Original Article

An empirical approach to ECRM-increasing consumer trustworthiness using online product communities

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ABSTRACT Online business communities are fast emerging as new organizational tools for customer relationship management, marketing, brand management and for a multitude of other purposes such as building strong online trust and reciprocity. This study has been conducted to do an analysis of the online community of Apple in detail by using Netnography, which is a new qualitative, interpretive research methodology that uses Internet-optimized ethnographic research techniques to study an online community. As a marketing research technique, 'Netnography' uses the information publicly available in online forums to identify and understand the needs and decision influences of relevant online consumer groups. The identification of parameters that aids participant trustworthiness can aid long-term strategic decision making. It is deduced that increased consumer participation in a community results in increased reciprocity, and more accurate peer-to-peer responses translate into greater peer acceptance, which is indicative of greater trustworthiness of a participant. This implies that trustworthiness and popularity of a forum member is a direct function of his ability to give correct answers (level of Consumer Product knowledge) to participants and their level of participation. Peer-to-peer consumer interaction is useful, and relevant incentives to consumer evangelists will be in the long-term organizational interest. Concepts of business online communities - coupled with commerce, content and communication - are widely discussed as the essential components of a successful organizational web presence. In a marketing context, the

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significance of a community can be viewed as an extension of the relationship marketing paradigm. The interest in the online communities from a marketing perspective is driven by the belief that the complex network of personal relationships and increasing identification with the group as a community provide a foundation for a very attractive business model. Customers and other stakeholders are only likely to be interested in communities that offer them value.

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INTRODUCTION

This article attempts to explore the role of online communities in business-to-consumer (B2C) spaces in building online trust, by analyzing the dimensions of consumer participation, longevity of forum presence, reciprocity and consumer status level in the community. For this purpose, studies are conducted on a set of online communities of Apple and correlation and regression model is applied for 40 product categories.

Organizations build online communities as part of their customer relationship management (CRM) initiatives. Online trust is positively associated with returns on these CRM initiatives. CRM is focused on targeted customer segments and effective communication and interaction with these segments and customers are directly related to online trust. As key consumers become opinion leaders in these consumer communities, it is vital for organizations to identify the components that build trustworthiness of these individuals. These opinion leaders can be subsequently leveraged by organizations to build greater value for their communities, brands and products. Higher the degree of perceived online trust, greater the degree of involvement of other customers, which eventually leads to greater returns and economic benefits for the organization. Organizations need to study the role of greater consumer participation and reciprocity, which increases trustworthiness

of certain consumers. There is a need for hosting the appropriate content on an organizational initiative, which by matching consumer requirements helps develop a relationship between organization and consumer.¹

The results of a regression model are used to analyze factors contributing to the growth of trust in an online community and for finding out the contribution of the independent variable, that is, number of points to the dependent variable, that is, number of views. The information is subsequently applied for prediction by analyzing how far the dependent variable depends on the independent variable.

LITERATURE REVIEW

We now proceed to do a literature review on online communities and concepts of CRM.

Online community

An online community is a group of people with some shared interest, who connect and interact with each other over time. Relationship of some sort is implied.² The dawn of the information age found groups communicating electronically rather than face to face. A computer-mediated community uses social software to regulate the activities of the participants. These are places where people gather to share knowledge, build recognition and tap opportunities. Initially sensed to be resource pools for value addition, where people



ventured to fulfill their need for self-actualization, participation in online communities and forums started as a medium for exchange of ideas and information, and now organizations have started using these communities for marketing through consumer evangelism and support. A web-based communication model utilizes the features of the network for B2C, as well as peer-to-peer communication. On the Internet, electronic tribes structured around consumer interests have been growing rapidly. To be effective in this new environment, managers must consider the strategic implications of the existence of different types of both virtual community and community participation.³ Consumers join these forums because of the multifaceted opportunities they provide to members. Not only do they provide information on products and services and latest promotional schemes, they are also triggers for innovation. As like-minded people converge together, these are new cliques where organizations can use opinion leaders for evangelism, while harnessing consumer-generated content for product improvement and cocreation. Corporates like Dell have introduced 'Ideastorm' as a virtual interaction center for consumers who participate in the development and enhancement of Dell's products and services by sharing their ideas online. Enabling interactive electronic dialogue with user communities is one way of getting closer to the customers.

The demographic composition of the user population has also changed to include people of all ages, different cultures, educational backgrounds, as well as experience and technical skills. This has led to a change in the range of people participating in various kinds of online communities. In today's era, although some communities require members to have particular skills or qualifications, there are millions of 'open' communities in which anyone with Internet and web access can participate. As a

result, the majority of users in these open communities and many others are not technical people. Today's online community participants come from all walks of life. Hence, online communities appear to have significant potential for organizations trying to interact and build relationships with their consumers. Here, customer orientation is given a new meaning and the contents and processes of exchange between companies and customers are reconsidered if firms want to retain their customers and cooperate with them.⁴ What deserves a significant mention is that online communities represent a set of core values such as consumer culture, building consumer perceived value, conviviality and strong democracy, thereby building consumer equity and consumer retention.

There is a concept of empathy and trust prevalent in online communities, as it is said that greater similarities among people forge better understanding. Furthermore, when people discover they have similar problems, requirements, opinions or experiences, they may feel closer, more trusting and be prepared to reveal even more.

This has a 'snowball effect' in that the more people discover that they are similar to each other, the more they tend to like each other and the more they will disclose about themselves. This is known as 'self-disclosure reciprocity' and it is powerful online. The reciprocity can be in the form of exchanges of the same kind of aid or helping a mutual friend in the network. Even if reciprocity does not happen immediately, it can happen months or years later possibly with another person in the community. In healthy communities, reciprocity is a general and accepted norm among members.

This research attempts to focus on the usage of online communities by organizations for building relationships with the consumers. By leveraging the content created by the consumers in the online forums, organizations can form strategies for targeting consumers appropriately, make alterations to products, improve services and improve consumer retention. We aim to work in the B2C segment where we shall study a diverse set of organizational and stand-alone communities.

Work commences with studying some features of online communities that can be useful for the organizations. These data have been compiled after reviewing literature available in this domain.

Online business communities

In the present scenario, many business companies view building online 'brand' communities as a marketing strategy. These companies seek to build a new kind of relationship with their customers through these communities.

Many companies are currently hosting interactive B2C online community sites organized around their brand, products and services to create reinforcing, competitively distinct and long-lasting relationships with customers.⁵ They aim to expand their markets and accumulate detailed customer profiles for target marketing new and existing products and services. Companies are often using these business communities to test new product ideas, involve customers in product development, to monitor customer purchase patterns and to gauge early demand for products.

The Kodak company's website has an embedded discussion board that serves as a gathering place for the discussion of photography. The various service providers such as Yahoo and Microsoft host a large number of online communities to encourage traffic to their sites where they carry advertisements.

Core characteristics and possible usage of online communities

In an online community, the members share the same physical space – that is, co-presence – and have access to shared resources. Co-presence breeds kinship

among consumers. Consumers make purchases on the basis of opinions of their peers; belonging to the same community enhances trust in the opinion of others. These members have a shared goal, interest, need or activity that provides the primary reason for belonging to the community. If organizations seed these communities with their evangelists (brand propagators) and they are able to become opinion leaders, they can influence the opinion and decision of entire consumer communities. Members are engaged in repeated, active participation and there are often immense interactions, strong emotional ties and shared activities occurring between participants. Reciprocity of information, support and services between members is thus obvious. The online communities can be used for customer engagement, which ultimately leads to consumer empowerment. These communities act as catalysts for strengthening the bond between company and consumer, building long-lasting relationships with the consumer, creating, maintaining and tightening the feedback loop, identification and resolution of customer issues, and creating customer loyalty through personal investment in order to maintain competitive business edge. These communities allow for greater interactivity among members, boosting self-disclosure reciprocity. These communities are also a useful complement to CRM solutions. They help in more accurate profiling of customers based on interests and behaviors, and thus they can be used to reinforce or manipulate brand image through better penetration of markets. They have enormous potential to be used as a 'test group' to gauge new products or advertising campaigns. Last but not least, these communities help companies to design a path for growth and change.

Customer relationship management

CRM is an enterprise-wide initiative that belongs to all areas of an organization.⁶



It reflects the comprehensive strategy and process of acquiring, retaining and partnering with selective customers to create superior value for the company and the customer.

The Goals of CRM are

- 1. Build long-term and profitable relationships with chosen customers.
- 2. Getting closer to those customers with every point of contact with them.⁷

CRM is an enterprise-wide approach to understanding and influencing customer behavior through meaningful communication to improve customer acquisition, customer retention, customer loyalty and customer profitability. CRM can be viewed as an application of one-toone marketing and relationship marketing, responding to an individual customer on the basis of what the customer says and what else is known about that customer.8 It is a management approach that enables organizations to identify, attract and increase retention of profitable customers by managing relationships with them⁹ and further identifying strategically significant customers.¹⁰

In the academic community, the terms 'relationship marketing' and CRM are often used interchangeably. The heart of marketing is relationships, and nurturing long-term relationships should be the goal of marketing practice. Eve macroenvironmental factors responsible for the growth of relationship orientation in marketing included the following:

- rapid technological advancements, especially in the field of information technology;
- the adoption of total quality programs by companies;
- the growth of the service economy;
- organizational development processes leading to the empowerment of individuals and teams; and

- an increase in competitive intensity leading to concern for customer retention;
- Increased competition reduces brand loyalty, making the job of the marketers more complex. Further, customers also become indifferent to the myriad marketing messages being thrust upon them. As a result, marketing needs to be more well directed and specific, because customers, whether consumers or businesses, do not want more choices. They want exactly what they want, when, where and how they want it, and technology now makes it possible for companies to give it to them.¹⁴

Customers have hidden or overt preferences that marketers can reveal by building a learning relationship. Earlier, marketers were attempting to interpret consumer needs on the basis of their buying behaviors. Now with the arrival of consumer-generated media, which I discuss in the next section, marketers have another avenue to learn about the consumer. The objective is to keep the consumers satisfied and keep them loyal toward the company or brand. CRM, which has also been described as 'information-enabled relationship marketing', 15 comprises processes used by organizations to manage consumer relationships, which also include collecting, storing and analyzing data, and is often termed as data-driven marketing. CRM attempts to provide a strategic bridge between information technology and marketing strategies aimed at building longterm relationships and profitability. This requires 'information-intensive strategies'. 16

For decades, businesses tried to determine what their customers wanted using focus groups that offered feedback about how well customers liked certain products. As the business world got more complex and markets became more competitive, the kind of information that could be gleaned from focus groups became inadequate for most businesses. They did not provide enough

information, nor was the information valuable after a product was already released.

Realizing the limitations of focus groups and similar marketing practices, companies decided that they needed to know more about who their customers were, how they interacted with the company and how the company could reach out to customers in a meaningful way. This idea of getting a '360° view' of customers was a nice concept, but it was never really achievable within the limited spectrum of marketing and communication tools that were available.¹⁷ This is where interactive marketing had a vital role to play. Marketing has moved from a transactionbased effort to a conversation, and interactive marketing can be defined as the ability to address the customer, remember what the customer says and address the customer again in a way that illustrates that we remember what the customer has told us. 18 The collaborative web is evolving as a significant interactive marketing tool, and the ability to remember what the customer has said is made easier when we can collect customer information online and communicate with the customer easily using the connectivity provided by the Internet.

The posts and reviews help in increasing the organizational brand equity, as the consumer perception for a product varies and depends a lot on the discussion on these communities. The online communities have more discussions about the competitor's products also and about new features, which increase the perceived value by stakeholders, which can be utilized for the growth of the company.

PARTICIPATION, RECIPROCITY AND ONLINE TRUST ARE IMPORTANT DIMENSIONS OF CRM

Reciprocity

It represents a pattern of behavior in which people respond to friendly or hostile actions with similar actions even if no material gains are expected. Furthermore, when people discover that they have similar problems, requirements, opinions or experiences, they may feel closer, more trusting and be prepared to reveal even more.

This has a 'snowball effect' in that the more people discover that they are similar to each other, the more they tend to like each other and the more they tend to disclose about themselves. This is known as 'self-disclosure reciprocity' and it is powerful online. The reciprocity can be in the form of exchanges of the same kind of aid or helping a mutual friend in the network. Even if reciprocity does not happen immediately, it can happen months or years later, possibly with another person in the community. In healthy communities, reciprocity is a general and accepted norm among members.

Online trust

Online trust is positively associated with returns on CRM initiatives because CRM is focused on targeted customer segments, and effective communication and interaction with these segments and customers is directly related to online trust. Thus, we can conclude by saying that higher the degree of online trust, greater the degree of involvement of the customers, which eventually leads to effective CRM. The degree of trust dependence in CRM may be driven by customer power and the influence of competitive intermediaries among other factors. Trust can be defined as 'the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor'. 19

Online trust is important in both business-to-business and business-toconsumer e-business. Consumers and businesses, feeling the pressure of economic downturn and terrorism, increasingly look



to buy from and do business with organizations with the most trusted websites and electronic networks. Companies' perception of online trust has steadily evolved from being a construct involving security and privacy issues on the Internet to a multidimensional, complex construct that includes reliability/credibility, emotional comfort and quality for multiple stakeholders such as employees, suppliers, distributors and regulators, in addition to customers. Further, trust online spans the end-to-end aspects of e-business rather than being just based on the electronic storefront.

Participation

The incentives offered by online communities can lead to higher levels of participation.

METHODOLOGY

The approach of Netnography is used for this article.

Netnography

It is a new qualitative, interpretive research methodology that uses Internet-optimized ethnographic research techniques to study the online communities. With the help of Netnography, the online community research can be done by either actively integrating the members of the community or passively monitoring the community and integrating the gathered information, knowledge and ideas into the new product development process.²⁰

Significance of the methodology

One of the main benefits of this methodology is the possibility to access unfiltered, unbiased information from very experienced and highly involved users, owing to the huge amount of conversations and the vivid online dialogue regarding consumer products marketing and innovation. Managers are able to obtain deep insights into the everyday problems

experienced by consumers and their solutions to those problems.

One of the main expectations of this new technique of research methodology is to utilize a huge number of consumer statements for qualitative analysis, to get unobtrusive and unbiased original consumer statements and to get access to specialized user groups.

Procedure

The following steps and procedures are included in a typical Netnography Research.²¹

- 1. Definition of Research field: It includes the definition of the field of innovation, as well as the systemization of topics, trends, markets and products, which are of major interest. The operating result of the first step is an extensive mind map that contains a classification and structured set of topics, which are used as a starting point to define search strategies for the identification of adequate online sources.
- 2. Identification and Selection of Online Communities: The aim of the second step of Netnography is to identify communities and Internet sources where users exchange relevant information on the defined research area. For this purpose, general online search engines, meta-search engines and specific online search engines that focus on blogs, groups, communities are used. Having identified and sighted often a couple of 100 relevant online sources for Netnography, the researcher has now to select the communities that can be probed in for further in-depth analysis. There exist a number of appropriate and well-proven qualitative and quantitative criteria that support the researcher in the selection procedure. Qualitative criteria include, for example 'topic focus', 'data quality', 'language type', 'interaction type', 'profile editing'. Quantitative criteria include criteria such as 'number of messages', 'frequency of usage', 'member activity', 'data quantity' or 'interaction level'.

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- 3. Community Observation and Data Collection: In this step, the selected online communities are observed by the researcher who immerses in the community. This is accomplished by extensive reading with focus on conversations that are recent, extensively corresponded to, referenced and frequently viewed from the community members. Although before the emergence of the Internet it was necessary for the researcher to participate in the considered group, currently Netnography enables observation and analysis of the consumer communication without active participation. Hence, the approach is a way to unobtrusively study the nature and behavior of online consumer groups. The analysis is conducted in the natural context of the community and thus is free from the bias, which may arise through the involvement of the researcher or experimental research setting.
- 4. Data Analysis and Aggregation of Consumer Insights: The 'thinking' about the 'noticed' and 'collected' online consumer statements is part of the fourth step of Netnography. In this step, the aim is to look for patterns and relationships within and across the collections of consumer statements and to make general discoveries about the subject matter of research. Therefore, the researcher compares and contrasts the collected consumer records in order to discover similarities and differences, build typologies or find sequences.
- 5. Community Insights Translation into Product and Service Solutions: The Netnography process typically does not end with the generation of insights. A major challenge is to transfer the obtained insights into innovative product and service solutions. The implications of the results could be for product, brand, target group, as well for the process of communication, for example source for product innovations and product modifications and development of consumer-oriented communication strategies.

CONTENT ORGANIZATION

Content organization on the site is initiated to enable consumers to view relevant content in order to induce greater consumer participation, as well as for creating and maintaining value-laden relationships with current and potential customers. The typology of content that attracts greater consumer interest and generates subsequent engagement by soliciting participation and involvement through comments needs to be identified to enable organizations to post content in accordance with consumer receptivity.

The online community of Apple: *Apple Discussions* (discussions.apple.com/category.jspa?categoryID=204) was used for our study and data (Table 1) was collected for the study.

The content in Apple Discussions is organized as follows:

Forum Categories—Categories represent a collection of topical forums, as well as other categories, and are used to organize forums. Most categories are generally defined by a product name, such as 'iPod', 'iMac', or 'Mac OS X v10.4 Tiger'. The Apple Discussions Forum has 40 product categories.

Forums—Forums are the areas where individual discussions take place. The discussions are displayed as a list of topics. For example, if a consumer is looking for conversations about searching their Mac with Spotlight, they can click the Mac OS X v10.4 Tiger link on the Discussions homepage, and then click the Spotlight link in the resulting Tiger page to visit the Spotlight forum.

Topics—Topics refer to the actual topics of discussion, each of which consists of messages displayed as a conversation.

Messages—Messages are the individual posts made by community members.



Table 1: Regression model for iPhone

			Model summary			
Model	R	R^2	Adjusted R ²	Standard error of the estimate		estimate
1	0.981ª	0.962	0.957	1887.96795		
			Coefficientsb			
Model		Unstandardized coefficients		Standardized coefficients	t	Significance
	•	В	Standard error	β	-	
1	(Constant) No_points	4069.859 0.352	789.794 0.025	_ 0.981	5.153 14.195	0.001 0.000

^aPredictors: (constant), no_points. ^bDependent variable: no_views.

If a consumer clicks a topic to view a discussion, they will see messages posted by other members.

Replies—Replies are posts made in response to other messages and are organized in a flat or threaded manner. For example, if someone posts a question in a topic, other members may post a reply to that question.

PARTICIPATION AND RECIPROCITY IN THE APPLE'S ONLINE COMMUNITY

When a community member posts a question as a topic starter, other members can post an answer in reply. An answer can be just some hints or helpful information to help the poster solve an issue. The originator of the topic can mark such a reply as a 'Helpful' post. A small yellow star appears next to that reply and the person who posted the reply is awarded 5 points.

If a community member posts a specific answer that provides a solution to the original poster's issue, the originator marks this reply as a 'Solved' post. A large green star appears next to that reply and the person who posted the reply will be awarded 10 points.

Only the original topic poster has the option to mark replies as either Helpful or

Solved or to not mark a reply at all. The originator can also end the discussion by marking the topic as 'answered', which displays a green star at the top of the topic page to let everyone know that the topic contains valid helpful information.

If a participant replies to another member's question topic, they are eligible to receive points from that member, although this is at his or her sole discretion. The originator has the option of marking a reply as either Helpful or Solved, which will add points to the respondent's account. These points, in turn, increase a member's ranking (status level) in the community over time. A member receives 10 points for each reply that a member marks as 'Solved' and 5 points for each reply that a member has marked as 'Helpful'. The reward system helps to increase community participation. When a community member gives a reward to another member for providing helpful advice or a solution to his or her question, the recipient's points will help increase his or her status level within the community. Members can see their status level by Forum, Category or at the main Community level.

Status level	Point range
5	50 000 +
4	8000-49 999
3	1000-7999
2	150-999
1	30-149

On the basis of literature review, we proceed to identify the following significant variables.

VARIABLE DEFINITIONS

We define the following variables:

- 1. No. of points: It represents the status level of a member in the forum category or at the main community level.

 These points are earned by replying to another members' question topic. This is considered as a measure of Reciprocity and correctness of replies made by a forum member.
- 2. *No of views*: It represents the no. of times a participant post is viewed by other members. This is indicative of *trustworthiness* of the participant.
- 3. No of days: It represents the total number of days spent by a consumer in the online community of Apple from the date of registration till 1 December 2010. This is indicative of *longevity* of community presence.
- 4. *No of posts*: It represents the volume of messages created by the community members. This is considered as a measure of *Participation*.

A previous study²² 'Building Participation, Reciprocity and Trust – A Netnography of an online community of Apple – using regression analysis for prediction' had already explored the implications of all the above variables. The number of posts and number of days appeared to have no direct relationship with trust; hence, the same were not explored further, in this study.

USING REGRESSION ANALYSIS FOR PREDICTION

An attempt was made to fit a regression model to the data collected from the Online group of iPhone and a significant linear relationship was observed in the case of iPhone between points and views. An R^2 value of 0.962 was observed in the case of iPhone. Approximately 96 per cent of variation in the no. of views was explained by the no. of points, calculations done across a set of 10 consumers (Table 1).

As per regression analysis, a random variable Y called a response variable is treated as a linear function of another variable X called the predictor variable (Figure 1).

Thus, Y = a + bX, where variance of Y is assumed to be constant, a and b are

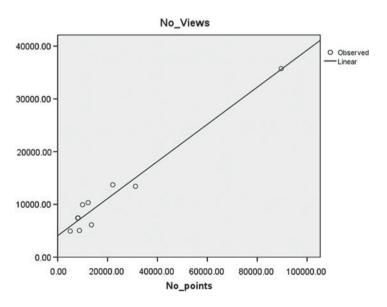


Figure 1: Regression output points versus views.



regression coefficients that specify the *Y* intercept and slope of line. A reasonably strong correlation was observed between the no. of points and no. of views. Views further demonstrated an incremental growth trend of 0.352 per unit increase in points. The entire process was repeated for 40 product communities of Apple.

RESULTS

Our previous study had shown that

- 1. High correlation is observed between the no. of views and no. of points. The participant points accumulated are a function of member posting; however, a high correlation between participant participation appears to lead to not only increased reciprocity, but also significantly increased trustworthiness of the community members.
- 2. There was no significant correlation observed between days since registration and views. Hence, the parameter of longevity is eliminated, as per our previous study.
- 3. The regression equation for iPhone is hence *Y* = 4069.859 + 0.352*X*, where the expected no. of views (*Y*) can be predicted by including the value of no. of points (*X*) in the above-given equation.
- 4. The Pearson correlation coefficient (*r*) was calculated among the number of points and views across all 40 product communities of Apple (Table 2). The substantial value of correlation coefficient indicated that there is a significant relationship between the number of points and views across 31 product communities, that is, in 78 per cent cases.
- 5. A significant value of R^2 is observed in over 33 product communities, that is, 83 per cent of the cases, and regression models could be applied to most of the cases, where the expected no. of views (*Y*) can be predicted by including the value of no. of points (*X*) in the above–given equation (Table 3).

Table 2: Relationship (Pearson's correlation coefficient) of number of views with number of points (*N*=40×10=400)

S. No	Product communities	Correlation coefficient	
1	iPhone	0.982**	
2	iPad	0.502	
3	Power Mac	0.911**	
4	Mac Mini	0.789**	
5	Mac Pro	0.712*	
6	Mac Book Pro	0.556	
7	Mac Book Air	0.860**	
8	Mac Book	0.680*	
9	iMac	0.737*	
10	Displays	0.902**	
11	Apple branded iPod accessories	0.753*	
12	iPod	0.754*	
13	iPod Shuffle	0.631	
14	iPod Mini	0.701*	
15	iPod Nano	0.829**	
16	Fifth Generation iPod	0.900**	
17	iBook	0.867**	
18	Power Book	0.736*	
19	Mobile Me	0.646*	
20	Air Port	0.768**	
21	Blue Tooth	0.803**	
22	QuickTime	0.652*	
23	iTunes	0.718*	
24	iPhoto	0.854**	
25	iMovie	0.692*	
26	Garage Band	0.767**	
27	iDVD	0.722*	
28	iWeb	0.751*	
29	Boot Camp	0.734*	
30	iTunes for Windows	0.711*	
31	Mac OS X v10.6 Snow Leopard	0.926**	
32	Mac OS X v10.5 Leopard	0.846**	
33	Mac OS X v10.4 Tiger	0.915**	
34	Mac OS X v10.3 & earlier	0.525	
35	Mac OS X Technologies	0.476	
36	Mac OS 9.x	0.422	
37	ICal	0.534	
38	iChat AV	0.233	
39	iSync	0.281	
40	Safari	0.126	

^{**}Significant at the 0.01 level.

CONCLUSIONS

- 1. We consider the no. of times a participant point is viewed as indicative of the trustworthiness of the participant.
- 2. Trustworthiness is not a function of longevity of forum presence.
- 3. Increased participation by virtue of points results in increased reciprocity, as depicted,

^{*}Significant at the 0.05 level.

Table 3: Views as a function of points (*N*=40×10=400)

S. No.	Product	Α	b	R^2	Regression equation Y=a+bX	Error
1	iPhone	4069.859	0.352	0.962	Y=4069.859+0.352X	789.794
2	iPad	3989.306	0.338	0.302	Y=3989.306+0.338X	707.177
3	Power Mac	1823.083	0.029	0.830	Y=1823.08+0.029X	236.195
4	Mac Mini	919.876	0.009	0.623	Y=919.876+0.009X	130.058
5	Mac Pro	157.81	0.063	0.508	Y=157.81+0.063X	1447.222
6	Mac Book Pro	2659.842	0.029	0.309	Y=2659.84+0.029X	913.219
7	Mac Book Air	226.532	0.005	0.739	Y=226.532+0.005X	49.820
8	Mac Book	2753.322	0.028	0.462	Y=2753.32+0.028X	631.396
9	iMac	2045.39	0.033	0.543	Y=2045.39+0.033X	724.652
10	Displays	323.531	0.009	0.814	Y=323.531+0.009X	70.362
11	Apple Branded iPod Accessories	139.182	0.006	0.567	Y=139.18+0.006X	94.651
12	iPod	991.017	0.046	0.569	Y=991.017+0.046X	788.003
13	iPod Shuffle	1193.438	0.045	0.398	Y=1193.44+0.045X	982.251
14	iPod Mini	174.682	0.037	0.492	Y=174.682+0.037X	456.83
15	iPod Nano	1519.677	0.084	0.687	<i>Y</i> =1519.68+0.084 <i>X</i>	575.726
16	Fifth Generation iPod	1564.002	0.152	0.811	Y=1564.002+0.152X	863.546
17	iBook	1934.832	0.007	0.752	<i>Y</i> =1934.83+0.007 <i>X</i>	501.291
18	Power Book	2572.572	0.054	0.541	Y=2572.57+0.054X	865.079
19	Mobile Me	3719.241	0.155	0.418	Y=3719.24+0.155X	2714.962
20	Air Port	558.751	0.18	0.589	<i>Y</i> =558.751 + 0.18 <i>X</i>	2544.793
21	Blue Tooth	346.419	0.015	0.645	Y = 346.419 + 0.015X	173.135
22	QuickTime	925.845	0.139	0.426	Y=925.845+0.139X	2440.806
23	iTunes	10175.007	0.176	0.516	Y=10175+0.176X	2688.461
24	iPhoto	2225.32	0.405	0.729	Y=2225.32+0.405X	4806.142
25	iMovie	4932.751	0.036	0.479	Y = 4932.75 + 0.036X	980.766
26	Garage Band	822.142	0.393	0.588	Y=822.142+0.393X	2120.173
27	iDVD	3318.253	0.04	0.522	Y=3318.25+0.04X	966.883
28	iWeb	5170.535	0.115	0.564	<i>Y</i> =5170.54+0.115 <i>X</i>	1030.208
29	Boot Camp	170.658	0.118	0.539	<i>Y</i> =170.658+0.118 <i>X</i>	607.471
30	iTunes for Windows	4570.421	0.247	0.506	Y = 4570.42 + 0.247X	2557.84
31	Mac OS X v10.6 Snow Leopard	384.187	0.27	0.857	Y=384.187 + 0.27X	1019.956
32	Mac OS X v10.5 Leopard	3014.609	0.181	0.715	<i>Y</i> =3014.61+0.181 <i>X</i>	2600.29
33	Mac OS X v10.4 Tiger	10657.945	0.062	0.838	Y=10657.9+0.062X	1733.767
34	Mac OS X v10.3 & earlier	2536.772	0.043	0.276	Y=2536.772+0.043X	954.149
35	Mac OS X Technologies	2987.941	0.101	0.227	<i>Y</i> =2987.94+0.101 <i>X</i>	1112.915
36	Mac OS 9.x	671.798	0.019	0.178	Y=671.798+0.019X	889.813
37	iCal	481.675	0.116	0.285	Y = 481.675 + 0.116X	657.433
38	iChat AV	2542.332	0.032	0.054	Y=2542.332+0.032X	2258.431
39	iSync	646.76	0.053	0.079	Y=646.76+0.053X	942.066
40	Safari	4654.849	0.054	0.016	Y = 4654.849 + 0.054X	3370.805

X=No. of points Y=No. of views

and subsequently views that are indicative of greater trustworthiness of participant. This implies that trustworthiness and popularity of a forum member is a direct function of his ability to give correct answers (level of Consumer Product knowledge) to participants and level of participation.

4. As key consumers become opinion leaders in these consumer communities, it is vital for organizations to identify the components that build trustworthiness

of these individuals. These opinion leaders can be subsequently leveraged by organizations to build greater value for their communities, brands and products.

The Apple's Community is a typical 'community of practice', organized for creation, development and use of customer focused knowledge. This inculcates a collective identity and system of shared values that promotes a sense of belonging among the members. This



along with a climate of increased trust in group members keeps consumers continuously participating and seeking for more information, thus stimulating consumer engagement and commitment, which in turn is the very premise of creation of the community from Apple's perspective.

MANAGERIAL IMPLICATIONS AND SCOPE FOR FUTURE WORK

Organizations can use online communities to build greater consumer engagement and participation. Some significant implications for managers are:

- 1. Companies can use online communities to enhance their value perception.
- This can be done by using online communities to build greater trustworthiness, which in turn is a function of greater reciprocity and participation.
- 3. Although high degrees of consumer participation can be achieved by increased longevity of forum presence, of vital importance is the accumulation of points by individual members. A higher status level is indicative of greater value associated with the opinion of the individual member.
- 4. Identification of these consumer opinion leaders and leveraging them as consumer evangelists for the organization is vital from an organizational perspective.
- 5. An online community is also a strategic marketing tool for companies, which can be done by leveraging the collective intellect of the participants. On the Internet, community building means attracting and engaging the users but for organizations, attracting users is not an end in itself. The goal is to have people share information or contribute ideas and a community is a means of achieving this goal.

6. Hence, companies can successfully use communities for relationship building, value creation and commitment.

LIMITATIONS AND SCOPE FOR FUTURE WORK

This is a pilot study conducted first on one product community of Apple. The entire process is then repeated for a set of 40 product communities for better validation. More emphasis should be laid on consumer education and recruitment of appropriate opinion leaders from the consumer group as creation of consumer evangelists will be in the interest of the organization. Peer–to–peer consumer interaction is useful and relevant incentives to consumer evangelists will be in the long-term organizational interest.

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