DETERMINING THE EFFECTIVENESS OF MICRO STAR INTERNATIONAL’S ONLINE SUPPORT FORUM

By

Eric Houser

A Research Paper

Submitted in Partial Fulfillment of the Requirements for the Master of Science Degree in Training and Development

Approved for Completion of 4 semester Credits TRHRD-735 Field Problem in Training Development

____________________
David A. Johnson, Ph.D.

The Graduate School
The University of Wisconsin Stout
May, 2003
This study examined the effectiveness of Micro Star International’s online support forum for VIA chipset based Socket A Motherboards as a training tool. The researcher surveyed customers who used the online forum as a form of technical support. 

Online questionnaire user’s perceptions of MSI online support forum. The researcher will then collected data from the survey and formatted the data into a chart to identify trends. The chart showed statistical data reflecting how and why end users used the online forum. This study explains how this forum is used as a low cost substitute to traditional technical support training methods.

Further, this study also makes a connection between the online forum and the end users dissatisfaction. The analysis of the data shows that the forum is not the choice end user solution and often does not provide the knowledge or structure necessary to solve end users support issues.
Table of Contents

Abstract ii

Chapter
I Introduction
   Background 1
   Statement of the Problem 3
   Research Objectives 3
   Limitations 4
   Assumptions 4
   Key Terms and Definitions 4

II Review of Related Literature
   Introduction 8
   CBT repeats the same Mistakes as Failed Traditional Training 9
   Customer Service is Crucial 10
   Web Based Support Reduces Costs 11
   Customer Expectations Increase as Technology Improves 12
   Customers are using the Internet 13

III Methodology and Approach
   Introduction 15
   Population 15
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey Instrument</td>
<td>15</td>
</tr>
<tr>
<td>Distribution</td>
<td>16</td>
</tr>
<tr>
<td>IV Findings and Analysis of Results</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>18</td>
</tr>
<tr>
<td>Findings and results</td>
<td>18</td>
</tr>
<tr>
<td>V Summary, Conclusion, and Recommendations</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td>20</td>
</tr>
<tr>
<td>Conclusions</td>
<td>20</td>
</tr>
<tr>
<td>Recommendations</td>
<td>21</td>
</tr>
<tr>
<td>Bibliographies</td>
<td>22</td>
</tr>
<tr>
<td>Appendices</td>
<td></td>
</tr>
<tr>
<td>Appendix A Charges for phone based technical support</td>
<td>26</td>
</tr>
<tr>
<td>Appendix B MSI Survey’s where customers make purchases</td>
<td>27</td>
</tr>
<tr>
<td>Appendix C Survey Instrument</td>
<td>28</td>
</tr>
<tr>
<td>Appendix D Results</td>
<td>31</td>
</tr>
<tr>
<td>Appendix E How effective the online forum solution was</td>
<td>32</td>
</tr>
<tr>
<td>Appendix F How effective the other support solution was</td>
<td>33</td>
</tr>
</tbody>
</table>
Chapter I

Introduction

Background

Micro Star International (MSI) was established in 1986 as a large manufacturer of computer components. MSI is headquartered in Jung-He City Taipei, Taiwan and has production facilities in both Taiwan and China. MSI products include CD-ROMS, VGA cards, DVD players, CDRW, and Motherboards.

MSI does not sell its products directly to the public. MSI sells its products to resellers, retailers, and computer builders, who then resell the products directly to end users. Examples of resellers of MSI products are Tech Data, Ingram Micro, and Leadertech Systems of Chicago. Examples of retailers of MSI products include Best Buy Superstores, PC Club, and Fry’s Electronics. Examples of computer builders that include MSI products as part of computers they build and sell include DELL, Gateway, and Compaq.

Many resellers of computer components offer no technical support for products that they resell. They refer end users to the manufacturer for technical support for the product. Computer retailers also refer customers to the manufacturer for technical support of computer components they resell. Major computer builders will not support computer components that they do not sell or did not build into a computer system. There are countless computer system configurations that can be arranged. This makes it difficult for the end user to
obtain the information needed to solve issues with configurations that they arranged themselves.

The motherboard is one of the key components of a computer. The microprocessor(s), VGA, System Memory, Input/Output devices, Power supply and PCI cards are all physically connected to the motherboard or integrated into the motherboard. A computer cannot function without a properly configured and functioning motherboard.

Currently only ATX form factor motherboards are being widely produced. Older versions of AT form factor motherboards are still in use as legacy equipment. There are two major motherboard platforms widely used today. The two major platforms are motherboards that accept Intel Corporation’s Processors and motherboards that accept Advance Micro Devices’ Processors. Currently Intel produces the Pentium III™, Pentium 4™, Celeron™, and XEON™ processors that would be compatible with ATX motherboards. The socket types for Intel platform motherboards are socket 370, socket 478, and socket 473. AMD currently produces the AMD Athlon™, Duron™, XP™, and MP™ processors. The socket type for AMD platform motherboards is Socket A. MSI mass produces both major platforms. AMD and Intel processors are not interchangeable in motherboards.

MSI uses microchips produced by various chip makers. This study focuses on MSI motherboards that use the VIA chipsets. This study focuses on MSI motherboards with ATX form factor that accept socket A processors.
MSI offers technical support in order to train end users how use and configure their products. MSI offers technical support via e-mail, phone, website, and online forum. This study focuses on technical support online forum thread VIA based Socket A motherboards. In this thread end users post technical questions and issues regarding MSI VIA based motherboards. Users receive responses from MSI personnel as well as other end users that use the online forum. All of this information from all of the threads is archived for future use.

**Statement of the Problem**

Micro Star International’s (MSI) online support forum for VIA Socket A based motherboards is ineffective as a training tool to solve end user’s support issues. Information in this forum is inconsistent, confusing, and time consuming. The support forum does not satisfy MSI’s customers. MSI will lose customers due to the lack of satisfaction associated with the online forum. Therefore, MSI should improve its online forum to improve customer satisfaction.

**Research Objectives**

The two research objectives in this study were to:

1. Determine if Microstar International’s online forum for VIA Socket A based motherboards is effective as a training tool.

2. Determine customer perception of Microstar International’s online forum for VIA Socket A based motherboards.
Limitations

There were five limitations of this study:

1. Users of the forum may use the forum only once, and may not have availability to the survey instrument.
2. Users of the forum may choose not to participate in the research.
3. Users may choose to provide false or misleading information.
4. Users of Microstar International’s products may never use the forum, and therefore will not participate.
5. There is a limited amount of time to complete this research.

Assumptions

There were five underlying assumptions:

1. Users of the forum want solutions to their problems.
2. Users of the forum are computer literate.
3. Users of the forum will answer the survey truthfully.
4. Microstar International wants to offer effective training solutions.
5. Microstar International wants to have good relations with end users.

Key Terms and Definitions

For clarity of understanding the following terms are defined as follows:

1. **AT form factor**: “invented by IBM in the early 80’s, was the predominant form factor for motherboards through the mid-190’s. The AT-type motherboard can be distinguished by the position of the keyboard plug and its power socket.” (Meyers, 2001, p. 243)
2. **ATX form factor**: “demand for a new form factor—a form factor that had more standard connections, but at the same time flexible enough for possible technology changes in technology. This demand led to the creation of the ATX form factor in 1995.” (Meyers, 2001, p. 246)

3. **Basic input/output Service**: (Bios) hundreds of little programs that allow talk between the hardware of a computer and the mainboard.

4. **Call Center**: A location where technically skilled employees offer technical support via telephone. Call centers are commonly referred to as a help desk. Customers with questions call a call center for help.

5. **CBT**: Computer based training, training that is based primarily from electronic media.

6. **Customer Service**: “The ability to create value” (Timm, 2001)

7. **Dial-up connection**: The use of a telephone modem to connect to an Internet Service Provider.

8. **FrontPage 2002**: A program that creates html code for authoring web pages.

9. **Flashing the bios**: A process of updating the software of the bios. This is done by erasing the old program, and writing the new version of the program.

10. **Hyper Text Markup Language**: (HTML) a computer language most commonly used for creating web pages.

11. **Instant Messaging**: An electronic way to send data instantly. It is like email but in real time, an instantaneous E-mail.
12. **Internet Relay Chat:** Is a virtual meeting place where people from all over the world can meet and talk. Group discussions of thousands of channels take place in IRC.

13. **Java Applet:** “An applet is a program written in the Java™ programming language that can be included in an HTML page, much in the same way an image is included. When you use a Java technology-enabled browser to view a page that contains an applet, the applet's code is transferred to your system and executed by the browser's Java Virtual Machine (JVM).” (SUN, 2003)

14. **Forum Thread:** Any new topic or question posted in the online forum.

15. **Motherboard:** “is a thin, flat piece of circuit board, usually green or gold colored and often slightly larger than a typical piece of notebook paper.” (Meyers, 7)

16. **Online Moderator:** Moderators of the Forum that are not paid by MSI. Users that help other users solve issues.

17. **Personal Digital Assistant:** (PDA) An electronic hand held device for managing information. These devices are often connected to the internet via wireless technology in the same way a cellular phone connects. A common example of a PDA is the brand Palm Pilot.

18. **Socket A:** “is a PGA socket designed for socketed AMD Athlon™ and AMD Duron™ processors.” (AMD, 2002)
19. **VIA:** A manufacturer of microchips which are integrated into computer components.
Chapter II

Literature Review

Introduction

Sales of computer components are one of the most competitive businesses. Computer component manufacturing is highly competitive. Computer component manufacturers need to keep expenses down. Because of the invention of the Internet customers have broader access to competition. Customers can even make purchases via wireless devices. This invention enables customers to comparison shop. Today’s customers are demanding the best price and good service (McRae, 2002).

Customer satisfaction is a universal component of any successful company no matter what business it is involved in. Relationships between business and customers are a vital to increasing sales. Kevin Rollins COO of Dell stated “In the clearest sign of customer satisfaction, Dell's third-quarter sales increased 22% over the same period last year, and the company expects to report a 40% increase for the fourth quarter.” (Stein, 2003)

This review of literature will discuss four topics as follows: 1. Computer Based Training Repeats the same Mistakes as Failed Traditional Training. 2. Customer Service is Crucial. Web Based Support Reduces Costs. 3. Customer Expectations Increase as Technology Improves. 4. Customers are using the Internet.
Computer Based Training repeats the same Mistakes as Failed Traditional Training.

Most computer based training in the 1990’s used CD-ROMS. Most of this training was not interactive. A lot of information that was once taught by instructors was put on CD-ROMS and was considered a library of information. With this method there is no interaction between the learner and the media. The training is considered to be static. Therefore there is little change in the media. This type of static training is meant to last a long period of time. The sales of training on CD-ROMS where sold as long lasting libraries of information (Oakes, 2003). CBT uses existing course materials without restructuring for the new media. This causes less learning to occur (Henke, 2003).

CD-ROMS were replaced by networks and the Internet. Instead of receiving CD-ROMS in the mail or by picking them up, all of the CD-ROMS were put online. Instead of improving the type of training, all that was done was publishing the CD-ROMS online. Even though there where advances in technology the main benefit of CBT remained in cost reduction. Most of the cost reduction came from elimination of instructor salaries and travel expenses. This focus on cost reduction is the biggest failure in E-learning. If E-learning isn’t effective the value of the cost reduction is meaningless (Oakes, 2003).

Online training is repeating the same mistakes as failed traditional training has made. E-Learning needs to be well designed like traditional training. If failed tradition training is put online it is still failed training no matter how it is accessed (Isaacs, 2003). Online training needs to be interesting to capture the learner’s
attention. In the best case scenario learners will be motivated, independent, and have knowledge of technology. Even in a best case scenario online training cannot be successful if the online training cannot keep the learner’s attention. There are a lot of companies that deliver online reading instead of dynamic online interactive training (Isaacs, 2003).

Customer Service is Crucial

There is a strong need for companies to try to keep existing customers. It costs more to attract a new customer than to keep an existing one. Advertising is ineffective in comparison to word of mouth. If a customer has a bad experience with customer services he/she will tell approximately ten other people. The same is true if the customer has outstanding service. Positive word of mouth will increase sales and company image. Customers put more weight in the beliefs of friends and families then they do of advertising. Companies will lose approximately 10-30 percent of it’s customers per year. Most of this loss is due to poor customer service (Timm, 2001).

Online there are higher expectations for customer service. Customers that shop online have more choices and quicker access to competition. They demand service to be immediate. If a customer doesn’t like how he/she is being treated online he/she can click on a competitor’s site within seconds. This increases the importance of customer service for a company doing business online (Foley, 2000).
Web Based Support Reduces Costs

If MSI removed its web based support, it would increase its overall technical support expenses. Often technical support is free of charge for the caller. For the company providing it, technical support is very expensive (Metz, 2002). The more calls customers make to the technical support department, the more technical support staff is required, which makes it necessary for paying a larger number of salaries. The median salary for level one help desk support nationwide is $39,057 per year. In California near where MSI is located, the median salary for level one help desk support is $45,228 per year (Monster, 2003). The goal of web based support is to reduce the number of telephone based technical calls a company receives, thereby reducing the amount of money needed for a technical support center. Companies that make a minimum ($100,000 ) investment in web based training typically show a positive ROI through cost reductions in travel, human resources, regulatory compliance, and customer support (Hoffman, 2002).

Not only do technical support phone calls cost the company, but often they cost the customer money. Many companies are charging customers for phone based technical support. (Appendix 1-1) For instance, According to Microsoft’s website, basic support for Windows XP Home edition after two incidents is $35 per incident (Microsoft, 2003). However, it is free to use the online forum to ask questions.
Customer Expectations Increase as Technology Improves

Technology has improved the speed of communication. Postal mail formally was the most common way to communicate long distance messages. Pony Express first improved communication by delivering mail in 10 days. Normally mail during this time period took many weeks to be delivered.

The invention of the telegraph increased the speed of communication as well as the expectation for faster communication. A message could be sent and received in a matter of minutes instead of weeks.

Soon to follow the telegraph, was the telephone. The telephone increased speed and consumer expectations again. The invention of the Internet and e-mail also increased communication speed, reliability of transmission, and consumer expectations (Freeland, 2003).

The next communication technological improvement was instant messaging. Instant messaging improves upon email because it is more immediate and provides two-way communication. When an email message is sent, there is a one-way communication. The sender has to wait and is unsure when the receiver will read the message. With instant messaging technology, the communication is two-way and the sender knows immediately if the communication is received. Millions of people use instant messaging technology. Instant messaging is changing the way electronic communication occurs. People can communicate with instant messaging through cell phones, personal Computers, and personal digital assistants from almost anywhere. The use of instant messaging can
improve the nature of customer service, can increase customer loyalty and help maintain customer relationships (Freeland, 2003).

All of these technical advancements have greatly increased the demand for immediate technical help. Similarly, consumers have high expectation of 24 hour technical phone support, but MSI does not offer twenty four hour technical phone support. MSI offers Technical support Monday through Thursday 7:30am until 5:30pm pacific standard time, and Fridays 8:30am until 4:00pm pacific standard time. There is no technical support offered on the weekends except for the MSI forum (MSI, 2003). Sporting Bet Incorporated (SBI) is a European online betting service that offers more immediate customer service. Sportsbook.com has live technical support 24 hours a day, 365 days a year (Sportsbook.com, 2003). By clicking on a link, a Java applet opens which allows the customer to have a live conversation with a customer service representative. With this method, the user does not have to disconnect the dial-up connection to speak with customer service.

Customers are using the Internet

MSI customers buy most of their products online. (MSI, 2003) A recent survey on the MSI website showed that 58 percent of MSI customers make their purchases online. Another 31 percent bought MSI products with a computer system. It is possible that these systems were bought online also. The statistics show that only three percent of MSI products were bought from a retail store. Therefore, most MSI customers have access to the Internet (Appendix 1-2, 2003).
In summary, Computer based training is making the same mistakes as failed traditional training. For example, CBT is not interactive with the learner and does not capture the learner’s attention. Excellent customer service is necessary to keep customers. Keeping customers is crucial to running a successful business. It costs more for a company to attract a new customer than to keep an existing customer. Word of mouth is the most powerful type of advertising. As communication technology increases, customer expectations increase.

MSI’s customers are using the internet to make their computer purchases. Only three percent of MSI customers surveyed bought their computer components from a retail outlet. Over half of those survey reported using the internet to make their purchase of MSI computer components.
Chapter III

Methodology

Introduction

The study will research how users of the MSI VIA Socket A based mainboard forum rate the effectiveness of the forum for solving their issues.

This chapter will describe the population, how the survey instrument was created, and how the data was collected. Appendix C shows the survey instrument.

Population

The minimum requirement to be included in the population and counted is that person must have previously owned or used or use a MSI main board and used the MSI forum. All of the participants have access to a computer and the Internet. Personal information could have been gathered without the knowledge of the participant. However, no information was gathered other then information that was volunteered.

Survey Instrument

The survey instrument Appendix C was created using a web authoring tool called Microsoft FrontPage 2002. FrontPage 2002 provided a form wizard for creating forms. Little knowledge of html or web programming was needed with FrontPage 2002 to create the form. The only knowledge necessary to create the form was inputting the variables. The researcher used this form wizard to create the html form. When survey was submitted by the participant, it output the data record to an html page. Data were added each time a survey was submitted, which increased the amount of information on the survey.
Once the survey instrument was completed, it was published to the
internet. There was minimal cost associated with this process. The researcher
used Windows XP Professional. Windows XP Professional provides the ability to
host web pages with service Internet Information Services 5.1 (IIS). IIS 5.1 was
installed because the service is not installed by default. Once this was
accomplished, FrontPage 2002 extensions were installed in order for the survey
instrument to work properly. FrontPage 2002 extensions were downloaded from
Microsoft’s website and installed. With the FrontPage 2002 extensions installed
on the server, there was no need to create a script to convert the form to data.
Without FrontPage 2002 extensions, the form has no capability to export the data.

Another Requirement for hosting the survey instrument was a permanent
internet connection. The researcher used a cable modem to broadcast the survey
instrument. The standard port for hosting websites is port 80. The cable modem
provider blocked port 80. Port 81 was then used to broadcast the survey
instrument. The IP address used was 24.120.142.42:81 to broadcast the survey
instrument.

Distribution

The researcher distributed the survey instrument was distributed for
minimal cost. Requests for users to complete the survey were posted in three
virtual locations. Requests were made on the MSI forum, Google MSI newsgroup
and Internet Relay Chat (IRC). In the MSI forum and Google MSI newsgroup
locations requests were posted for users to go to host IP address and complete the
survey. IRC users were messaged requesting that they go to the host IP address
and complete the survey. When participants submitted the final survey form, it was instantaneously reported to the host computer.

In summary, results of users that never owned or used a MSI’s MSI VIA Socket A based mainboard were excluded from the data collection. The survey instrument was created with the web authoring program Front Page 2002. Front Page 2002 required minimal knowledge of html or computer programming. The online questionnaire was hosted using Windows XP professional and broadcasted using a cable modem. Requests to complete the online questionnaire were made on the MSI Forum, Google MSI newsgroup and IRC.
Chapter IV

Findings and Results

Introduction

The results of the study were based upon the successful completion of the online questionnaire electronic instrument as shown in Appendix C. Data were collected anonymously from the three virtual locations. No data were collected to determine which source generated more users to complete the online questionnaire. There were 219 surveys completed and submitted from the three sources. Thirty seven of these surveys were not used because the participant answered no to ever owning or using a MSI VIA Socket A based mainboard. This left 182 surveys to analyze data with. The researcher found that MSI’s online forum is not effective in solving end user’s issues, and the users were forced to get help elsewhere as disclosed in the findings and results

Findings and Results

Participants that use the forum have used it often. The majority of users reported using the Forum weekly with an average of slightly over 56 times. Over 96 percent of users of the MSI Forum bought their mainboard separately. Eighty nine percent reported reading conflicting information. Eighty five percent of the users reported that the forum is a waste of time. Even two percent of the respondents thought there was inappropriate language on the forum. Ninety seven percent of the respondents reported trying a solution from the forum. (Appendix D)
There were mixed results; however, the results showed that participants thought the online forum was ineffective. Of those who responded, 16.3 percent strongly agreed that the forum effectively solved their issue. Twenty five point six percent of the respondents agreed that the forum effectively solved their issue. Two percent of the respondents were unsure or neutral whether the forum solved their issue. Twenty two percent disagreed that the solution was effective, and another 33.9 percent strongly disagreed. (Appendix E)

Eighty four percent of the respondents tried another support solution. Those who tried another support solution reported results that other support solutions were helpful. Forty five percent strongly agreed the other support solution was effective, and another 21.6 percent agreed. Four point four percent were neutral or unsure. Twelve percent disagreed and 16.7 percent strongly disagreed. (Appendix F)
Chapter V

Summary, Conclusion, and Recommendations

Summary

Users of the MSI Forum use the Forum an average of 56 times, this equates to the average user accessing the forum once a week. Those who were unable to solve their issues from the forum in most cases reported that they were able to solve their issues from other support options. Nearly half of the respondents said they were unable to solve their issues with the MSI Forum. A large number of respondents reported conflicting information and that they feel they wasted their time with the forum. This hurts the image of MSI by hosting this conflicting information. To the surprise of the researcher there was little report of inappropriate language.

Conclusions

Four main conclusions are made from the data about MSI’s online forum:

1. The MSI Forum alone is not effective for training end users to solve their issues with MSI Mainboards.

2. Other support options (i.e., Phone support, online documentation, and E-mail based support) appear to be more effective than the MSI Forum for solving VIA Socket A based mainboard issues.

3. The MSI Forum contains conflicting information. For instance, contrary to documentation the forum has said to flash the bios from a floppy disk and without the use of a floppy disk.

4. The MSI Forum’s users use it often, an average of once per week.
Recommendations

The following five recommendations are made to improve the MSI Forum customer relations:

1. MSI should integrate its Forum with other support options such as phone support, e-mail based support, and instant messaging.
2. MSI should use employees of MSI to moderate the Forum instead of Forum Moderators.
3. MSI should have a professional technical representative available, 24 hours a day, seven days a week, via instant messaging.
4. MSI should further research the effectiveness of its online forum.
5. MSI should seek outside help in building a total support solution.
Bibliographies


http://www.macromedia.com/support/programs/pricing_matrix.html


http://support.microsoft.com/default.aspx?scid=fh;en-us;Prodoffer31


http://content.salary.monster.com/


http://www.msicomputer.com/


http://www.sportsbook.com/misc/help.html


Fortune Magazine, 147, 81.


http://java.sun.com/applets/


http://www.symantec.com/techsupp/support_options.html


http://www.quark.com/support/techplans/plan_xpress.html
Appendices
Appendix A Charges for phone based technical support

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Software/ Hardware Name</th>
<th>Free Forum</th>
<th>Grace Period</th>
<th>Cost Per Incident for Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe</td>
<td>Any Adobe product for MAC or Windows</td>
<td>Yes</td>
<td>None</td>
<td>$149.00</td>
</tr>
<tr>
<td>Hewlett Packard</td>
<td>All hardware</td>
<td>Yes</td>
<td>Depends on warranty</td>
<td>Depends on product</td>
</tr>
<tr>
<td>Intuit</td>
<td>Quicken 2003</td>
<td>Yes</td>
<td>None</td>
<td>$1.99 per minute</td>
</tr>
<tr>
<td>Macromedia</td>
<td>Cold Fusion</td>
<td>Yes</td>
<td>None</td>
<td>$500.00</td>
</tr>
<tr>
<td>Microsoft Corporation</td>
<td>Windows XP Home</td>
<td>Yes</td>
<td>2 Incidents</td>
<td>$35.00</td>
</tr>
<tr>
<td>Symantec</td>
<td>Norton Antivirus</td>
<td>Yes</td>
<td>None</td>
<td>$29.95</td>
</tr>
<tr>
<td>Quark</td>
<td>Quark Express 6.0</td>
<td>Yes</td>
<td>None</td>
<td>$39.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Option</th>
<th>Votes</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-line, E-Commerce</td>
<td>2662</td>
<td>58%</td>
</tr>
<tr>
<td>Retail Store</td>
<td>144</td>
<td>3%</td>
</tr>
<tr>
<td>Reseller (VAR)</td>
<td>141</td>
<td>3%</td>
</tr>
<tr>
<td>Distributors</td>
<td>212</td>
<td>5%</td>
</tr>
<tr>
<td>With a System</td>
<td>1431</td>
<td>31%</td>
</tr>
</tbody>
</table>
Appendix C Survey Instrument

Evaluation Key

1=I strongly agree the solution was effective.

2=I agree the solution was effective.

3=neutral/unsure if the solution was effective.

4=disagree that the solution was effective.

5=strongly disagree the solution was effective.

1. Is this your first time to the MSI Forum?
   - Yes
   - No

2. How many times have you visited the forum?

3. How often do you visit the MSI Forum?
   - Daily
   - Weekly
   - Monthly

4. Did you have a specific problem that prompted you to visit the MSI VIA Socket A based mainboard forum?
   - Yes
   - No

5. Do you now own/use or did you ever own/use a MSI VIA Socket A based mainboard?
6. If yes, did this MSI VIA Socket A mainboard come with a computer you purchased?

[ ] Yes  [ ] No

7. Have you read conflicting information in this forum?

[ ] Yes  [ ] No

8. Have you attempted any of the solutions on the forum?

[ ] Yes  [ ] No

9. If you have attempted any of the solutions do you agree that the solution was effective?

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

10. Do you believe you have wasted time using the MSI VIA Socket A based mainboard online forum?

[ ] Yes  [ ] No

11. Have you tried other support options to find a solution?

[ ] Yes  [ ] No

12. Was the other support solution effective?

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

13. Do you believe there is inappropriate/explicit use of language on the MSI VIA Socket A based forum?

[ ] Yes  [ ] No

14. Will you use the MSI VIA Socket A based mainboard forum again?

[ ] Yes  [ ] No
15. If you have any other comments you would like to add please write them below.
### Appendix D Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Time Visitors to the MSI Forum.</td>
<td>12.6%</td>
<td>87.4%</td>
</tr>
<tr>
<td>Average number of times the participants visited the MSI Forum.</td>
<td>56.21 times</td>
<td></td>
</tr>
<tr>
<td>How often participants use the MSI Forum.</td>
<td>Daily=14.2%</td>
<td>Weekly=63%</td>
</tr>
<tr>
<td></td>
<td>Monthly=22.8%</td>
<td></td>
</tr>
<tr>
<td>Own/use a MSI main Board.</td>
<td>81.1%</td>
<td>16.9%</td>
</tr>
<tr>
<td>MSI Mainboard came with computer.</td>
<td>3.3%</td>
<td>96.7%</td>
</tr>
<tr>
<td>Conflicting information on MSI Forum.</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Attempted solutions from the MSI Forum.</td>
<td>97.3%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Wasted time using the MSI Forum.</td>
<td>85.2%</td>
<td>14.8%</td>
</tr>
<tr>
<td>Tried other support options.</td>
<td>84.1%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Will use the MSI Forum again.</td>
<td>77%</td>
<td>23%</td>
</tr>
<tr>
<td>Inappropriate Language</td>
<td>2%</td>
<td>98%</td>
</tr>
</tbody>
</table>
Appendix E How effective the Online Forum Solution was.

- **Strongly Agree**: 16.3%
- **Agree**: 25.6%
- **Neutral Unsure**: 2.2%
- **Disagree**: 22%
- **Strongly Disagree**: 33.9%
Appendix F How Effective the other support solution was.