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The Double Jeopardy Phenomenon and the Electronic Distribution of Information

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***Abstract*—The aim of this paper is to attract attention to the double jeopardy phenomenon. Double jeopardy seems to very often go unnoticed by companies while they look for an explanation as to why their efforts to enhance the intensity of brand usage are unsuccessful. The clue is that the companies do not pay enough attention to raising the market share. Our discussion in this paper refers to informational websites. Our aim is not to form a final conclusion as to whether there is a double jeopardy phenomenon or not on this particular market. Instead, the conclusion is reached that although the double jeopardy pattern can be observed on the virtual market, the nature of virtual markets can oppose this phenomenon.**

I. Introduction

In the early 60s when Whilliam PcPhee examined the double jeopardy phenomenon (DJ), he might not have expected how universal his idea would be. Nowadays, double jeopardy is observed not only on the traditional market, but on the virtual market as well. Although on the virtual market the double jeopardy phenomenon is competing with the famous 'long tail' theory (the internet enhances the sale of small brands), the Internet distribution does not seem to protect 'small brands from losing twice' [1]. This means that brands on both the Internet and as traditional markets follow the double jeopardy phenomenon – small brands not only attract fewer customers, but these brands are less preferable.

Based on the previous research cited in literature we suspected that our analyses of the usage of the different websites would bring more evidence to suggest the breaking of marketers' 'double jeopardy myopia'. Marketers often do not like the idea of double jeopardy, as they tend to believe that marketing tactics can easily enhance the brand usage. We thought that our conclusion would be that "[...] long-term growth is seen to be a function of penetration not of increased repeat-purchase. This fits the Double Jeopardy pattern but not perhaps the common conception of brand loyalty among practitioners" [2]. But our analyses do not show clear picture of the double jeopardy phenomenon among different categories of websites. Our findings confirm that although the websites are visited by internet users according to the double jeopardy rule, there are many exceptions.

Although the double jeopardy phenomenon has been well-known for over half of century, few studies can be found in marketing literature. On the traditional market the consumers' behaviour during the process of purchasing their coffee, newspapers, soap or breakfast flakes is consistent with the double jeopardy phenomenon [5]. Furthermore, one of the latest publications is the work of C D A Graham [3] who presented a survey based on data gathered from 4,000 of UK households. The results confirmed the double jeopardy phenomenon and the fact that market equilibrium extends into the long term - "[...] exceptional, permanent, structural change in share (i.e. more than 6 points in as many years) does appear to have a common causality. It is strategic, achieved not through everyday manipulation of the promotional mix, but by a major change to brand architecture, or some discontinuous innovations" [4]. A. Elberse [6] pointed out the double jeopardy phenomenon on the virtual market. Her findings show that although as a medium the Internet enlarges the assortment of informational products (this means that according to long tail theory the tail is going to lengthen), the obscure products which form the end of the 'tail' still find few customers. The tail is going to be longer and flatter, not necessary bulked up. This fits with the double jeopardy phenomenon – less popular brands lose 'twice'. On the virtual market the double jeopardy phenomenon was also observed on Polish informational portals [7].

II. The analysis of Business and Informational Polish Portals

In order to examine how double jeopardy affects brands on the virtual market we conducted analyses of three different categories of websites: business and informational portals of Poland and additionally, in the next chapter - social networking sites in the United States.

First, we examined the two categories of Polish portals: business portals (category business, finance and law) and informational portals. The data were taken from the Megapanel PBI/Gemius survey from February 2010. For business portals the frequency of purchase refers to the frequency of visiting the website by the user. Therefore the variable 'views per user' reflects the process of 'buying' information from a particular portal. Trying to explain the double jeopardy phenomenon we use so called model 'w(1-b)'. This model takes into account three variables [8]:

- b_x represents the proportion of customers who buy at least once brand X during the analysed period
- w_x is the frequency of purchasing brand X during the analysed period

- the frequency of purchasing the brand X can be estimated according to the equation that $w_x = w_o/(1-b_x)$, in which w_o is the constant. W_o – is calculated as an average of the $w_x(1- b_x)$ for the all analysed brands.

If the double jeopardy phenomenon can be observed within the data about the reach, users and views for business and informational portals it would mean that the biggest portals (with furthest reach) should also have the highest numbers views. The empirical statistics seem to confirm this pattern. As we can see in Table I and Table II, the higher the reach of the portal (column 4), the higher the number of visits per 'average' internet users (column 5). The correlation between variable 'reach' and 'views per user' is strong:

- for business portals the correlation is 0,73 (R Spearman, p<,05)
- for informational portals the correlation is 0,75 (R Spearman, p<,05).

We can also apply the model of 'w(1-b)' to both analyses allowing us to calculate the expected numbers of visits on the basis of the reach of a particular portal. In this case, the model helps to answer the question: "Taking into account the reach of the portal, does the number of views fit to the reach?" Referring to the example, if the observed usage of a portal is similar to the number calculated using the 'w(1-b)' model, it means that the brand follows the pattern of double jeopardy. The problem for marketers starts when the usage of the brand is lower than calculated. This means, that the brand could be more intensely used, but some factors (unsuccessful campaign, negative PR) contributed to lowering the intensity of usage.

Analyses of Polish business and informational portals seem to confirm that 'small brands lose twice' – not only do fewer users see them, they are also used less intensively (the constant wo is 8.8 for business category and for informational portals wo constant is 16.7). However, we may observe that within both categories there are some brands which go 'against the double jeopardy phenomenon': 1) within the business category e.g. Group Wirtualna Polska– business, Group Bankier.pl or Group Interia.pl – business and 2) within the category informational portals e.g. Wirualna Polska – information, TVN – information or Group Polskie Radio.

III. The analysis of US social networks sites

Let us also analyze the correlation between market share of social networks sites and the activity of their users [Table III]. It should be noted that 'social software' has emerged as a driving force of Web 2.0. The term Web 2.0 was coined by Tim O'Reilly in 2005, to describe a sea of changes in web services and technologies. Overall, there is an increasing presence of social software applications that allow users to communicate, collaborate, and share their personal interests [9]. We examined the data from the five major social networks sites based in the United States: Facebook, MySpace, Tagged, Twitter, myYearbook [10]. If the double jeopardy phenomenon exists on this market, it would mean that users of the largest social network sites are more active than those on the smaller ones. The data only partly confirms this prediction. The changes in the market partly reflect the double jeopardy phenomenon – it means that when MySpace's [11] share of the market decreased,

Table I.
Polish business portals in February 2010. The implementation of the model 'w(1-b)' [14]

	1	2	3	4	5	6
		real users	views	reach (bx)	views per user – observed (views/real users – w_x)	estimated views per user – model $w(1-b_x)$ ($wo(1-bx)$
1	Group Onet.pl	3 680 854	54 476 716	0,21	14,8	11,1
2	Group Money.pl	3 230 031	33 080 782	0,19	10,2	10,8
3	Group Infor	2 592 388	24 926 902	0,15	9,6	10,3
4	Group Wirtualna Polska	2 401 477	38 218 983	0,14	15,9	10,2
5	Group Bankier.pl	2 197 162	40 564 897	0,13	18,5	10,0
6	Group Gazeta.pl	1 773 374	17 713 166	0,10	10,0	9,8
7	Group Interia.pl	1 563 283	22 300 749	0,09	14,3	9,6
8	eGospodarka.pl -	1 448 256	8 139 142	0,08	5,6	9,6
9	forumprawne.org	839 639	-	0,05	-	9,2
10	Group Wolters Kluwer Polska -	759 682	4 034 215	0,04	5,3	9,2
11	Group o2.pl -	709 703	5 092 051	0,04	7,2	9,1
12	nf.pl	629 810	4 014 680	0,04	6,4	9,1
13	m2	515 555	2 333 250	0,03	4,5	9,0
14	Group Inwestycje.pl -	510 190	3 330 369	0,03	6,5	9,0

TABLE II.
POLISH INFORMATIONAL PORTALS IN FEBRUARY 2010. THE IMPLEMENTATION OF THE MODEL W(1-B) [15]

		real users	**views**	**reach (b_x)**	**views per user – observed (views/real users – w_x)**	**estimated views per user – model w(1-b_x)**
1	Group Onet.pl	6 044 938	226 955 389	0,35	37,5	25,5
2	Grupa Gazeta.pl	5 620 848	133 678 936	0,32	23,8	24,6
3	Group Wirtualna Polska	4 813 300	194 257 130	0,28	40,4	23,0
4	Group Interia.pl	3 170 747	69 062 585	0,18	21,8	20,4
5	Group Media Regionalne	2 934 016	78 030 484	0,17	26,6	20,0
6	Grupa Polskapresse - Informacje i publicystyka	2 897 029	35 010 910	0,17	12,1	20,0
7	Group TVN	2 067 830	65 740 032	0,12	31,8	18,9
8	Group Axel Springer	1 336 547	31 593 869	0,08	23,6	18,1
9	Group Presspublica	1 271 260	18 991 842	0,07	14,9	18,0
10	Group Infor - Informacje	1 237 180	22 712 598	0,07	18,4	17,9
11	Group TVP	1 099 680	11 961 268	0,06	10,9	17,8
12	Group o2.pl	1 074 275	17 495 750	0,06	16,3	17,8
13	se.pl	1 041 431	8 892 234	0,06	8,5	17,7
14	Group Google	948 809	-	0,05	-	17,6
15	trojmiasto.pl	707 141	-	0,04	-	17,4
16	Group Gery.pl	644 121	5 823 700	0,04	9,0	17,3
17	Group Polskie Radio	582 316	7 442 190	0,03	12,8	17,2
18	eioba.pl	505 441	-	0,03	-	17,2
19	pogodynka.pl	409 554	7 063 355	0,02	17,2	17,1
20	teleman.pl	401 147	4 665 509	0,02	11,6	17,1

the average time which users spent on this social networks site was also reduces. A similar correlation can be seen in an analysis of Facebook [12] – Facebook grew significantly which lengthened the time per user. Data regarding Twitter, however, runs contrary to the double jeopardy phenomenon: the average time spent on Twitter shortens as its market share rises.

TABLE III.
AVERAGE TIME SPEND ON THE TOP FIVE SOCIAL NETWORKING SITES (RANKED BY MARKET SHARE) AND THEIR MARKET SHARE AMONG US INTERNET USERS, SEPTEMBER 2008&2009 [16]

	September 2009		**September 2008**	
	market share	minutes:seconds	market share	minutes:seconds
Facebook	58,59	23:00	19,94	18:38
MySpace	30,26	25:56	66,84	29:37
Tagged	2,38	25:17	1,62	23:31
Twitter	1,84	15:52	0,15	36:27
myYearbook	1,05	18:07	1,76	26:12

IV. Looking for Explanation

The presented data partly confirms the double jeopardy phenomenon. The larger virtual portals (ranked by reach) are more intensively used (more views per user or longer time spend on the portal). However there are also smaller portals which do not lose 'twice' – they have similar level of usage as bigger ones. Why? We would like to point out a few possible explanations.

Firstly we wonder how far we can compare 'buying' by spending time on informational portals to buying other goods such as coffee, soaps. In a traditional or internet shop the customer can see different competitive brands and decide what to buy. Under image theory customers' behaviour in this situation is based on the pattern that "[...] most choices are actually choices *not* to do something, in other words, *rejections*." [13]. It means that it is very likely that 'big' brands (which are familiar for customer) simply 'win' the process of selection and this way the pattern of the double jeopardy is enhanced. In the process of choosing informational or business portals the situation is different. Although selected portal can be easily changed to another, because it does not directly require spending money, we should notice that the usage of websites is connected with time, convenience and psychological costs. So we may take into consideration that currency is in this case not money, but time (the 'budget' of time which a user poses and is willing to spend on websites is somehow limited) or convenience (the internet user can be attached to the portal, because they think: 'I'm familiar with navigating this web site', 'I have a mail box on this portal, which makes it easier to use business section on this site'). At the same time, it must be remembered that the internet user can easily read two or more different portals more or less simultaneously. The ease of using many different brands by a user at the same time (in this case portals) means that the double jeopardy pattern is somehow 'diluted'.

The case of social network sites seems somehow different. The value of a social network site increases when more users are within the social network. The effect of 'closeness' appears – the more users have their profiles on a social networks site, the more valuable the site seems to be. Therefore the effect of the double jeopardy phenomenon should (theoretically) be even more visible. Partly, we observed the effect – as Facebook enlarges its share of the market, the time spent visiting it grows. But we analyzed the data from very short period of time. This means that every change, even a temporary one, is reflected in the analyses presented and we are far from saying that the double jeopardy phenomenon has been proved.

To conclude, we observe the pattern of the double jeopardy phenomenon among users of websites. Smaller portals can lose 'twice' – meaning that if the portal attracts less customers, the customers are less willing to spend more time on it and visit less often. Therefore 'the more the better'- the more users the website pulls in, the more time they will spend on it and the more actively they will use it. However, according to our analyses, the reach of the portal is not everything. Smaller portals can enhance the level of activity of their users and break the double 'losing' (e.g. delivering unique utility and features, targeted to niche).

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[10] http://www.alexa.com/topsite - According to the alexa ranking of the top sites (6 may 2010) in the global Internet Facebook is in second position, Twitter is eleven, and MySpace is twenty two

[11] C. Mooney, Online Social Networking, Lucent Books, Detroit – New York – San Francisco – New Haven – Waterville – London 2009, p. 18 - In 2003 Tom Anderson and Chris DeWolfe launched MySpace in Santa Monica, California. As music fans, the pair designed the site as a place to promote local music acts. They also wanted to be able to connect with other fans and friends. On MySpace, users created a Web page with a personal profile. Then they invited other users to become their friends. Over the next two years, MySpace grew at a tremendous pace. The site's success brought attention from investors. Rupert Murdoch, famous for his media empire, wanted to buy MySpace. Murdoch had interests in television, film, newspapers, publishing, and the Internet. In 2005 Murdoch purchased MySpace for an amazing $580 million. By early 2008 MySpace had grown to a mind-blowing 110 million active users.

[12] C. Mooney, *Online Social Networking,* Lucent Books, Detroit – New York – San Francisco – New Haven – Waterville – London 2009, p. 19 - Facebook was one site that emerged as an alternative to MySpace. In February 2004 Harvard student Mark Zuckerberg launched Facebook. The site began as a closed network for college students. Closed networks only allow users to join if they meet certain criteria. In contrast, sites such as MySpace and Friendster were open social networking sites. Anyone could sign up for an account.

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