

The effect of the Smartphone dissemination on the macro-marketing environment.

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ABSTRACT: *For the last decade, the diffusion of the Smartphone in the world has been phenomenal. A lot of academic research has been devoted to its addiction effect, its impact on learning, medical treatment, advertising and store shopping environment. This article aims at looking at its wide-ranging effect on the macro-marketing environment. It is divided in three parts:*

- 1. The direct competitive impact on sales of products like cameras, alarm clocks, calculators, watches, notebooks, diaries, regular line phones etc..*
- 2. The Smartphone Applications effect on consumption and use of certain types of products, like taxis, buses etc. as well as its effect on price competition.*
- 3. The third part considers the indirect beneficial effects on price inflation, and pollution environment.*

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I. INTRODUCTION.

The Smartphone revolution all over the world, has raised a few academic researches issues. Some articles have dealt with the issue of adoption and choice of the device (Kim, 2016; Baglione, 2014; Attri, Maheshwari, & Sharma, V. (2017); Mishra, M. K., & Choudhury, D. (2013); Lakshmi, & Kavida, (2018); Boscor (2016); Barrett (2012); Godinho de Matos, Ferreira & Krackhardt, D. (2014)...) Others have dealt with the addictive effect of the product, (Gumusgul, (2018); Jeong et al. (2018); Vahedi & Saiphoo (2018); Gündogdu et al. (2018)...) . Other researchers have focused on the learning effects of the Smartphone (Muchlas (2018); Klímová, (2018); Jain et al. (2018); Ahmed & Kabir (2018); Hochberg et al (2018)...) or on medical applications and issues (Versluis et al. (2018); Raicle et al. (2018); Minen et al. (2018); Evald (2018); Bier et al. (2018); Rausch et al. (2018); Richardson et al. (2018)...). Finally numerous studies have evaluated the Smartphone impact on Advertising and Shopping environment (Kelehaar et al. (2018); Martins et al. (2019); Ali et al. (2014); Kang & Kyunseung (2016); Barry et al.; Hanley & Boostrom (2011); Kim & Law (2015); Bhawe et al. (2013); Fuentes & Backstrom (2017); Fuentes et al. (2017); Spaid & Flint (2014); Holmes et al. (2014). As opposed to those past researches, the objective of this article is to investigate the wide-ranging effect of the Smartphone dissemination on the macro-marketing environment. It will be divided in three sections.

A. The direct competitive effects.

Because it incorporates many features besides its telephonic aspect, the Smartphone has caused a negative effect in the sale of some products.

For instance, the company Cannon developed in the late 1970's the so called "idiot proof camera", that enabled people with no photographic skills to realize nice pictures. This was a tremendous success. Today everyone with a Smartphone can produce similar results with the built-in camera. As a consequence the sale of ordinary cameras has decreased tremendously. Only the more expensive brands' targeted to skilled amateurs or professionals, have kept their sales volume.

To a lesser degree, the phenomenon of abandonment has touched other categories of products like diaries, address and telephone books, pocket calculators, notebooks, pens, alarm clocks and, sometimes even watches. The Waze and Google Map applications have seriously reduced the need for road and city maps. Those are only examples of the direct competitive effects that the Smartphone had on the sales of previously popular goods.

However the indirect effects on the consumption and consumer behavior for some other products and services have also been important.

B. The indirect competitive effects.

It is important to stress first, that by providing instant access anywhere to the Internet, the Smartphone has multiplied manifolds its impact on consumption habits. The effects of the Internet on consumption behavior

have already been investigated previously (Picard (2017)), but with full access, even within stores, consumers can compare prices immediately, (and even if they are particularly uninhibited, show the competitor's lower price to the store salesperson, who sometimes will even accept consequently, to grant this particular consumer a discount). This phenomenon puts enormous pressure on store price margins for standardized items.

The taxi industry has also been affected in different ways by the Smartphone dissemination. First, it has created direct competition by companies like Uber that provides quasi-similar services at lower prices. Second, applications like Google Map allow tourists to easily find their ways, even in cities where street signs are either none existent or written in an alphabet they are not familiar with. This might affect taxi use for short distances. The Uber (and likes) applications might also have reduced the need for a personal chauffeur, since it is extremely rare that no Uber driver would be available at wish, in a city.

Other applications like Moovit, that gives instant public transport directions and timetables' further reduce the need for tourists to spend more money on a taxi drive. That application, because it indicates the best way, and the time delay necessary to reach a destination has also increased the use potential of public transportation by local residents.

As an advertising vehicle, and an instant access to news, the Smartphone has also decreased the sales and profitability of newspapers and to a lesser degree other media vehicles.

The What's up application has also probably diminished the number of regular phone conversations. This has probably impacted the number of paid long distance calls that consumers had to incur in the past.

There are without any doubts many other indirect effects of the Smartphone on other products consumption' and the trend is certainly going to increase with the ever growing development of new applications. In the next section, some of the macro-effects of the Smartphone revolution will be examined.

C. The macro effects of the Smartphone.

As was indicated before, applications of the "Waze" category had seen huge popularity. They enable car drivers to save time and gasoline consumption by indicating the fastest way for reaching desired destinations. The global impact of Waze use, is both economically and ecologically positive, since less productive time is wasted on the roads, and by the consequential reduction of gas consumption, the global pollution level is diminished. To a similar extent the facilitation of public transportation caused by the "Moovit" and "Google Map" applications has also a positive effect on global pollution and gas consumption, since it provides a more ecological mean of transportation than the use of cars or taxis.

The instant access to competitors' price information in shopping place has further reduced the phenomenon of "dissymmetry of information" that greatly benefited to retailers in the past. It is becoming harder and harder to realize what economists call "supernormal profits" in the retail business and service industry. This might reduce the usefulness of hiring highly manipulative salespeople, and instead, encourage marketers in their efforts to earn profits through providing superior real value to their present and potential customers

D. Conclusion.

In addition to the social and other tremendous changes on Society that the Smartphone global dissemination has brought upon within the last ten years, this article has attempted to focus more intensively on the macro effects of the phenomenon. For that purpose a distinction was made between direct and indirect effects on other products consumption, and the macro-effects on the ecological and economical global environment. Nevertheless, it is probably too early to realize precisely how much life has changed with the advent of this technology.

REFERENCES.

- [1]. Ahmed, M. S., & Kabir, A. (2018). The Acceptance of Smartphone as a Mobile Learning Tool: Students of Business Studies in Bangladesh. *Malaysian Online Journal of Educational Technology*, 6(2), 38–47.
- [2]. Ali, G., Madni, A. R., Islam, H. tul, & Husnain, N. (2014). Mobile phone advertisements create false need: Exploring usage & liking of mobile phones & advertisements by youngsters. *Global Media Journal: Pakistan Edition*, 7(2), 7–17.
- [3]. Attri, R., Maheshwari, S. & Sharma, V. (2017). Customer Purchase Behavior for Smartphone Brands. *IUP Journal of Brand Management*, 14(2), 23–37.
- [4]. Baglione, S. L. (2014). Are Smartphones a Smart Marketing Buy? *International Journal of Business, Marketing, & Decision Science*, 7(1), 19–31.
- [5]. Barrett, P. (2012). An Approach to Accelerate Mobile Marketing in Canada: The Canadian Marketing Association's Mobile Marketing Accelerator. *International Journal of Mobile Marketing*, 7(1), 27–30.
- [6]. Barry, A. E., Bates, A. M., Olusanya, O., Vinal, C. E., Martin, E., Peoples, J. E., ... Montano, J. R. (2016). Alcohol Marketing on Twitter and Instagram: Evidence of Directly Advertising to Youth/Adolescents. *Alcohol & Alcoholism*, 51(4), 487–492.
- [7]. Bhave, K., Jain, V., & Roy, S. (2013). Understanding the Orientation of Gen Y toward Mobile Applications and In-App Advertising in India. *International Journal of Mobile Marketing*, 8(1), 62–74.
- [8]. Bier, N., Paquette, G., & Macoir, J. (2018). Smartphone for smart living: Using new technologies to cope with everyday limitations in semantic dementia. *Neuropsychological Rehabilitation*, 28(5), 734–754.

- [9]. Boscor, D. (2016). Marketing strategies adopted by Romanian smartphones producers. Case study: Visual Fan. Bulletin of the Transilvania University of Brasov. Series V: Economic Sciences, 9(2), 31–38.
- [10]. Evald, L. (2018). Prospective memory rehabilitation using smartphones in patients with TBI. Disability & Rehabilitation, 40(19), 2250–2259.
- [11]. Fuentes, C., Bäckström, K., & Svingstedt, A. (2017). Smartphones and the reconfiguration of retailscapes: Stores, shopping, and digitalization. Journal of Retailing & Consumer Services, 39, 270–278.
- [12]. Fuentes, C., & Svingstedt, A. (2017). Mobile phones and the practice of shopping: A study of how young adults use smartphones to shop. Journal of Retailing & Consumer Services, 38, 137–146
- [13]. Godinho de Matos, M., Ferreira, P., & Krackhardt, D. (2014). Peer Influence in the Diffusion of Iphone 3G over a Large Social Network. MIS Quarterly, 38(4), 1103–A15
- [14]. Gumusgul, O. (2018). Investigation of Smartphone Addiction Effect on Recreational and Physical Activity and Educational Success. World Journal of Education, 8(4), 11–17.
- [15]. Gündođu, C., Aygün, Y., Ilkim, M., & Tüfekçi, S. (2018). Explaining the Impact of Disabled Children's Engagement with Physical Activity on Their Parents' Smartphone Addiction Levels: A Sequential Explanatory Mixed Methods Research. Journal of Education and Training Studies, 6(2), 44–53.
- [16]. Hanley, M., & Boostrom., R. E. (2011). How the Smartphone is Changing College Student Mobile Content Usage and Advertising Acceptance: An IMC Perspective. International Journal of Integrated Marketing Communications, 3(2), 49–64.
- [17]. Hochberg, K., Kuhn, J., & Müller, A. (2018). Using Smartphones as Experimental Tools--Effects on Interest, Curiosity, and Learning in Physics Education. Journal of Science Education and Technology, 27(5), 385–403.
- [18]. Holmes, A., Byrne, A., & Rowley, J. (2014). Mobile shopping behaviour: insights into attitudes, shopping process involvement and location. International Journal of Retail & Distribution Management, 42(1), 25–39.
- [19]. Jain, D., Chakraborty, P., & Chakraverty, S. (2018). Smartphone Apps for Teaching Engineering Courses: Experience and Scope. Journal of Educational Technology Systems, 47(1), 4–16
- [20]. Jeong, Se-Hoon; Yum, Jungyoon; Hwang, Yoori. (2018). Effects of Media Attributions on Responsibility Judgments and Policy Opinions. Mass Communication & Society, 21(1), 24–49,
- [21]. Kang Woo Lee, & Hyunseung Choo. (2016). Predicting user attitudes toward smartphone ads using support vector machine. International Journal of Mobile Communications, 14(3), 226–243.
- [22]. Ketelaar, P. E., Bernritter, S. F., van Woudenberg, T. J., Rozendaal, E., Konig, R. P., Hühn, A. E., ... Janssen, L. (2018). "Opening" location-based mobile ads: How openness and location congruency of location-based ads weaken negative effects of intrusiveness on brand choice. Journal of Business Research, 91, 277–285.
- [23]. Kim, J. S. (2016). An Investigation of Key Factors Affecting the Adoption of Smartphone in Three Regions. International Journal of Innovation & Technology Management, 13(6), 1.
- [24]. Kim, H. H., & Law, R. (2015). Smartphones in Tourism and Hospitality Marketing: A Literature Review. Journal of Travel & Tourism Marketing, 32(6), 692–711.
- [25]. Klímová, B. (2018). Mobile Phones and/or Smartphones and Their Apps for Teaching English as a Foreign Language. Education and Information Technologies, 23(3), 1091–1099.
- [26]. Lakshmi, S., & Kavida, V. (2018). Factors Contributing to Brand Positioning of Smartphones Among College Students in Chennai: A Study. IUP Journal of Brand Management, 15(1), 55–65.
- [27]. Martins, J., Costa, C., Oliveira, T., Gonçalves, R., & Branco, F. (2019). How smartphone advertising influences consumers' purchase intention. Journal of Business Research, 94, 378–387.
- [28]. Minen, M. T., Stieglitz, E. J., Sciortino, R., & Torous, J. (2018). Privacy Issues in Smartphone Applications: An Analysis of Headache/Migraine Applications. Headache: The Journal of Head & Face Pain, 58(7), 1014–1027.
- [29]. Mishra, M. K., & Choudhury, D. (2013). The Effect of Repositioning on Brand Personality: An Empirical Study on BlackBerry Mobile Phones. IUP Journal of Brand Management, 10(2), 64–82
- [30]. Muchlas. (2018). Developing an Online Learning Media Using Smartphone for the Electrical Machinery Course. Turkish Online Journal of Educational Technology - TOJET, 17(1), 62–68.
- [31]. Picard, J. (2017). The impact of E-Commerce on Physical Distribution. International Conference on Social Sciences, Business, Economics and Management (SBEM) Proceedings ANISSH-2017, 2 (12)
- [32]. Picard, J. (2017). The Internet and Product Bundling and Unbundling. 10th International Conference on Law, Business, Marketing and Education Proceedings (LBME-17)
- [33]. Raichle, C. J., Eckstein, J., Leonardi, L., Brasier, N., Burkard, T., Lapaire, O., ... Brasier, N. (2018). Performance of a Blood Pressure Smartphone App in Pregnant Women: The iPARR Trial (iPhone App Compared With Standard RR Measurement). Hypertension (0194911X), 71(6), 1164–1169.
- [34]. Rausch, M., Simon, J. E., Starkey, C., & Grooms, D. R. (2018). Smartphone virtual reality to increase clinical balance assessment responsiveness. Physical Therapy in Sport, 32, 207–211.
- [35]. Richardson, J. E., Lee, J. I., Nirenberg, A., & Reid, M. C. (2018). The Potential Role for Smartphones Among Older Adults with Chronic Noncancer Pain: A Qualitative Study. Pain Medicine, 19(6), 1132–1139.
- [36]. Rhea, C. K., Felsberg, D. T., & Maher, J. P. (2018). Toward Evidence-Based Smartphone Apps to Enhance Human Health: Adoption of Behavior Change Techniques. American Journal of Health Education 49(4), 210–213.
- [37]. Spaid, B. I., & Flint, D. J. (2014). The Meaning of Shopping Experiences Augmented By Mobile Internet Devices. Journal of Marketing Theory & Practice, 22(1), 73–90.
- [38]. Vahedi, Z., & Saiphoo, A. (2018). The association between smartphone use, stress, and anxiety: A meta-analytic review. Stress & Health: Journal of the International Society for the Investigation of Stress, 34(3), 347–358.
- [39]. Versluis, A., Verkuil, B., Spinhoven, P., & F Brosschot, J. (2018). Effectiveness of a smartphone-based worry-reduction training for stress reduction: A randomized-controlled trial. Psychology & Health, 33(9), 1079–1099.
- [40]. Yu, X., Anaya, G. J., Miao, L., Lehto, X., & Wong, I. A. (2018). The Impact of Smartphones on the Family Vacation Experience. Journal of Travel Research, 57(5), 579–596.

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