Revitalizing the P’s of e-Marketing with Customer Experience Management

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Abstract

There have been increasing uses of Internet technologies as marketing tools to manage online customer experience, from personalized emails to location-aware apps on smart handheld devices. However, due to a lack of a comprehensive and integrated framework for managing customer’s experience, it remains challenging for e-marketers to effectively employ these tools. This paper proposes a formal approach to managing customer experience in electronic markets. We propose to expand the conventional 4Ps marketing mix model by incorporating four additional e-Ps including Push-pull-participative communication, Personalization, Promptness, and Privacy. We have further discussed how our framework can help e-marketers identify their customer experience strategies and e-commerce tools to implement e-CEM. Finally, we offered some tangible e-metrics to monitor and evaluate the effectiveness of implementing the framework.

1. Introduction

Internet commerce has become of age with smart technologies ranging from context-aware URL that seems to know who we are and from where we access the website to mobile apps on smart phone that can provide us helpful recommendation using location-aware technologies. As customers we expect “instant gratification” and enhanced personal experience. Nearly 90 percent of companies surveyed by Forrester in 2011 say customer experience are their strategic priority and 76% seek to differentiate on customer experience. What is the general trend behind these phenomena?

The progression of economic value of our society is at the point where “staging experience” for customers is the key to winning the next competitive battleground [22]. Some call the present economy “experience economy” others call it “attention economy” [8]. In this economy, marketers shift the focus from product and service marketing to experience marketing. The market is not composed of segments of customers but of each individual customer. Thus, effective marketing is the management of individual customer’s experience. Each offer must be uniquely tailored for individual customer. Put it differently, instead of buying or receiving a product or service from a company, customers co-create the value according to their personalized needs and wants during the life cycle of transaction from searching to after-sale feedback. The offer usually composes of products, services, and personalized experience from interactions with marketers at different touch points. How to better manage electronic customer experience?

The purpose of this paper is to examine existing marketing frameworks and propose a framework for customer experience management based on e-marketing concepts and related technologies. The paper is organized as follows: First, we present the foundation of e-marketing by briefly discussing the 4Ps model and its extensions. Next, we propose an electronic customer experience framework or e-CEM, and we discuss how to implement the framework.

2. Foundation of e-marketing

Traditionally, marketers embrace the framework of marketing mix or 4Ps model to guide them in marketing planning. The model was championed by McCarthy [18] who simplified a theory put forward initially by Borden [3]. The model postulates that a product or service is best marketed when marketer employ the right mix of product attributes, pricing, availability (place) and promotion, to the targeted market segment. The marketing paradigm of the time was that of “facilitating exchange” where transaction is the end goal.

The 4Ps was formulated in the mass marketing era to guide marketers in allocating marketing resources. It is product-oriented and relies heavily on the push method of mass media. Today’s customer expects a one-on-one relationship with service/product provider. To succeed marketers cannot rely solely on the marketing framework of the past era; they have to understand the interactive nature of electronic commerce. Evidences show that companies who know how to use the tools on the Internet to enable long term customer relationship will likely get more satisfaction, trust and repeated patronage from their customers.
Responding to the new realities of electronic markets, the 4Ps framework has received several face-lifts. Notably, Kotler and his colleagues [16] redefined the 4Ps into 4Cs as previously suggested by Lauterborn [17]: customer needs and wants replace product, costs to customer replace price, convenience replaces place, and communication replaces promotion (Figure 1). The discussion of the 4Ps and 4Cs frameworks is beyond the scope of this paper and such discussion exists elsewhere (e.g., [5, 23]). However, it is worth noting that while the 4Ps framework is product-oriented the 4Cs framework is customer-oriented because it is formulated during the mass customization era of the Internet and it belongs to the customer relationship marketing paradigm. It incorporates the “pull” marketing communication methods of the Internet. The products and services are mass customized to fit the needs and wants of smaller segments of customers. It is a useful framework for e-marketing practitioners, but it also has some shortfalls that we will discuss later.

Besides 4Cs framework, several studies have attempted to address the lack of e-marketing framework [e.g., 27, 28]. Klyanam and McIntyre [27] proposed an extension of 4Ps with $4Ps + P^C^2^S^3$ by adding to (the 4Ps) personalization, privacy, customer service, community, site, security, and sales promotions. Citing the diminishing role of 4Ps model and the lack of strategic element in 4Ps, Constantinides [28] proposed the 4S web marketing model. While Klyanam and McIntyre's model is a good contribution to the 4Ps paradigm, it is very complicate and lack the strategy and metrics for practical implementation. The 4Ss model on the other hand is a good framework for managing web-enable business not particularly about e-marketing. Both models don't take into account the interactions among the components of the e-marketing mix, although Klyanam and McIntyre [27] admitted that all of the new online components ($P^C^2^S^3$) of their model are overlapping functions.

Existing frameworks of e-marketing that base on the 4Ps model do not adequately address the experience aspect of online customer. Furthermore, they have several operational shortfalls: (1) they share the lack of flexibility of the 4Ps framework in the sense that each of the components of the mix is presumed to be distinct, well-defined, and independent management process, there is no interaction among them; (2) they lack the interactivity aspects of today one-to-one online marketing; (3) they lack the consideration on privacy issues of online customers (except for [27]); (4) they treat customer experience secondary, because there is no time sensitive element in the model; and (5) they don’t discuss the strategic, controlling, practical, and technical aspects of implementing the framework in today online environment.

Thus, we propose a new framework to help online marketers to effectively execute their marketing strategies in the new reality of customer experience marketing paradigm, the 4e-Ps of electronic customer experience management (e-CEM) framework (Figure 1). We contend that, to deliver meaningful experience to today’s online customers, e-marketers should communicate with them using the combination of push-pull-participative methods to get to know each customer on a one-to-one basis. Therefore, the offers can be personalized according to the needs and goals of each individual customer and at the same time online marketers need to ensure that customers feel being promptly dealt with and yet they are in control of their privacy.

The contributions of our framework are: (1) it provides a simple communication tool depicting customer experience as the primary focus of e-marketing; (2) it bases on a unified marketing paradigm of our time and doesn’t attempt to force fit the components into the old 4Ps paradigm; (3) it incorporates the time sensitive component of promptness and its interactions with other components; (4) it promotes the synergy between marketing practices and technological tools, therefore eliminating the functional silos that plaque many organizations; and (5) it provides practical guidelines for the strategy, evaluation, best practices, and technical tools for successfully implementing the framework.

3. e-CEM framework

Today’s market space of customers that expect “instant gratification” and “real time” services [19] operates according to four important principles of marketing: the exchange principle, the retention principle, the network effect principle, and the trust principle (Figure 1). The four principles are the pillars of today’s Internet marketing. First, the exchange principle dated back to era of mass marketing and early economic transaction theory suggests that entity engaged in a transaction for the meaningful exchange of value and the function of marketing is to facilitate the exchange. When applying to online environment in its optimal state, this principle stipulates that due the transparency of information made possible by the Internet and communication technologies, today marketers are able to match the customer needs and wants with an offer in every transaction. It results in an efficient and personalized match of the products and
services at the perfect moment. Second, the retention principle, rooted in the relationship marketing paradigm suggests that retaining current customer is more cost efficient and profitable than recruiting a new one. For instance, according to McKinsey, a ten percent increase in repeat customers would mean a 9.5 percent increase in the corporate coffers [20]. Thus, the aim is repeat business with cross-selling and up-selling of related products and services. To achieve this end, marketers must understand customers’ behavior online at the moment of transaction. Third, the network effect principle derived from Metcalf's law, stipulates that the value of a network is the function of the square of the number of individuals participated in the network.

Coupled with the view that customers exist in a social context, this principle is very appropriate in today's cyberspace that is dominated by social networking technologies. Finally, the trust principle states that, customers only do business with online marketers that they trust. Due to the faceless nature of online commerce customers don’t always feel that they are dealing with a real brand and real people [7]. The four principles of online marketing constitute the driving forces behind the proposed e-CEM framework. Therefore, we depict them in a big arrow pointing to the framework.

Despite the growth of online advertising, marketers did not fully harvest the potential of online marketing for three reasons. First, there is still a huge disparity between the budget spending for online advertising and the percentage of actual time spent by customers online. Advertisers spend 6.9% of their advertising budgets on online media [26], even though online consumers spend 23% of their media time on the Internet (excluding the access via smart devices) according to a recently released analysis by eMarketer. This is what we mean by communication gap. Second, most personalized offers are considered irrelevant for customers. According to a study by IBM Coremetrics (2011) consumer attention continue to decline in terms of number of pages viewed per visit and time on site, suggesting that personalization gap is a major problem for e-tailers. Finally, although the customer satisfaction with e-commerce sites are in general high (around 80 percent between 2005 and 2006), the conversion rate is flat (between 2.4 percent in 2005 and 2.8 in 2007 according to Forrester, 2008). Conversion rate is the ratio between the number of actual orders and the number of site visits [6]. This observation pertains to conversion inefficiency depicted in figure 1. To improve the communication gap, the conversion inefficiency, and the personalization gap; we propose the e-CEM framework that composes of four e-Ps [4].

1. Use the combination of **Push-pull-participative** approaches to communicate with customers to get to know them in a one-to-one basis and to identify opportunities for designing new customer experience. The right combination of the three approaches of communication can bridge the communication gap and may lead to improvement in personalization.

2. **Personalization** of products and services to minimize customer search effort and to optimize customer experience and improve the conversion rate.

3. Ensure **Promptness** in web site responsiveness, delivering of products/services, returning the products, replying customer inquiries, service failure recovery. The key is to manage customer expectation toward the timeliness of services, one important ingredient of good customer experience.

4. Appeal to customers’ fear of the lost of **Privacy** with policies, practices, controls and technologies to ensure that customer personal information is secured. Managing customer privacy properly can improve

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Figure 1: e-CEM Framework
customer disclosure of confidential information and lead to better personalization [13].

3.1. Push-pull-participative communication

The starting point and the cornerstone of the online experience management framework is how customers' preference and needs is collected by using the balanced approach of three different methods.

The Push method involves preparing and sending personalized messages and offers to customers using e-mail marketing, banner ad, and other push technologies. For instance, Amazon.com sends personalized information to previous customers about special offer on Memorial Day, suggesting the title of books that are on discount and might be of interest to the customers. Note that, online customers' willingness to receive email offer has been declining. According to a survey by Forrester Research in 2000, only 44% of North American online customers thought that they received too many e-mail offers. In 2006 the rate rose up to 77%. However, 73% of customers still want to receive notifications of sales and promotions via email from their favorite retailer at least bimonthly (Forrester survey, 2005). Thus, there are still opportunities for online companies to communicate effectively with their customers using push method if they formulate their tactics appropriately. The content (can be dynamic) of the message and the media that company chooses to send the message to the customers are important. However, timing the message at the right moment is even more important in today’s e-mail spamming culture; to achieve this company need to take into account three-way interaction among Personalization, Promptness, and Push communication.

Pull method of communication means information is stored in company’s database and customers initiate the communication process through one or many customer touch points to fetch information. The Pull method also involves the presentation of related information on the sideline while customers visiting a website. For example, YouTube displays related video links around the active one. Some call the sideline presentation of information as passive communication.

The third method of communication is participative communication. Marketers participate in online forum and social media sites to have dialogue with customers. These are the emerging channels of communication resulting from the increasing popularity of social networking, blogs, and e-word-of-mouth media. According to Nielsen Netview Report, in 2010 Americans spend nearly one third of their time online on social media and blogs up from only 15.8 percent in 2009. Given the limits of push method of communication mentioning earlier and the ever-increasing population of social media users, marketer should pay special attention to participative communication, especially for young audience. Younger social media generation customers are more inclined to be conversationists by posting updates on social network sites, tweeting, and participating in online forum to provide feedback on their online experience, according to a survey by Forrester in 2010.

3.2. Personalization

At its basic level, online personalization is tailoring a Web page design according to customer's behavioral needs. It is different from customization because, with customization customers pick and choose the features/components of products and services that they like while in personalization, companies use recommendation engines to design plausible configurations of products and services to their customers based on customer profiles or online behaviors. Personalization also includes methods of communication, pricing, and timing of an offer.

In the literature of recommendation systems, there are at least five different methods for personalization of recommendation [15]. They are: demographic filtering, collaborative filtering, context-based recommendation, content-based recommendation, and simplified statistics approaches. Demographic filtering personalizes the recommendation based on customers’ profiles that either were provided by them or collected from other sources. Collaborative filtering uses recommendation engines to extract trends from the behavior of other site visitors and use that information to present suggestions to current customer based on behavioral similarities. For example, Amazon.com uses collaborative filtering to recommend books on the basis of purchases by other people who bought or rated similar items in the past. Some called this method “affinity selling”. This method is good for customers who don’t have sufficient product knowledge. Context-based recommendation focuses on the similarity between the content currently viewed and the context of viewing. The recommendation engine generates the list of related items based on the viewing patterns and association rules between items. It is a good method for first-time buyers and for gift buying. Content-based recommendation focuses on the product attributes, textual descriptions, hyperlinks, related ratings. Items that are closest to the currently viewed items are recommended on an item-to-item correlation basis. This method is good for new products. Simplified statistics approach recommends products based on
some statistical aspects usually popularity of the item (most popular) and average customer rating (top rated). This method is good for new user or for user that doesn’t have sufficient product knowledge.

Conversion rate of personalized product offers are low, according to a study by Forrester Research, more than 90 percent of consumers who were recommended the products or services on personalized sites turned down the offers (Forrester, 2003). Another study by IBM Coremetrics in 2011 showed that general conversion rate remains flat with only 5.2% for general population, 3.9% for mobile users, and 10.7% for social media users. Thus, there is room for improvement regarding personalization for conversion. There is no single personalization method works for every circumstance, studies showed that the personalization strategies that work are those that incorporate multiple methods for different customers and web visiting scenarios [15]. Furthermore, the adoption of event-driven technologies and constant analysis of customer behavior are keys to success in personalization [14]. The IBM data also underscores the important of personalization to mobile users.

3.3. Promptness

Promptness in delivering of products and services, reimbursing, replying customer inquiries, recovering from service failure are crucial for online marketers. According to a study by Oracle ATG in 2011, consumers are using multiple channels to research and purchase and 22% of customers don’t buy online because of the time constraints. Online customer expects minimal waiting times and ease of site navigation. Studies show that online customers don’t like to wait online for the Web page to load. They can tolerate around 10 seconds of delay according to Nielson [21] while another study [24] showed increased customers’ frustration with delay of 30 seconds. In terms of product delivery online customers have moderate expectation on the speed of the delivery of online retailers. In a study by Forrester Research, when asking: “for a typical online purchase with standard delivery, within how many days would you normally expect a package to arrive?” 59 percent of online shoppers expected three to five days delivery, while 32 percent expected six to ten-day delivery (Forrester, 2006).

Promptness is about managing customer’s expectation of how they will experience the delivering of products and services. Today’s customers expect website that they visit to be very responsive, easy to navigate, and clearly display the right information at the right places. Providing clear policies in shipping and handling, returning of products, answering inquiries are good practices for online businesses.

Because error is inevitable in the operations of online business, well-planned recovery tactics in place is very crucial. Promptness in service failure recovery is a key to customer retention. It can change customer outrage into customer delight by leaving the customer experience better off than before the error. It is five to seven times more expensive to recruit a new customer than to retain an existing one, according to U.S. Consumer Affairs. Customers need alternative ways to communicate with the company, providing toll free number, instant messaging, online chat room, and interfacing on smart handheld devices are some of the ways to provide the sense of presence while dealing with frustrated customers and regular customers alike.

3.4. Privacy

Customers used to be very generous in giving out personal information. However, today’s customers need justification in the form of receiving meaningful value in return or to be compensated for giving out such information. Companies have good reasons to collect customer information. It enables them to serve customer better by offering personalized products and services. [10]. However, personalization comes at a price, the potential lost of customer privacy [1]. This has been one of the major problems that turns many online customers away from personalization and online shopping. For example, giving out financial information online was the number one reason not to shop online for North American customers surveyed by Forrester in 2005 (62 percent in general and 72 percent among senior shoppers).

Trust is critical in online privacy. Internet privacy practices, thus, are important to gain customer trust and they are also required by law. For example, in United States online companies must comply with the Fair Information Practices and other internet privacy requirements. The encouraging news is; customers are willing to give up some privacy if it can be made sure that the personal information improves their shopping experience [12]. What they want are controls over the giving and distribution of such information. Customers don’t want companies to sell personal data to marketers due to the fear of “spamming” and ID theft.

Among the four e-Ps of e-CEM, privacy is both insider-oriented and outsider-oriented; because, the policies, controls, practices, and technology infrastructure to achieve customer privacy must be clearly communicated in the company before dealing with customers. Privacy practices must be properly planned and managed because success depends upon
the understanding and participation at every level of corporate governance. To protect customer privacy, customer information must be secured from both outside intruders and employees. Security breach can do a lot of damage to a company’s brand. The privacy issue becomes even more important in the location-based services environment where customers’ every move is shared with service providers [29] as highlighted in the recent court cases against Apple and Google.

3.5. Interactions among e-Ps

Many two-way arrows depicted in the figure pertain to the interactions among the components of e-CEM mix. The interaction between communication and promptness results in the appropriate timing of the offer delivered to customer. For instance, using the new inbox feature of email marketing marketers can provide a dynamic offer to customers at the time when they read the email. The interaction can be three-way or four-way. For example a four-way interaction among communication, personalization, promptness, and privacy is illustrated [29] where a location-based service provider uses communication to obtain the consent on privacy agreement and service preference from a customer and then promptly provide them services at the right time, place, and context. To be successful in customer experience management four-way interaction should be considered in most cases.

4. Implementation and evaluations

The e-CEM framework implementation should focus on four organizational levels reflecting different aspects of online business. They are strategy, practices, e-metrics/control, and technical tools (Table 1).

4.1. Strategy

Strategy involves defining and setting the corporate customer experience strategic goals around the four components of e-CEM framework and in alignment with overall corporate strategy. The four principles that we mentioned earlier are the basic building blocks for the e-CEM strategy. For instance, exchange and retention principles guide the strategy to achieve the right mix of communication. This means companies should not focus on push communication alone (to acquire customer or to increase sales). Retention principle focuses on personalized message to individual customer at different stages of customer’s life cycle (which bases more on participative communication). One-to-one dialogue is personal and addresses the specific needs of customers; it reduces the waste of time and frustration from the part of the customers. Thus, customer appreciation and trust is achieved. Embedding business rules/best practices into personalization strategy by using state-aware personalization engines (e.g. those who purchase more than 4 times are loyal customers) is the desired strategy [14]. Based on retention principle, state-aware engines allow marketers to treat customers in different stages of their life cycles differently with different channels of communication and messages [14]. Based on network effect principle, a company should use participative communication with customers who are mass connectors or mass mavens. Recent Airbnb fiasco illustrates this principle. By ignoring the complaints of a customer who is a blogger Airbnb, a vacation rental match-making service provider is forced to do damage control when the case spread from the blogger's posts to the mainstream media 1. Promptness strategy involves the resource-based management of customers’ expectation of promptness to delight customers. Privacy strategy defines the high-level privacy and security policies and generates the privacy and security practices for the enterprise. The goal is making customer privacy an enterprise-wise commitment.

4.2. Practices

The practices incorporate and translate the strategies and policies into marketing operations. Best practices of the industry and related industries should be considered in defining the practices of the framework applications to achieve the strategy for each aspect of e-CEM.

Online marketers practice the following push-pull-participative communications:

Push communication is for delivering the offers, attracting customers to the site, and learning their behaviors while they are navigating the website. Push is triggered by events and the status of customers. For instance, Jenny Craig uses the personalized “Click to call” pop-up that enables customer to talk with real diet specialist to sell its diet plans when they seem to wander too long on the diet plan information page. It results in doubling the conversion rate for Jenny Craig. The success comes from improving customers’ cross-channel experience. The most popular push method is e-mail marketing which is used for the delivery of e-newsletters, coupons, updates and alerts, press releases, special event greeting. Dynamic inbox content is

gaining traction now; it focuses on the timing and context when displaying the message.

**Pull:** SEO or search engine optimization using a combination of paid search keywords and self-managed content approaches; linking strategy with associated sites or with Google adSense; promotional showcase on the web site, catalogue search capabilities, smart multi-level product information, search-andising, and site maps are among the most effective practices of pull method. Rich media technologies have been used to pull customer, an example of successful use of rich media is NikeID; the website provides interactive Flash features for customers to design the shoes according to their preferences. Multi-channel push-pull messages including online video and other interactive rich media communications; offering samples in the form of free download, trailer, free stuff, virtual tour, and apps on smart devices are practiced.

**Participative:** Participating in customer review or third-party review sites and other customer generated contents like blogging platforms and social networking sites (including twitter account, Facebook page, and present in Second Life to name a few) to communicate with social media savvy customers whose population is increasing as discussed earlier. To achieve viral marketing effect marketers should promote participation (e.g., using crowd sourcing to generate content and reach). Targeting mass connectors or mass mavens is also preferable because their messages leverage company’s reach. Research showed that providing access to competitor price information may result in long-term preference for e-marketers [25].

Concerning **personalization** component of e-CEM, online companies practice a range of customization and personalization tactics. Customization is currently the simplest and most widely adopted practices for e-tailers. For instance, Dell lets customers customize their own PC on its web site by providing some technical guidelines if necessary. Profile-based and context-based recommendations are taking off and can be great practices for online companies. Personalized loyalty program and custom pricing (e.g., group pricing of two related items) are also being practiced by e-tailer like Amazon.com. The most basic form of personalization is providing options for multiple currencies and payment methods (credit card, check, Paypal, etc.)

An important practice of personalization that is often overlooked by most is customer experience design. It involved using customer persona and scenarios of behaviors to design the online services and products for customers. For instance, Second Life was designed based on the fantasies of many people that want to have alternative lives to break away from boring everyday life [11]. Buzzsaw.com's service offerings are created based on scenarios of hosted shared workspace for architects and stakeholders where they can participate in the design and the management of a project regardless of their locations and work schedule².

The practices of **promptness** aspects of e-CEM at its basic form include shipping and product return policies. Many websites also provide flexible shipping options based on promptness need of the customers. E-mail reply policy is an effective way to convey the promptness expectation to customer. Amazon.com is the first among e-tailers to introduce the one-click payment option to speed up the check out process and avoid shopping cart abandon. Free 1-800 phone number and chat box for customers to communicate with real person representatives are good practices in conveying both the sense of promptness of service and the sense of presence for the sites. However, personalized “Click to call” or “Click to chat” like the case of Jenny Craig that we mentioned earlier can prove to be very effective in the practice of promptness. Location based services on smart devices take promptness to a new level by incorporating context and location into the time dimension.

**Privacy** statement and privacy seal are popular practices of privacy assurance [13] by online companies. Trust seal is another way to convey to the customer that the site is safe and secured. In addition to the statement and seals a company should also has a comprehensive data retention management program which clearly outlines individual access process and information access controls based on customer privacy preference. Furthermore, the program should be clearly communicated to employees and stakeholders. It is also necessary to have a procedure for crisis management relating to customer privacy and security breach. The procedure should be backed by external and internal communication program.

### 4.3. e-Metrics and privacy controls:

Following an old management adage “you cannot manage what you do not measure,” whether a company is a multi-channel organization or an Internet pure play, it will not able to meet its strategic goals without effective measurement, evaluation, and controls mechanism. Therefore, every business needs accurate

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²http://edcorner.stanford.edu/authorMaterialInfo.html?top icId=2&start=1&mid=14
e-metrics to assess the performance of its customer experience management. In addition to metrics there are controls that are created to enforce organization’s privacy policies. They include a privacy requirements process, an information classification and evaluation program, a compliance process, a definition of the organizational roles and responsibilities, and an employee education program.

E-metrics that reflect the convergence of the goals of customers and business owners are the measurement that is effective in the long run [2]. Most e-tailers rely on clickstream data provided by Web analytics software to analyze the effectiveness of their online campaigns. Note that there is no universal metrics for every type of websites and for every stage of customer life cycle. Metrics used should be tied to the strategic goals (e.g., brand visibility vs. increased sales, or cost leadership vs. experience differentiator) and the technologies that are used to capture the data.

The effectiveness of push-pull-participative communication can be measured using the following metrics:

**Push-Pull** communication effectiveness can be derived from visitor statistics (new registrations, frequency of visit, visit duration) and clickstream path (popular pages, entry & exit pages, referral sites and keywords). Referral sites and search keywords can tell the firm that how effective is each associated site and search engines. Breaking down the conversions by each referral website and keyword can point to the quality of the referral. Acquisition Costs are the ratio of advertising and promotion costs by the number of click-throughs [6]. It is the measure of how effective the push-pull communication is. Similarly, cost per conversion which is the ratio of advertising and promotion costs by the total sales is also another way to measure communication effectiveness.

**Participative** communication effectiveness can be gauged by the number of blog read, the number of positive messages on customer forum or third-party review site, and the referrals that are made by those sites. Net promoter score is also an important indicator of participative communication, because it informs marketers about the propensities of a customer to spread positive word-of-mouth about the company.

Clickstream data provides valuable insight into the behavior of customers and prospects on the site: where they go, which marketing campaigns or search keyword drove them there, how much time they spend on the site, where they leave the website, the average order size and other related pieces of data. However, as important as this information is, it does not paint a complete picture of website performance. It has to be considered together with customer satisfaction because the result of customer satisfaction survey can predict future behavior and can answer the “why” questions while clickstream can only answer “where,” “what,” and “when” questions [9]. The goal is to gain a complete view of customer.

A metrics of **personalization** effectiveness is personalization index—it is the ratio of total number of profile elements used in customer interaction by the total number of number of customer profile elements collected. This is the measure of how effective the company uses customer information. Conversion rate and stickiness are the metrics of personalization effectiveness. Stickiness is a composite measure to capture effectiveness of site content in terms of ability to hold clients’ attention and allowing them to complete their online tasks. It is computed by multiplying frequency, duration, and reach [6]. Attrition and churn are two metrics that measure the ineffectiveness of a website. While attrition measures the rate of customer defect during a period of time, churn is the measure of how much the customer base rolls over during a given period. Churn is the ratio of defect customers during the period by the total number of customers at the end of the period [6].

To understand the level of **promptness** marketers can look into the duration of visit per page, compare the duration spent on the page to average duration spent by others. Customer might have difficulty finding certain information. In such a case the event-driven computing systems launch a conversation with the customer via either chat box or pop-up depending on how valuable the customer is. Shopping cart abandonment can be an indication of low promptness; however it is also due to other reasons like fear of credit card information being stolen. The ultimate metric of promptness is customer complaints, however not all customers that dissatisfy with a site do complaint. Thus, shopping cart abandonment and customer complaints might not be good metrics of promptness. The best metric is the preventive regular and rigorous site usability testing. Some sites use the shopping card recovery technology to send personalized messages to customer trying to recover the cart.

**Privacy** interest of customer can be examined from the duration of visit of privacy statement page and choices made by customer regarding offers of various company communications. Furthermore, e-marketers must follow minimum privacy requirements process for all customers, through information classification and control program and following compliance process required by law and also should
actively provide employee customer privacy education program for new employees. Site like J. Crew and Circuit City try to recover the abandoned shopping cart by sending message to convince the customers that shopping with them is safe and their privacy is protected.

### Table 2: Strategy, metrics/controls, practices, and technical tools for e-CEM framework

<table>
<thead>
<tr>
<th>Push-pull-participative</th>
<th>Personalization</th>
<th>Promptness</th>
<th>Privacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation of marketing resources based on customer channel use and customer value. Do not focus on reach alone, the goal is one-to-one dialogue along the customer life cycle.</td>
<td>Embedding business rules/best practices into personalization strategy using state-based approach (e.g. first-time or loyal customer). Message and channel uses tailored to events triggered by customer and his/her status.</td>
<td>Resource-based expectation management of promptness, the goal is to delight customers (complaint handling, shipping &amp; handling, and return policies.)</td>
<td>Define the high-level privacy and security policies and generates enterprise privacy and security practices. The goal is making customer privacy an enterprise-wise commitment.</td>
</tr>
<tr>
<td>- Multi-channel ad</td>
<td>- Personalized landing page</td>
<td>- Shipping &amp; returns policy</td>
<td>- Privacy statement</td>
</tr>
<tr>
<td>- Customer review / customer generated sites</td>
<td>- Profile-based + Context-based recommendations</td>
<td>- Flexible shipping options</td>
<td>- Trusted seal</td>
</tr>
<tr>
<td>- Site maps, Site search, Search and Linking strategies, adSense</td>
<td>- Customization</td>
<td>- One-click payment</td>
<td>- Data retention management program</td>
</tr>
<tr>
<td>- Sampling (trial, trailer, virtual tour, free stuff)</td>
<td>- Personalized loyalty program</td>
<td>- Chat box</td>
<td>- Individual access process</td>
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<tr>
<td>- SEO and SEM</td>
<td>- Custom pricing (e.g. group pricing)</td>
<td>- Free phone call</td>
<td>- Information access controls</td>
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<td>- Promotional showcase</td>
<td>- Customer experience design (persona, scenario)</td>
<td>- E-mail reply policy</td>
<td>- Customer privacy preference</td>
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<td>- Multi-level product info.</td>
<td>- Multiple currencies</td>
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<td>- Contact &amp; dispute process</td>
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<tr>
<td>- Listmania, wish list</td>
<td>- Payment options</td>
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<td>- External communication program</td>
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<td>- Crowd sourcing</td>
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<td></td>
<td>- Visitor statistics (new registrations, frequency of visit, visit duration) + clickstream path (popular pages, entry &amp; exit pages, referral sites and search keywords)</td>
<td>- Duration of visit per page</td>
<td>- Duration of visit of privacy statement page</td>
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<td></td>
<td>- Acquisition Costs</td>
<td>- Shopping cart abandonment</td>
<td>- Privacy requirements process</td>
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<td></td>
<td>- Cost per conversion</td>
<td>- Customer complaints</td>
<td>- Information classification &amp; control program</td>
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<td></td>
<td>- Number of blog read</td>
<td>- Regularly and rigorous A/B testing</td>
<td>- Compliance process</td>
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<td>- Net promoter score</td>
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<td>- Employee education program</td>
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#### 4.4. Technical tools

E-marketers need to identify the appropriate technologies and marketing tools to implement the framework and to ensure that an enterprise architecture and infrastructure is in place to provide the necessary supports for those technical tools. Both technical tools and architecture must be in good working order to ensure that an enterprise provides sufficient privacy and security protection to its customers. The technical
tools that help make the e-CEM possible are listed in the last row of Table 2. Some of those tools like social computing Web services and mash up computing are still nascent in their adoption stage but all are promising. Since the objectives of the paper are about e-marketing we don’t delve into the technological tools in greater detail.

5. Conclusion

We content that to better manage online customer experience we need a framework that take customer experience front and center. We proposed an electronic customer experience framework or e-CEM that composes of 4e-Ps: Push-pull-participative communication, Personalization, Promptness, and Privacy. We have further discussed how our framework can help e-marketers identify their customer experience strategies and technical tools to implement the framework. We also offered some examples of how to monitor and evaluate the effectiveness of e-marketing with tangible e-metrics.

6. References

[23]. Robins F (1991) Four Ps or Four Cs or Four Ps and Four Cs. MEG 1991 Conference Proceedings.