

PRICING DIGITAL PRODUCTS

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ABSTRACT

Digital products are the dominant force of tomorrow. Under this reality, companies need to take under consideration many new paragons in order to determine their pricing policy, which is quite different than the traditional one when we come to digital products. Several factors that determine digital pricing are discussed in this paper, although the subject needs a deeper approach. Social media and search engines are MSPs which are crucial in terms of pricing determination for digital goods, as they are the prevalent way these products are advertised via the internet

Key words

Digital products; Digital pricing; Social media; models.



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INTRODUCTION

Electronic commerce nowadays has a vast presence in global markets, a presence which has the tendency to become the dominant way of commercial expressions in the next 10-20 years. Due to the vast impact of internet in commerce, electronic commerce has, beyond its profound influences in business, changed how products are designed, manufactured, distributed and sold (Ying, 2010).

1.THE THREE GROUPS OF DIGITAL PRODUCTS

A very important "problem" in terms of electronic commerce is how to determine the market price of digital products that sold through internet (Ying, 2010). In order to determine their pricing policy for digital products, scholars have divided them into three groups, which according to Ying (2010), are the following:

GROUP 1: Products which although they are in a digital format, are stored in a physical material one and are transported as physical products.

GROUP 2: Products which are in digital format and transported to the final user via wireless devices and communication cables.

GROUP 3: Services which are represented in digital format (i.e. internet banking) and offered through online or wireless connections.

Digital products have certain characteristics which differentiate them from the physical ones, characteristics which are very important in order to determine their pricing. Such characteristics are that they are capable of not losing their quality during their duplication process, they require negligible storage space, they can be delivered timely no matter the circumstances, it is very easy to be transferred and be processed (Ying, 2010). These qualities make digital products very flexible in terms of how they can approach customers and how they can be sold, something which is a very determinant paragon in order to establish the right price.

Digital products can create a new target group which is clients who are kin in using internet through cables or wireless devices (i.e. mobile phones). That means in simple words that digital products created a new market segment which, although operates in correlation with the physical market, can give a very important boost to a company's sales.

1.DIGITAL PRODUCTS' PRICE DETERMINATION

According to Samuelson and Nordhaus (cited in Ying, 2010), the production cost of the good is identified as one of the major factors in determining the price in traditional economic literature.

Because of their characteristics, digital pricing methods cannot be treated in the same way as the traditional ones. Certain other paragons should be considered in the final pricing scheme such as the online demand, which sometimes s bigger than available resources (Ying, 2010), the almost zero cost of duplicating them (Ying, 2010), the very low distributional cost, especially considering that digital products can reach customers all over the globe in almost zero time, the vast antagonism as the same or similar digital product can be only one click away from the next digital shop and, sometimes, zero selling price-or even negative price- in which some online shops can deliver it.

Another important parameter of digital products, in terms of pricing development, is that many incumbent content providers, manufacturers and service providers view digitization as a threat to revenue and profitability (Docters et al., 2011).

An important issue that digital shops encounter nowadays is that people shows an important unfamiliarity with certain digital products (Docters et al., 2011). Although there is a very fast paced evolvement in customers shopping attitude in terms of digital buying, there a lot of road to cover in order to have a high percent of "tech savvy" customers.

It is important here to underline that marketers should be ready to adopt to such circumstances and response to their customers' needs, something which means that companies need to implement an equilibrium between their physical and digital products in order to be able to satisfy the needs of all, if this is possible, their customer groups (Docters et al., 2011). This is very important considering the fact that in certain markets traditional products outperform digital ones (i.e. lega; publishing industry vs digital one etc.) (Docters et al., 2011).

Several other paragons should be examined in terms of digital pricing and distribution like, digital piracy, software content pricing, digital bundle strategies, how to capture the value of many users while selling one product with more licenses? etc. (Docters et al., 2011).

It is important one to notice that in today's digital world we need to emphasize more on the price instead of quantity (Gerald V., 2009), this is why several models different than the traditional ones have been deployed in order to give answers to digital market phenomena. Such models, in our case, mainly emphasize on the impact of low marginal costs and advertising revenue (Gerald V., 2009).

When we come to quantity, literally we mean bytes which the seller transfers to buyer via an online "distribution-transfer" system. In terms of prices, companies in the digital world they see prices to be paid by consumers while fees are being paid by advertisers (Gerald V., 2009).

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It is important here to underline that there is a vast interaction between prices and advertising fees. This interaction becomes more interesting when it is combined with the low marginal cost digital product sometimes have (Gerald V., 2009).

According to Yamaguchi K. (2014), few decades ago there were only two determinants of the online advertising fees, the CPC (cost per click) and the CPM (cost per 1,000 impressions), while nowadays there are dozens of them due to the vast expansion of digital markets.

1.1. Modeling in digital pricing

Although the traditional models since now were established on the foundation of the supply and demand curves which in a way determine prices of the goods, although the market interactions and correlations were also strong determinants of the price, in our digital era the key distinguishing features of digital products create severe differences in how we approach the market trends in terms of price determinants (Gerald V., 2009). According to Gerald V. (2009), the distinguishing features of digital products are the following:

- They tend to have low or zero marginal cost (i.e. copies).
- Individual products are unique, in a way, in such a way that they tend to create a kind of a monopolistically competitive market (i.e. copyrights which grant to the creator of the product, i.e. song etc., the unique and exclusive right to control the specific product.

According to Kannan et al. (2009), products in the traditional product line tend to be substitutes in general, while the different content product forms tend to become from substitutes to complements. This is very helpful to companies which can bundle their products and create additional revenue in that way.

In order companies to understand the contemporary market trends and determine their way of action in order to establish the right prices, something which will have a severe impact in several other decisions, i.e. how to distribute and in which quantity etc., they have to establish new business models which will be able to incorporate all the new characteristics of the digital markets and digital products (Gerald V., 2009).

In order to be able to create such new models, marketers need to take under consideration two paragons, business and consumers. This is very important if we will be able to see that consumers make decisions based on maximizing their "utility" of consumption subject to an income constraint, while businesses, they want to use the consumer model and cost models in general in order to maximize their profits (Gerald V., 2009). Consumerist behavior is usually following a well-known pattern. When competitor sellers are selling the same product for different prices, consumers will go to the lower price (Gerald V., 2009). Of course, companies can reach, in such occasions, even negative prices by giving to consumers subsidize products in order to attract them (Gerald V., 2009).

1.1.Social media platforms and search engines

Another important paragon which develops the contemporary digital markets is the convenient the online platform is giving to consumers (Gerald V., 2009). Consumers tend to visit online platforms which have more user- friendly interface and in addition platforms which make her feel safe. There is sometimes a certain digital- phobia among consumers, an obstacle that companies need to overcome in order to create an even bigger consumer satisfaction and attract more customers on the long run.

This is very important if companies will be able to understand the vast impact of social media platforms and their role to our digital era. Word of mouth has taken, the last years, enormous dimensions via these social media platforms, as consumers have now a potential network of thousands of connections and news spread worldwide with the speed of light.

Another important paragon which is able to determine in a level the pricing strategy companies need to follow in their digital presence, is search engines. Search engines are a very popular kind of MSPs (Managed Service Providers). According to Hagiu and Yoffie (2009, p.76), "MSPs are products, services, or technologies that connect different types of customers to one another". Because many companies use the same MSPs, in order to choose how to "play" on a given platform, a company which want to play with an MSP, must figure out how to differentiate its products from competitor's that are conducting business with the same MSP (Hagiu and Yoffie, 2009, p.80).

Also according to Hagiu and Yoffie (2009), MSPs can, under certain circumstances, holdup the company which starts collaboration with such platform. Companies have to consider several strategic parameters, in order to avoid such a hold up and gain their competitive advantage via the MSP collaboration (Hagiu and Yoffie, 2009, p.77). An easy way of facing this "problem" is the use of multiple MSPs. For example, a certain online company can use for advertisement more than one social networks or can use more than one credit cards for its customers in terms of transaction. In this way, online companies have a double benefit. They are able to attract more customers, while they minimize the danger of being hold up by a unique MSP. Either ways is a win- win situation for online sellers.

It is more than obvious from the above, that another important factor in pricing placement for digital companies is the right use of MSPs.



CONCLUSIONS

We can conclude that pricing of digital products is a very complicated new way of pricing due to several reasons, some of which were analysed in this essay. It is important for contemporary companies to understand the differentiation in terms of rules that apply to digital products and digital markets as well as in the way consumers react in such digital environment. Several new kind of determinants of the product's pricing methods, such as MSPs and advertisement should be considered from marketers in order to be able to implement the right equilibrium between price and revenue.

REFERENCES

- [1] Docters Rob, Tilstone Lisa, Bednarczyk Susan, GieskesMartijn, 2011. "Pricing In The Digital World", *Journal of Business Strategy*, Vol. 32(4), pp.4-11.
- [2] Gerald V. Post, Proceeding of the 42th Hawaii International Conference on System Sciences, Hawaii, 2009, IEEE: New York.
- [3] Hagiu, Andrei and Yoffie, David B.(2009) What's your google strategy? Harvard Business Review, 87(4), pp.74-81.
- [4] Kannan, P.K., Pope, B.K. & Jain, S. 2009, "Practice Prize Winner--Pricing Digital Content Product Lines: A Model and Application for the National Academies Press", *Marketing Science*, vol. 28, no. 4, pp. 620-636.
- [5] Yamaguchi K., 2014, "Pay per what? Choosing pricing models in digital advertising" Marketing Land [online]. Available at:http://marketingland.com/pay-per-pricing-models-digital-advertising-97913> [Accessed 9 November 2015).
- [6] Ying Sai, 2010. "Pricing Digital Products and Services in Electronic Commerce". *Journal of Contemporary Management Research*, Vol. 6(3), pp. 263-270.



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