research results that indicate faculty members think that it is important that textbooks be current.

The special obligations test – Does the proposed action violate any other special obligations that stem from this type of marketing organization? Maybe. Due to the fact that the

collegiate textbook industry is essentially a durable goods monopolist market, opportunities exist for publishers to take advantage of being a monopolist including the use of planned obsolescence to eliminate price and unit sales competition of new books from used books (Iizuka, 2007). The author questions what is the responsibility of the prescribing faculty member in allowing publishers to use product management strategies that are not in the best interests of a faculty member's students? This question will be further addressed in the final section of the paper.

The motives test – Is the intent of the contemplated action harmful? No. To the contrary, publishers insist that their product management strategies are necessary to provide the needed incentives for authors to write new textbooks, meet the ancillary needs of the market (faculty members' requirements for supplemental instructional and course materials), remain competitive, and be profitable (*Why PIRG is Wrong*).

The consequences test – Is it likely that any major damages to people or organizations will result from the contemplated action? No. The practice of releasing new editions every two years is not likely to result in major damages to people or organizations.

The virtues test – Does this action enhance the ideal of moral community, and is it consonant with what the marketing organization wants to be? Impossible for an outside observer to answer. The answer to the virtues test needs to be answered by the organization, or by its marketing managers. While an outside observer could make assumptions of what enhancing the ideal of a moral community constitutes, it is up to the management of a publisher within the context of its corporate culture to determine what the organization wants to be. It would be presumptuous to assume, for instance, that product managers in publishing companies aspire to and commit themselves to the highest standard of professional ethical norms and values such as those found in the AMA's Statement of Ethics.

The rights test – Does the contemplated action infringe on the rights of the consumer? Maybe. Although it might appear that consumers of textbooks (or students) have little choice than to purchase required editions of textbooks, often times there are other alternatives. In some instances, older editions, which are available at lower prices, are an extremely close substitute to the required newer edition, especially if the textbook's author has not made substantial changes. Faculty members put required textbooks on reserve in an institution's library for students to use too. Depending on the type and structure of a course, some students may choose to share a textbook with a fellow student or can flat-out refuse to purchase the required textbook.

The justice test – Does the proposed action leave another person or group less well off? Maybe. Is this group already a member of a relatively underprivileged class? Maybe. As durable goods monopolists, publishers can "kill off" used books through planned obsolescence every two years, thus increasing the price they are able to obtain for new editions of books and ultimately increasing their profits (Iizuka, 2007). This action comes primarily at the expense of students. The Government Accountability Office (2005) and California State Auditor (2008) have reported that book prices have risen faster than the inflation rate, the book publishers-producer price index, and median household incomes in the United States. Are college students a relatively

underprivileged class? While one could argue that as a group they are underprivileged, a counter argument could be made that college students are a privileged class and the costs of books should be viewed as an investment which will make one better off in the long run.

The economic test – Does the proposed action lead to economic efficiency of how resources are used in a society? Maybe. The Advisory Committee on Student Financial Assistance (2007) argues that the market for textbooks is broken. Students have no direct control over the price, format, or quality of textbooks. However, is this the result of actions of publishers? No. Publishers don't create the market structure of college textbooks. They are only taking advantage of an existing market opportunity. The market structure is rather complex and although publishers can take advantage of being a durable goods monopolist in the short run, they are subject to competitive market forces in the long run which should lead to economic efficiency.

Based upon the assessments and answers (which takes into account balancing the interests of all relevant stakeholders) to each of the above ethical "test" questions regarding publisher's actions, the author believes that it is not unethical *for college textbook publishers to release "new editions" of textbooks used in "introductory" or "principles" undergraduate business courses with slow rates of change every two years for the purpose of making older editions in the used market obsolete?* Therefore, it must be ethical.

Conclusion and Ideas for Further Study

Murphy and Laczniak (2006) argue that balancing relevant stakeholders' interests, concerns or duties owed is the essence of appropriate ethical decision making. In the case of marketing ethics, particularly those related to product management issues, some have argued that if "true" marketing exists, then by definition, marketing ethics is rooted in an utilitarian approach to ethics (Nantel & Weeks, 1996). Although there are various definitions of marketing, almost all include some form of meeting customer needs. Kotler and Keller (2006) give a short definition as simply "meeting needs profitably" which the American Marketing Association (2010b) has adopted in a formal definition: *Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.*

While on the surface it might appear that publisher product management tactics are unethical, their actions do not definitively violate any of the nine tests used. As the market structure currently exists, their actions appear to "balance" the interests of all relevant stakeholders. As a for-profit enterprise, publishers must be profitable to meet the needs of customers and other stakeholders. Adequate advances and royalties must be available to incent business scholars to write collegiate textbooks. Business faculty members need up-to-date introductory textbooks and supplemental instructional materials to keep their courses and programs competitive. Finally, students need up-to-date textbooks and instructional aids to

complement lectures and class discussions and develop their marketable business skills. In the long run, competitive market forces should keep primary stakeholders' interests in balance.

Business faculty members are the one stakeholder group which has the least economic interest. Most publishers provide faculty members with free examination copies and other incentives and the textbook adoption policies at many institutions are open to a number of faculty member conflicts of interests (Bierman, 2010). That is why, in the assessment of the special obligations test above, the author questioned what is the responsibility of the prescribing faculty member in allowing publishers to practice this product management strategy which may not be in the best interests of a faculty member's students. The author suggests that the ethics of textbook adoption by business schools and its faculty members is ripe for additional study and discussion. Improving ethical decision making in the textbook adoption process would likely improve ethical decision making in the collegiate publishing industry by improving the market's ability to keep relevant stakeholder interests and perspectives in balance.

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IS THE ELECTRONIC WORD OF MOUTH EFFECT ALWAYS POSITIVE ON THE MOVIE?[1]

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ABSTRACT

Previous studies have been arguing that the movie revenue is affected by the volume or the valence or both of electronic word of mouth (Liu, 2006; Chintagunta et al., 2010, Bae et al. 2010). Those studies analyzed the effect of the electronic word of mouth (eWOM) in the film industry with the assumption that the volume of eWOM unilaterally affects revenue. However, they overlooked that box-office revenue, in turn, can influence the volume of eWOM. Therefore, in this study, a simultaneous equation that considers the influence of box-office revenue on eWOM as well is formulated. The authors found that the valence of eWOM affects box-office revenue and the volume of eWOM is not cause of the revenue except the first week. The volume of eWOM is affected by the revenue on the contrary.

The authors also found that eWOM effect in the result above does not work on the successful movie. Because the audiences have a lot of information sources about the successful movie, they don't have to check out the eWOM on the website before going to movie theater. But, in the case of the unsuccessful movie the audiences don't have enough sources to gather the information about the movie except eWOM on the website, so that eWOM is critical to them. The authors conclude that the movie companies have to use the eWOM as an important communication channel especially if it is expected to be the unsuccessful movie.

INTRODUCTION

Word-of-mouth(WOM) and electronic word-of-mouth (eWOM), which are forms of customer-to-customer information exchange, have become subjects of interest for companies and marketing researchers as possible alternatives for traditional mass-media commercial advertisements, which have been losing their appeal due to increased competition.

WOM is distinct from traditional sources of information, such as commercial advertisements, in two ways. First, WOM provides more credibility to customers than other sources of information. Beck (1992) explained the uniquely credible status of WOM as an information source, by arguing that WOM has a stronger influence on the purchasing decisions of customers because it is perceived as advices from other customers faced with similar circumstances. In particular, WOM has been found to be especially influential when customers make purchasing choices about newly-released products that they are aware of but are not well-

informed about (Mahajan, Miller, and Kerin, 1984). Films, by nature, exhibit characteristics that are largely similar to those of newly-released products, and it has also been well established that WOM generally has a significant effect on the movie-going choices of customers (Austin, 1989; Bayus, 1985; Faber and O'Guinn, 1984; Neelamegham and Chintagunta, 1999).

Second, unlike advertisements, which are transmitted to customers via mass-media, WOM information is easily accessible for customers via social networks (Benerjee, 1992; Brown and Reingen, 1987; Murray, 1991). The accessibility of eWOM has vastly expanded due to the rapid growth of the Internet population and is now available via various channels and forms such as Internet messengers, online forums, communities, or purchase reviews posted on shopping websites. The resulting eWOM is exerting an even larger influence on the information searching and purchase decision-making actions of customers than the offline WOM of the past (Bussiere, 2000; Chatterjee, 2001). Many websites are being used not only as providers of product information, but also as forums for information exchange, and heavily influence the purchasing decisions of customers. A few marketing studies that have been conducted on the subject of WOM data include: one study on the effect of WOM information from Usenet newsgroups on television shows (Godes and Mayzlin, 2004); one study on the effect of eWOM information on revenue, which analyzed the customer review data accumulated in the two online bookstores of Amazon.com and BarnesandNobles.com (Chevalier and Mayzlin, 2006); and one study on the effect of movie reviews posted on Yahoo.com on box-office revenue (Liu, 2006).

This study has two objectives. The one is to identify the effects between box-office revenue and the volume as well as valence of movie reviews posted in the film sections of portal websites. The structure in the first analysis was more elaborate model in the previous studies (Bae et al. 2010). The other is to find out if the eWOM effects in the former result are equally applied to all the movies regardless of their revenue difference.

THEORETICAL BACKGROUND

Definition and Characteristics of WOM and EWOM

The term "word-of-mouth(WOM)" was first used in a marketing study by Whyte, which was published in a 1954 edition of the Fortune magazine. Each researchers have adopted different definitions of WOM, but all agree that it consists of oral interpersonal communication. Zaltman and Wallendorf (1979) defined WOM communication as a non-profit interpersonal activity involving the direct conveyance and acquirement of information via conversation. Arker and Myers (1982) defined WOM as a form of advertising communication in which the advertisement recipient becomes an information source to those around him. Ritchins (1983) understood WOM as a process of information exchange concerning a product, which occurs in the consumer market.

WOM communication is considered a more credible source of information than commercial advertisements, because the information provider evaluates products and services according to his independent judgment instead of advocating corporate interests (Silverman, 2001). Customers have been shown to be greatly influenced by WOM information in making purchasing decisions in a survey by McKinsey, which reported that 67% of customers rely on WOM information when purchasing products (Taylor, 2003). Particularly in the case of the purchase of newly-released products, which pose risks stemming from deficient information, WOM has been found to play an even larger role than usual (Mahajan, Muller, and Kerin, 1984). This is because of the fact that WOM provides credible information which decreases the risks that accompany the decisions of the customers.

Electronic word-of-mouth(eWOM) occurs in the virtual world of the Internet (Bussiere, 2000; Henning-Thurau and Walsh, 2003; Henning-Thurau et al., 2004) such as Internet communities, purchase reviews posted in shopping websites, and audience scores about the movie. Chatterjee (2001) argues that eWOM, compared to its off-line counterpart, provides both positive and negative information simultaneously from more diverse and numerous sources. Chevalier and Mayzlin (2006) as well as Henning-Thurau et al. (2004) characterized eWOM as a convenient form of communication that possesses anonymity, as well as freedom from the restrictions imposed by time and space.

eWOM can bring about different results according to the means by which it is employed. Companies can take advantage of its anonymity by using it to disseminate marketing messages in the guise of customer opinions, which can lead to better results than traditional marketing techniques (Mayzlin, 2006). Chen and Xie (2008) examined the relationship between product descriptions provided by sellers and online product reviews posted by customers. As a result, it was found that product description and customers' online evaluation take on a more complementary role under the condition that the price of a product is low and its customers have a lot of information about the product. eWOM is a communication channel capable of rapidly disseminating large volumes of information (Bickart and Schindler 2002; Chatterjee 2001), and much research is being conducted to investigate methods to reach customers through eWOM as well as more traditional marketing techniques.

Previous Studies on Movie Success Factors

Existing literature on movie success factors can be categorized into studies on the factors that consist of the properties of the films themselves and those that consist of customer information sources regarding the films. With respect to the former, Linton and Petrovich (1988) studied 15 properties of film including its characters, story, and background etc., amongst which the characters, story, and acting properties were identified to be important success factors. Also, Litman and Kohl (1989) studied the intrinsic properties and success factors of film and

categorized them into areas of properties (genre, appearance of star actors, rating, country of production, filming budget) and scheduling, distribution marketing efforts.

Studies on the influence of information sources have focused on critical reviews(professional film reviews), previews, advertisement, and WOM. Although various studies identified different factors as being influential in each category, WOM and critical reviews were consistently found to be the most important information sources for customers. The importance of WOM in film success has been well verified in various studies. Faber and O'Guin (1984) argued that previews and WOM were the most credible sources of information in evaluating movies, and many other studies have concluded that WOM has an important effect on customers' expectations, scores, and movie-going choices, as well as films' success (Austin and Gordon, 1987; Mahajan et al., 1984; Levene, 1992; Zufryden, 1996).

Studies on critical reviews, unlike those on WOM, offer differing conclusions. Hirschman and Pieros (1985) showed the existence of a negative correlation between box-office revenue and critical reviews. Faber and O'Guin (1984) verified the existence of a more important success factor in movies than critical reviews and Eliashberg and Shugan (1997) found that the influence of critical reviews changed with passing time. Litman (1983) identified the distributor, a Christmas season release date, and critical reviews as major factors in film success, while Basuroy et al. (2003) argued that critical reviews acted as predictors for the success of a movie in its initial and later phases of release. Studies on critical reviews have thus yielded mixed conclusions, with their being no clear consensus regarding their influence on box-office revenue.

Existing Studies on the WOM Effect in the Film Industry

The film industry is characterized by its high-risk, high-return nature. Various studies have verified that 6 to 7 out of 10 released movies turn out to be less than profitable (Liu, 2006; Vogel, 2001; Shugan, 1995). Even in the case of large film production and distribution companies, the majority of their profits derive from a small number of blockbuster films, which has led them to increase investment in their advertisement (Eliashberg et al., 2006). Due to the nature of the film industry, there have been many studies on the various factors that influence films' success, and the WOM effect has been considered to be an important movie success factor.

The volume and valence of WOM have been studied as their most important attributes (Mahajan et al., 1984; Neelamegham and Chintagunta, 1999). The volume of WOM refers to the amount of WOM messages, while the valence of WOM shows the degree to which the messages convey positive or negative assessments or sentiments.

Dellarocas et al. (2004), building on the Bass model, estimated the Bass parameters (p, q) of the coefficient of innovation (p) and the coefficient of imitation (q) based on audience scores during the initial week of release. The size and density (the ratio between the initial-week box-office revenue and audience score size) of audience scores during the initial week of release were

shown to be useful in estimating p, while the scores themselves were shown to have explanatory power with regard to q. Duan et al. (2005) studied the daily relationship between audience scores and box-office revenue during the first two weeks of release through panel data analysis. They concluded that, while audience scores did not have significant explanatory power with regard to box-office revenue, the volume of WOM did. Liu (2006) found that the valence of WOM was higher before release, when expectations are higher, than after. According to this study, the valence of WOM did not have significant explanatory power with regard to box-office revenue. Moon et al. (2010) argued that box-office revenue exert a positive influence on the valence of the WOM of general customers, while the WOM effect (consisting of both reviews by professional critics and audience scores) only had a significant influence on box-office revenue when advertisements were employed at the same time. Chintagunta et al. (2010) found that the factor which influence the movie revenue is not the volume of the eWOM but the valence of it.

PURPOSES OF THIS STUDY

Some studies on the relationship between the movie revenue and WOM have asserted that, while the volume of WOM has a positive influence on box-office revenue, the valence of WOM does not affect box-office revenue (Liu, 2006; Duan et al., 2005). Others maintained that the factor influencing the movie revenue is the valence of eWOM (Chintagunta et al., 2010). In this study, the authors identify the relationship between the revenue and eWom under the consideration of mutual effects between both factors using Korean movie data. For verifying this, the authors improve the model in the previous studies (Bae et al., 2010) and propose a better structure regarding the relationship between the volume of WOM and box-office revenue. Existing studies on the film industry have assumed WOM to be an independent variable that affects box-office revenue. However, a more realistic assumption is one in which box-office revenue induced by WOM affects the volume of WOM again, the increase of which will also affect revenue. That is, previous studies have failed to consider the effect of the relationships and have overlooked the fact that WOM and box-office revenue have an endogenous relationship of mutual influence. Therefore, in this study, we will assume that box-office revenue and WOM volume exhibit a simultaneous and mutual influence, and define two variables as endogenous variables to perform analysis using a simultaneous equation. We expect that this will allow us to formulate a clear conclusion on whether WOM volume unilaterally affects box-office revenue, or vice versa, or if each of the variables are mutual causes for changes in the other.

Finally, the effect of eWOM might be different between high revenue movie and low revenue movie because the movie earning a lot of revenue has numerous information sources besides eWOM to let the audiences be exposed to the movie like You Tube, twitter, Facebook, Online Community and etc. It means that the audiences don't need to check the eWOM out before going to the theater because they already know the movie is great through other

information sources. Therefore there might be a small eWOM effect or no effect in the successful movies.

RESEARCH MODEL

Data Collection

Data collection was performed upon the websites of Naver Movies (movie.naver.com), the Korean Film Council (www.kobis.or.kr), and Interpark Movies (movie.interpark.com), using a custom-programmed web crawler. Among the many websites with eWOM data, Naver Movies was chosen for the following reasons. First, Naver Movies, with its 32 million members as of August 2008, has, by far, the largest user base among similar sites, which allowed us to obtain a much larger and diverse sample of eWOM. Also, the extensive database of Naver Movies enables users to evaluate all films that have ever been domestically released. Second, Naver Movies requires users to log in to submit scores and allows each user to submit only one score per movie, which effectively prevents the possibility of a small number of users manipulating the overall scores. Third, the date, time, and score of each eWOM posting in Naver Movies are stored along with ID information of the poster, and all comments and movie data are stored permanently unless deleted by the original poster. Therefore, it is possible to accurately measure the valence and volume of WOM at any particular time after the release of a particular movie, by measuring the number of comments for a single movie by date, obtaining a weekly sum, and setting the result as the variable for the volume of eWOM; and obtaining the weekly average of the scores given in each comment and setting the result as the variable for the valence of eWOM. Finally, Naver Movies allows users to not only submit scores, but also share full reviews, and also provides critical reviews and news articles from such film magazines as Cine 21 and Film 2.0, thus allowing for the collection of additional data.

Box-office revenue data was obtained from the integrated movie ticket network of the Korean Film Council, by collecting information from the box office page for the research period ranging from January 2005 to December 2007. The weekly sum of the collected data, beginning at the date of release, was obtained.

As film information, including rating, running time, and genre, was often left out in the Naver Movies website, information from the Interpark Movies website was collected and used, as well as compared with data from the Naver Movies website. The ratings and running time information provided on the Naver and Interpark Movie websites were consistent with each other excluding those that were omitted in one site, and while genre information showed some difference due to categorizing difficulties, the differences in the other variables were verified to be small enough to not have any statistically significant influence.

Declaration of Variables and Summary Statistics

Daily box-office data from the integrated movie ticket network of the Korean Film Council was gathered and added to obtain the box-office sales for each week of the first 8 weeks of release, the results of which were used as the box-office revenue data variable (LNREV). eWOM data was gathered by collecting Naver Movies comments, scores, and posting date. The eWOM volume variable (LNMSG) denotes the weekly sum of the daily data of the number of comments for a particular film obtained for the first 8 weeks of its release. The WOM valence variable (RATING) denotes the weekly average of the scores given in each comment. The WOM variance variable (VAR) denote the variance of weekly scores.

The number of opening screens (SCRN) importantly affects box-office revenue, and its value changes daily. Therefore, the value for this variable was obtained by collecting daily data from the integrated movie ticket network and calculating their weekly average for the first 8 weeks of release.

Film information was collected from Naver Movies and Interpark Movies and matched with the title information listed on the integrated movie ticket network of the Korean Film Council. Detailed information including ratings (DPG, DR), genre (GACTION, GCOMEDY, GSF), and star actor appearance (STAR) were obtained primarily from Interpark Movies, with Naver Movies as a secondary and alternative source.

Movie scores submitted by professional critics (CRATING) was collected from the 'Cine 21' service section of the Naver Movies website. The movie scores showed in the 'Cine 21' section are the average values of aggregated film critic movie scores. The highest score is 10, and higher scores indicate more positive reviews. A variable for the number of new releases among the top 10 movies of week t (NEW) was included, along with another for the average time that the top 10 films of week t remained in theaters (AGE). These two variables (Elberse and Eliashberg, 2003) show the level of competition within a given week, in that, in the case of the former, the more the number of high-grossing films in the top 10 mark that were released in week t, the smaller will the relative volume of WOM for the study subject films. In the case of the latter, the shorter the average time in theater for high-grossing films in the top 10 mark, the larger the volume of WOM for these films, which may, in turn, reduce the volume of WOM for the study subject films. The data for these variables were collected from the weekly box-office data of the Korean Film Council integrated movie ticket network. The names and definitions of the variables used for statistical analysis in this study are listed below in <Table 1>.

Table 1: List of Variables Used in Analysis of the Relationship between WOM and Box-Office Revenue	
Name of variable	Definition
t	Elapsed time since date of release (weeks)
AGE_t	Average time in theaters for top 10 movies released in week t
CRATING	Scores submitted by professional critics
DPG	PG Rating
DR	R Rating
GACTION	Action/Adventure Genre
GCOMEDY	Comedy Genre
GSF	SF Genre
$LNMSG_t$	Volume of WOM during Week t (natural log)
$LNREV_t$	Box-Office Revenue of Week t (natural log)
NEW_t	Number of Top 10 Films for Week t that were newly released during Week t
$RATING_t$	Average Audience Score for Week t
$SCRN_t$	Number of Showing Theaters for Week t
STAR	Star Actor Appearance
VAR_t	The Variance of the Score for Week t

The final data set we used only contained films released during the research period of January 1, 2005 to December 31, 2007. Also, under the assumption that art films, independent films, and re-releases are viewed by few audiences and are therefore inadequate for judging the effects of WOM, the subjects of this study were limited to films that had sold over 100,000 tickets during its first 8 weeks of release, which left us with 439 subject films. This assumption was adopted under concerns that, in the case of films with small audience numbers, the nature of this study, which employs the average value of evaluation scores submitted by audiences, would cause the opinions of a few members of the audience to appear as representing the general consensus regarding the film. Therefore, excluding these films from the analysis entirely was judged to be more appropriate. Pertaining to the films that were employed as subjects in this study, the total number of audience amounted to 405 million, the total volume of WOM data numbered 746,282, the total box-office revenue counted 2.08 billion dollars and the number of reviews by professional critics to 1,105. The summary statistics of the variables used in the statistical analysis of this study, as well as those variables that are considered important in the film industry, are laid out below in <Table 2>.

Table 2: Summary Statistics of the Movie Sample			
Name of variable	**M**	**Median**	**SD**
Total number of audience	922,738	456,859	1,284,716
Accumulated revenue (millions in dollars)	4.75	2.32	6.64
Number of screens in opening week	147.1	129.5	83.9
Volume of WOM (opening week)	441.9	209.0	1,121.4
Audience evaluation score (opening week)	7.23	7.43	1.42
Accumulated volume of WOM	1,705.3	827.0	3,412.4
Accumulated audience evaluation scores	6.99	7.23	1.47
Accumulated critic scores	5.51	5.5	1.14

RESULTS OF EMPIRICAL ANALYSIS

First, we adopted a hypothesis that took into account the previously overlooked possibility of a mutual relationship between WOM volume and box-office revenue, and formulated a simultaneous equation to estimate the coefficient values for each variable. Second, we divided the sample movie into two groups. One is the movies that earn top 50% revenues in the sample, the other is the movies that earns down 50% revenues in it. After that, we identify the mutual relationship between eWOM and the box-office revenues like the first analysis. In order to verify any differences in the influence of each independent variable upon the dependent variables in different time periods following film release, regression analyses and the simultaneous equation estimation were performed for each week for the first 8 weeks of film release.

Mutual Relationship between Volume of WOM and Box-Office Revenue

The relationship between WOM and box-office revenue is not one in which the former unilaterally affects the latter. A more realistic model is one in which an initial increase in WOM volume leads to an increase in box-office revenue, which in turn again affects WOM. Therefore, in this study, a model was set based on a simultaneous equation formulated using <Equation 1>, in which WOM volume affects box-office revenue, and <Equation 2>, in which box-office revenue affects WOM. This model makes it possible to determine which variable among WOM volume and box-office revenue is the cause for the changes of both, or, alternatively, verify the possibility that both may be mutual causes for changes in the other.

<Equation 1>

$$LNREV_{i,t} = \alpha_0 + \alpha_1 LNMSG_{i,t} + \alpha_2 RATING_{i,t} + \alpha_3 SCRN_{i,t} + \alpha_4 CRATING_i + \alpha_5 NEW_t + \alpha_6 AGE_t + \varepsilon_{i,t}$$

<Equation 2>

$$LNMSG_{i,t} = \beta_0 + \beta_1 LNREV_{i,t} + \beta_2 STAR_i + \beta_3 GCOMEDY_i + \beta_4 GACTION_i + \beta_5 GSF_i$$
$$+ \beta_6 CRATING_i + \beta_7 DPG_i + \beta_8 DR_i + \varepsilon_{i,t}$$

In both <Equation 1> and <Equation 2>, i denotes the individual films (i=1,2,3,…,439), while t denotes the time, in weeks, elapsed since the release of the film (t=1,2,3,…,8). The residual term is assumed to follow normal distribution, $\varepsilon_{i,t} \square N(0, \sigma_i^2)$. In <Equations 1>, the box-office sales variable(LNREV) is the dependent variable, and the volume of eWOM (LNMSG), the valence of WOM(RATING), the number of opening screens(SCRN), the professional critics(CRATING), the competition variables(NEW, AGE), and the variance of eWOM(VAR) are the independent variables. In <Equation 2>, eWOM volume (LNMSG) becomes the dependent variable. The variance of eWOM(VAR) and the dummy variables of star actor appearance (STAR), genre (GCOMEDY, GACTION, GSF), and rating (DPG, DR) influence eWOM volume. The endogenous variables of <Equation 1> and <Equation 2> are set as box-office revenue (LNREV) and WOM volume (LNMSG), while the remainder of the variables declared in this study are set as their exogenous variables.

The estimation results of the two equations, obtained by using the 2SLS method, are shown in <Table 3>. In <Table 3>, the values listed above each of the variables are coefficient values, while those on the bottom are t-values. In the result for <Equation 1>table above, eWOM volume (LNMSG) does not have a significant effect upon box-office revenue after the first week of release, while eWOM valence has a positive correlation with box-office revenue. These results imply that the audience takes note of both the audience scores and volume of the eWOM posted on film information websites until the first week of release, but after that, the valence of eWOM acts as the primary standard for making movie-going choices. This implies that the audience put comparatively more importance on the opinions and film reviews of others like previous studies (Chintagunta et al., 2010). The variable of the number of showing theaters(SCRN) directly affects box-office revenue, which was reflected in the fact that it exerted a statistically significant influence on revenue from week 1 through 8. It is so obvious that the movie played at a lot of theater earns more than others. The variance of eWOM(VAR) doesn't show the consistent results, which means it is inconclusive even if they are statistically significant in a few weeks.

The data below in <Table 3> shows the results of the analysis performed on <Equation 2> of the simultaneous equation, in which box-office revenue affects WOM volume. The coefficient of the box-office revenue variable (LNREV) remains significantly positive from week 1 through 8. Considering the fact that the eWOM volume variable (LNMSG) in the data above in <Table 3> showed no statistically significant trend, it could be concluded that eWOM

volume is not the standard by which the audience makes movie-going choices, but is the result of increased ticket sales, which would lead to more related comments. This hypothesis is in direct contradiction with those of previous studies which asserted that eWOM volume influences box-office revenue (Liu, 2006). Even if some of these variations must be due to cross-country differences, it can be concluded that eWOM volume is a variable that holds little influence. This result is almost same as the previous studies (Bae et al. 2010) but it is necessary for the second analysis.

Table 3: Simultaneous Equation between WOM and Box-Office Revenue								
$LNREV_{i,t} = \alpha_0 + \alpha_1 LNMSG_{i,t} + \alpha_2 RATING_{i,t} + \alpha_3 SCRN_{i,t} + \alpha_4 CRATING_i + \alpha_5 NEW_t + \alpha_6 AGE_t + \alpha_7 VAR_t + \varepsilon_{i,t}$								
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**
CONST	17.25	19.18	17.58	14.35	12.94	11.80	11.00	10.17
	46.59**	44.10**	36.29**	22.91**	17.51**	14.43**	10.55**	7.41**
LNMSG	0.34	0.10	-0.07	-0.37	-0.21	-0.43	-0.27	0.12
	4.26**	1.09	-0.53	-1.05	-0.54	-0.93	-0.43	0.31
RATING	0.08	0.07	0.20	0.38	0.35	0.46	0.38	0.38
	2.76**	2.76**	5.44**	4.75**	4.45**	4.07**	2.33**	2.76**
SCRN	0.01	0.01	0.01	0.03	0.03	0.04	0.05	0.04
	7.53**	9.49**	9.87**	6.32**	5.92**	5.82**	4.43**	6.08**
CRATING	-0.05	-0.05	-0.05	-0.08	-0.05	0.00	0.06	-0.04
	-4.29**	-3.60**	-2.71**	-2.20**	-1.38	0.07	0.85	-0.65
NEW	-0.01	-0.20	-0.31	0.05	-0.13	0.12	-0.30	-0.23
	-0.06	-2.67**	-3.07**	0.24	-0.47	0.38	-0.74	-0.46
AGE	0.24	-0.10	-0.37	0.02	0.22	0.17	0.03	0.45
	2.61**	-1.09	-2.69**	0.09	0.65	0.43	0.05	0.83
VAR	0.14	0.00	0.15	0.45	0.48	0.45	0.65	0.57
	1.97**	-0.06	1.78	2.66**	2.32**	1.68	1.53	1.99**
$LNMSG_{i,t} = \beta_0 + \beta_1 LNREV_{i,t} + \beta_2 STAR_i + \beta_3 GCOMEDY_i + \beta_4 GACTION_i + \beta_5 GSF_i + \beta_6 CRATING_i + \beta_7 DPG_i + \beta_8 DR_i + \varepsilon_{i,t}$								
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**
CONST	-0.29	-0.42	-0.54	-0.56	-0.50	-0.40	-0.27	-0.17
	-2.50**	-3.63**	-4.63**	-3.88**	-3.31**	-2.40**	-1.43	-0.77
LNREV	0.03	0.14	0.08	0.00	0.14	0.07	0.20	0.05
	0.32	1.36	0.77	0.03	0.89	0.44	1.01	0.23
STAR	0.02	-0.07	-0.06	0.14	0.25	0.35	0.34	0.31
	0.25	-1.01	-0.95	2.18**	3.84**	5.21**	4.66**	3.28**
GCOMEDY	-0.29	-0.42	-0.54	-0.56	-0.50	-0.40	-0.27	-0.17
	-2.50**	-3.63**	-4.63**	-3.88**	-3.31**	-2.40**	-1.43	-0.77
GACTION	0.03	0.14	0.08	0.00	0.14	0.07	0.20	0.05
	0.32	1.36	0.77	0.03	0.89	0.44	1.01	0.23
GSF	0.02	-0.07	-0.06	0.14	0.25	0.35	0.34	0.31
	0.25	-1.01	-0.95	2.18**	3.84**	5.21**	4.66**	3.28**
DPG	-0.29	-0.42	-0.54	-0.56	-0.50	-0.40	-0.27	-0.17
	-2.50**	-3.63**	-4.63**	-3.88**	-3.31**	-2.40**	-1.43	-0.77
DR	0.03	0.14	0.08	0.00	0.14	0.07	0.20	0.05
	0.32	1.36	0.77	0.03	0.89	0.44	1.01	0.23
VAR	0.02	-0.07	-0.06	0.14	0.25	0.35	0.34	0.31
	0.25	-1.01	-0.95	2.18**	3.84*	5.21*	4.66**	3.28**
**: $p < 0.05$								

Mutual Relationship Effects depending on Revenues

Previous result shows that the eWOM valence affects the box-office revenue and the WOM volume does only for the first week. Is this result applied to all the movie at the same way? For example, if we compare 'Transformer' with 'SAW 2', the first earned 4 million dollars and the latter earns 0.2 million dollars in South Korea. The number of information sources about the 'Transformer' is more than 'SAW 2'. It means that somebody who wants to watch the 'Transformer' doesn't have to check the eWOM out before going to the movie theater because he or she already got a lot of information through Facebook, You Tube, Twitter, Blogs, on-line community, and off-line community on purpose or not. But if we intend to watch 'SAW 2', we don't have much information about it, so that we have to check eWOM out on the movie website. Therefore eWOM effect is much smaller in the successful movies and is much bigger in the unsuccessful movie.

We divide the sample movies into two groups. The first group(H) which earned 1.04 billion dollars(50%) of total revenue 2.08 billion dollars consists of 56 movies in 439 movies. The second group(L) is composed of the 383 movies that are the rest of the sample excluding H group. The summary statistics of the variables for both groups are laid out below in <Table 4>.

Table 4: Summary Statistics of High Revenue Group(H) and Low Revenue Group(L)						
Name of variable	**H**			**L**		
	M	**Median**	**SD**	**M**	**Median**	**SD**
Total number of audience	359.3	301.3	188.0	13.0	13.1	1.7
Accumulated revenue (millions in dollars)	18.61	15.70	9.64	2.77	1.87	2.26
Number of screens in opening week	270.7	243.3	132.0	129	119.7	54.5
Volume of WOM (opening week)	1534.0	875.5	2635.9	282.2	180	475.1
Audience evaluation score (opening week)	8.09	8.34	1.12	7.10	7.35	1.41
Accumulated volume of WOM	6552.7	4194	7783.8	1,100.7	745	1,334.7
Accumulated audience evaluation scores	7.87	8.07	1.10	7.01	7.25	1.42
Accumulated critic scores	4.90	5.67	2.48	4.06	5.00	2.56

The estimated results of <Equation 1>, <Equation 2> for H and L Groups by 2SLS method are shown in <Table 5> and <Table 6>. In the <Table 5>for the H group, we found that the WOM valence(RATING) and the eWOM volume(LNMSG) effects on the box office revenue are not statistically significant for all 8 weeks. It means that the audiences who want to watch the successful movie don't have to rely on the WOM and have a lot of sources which give information about the movie to them. But in the <Table 6> we verify the same results that eWOM valence affect the box office revenue as <Table 3> in the previous analysis. As for this, we concludes that the valence of eWOM effect does not affect the box office revenue in the successful movie but it it does in the unsuccessful movie.

Both group showed that the number of screens have the statistical significant coefficient as previous result showed. It is also found that the coefficient of the box-office revenue variable (LNREV) in the lower table in the <Table 6>, <table 7> remains significantly positive from week 1 through 8, which proved that the volume of eWOM was induced by the movie revenue regardless of the size of revenues.

Table 5: Simultaneous Equation between WOM and Box-Office Revenue for the H group (the Successful Movie)

$$LNREV_{i,t} = \alpha_0 + \alpha_1 LNMSG_{i,t} + \alpha_2 RATING_{i,t} + \alpha_3 SCRN_{i,t} + \alpha_4 CRATING_i + \alpha_5 NEW_t + \alpha_6 AGE_t + \alpha_7 VAR_t + \varepsilon_{i,t}$$

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
CONST	21.26	19.60	20.60	19.43	19.31	16.76	18.39	12.56
	15.70**	18.36**	15.74**	14.57**	12.33**	9.22**	7.82**	3.67**
LNMSG	0.17	0.28	0.09	-0.04	-0.09	-0.15	-0.20	0.02
	1.17	1.80	0.49	-0.12	-0.34	-0.65	-0.66	0.04
RATING	-0.08	0.01	0.09	0.19	0.16	0.21	0.07	0.55
	-0.98	0.18	0.65	1.09	1.25	1.16	0.37	1.72
SCRN	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.03
	3.80**	1.84	2.44**	1.70	4.63**	8.14**	7.19**	5.08**
CRATING	-0.02	-0.03	-0.01	0.00	-0.04	-0.10	-0.02	-0.06
	-0.88	-1.39	-0.57	0.00	-1.13	-2.25**	-0.33	-0.55
NEW	-0.20	0.02	-0.45	-0.03	-0.47	0.39	0.18	-0.62
	-1.36	0.18	-3.30**	-0.16	-2.10**	1.58	0.48	-0.82
AGE	0.08	0.21	-0.17	-0.13	-0.02	0.48	-0.81	-0.58
	0.41	1.16	-0.81	-0.39	-0.06	1.46	-1.25	-0.54
VAR	-0.01	0.13	0.05	0.04	-0.07	0.04	-0.34	0.06
	-0.09	0.97	0.20	0.14	-0.28	0.11	-0.95	0.09

$$LNMSG_{i,t} = \beta_0 + \beta_1 LNREV_{i,t} + \beta_2 STAR_i + \beta_3 GCOMEDY_i + \beta_4 GACTION_i + \beta_5 GSF_i + \beta_6 CRATING_i + \beta_7 DPG_i + \beta_8 DR_i + \varepsilon_{i,t}$$

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
CONST	-21.09	-34.15	-22.82	-34.87	-13.13	-5.61	-5.05	-3.88
	-3.45**	-4.56**	-3.07**	-4.14**	-2.94**	-2.59**	-2.40**	-2.38**
LNREV	1.31	1.88	1.34	1.86	0.88	0.52	0.46	0.37
	4.66**	5.59**	4.09**	5.07**	4.51**	5.35**	5.14**	5.39**
STAR	-0.49	-0.30	-0.29	-0.08	-0.11	-0.19	-0.26	0.08
	-2.31**	-1.62	-1.45	-0.34	-0.47	-0.80	-0.89	0.25
GCOMEDY	-0.69	-0.27	-0.78	-0.42	-0.52	-0.61	-0.54	-0.86
	-2.87**	-1.20	-3.19**	-1.71	-2.09**	-2.28**	-1.61	-2.39**
GACTION	-0.06	-0.03	-0.05	0.15	0.22	0.35	0.77	0.46
	-0.24	-0.16	-0.21	0.65	0.91	1.34	2.35**	1.34
GSF	0.15	0.13	0.45	0.45	0.72	0.89	0.29	0.63
	0.47	0.44	1.52	1.44	2.21**	2.53**	0.66	1.33
DPG	-0.27	-0.05	-0.42	0.10	-0.25	-0.36	0.19	-0.03
	-0.86	-0.17	-1.37	0.28	-0.74	-1.04	0.43	-0.07
DR	0.25	0.57	0.22	0.04	-0.02	-0.17	-0.17	-0.42
	0.94	2.24	0.83	0.16	-0.08	-0.58	-0.50	-1.15
VAR	-0.32	-0.34	-0.03	0.30	0.14	0.10	0.26	0.56
	-1.97**	-2.17**	-0.18	1.18	0.57	0.44	1.05	1.98**
**: $p < 0.05$								

Table 7: Simultaneous Equation between WOM and Box-Office Revenue for the L group (the Unsuccessful Movie)							
$LNREV_{i,t} = \alpha_0 + \alpha_1 LNMSG_{i,t} + \alpha_2 RATING_{i,t} + \alpha_3 SCRN_{i,t} + \alpha_4 CRATING_i + \alpha_5 NEW_t + \alpha_6 AGE_t + \alpha_7 VAR_t + \varepsilon_{i,t}$							
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**
CONST	17.39	19.52	17.32	14.14	13.33	12.16	11.22	9.80
	48.41**	44.41**	39.73**	24.39**	18.50**	13.83**	8.97**	5.56**
LNMSG	0.30	0.02	-0.13	-0.16	-0.21	-0.77	-1.42	-1.27
	3.51**	0.22	-1.06	-0.51	-0.55	-1.44	-1.22	-1.75
RATING	0.06	0.05	0.18	0.30	0.30	0.45	0.48	0.38
	2.32**	1.99**	5.69**	4.47**	4.06**	3.79**	1.96	2.20**
SCRN	0.01	0.01	0.02	0.03	0.05	0.08	0.16	0.28
	6.81**	8.85**	11.31**	7.90**	8.30**	7.46**	4.90**	5.52**
CRATING	-0.05	-0.04	-0.04	-0.07	-0.02	0.05	0.12	0.00
	-4.00**	-2.74**	-1.85	-1.88	-0.55	0.84	1.35	-0.03
NEW	0.01	-0.24	-0.19	0.17	-0.22	0.02	-0.38	1.19
	0.09	-3.15**	-2.00**	0.78	-0.72	0.06	-0.68	1.35
AGE	0.27	-0.09	-0.26	-0.02	-0.02	0.03	-0.04	0.97
	2.95**	-0.93	-2.05**	-0.08	-0.05	0.07	-0.06	1.30
VAR	0.14	-0.04	0.12	0.27	0.35	0.48	1.02	0.92
	1.90	-0.66	1.51	1.83	1.75	1.67	1.49	2.34**
$LNMSG_{i,t} = \beta_0 + \beta_1 LNREV_{i,t} + \beta_2 STAR_i + \beta_3 GCOMEDY_i + \beta_4 GACTION_i + \beta_5 GSF_i + \beta_6 CRATING_i + \beta_7 DPG_i + \beta_8 DR_i + \varepsilon_{i,t}$							
	Week 1	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**	**Week 7**	**Week 8**
CONST	-17.05	-16.26	-8.88	-4.08	-3.10	-3.01	-2.66	-0.62
	-9.12**	-10.13**	-10.26**	-7.89**	-5.97**	-4.59**	-3.36**	-0.61
LNREV	1.09	1.07	0.70	0.42	0.34	0.32	0.30	0.17
	11.53**	13.78**	16.25**	14.65**	10.54**	7.69**	5.31**	2.37**
STAR	-0.09	-0.10	0.01	-0.04	0.05	0.06	-0.02	0.23
	-0.84	-0.93	0.13	-0.34	0.34	0.40	-0.09	1.08
GCOMEDY	-0.36	-0.39	-0.34	-0.30	-0.27	-0.59	-0.27	-0.44
	-3.76**	-4.14**	-3.59**	-2.68**	-2.12**	-3.86**	-1.62	-2.19**
GACTION	-0.33	-0.47	-0.35	-0.08	0.02	0.02	0.19	-0.03
	-3.33**	-4.65**	-3.51**	-0.65	0.18	0.13	1.02	-0.12
GSF	0.00	0.13	0.08	0.14	0.02	0.18	0.22	0.12
	-0.01	0.81	0.52	0.74	0.10	0.79	0.83	0.34
DPG	-0.28	-0.42	-0.54	-0.52	-0.43	-0.29	-0.23	0.04
	-2.23**	-3.40**	-4.37**	-3.55**	-2.78**	-1.63	-1.12	0.15
DR	0.04	0.13	0.13	0.05	0.27	0.20	0.44	0.62
	0.35	1.19	1.11	0.36	1.66	1.10	1.88	2.01**
VAR	0.05	-0.07	-0.06	0.18	0.30	0.35	0.38	0.27
	0.61	-0.93	-0.93	2.79**	4.62**	5.26**	5.12**	2.65**
**: p<0.05							

The authors changed the ratio of successful movie and conducted the same analysis for the robustness like 25% of the sample movie (67.2% of total revenue). The result was almost same as the <Table 5> and <Table 6>.

CONCLUSIONS AND MANAGERIAL IMPLICATION

Some of previous literature on the film industry asserted that the volume, but not the valence of electronic WOM affects revenue (Liu, 2006; Duan et al., 2005). Others argues that the factor which affects the movie revenue is not the volume of eWOM but the valence of it (Chintagunta et al., 2010).

In this study we found three important results. First, we partly support the result of the previous studies (Chintagunta 2010). It was found that the audiences are not affected by the volume of eWOM in their movie-going choices except the first week. In the first opening week, the audiences have little information about the movie, so that they guess how many people watched the movie by checking out the number of eWOM and also check the score of the movie that other audiences evaluate on. From the second week, they check out the score only because they have many ways to get the information about the number of people who watched the movie such as the newspaper. It means that the main factor that affect the movie revenue is the valence of eWOM.

Second, it is found that the relationship between the variable of eWOM volume and revenue cannot be simply regarded as cause and effects in the previous studies(Chintagunta et al., 2010; Liu 2006). It is more appropriate that there is a structure in which increases in eWOM induced by revenue increases cause revenue increase again. Considering endogenous relationship between the volume of the WOM and the revenue, the real cause between these two variables is the revenue. It means that the evaluation on the movie is conducted after the person watched the movie and the volume of eWOM is not the factor that let the audiences go to the theater.

Third, the eWOM effects on the revenue that we verify are not equally applied to all movies. In the case of the successful movie, the audiences have a lot of sources to get the information if the movie is what they like or not. Nowadays we are easily exposed to Facebook, Twitter, You Tube, online community, offline community, newspaper, and etc. The more successful movies are, the more information we can get. It means that we don't have to check out the eWOM information if it is successful movie. But if it is unsuccessful, we have little information about the movie except eWOM on the portal website. The results explains that there is no statistically significant eWOM effect on the revenue in the successful movie which earn the top 50% revenue in the sample movie and eWOM effect on the unsuccessful movie was the same as the first result in the full sample.

The results of this study imply that the film industry needs to recognize electronic WOM as an important channel for customer communication and manage it more efficiently especially if the movies are expected to be unsuccessful. Many companies are investing large amounts of their budget into customer communication costs, and have put effort into improving the awareness of their films, effectively using mass communication in traditional marketing and promotion activities. However, as this study shows that the valence of the WOM regarding a film influences its box-office revenue throughout the full term of its release, focusing more marketing

resources on WOM could prove more efficient than the very costly advertisement campaigns to raise awareness prior to film release. This could be achieved, in one way, by gathering customer feedback in screenings and focusing marketing efforts on groups that show high levels of WOM activity.

However, the validity of the results of this study might be limited to South Korean data, and whether the same applies to data from other countries is a subject for further research. Also future studies should perform analysis taking into account the fact that the volume and valence of WOM can differ greatly according to the targeted audience of a film.

ENDNOTES

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FROM POLITICAL CYNICS TO LOYAL PARTISAN REBELS: THE SYRIAN CASE.

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ABSTRACT

This paper aims to offer a lens to explore conceptually the impact of being cynical with high political sophistication and efficacy in turning such individuals to be partisan rebels against their ruling regime. For that reason, a model that encompass political cynicism, sophistication, and efficacy, endorser's credibility, the brand image, credibility and equity of an opposition party, CPHPSE-opposition party identification, trust, emotional attachment, and rebels loyalty is developed. In building the conceptual model, the researchers adopted social identity theory, emotional attachment theory, sensemaking model, selective perception theory, the associative network memory model, and brand signalling theory. The present study could be the first to explore the impact of the CPHPSE and their social network interpersonal and selective perception of political endorser's credibility, brand image, credibility and equity of an opposition party on CPHPSE behaviour.

INTRODUCTION

The arrest of 15 school children who were inspired by the uprising in Tunisia and Egypt was the straw that broke the strong and patient Syrian camel's back. The domino effect started when some people marched to the streets of the small Syrian town Deraa at March 15, 2011 (BBC 2012). Both the oppositions and loyalists had their aims either to move toward a more democratic country or to repress the demonstrators. Now at this point of time the protesters demand toppling the regime and the execution of the president, but the Syrian regime is trying everything to frighten, spread a negative propaganda and isolate the pro-democracy demonstrators from the outside world (BBC 2012). All for the sake of sustaining for the longest time possible and without any compromise, because what the pro-democracy protesters demands could topple the regime in one way or another (Fisk 2011). From the government perspective there are us and them, whoever demands more democratic constitution are them and this type of people are conspirators, outsiders, germs, armed ganged, and terrorists. As the Assad of Syria for the last decade has established the image of 'rejectionists' for the foreign affaire polices of the country it seems that he is using the same platform in dealing with the protesters, by rejecting their existence.

Political groups on social networking sites have been a key political issue in many Middle Eastern countries. This may be due to the political and psychographic environments of this region; it can be a political discussion arena, and that the act leads the actor(s) to be politically cynical public with high political sophistication and efficacy (CPHPSE). CPHPSE can be defined as a group of individuals who (1) doubt and distrust the intention of their governments; (2) interested and knowledgeable politically; and (3) they feel that their individual actions can and have an impact on the political process. Building on the assumption that partisan rebels in Syria are CPHPSE, the current study aims to (1) build a model that relates political cynicism, sophistication and efficacy with rebel loyalty; and (2) demonstrate the moderating effect of the brand credibility of an opposition party on the rebel loyalty provoked by the endorser's credibility. Achieving these two goals will enable the researchers to identify the effect of the brand image, equity and credibility of an opposition party on the rebels' loyalty through the different routes of influence that the model proposes.

Zakaria (2011) argued that "Today's information technology has the effect of breaking down hierarchies and monopolies. That's got to be good for the individual, and it must be bad for dictatorships". Furthermore, the finding of Weiwu, Thomas, Trent, and Shannon (2010) study revealed that political groups on social networking sites have a positive impact on the public political sophistication and efficacy. The engagement of Syrian CPHPSE with oppositions' political groups on social networking sites could represent a sign of the transformation probability of the CPHPSE to loyal rebels against the Syrian regime.

The political community represents distinguished values, attitudes and beliefs characterizing a political party. Liberty, freedom, majority rule, minority protection, equality, self-government, unity, representation, rule of law, judicial review, separation of powers, secularism, tolerance, individualism, participation, transparency, civil rights and similar concerns are the core values of any democratic institutions (Henderson, 2004). Countries like Syria lack most if not all core values of democracy which make the political groups on the social networking sites a place to fantasize about most of these values. Due to the complexity and the intangibility of the socio-political products offered by an opposition party, studying a particular party's socio-political product can be well-nigh impossible (Egan, 1999). The mixture of future promises, vagueness, uncertainty, and satisfaction are the main components of an opposition party's socio-political products. For this reason, the researchers have embarked upon this study of an opposition party's perceived brand images, equity and credibility. In other words, opposition parties promote intangible and complex socio-political products, making it difficult for the supporters to 'unpack', or separate out, the different parts of the party agendas instead of seeing it as one package. If the party could be dissected in this way, its supporters could evaluate each piece of policy separately rather than the party's overall image. However, at the moment, opposition party supporters have to use the aforementioned method for evaluating political parties (Lock & Harris, 1996). Furthermore, the six aspects of political product are the party prospective, the political party, policies, leader, candidates, issues and services (O'Cass, 2003).

The difficulties to separate between these aspects from the CPHPSE prospective presents the crucial influence the brand image of an opposition party play over CPHPSE political participation decisions. In addition, the brand equity of an opposition party is crucial, because most CPHPSE never have the chance to meet such a party officials. Therefore, they don't have the chance to form direct and unfiltered opinion about the politicians who represent the party they get involved in or attached to (Phipps, Brace-Govan, & Jevons, 2010). However, CPHPSE may expect the quality of the political product to be correlated with the brand name (Erdem 1998). Consequently, CPHPSE rely on the suppliers images, which in this case are the endorser's credibility, brand image, equity and credibility of an opposition party (Phipps, Brace-Govan, & Jevons, 2010; Spry, Pappu, & Cornwell, 2011).

Little work has been done on the contribution of CPHPSE and their social networks selective and interpersonal perception of political endorsers' credibility, brand image, equity and credibility of the Syrian opposition parties. More fundamentally, how politically cynical public who engage in political groups on social networking sites establish and retain high political sophistication and efficacy. This lack of knowledge about the phenomenon provoked the need for this study to provide more evidence on how endorser credibility affects CPHPSE trust, emotional attachments, identifications, and how CPHPSE transform to loyal rebels against their regimes. The current study is expected to contribute to the literature by examining the variables that link the relationship of political cynicism to loyal rebels. This paper is devoted to the study of CPHPSE selective and interpersonal perception. In the following section, the researchers draw on extent research in multidisciplinary areas to elaborate on the effect of being CPHPSE on pledging loyalty to pro-democratic demonstration's movement. The researchers then presents the conceptual framework that offers propositions and a model that indirectly relates the cynicism and rebels loyalty, in which the effect of CPHPSE is mediated by the brand image, equity, and credibility of an opposition party, endorser's credibility, CPHPSE-opposition party identification, trust, and emotional attachment.

THE PROPOSED MODEL

The model advanced here (see Figure 1) is based on the social identity theory, emotional attachment theory, the interpersonal sensemaking model, selective perception, social networking, the associative network memory model from cognitive psychology, and brand signalling theory from information economics.

Figure 1. The Conceptual Model

Social Identity Theory

Social identity theory is a theory of behaviour and group membership (Hogg, Terry, & White, 1995). It was created to make sense of the way people within an environment try to make sense of themselves. Basically, it is a sub-theory of social cognition. This research will contribute to the literature of the social identity theory (Tajfel & Turner, 1985) by demonstrating the relevant role of CPHPSE-opposition party identification on the effect of the opposition party's selectively and interpersonally perceived brand image on rebels' loyalty.

Emotional Attachment Theory

The emotional attachment theory explores how people tend to establish, maintain and enhance emotional ties with another particular person or group (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1994). The present study will contribute to the emotional attachment theory by presenting the relevant influence of CPHPSE-opposition party emotional attachment on CPHPSE trust, which then has an affect on the rebellion loyalty

Interpersonal Sensemaking Model

In general, people have an innate motivation to interpret and make meaning of the information around them (Baumeister & Vohs, 2002). However, there is a significant gap in people's understanding of political information (Wrzesniewski, Dutton, & Debebe, 2003). The sense of meaning, which CPHPSE get from an opposition party's information, is tied to their attitude towards that party (Lodahl & Kejner, 1965; Vecchio, 1980; Mow International Research Team, 1987; Roberson, 1990). The sense of satisfaction from being affiliated with this type of parties can be linked to their understanding of the meaning of the party's propaganda and activities (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). An alternative approach to understanding the process of organizing was developed by Weick (1995). He called that approach 'sensemaking'. Studying the mechanism used by individuals and organizations to give meaning to an event is the focus of the sensemaking approach. Weick (1995) proposed a framework that provides explanations for the way individuals and organizations make sense of their environment (Mills, Thurlow, & Mills, 2010).

The meaning CPHPSE derive from their sensemaking about an opposition party is mainly influenced by the following factors: 1) the CPHPSE individual values (Nord, Brief, Atieh, & Doherty, 1990), 2) their needs (Alderfer, 1972), 3) the characteristics of the mission that is required of members (Hackman & Oldham, 1976; Hackman & Oldham, 1980), 4) the individual's level of commitment to the party's cause (Loscocco, 1989; Morrow & Wirth, 1989; Meyer & Allen, 1997), and 5) the level of the individual's engagements with it (Kahn, 1990; Rothbard, 2001; Wrzesniewski, Dutton, & Debebe, 2003). Building on Wrzesniewski, Dutton

and Debebe's (2003) model of interpersonal sensemaking, the researchers suggest that CPHPSE create their own meaning through sensemaking of the cues they receive. The sensemaking process in this study starts with a CPHPSE noticing an opposition party's propaganda and activities. It proceeds with CPHPSE making sense of the cues from the propaganda and activities, and then imputes a specific position, role and self-meaning from this interpretive effort.

Based on that model, the sensemaking process starts with CPHPSE noticing the interpersonal cues in the opposition parties' propaganda and activities (Wrzesniewski, Dutton, & Debebe, 2003). The researchers suggest calling this CPHPSE 'interpersonal cue'. It is worthwhile to mention that the CPHPSE interpersonal cues are received either through direct interaction with an opposition party's members or through indirect exposure to the opposition parties' propaganda and activities. Either way, the CPHPSE interpersonal cue is an important stage of their sensemaking. The researchers define the interpersonal cues in this study based on the symbolic interaction researchers' definition of the line of action; it is defined as the process CPHPSE go through while interpreting an opposition party's on-going actions and propaganda (Blumer, 1966; Prus, 1996). These cues, therefore, are essential chunks of an opposition party's activities and propaganda in that they carry signal values of how CPHPSE may view the party and its members.

Through the interpersonal cues, a process of interpretation is activated within CPHPSE. The interpretation process is the combination of three sequential elements: noticing, discerning affirmation or disaffirmation (Wrzesniewski, Dutton, & Debebe, 2003), and establishing a position toward an opposition party. Although an opposition party's activities and propaganda generate a continuous outflow of materials, the researchers suggest that not all of this material might be noticed by CPHPSE, and even less material is interpreted so as to gain meaningful information. However, based on Weick's (1995) book, even if CPHPSE are barely aware of an opposition party's activities and propaganda, they could extract some cues for future exploration. After noticing the cues, CPHPSE determine whether they affirm or disaffirm the cues (Wrzesniewski, Dutton, & Debebe, 2003). A positive response to cues indicates that an opposition party's propaganda and activities are perceived by CPHPSE to communicate the following: care, competence, worth or any other attribute that may make members feel significant. However, interpreting the cues to be negative implies that the recipients might perceive an opposition party to lack significance, zeal, competency or some other essential attribute. The final step in the process of interpretation is to make sense of an opposition party's propaganda and determine its reasons. Building on Wrzesniewski, Dutton, and Debebe's (2003) model concerning how an individual determines the motives and meaning of an opposition party's cues, the CPHPSE either increase or decrease the level in which they affirm or disaffirm that party's propaganda and activities.

The last phase of this model is to link the relationship between interpersonal sensemaking and the meaning of an opposition party propaganda and activities. One must determine how the

affirmation or disaffirmation of the interpreted cues translates into changes in the meaning of an opposition materials. Interpersonal sensemaking in this case has a major impact on how CPHPSE may evaluate certain opposition party, their roles, and their own self-meaning in light of their imputed evaluation of an opposition party's propaganda and activities.

Selective Perception

From social psychologist perspective, selective perception reflects that we often see what we want to see, and we mainly pay attention to others with similar perspectives (Norris & Lovenduski, 2004). If this common psychological mechanism operates among CPHPSE who perceive political demonstrations to be positive, it suggests that they may exaggerate how far certain opposition party shares their beliefs, and as a result they pay most attention to indicators that confirm positive support ('the Syrian National Transitional Council (SNC) represents a democratic coalition of opposition parties to which I belong'), and discounting contrary evidence ('but you can't trust the local media campaigns against this coalition'). If selective perception plays an important role for CPHPSE and opposition parties in Syria, this theory suggests that opposition parties may have successfully recruited some of the CPHPSE who selected to perceive the positive traits of an opposition party and its leadership.

Social Networking

Ormerod and Wiltshire (2009) suggested that individuals tend to relate to others among their social groups like friends, family members, and colleagues. Building on Ormerod and Wiltshire's (2009) ideas, CPHPSE could be influenced by members of their social groups in making sense about certain opposition party's activities and propaganda. Therefore, members of their social group may play an important role in affirming/disaffirming certain opposition party's cues. Based on Wrzesniewski, Dutton, and Debebe's (2003) model of sensemaking and Ormerod and Wiltshire's (2009) study, CPHPSE social networking can affect their position toward certain opposition party.

Associative Network Memory Model

According to one of the associative models, the memory consists of a set of nodes and links (Wyer & Srull, 1989). Stored information represents the nodes which connect with the others by links of varying strengths. A "spreading activation" process connects one node to another and determines the extent of retrieval provoked by the recognition of any cue by the CPHPSE and it could happen even if CPHPSE simply think about an opposition party (Keller, 1993). The conceptualizations of memory structure which involve associative models represent the most widely accepted work in this field. Brand equity was conceptualized by Keller (1993)

using the associative memory model. The model encompasses two components: brand awareness and brand knowledge. The process of perceiving and establishing the brand equity can be described through the associative network memory model (Keller, 1993), CPHPSE and their social network interpersonal sensemaking (Wrzesniewski, Dutton, & Debebe, 2003; Ormerod & Wiltshire, 2009), and selective perception (Norris & Lovenduski, 2004).

Meaning Transfer Theory

Meaning transfer theory is the theory that helps in predicting the effectiveness of certain endorsement (McCracken, 1989). The theory takes in account the endorser's characteristics that interact with the endorsed subject's characteristics which can help in predicting the effectiveness of the endorsement. McCracken's (1989) theory implies that an endorser could have different effects and meanings. As a result, the success of the endorsement relies on the matches between the endorser's character and the endorsed subject's character. In addition, he argued that there are two ways in which the endorsement transfers the meaning behind it. First, the transfers of meaning from the endorser to the endorsed subject, which CPHPSE in this case do voluntarily. Second, transfer of meaning/meanings from the endorsed subject to CPHPSE. Therefore, the effectiveness of the endorsement is the outcome of the meanings the endorser delivers to the endorsed subject. It is safe to suggest that the political expertise of the endorser could be one of the most effective meanings this type of individuals can deliver to the endorsed party and to CPHPSE thereafter. However, every single celebrity is a complicated mix of characteristics and meanings. Therefore, the success of a celebrity's endorsement is mainly the result of transferring the meanings of the appropriate aspects of the endorser's associations to the party and its agendas. This research will contribute to the literature of political endorsement by combining the meaning transfer theory, the associative network memory model, selective perception, social networking, and brand signalling theory. That is expected to demonstrate the relevant role of politically expert celebrity's endorsement on the brand image and credibility of an opposition political party and its brand equity.

Loyalty

Hirschaman's (1970) definition of loyalty left enough room for multiple interpretations (Dowding, John, Mergoupis, & Van, 2000). He argued that loyalty is the "special attachment to an organization" (P.77). A stream of studies followed the publication of Hirtschaman's book; these studies came from disciplines of psychology and sociology in the areas of organization commitment (Mowday, Steers, & Porter, 1979; Meyer, Allen, & Smith, 1993), social network analysis (McPherson, Popielarz, & Drobnic, 1992; Burt, 2001) and social attachment (Pauksztat, van Duijn, & Wittek, 2011). In addition, Brewer and Silver (2000) defined group loyalty as: the will of a member of a group to pay effort, cost, and sacrifices on behalf of that group. Based on

these insights to the concept of loyalty, the researchers propose a definition for rebels' loyalty as: the attitude, social relationship and emotional attachment that provoke CPHPSE to pay the ultimate effort, cost, and sacrifices to achieve the objectives and missions of their opposition parties.

POLITICAL CYNICISM

Political science researchers defined political cynicism in terms of trust and the concept holds few meanings. Strong political cynicism refers to "distrust" or "contempt"; mild political cynicism reflects "doubt" or "disappoint" (Leon, Shawn T., & Elaine, 2010). Public cynicism varies from ardent to mild (Berman, 1997). Ardent cynics are those who strongly distrust, are critical of and paranoid about the intentions of their government (Janine, Stuart, & Richard, 2010). Milder cynics are those who obtain less hostile beliefs and are more evidence-based about their government, political parties and politicians (Berman, 1997).

In countries that like Syria, political pages on social networking sites could provoke public distrust and cynicism about politics and politicians. The resulted cynical attention reduces civic engagement and political participation (De Vreese, 2005). In countries where local newspapers used to spread governmental propaganda, people who consider their local newspaper and news channels as the main source of political information might be less cynical than those who rely on various sources like global magazines, news channels and political pages on social networking sites. In countries that lack democratic participation, the use of Internet to gather political information could increase the level of political cynicism. This can be a result of the variety of online sources of political information and the rise of hacktivism and leaked diplomatic secrets.

Unlike political trust, cynicism is derived from doubting the government and politicians (Janine, Stuart, & Richard, 2010). There are two forms of cynical expressions; first type is derived from the public perception of the government inability and/or unwillingness to deliver its promises, which result public dissatisfaction; second type is derived from public perception that their government and politicians have bad intention when they deal with people (Barber, 1983). Integrity, purpose and effectiveness of the local government are the main determinants of the political cynical attention of the public (Starobin, 1995; Janine, Stuart, & Richard, 2010). The public is said to be cynical about their government when they perceive that their government is not acting for their interest or being involve in public injurious behaviour (Govier, 1994; Janine, Stuart, & Richard, 2010). Examples of such behaviour are the consequences of emergency laws, supporting terrorist organizations in other countries, and the lack of economic reforms.

Political sophistication is a trigger to three factors: strong capability in assimilating and processing political data, motivator for being politically up to date, and the desirable exposure to political information (Luskin, 1990). One can argue that the level of exposure to political information is positively influenced by the availability of such information (Caroline, Ramona,

& Daniel, 2003). Social networking may create additional opportunities for learning about politics, thus increasing political knowledge and sophistication. Social networking sites may provide an alternative for face to face interaction. The time people spend on social networking sites may enhance their political knowledge, hence it provides its users with the ability to exchange thought and create dialogues. Such interaction has a significant role in political learning, attitude formation, and behaviour (MacKuen & Brown, 1987; Huckfeldt & Sprague, 1995; Weiwu, Thomas, Trent, & Shannon, 2010). Since milder cynicism is evidence-based, milder cynics rely on political information to address their position toward their governments. Therefore, milder cynics are those with better political knowledge, and consequently higher political sophistication. In countries like Syria people with higher political sophistication are expected to be cynical about their governments. Since milder cynics are evidence-based people, the more information they get, the more cynical they get. In this case milder and ardent cynics could share similar attention toward their governments. The cynical behaviour of social networkers could lead them to become more evidence-based individuals, which may enhance their political knowledge and sophistication. As a result, cynicism is positively related to political sophistication, because cynicism could be an indicator of political interest and knowledge. Therefore:

> P1   *The higher overall political cynicism of social networkers the greater their political sophistication.*

POLITICAL SOPHISTICATION

Political sophistication can be defined as the combination of both political interest and knowledge (Daniel, 2005). Highly sophisticated public are more engaged in politics, they gain information from various sources, such as social networking sites. In the contrary, public with lower political sophistication does not display significant effort to engage and/or to gain political information. Social networking sites in part can play the role of a biased local government media and/or an independent global one. Such diversifications can serve the public to evaluate and validate political information, which could cover the knowledge gaps.

Political interest can be defined as ''a citizen's willingness to pay attention to political phenomena at the possible expense of other topics'' (Lupia & Philpot, 2005, p. 112). Effective public uprising depends on the public interest in the political process. Higher public political interest is significantly influenced by the level of their political knowledge (Delli Carpini & Keeter, 1996). Political knowledge is the result of education, interpersonal discussion, and the news media (Kenski & Stroud, 2006). Political knowledge is a trigger for the need to participate in the political process (Delli Carpini & Keeter, 1996; Jennings & Zeitner, 2003). In countries like Syria, public disobedience through protesting could be the only way to participate politically. Social networking sites can be an effective communication tool to engage with the

Cynical Publics who have High Political Sophistication (CPHPS), it can provide the oppositions of the ruling regime with the chance to stimulate the CPHPS political interest.

Political efficacy can be defined as ''the feeling that political and social change is possible, and that the individual citizen can play a part in bringing about this change'' (Campbell, Gurin, & Miller, 1954, p. 187). Public political efficacy is crucial for political participation, because after the public perceives the value of engaging in the political process they may feel that they are capable of bring about changes (Abramson & Aldrich, 1982). Janine, Stuart, and Richard (2010) suggested that cynical public can be also politically interested, which enhances the level of their political efficacy (De Vreese, 2005). Public political sophistication positively contributes to their political efficacy. The CPHPS retains strong sense of political efficacy. Therefore:

> *P2: The higher the political sophistication of the public, the more likely they sense stronger political efficacy.*

POLITICAL EFFICACY

Political efficacy refers to "the feeling that individual political action does have, or can have an impact on the political process" (Campbell, Gurin, & Miller, 1954, P187). Social networking sites could help in increasing the public political efficacy by providing social networkers with the ability to interact with the opposition political active groups (Lee, 2006; Weiwu, Thomas, Trent, & Shannon, 2010). Furthermore, social network websites ease the public engagement with the opposition bodies by providing them with a communication tool to increase the pressure on their local regime.

The political efficacy of the public has strong political impact. It was argued earlier that the political efficacy of the public is influenced by their political sophistication. Since politically sophisticated public are interested and knowledgeable with regards to politics, those with high political efficacy are the ones who engage in political discussion online/offline. With regard to the Syrian case, the public is paranoid from the regime. It can be observed from various statements of Syrian nationals that political paranoia is the usual mental state of everyday life, like the statement of the Syrian activist Ahed Al Hendi: "people in Syria adopt two faces. One face they reveal to their families and their circles of trust. And the other they show people they don't know because they assume they're secret service. It's like living in a prison. Every single word could be counted against you" (Mike, 2011). In this case online political discussion would be an alternative to satisfy the socio-political needs of the CPHPSE.

One can argue that political online discussions can positively influence political activities, cognition and social needs (Hardy & Scheufele, 2005; Moy, Manosevitch, Stamm, & Dunsmore, 2005; Weiwu, Thomas, Trent, & Shannon, 2010). Furthermore, the online chatting about politics could enhance the political behaviour and attitude (Johnson & Kaye, 2003; Moy,

Manosevitch, Stamm, & Dunsmore, 2005; Kaye & Johnson, 2006). People who visit the opposition figures' profiles on Facebook may do so to meet other supporters of the public figure, to find out what other people have to say about such political celebrity, and to engage in discussion with the political celebrity and his/her supporters. People could rely on social networks to collect information about the opposition political celebrities to make decisions of whom to support (Papacharissi & Mendelson, 2008; Postelnicu & Cozma, 2008; Weiwu, Thomas, Trent, & Shannon, 2010).

Milder CPHPSE may verify the political information they get online. Therefore, they would be able to identify credible sources of information. The political endorsers of oppositions' parties should be credible in order to satisfy the needs of people with high political efficacy. The believability of political endorser by the public is an indicator of his/her credibility. Consequently, the CPHPSE would focus on credible endorsers that oppositions employ to promote their causes and agendas. Therefore:

> *P3:* *The higher the overall political efficacy of the public, the greater the reliance on credible political endorsements.*

> *P4:* *The higher overall political sophistication of the public, the greater the reliance on credible political endorsements.*

ENDORSER'S CREDIBILITY

The political endorsement of an opposition party can be defined as the act of backing an opposition party by a celebrity who has public recognition (McCracken & Grant, 1989). Political celebrities can use their personal qualities of attractiveness, likeability, reputation, and believability to endorse certain political party (Atkin, 1983; Nelson, 1974). Opposition parties may influence the CPHPSE perception using credible political endorsers (Barbara & Ronald, 1999). The credibility of political celebrity is the combination of physical attractiveness, trustworthiness, and experience (Ohanian & Roobina, 1990). The credibility of the endorsers can influence some properties of an opposition party's brand image. Political celebrity endorsement is a widely used strategy; whereby political celebrities can use their endorsements as a promotional tool. Political celebrity endorsements for the opposition parties can be seen as the expert opinions, spokesperson's presentations for an opposition party, or just being associated with opposition party's activists (McCracken & Grant, 1989; Seno & Lukas, 2007). Forms of endorsements are explicit (I endorse this party), implicit (I will protest against the regime party), imperative (you should revolt against the regime party), and co-preventative (merely appearing with the oppositions parties activists). The "association transfer" or a "meaning transfer" happens during the political celebrity endorsement through the unmediated relationship between such a politician and the endorsed party. This type of promotional strategy allows an opposition

party to transfer the perceived quality of the endorser to its perceived quality, which can improve their perceived brand image, therefore:

> P5:   *The greater the overall credibility of political endorsement of an opposition party perceived by the CPHPSE, the more positive the brand image of that opposition party.*

Brand Credibility of an Opposition Party

The brand credibility of an opposition party can be defined as the believability of the positioning information of a party as part of its brand. This implies consistently delivering what is promised (Erdem & Swait, 1998; Erdem, Swait, & Jordan, 2002). Political parties may use various marketing mix to send more signals about the quality of their political product, these signals can be credible or incredible based on the political market condition. Therefore, brand credibility of an opposition party reflects all the individual marketing mixes which have been used by a party to market its political products (Erdem, Swait, & Jordan, 2002). Since political celebrity endorsement is commonly used as a promotional tool by political parties, the signals derived from such endorsement can affect the brand credibility of the parties. Spry et. al (2011) stated that, the credibility of endorser has a significant impact on the credibility of the brand. Therefore, using credible endorser should enhance the brand credibility of the opposition parties. Brand investment of an opposition party is an indicator of brand credibility, because parties that make large brand investment are mostly the ones that deliver their promised political product. Therefore:

> P6:   *The credibility of political celebrity endorsers of an opposition party has a positive impact on the brand credibility of the endorsed party.*

BRAND IMAGE OF OPPOSITION PARTIES

Arising from the difficulties in unpacking the socio-political products, CPHPSE could make their versions of meanings about the socio-political product bundle offered by an opposition party using their interpersonal sensemaking (Wrzesniewski, Dutton, & Debebe, 2003), selective perception (Norris & Lovenduski, 2004), and the confirmation from their social networks (Ormerod & Wiltshire, 2009). This could be value-based (Wrzesniewski, Dutton, & Debebe, 2003) and/or emotional-based (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1994). In the socio-political products market, many people have abnormally homogeneous perception of the political parties' characteristics (Holbrook, 1995).

Opposition parties are organizations whereby politicians communicate information and announce promises seeking recruits and support (Harris & Lock, 2001). The term political party

brand is currently a conventional concept and part of the overall branding in the consumer marketing (French & Smith, 2008; Almohammad, Hatamian, Abdul Wahid, & Haron, 2011). As Keller (2005, P. 151) stated, "branding principles have been applied in virtually every setting where consumer choice of some kind is involved, e.g. with physical goods, services, retail stores, people, organizations, places or ideas".

In the context of this study, the brand image of an opposition party can be defined as the perception held by the CPHPSE selectively and interpersonally about that party brand's association (Keller, 1993). In this sense, brand image can play a significant role in directing Syrian CPHPSE preferences and choices and enabling them to differentiate between opposition parties and the ruling one (Aaker, 1991; Tybout & Sternthal, 2001; Kapferer, 2004; French & Smith, 2008). The brand of both politicians and parties have been studied and differentiated in previous studies (Kavanagh, 1995; Kotler & Kotler, 1999; Harris & Lock, 2001; Smith, 2001; White & de Chernatony, 2002; Schneider, 2004; Needham, 2005; Needham, 2006; Reeves, de Chernatony, & Carrigan, 2006; Scammell, 2007; French & Smith, 2008; Almohammad, Hatamian, Abdul Wahid, & Haron, 2011). These differentiations allowed the researcher to rely on the literature of politicians and parties in describing brand image and equity of an opposition party.

The CPHPSE are rational and economic actors when they decide which party to follow (Downs, 1957) and they could be influenced by their class affiliation. However, most of the people in Syria are not highly involved with political parties; their involvement is limited, due to the costly aspect of gathering political information in terms of the efforts required to assess it and how motivated they are to do so. For opposition parties seeking for recruits, they should be perceived by millions as well-known and fulfilling in their political offers (Kirchheimer, 1966; French & Smith, 2008). Brand image can play a significant role in directing the preferences, choices, and it enables the CPHPSE to differentiate between competing partisan political offers.

In the context of Syrian opposition parties, CPHPSE interpersonal sensemaking (Wrzesniewski, Dutton, & Debebe, 2003) plays an important role in determining the noticed cues of an opposition party image and value. As the process of sensemaking proceeds, the CPHPSE discern whether the cues are affirming or disaffirming. The researchers suggest that the CPHPSE selective perception and social networks play a critical influence in the determination of nature of cues. In addition, the determination of their position toward an opposition party creates nodes in their memory which mainly determine the final perceived brand image and equity that party. In this sense and building on Phipps, Brace-Govan, and Jevons's (2010) ideas, the brand equity of Syrians' opposition parties are mainly influenced by their brand image. Hence, the perceived brand image of an opposition party (Syrian Democratic People's Party, Communist Labour Party) often dominates a significant part of the brand equity of the party, therefore:

> *P7:   The greater the brand image of an opposition party associations perceived*
> *by the CPHPSE, the more positive the brand equity of that party.*

Opposition's parties influence CPHPSE perception through their unique socio-political attributes and distinctiveness (Albert & Whetten, 1985; Almohammad, Hatamian, Abdul Wahid, & Haron, 2011). The degree to which CPHPSE identify themselves with an opposition party is influenced by the mental picture of that party identity (Bergami & Bagozzi, 2000; Dutton, Dukerich, & Harquail, 1994). Based on the social identity theory and self-categorization theory, people realise their social categories from its multitude. In addition CPHPSE selective perception (Norris & Lovenduski, 2004), interpersonal sensemaking (Wrzesniewski, Dutton, & Debebe, 2003), and social networks (Ormerod & Wiltshire, 2009) provide them the aptitude to link the associated opposition party to the multitudes of their social categories. This provides them with the sense of belonging based on their self-definition (Tajfel, 1988). Based on their self-concept, interpersonal sensemaking and their social networks, CPHPSE perceive selectively the characteristics of an opposition party and they may adhere to that party if it could enhance their self-esteem (Scott & lane, 2000; Wrzesniewski, Dutton, & Debebe, 2003; Norris & Lovenduski, 2004; Ormerod & Wiltshire, 2009). CPHPSE-opposition party identification refers to the psychological match between CPHPSE and an opposition party. This identification happens when CPHPSE selectively perceive, interpersonally make sense of an opposition party's positive meanings, and confirm the meaning with their social networks. That validates the matches between themselves and a particular opposition party (Wrzesniewski, Dutton, & Debebe, 2003; Norris & Lovenduski, 2004; Ormerod & Wiltshire, 2009). Previous research on organization identification, and interpersonal sensemaking showed organization perceived brand image influences the way people perceive the identity of that organization (Weick, 1995; Wrzesniewski, Dutton, & Debebe, 2003). Such perception enhances CPHPSE-opposition party identification (Lichtenstein, Drumwright, & Braig, 2004; Maignan & Ferrell, 2004; Sen & Bhattacharya, 2001). The party objectives, in terms of economic growth and foreign affair policies reflect a responsive image of the party to the CPHPSE who are aware about these issues. CPHPSE interpersonal sensemaking, selective perception, and the confirmation with their social networks are the main determinants for CPHPSE to realise an opposition party identity and the matches between themselves and a specific opposition party (Wrzesniewski, Dutton, & Debebe, 2003; Norris & Lovenduski, 2004; Ormerod & Wiltshire, 2009). Therefore, CPHPSE display higher levels of identification with such opposition party to satisfy their socio-political needs (Scott & lane, 2000).Therefore:

> P8: *The greater the brand image of an opposition party perceived by the CPHPSE, the greater the CPHPSE-opposition party identification.*

BRAND EQUITY OF OPPOSITION PARTIES

The brand equity of an opposition party in the context of the current study can be defined as the perceived value of that party brand name which is added by CPHPSE. This value is

generated from cues noticed by CPHPSE, interpersonally, about the significance of an opposition party. In addition, CPHPSE selective perception, social networks and the rest of the elements of CPHPSE interpersonal sensemaking assist them to determine their position towards a certain opposition party, that party role, and generate self-meaning which later could be validated by their social networks. Based on the associative network memory model, these validated self-meanings create nodes in the memory of CPHPSE. According to Keller (1993) the created nodes are the elements of brand knowledge which is the essence of the brand equity of an opposition party (CPHPSE based-brand equity).

The perceptual value added by CPHPSE to an opposition party brand can influence their sensemaking and selective perception of other aspects of that party. In this study, CPHPSE selective perception, interpersonal sensemaking, and social networks are the underlying basis of their memory of the brand equity of an opposition party. The memory structure and the process of memory have been studied under the literature of cognitive psychology. The conceptualizations of memory structure which involve associative models represent the most widely accepted works in this field. Brand equity has been described by many authors in terms of brand knowledge (Keller, 1998). The condition in which CPHPSE are familiar with an opposition party brand is when they recall some favourable, strong, and unique brand associations. That represents the selective and interpersonal perceived brand equity of an opposition party. Brand equity was conceptualized by Keller (1993) using the associative memory model, which is about two components: brand awareness and brand knowledge. Based on the CPHPSE interpersonal sensemaking model, selective perception, social networks, and associative network memory model, CPHPSE may establish awareness about a certain opposition party brand. That awareness could be the outcome of created meaning of the propaganda and activities of that party. Then these CPHPSE are expected to build on this foundation to craft a salient image composed of a group of positive associations about that party brand.

Based on the CPHPSE interpersonal sensemaking model, selective perception, social networks, meaning transfer theory, brand signalling theory, and associative network memory model, the announcements of an opposition party officials like Abdel Hamid Al Atassi (representative of the Syrian Democratic People's Party) can be a trigger of brand recall and recognition, because the meanings and the personal qualities of Al Atassi could create a brand node by establishing additional nodes to some of the Syrian democrats memories. Furthermore, when CPHPSE get exposed to the oppositions call for public disobedience and its importance, they may establish deeply rooted memories through their selective perception, interpersonal sensemaking, and the validations from their social networks about the significance of the oppositions' calls for the unrest.

The brand credibility of an opposition party could improve its brand equity. Based on the signalling theory, the brand equity of an opposition party can be built by the brand credibility of that party (Erdem & Swait, 1998; Spry, Pappu, & Cornwell, 2011). The brand credibility of an

opposition party can result in low political information gathering costs, lower perceived risks, and higher selectively perceived political product quality. These outcomes through their enhancement of the interpersonally and selectively perceived quality of the party would transfer the objective quality to perceived subjective quality (Erdem, Swait, & Jordan, 2002; Spry, Pappu, & Cornwell, 2011). Therefore, the brand credibility of an opposition party leads to a higher expected performance by that party. This may result in more selectively and interpersonally perceived added value to the political product from the CPHPSE and their social networks perspectives. In addition, the brand credibility of an opposition party is very crucial, without it, the most credible political endorser will not be effective in enhancing the brand equity of an opposition party. Therefore:

> *P9:*   *The brand credibility of an opposition party has a positive impact on the*
> *brand equity of that party.*

Based on CPHPSE interpersonal sensemaking model, selective perception, associative network memory model, brand signalling theory, and the validations from their social networks, the endorsement of political celebrity may trigger brand recall and recognition, because it signals cues to the CPHPSE about an opposition party image and value. Then CPHPSE discern whether the cues are affirming or disaffirming. The researchers suggest that the endorsers' credibility play a significant role in the determination of nature of the signalled cues. In addition, the determination of their position toward certain endorser establishes additional node to the CPHPSE memory. In this sense, if the credibility of the political celebrity is strong, the CPHPSE would have a deeply rooted memory about the endorsed opposition party brand. For example, Burhan Ghalioun (the chairman of the Syrian Opposition Transitional National Council (SNC)) could be perceived to be trustworthy among the partisan CPHPSE. Therefore, when Ghalioun endorsed the illegitimacy of the Syrian regime, the CPHPSE interpersonal and selective perception of the brand credibility of the oppositions' parties under the SNC coalition was likely to be positively affected. Marketers control associated memory about their brands by managing the brand equity (Keller, 1993; Spry, Pappu, & Cornwell, 2011). Researchers claimed that strengthening brand equity can be a result of enhancing secondary association like the endorser entity (Keller, 2005; Spry, Pappu, & Cornwell, 2011). For instance, endorsement by the activist of the Syrian civil society, Suhair al-Atassi, who is trusted by the Syrian Democrats, may enhance the Syrian Democratic People's Party brand by communicating associations such as "high performing" and "reliable". The exposure of the CPHPSE to the endorsement could provoke them to make selective and interpersonal cognitive match between the association of the political celebrity and the endorsed party brand. This match may enhance their positive judgment about the perceived brand quality of an opposition party. In this case, the political celebrities act as external stimulus to provide more information about the political product attributes and quality. This information probably allows the CPHPSE to eradicate their uncertainty with regard

to the future performance of the party's political product. Consequently, strong endorser's credibility has a positive influence on the brand equity of the endorsed brand, Therefore:

> *P10:*   *The credibility of a political celebrity endorser has a positive impact on the brand equity of the endorsed opposition party.*

> *P11:*   *Brand credibility mediates the relationship between endorser credibility and the brand equity of the endorsed opposition party.*

The brand equity of an opposition party is the differential effect of the brand knowledge of that party on CPHPSE response (Keller, 1998). The degree to which CPHPSE prefer an opposition party brand is directly related to the brand equity of that party (Keller, 1998). However, the brand equity differs from the CPHPSE loyalty to an opposition party. Furthermore, Aaker (1991) acknowledged that loyalty can be considered as both a dimension and outcome of brand equity. Building on Keller (2003) and Aaker's (1991) ideas, the researchers suggest that the stronger the brand equity of an opposition party the more loyal the CPHPSE will be to that party. Loyalty in this case refers to the attitude and social relationship attachments that provoke CPHPSE to pay the ultimate effort, cost, and sacrifices to achieve the missions and objectives of an opposition party. As a result, the loyalty means that CPHPSE become devoted rebels against the ruling regime. Therefore:

> *P12:*   *The more positive the brand equity of an opposition party, the more likely the CPHPSE are to be loyal rebels against their local regime aiming to bring about their partisan demands.*

CPHPSE-OPPOSITION PARTY IDENTIFICATION

The researchers define the identification with an opposition party as the degree to which CPHPSE and their social networks define themselves by the same attributes that define that party (Dutton et al., 1994; p. 239). The strength of CPHPSE perceptual connectedness to an opposition party is related to the extent the opposition party is interpersonally and selectively perceived by CPHPSE and their social networks to be motivated to achieve its partisan's objectives and the partisan willingness to display the ultimate sacrifice to achieve the announced missions and objectives (Dutton et al., 1994; Kramer, 1993; Mael & Ashforth, 1995).

From marketing perspective, CPHPSE establish meaning and definition of their identity selectively and interpersonally through their brand preference, choice and engagement (Belk, 1988; McCracken, 1986). The level of the CPHPSE-opposition party identification depends on the degree to which that party or brand is selectively and interpersonally perceived by the CPHPSE and their social networks as a partner (Fournier, 1998) or as a reference group (Escalas

& Bettman, 2005). Similarly, the attraction theory (Berscheid & Walster, 1969; Byrne, 1971), social identity theory (Tajfel & Turner, 1979), self-categorization theory (Turner, 1985), CPHPSE selective perception, and interpersonal sensemaking model are combined to argue that CPHPSE and their social networks are attracted to, prefer, and support relationships with others with similar characteristics in order to enhance their self-esteem and maintain stable self-identity. Interaction in this case is preferable with others who have similar attitudes, values, activities, or experiences (Kunda, 1999).

The studies on self-identity (Ryder, Alden, & Paulhus, 2000), social identity (Tajfel & Turner, 1985), organizational identification (Pratt, 1998), brand identification (Curlo & Chamblee, 1998), corporate identity (Simõ̃es, Dibb, & Fisk, 2005), the CPHPSE selective perception, and interpersonal sensemaking portray that the identification concept can be related to CPHPSE who are affiliated with politically sophisticated social networks and an opposition party thereafter. The definition CPHPSE identification with an opposition party is derived from Dutton et al.'s (1994) definition of the "organizational identification" as the perceptual links between the identified opposition party and both the CPHPSE and their social networks. In this study, the term of identification has been moved from the employee and customer perspectives to CPHPSE. Considering this movement, CPHPSE and their social networks are key stakeholders who play a significant role in establishing the reputation of and identification with an opposition party.

CPHPSE-opposition party identification is an optional and selective perceptual factor from CPHPSE and their social networks sides which, favourably or unfavourably, leads them to engage in partisan-related behaviour (Bhattacharya & Sen, 2003). CPHPSE-opposition party identification is the level of interpersonally and selectively perceived matches between CPHPSE self-conception and their perception about an opposition party. Therefore, identification is a significant influential factor: CPHPSE who identify themselves with an opposition party are probably loyal patrons of that Party (Bhattacharya et al., 1995).

When CPHPSE and their social network establish identification with an opposition party, they may perceive a sense of attraction to relate and define themselves in terms of that party (Mael & Ashforth, 1992). Bhattacharya & Sen (2003) suggested that identification is "the primary psychological substrate for the kind of deep, committed, and meaningful relationships" (p. 76). If the CPHPSE interpersonal and selective perception about an opposition party becomes self-referential or self-definitional they are said to be identified with that party (Pratt 1998). Although identification develops and grows over time, CPHPSE can identify themselves with an opposition party that is yet unknown to them (Marin, Ruiz, & Rubio, 2009). This type of identification happens when CPHPSE and their social networks believe that an opposition party shares the same values. For instance, if CPHPSE sense that an opposition party shares the same concern about the foreign interventions in the country to topple the ruling regime they may feel an instant sense of connectedness and identification with that party.

CPHPSE and their social networks are more attached and concerned about an opposition party when they identify themselves with it. Recent studies showed that people behaviour is positively influenced by the identification (Ahearne et al., 2005; Bhattacharya & Sen, 2003; Sen & Bhattacharya, 2001; Almohammad, 2010). CPHPSE who identify themselves with an opposition party behave in a way that supports its missions and objectives. The range of identification driven behaviour includes the actions of the party promotion, resilience to negative information about that party, and probably the transformation to loyal rebellion against the ruling regime.

Deriving from social identity theory (Tajfel & Turner, 1986) and Shaffer and Prislin's (2011) study, for CPHPSE and their social networks to be loyal to an opposition party, they should first identify themselves with that party. CPHPSE and members of their social networks who identify themselves with an opposition party have intertwined interests and goals with that party. Therefore, identified CPHPSE and members of their social network interpersonally and selectively perceive that whatever benefits that party could also benefit them. As a result, CPHPSE are argued to engage in actions that serve the objectives and missions of that party. Building on Tajfel and Turner's (1986), Brewer and Silver's (2000), and Shaffer and Prislin's (2011) ideas, strong identification with an opposition party is expected to result in a loyal behaviour toward that party. Consequently, strongly identified CPHPSE are suggested to forgo personal benefits (including the one-life) to advance such a party cause at their personal expense. Identified CPHPSE have a clear stake in the opposition party success (Mael & Ashforth, 1992). From the identifiers' perspective, an effective path to long-term success lies in the absolute will to pursue the partisan missions and objectives (Bhattacharya & Sen, 2003). In addition, building on Bhattacharya's et al. (1995) and Almohammad's (2010) suggestions, CPHPSE identification could result in higher loyalty through assimilating to the public disobedience demanded by such parties. Therefore:

P13:   *The greater the CPHPSE-opposition party identification, the more likely the CPHPSE are to be loyal rebels against their local regime aiming to bring about their partisan demands.*

TRUST

In the relationship marketing arena, trust can be considered as a determinant (Chaudhuri & Holbrook, 2001), presumption (Gurviez, 1999; Gurviez & Korchia, 2002; Louis & Lombart, 2010), or a belief (Sirieix & Dubois, 1999). Trust is a psychological variable that represents a set of "aggregated presumptions". It is a multidimensional variable constructed from credibility, integrity, and benevolence that CPHPSE and their social networks interpersonally and selectively ascribe to the brand equity of an opposition party (Gurviez & Korchia, 2002; Louis & Lombart, 2010). Based on this definition the brand equity of an opposition party will be credible if it

reaches the partisan's performance expected by the CPHPSE. The brand equity of an opposition party will be of integrity to CPHPSE, if that party keeps its partisan's promises. In other words, that party officials should be interpersonally and selectively perceived as honest by CPHPSE and their social networks. If CPHPSE and their social networks selectively and interpersonally perceive that party officials are trying to prioritize their practices based on CPHPSE interests, they may consider those officials as benevolent.

Bearing in mind the brand equity of an opposition party is a relational market-based asset which indicates that establishing, maintaining, and building trust is an essential part of that party brand equity. Furthermore, it allows that party officials to build long term relationships with CPHPSE (Garbarino & Johnson, 1999; Larzelere & Huston, 1980; Morgan & Hunt, 1994). According to Gouteron (2006, 2008) and Hess, Bauer, & Huber, (2007), there is a positive significant influence of the brand equity over trust. In addition, strong brand equity of an opposition party fosters strong CPHPSE trust toward the party (Sirdeshmukh, Singh, & Sabol, 2002). It is worthwhile to mention that it is the brand equity of an opposition party that interpersonally and selectively provides the CPHPSE and their social networks with the feelings of security and credibility; hence, it could reduce the CPHPSE and their social networks' doubts and cynicism about the party and its officials (Moorman, Zaltman, & Desphande, 1992). In this sense, CPHPSE and their social networks develop interpersonally and selectively the brand equity of an opposition party, which becomes a substitute for the human contact between that party and CPHPSE (Sheth & Parvatiyar, 1995; Delgado-Ballester & Munuera-Alema´n, 2005). The logic behind the interpersonal and selective establishment of the brand equity of an opposition party by CPHPSE and their social networks is to transmit trust toward that party brand, especially when direct interaction with the officials of such a party is not possible (Sheth & Parvitiyar, 2000). In addition, the selectively and interpersonally perceived unique value of the brand equity of an opposition party may establish a greater trust (Chaudhuri & Holbrook, 2001). Based on these ideas:

P14:   The more positive the brand equity of an opposition party, the more likely the CPHPSE are to trust that party.

CPHPSE-OPPOSITION PARTY EMOTIONAL ATTACHMENT

According to the attachment theory, CPHPSE establish, maintain, and enhance emotional ties with particular others (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1994). Deriving from psychology and marketing, the researchers suggest the attachment can go beyond zealous an individual-to-individual relationship (Thomson & Johnson, 2006) to an opposition party or brand (Carroll & Ahuvia, 2006; Paulssen & Fournier, 2007; Park & MacInnis, 2006). Based on Lacoeuilhe's (2000) study, CPHPSE attachments to an opposition party brand is a psychological variable that reflects a long-term and inalterable sentimental relationship to an opposition party

provided that CPHPSE and their social networks have a psychological closeness to that party. CPHPSE trust of the brand equity of an opposition party is mainly influenced by the attachment formation (Pavlos, 2010), because, CPHPSE trust represents a critical cognitive variable to the party achievements of its missions and objectives (Pavlos, 2010; Park & MacInnis, 2006; Selnes, 1998). More fundamentally, CPHPSE may employ trust as a tool to reduce the perceived risks which enables them to pursue their emotional support of an opposition party and its officials.

Based on the study of May, Gilson, and Harter (2004), trust reflects a positive stimulus on psychological safety. In addition, the social psychology literature showed the positive influence of trust over emotional attachment (Burke & Stets, 1999). The essential role of the attachment in this case is to establish emotional security through satisfaction of the CPHPSE and their social networks' safety needs (Hazan & Shaver, 1994; Thomson, 2006; Pavlos, 2010). In addition, CPHPSE and their social networks could cope with their safety needs through their emotional attachments to an opposition party and its officials. Furthermore, trust is essential for their psychological needs satisfaction. For instance, to claim that CPHPSE trust an opposition party means that CPHPSE and their social networks expect that party not to exploit their vulnerability (James, 2002). CPHPSE may feel specifically vulnerable since they undertake psychological risks (identifying themselves with an opposition party), financial risks (donating to causes endorsed by such a party), and it may reach the physical risk when they decide to revolt against the ruling regime. According to Hazan and Shaver (1994), for a relationship to be considered as an attachment, it should promote the opposition party members' feeling of confidence and security. CPHPSE and their social network trust in an opposition party is expected to promote stronger attachment with that party (James, 2002), therefore:

> *P15:   CPHPSE trust towards an opposition party leadership positively influences CPHPSE-opposition party emotional attachment.*

Opposition parties aim to move beyond financial support from CPHPSE, namely, CPHPSE commitment, enduring psychological bonds, and retaining them as loyal constituents. One way to interpret Hirschaman's (1970) definition of loyalty in the context of this study is: as CPHPSE and their social networks' emotional attachment to an opposition party (Dowding, John, Mergoupis, & Van, 2000; Luchak, 2003). Building on Meyer and Allen's (1997) ideas, the main determinants of loyalty are identification with an opposition party and emotional attachment to it. That mean CPHPSE and their radical social networks' ultimate sacrifices are the result of their selective and interpersonal emotional attachment to an opposition party. The researchers suggest that CPHPSE who are deeply and emotionally attached to an opposition party's cause are strict to follow it and justify their actions and affiliations upon it. In addition, strongly attached CPHPSE are expected to sympathize, justify and get involved with oppositions active disobedience against the ruling regime. As a result of the previous discussion the

researchers propose that CPHPSE who are selectively and interpersonally attached emotionally to an opposition party become its loyal patrons, therefore:

> *P16:* *CPHPSE-opposition party's emotional attachment positively influences the transformation of CPHPSE into loyal rebels against their local regime aiming to bring about their partisan demands.*

PROPOSED MEASURES

The exploratory construct of the proposed model includes political cynicism, sophistication, and efficacy, and brand image, equity and credibility of an opposition party, in addition, the CPHPSE-opposition party identification, emotional attachment, trust and loyal rebels. For the political cynicism construct, researchers could adopt Janine, Stuart and Richard's (2010) measures, however, further modification is require to make them best fitted for the context of the study. Deriving from Woong and Cappella (1997) method of measuring political sophistication, future researchers should establish a list of items that measures the construct for each individual country. De Vreese's (2005) five items of the political efficacy construct can be used as a reference to develop new measures for political efficacy under the assumption that efficacious citizens are the ones who carry out the demonstrations. Brand image of an opposition party could be measured using Francisco and Vicenta's (2009) measures. However, further elimination and modification is required to make them best fitted for the current study. The variable brand equity of an opposition party is suggested to be measured through the 5 dimensions that originally appeared in Lassar, Mittal and Sharma (1995). Since their study measured the customer-based brand equity, future researchers cannot adopt their measurements. But their dimensions are the base line for developing the ones for this construct. The endorser's credibility can be measured on the three dimensions developed by Ohanian and Roobina (1990). The seven items to measure the opposition party's brand credibility can be sourced from the research of brand signalling (Erdem & Swait, 2004). Schiffman, Shawn, and Elaine's (2010) measures of political trust can be utilized to measure the trust construct. Measures of the emotional attachment can be obtained from Lacoeuilhe's (2000) study. Items for measuring the CPHPSE-opposition party identification construct can be sourced from the social identity research (Tajfel & Turner, 1979; Tajfel & Turner, 1985; Turner, 1985; Bhattacharya & Sen, 2003; Ahearne, Bhattacharya, & Gruen, 2005; Wann-Yih & Cheng-Hung, 2007). Finally, the loyal rebels' construct is suggested to be measured based on Hirschman's (1970) four dimensions, which then were tested and developed by Linz's (1978) and Gel'man (2010).

Given that there are few well-established measures of most constructs of the proposed model, this study required from future researchers to devise a set of items for each variable using focus group (five participants). Focus group is a suitable method due to its superiority comparing to other methods (Bloor, Frankland, Thomas and Robson 2001). And the use of focus group

during preliminary exploration in specific areas is very powerful (Vaughn, Schumm and Sinagub 1996). However, this task will be very challenging to future researchers due to difficulties in obtaining the required data and the complexity of the proposed model. But testing the conceptual model is both academically and politically important. Its academic significance lies in its contribution to literature in that it presents the variables that link cynicism with rebel's loyalty. The political importance is derived from the fact that public unrest is a critical, political issue globally which calls for various perspectives in exploring it.

CONCLUSION

Overall, this paper has contributed several key new insights into political marketing. It has conceptualized a framework of relationships that linked political cynicism to the rebels' loyalty. The study employed the social identity theory, emotional attachment theory, CPHPSE sensemaking model, selective perception theory, social network theory, associative network memory model, and brand signalling theory. Through its framework the study aimed to reach a better understanding of CPHPSE behaviour and the way they build their identification, emotional attachment and loyal behaviour. A mixture of models and theories is employed to provide researchers with better understanding of the ways CPHPSE and their social networks interpersonally and selectively perceive the credibility of a political endorser, brand image, credibility and equity of an opposition party. In addition, it demonstrates the way CPHPSE establish identification with, trust toward, and get emotional attachment an opposition party, and finally turn into loyal rebels against the ruling regime. The model of this study shows the role of the endorser's credibility, the brand image and credibility of an opposition party may have on the brand equity of that party. It presents the inter-relatedness of political cynicism, sophistication, and efficacy. Furthermore, the endorser's credibility, the brand image, credibility and equity of an opposition party, CPHPSE-opposition party identification, trust, and emotional attachment. Presenting such a framework could improve researchers in various areas understanding of the impact of being cynical with high political sophistication and efficacy and the political endorser's credibility on the brand image, credibility and equity of an opposition party in authoritarian's countries. And ultimately, it could highlight the possible paths of selective and interpersonal transformation of CPHPSE into loyal rebels in such countries.

The researchers suggest measures for the constructs of the proposed model which may provide future researchers with a theoretical cornerstone to further develop and test the proposed measures. This task is expected to help concerned researchers to examine the degree to which CPHPSE in authoritarian's countries are influenced by, value, identified with, trust in, and emotionally attached to a certain opposition party. Thus, pursuing such a type of study could provide a roadmap for concerned researchers to proceed further in improving the understanding of the determinants of rebels' loyalty to opposition party in their pursuit to democracy and the building of civil society. Nevertheless, this study failed to conclude with suggestions to

marketers of opposition parties to enhance the CPHPSE interpersonal and selective positive evaluation of an opposition due to the conceptual nature of the current study.

FUTURE RESEARCH

This research is just a conceptual starting point and it can't provide many claims. This makes it essential for other researchers to test various research propositions made in this paper. The proposed model shows three internal outcomes linked to rebels' loyalty. It also demonstrates that there is a framework of relationships among the constructs of the proposed model. Testing the effects of these outcomes and the framework of relationships has to be resolved in future researches using empirical studies. However, as noted by one of the reviewers, the empirical test of the proposed model could present a strong challenge, in terms of data collection, giving the contamination of the sampling process as a result of the protests and violence.

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STUDENTS PERCEPTION OF QUALIFICATIONS FOR SUCCESSFUL SOCIAL MEDIA COORDINATOR

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ABSTRACT

Social media has grown explosively and become very popular in recent years; the average time spent on social media is increasing steadily, especially among young people. Organizations, public or private, have realized the importance of social media as a powerful tool for establishing relationships with citizens or consumers. Although potential benefits from social media could be enormous, organizations face a big challenge in taking advantage of social media, since the old way of managing traditional media does not work for social media and numerous social media platforms make the issue of managing social media complicated. More and more organizations want to hire some professionals as an attempt to manage and utilize social media effectively for their businesses or projects. Job titles commonly posted in the job market are Social Media Coordinator, Social Media Specialist, Social Media Manager, Online Community Manager, Public Relations Specialist, and so on. A latest report by US Department of Labor estimated the number of jobs Public Relations Specialists in 2008 to be about 275,000 and projected jobs to grow 24% over the next decade, which would be much higher than other occupations. Universities need to prepare a curriculum for students who want these jobs. The authors of this paper surveyed about 400 students at a business school regarding various aspects of social media and qualifications and skills for a successful Social Media Coordinator.

INTRODUCTION

Social media, defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (Kaplan & Haenlein, 2010), has grown explosively and become very popular in recent years, thanks to the advances in diverse Web 2.0 technologies. Social media platforms provide various SNSs (Social Network Services) which attract hundreds of millions of users worldwide. According to ComScore, as of October 2011, 1.2 billion users are enjoying SNSs around the world and 98% of online users in the US are using social media (ComScore, 2011a). More specifically, Facebook had 845 million active users at the end of December 2011

(Facebook, 2012). Twitter hit 100 million active users in 2011 (Twitter, 2012) and an estimate of registered Twitter accounts reached 500 million in February 2012 (Twopcharts, 2012).

In addition, the average time spent on social media is increasing steadily, especially among young people. Online users were spending 19% of all time spent on the web in October 2011, in contrast with 6% in March 2007 (ComScore, 2011a). Millennials who were born between 1981 and 2000 spent 41% of online time on Facebook in September 2011 (ComScore, 2011b).

Social media help users build social relationship by connecting members or inviting even non-members. Users can interact with friends or meet new people in cyberspace. In addition, users as consumers can also express or exchange their views on products/services or organizations.

Public and private organizations have also realized the importance of social media as a powerful tool for establishing relationships with citizens or consumers. They want to explore opportunities that leverage on the popularity of social media. McKinsey survey reported that 72% of executives from 4,200 companies responded that they used at least one social media platform (Bughin et al., 2011). Another survey result showed that 80% of companies use social media for recruitment in 2011 (Jobvite, 2011) while another survey revealed that 93% of marketers were employing social media for marketing (Stelzner, 2011).

There are well known cases where companies or individuals have already embraced social media successfully. A pop singer has used social media to launch a new song and to strengthen his celebrity image (Kaplan and Haenlein, 2012). Likewise, an organization can build and strengthen its brand image or public relations. An organization can introduce a new product/service into the global market through social media, in addition to traditional mass media outlets. The Recording Academy implemented an integrated social media strategy for the 52nd Grammy Awards in 2010 with huge success (Wesley and Rohm, 2010; Hanna et al., 2011).

Although the potential benefits from social media could be enormous, organizations face challenges in taking advantage of social media, since the old way of managing traditional media does not work for social media and numerous social media platforms make the issue of managing social media complicated. There are at least six types of social media, such as collaborative projects (e.g., Wikipedia), blogs and microblogs (e.g., Twitter), content communities (e.g., YouTube), social networking sites (e.g., Facebook), virtual game worlds (e.g., World of Warcraft), and virtual social worlds (e.g. Second Life) (Kaplan & Haenlein, 2009).

More and more organizations want to hire professionals in the area, as an attempt to manage and utilize social media effectively for their businesses or projects. Job titles commonly posted in the job market are Social Media Coordinator, Social Media Specialist, Social Media Manager, Online Community Manager, Public Relations Specialist, and so on (D'Angelo, 2010), although there are more than 80 job titles which involves the use of social media. The latest report by the US Department of Labor estimated the number of jobs Public Relations Specialists had in 2008 to be about 275,000 and projected jobs to grow over the next decade by 24%; a

much higher rate than other occupations (Bureau of Labor Statistics, 2010). Universities need to prepare a special curriculum for students who want this job. The authors of this paper surveyed students at a business school about various aspects of social media.

LITERATURE REVIEW

Social Media in Marketing

Social media is not new to marketing, but it is nonetheless an important tool. New e-marketing tools and technologies have led to the development of new marketing strategies (Bradley 2011 and Luca 2011). One example as stated by Neff (2010) is that brands may often find more traffic on their Facebook site fan page than on their corporate website. Neff also stated that numerous brands use Facebook for relationship marketing making Facebook the largest such provider in that field.

According to Finin, Joshi, Kolari, Java, Kale and Karandikar (2008), social media systems have become an "important way to transmit information, engage in discussions and form communities on the Internet. (p. 77). Corporations are striving to better understand the workings of social media systems and how to implement them because one-third of new web content represents such social media systems (Finen et al 2008). One area that social media tools have changed is marketing as communication has begun focusing individuals on personal connections, rather than on authorized spokespersons, and changing the opinion leader in the marketing realm (Gowdy, Hildebrand, La Piana and Campos 2009). The number of technologies entering the market on a constant basis keeps marketers extremely busy and presents an extreme challenge for marketing strategists. According to Jarvenpaa and Tuunaimen (2012), social media technologies (SMT) also are extremely helpful to marketers in that they "provide unparalleled opportunities for customer relationship management (CRM), which is extremely vital in the marketing world today.

Girard and Bertsch stated that (2011), the use of social media tools has provided numerous benefits to marketers, in that emerging knowledge-sharing tools such as Facebook, LinkedIn and Twitter "provide flexible, agile, and intuitive solutions for connecting people to people and facilitating coordination, communication and collaboration" (pg. 98).

There appears to be no end to the popularity of social media in the United States. According to Thomas (2010), "by the end of 2008, social networking had become more popular than email" (p. 1). Madden (2010) commented that in 2009 social media usage increased from 41% to 61% in those aged 18 and older.

Social Media Coordinator

Research has indicated that corporations, profit and non-profit, are using social media extensively and seek for well equipped Social Media Experts when searching for a Social Media Coordinator to add to their staff. Marquette University stated that they hired a Social Media Coordinator based on their story-telling experience, rather than their knowledge of current

technological skills. They stated that they also sought an individual who was up-to-date in their knowledge of new media and its relations to the social media market (Bosten 2011; Stageman 2009).

According to Harris, Harrigan and Naudin (2010, pg. 2), employers within the current global marketplace are "seeking high level skills of communication, networking and entrepreneurship in their potential employees." In addition, the skills consistently extend to social media usage through online methodology and engagement.

Student Usage of Social Media

Online social networking sites have grown considerably in the past few years. In addition, blogs, virtual communities and personal websites have continued with their popularity in the college student community to the point that such social media interaction has had a profound effect upon how students communicate with their peers (Mendez, Curry, Mivaveta, Kennedy, Weinland and Bainbridge 2009). In regards to Facebook, Pempek, Yermolayeva and Calvert (2009) commented that undergraduate students spend approximately 30 minutes per day on Facebook. According to Facebook.com data in 2011 this social media outlet had over 500 million active users. Twitter.com also echoes the importance of their place in social media with a statement that they feature 140 million tweets per day. These forms of social media have led to a figure of over 55% of young American youth who use internet on mobile devices.

One study looked specifically at the social media usage of university business majors. Alexopoulos and Lynn (2010) found that business students, on average, own eight fixed or portable electronic devices. The researchers included 988 viable subjects within the study. When placing themselves on the Product Life Cycle, over 33% of the university student subjects labeled themselves as early adopters of technology. In the same study, the business students rated their favorite information communication technologies as Google, Moodle, Youtube, Linked In, Bebo and Facebook. The study also found that 84% of the university students asked were using a form of social media. McCool (2011) also stated the importance of Twitter to the college student because it provides the student with a sense of contact rarely seen in other forms of social media with celebrities and athletes.

Employer Usage & Gap Analysis

In addition to students, employers are also utilizing social media continuously. According to Maclenod (2008) Facebook is used by 56% of young business managers and that Generation Y members are definite fans of social media. Therefore, employers should seriously be using social media for numerous reasons, particularly employing Facebook, company blogs, Youtube, and virtual job boards for employee recruitment purposes. Han (2010) suggests that companies should continue to look for other social media platforms than Facebook, as young users are leaving Facebook for other channels to insure privacy from their parents and other factors.

Other uses for social media by employers are evident from previous research. According to Gauravonomics (2010), corporate consultants can use social media for interactive consulting, based on SWOT analysis and for-solution delivery.

Employer Policy

The use of social media by employees may pose serious implications to a corporation through lack of employee productivity, improper communications, and legal problems as well. Because of such problems corporations may find it necessary to develop policies addressing social media usage by employees while at work, as well as when not at work. According to Thomas (2010), such policies may be necessary in the corporate workplace because "problems associated with the discovery of electronically stored information may be directly applicable to the discovery of information from social networking sites. Thomas goes on to warn corporations that "the legal ramification of the use of social networking sites as a marketing tool, or as a means of internal and external communication, must be addressed for companies to be prepared in the event of litigation" (pg. 1) Edwards, Peters and Sharman (2001) warn that company policy concerning social media usage must be clear or it may be destructive to corporate culture. Welebir and Keiner (2005) also comment that acceptable Internet usage in the workplace may be fitting to include in a statement of employee code of conduct. Some such policies merely discuss the correct times of usage of the Internet at work, not specific lengths of time of usage (Grossenbacher-Fabsits 2011).

Not only can employees waste valuable work time if employers encourage them to use social networking sites but they can also "spill company secrets or harm corporate relationships by denigrating business partners" (Baker 2009, page 23). It is easy to understand that businesses are drawn to Web 2.0 because of its relatively low cost to operate, but businesses must also be warned that they may wish to adopt broad policies stating that the company actually owns the communication and computer systems used by employees and that "any information created and stored on such systems is property of the company" (Bennett 2010, pg. 424). Bennett also states that companies enact policies such as the one described to protect the company from legal risks such as "leaks of confidential information, or exposure to claims of a hostile work environment" (pg. 425). Unfortunately, employees may blur distinctions between correct social media usage in personal and work times.

Kaupins and Park (2011) agree that employers should establish social networking policies that are clear and that they should take the extra step and provide them to their employees through various channels, including their company policy handbooks. After receiving the policy information, employees should also acknowledge receipt of the policy and that they have, in fact, read the policy. This may be accomplished by asking the employee to sign an acknowledgement form. A more formal, rigorous activity will keep both employer and employee on the same page as far as what is expected. This activity may also alleviate employee opinion that their employer will not monitor their social networking activities. In addition, this activity may help employers by not requiring them to block their employees from accessing social networking tools, which may be looked at as potentially "unrealistic and unproductive" (Bennett 2010, pg. 428).

One ethical question also arises from the practice of employers searching their employees' social networking sites for private details about their current employees, as well as their potential applicants (Kaupins and Park 2011). Although some individuals may find this

action as unethical, it is stated by numerous corporations, both for-profit as well as non-profit, to be the case of what is actually occurring.

Although it may be thought unwise to simply ban the usage of social media by their employees, it may also be considered once one is made aware of the time spent on social media sites by individuals. According to the Nielson Company, 22% of all time spent online is on social media sites (Jungjck and Rahman 2011).

Student Policy

In addition to corporations, universities understand the need for the development of student policies regarding social media usage, with misuse carrying the threat of possible expulsion (Kind, Genrich, Sodhi, Chretien 2010; Skiba 2011; Williams 2011). Introduction of such policies on the university campus may actually aid the student in becoming aware to such policy and make the transition from campus to corporate expectations more palatable.

Qualifications

When hiring a Social Media Coordinator, Marquette University stated that the individual was hired because of their story telling experience instead of their technological skills, although the university did want the individual to be "savvy and knowledgeable about how to use new media" (Stageman 2009, page 33). Whether they be known as a Social Media Coordinator, a Social Media Specialist, or a Social Media Manager, these individuals are often "focused on promoting, maintaining and monitoring brand or company image" (D'Angelo 2010, pg. 3).

A perusal of advertisements for Social Media Coordinators found that technical functions for the position were not as common as content production functions. In addition, both written and oral communications were significant in the desired applicants' qualifications (D'Angelo 2010; McWilliam 2000). D'Angelo also commented that the ads looked for "strategists, managers, content developers and writers and customer service representatives (pg. 5).

Social Media Tools and Technologies

As shown in Figure 1, Kriegler (2010) classified the Social Media into seven major categories and supporting technologies (e.g. SOAP, AJAX, and RSS). The seven categories are:
1. Social Networks (e.g., Facebook),
2. Blogs and Microblogs (e.g., Twitter),
3. Wikis (e.g., Wikipedia),
4. Video (e.g., YouTube),
5. Pictures (e.g. Flickr),
6. Audio (e.g. Podcasts), and
7. Collaboration (e.g. Google Docs).

Figure 1:   Social Media Tools and Technologies (Kriegler 2010)

METHODOLOGY

The Variables and Survey Design

We are interested in students' perception on the usage of social media (question # 2, 3, & 5); social media policy (question # 4, 6, 7, 8, 9, and 10); technical (all questions within #12), communication (all questions within #13), and personal (all questions within # 14) qualifications for successful social media coordinator (see attached survey form).

Pilot Study

A pilot study was conducted to measure the internal consistency of the questions in each variable. About 50 students from a Business School in Central California participated in the pilot study. The findings on the variables (Cronbach Alpha) and their levels of reliability were as follows:

Variables	Cronbach Alpha	Note
Social Media Usage	.723	good
Social Media Policy	.768	good
Technical Qualifications	.724	good
Communication Qualifications	.734	good
Personal Qualifications	.802	very good - this was achieved by deleting the question on global knowledge

Subjects and Data Collection

About 430 students attending a Business School in Central California participated in the survey. Only 399 valid surveys were used for analysis. The subjects include 186 males (46.7%), 193 females (48.5%), and 20 no answers (4.8%). The age group breakdown and their major of study are shown below:

#19. Age

17-24	25-39	>= 40
89%	9%	2%

#17. Field of Study

Accountancy	22%	Computer Information Systems	6%
Entrepreneurship	5%	Finance	6%
Human Resource Management	4%	International Business	4%
Logistics/Supply Chain Strategies	1%	Management	15%
Real Estate/Urban Land Economics	1%	Sports Marketing	10%
Other	21%	Total	100%

RESULTS

Social Media Usage:

96% of the subjects indicated that they have used social media in the past whereas 92% indicated that they are currently using some form of social media. Facebook (81%) dominates their favorite SM followed by Twitter (6.5%) and Blogs (1.8%). Majority of students (79%) indicated that they have used SM for 2 or more years.

#3. Favorite Social Media

	Frequency	Percent
Facebook	**323**	**81.0**
Twitter	26	6.5
Blogs	7	1.8
Others	24	6.0
missing	19	4.8
Total	399	100

#5. Years in using Social Media

	Frequency	Percent
Less than 1 year	25	6.3
Between 1-2 years	43	10.8
Between 2-3 years	**94**	**23.6**
More than 3 years	**221**	**55.4**
Never used	10	2.5
missing	6	1.5
Total	399	100.0

Social Media Policy:

42% of the subjects reported that their employers are currently using social media for their businesses. 24% of the students indicated that employers have policies in the use of social media. 17% of the students reported that employers have policies covering both usage at work and outside of work. 20% of the students indicated that their employers actively block access to social media at work. 18% of the students reported that employers monitor the use of social

media at work. 19% of the students reported that the misuse of social media has been an issue at their place of employment.

#15. Business Sector of Employer: 27% private, 43% public, 6% nonprofit sector.

#16. Size of their employer:

1-10	11-50	51-100	101-200	Over 200
20%	26%	12%	5%	18%

#11. Majority of students (54.1%) believe that SM as a tool for Career Advancement.

		Frequency	Percent
Valid	1. **Very Important**	**89**	**22.3**
	2. **Important**	**127**	**31.8**
	3. Neutral	82	20.6
	4. Unimportant	28	7.0
	5. Very Unimportant	29	7.3
	Total	355	89.0
	Invalid	10	2.5
Missing	System	34	8.5
Total		399	100.0

Technical Qualifications:

Students indicated that most of the SM elements are important to the success of a social media coordinator position.

#12. Importance of Social Media Element (percent of missing is omitted)

	Unimportant	Neutral	**Important**
Social Networking (i.e. Bebo, Facebook, LinkedIn)	13%	15%	**70%**
Video Sharing (i.e. YouTube)	14%	16%	**66%**
Product Reviews (i.e. eopinions.com, TripAdvisor)	17%	17%	**63%**
Business Reviews (i.e. Customer Lobby, yelp.com)	18%	15%	**63%**
Livecasting (i.e. Ustream.tv, Skype)	17%	17%	**62%**
Community Q&A (i.e. Yahoo!Answers)	21%	18%	**58%**
Audio and Music Sharing (i.e. Last.fm)	19%	21%	**57%**
Social News (i.e. Digg)	24%	21%	**52%**

	Unimportant	Neutral	**Important**
Photo Sharing (i.e. Flickr)	22%	22%	**52%**
Microblogging (i.e. Twitter)	25%	22%	**51%**
Events (i.e. Meetup.com, Eventful)	28%	19%	**49%**
Social Network Aggregation (i.e. FriendFeed)	27%	26%	**44%**
Wikis (i.e. Wikipedia, internal wikis)	27%	26%	**44%**
Social Bookmarking/ Tagging (i.e. Delicious, 1GoogleReader)	27%	27%	**43%**
Social Media analytics (i.e. Sysomos MAP, Alterian SM2)	28%	26%	**43%**
Blogs	34%	21%	**43%**
Virtual Worlds (i.e. SecondLife)	41%	22%	**33%**
Information aggregators (i.e. Netvibes, Twine)	38%	29%	**31%**

Communication Qualifications:

Students expressed that all the skills listed are important to the success of a social media coordinator position. Computer Skills are top of the list with 84% followed by Intercultural Skills (82%) and Written Communication Skills (80%).

#13. Importance of skills for the success of social media coordinator (percent of missing is omitted)

	Unimportant	Neither	**Important**
Computer Skills	6%	8%	**84%**
Intercultural Skills	7%	8%	**82%**
Written Communication Skills	9%	8%	**80%**
Analytical/Quantitative Skills	8%	11%	**77%**
Interpersonal Skills	10%	10%	**77%**
Team Work Skills	10%	11%	**76%**
Verbal/Oral Communication Skills	11%	13%	**73%**

Personal Qualifications:

Students reported that all the traits listed are important to the success of a social media coordinator position. Motivation/Initiative made the top of the list with 86% followed by Honesty/Integrity (85%), Flexibility/Adaptability (84%) and Work Ethic (82%).

#14. Importance of traits for the success of social media coordinator (percent of missing is omitted)

	Unimportant	Neither	<mark>Important</mark>
Motivation/Initiative	7	7	<mark>**86**</mark>
Honesty/Integrity	8%	7	<mark>**85**</mark>
Flexibility/Adaptability	5	7	<mark>**84**</mark>
Work Ethic	6	8	<mark>**82**</mark>

We also found that there are significant gender differences on the qualifications for a successful Social Media Coordinator as shown in the table below. Red color represents significant difference between male and female.

Gender difference (red color represents significant difference between male and female)						
Qualifications/Skills	Gender	N	Mean	Std. Dev.	t	Sig. (2-tailed)
Blogs	male	184	4.09	1.858	-.451	.652
	female	191	4.18	1.821	-.451	.653
Microblogging (i.e. Twitter)	male	183	4.46	1.898	-.450	.653
	female	193	4.55	1.756	-.449	.654
Social Networking (i.e. Bevo, Facebook, LinkedIn)	male	185	5.14	1.776	-1.486	.138
	female	191	5.40	1.579	-1.483	.139
Social Network Aggregation (i.e. FriendFeed)	male	182	4.00	1.784	-2.289	.023
	female	191	4.41	1.661	-2.285	.023
Events (i.e. Meetup.com, Eventful)	male	182	4.08	1.782	-3.360	.001
	female	191	4.70	1.778	-3.359	.001
Wikis (i.e. Wikipedia)	male	182	4.19	1.747	-.532	.595
	female	192	4.29	1.677	-.531	.596
Social Bookmarking/ Tagging (i.e. Delicious, 1GoogleReader)	male	182	3.95	1.735	-3.018	.003
	female	192	4.46	1.551	-3.009	.003
Social News (i.e. Digg)	male	182	4.23	1.775	-2.705	.007
	female	192	4.70	1.563	-2.696	.007
Photo Sharing (i.e. Flickr)	male	181	4.30	1.792	-2.697	.007
	female	192	4.77	1.548	-2.685	.008
Video Sharing (i.e. YouTube)	male	181	5.13	1.597	.438	.661
	female	192	5.06	1.492	.437	.662
Livecasting (i.e. Ustream.tv, Skype)	male	180	4.86	1.677	-.983	.326
	female	191	5.03	1.657	-.983	.326
Audio and Music Sharing (i.e. Last.fm)	male	182	4.53	1.736	-2.616	.009
	female	191	4.97	1.557	-2.610	.009
Product Reviews (i.e. eopinions.com, TripAdvisor)	male	184	4.73	1.905	-2.501	.013
	female	192	5.18	1.563	-2.491	.013
Business Reviews (i.e. Customer Lobby, yelp.com)	male	184	4.74	1.938	-3.741	.000
	female	192	5.43	1.620	-3.727	.000
Community Q&A (i.e. Yahoo!Answers)	male	184	4.51	1.771	-2.954	.003
	female	191	5.04	1.712	-2.952	.003

Gender difference (red color represents significant difference between male and female)						
Qualifications/Skills	Gender	N	Mean	Std. Dev.	t	Sig. (2-tailed)
Virtual Worlds (i.e. Second Life)	male	184	3.49	1.796	-1.392	.165
	female	191	3.75	1.811	-1.392	.165
Information Aggregators (i.e. Netvibes, Twine)	male	186	3.54	1.762	-1.917	.056
	female	190	3.88	1.691	-1.916	.056
Social Media analytics (i.e. Sysomos MAP, Alterian SM2)	male	184	4.01	1.863	-2.489	.013
	female	192	4.47	1.787	-2.487	.013
Verbal/Oral Communication Skills	male	183	5.44	1.633	-1.195	.233
	female	192	5.65	1.659	-1.195	.233
Written Communication Skills	male	183	5.70	1.586	-1.793	.074
	female	191	6.00	1.596	-1.793	.074
Interpersonal Skills	male	182	5.58	1.549	-1.298	.195
	female	192	5.79	1.568	-1.298	.195
Team Work Skills	male	184	5.39	1.585	-2.193	.029
	female	192	5.76	1.630	-2.195	.029
Analytical/Quantitative Skills	male	184	5.43	1.628	-2.709	.007
	female	190	5.86	1.386	-2.702	.007
Computer Skills	male	184	5.85	1.493	-2.386	.018
	female	190	6.19	1.271	-2.380	.018
Intercultural Skills	male	185	5.69	1.618	-2.796	.005
	female	189	6.10	1.223	-2.787	.006
Honesty/Integrity	male	184	5.66	1.578	-3.803	.000
	female	188	6.22	1.250	-3.793	.000
Motivation/Initiative	male	184	5.80	1.557	-3.108	.002
	female	189	6.25	1.259	-3.100	.002
Work Ethic	male	183	5.83	1.531	-3.021	.003
	female	190	6.26	1.262	-3.010	.003
Flexibility/Adaptability	male	183	5.92	1.396	-1.968	.050
	female	189	6.20	1.271	-1.965	.050

CONCLUSION AND FUTURE RESEARCH DIRECTION

Almost every student (96% of the subjects) indicated that they have used social media in the past. Facebook (81%) dominates their favorite SM followed by Twitter (6.5%) and Blogs (1.8%). Majority of students (79%) indicated that they have used SM for 2 or more years. 42% of the subjects reported that their employers are currently using social media for their businesses. Students strongly expressed that all the skills listed in the Technical, Communication, and Personal Qualifications are important to the success of a social media coordinator position. We also found that there are significant gender differences on the qualifications for a successful Social Media Coordinator.

This study was conducted at a business school in Central California. We plan to expand our target subjects at multiple locations in the nation to generalize our findings. We also plan to survey employers to determine employers' expectations for successful social media coordinator's qualifications. Then we should be able to conduct a gap analysis between students' perception and the employers' expectations.

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ATTACHMENT: SURVEY QUESTIONNAIR FORM

We are distributing this survey to collect data regarding social media for a MBA project. Both the students and faculty members involved in this research would like to thank you for taking the time to complete this survey.   If you would like to be provided with the findings of our research, then please provide your email at the end of this survey.

Thank you,

Dr. Ojoung Kwon, Kelvin Alfaro, Nassreen El-Dahabi and Dr. Susan D. Geringer

In regard to the following questions, please circle the ONE selection that best describes your answer.

1. **Have you ever used social media/networking in the past?**
   Yes
   No
2. **Do you currently use social media/networking (e.g., LinkedIn, Facebook)?**
   Yes
   No
   3. What is your favorite social media network?
   Facebook
   Twitter
   Blogs
   Other (please specify) _____
4. **Does your employer (internships included) use some form of social media/networking for their business?**
   Yes
   No
   Don't Know
5. **If you use social media/networking, how long have you used them?**
   Less than a Year
   Between 1–2 Years
   Between 2–3 Years
   More than 3 Years
   I have never used them
6. **Does your place of employment maintain any policies in relation to using social networking?**
   Yes
   No
   Don't Know

7. **If your place of employment has policies in place in relation to social networking, do they cover both uses at work and outside of work?**
   Just at work
   At work and outside of work
   No such policies exist
8. **Does your employer actively block access to social networking sites at work?**

Yes
No
Don't know

9.   Does your employer monitor the use of social networking sites at work?
Yes
No
Don't Know

10.   Is the misuse of social networks ever an issue for you or others at your place of employment?
Yes
No
Don't know

11.   How important is Social Media as a tool to promote and market your career advancement?
Very Important
Important
Neither Important or Unimportant
Unimportant
Very Unimportant

For the purposes of this study, the term **"*social media coordinator,*"** refers to a person who is responsible for identifying, evaluating, and securing advertising on behalf of an employer through various social media platforms. The goal of any social media coordinator is to determine which outlets will allow the organization to reach its intended audience in the most effective manner and who can tactfully develop creative concepts and seamlessly execute them into compelling digital social media experiences

12. Circle only one answer for each question that represents the importance of each social networking element in relation to the success of a social media coordinator position. (On a scale from 1 to 7, with 7 = very Important and 1= very unimportant)

	Very Unimportant			Neither Important or Unimportant			Very Important
Blogs	1	2	3	4	5	6	7
Microblogging (i.e. Twitter)	1	2	3	4	5	6	7
Social Networking (i.e. Bebo, Facebook, LinkedIn)	1	2	3	4	5	6	7
Social Network Aggregation (i.e. FriendFeed)	1	2	3	4	5	6	7
Events (i.e. Meetup.com, Eventful)	1	2	3	4	5	6	7
Wikis (i.e. Wikipedia, internal wikis)	1	2	3	4	5	6	7
Social Bookmarking/ Tagging (i.e. Delicious, 1GoogleReader)	1	2	3	4	5	6	7
Social News (i.e. Digg)	1	2	3	4	5	6	7
Photo Sharing (i.e. Flickr)	1	2	3	4	5	6	7
Video Sharing (i.e. YouTube)	1	2	3	4	5	6	7
Livecasting (i.e. Ustream.tv, Skype)	1	2	3	4	5	6	7
Audio and Music Sharing (i.e. Last.fm)	1	2	3	4	5	6	7
Product Reviews (i.e. eopinions.com, TripAdvisor)	1	2	3	4	5	6	7

	Very Unimportant			Neither Important or Unimportant			Very Important
Business Reviews (i.e. Customer Lobby, yelp.com)	1	2	3	4	5	6	7
Community Q&A (i.e. Yahoo!Answers)	1	2	3	4	5	6	7
Virtual Worlds (i.e. SecondLife)	1	2	3	4	5	6	7
Information aggregators (i.e. Netvibes, Twine)	1	2	3	4	5	6	7
Social Media analytics (i.e. Sysomos MAP, Alterian SM2)	1	2	3	4	5	6	7

Other(s) (please specify) _____

13. How important are the following skills to the *success* of a Social Media Coordinator?

	Very Unimportant			Neither Important or Unimportant			Very Important
Verbal/Oral Communication Skills	1	2	3	4	5	6	7
Written Communication Skills	1	2	3	4	5	6	7
Interpersonal Skills	1	2	3	4	5	6	7
Team Work Skills	1	2	3	4	5	6	7
Analytical/Quantitative Skills	1	2	3	4	5	6	7
Computer Skills	1	2	3	4	5	6	7
Intercultural Skills	1	2	3	4	5	6	7

14. How important are the following *traits* to the success of a Social Media Coordinator?

	Very Unimportant			Neither Important or Unimportant			Very Important
Honesty/Integrity	1	2	3	4	5	6	7
Motivation/Initiative	1	2	3	4	5	6	7
Work Ethic	1	2	3	4	5	6	7
Flexibility/Adaptability	1	2	3	4	5	6	7
Global Knowledge	1	2	3	4	5	6	7

Please circle the ONE correct answer for each of the following questions

15.   What is the business sector of your current employer?
   Private sector
   Public sector
   Nonprofit Sector (Voluntary/Charities)
   Other (please specify)_____

16. **How many individuals does your organization employ?** 1-10
    11-50
    51-100
    101-200
    201 or More
17. **What is your field of study?**
    Accountancy
    Computer information Systems
    Entrepreneurship
    Finance
    Human resource management
    International Business
    Logistics/supply chain strategies
    Management
    Real estate/Urban Land Economics
    Sports Marketing
    Other (please specify)_____
18. **What is your Gender?**
    Male
    Female
19. **What category represents your age group?**
    17-24
    25-39
    40-59
    60+

20. **If you are interested in our findings, please provide your email address below:**

21. **In what ZIP code is your home located? (enter 5-digit ZIP code; for example, 00544 or 94305):**
    _____

22. **Name of your company? (optional) _____**

CONSUMERS' INTENTION TO USE SELF-SCANNING TECHNOLOGY: THE ROLE OF TECHNOLOGY READINESS AND PERCEPTIONS TOWARD SELF-SERVICE TECHNOLOGY

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ABSTRACT

The proliferation of self-scanning technology found in the retail environment today suggests a need to identify factors that impact consumers' intentions to use this technology to complete a retail transaction. This study assesses the impact of consumer technology readiness on perceived reliability and perceived fun of using self-service technology, and as well the impact technology readiness has on consumers' intentions to use self-scanning technology. In addition, this study investigates the effects of perceived reliability and perceived fun of self-service technology on intentions to use self-scanning technology. The findings indicate that technology readiness does have a direct and positive influence on both perceived reliability and perceived fun of self-service technology, but has little direct impact on consumers' intentions to use self-scanning technology. However, perceived reliability and perceived fun of self-service technology were both found to directly influence use intention of self-scanning technology, as well as partially mediate the effect of technology readiness on use intention of self-scanning technology. Managerial implications are also provided.

INTRODUCTION

The concept and study of SST has gained wide spread interest in recent years (Beatson, Lee, and Coote, 2007; Dean, 2008; Forbes, 2008; Makarem, Mudambi, and Podoshen, 2009; Kelly, Lawlor, and Mulvey, 2010). The proliferation of new self-service technology (SST) found in the retail environment today suggests a need to assess the extent to which consumers are willing to actually use this new technology. A general conclusion from previous research is that the adoption of SST is driven by technology characteristics and individual differences.

SST is likely to become increasingly more important because it allows retailers to standardize their interaction with consumers (Hsieh, Yen, and Chin, 2004), to increase productivity and efficiency (Walker, Craig-Lees, Hecker, and Francis, 2002), and to offer consumers access to services through new and convenient channels (Meuter, Ostrom, Bitner, and

Roundtree, 2003). SST also allows consumers to be productive resources involved in the service delivery, thus allowing retailers to handle demand fluctuations without expensive adjustment of employee levels (Curran, Meuter, and Surprenant, 2003).

Self-scanning checkouts in grocery stores is one type of SST that when first introduced over two decades ago was initially not well received by consumers. This resistance may have been due to consumers' lack of trust and confidence in themselves and in the new technology to perform correctly. Today, however, self-scanning technology is very popular and has grown beyond grocery stores, with self-scanning checkout/check-in kiosks found today in airports, movie theaters, and libraries. The modern consumer is seemingly more technologically informed and comfortable with using self-scanning technology.

One of the nation's largest grocery stores, Kroger Co. is currently testing a new advanced self-checkout system (Gasparro, 2011). This new technology, which is a scan-tunnel system, is similar to what airlines use for carry-on luggage. Customers place their grocery items on a conveyor belt and the tunnel scans the barcodes regardless of which direction they are facing. Initial results are encouraging as customers appear to be embracing the scan tunnels, and the new technology has the potential to reduce theft but still allow for employee interaction by bagging the groceries and manning the scan tunnels.

Given the expanding role and importance of self-scanning technology in the retail setting, it is imperative to enhance the understanding of factors that may affect consumers' evaluation and intention to use self-scanning technology. The purpose of this paper is to extend recent research that has investigated factors driving consumers' usage of self-scanning technology. Specifically, this study assesses the impact of consumer differences (i.e., technology readiness) and SST attributes (i.e., perceived reliability and perceived fun) on consumers' intention to use self-scanning technology to complete a retail transaction.

LITERATURE REVIEW

Self-Scanning Technology

Meuter, Ostrom, Roundtree, and Bitner (2000) first defined SST as "technological interfaces that enable consumers to produce a service independent of direct service employee involvement." The increasing use of SST by retailers has created a growing need for classifying different types of SST. Meuter et al. (2000) introduced a classification of SST along two dimensions: 1) interface (telephone/interactive voice response; online/internet; interactive kiosks; video/CD) and 2) purpose (customer service; transactions; self-help). Cunningham, Young, and Gerlach (2008) also classified SST along two dimensions: 1) standardized vs. customized, and 2) separable vs. inseparable. Standardized includes pay at the pump, Internet search, self-scanning, and tax software. Customized includes online education and online brokerage services.

The importance of one type of SST, self-scanning technology, has grown significantly in retailing seemingly because of its potential strategic value. The appeal of self-scanning technology is primarily derived from the elimination of a service representative. Retailers are drawn to self-checkout because of its promise of greater cost efficiencies, enhanced service quality, and attraction of new customers over in-person services (Parasuraman and Grewal, 2000).

The use of self-scanning technology does not always lead to positive consumer attitudes or consumer usage. To encourage greater use of self-checkout/check-in, some firms are trying to force consumers into using the technology by charging additional fees for using the traditional full-service transaction. However, Reinders, Dabholkar, and Frambach (2008) argue that forcing consumers to use technology based self-service has severe and adverse effects on attitudes both toward using the SST and toward the service provider. Restricted freedom leads to frustration and hostile attitudes toward the source of the restriction, in this case the service provider (Fitzsimons and Lehmann, 2004). The negative attitudes resulting from forced use of SST can include: 1) an increase in negative word-of-mouth about the service provider, and 2) a loss of customers to competition.

Weijters, Rangarajan, Falk, and Schillewaert (2007) investigated consumer usage of self-scanning technology in grocery stores in Western Europe. The authors identified a model to better understand the antecedents and consequences of self-scanning usage by customers in a retail setting. As part of their study, they found perceived usefulness, perceived ease of use, perceived reliability, and perceived fun to be key drivers of consumer attitudes toward self-scanning usage. Wang, Harris, and Patterson (2009) also found that situational influences (waiting time, task complexity, and group influence) may impact an individual's choice of self-checkout usage.
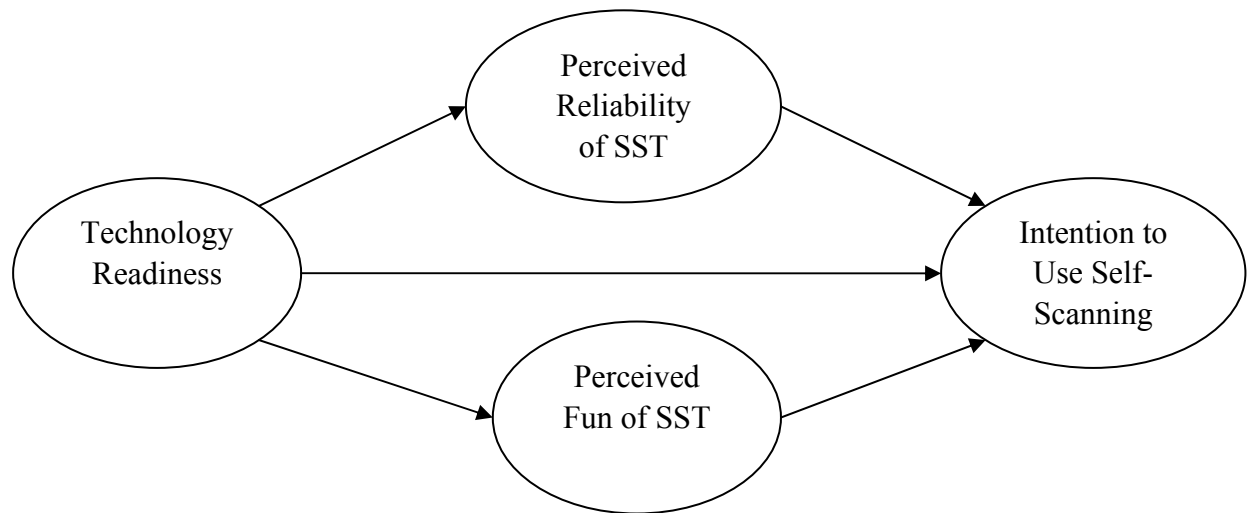
One potential risk faced by firms using self-scanning options is reduced customer loyalty. Selnes and Hansen (2001) suggested that self-service without minimal personal interaction may have a negative effect on consumer loyalty because the important social-bond element is removed. The authors also argued that personal service and personal relationships between customers and employees are even more important in maintaining customer loyalty when simple and repetitive tasks are automated. Beatson, et al. (2007) found similar results regarding the potential negative impact self-scanning may have on customer satisfaction and resulting customer commitment. Some grocery stores, such as Albertson's, have recently announced they are removing the self-service checkouts in their stores to enhance the one-on-one interaction with customers (Gasparro, 2011).

Conceptual Model

Figure 1 represents the proposed conceptual model regarding consumers' intention to use self-scanning technology (IU). Based on theoretical underpinnings supported in prior research,

this model theorizes that consumer technology readiness has a positive influence on perceived reliability and perceived fun of SST. In addition, technology readiness, perceived reliability of SST, and perceived fun of SST usage are also hypothesized to be a casual determinant of IU.

Figure 1
Proposed Self-Scanning Model

Technology Readiness

Technology readiness (TR) refers to an individual's propensity to embrace and use new technologies for accomplishing goals in home life and at work (Parasuraman, 2000). TR is a state of mind, resulting from mental enablers and inhibitors that collectively determine a person's predisposition to use new technology (Parasuraman, 2000). Meuter et al. (2003) suggested that 55% of Americans suffer from some degree of technophobia. In other words, many individuals avoid technology if they are not comfortable with, or not ready to use the technology.

TR has been commonly assessed through the use of the Technology Readiness Index (TRI), which is a 36-item measurement scale developed by Parasuraman (2000) that assesses four dimensions of TR. According to the TRI, two dimensions of TR are contributors and two are inhibitors of technology adoption. The contributors to technology adoption are: 1) Optimism – the degree to which individuals believe that technology can benefit their lives and give them more control, flexibility, and efficiency in their lives, and 2) Innovativeness – a natural desire to experiment with new technologies, as well as to be a thought leader. The inhibitors to

technology adoption are: 1) Discomfort – a feeling of lacking both control over technology and the confidence in making the technology work, and 2) Insecurity – a need for assurance that a technology-based product, service or process will operate reliably and accurately.

The TRI reflects a set of beliefs about technology, but is not an indicator of an individual's competency in using the technology. The TRI can be used to assess TR for employees within a firm, as well as for the firm's customers. The TRI has been found to be a valid indicator of TR across various cultures (Tsikriktsis, 2004; Jaafar, Aziz, Ramayah, and Saad, 2007; Meng, Elliott, and Hall, 2010).

Findings on the impact of TR on perceptions and intentions towards using SST are scarce and conflicting. Lin and Hsieh (2006; 2007) found increased customer TR leads to favorable behavioral intentions when using SST, and argued that firms should pay special attention to TR in order to improve favorable outcomes of SST implementation. However, Liljander, Gillberg, Gummerus, and Riel (2007), found that TR had little impact on consumers' adoption behavior of SST. Similarly, Lin, Shih, and Sher (2007) found a non-significant relationship between consumer TR and their intentions to use a specific e-service. These limited and confounding results suggests a need to further investigate the impact TR has on usage intentions for specific SST. Therefore, the following hypothesis is presented:

> H1   *TR has a positive and direct effect on consumers' intention to use self-scanning technology (IU).*

Perceived Reliability Of Sst

Perceived reliability of SST (PR) refers to the correct technical functioning of technology. PR is critical to any retail transaction using SST. PR can reduce a consumer's anxiety and perceived risk of using SST to complete retail transactions. We have found no studies specifically investigating the effect of TR on PR. Walczuch and Lundgren (2004) concluded that knowledge and experience with the Internet did play a limited role in influencing trust in using e-retailing. In other words, the more an individual uses the Internet and knows how e-retailers operate, the more confident that individual will feel that e-retailing technology will work correctly for them. Given the need for further research on the influence TR has on PR, and the suggestion of Parasuraman (2000) to examine the consequences of TR, the following hypothesis is proposed:

> H2   *TR has a positive and direct effect on perceived reliability of SST (PR).*

Limited research exists regarding the impact of PR on IU. Dabholkar, Bobbitt, and Lee (2003) argue that PR does have a positive impact on IU. Their findings, however, were based on a small sample size (n = 49). Weijters et al. (2007) found PR to be a determinant of a

consumer's "attitude" towards usage of SST. Similarly, Dabholkar and Bagozzi (2002) proposed perceived performance as being a determinant of attitude towards using SST. Drawing on the insights from these earlier studies, the following hypothesis is proposed:

H3 *PR has a direct and positive effect on consumers' intention to use self-scanning technology (IU).*

Perceived Fun of SST

Perceived fun of SST (PF) focuses on the enjoyment aspect of using technology. Enjoyment or fun refers to the extent to which the activity of using technology is perceived to provide reinforcement in its own right, apart from any performance consequences that may be anticipated (Davis, Bagozzi, and Warshaw, 1989). We also have found no studies investigating specifically the effect of TR on PF. Lin et al. (2007) found that a consumer's TR did positively impact consumer satisfaction with SST. The authors described satisfaction as a judgment by the consumer that the product or service feature provided a pleasurable level of consumption-related fulfillment. Again, given the need for further research on the influence TR has on PF, the following hypothesis is presented:

H4 *TR has a positive and direct effect on perceived fun of SST (PF).*

PF has been found to be a dominant factor in influencing both relationship duration and repurchase intention as it relates to online shopping (Bauer, Falk, and Hammerschmidt, 2006). PF has also been found to be an important determinant of attitude toward the use of technology (Davis et al. 1989, 1992; Dabholkar et al., 2002; and Weijters et al. 2007). In keeping with this theoretical argument, the following hypothesis is proposed:

H5 *PF has a direct and positive effect on consumers' intention to use self-scanning technology (IU).*

METHODOLOGY

Data Collection

An online survey was developed to collect data using Zoomerang's online consumer panel. Panel members were randomly selected to receive email invitations with Zoompoints as incentives for their participation. Respondents self-selected, and a total of 1,079 consumers chose to participate in the survey by responding to the email invitation. The sample was comprised of 48.4% male and 51.6% female respondents. In addition, 48.7% were married, and

75.2% had received some education after high school. Age groupings were 18 to 20 (4.2%), 21 to 30 (22.5%), 31 to 40 (20.1%), 41 to 50 (20.7%), and over 50 (32.5%). Finally, 28.1% of respondents reported annual household income under $25,000, 18.8% reported income from $25,000 to $34,999, 16.3% reported income from $35,000 to $49,999, 18.0% reported income from $50,000 to $74,999, 10.1% reported income from $75,000 to $99,999, and 8.6% reported annual household income over $100,000.

Measurement of Constructs

The questionnaire began with the 36 items that comprise the TRI Scale (Parasuraman, 2000). The second part of the questionnaire included three items that assessed PR, two items that evaluated PF, and a single item that assessed IU. The final section of the questionnaire assessed demographic characteristics of respondents. A pretest of the on-line questionnaire revealed no problems with regard to respondent interpretation of the questions and data tabulation.

The internal consistency of the scales was tested through the computation of Cronbach alpha values. Calculated alphas of .891 (technology readiness), .803 (perceived reliability), and .886 (perceived fun) were all deemed adequate for use in the conduct of basic research (Nunnally, 1978).

Data Analysis

Both proposed measurement and structural models were tested using Structural Equation Modeling (SEM). Three types of information were considered in assessing model fit in both cases: chi-square, measurement error, and fit indices. Given that chi-square values tend to be sensitive to sample size and are likely to be significant if large datasets are utilized, chi-square is not an absolute criterion in evaluating model fit. A second criterion that was examined was measurement error, or RMSEA (root-mean-square error of approximation). The final piece of evidence examined were the fit indices of CFI (Comparative Fit Index), IFI (Incremental Fit Index), NFI (Normed Fit Index), and NNFI (Non-Normed Fit Index).

RESULTS

Test Of Measurement Model

The TRI (Parasuraman, 2000) was used to assess TR. Items which had non-significant and/or low factor loadings on the TR construct were deleted from the model. A 13-item construct was selected as the optimal solution for the measurement of TR, with the reliability of the TR construct improving slightly to .911.

The three item scale measuring PR and the two item scale evaluating PF were measurement items used in previous research (Dabholkar et al. 2002; Weijters et al. 2007). The single item scale assessing IU was designed specifically for this study (i.e., "In the future, how likely is it that you would use self-scanning technology if it were available at the store in which you are shopping?" The path loadings for the proposed measurement model are shown in Table 1. All path coefficients were significant at the .01 level, with the majority of loadings above .50, indicating high validity for the proposed measurement model.

Table 1: Construct Reliabilities and Item Loadings for Self-Scanning Model	
Construct/Items	Reliability/Item Loadings
Technology Readiness (TR)	**.911**
Technology gives people more control over their daily lives.	.46
Other people come to me for advice on new technologies.	.73
I prefer to use the most advanced technology available.	.71
Technology makes me more efficient in my occupation.	.57
I am among the first in my circle of friends to acquire new technology when it appears.	.71
I find new technologies to be mentally stimulating.	.73
I can usually figure out new high-tech products and services without help from others.	.72
Technology gives me more freedom of mobility.	.61
I keep up with technological developments in my areas of interest.	.76
Learning technology can be as rewarding as the technology itself.	.60
I enjoy the challenge of figuring out high-tech gadgets.	.77
I feel confident that machines will follow through with what I instructed them to do.	.54
I find I have fewer problems than other people in making technology work for me.	.72
Perceived Reliability of SST (PR)	**.803**
Self-scanning will be reliable.	.91
I expect self-scanning to work well.	.75
Self-scanning will have a faultless result.	.65
Perceived Fun of SST (PF)	**.886**
Self-scanning will be entertaining.	.82
Self-scanning will be enjoyable.	.96

The results for assessing the fit of the proposed measurement model are shown in Table 2. The chi-square statistic of 2739.38 was significant at 153 Degrees of Freedom (p<.000). Other fit indices, however, all demonstrate a good model fit. The fit indices of CFI, IFI, NFI, and NNFI were all reasonably high at .91, .91, .90, and .90 respectively. In addition, the RMSEA was low at .13, therefore, the generalizability of the measurement model was accepted and assumed valid.

Table 2: Measurement Model Fit								
	Chi-Square	DF	Sig.	RMSEA	CFI	IFI	NFI	NNFI	Decision
Proposed Measurement Model	2739.38	153	.000	.13	.91	.91	.90	.90	Accept
Notes: RMSEA = Root Mean Square Error of Approximation, CFI = Comparative Fit Index, IFI = Incremental Fit Index, NFI = Normed Fit Index, NNFI = Non-Normed Fit Index									

After confirming the measurement model, the structural model shown in Figure 1 was estimated. The LISREL output for assessing the fit of the structural model is presented in Table 3. The overall model fit was again assessed through chi-square, error level (RMSEA), and multiple fit indices (CFI, IFI, NFI and NNFI). Although the chi-square statistic of 1863.91 was significant at 148 degrees of freedom (p<.000), the multiple fit indices were all above the 0.90 level, and the RMSEA was relatively low at .11, all indicating an acceptable fit between the hypothesized model and the data.

Table 3: Structural Model Fit								
	Chi-Square	DF	Sig.	RMSEA	CFI	IFI	NFI	NNFI	Decision
Proposed Structural Model	1863.91	148	.000	.11	.94	.94	.93	.93	Accept
Notes: RMSEA = Root Mean Square Error of Approximation, CFI = Comparative Fit Index, IFI = Incremental Fit Index, NFI = Normed Fit Index, NNFI = Non-Normed Fit Index									

Test of Hypotheses

Given that the proposed structural model was confirmed and viewed as valid, H1 – H5 were tested through freeing up the proposed paths and fixing the other path coefficients at zero. As the results in Table 4 indicate, TR does significantly impact PR and PF, but not IU. Therefore, H2 and H4 were supported, but not H1. In addition, the hypothesized positive influences of PR and PF on IU were confirmed, thus H3 and H5 were also supported. All path coefficients of supported hypotheses were significant at the .001 level.

Table 4: Proposed Structural Model Results			
	Perceived Reliability (PR)	Perceived Fun (PF)	Intention To Use (IU)
Technology Readiness (TR)	.91*	.81*	.06**
Intention to Use (IU)	.40*	.42*	NA
*Significant at p < .001, **Not Significant			

Mediation Effects

Lin et al. (2007) also found a non-significant relationship between TR and consumers' intention to SST, but did find the SST attributes of perceived usefulness and perceived ease of use to fully mediate the effects between TR and consumers' intention to use SST. Given these findings, and the theoretical underpinnings that support the justification for a hypothesized link between TR and IU, further analysis was conducted to assess if the SST attributes of PR and PF mediate the impact of TR on IU. Therefore, the following two hypotheses are proposed:

> H6 *Perceived reliability of SST (PR) mediates the effect of TR on consumers' intention to use self-scanning technology (IU).*

> H7 *Perceived fun of SST (PF) mediates the effect of TR on consumers' intention to use self-scanning technology (IU).*

The test for mediation effect was conducted using guidelines presented by Baron and Kenny (1986). First, when regressing the mediator on the independent variable, the independent variable must significantly affect the mediator. Next, when regressing the dependent variable on the independent variable, the independent variable must significantly affect the dependent variable. Finally, when regressing the dependent variable on both the independent variable and the mediator, the mediator must significantly affect the dependent variable. To establish mediation, the effect of the independent variable on the dependent variable must be less in the third regression test than in the second. This study also used the Sobel test (Sobel, 1982) to confirm if the mediation path was significant. Table 5 summarizes the results of the mediation tests.

Table 5: Mediation Tests for Perceived Reliability and Perceived Fun of SST					
	Dependent Variables				
	Perceived Reliability (PR)	Intention to Use (IU)	Intention to Use (IU)	Perceived Fun (PF)	Intention to Use (IU)	Intention to Use (IU)
TR	.016*(10.39)	.069*(11.73)	.040*(7.33)	.019*(10.35)	.069*(11.73)	.041*(7.49)
PR			1.797*(17.96)			
PF						1.466*(16.99)
Sobel Test		z=7.31*			z=8.29*	
Notes: t-value in parentheses; * significant at p < .001						

The results in Table 5 confirm that TR significantly affects PR and IU, respectively. For the meditation effect of PR to hold, the effect of TR on IU must be reduced when PR is controlled, while the effect of PR on IU must be significant. As shown in Table 5, the effect of

TR on IU was reduced from .069 to .040 with *t*-value reduced from 11.73 to 7.33, and the effect of PR on IU was significant. Moreover, the Sobel test ($z = 7.31$, $p < .001$) confirmed that the mediation effect of PR does exist, therefore, confirming H6. When the effect of TR was reduced, its effect was still significant when PR was controlled. This finding show PR only partially mediates the path between TR and IU, suggesting that other mediators may exist.

The findings in Table 5 show similar results for the mediating effect of PF. The effect of TR on IU was reduced from .069 to .041 with *t*-value reduced from 11.73 to 7.49, and the effect of PF on IU was significant. Again, the Sobel test ($z = 8.29$, $p < .001$) confirmed that the mediation effect of PF does exist, thus H7 was supported.

Test of Trimmed Model

Since the results in Table 4 indicated a non-significant relationship between TR and IU, the structural model was further estimated by trimming the path between TR and IU. Thus, the trimmed model and the original full model were nested, and the two models were compared based on the difference between their chi-square statistics (see Table 6).

Table 6: Trimmed Versus Full Model		
	Trimmed Model	Full Model
Path	Path Coefficients	Path Coefficients
TR->PR	.91* (11.07)	.91* (11.04)
TR->PF	.82* (10.55)	.81* (10.49)
TR->IU		.06 (.79)
PR->IU	.41* (12.65)	.40* (10.94)
PF->IU	.43* (12.55)	.42* (11.16)
Model Fit Statistics		
Chi square (d.f.)	1864.62* (149)	1863.91* (148)
CFI	.94	.94
IFI	.94	.94
NFI	.93	.93
NNFI	.93	.93
RMSEA	.11	.11
Note: * p < .001		

As shown in Table 6, the trimmed model yielded an x^2 of 1864.62 (149), and did not deteriorate significantly ($\Delta x^2 = .71$, $\Delta d.f. = 1$, $p = .23$). Moreover, the relationships of TR $\rightarrow$ PF, PR $\rightarrow$ IU, and PF $\rightarrow$IU were all slightly stronger in the trimmed model than in the full model. Therefore, the overall results in Table 6 indicate that the trimmed model (without the TR $\rightarrow$ IU path) is the preferred model.

DISCUSSION AND IMPLICATIONS

This study extends previous research related to TR. Specifically, this study examined the impact of TR on consumers' perceptions of SST attributes, as well as the impact on consumers' intention to use self-scanning technology. Previous studies have examined the influence TR has on the SST attributes of perceived usefulness and perceived ease of use (Lin et al., 2007; Walczuch, Lemmink, and Streukens, 2007). There currently, however, is a gap in the literature related to the investigation of TR and its impact on other SST attributes, such as perceived reliability and perceived fun. An important finding of this current study is that TR does have a direct and positive influence on both perceived reliability and perceived fun of SST.

Another important finding of this study is the seemingly minor direct role TR plays in predicting consumers' intention to use self-scanning technology to complete a retail transaction. The results of this study show that consumers' perceived reliability and perceived fun of SST appear to be more important drivers of intention to use self-scanning technology than TR, as both constructs were found to have a direct and positive effect on consumers' intention to use self-scanning technology. Perceived reliability and perceived fun of SST were also found to partially mediate the effect of TR on intention to use self-scanning technology. This finding helps to explain the non-significant path found between TR and IU, as well as sheds light on why consumers who score high on TR do not always use self-scanning options in the retail environment. Other factors, such as perceptions related to the SST (i.e., low perceived reliability, lack of enjoyment), or simply the desire to interact with store employees may dominate the decision to use or not use self-scanning technology.

Important managerial implications can be derived from the findings of this study. First, retail managers must ensure that self-scanning technology is dependable and functioning correctly (e.g., reliable). Some consumers may seek to avoid self-scanning options because of their lack of confidence in, and understanding of, the self-scanning technology. Therefore, educating consumers on how to use self-scanning technology is critical. Airlines have been successful in educating consumers on how to use check-in kiosks by having employees show them how the kiosks work. Moreover, employees should also be trained to promptly and patiently help customers solve problems when they encounter troubles in using self-scanning technologies. This will encourage customers to try and assure them a more reliable and less stressful experience in using self-scanning technologies.

Creating some aspect of enjoyment/fun from using the self-scanning technology also appears to be imperative. Bauer et al. (2006) point out the importance of hedonic aspects in technology-dominated retail settings. The use of self-scanning technology, in part, is seemingly driven by the anticipated enjoyment received from using the technology. Innovative technology should be used that is aesthetically appealing, and that uses state-of-the art audio and visual effects.

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Although this study did provide additional insight into the influence TR has on the evaluation of SST attributes and consumers' intention to use self-scanning technology, a number of limitations do exist. First, our findings were obtained from a single study. Therefore, caution must be exercised when generalizing the results to the entire consuming population. Second, we used a single determinant (TR) of perceived reliability and perceived fun of SST. However, there are a number of other factors (i.e., quality, trust, complexity, social influence, etc.) that could also impact the evaluation of these SST attributes. We also used a single item scale to assess intention to use self-scanning technology. Finally, even though the sample size in this study was relatively large, respondent participation was based on self-selection, and as a result, some selection bias could exist within the sample.

Future research should focus on the influence TR has on consumer perceptions of SST attributes across different individual characteristics and different cultures. Additional research is also needed to investigate the impact situational variables, such as perceived waiting time, the availability of customer assistance if needed, and the presence of other customers on consumers' intention to use self-scanning technology. Finally, future research could expand upon the current findings by examining the role played by specific dimensions of TR (i.e., optimism, discomfort, etc.) in explaining consumers' intentions to use self-scanning technology to complete a retail transaction.

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