

# EXAM INTERNET MARKETING - PART I

Course Instructors: Ana Isabel Costa & Fernando Machado

Academic Year 2011/12, 4th trimester, 01.06.2012

Student's Name and Number: \_\_\_\_\_

## Instructions

This part of the exam contains **5 multiple choice questions**, each with four answer options (A, B, C or D). For each question, you have to **indicate** what the **correct answer option** is **by writing down the correspondent letter** in the space provided. For **every correct answer**, you **add 0.8 points** to your final grade. For **every incorrect answer**, you **discount 0.2 points** from your final grade. If you leave a **question unanswered**, **no points** will be added to or **discounted from** your final grade. This part of the exam is graded for a maximum of 4.0 points and should be finished within **20 minutes**.

- 1) Which of the following activities is the one engaged in by the highest percentage of online users? \_\_\_\_\_
  - A) Using a search engine.
  - B) Reading news.
  - C) Using e-mail.
  - D) Downloading songs.
  
- 2) Which of the following types of online market segmentation and targeting involves tracking the actions of users in web sites? \_\_\_\_\_
  - A) Socio-demographic
  - B) Psychographic
  - C) Contextual
  - D) Behavioral
  
- 3) Studies have shown that viewers scan search engine results pages: \_\_\_\_\_
  - A) In an "F" shaped pattern with greater attention to the left side of the page.
  - B) From top to bottom, with the greatest attention to the right side of the page.
  - C) From top to bottom, with little consideration for elements along either margin of the page.
  - D) In an inverted "T" pattern with greater attention to the left side of the page.
  
- 4) Which of the following statements about online consumers' decision-making process is NOT TRUE? \_\_\_\_\_
  - A) Consumers use search engines to find online offers that can satisfy their consumption needs.
  - B) Direct e-mail marketing messages drive online consumers to make purchase decisions.
  - C) Consumers visit online retailers and price comparison sites always with the intent to make an immediate purchase.
  - D) Consumers use social media to learn about new marketing initiatives and interact more closely with companies and brands.

- 5) Which of the following statements about the importance of brands in online marketing is TRUE? \_\_\_\_\_
- A) Brands increase search costs for online consumers.
  - B) Brands increase consumers' uncertainty about online offers and their purchase risk.
  - C) Brands increase the ability of firms to charge premium prices.
  - D) Brands reduce the level of differentiation in online markets.

Answer Key

Testname: EXAM\_INTERNETMARKETING\_01JUN12\_PART1

- 1) C
- 2) D
- 3) A
- 4) C
- 5) C

**EXAM INTERNET MARKETING – PART II (10.5 points)**

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Academic Year 2011/12, 4th trimester, 01.06.2012

**I (5.5 points)**

“Sephora is a chain of cosmetics stores founded in France in 1970 and acquired by Paris-based conglomerate LVMH (Louis Vuitton and Moët Hennessy) in 1997. The Sephora chain includes more than 750 stores in 17 countries. Carrying over 250 brands, along with their own private label, Sephora offers beauty products including makeup, skincare, fragrance, haircare, bath and body products, and hair and make-up tools” (Wikipedia).

Sephora’s main target market is women aged 25-35. The company has a well developed online marketing strategy which includes among others, the following channels:

- Paid search advertising, by buying thousands of keywords related to beauty and to beauty products;
- An e-commerce site (Sephora.com), generating approximately 20% of the company’s total sales. The site includes various features, such as product reviews and ratings;
- A facebook page where the company provides information and interacts with clients, but which is also used by fans to interact with each other, sharing their passion for make-up.

Imagine that you conducted some research about Sephora’s online presence and obtained the following results<sup>1</sup>:

- The average Sephora customer makes 0.6 online orders per year and spends \$40 per order;
- Sephora’s facebook page had about 800 thousand fans by the end of 2010, 80% of which were Sephora’s customers;
- A study focusing on Sephora’s customer base detected no differences between facebook fans and non-fans in terms of their off-line purchase behavior. However, customers who are fans were found to have a larger average order size (\$45) and to order online more frequently (0.75 orders per year) than non-fans;
- The non-marketing costs amount to 40% of the sales value;
- Sephora spends \$2 million yearly to operate its facebook page.

- a) Briefly discuss how appropriate Social Media Marketing is for the cosmetics business.

**Firms that operate in the cosmetics market are likely to be able to extract significant benefits from using social media marketing mainly due to the following factors:**

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<sup>1</sup> Most of the data presented below is fictitious

- **The consumers of cosmetics (and the consumers of Sephora in General) are mainly young or middle-age women of the middle or high social classes. A high proportion of these consumers (particularly in the younger age intervals) use social media rather intensively. So social media is appropriate to reach the target consumers of a company like Sephora.**
  - **Cosmetics are a high involvement product and many consumers have an emotional attachment to their favourite brands. This is a highly favourable context to interact with consumers (and to facilitate interaction between consumers) through social media.**
  - **Social media marketing is particularly appropriate for products that are consumed publicly and purchased infrequently. That is the case of cosmetics.**
- b) One of Sephora's managers thinks that given the firm's strong social media presence on Facebook, using Twitter cannot generate significant additional benefits for the brand. Would you agree with him? Why or why not?

**Microblogs such as Twitter "allow users to exchange small elements of content such as short sentences, individual images, or video links". Microblogs are different from social networks in various dimensions. Some of the main differences between twitter and facebook are as follows:**

- **The profile of the users: twitter users are older (users aged 26-34 are 30% for twitter and 23% for facebook) and more educated (college grads 28% for twitter vs 22% for facebook) than facebook users.**  
(<http://www.webanalyticsworld.net/2010/12/twitter-vs-facebook-population.html>).
- **Twitter and facebook also differ both in terms of half-life and depth of the information they make available and exchange. Information on twitter is short-lived and shallow when compared to facebook. This implies that firms may use facebook and twitter with somehow different objectives.**

**In short, the profile of twitter users appears to be well adapted to Sephora's target segment. Furthermore, Sephora can use twitter to generate very brief conversation and engagement, increase awareness and recall and keep the brand top-of mind. Brands such as Dell also use twitter to keep their followers abreast of promotions. Facebook can also contribute to achieving those objectives but it is used primarily to track and influence attitudes towards the brand and enhance brand image. Therefore, using twitter can potentially generate significant benefits for a brand like Sephora, even if that brand is already using facebook.**

- c) Based on any assumptions that you may find appropriate, find an estimate of the ROI of the company's investment in facebook. Based on your estimate would you say that such investment is paying off?

**640 thousand customers (80% of 800 thousand) are fans of Sephora on facebook. Those customers make higher purchases online (buy more frequently and purchase more per order, on average) than they would if Sephora had no facebook page. Therefore we compare the sales, costs and profits of fans and non-fans to find the**

**ROI of Sephora’s investment on facebook. This calculation relies on the assumption that fans and non fans are basically similar in every dimension other than their Sephora facebook experience, which may lead to an overestimate of ROI (it is possible that those who become facebook fans belong to a group of heavy internet users with a high preference for Sephora. Such customers would probably buy more online than other customers, even the firm had no facebook page).**

**The analysis can be conducted in terms of per customer or in terms of aggregate sales, costs and profits.**

**Per customer analysis**

	Non-fan	Fan	Var
Sales	24	33,75	9,75
Non markt costs (40%)	9,6	13,5	3,9
Margin	14,4	20,25	5,85
facebook costs	0	3,125	3,125
Profit	14,4	17,125	2,725
<b>ROI</b>			<b>87,2%</b>

**ROI=Profit/facebook costs**

**Aggregate values analysis**

	Non-fans	Fans	Var
Sales	15.360.000	21.600.000	6.240.000
Non mkt costs (40%)	6.144.000	8.640.000	2.496.000
Margin	9.216.000	12.960.000	3.744.000
facebook costs	0	2.000.000	2.000.000
Profit	9.216.000	10.960.000	1.744.000
<b>ROI</b>			<b>87,2%</b>

**87.4 % can be considered a high rate of return. Therefore Sephora’s facebook page can be regarded as an effective marketing initiative, which contributes positively to the company’s profitability.**

- d) Some managers at Sephora believe that ROI alone is not an adequate metric for evaluating a company’s presence in social media. Explain the extent to which you agree or disagree with this position. Also discuss alternative measures of the effectiveness of social media marketing and explain why such metrics may add relevant information to ROI.

**It is reasonable to assume that the maximization of profits is the main long run objective of firms (excluding of course, non-profit organizations). From that perspective managers should make an effort to be able to measure the extent to which any marketing action of program contributes to profits, that is, to estimate its ROI. However, certain types of marketing actions may contribute significantly to the**

**firm's bottom line but only indirectly or over the longer run. In such cases, calculating the ROI (based on the short run effect of marketing investments on sales and profits) proves to be a very difficult and task, which is likely to produce rather imprecise estimates. Therefore, in the case of advertising, for example, marketers use various other metrics to measure the effectiveness of marketing investments (recall, recognition, liking, measures of attitudes towards the ad, etc.). The same happens with a firm's investments in social media. Increasing (short-term) sales is only one of the objectives of a firm's presence on facebook, and probably not the most important one. Other objectives include building brand awareness and brand engagement, generating positive word of mouth about the brand and using facebook as a means of increasing the firm's knowledge and understanding about consumers.**

**Various metrics have been proposed to measure the effectiveness of a firm's presence in social media. Some examples are:**

- **Number of fans or number of impressions (awareness indicators)**
- **Number of comments per post, or number of likes per post (engagement indicators)**
- **Number of shares or reposts per post (word of mouth indicators).**

## II (5 points)

In one of their papers, Ghose and Sundararajan analysed software sales from Amazon and concluded that on average Amazon's prices are about 4% cheaper than the list prices for the various software products.

- a) What are the main factors that an online retailer such as Amazon must take into account when deciding on its level of price for a software product?

**Economic theory shows that the optimal (profit maximizing price of a firm with market power is a function of two factors:**

- **The price elasticity of demand for the firm's product: the more sensitive consumers are to the firm's price the lower the optimal price.**
- **The marginal cost of serving an additional customer: optimal price increases with the firm's cost)**

**In the case of software, marginal costs are very low, so pricing is made on the basis of WTP and consumer price sensitivity. The elasticity of demand for a firm's product depends on several factors such as:**

- **Number of competitors: as the number of competing sellers increases, demand becomes more elastic and consequently the optimal price decreases.**
- **Degree of product differentiation: the higher the degree of differentiation the more elastic is demand.**
- **Information: when consumers are well informed the demand for the firm's product is more elastic.**
- **Transaction costs (costs associated with acquiring a good that are in excess of the amount paid to the supplier, such as search costs): high transaction costs lead to lower elasticity of demand.**

- b) Why would the profit maximization strategy for Amazon be to price its products below the list price?

**Amazon is a large online retailer. It is widely known that in the online environment information is widely available and transaction costs (search costs in particular) are quite low, resulting in higher price sensitivity of consumers. This explains why online retailers tend to charge lower prices than conventional retailers. In addition one could argue that a large online seller such as Amazon has a lower marginal cost of selling software products than most competitors.**

- c) Many of the software titles studied by Ghose and Sundararajan were offered in two or even in three versions. Using a 7-month, 108 product panel of software sales the authors estimated measures of "quality degradation", that is, ratios of the estimated quality of the highest version ( $s_1$ ) to the estimated quality of the version in question ( $s_i$ ). They found the following intervals:

N. of versions	Measure	Observed interval
2 versions	$s_1/s_2$	1.09 – 1.75



3 versions	$S_1/S_2$	1.08 – 1.46
	$S_1/S_3$	1.63– 2.31

c1) Explain the logic of the concept of quality degradation from a pricing strategy perspective.

**Software products are characterized by a high fixed cost of development and a very low marginal cost. Once a software title has been developed the cost of selling a lower quality version (a version with less features or lower data processing capacity) is basically similar to the cost of selling the high quality version. Therefore the costs of producing and selling software do not provide a rationale for selling lower quality versions at lower prices. The real reason is price discrimination. While in many businesses it is possible to use socio-demographic variables (age, profession, household composition, etc,) as a basis for discrimination, that is not possible in general for information goods such as software. Consequently sellers of such goods use variations in quality to price discriminate. Firms face various consumer segments with different levels of WTP for products and, in particular, value product quality differently. Some segments are willing to pay significant amounts for advanced product features while others are willing to pay a much lower amount or even nothing for such features. Therefore, a firm's optimal strategy is to sell two or more product versions with different levels of quality at different prices, as a form of price discriminating and appropriating consumer surplus. In other words, the sellers deliberately degrade the quality of the cheapest versions to prevent high WTP consumers from buying them.**

c2) Briefly explain how software producers may determine the optimal levels of quality degradation. Why do we observe that the total number of versions is associated with an increase in the difference in quality between the highest and lowest quality versions?

**Assume that there are two consumer segments. The basic idea is that sellers must set the price and the quality level of each version such that consumers self-select into different versions according to their willingness to pay and as a result the firm is able to price discriminate.**

**A possible strategy would be to create a low quality version containing only the features that are valued by the low WTP segment (that is, do not include features for which WTP is zero) and charge the price that fully extracts consumer surplus from that segment. However this imposes a limit on the price that can be charged on the high quality version (because the high WTP segment has the option of buying the low quality version). Therefore, it may pay off to reduce both the quality and the price of the low end version (resulting in a loss of revenue for that version) in order to make it less attractive for the high WTP segment and be able to charge a higher price on the high end version (resulting in a benefit on the high end version). The optimal quality level of the low end version is obtained when the marginal loss and the marginal benefit of reducing quality are equal.**

Suppose now that there are 3 segments rather than two. In this scenario the optimal policy might be to create three versions, one for each segment. Furthermore, with a larger number of segments we are likely to observe a higher variance of WTP for quality. Then the firm will tend to induce a larger quality difference between the low end and the high end versions, reflecting a higher dispersion of WTP across segments. In fact, even if the variance of WTP with three segments is not larger than the variance for WTP with two segments one may still tend to observe larger quality differences between the high and the low end versions. This is because the firm must set the quality levels such that the mid WTP segment does not want to buy the low end version and the high WTP segment does not want to buy either the mid or the low end versions. In order to guarantee this the firm must differentiate its versions further than in the two segment case.

## EXAM INTERNET MARKETING – PART III (5.0 points)

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Academic Year 2011/12, 4th trimester, 01.06.2012

**Student's Name and Number:** \_\_\_\_\_

### Question 3.1 (1.5 point)

Paul is the manager of *Glamorous*, a large store in downtown Lisbon selling designer shoes, belts, bags and other accessories made of genuine Portuguese leather to both men and women. To increase short-term sales, Paul recently held an exclusive (*i.e.*, by invitation only) fashion show at his store where he presented the new summer collection. The show was promoted by sending an e-mail message to the addresses of the store's loyalty card holders in the past 6 years. The message contained a link to download a personal invitation to the show, which also worked as a discount coupon to be redeemed in a single purchase made at the store on the day of the event. To enter the event and benefit from the discount, invitees had to print out and bring along the invitation. A total of 5200 e-mails were sent, the delivery rate was 39.5%, the open rate was 28.0% and the click-through rate was 5.5%. A total of 286 people attended the event, after which 10 used their invitation to make a purchase at the store with a discount.

Do you think Paul's e-mail marketing campaign was successful?

No

Yes

Why?

The stated objective of this e-mail marketing campaign was to increase sales in the short-term, by advertising an event and offering an associated promotional discount to drive past customers to the store. Although the click-through rate of the campaign was higher than 5% (the benchmark CTR for SEM is 5%), meaning that the e-mailed offer was deemed relevant and interesting enough by recipients, the conversion rate (10/5200) was lower than 0.2%. The online advertising formats with the lowest effectiveness rates are display ads, with values between 0.2% and 0.6%. This is why many companies typically prefer other, more effective (and also less costly) online advertising formats such as e-mail messages – when executed properly these should achieve CTR and conversion rates that are very close to the 5% benchmark of SEM, at a relatively lower cost. This particular e-mail campaign was thus not very successful.

Many invitees had probably not been in the store for while (e-mails were sent to everybody who had owned a store loyalty card in the past 6 years, this being the only targeting criterion). They could not easily find further information about the store and its current offer (products, prices, other promotional activities) online, given that the landing page for the e-mail campaign was not hosted at a website associated to the store. The e-mail message did not convey information other than about the event and discount. From this, we can infer that the company probably does not have a website or social media page yet, and has overall a very incipient online presence (e.g. listing in some online classifieds and directories). So, and although the e-mail with the event invitation and the promotional discount offer was enough to attract a good number of past customers to the store (there was a 5.5% CTR and everybody who clicked to download the invitation came to attend the show –  $286/5200 = 0.055$ ), once these were there, they realized that the offer was not meeting their expectations and was not really appealing to them (in terms of price, quality, assortment, etc.). This led to the very low conversion rate observed.

Suggest 3 marketing initiatives Paul can undertake to outperform these results in future e-mail campaigns:

- 1 Gain access to a more current and relevant database of e-mail addresses – the bounce back rate of e-mails was higher than 60%.
- 2 Improve the targeting of future e-mail campaigns by analyzing personal and behavioral information contained in the loyalty card database.
- 3 Develop a company website that can better support promotional activities and marketing campaigns. Response increases when mails resemble information on the company's website and past promotions. Once the website is running, analyze visitors' behavior using web analytics tools - tying e-mail messages to past behavior on sites increases the likelihood of a good response.

Another possible answer: Paul could try randomly sending out several combinations of e-mail message formats and promotional offers to customers in the loyalty card database, to see what combination works better in driving the right kind of visitors to his store and hence increase conversion rates.

### Question 3.2 (2.5 points)

Paul is planning to set up a web site for his store in the near future, in order to better inform and stay connected with current and prospect customers. What are the main quality dimensions he must keep in mind when developing the web site?

- › Visibility
- › Usability
- › Credibility
- › Sellability
- › Scalability
- › Maintenance

Paul is thinking about paying for the inclusion of ads in Search Engine Page Results (SERPs), so that customers can easily find his future website when searching online for stores selling accessories in Lisbon. If you were Paul, would this be the first kind of search engine marketing you would undertake?

No

Yes

Why? Paul should first pursue SEO activities to improve the rankings of his website in organic search results. Organic search results have higher click-through and conversion rates than paid inclusion ads, and are free of charge. SEO activities tied with the use of web analytics tools are also a good way to improve SEM skills and uncover the most promising keywords for future paid inclusion ad campaigns.

Given that *Glamorous* does not have a website yet, suggest 2 ways for Paul to find the keywords/key phrases that he should buy to guarantee the placement of his ad in SERPs:

- › Look at content being highlighted at competitors' sites (headings, copy)
- › Use keyword suggestion tools, e.g. AdWords

Paul has selected 4 key phrases he wants to buy to guarantee the placement of his ad in SERPs. Please rank them by order of strength (1 = strongest to 4= least strong):

\_3\_ Glamorous Lisbon

\_1\_ Designer Accessories Store Lisbon

\_4\_ Top-Grain Portuguese Leather

\_2\_ Glamorous Accessories Store Lisbon

Justify briefly your ranking

SEM budgets should be devoted to leverage the Long Tail (Category keywords/Key phrases), to capture prospects and introduce the company to them early in the consideration / buying cycle. This should render investments in “Glamorous Lisbon” or “Glamorous Accessories Store Lisbon” less of a priority.

Key phrases that are very general might attract a broader spectrum of prospects and increase CTR, but will lead to lower conversion rates. This decreases both the efficiency and effectiveness of paid inclusion ads. Top-grain Portuguese leather and Glamorous Lisbon are phrases that can be related to many topics other than the store in question. Moreover, “Top-grain leather” is industry jargon and probably has little meaning to customers; “Glamorous Lisbon” is relatively more targeted because it contains the store name.

Given that the store does not have online sales and is currently only present in one location, there is no point in attracting traffic to the web site that cannot easily visit the store afterwards. Again, this would increase CTR, but lower conversion rates and increase advertising costs with little return. The key phrases should attract people who are interested in shopping for designer accessories in a Lisbon store. Vertical search by location is one of the most relevant forms of SEM for offline retailers and other companies in the service area.

Indicate 3 design features Paul should incorporate in the development of the website, in order to optimize his search engine marketing efforts:

Students could mention 3 of the following aspects related to website design (other than keyword-related):

#### Usability

- Be user-friendly
  - › Be easy to access and quick to load
  - › Provide navigation links on every page
  - › Create a visual hierarchy that moves vertically
- KISS
  - › Keep it simple, consistent, uncluttered, focused

- › Keep it short - use teaser text to get people navigating
- Be relevant
  - › Update contents regularly
  - › Offer incentives to generate action
  - › Be interactive
  - › Ask for evaluation

### Credibility

- › Design - Brand Fit
- › Focus
- › Identification & Story
- › Relevance
- › Interactivity
- › Reputation
- › Contacts
- › Support - FAQs
- › Privacy Policy

### **Question 3.3 (1.0 points)**

Take the following quiz to test your knowledge about online advertising:

1 – How do you call specialized marketing agencies, like Google AdSense, that sell the placement of ads in SERPs of websites other than search engines'? [Network Keyword Advertising](#)

2 – In which form of online advertising does one web site agree to host an ad for another for a given period of time, in exchange for a pre-negotiated per click, per action or fixed fee? [Affiliated Marketing](#)

3 – What type of companies is responsible for the largest share of online advertising volume and value? [Retailers](#)

4 – What form of online advertising has the lowest click-through rate? [Display Ads](#)

5 – If an online retailer wants to learn how different groups of customers find its website, it should use \_\_\_\_\_. However, if the retailer wants to know how individual customers shop at its website, it should look at \_\_\_\_\_.  
[Web Analytics; Clickstream Data.](#)

**-END-**