CHAPTER 5

CONCLUSIONS AND SCOPE OF FURTHER RESEARCH

5.1. Consumer Trustworthiness Regression model using Netnography (CTR)

Organisations build online communities as part of their Customer Relationship Management (CRM) initiatives.

(i) 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 is directly related to online trust.

(ii) As key consumers become opinion leaders in these consumer communities, it is vital for organisations to identify the components that build trustworthiness of these individuals. These opinion leaders can be subsequently leveraged by organisations to build greater value for their communities, brands and products.

(iii) 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 organisation.

(iv) Organisations 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 organisational initiative which by matching consumer requirements helps develop a relationship between organisation and consumer.

5.1.1. Netnography of 40 online product communities of Apple

(i) 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.
(ii) 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.

(iii) Peer-to-peer consumer interaction is useful and relevant incentives to consumer evangelists will be in the long term organisational interest.

(iv) Concepts of business online communities-coupled with commerce, content and communication - are widely discussed as the essential components of a successful organisational web presence. In a marketing context, the significance of a community can be viewed as an extension of the relationship marketing paradigm.

(v) 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.

(vi) Customers and other stakeholders are only likely to be interested in communities that offer them value.

5.1.1.1. Conclusions

1. We consider the number 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 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 organisations to identify the components that build trustworthiness of these individuals. These opinion leaders can be subsequently leveraged by organisations to build greater value for their communities, brands and products.

5. 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 which promotes a sense of belonging amongst 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.

5.1.1.2. Implications to Organisations

Organisations 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.
2. 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 organisation is vital from an organisational 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 organisations, 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.

5.1.1.3. Limitations and Scope for Future Work

This study has been conducted initially 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 organisation. Peer-to-peer consumer interaction is useful and relevant incentives to consumer evangelists will be in the long term organisational interest.

5.1.2. Netnography of Dell Ideastorm

5.1.2.1. Conclusions

The value of a user’s votes and comments on other’s ideas is indicative of his or her degree of participation. As consumer ideas increase, the degree of participation of the consumers goes up. As votes and comments are a function of number of ideas, it helps in segregating the highly patriotic consumers and further using them as consumer evangelists. This community leverages user collaboration to act as a multiplier force for better collaborative CRM.

5.1.2.2. Implications to Organisations

Dell “Ideastorm” can be used to identify significant ideas originating from consumers. It can be harnessed for Joint Value Creation which is the process of asking consumers for ideas, which may get implemented, which further results in greater consumer participation. Organisations can benefit by adopting a holistic co-creation approach by incorporation of consumers as co-creators in open innovation activities.

5.2. Conclusions and Implications for RI-1

The following section details the conclusions and implications for Research Instrument, RI-1.

5.2.1. Conclusions for questions of RI-1

5.2.1.1. Participation

The ability of a community to contribute to member-centricity, responsiveness and accessibility stimulates participation. Online communities sustain if users participate. Companies will benefit if they are able to solicit long term consumer participation which
results in developing consumer relationship capital. Companies need to identify the driving forces which aid this process and it is by achieving the right quantum of member-centricity, responsiveness and accessibility, that companies can lower the walls, both metaphorical and real, including the walls of distance, time and experience.

5.2.1.2. Emotional Attachment

The ability of a community to contribute to increasing the number of members who are emotional optimists and risk avoiders stimulates emotional attachment towards the community. This will further lead to creation of emotional bonds among the members as well as towards the organisation. The companies need to identify the driving forces which aid this process and it is by achieving the appropriate mix of emotional optimists and risk avoiders, that companies will be able to achieve this.

5.2.1.3. Online Trust

The ability of an online community to increase the credibility of the organisation and improve communication across varied organisational functions, levels, processes and stakeholders can be achieved by resolving the problems of members aptly, increasing inter member reliability and creating an environment which mitigates consumer or member uncertainty. This leads to creation of online trust among the members and community.

5.2.1.4. Commitment

The ability of an online community to contribute to member affinity, personalization, inducing member participation, building member loyalty and member-to-member interaction stimulates commitment. The online communities sustain if users or members are committed. Companies will benefit if they are able to solicit long term consumer commitment which results in developing commitment bonds. Companies need to identify the driving forces which aid this process and it is by achieving the optimum mix of member affinity, personalization, inducing member participation, building member loyalty and member-to-member interaction, that companies can reduce repelling forces.
5.2.1.5. Member Loyalty

The online community will benefit in terms of achieving the highest member loyalty by appropriate presence of interactive loyal, loyal persuader and loyal advocate members within the community.

5.2.1.6. Attitude towards Switching

One of the most important dimensions of an online community is to prevent members from switching from the product or community or act as a switching barrier. This can be done by identification of consumers who switch for value, switch for price and non switcher. The appropriate presence of these within the community will help companies to play with the various price effects and launch those campaigns which will increase the number of non switchers.

5.2.1.7. Degree of Participation

If a consumer has a high Degree of Participation or involvement in the online business community of a company, then his Attitude towards Switching from the community or product is low. A high degree of participation can be achieved by increasing the frequency of login, easy navigability around the community, ability to provide correct responses, high level of reciprocity, volume of content contributed and increase in the trust towards the organisation due to individual participation in the community.

5.2.1.8. Usability of Online Tools

Chat scores the highest on usability because of its instant interactive facility, and ability to facilitate bi-directional communication followed by Wikis which enable individuals to contribute or modify content. The ability of wikis to enable site visitors to add their own content and build up, in an additive fashion, on the content created by others. They hence create a common platform for people in the targeted and specified community, to not merely participate in the communication but also to be the content and knowledge providers of the group. Blogs for their easy to use content management system, archive oriented structure, latest information first order, ease of responding to previous blog
postings, score more than *Forums, Debate and File Managers*. File managers have functionalities for document storage and retrieval. They score the lowest and are of not much value from a consumer or participant perspective. They may have greater value from an organisational perspective.

### 5.2.2. Implications to Organisations

Organisations can use online communities primarily in two areas: inside the organisation to improve efficiency and productivity, and between the organisation and the customers for customer acquisition, improving revenue and customer retention. Online communities have increased the connectivity to levels beyond imagination, thereby changing the flow and balance of information. The ability of marketers to shape perceptions by presenting a unified mass market branding image is faced with a counter flow of opinions which can be positive or negative. Formation of groups with lightweight technology investments ushers in concepts of employee collaboration, community participation and broader communication channels. As participatory online environments allow organisations to freely engage and converse with the consumers, the voice of the consumer has gained tremendous importance. An empowered consumer has increased access to organisation specific information, thereby opening up the need for organisations to maintain online reputations and availability of product and service specific information. While this represents a significant opportunity for organisations to build new web-based collaboration, productivity, and business systems to improve cost and revenue returns, it has also opened up a low cost channel for organisations to contact and engage a consumer.

### 5.2.3. Limitations and Scope for Future Work

1. Online communities represent a new age digital tool, in a relatively lesser explored medium from the perspective of research in management.
2. This brings up constraints of data availability both regarding data to be collected from individual companies as well as communities.
3. A significant limitation can be viewed in the context of the database of online communities. As I scouted around for databases of online communities, the entire
data set ended at a 100 companies with multiple communities. Contacting the consumers or members of various online communities was a great challenge in itself as the virtual domain while offering several benefits also posed restrictions in the context of physical proximity to respondents.

4. Data could be collected from online community members who had to be approached through online intercept sampling technique, which made it a very tedious, time consuming task.

5. Future research opportunities exist in the context of the scale and volume of the members that can be contacted.

5.3. Co-creation Model using INV based on Metcalf Law (C-INV)

Business Online Communities are fast becoming excellent tools for operational and collaborative Customer Relationship Management (CRM) with co-creation soon gaining pace as a strategic outcome of Collaborative CRM. This model aims at analyzing the determinants of Individual Network Value (INV), further goes on to develop a framework for calculating Community Network Value and subsequently, empirically identifies individuals who have high INV. By segmenting the consumers, this model discusses how organisations can identify consumer co-creators. The community value of a network is of great importance to organisations, especially from the CRM, Marketing and Customer Experience standpoint. The study segments consumers using hierarchical cluster analysis into groups to identify consumer co-creators. Greater participation in an online community, backed by greater commitment, online trust and loyalty towards an organisation are individual traits which are useful to companies for identifying consumer co-creators for new product development, sharing innovative ideas and consumer evangelism. The online computer-based innovation fundamentally challenges current ways of communicating, cooperating and coordinating during the innovation and product development process. This has caused a fundamental change in the way companies can participate in innovation and learn from their consumers. This study highlights how the community value of a network, reputational gains for the individual, sharing innovative thoughts and practices, promoting reciprocity in a community and leveraging feedback
from knowledgeable consumers, are motives for consumers and organisations to participate in activities for collaboration and innovation.

5.3.1. Conclusions

*Cluster 3* is the most significant group of consumers as it contains individuals most suitable to become consumer evangelists. *They can be used as consumer co-creators*, for new product development and sharing innovative ideas. *Cluster 1* is the biggest cluster and the organisation will benefit from investing in these consumers. Additional customer centric strategies can help improve consumer scores on participation, online trust, commitment and loyalty. Online customer communities enable organisations to establish distinguished innovation models that involve varied customer roles in new product development, which is further supported by Operational, Analytical and Collaborative CRM.

*The conclusions can be summed up in the following points:*

1. Individual network value serves as an important metric in identification of valuable customers.

2. Participation appears to be the most important determinant of Individual Network Value.

3. Valuable customers demonstrate high participation, high emotional attachment, high loyalty and commitment and low attitude towards switching.

4. Organisations can use comparisons of Community Network Values of different product communities to gauge the effectiveness of new products launched and effectiveness of new campaigns launched.

5. Based on Metcalf’s Law, online communities will signify more value to the parent organisation when they have more users. The comparisons of Community Network Value (CNV) of different product communities (say, of Apple) is also reflective of product performance from a consumer perspective. Product communities with high CNV are reflective of greater consumer appreciation, association and engagement than those with low CNV.
5.3.2. Implications to Organisations

The organisations need to create strategies to build a relationship with the consumer through greater consumer engagement, reducing uncertainty and greater consumer motivation. It is vital for organisations to have a mechanism in place, which is useful to identify significant consumers. Co-creation might be viewed as an aspect of customer knowledge competence which encompasses the processes that generate knowledge about specific customers. Co-creation can generate significant new value from existing assets and established customer relationships. An online community can be built and managed for informing product innovation and engaging customers in co-creation of a consumption experience. It requires companies and customers to exert more effort than traditional transactions because it is about building relationships, not completing purchases. Companies seek more value in product or service offerings, are more price sensitive and are further quiet likely to go with a more trusted source.

The implications to organisations can be summed up in the following points:

1. Create barriers to switching.
2. Identification of consumer evangelists.
3. Promotes consumer advocacy.
4. Build a relationship with the consumer through greater consumer engagement, reducing uncertainty and greater consumer motivation.
5. Product innovation through Customer Experience Management.
6. Co-creation is a leap forward from first generation Internet tactics as personalization or customization. It requires companies and customers to exert more effort than traditional transactions because it is about building relationships, not completing purchases.

5.3.3. Limitations and Scope for Future Work

This study has been conducted by collecting data across across communities of four companies, namely Apple (Apple I Pad), Cisco (Cisco Collaboration Community), Dell
Conclusions and Scope of Further Research

(Ideastorm) and Microsoft (Microsoft Dynamics CRM). The entire process can be repeated for more communities for better validation.

5.4. RI-2- Consumer Price Sensitivity Model using K-means cluster analysis (CPS)

This model attempts to study the usage of online communities to study consumer price sensitivity in the context of the type of product purchased, i.e. expensive, medium or low cost products. The research study examines the impact of reference price effect, difficult comparison effect, price quality effect and switching cost effect on consumer price sensitivity and proceeds to segment consumers into groups which demonstrate similar characteristics. Organisations will benefit by identifying the strategically significant consumers in each category and then target them appropriately rather than investing in a blanket promotion program. The objective is to enable organisations to identify consumers demonstrating future profit or relationship potential and devise strategies to impact price sensitivity by responding to price search intentions, improving product perceptions, improving consumer experiences, informing consumers about new schemes and improving product perceived value. Most valuable consumers will be those who depict consistent behaviour across all three product typologies, as they will tend to be the most loyal. Valuable consumers identified through a customer portfolio analysis can be leveraged by hosting appropriate content in an online business community and subsequently using customers engaged through business online communities as important sources of competitive advantage. Due to these benefits, online business communities may generate more profitable sales than transactional marketing methods. Online business communities maintained for effective Customer Relationship Management can help to reduce price sensitivity, enable price premiums, and create opportunities for up and cross selling. The communities create barriers for customers to exit and for competitors to enter and facilitate database development. Loyal customers are important determinants in predicting market share and profit levels. The availability of detailed product information and the interactive nature of the online medium may enhance consumer’s willingness to search for price information on the Internet. Performing an Internet search for the lowest prices will be perceived as relatively comprehensive and capable of delivering a favourable price with less cost to the consumer. Respondents with Internet access have different price perceptions and price-search intentions than those
without access. The price search done by a consumer on the Internet provides low cost options and demonstrates availability of higher benefits of products which is less likely to be strongly influenced by other promotional cues. The large amount of information about pricing, competitors, and features available on the Internet also helps to create a cost transparent environment. This severely impairs a seller's ability to obtain high margins, because it turns products and services into commodities, and may damage company reputations by creating perceptions of price unfairness. Transaction Marketing focused on profitable customers and Relationship Marketing focused on building consumer relationships. Smart marketers will benefit by identifying strategically significant consumers who show noteworthy profit or relationship potential for the company, rather than investing resources in blanket promotions and mass marketing to all consumers.

5.4.1. Conclusions of RI-2 which led to creation of Consumer Price Sensitivity Model

Segmentation of consumers and a detailed profiling can aid organisations in creating well defined strategies for impacting consumer price sensitivity, and increasing consumer switching costs. Companies can use Online Communities to execute these strategies. Highly price sensitive consumers can be subjected to greater product related content to increase the perceived value associated with the product and reduce their price sensitivity by sharing more product related content, features, schemes and product and price comparisons. Research says that a significant volume of consumers switch to another product or service because of perceived indifference of the organisation they have purchased the product from. Increasing the level of interactivity between organisation and consumer, solving consumer queries and hosting consumer testimonials will work in the favour of the organisation.

5.4.2. Implications to Organisations

Organisations will benefit by identifying consumers who exhibit the most uniform behaviour across all three product typologies. They will tend to be the most loyal consumers for the company. The loyal consumers, hence identified can be used as consumer evangelists and appropriate loyalty and reward programs can be designed for
them. The organisation can maximise the consumer relationship and by further developing superior learning and feedback mechanisms, use these consumers as organisational assets.

5.4.3. Limitations and Scope for Future Work

The data was collected only across 200 consumers from 40 online product communities of Apple to formulate a conceptual framework for consumer segmentation and analysis to aid strategy formulation. The entire process needs to be executed across bigger sample sizes and multiple consumer online communities for validation of the results.

5.5. RI-3-Business Online Community Credibility Model (BOCC) using Linear Programming

The Business Online Community Credibility model (BOCC) was developed by incorporating the perspective of the community manager to measure the credibility of an online community by incorporating the concepts of community dynamics, co-creation, collaboration enabler, CRM goals, return on investment and customer life time value. The model uses a numeric weighting technique to calculate a business online community credibility score. The model further uses the linear programming technique to maximise the BOCC score and further to determine an optimal solution for the variables contributing to the BOCC score. According to this model, Customer Relationship Management came out to be the most important determinant for increasing the credibility of an online community. While designing the online communities the organisations can focus more on incorporating those attributes which further enhance operational, analytical and collaborative CRM.

5.5.1. Conclusions for RI-3 which led to Business Online Community Credibility Model (BOCC)

The competencies of online communities in terms of community dynamics can be broadly grouped under People, Purpose, Policy and Reciprocity. The parameters of Customer Relationship Management can be broadly classified into Operational, Analytical and Collaborative CRM. The online communities can become excellent tools
for consumer information system, predicting consumer behaviour, assessing growth rate of target market, providing customized communications, providing a platform to long term customers for entering into collaborations and lowering price sensitivity. Online communities serve a significant function by impacting Customer Lifetime Value, as also in identifying strategically significant consumers for the company. The parameters of Customer Lifetime Value can be grouped under identification of profit potential diminish consumer communication costs and augment profits from current customers. The online communities can be used for reducing acquisition costs, decreasing direct marketing costs, raising switching costs, reducing consumer price sensitivity and development of service and product portfolios. The online communities classified as winners are those which score high on co-creation and collaboration. They facilitate a dynamic environment in terms of reciprocity and optimal level of customization for a win-win organisation – community member relationship. Organisations will benefit if their communities qualify as winners. Online Communities provided a good Return on Investment for the organisations that used them as channels for consumer engagement, interaction and influence. Further, by assigning tangible figures for reduced costs, viz. reduction in marketing spend, PR campaigns or advertising, reduced costs with regard to customer support staff and other tangible benefits because of the crowd sourcing, significant Return on Investment can be achieved using online communities.

5.5.2. Implications to Organisations

The Internet often resembles a living ecosystem more than any specific product or technology. Each day brings growth, decline, change and surprising developments. Entire communities of customers, suppliers, product and services have sprung into existence. Organisations will benefit more from creating focussed groups which specialise in particular community objectives. Communities will gain as they become ubiquitous, are able to speed up diverse aspects of business and life, are able to meet consumer/member expectations, allow reciprocity and sharing, and aid specialisation along with virtual value activities. Detailed virtual value analysis can give companies a tool for spotting information collection, design, and distribution activities to make their site a more valuable resource.