Merchandizing IT Products via Social Networks. Modeling and Simulation of the Procedures

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Abstract In this paper is going to be analyzed the different ways and results an IT company will gave if it would use simulation modeling for product merchandizing through social networks (Liu et al., Internet Research 25(2):300–316, 2015). All over through these years the companies are developing different ways of marketing methods on the Internet so they can sell more and more. In this research paper, is going to be presented the results which an IT company could have if it would changed the traditional way of selling and advertising products by social media marketing. A company that produces IT products is going to advertise and deliver these, through social networks, a daily habit in our lives and our routine (Dunne et al., Journal of Research in Interactive Marketing 4(1):46–58, 2010).

Keywords Dynamic simulation modeling · Social media marketing · Merchandizing IT products

What Are Exactly Social Networks and Why Are They so Important? How Can We Be Advertised on Them?

Social networks are tools of media, in which people are based on them to contact with each other, to exchange opinions and to share music and ideas. Nowadays social media is a growing share of information from which the entrepreneurship can find many opportunities to evolve. Also, with the promotion via them is being developed different methods on the labor market and ways, which companies can now sell on the Internet.

These tools are very important because via them the users show their preferences and these can decode (by the company for example) and give the wanted results and information (Pierson and Heyman 2011). Also they bring technology issues and

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new ideas in the market industry and of course spread the name of the company. Furthermore, they are very useful because from these data it can be extracted the personality of user so we can show our ads to him, which depend on his click through (Balmaceda et al. 2014).

Merchandizing

Merchandizing is the charisma or the technique of making products to be desirable and easily accessible on the consumer. This technique is a psychological way to cause desires and needs to the consumer which maybe he did not think about having them. In first, merchandizing needs resources so it can be given (first and also later) to keep the clients satisfied and the quality of service high. Especially for IT products the combination of traditional marketing merchandizing (flyers, advertisement in radio-TV) and modern marketing (social media, blogs, email, etc.) gives the best result on advertisement of company's products (Vijayasarathy 2002).

Merchandizing IT Products/Services

Figure 1 evidence the fact that the creation and the risk of investing resources in a Facebook page may lead in conducing in a good one brand name.

With the combination of traditional marketing, social marketing in Facebook may become an unbelievable tool of products' promotion because it can "drive" the Facebook users to the company, which they could become the best advertisers in the short future with a minor cost in the company (Hansson et al. 2013)

IT Products in Social Media

Starting from, the use of social media is very widespread so companies take advantage of this and they compete in market on the base of social media.

Fig. 1 Making money from social media (http://themgroupcreative.com/driving-business-revenue-social-media-marketing/)

A company may use the social networks so it can have access to many users and future clients, which they can bring more and more followers day to day (Swani et al. 2013). IT products considered as a way of computers, laptops, tablets, smartphones, and hardware for example printers, inks, gadgets for technological issues. Moreover, an IT company may provide services such as design of web sites, antivirus systems, e-shops, etc.

Professional Facebook page: (PFP) the professional page is the "face" of the company in the future clients. It has characteristics like contact with clients, advertisements of new and old products, creation of coupons, reviews, etc.

To create the Facebook professional page there is a need of staffing resources and also people who are specialists in specific parts of working. For example, the start is a computer and a graphic designer to design the logo of the company in Facebook page. Of course, useful is an extra person who is specialized in social media advertisements so he can organize the design of the page with a help of a marketer who can deal with the advertisements of the product (Haigh et al. 2013). Extra features of the professional page may be the Offering coupons and discounts which is a new technique in social media to make products attractive, too. Tools for the satisfaction of the page are; statistics which Facebook gives for professional pages and the redirects in the website in which the clients are directed to buy.

Buying likes or inviting for professional page: is the way to boost the name of the company via social networks by rising up the followers of the page.

The success of PFP creation leads to the purpose which is the increase of the followers by buying likes or inviting people for joining the page. First way, the page pays an amount of money to Facebook and Facebook itself provides them a number of followers. In the other side, a person should invite people to like the page and has the competence of checking the statistics of likes.

Create Events: as keeping the clients satisfied, it has been created a feeling of a caring company to the clients and that may return resources in the company.

There is a fact of high satisfaction of the page to proceed to events in PFP, and after all the company can give resources to Events. For example a game contest in the PFP, may considered as an event, which can lead to a winner, or discounts if someone buys a coupon from Facebook. The implementation of all the above is done by a marketer with the collaboration of a (gaming) programmer.

Website: the main page is the way to build a society of followers in the company and to keep the fame well-known.

First of all, the existence of a web site presupposes the use of a server, which hosts the site. Over there is taken a database of clients to know their preferences and personality information and to organize them in lists. Specialists in these two are: a programmer for hosting the site and a database programmer for the creation of the database. In this website also work an advertiser with a graphic designer for the total icon of the site to be more attractive. Many sites to be more functional, add a "forum" option for the open discussion of the clients and for reviewing products.

Support: existence of FAQs, submitting questions in the site, reviews and answers of PFP.
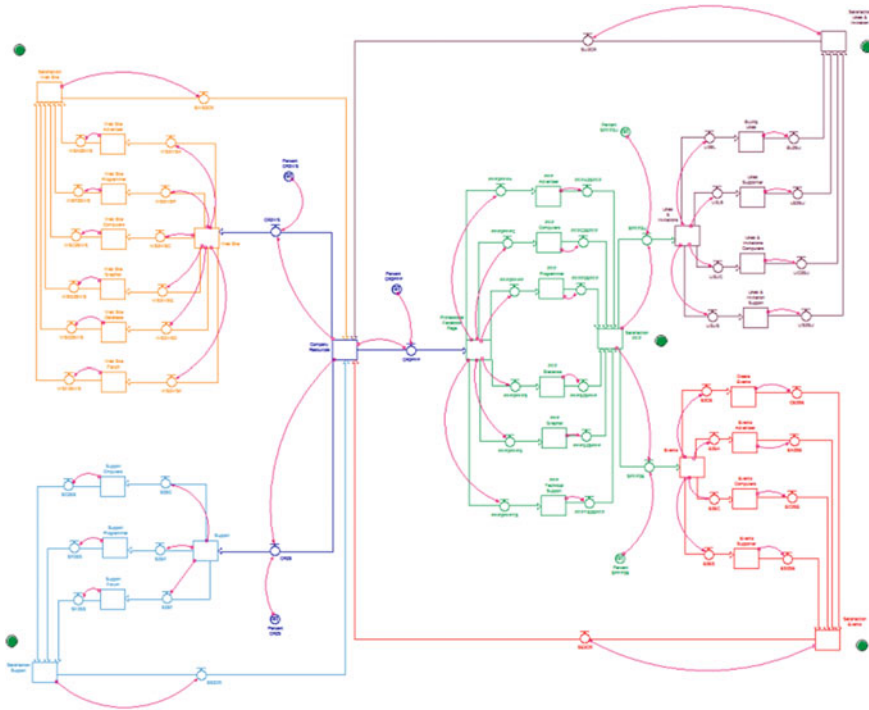
Fig. 2 Dynamic simulation model

The support of the website is not compulsory for the function of the site but indirectly may lead to resources, by satisfying the feeling of the client. For the implementation of support should be expenditure resources first for the implementation of the system and after all for its functionality. So, first of all, there is a need for a computer and a programmer who will design the support part. The programmer could contribute with a support staff, that should answer questions and also they can be collaborate for the forum of the main site, a tool for the clients to discuss open. In order to proceed to the support of the PFP, there is need of persons who could answer the inbox messages of questions and reply the posts in Facebook and also they may check the reviews which customers submit. High response rate evidence a company which pays attention to its clients (Kabadayi and Price 2014) (Fig. 2).

Dynamic Simulation Model

The converter has three operations. It can turn out inflows to outflows with graphical or mathematical functions the model makes itself. Also, it can either

keeps values stable so we can use them as before, or may used as external input to the model.

Connectors link information of the model. They are two types: dashed and solid wire. Dashed wire means information link and Solid turns out an action link.

A stock collects the concentration of a physical or a nonphysical quantity.

A flow shows an action, which fills or empties a stock. The arrow which has, gives the direction of positive flow inside or outside a stock.

As seen from the dynamic model (Fig. 1) the results affect when is changed the values of Company Resources in the main five factors, which analyzed before. Depending on the Company Resources, which provides money to them, the Professional Facebook page (PFP), the factor of Buying likes or inviting for professional page, the Creation of Events and the factors of Support and Website are connected. When each Factor is completed successfully, the lamp is turned on (green) and when it needs more Resources is turned off (red). All factors return money back in the CR, which they gain from their activities.

Implementation of the Dynamic Simulation Model

To create and describe the models used the iThink software from iSee Systems. In this model, the user may input the stocks and flows to describe the processes. The outputs the model gives itself (Figs. 3 and 4) are the results described by graphs. Figure 4 shows how the Company Resources (CR) may affect by the Satisfaction of
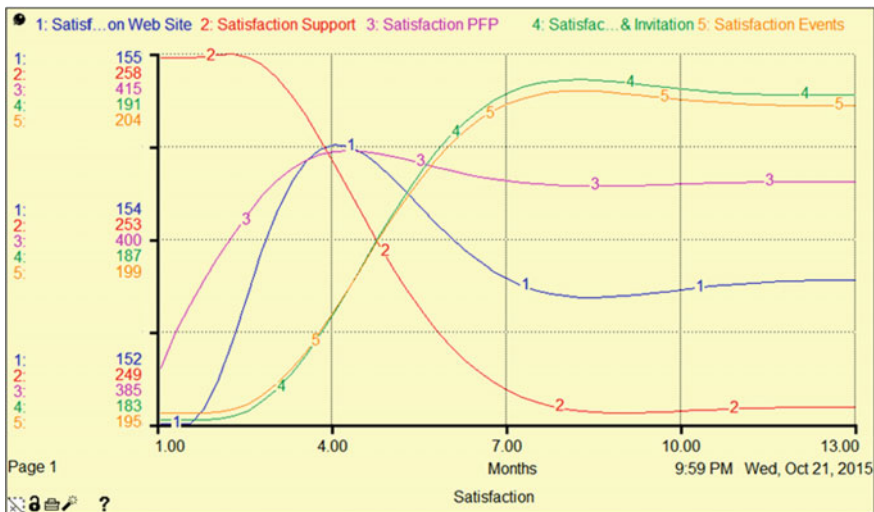

Fig. 3 Main factors satisfaction

Months	Company Resources	Satisfaction Web Site	Satisfaction Support	Satisfaction PFP	Satisfaction Likes & Invitation	Satisfaction Events
Initial	1,000.00	152.00	257.40	389.50	183.07	194.75
1	968.82	152.36	257.49	398.51	183.09	194.77
2	957.51	153.71	256.92	404.67	183.73	195.46
3	954.58	154.26	254.81	407.04	185.41	197.25
4	954.69	153.99	252.31	406.67	187.51	199.48
5	955.75	153.51	250.39	405.52	189.21	201.29
6	956.78	153.17	249.30	404.65	190.15	202.29
7	957.37	153.03	248.84	404.29	190.43	202.59
8	957.52	153.03	248.75	404.28	190.38	202.53
9	957.42	153.09	248.80	404.42	190.24	202.38
10	957.27	153.14	248.86	404.54	190.14	202.28
11	957.17	153.16	248.89	404.61	190.10	202.24
12	957.13	153.16	248.89	404.62	190.11	202.25

Fig. 4 Company resources to satisfaction

the factors during months. It can reveal reduction of satisfaction in some factors like Support and this can be changed by changing the functions inside the model.

Support for Decision Makers

Figure 5 is the main user interface and provides the feature of changing the values of Company Resources to the five Factors.
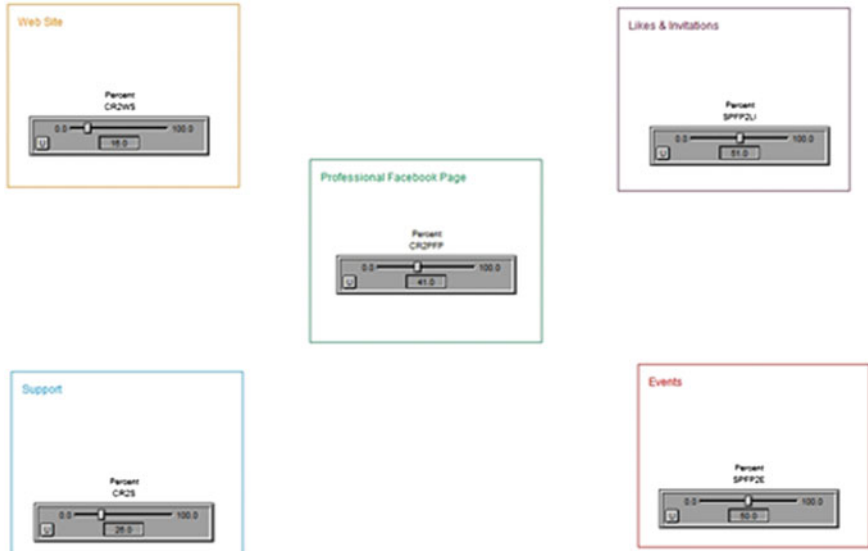

Fig. 5 Manager environment

Conclusions

In this research paper was made an attempt to simulate procedures of merchandizing the IT products via social networks. The nature of social media analyzed and both examined that they are growing up their fame and place for marketing day to day. Also was investigated the fact that they are dynamic because the job market is changing, too. Furthermore, this article attempts to show that in the case of using social media for merchandising the cost reduces dramatically and a company can have a profit by selling and merchandising products via this method in comparison with others traditional methods (Crumpton 2014). The daily use of social media as a networking tool leads the client to the ease of access in products/services

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