

Toward Mass Interpersonal Persuasion Marketing: Design Guidelines for a New Type of Internet Marketing

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Abstract—The open platform provided by SNSs leverages the power of mass interpersonal persuasion worldwide. This leveraging capability has the power to empower third-party applications of SNSs. Instead of mass-media persuasion, mass interpersonal persuasion by applications opens up new opportunities of marketing. The author proposes a framework called Mass Interpersonal Persuasion Marketing (MIPM). MIPM is a new marketing framework that fits into this era of Internet social networking services. The author discusses the unique characteristics of MIPM and the differences between legacy marketing and MIPM.

I. INTRODUCTION

Social Networking Services (SNS) are quickly permeating everyday life. As of March of this year, there are 901 million people that use Facebook. And, over 526 million of those users used Facebook every day of that month. This huge shift toward SNS is changing the whole perspective of Internet marketing.

Persuasive technology is a framework that uses persuasion and social influence in conjunction with technology to pursue business consequences. This concept was coined by Fogg in the 1990's at Stanford University and has been leveraged in the PC Internet and the mobile Internet. Ubiquity in the spatial and time dimensions further increases the effectiveness of persuasive technology.

Fogg provided the important insight of persuasion as the fourth stage of computing, is persuasion following the three stages: functionality, entertainment, and usability. He had the insight to recognize that most successful IT businesses have utilized these four characteristics of computing.

The most important trigger in persuasive technology took place in 2007 when Facebook adopted an open platform strategy. The open platform strategy in which SNSs provide third-party SNS-related APIs is very powerful. It is so powerful that Facebook is the most universally recognized SNS in 2012, among the major 7 SNSs that existed in 2007 worldwide: mySpace, Facebook, Friendster, Hi5, Bebo, Orkut, and Imeem. The open platform has enabled mass interpersonal persuasion (MIP) whereby anyone can invoke technology-empowered

persuasion using the large-scale social graph in order to realize mass-scale persuasion.

Using this framework, the author has come to recognize that persuasive technology may provide a new marketing framework, "Mass Interpersonal Persuasion Marketing (MIPM)."

In this paper, the author provides the definition of MIPM, the driving factors behind the concept, and the applications of MIPM in social game design. Finally, the author presents the implication of MIPM for the era of social networking.

II. BACKGROUND

A. Purpose of Research

The aim of this research is to identify a new kind of persuasion using the open platform provided by SNSs.

B. Related Works

Fogg coined the term "Persuasive Technology" from his insight into how the combination of psychology and computer technology makes a difference in terms of influencing behavior during this study of psychology in the 1990's. He established Persuasive Technology Laboratories in Stanford University in 1998.

Fogg envisioned that a fourth wave of computing, that of persuasion, which follows functionality, entertainment, and usability as the three preceding stages [1]. He contributed the insight that the major successful Internet companies such as Amazon, Google, and Facebook, were those that utilized this trend in computing.

Persuasion has attracted the attention of a wide range of researchers. Khaled discussed a serious game design from the perspective of persuasion [2]. Bauer et al discussed the effectiveness of open-ended social awareness in the context of persuasion [3]. Harjumaa et al discussed a taxonomy of general persuasive approaches [4].

One remarkable change in the last five years is technology-augmented social persuasion, leveraged by the wide acceptance of social networking services. The advances in social networking services make it possible for individuals to change

their attitudes and behaviors on a mass scale. Facebook launched its Facebook Platform, a collection of their APIs and related tools, in May 2007. This has come to represent a new form of persuasion, called Mass Interpersonal Persuasion (MIP), and is still exhibited on Facebook today [5].

Persuasion is directly linked to emotion. The author discussed emotion engineering in the framework of mobile social game design [6].

In the past, with the increase of Internet searching by users, search engine marketing has increased its significance in Internet marketing [7] [8]. With polished KPIs and the power of analytics, it is the mainstream of Internet marketing. It is still in the mainstream, however, social media marketing has risen in tandem with the steady growth of social media. Leskovec et al presented an analysis of a person-to-person recommendation network [9].

The rise of persuasive technology has paved the way to the marketing methodologies of mass interpersonal persuasion. However, mass interpersonal persuasion marketing is still in its early stages, and very little literature has been written about it.

The originality of this paper lies in its binding this new type of interpersonal persuasion to the transitions of marketing, innovation, and design methodologies.

III. MIPM AS A FRAMEWORK OF INTERNET MARKETING

A. Definition

MIP is a new form of persuasion that is leveraged by the APIs of SNSs. MIP is persuasion that is implemented on a massive-scale by applications that uses APIs of SNS APIs. It brings together the power of interpersonal persuasion and the reach of mass media. MIP has six components according to Fogg's definition: persuasive experience, automated structure, social distribution, rapid cycle, huge social graph, and measured impact.

MIPM is defined as a framework that uses mass interpersonal persuasion in order to achieve a designated goal of downloading/use. Mass interpersonal persuasion is one of the areas of persuasive technology. Persuasive technology is broadly defined as technology that is designed to change the behaviors of users through persuasion and social influence, but not through coercion. However, the main focus here is mass interpersonal persuasion as it is leveraged by the open platforms provided by SNSs.

Mass interpersonal persuasion is a turning point for marketing because it provides the scale of influence from mass media to individuals, thanks to the large social graph provided by large-scale SNSs.

B. Mass Interpersonal Persuasion

The six components of MIP are depicted in Fig. 1.

The two components marked with asterisks are the components that are unique to MIP. The other components are common in viral marketing, which existed before MIP emerged. MIP is unique in that it uses all six components at once, something that did not take place in marketing in the past.

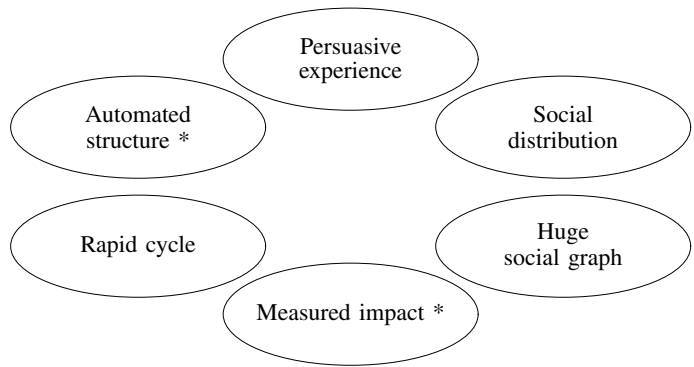


Fig. 1. Six components of mass interpersonal persuasion [5].

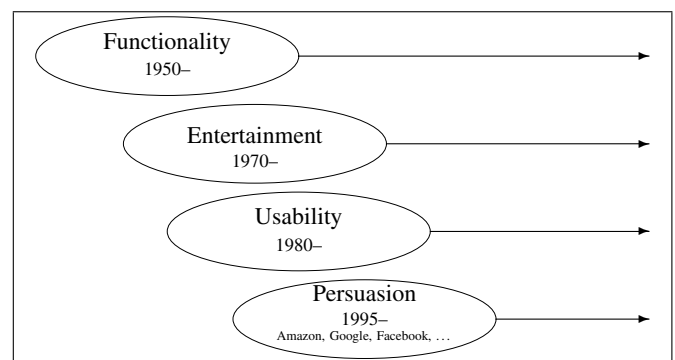


Fig. 2. Four waves of computing [1].

C. Business model of MIPM

It is difficult to predict the outcome of MIP because it heavily depends on interpersonal behaviors. In order to cope with this difficulty, MIPM is usually combined with performance-based marketing. Clients will pay a small fraction of NRE (Non-Recurrent Expenditure) with additional performance-based payment. When a MIPM campaign fails, clients just need to pay a small sum of money in addition to the fixed NRE.

Even with this business model, the mass-scale persuasion capabilities of MIPM can produce a large-scale business opportunities for MIPM service providers.

Persuasion is the mainstream of computing today, as depicted in the history of computing in Fig. 2.

It is natural to make full use of this trend in marketing.

D. Applications

The closest examples of MIPM in the today's world involve mobile social games. Not just making use of SNS infrastructures, popular mobile social games are leveraged by extensive techniques to evoke emotion, in individual or social contexts, by visualization in game contexts. Visualization examples include avatars, game levels, player titles, possessions in player

TABLE I
TWO APPROACHES OF MIPM.

Approach	Description
Mainstream approach	When the mainstream feature of the target application has a viral feature, the main feature should be designed according to the MIPM design guidelines.
Appendix approach	When the main feature of the target application does not have a viral feature (e.g. standalone application), an additional feature should be designed to utilize social influence. In this case, the additional designed feature works as a catapult for the target application. The additional feature should be designed according to the MIPM design guidelines. A smooth transition to the target application should be designed in an integrated manner in order to avoid any user-perceived disruptions.

inventories, items gained during game-play, decorated player rooms, and so on.

IV. DESIGN GUIDELINES OF MIPM

First, MIPM needs to address the positioning of MIPM with the main feature. There are two approaches depicted in Table I.

The following design guidelines are applied in order to deploy the automated structure and the measured impacts:

- visualization of artifacts
- emotion triggered by visible changes of the artifacts
- interaction of visible artifacts utilizes online persuasion techniques

The design starts from the identification of emotion. For example, if a user is given a bland avatar (naked without t-shirt and monotone color underwear, in the case of Mobage), many users would be too shamed to keep it. This triggers behavior to make an effort to “dress up” the avatar, because, from a user perspective, it is a reflection of oneself.

In the case of other mobile social games, the user room that is displayed is another example. Game-play will provide a series of decorative items which fit a season or an event (e.g. Christmas or Halloween). When a user sees how someone else has decorated his/her room, it triggers behavior to match or exceed the decoration for themselves.

Player-levels or game titles are other examples that are more subtle. Having escaped from most dangers of being killed by wild animals, starvation, and severe stress from climates (head, cold, etc), self-consciousness is a strong emotion for modern human beings. Player-levels and game titles have little impact on their real-world lives, however, those artifacts with scoring or decorative titles trigger user behavior to improve them.

Once emotion is captured, it should be translated into visible artifacts. In the above mentioned examples, avatars, rooms, game level indicators, title indicators are visible artifacts. They should be designed to be fully visible to players as well as to other players.

Then, social interactions and influences to strengthen those behaviors should be designed. Finally, social interactions and influences should be designed to enhance service diffusion. In

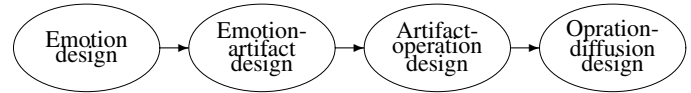


Fig. 3. MIP design process.

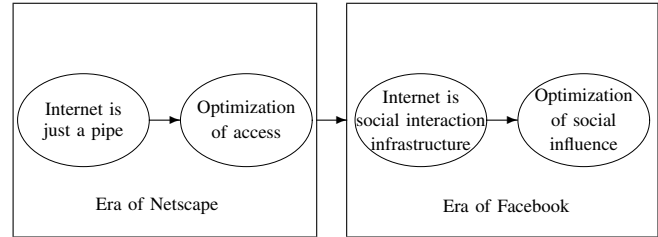


Fig. 4. Transition from information highway to interpersonal persuasion infrastructure

the case of mobile social games, they are enhanced by team-play, team support systems, competitions, team rewards, and so on.

This design process is summarized in Fig. 3.

V. DISCUSSION

A. Unique factors of MIPM

The strong backing trend behind MIPM is the transformation of the nature of the Internet. The way the Internet is transitioning from an information access infrastructure to a social interaction infrastructure.

The transition from information highway to interpersonal persuasion infrastructure is depicted in Fig. 4.

This is a significant transition. In 1995, Netscape Communications held its IPO. There was no clear business model, but only hype, which defined the style of IT business startups for the following decade. In 2012, Facebook held its IPO. This IPO was totally different from that of Netscape Communications. Before its IPO, Facebook had already secured more than 900 million monthly users, with one billion annual profit. It will form a new standard for IT startups in the next decade. And, the fundamental driving power is the fact that the nature of the Internet has changed as depicted in Fig. 4. Even as early as the year 2005, it was clear that a new type of Internet content, user-generated content, had emerged. It created a hype surrounding Web 2.0 [10], at the time. This was the first indication of a transition of the Internet.

This naturally had had an impact on the Internet marketing. The transition from legacy marketing to MIPM is depicted in Fig. 5.

The early days of Internet marketing involved displaying advertisements. It is natural that the exposure to visibility on the Internet would increase in value as the visit duration of users increased. This led to display advertisement.

Once search engines became popular, search engine marketing quickly caught up.

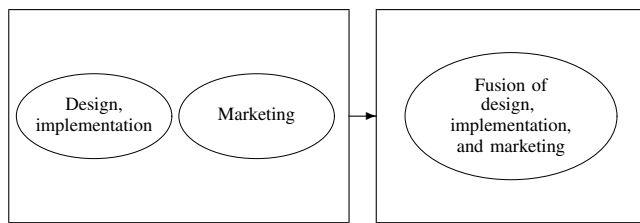


Fig. 5. Fusion of design, implementation, and marketing

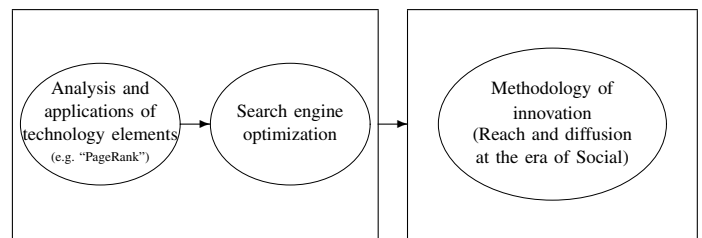


Fig. 7. Transition from technology elements to innovation

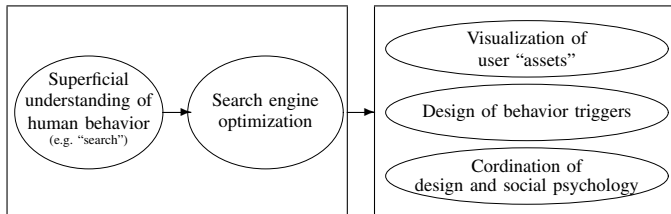


Fig. 6. Transition from manipulation of superfluities to manipulation of fundamentals

In conventional service design, service design and implementation are separated from marketing. However, considering the fast growth and power of MIP, it is better to incorporate the artifacts that work in MIP into the central part of the design and implementation.

Also, it is hard to know in advance how the interactions with artifacts will work in interpersonal persuasion. Therefore, iteration between design and implementation in order to increase the values used for MIP should be a mandatory part of engineering. This is aligned with the trend toward open innovation.

Marketing is a complex, multi-faceted activity. However, it is clear that search engine optimization is one of the most powerful Internet marketing schemes since Google emerged and started to dominate. Searching by using search engines has been a popular, dominant user behavior in the last decade. Therefore, it is straight-forward to build up a methodology to improve visibility based on the search engine results. This is search engine optimization. Search engine marketing is an activity of marketing that includes a wide range of search engine-related marketing efforts.

MIPM provides a transition from this technology-element-focused Internet marketing. The transition from manipulation of superfluities to manipulation of fundamentals is depicted in Fig. 6.

The transition from technological elements to innovation is depicted in Fig. 7. This represents a transition from a technology-element-focus to an innovation-process-focus.

The discussion above indicates that MIPM is not just a new type of marketing, but also a design strategy, and an innovation strategy.

B. Advantages of the proposed approach

The approach described above provides a new and feasible Internet marketing solution.

First, it is aligned to the transition of the Internet itself towards social interaction infrastructure. When computing is captured as a catapult of persuasion, it is useful to leverage marketing with the full power of mass interpersonal persuasion.

Second, it is aligned to the new design paradigm that was not visible in the legacy implementation and marketing format. The combination of design, implementation, and marketing, will provide a holistic approach to improve the final results of marketing. Marketing-embedded design principles will facilitate more efficient service diffusion compared to legacy design principles, which focused on functionality and usability in an isolated manner.

Third, it is aligned to the new innovation paradigm. It follows the perspective of open innovation, including the target audience for marketing. It addresses the emotion-triggered operations and interactions among end users, which is a unique approach in design methodology.

Fourth, it addresses the deep part of human beings, such as emotions in the social contexts. Human beings are creatures of social interaction. Legacy marketing principles focused on superficial behaviors such as searches. The proposed approach is more focused on the internal emotional triggers of human beings.

Fifth, it can be implemented by performance-based marketing, which provides fewer entry risks for marketing clients and, when successful, more revenue potential for marketing service providers.

C. Limitations

This is a descriptive study. It describes the qualitative characteristics of MIPM.

Detailed discussions of the design guidelines of MIPM is beyond the scope of this paper. Quantitative verification of the design guidelines of MIPM remains for future studies. And, the effectiveness of MIPM backed up by any real-world results is not shown in this paper.

There are two approaches in MIP: the mainstream approach, and the additional feature approach. In-depth discussions of each approach, and the difference between the two is beyond the scope of this paper.

VI. CONCLUSION

MIPM is a kind of radical conversion of legacy marketing. MIPM is an attempt to make full use of massive online persuasion through applications that use SNS APIs.

MIPM is a successor of Search Engine Marketing (SEM). It makes some radical modifications that utilize massive online persuasion leveraged by the open platforms of SNS.

With Facebook emerging as a single global SNS infrastructure, MIPM is becoming more feasible worldwide. Mobile technology is suitable for online persuasion because it utilizes an always-on capability and the knowledge of user contexts. In March 2012, Comscore reported that Facebook visit duration using PCs were outperformed by Facebook visit duration using smartphones. Considering the above-mentioned characteristics of mobile technology, this transition to powerful mobile technology is further empowering the business opportunities of MIPM.

When the main function of a target application is viral, the design and implementation should address the MIPM design guidelines to make full use of social influence. And, even when the main function of the target application is not essentially viral, social influence-based features can be realized to attract users on a massive scale. In this case, MIPM works as a catapult to boost the original application.

With a performance-based marketing business model, clients can minimize the initial costs and risks, and MIPM service providers can maximize their potential revenue. The author thinks it is a promising approach for the next generation of Internet marketing.

The author proposes the term MIPM, describes its design guidelines, and its business model implications. Then, the author presents the unique characteristics of MIPM.

Considering the ongoing transformation of the Internet from an information infrastructure to a social interaction infrastructure worldwide, the author believes that MIPM will be one of the mainstream Internet marketing methods in the coming years.

The potential large-scale market will attract researchers and industry attention. MIPM is a marketing methodology, but it also covers the new type of open innovation.

The author hopes that this paper will become the starting point for further research and exploration of this new kind of Internet marketing as well as marketing innovation.

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