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WHAT AMERICANS LIKE ABOUT BEING ONLINE

A study of AOL users finds they are particularly gratified using the Net as a source of information, communication, and socializing—results that may be helpful to ISPs in their efforts to attract and retain users.

Society is moving away from traditional mass-exposure media, in favor of the interactive interfaces of the Internet [3, 11]. It once was sufficient to advertise on the major television networks in order to market effectively to consumers; now, the Internet is a necessary component of most consumer marketing plans [9]. Even so, Internet-based e-commerce is still in its formative stages [2, 4], particularly in light of the dot-com shakeup, and it continues to be difficult to estimate the effect of Internet use on consumer behavior. Yet, the motivations that bring consumers to the Internet are critical to the success of online businesses [11, 12], since consumers must be online in order to participate in e-commerce [7, 10].

This article reports the results of a survey of online consumers. The survey was executed with the assistance of America Online (AOL) and HotWired.com, to determine the types of gratifications that drive consumer use of the Internet. The reasoning is that if we know what people enjoy about using the Internet, we will be better equipped to motivate them to happily use our part of the Internet in ways that fit with our e-commerce business models.

The survey utilized the results of a qualitative study of the HotWired site [11], in which 98 users were invited to help the site serve them better by

providing words that described what they liked about Internet use. The questionnaire was active for one week, and a list of 45 terms resulted from application of a psychological word-association technique [11] designed to elicit trait terms that closely represented user attitudes. The list of terms generated in the qualitative study is displayed in Table 1.

Using the list of 45 descriptive terms as a potential range of gratifying online activities, a questionnaire was developed for a survey of AOL users. In the questionnaire, each descriptive term was linked to a seven-point semantic differential scale

anchored by “very important” and “very unimportant.” The questionnaire contained instructions for the respondents to use the importance scales to indicate how important or unimportant each characteristic or activity was to them, personally, as a reason for using the Internet.

Some 915 AOL users were recruited during a one-week period at the AOL Opinion Place site. Survey respondents were reasonably balanced across age and gender categories, with 16.6% of respondents between 18–24 years of age, 21% between 25–34, 19.8% between 35–44, 20.4% between 45–54, and 22.2% reporting they were 55 years of age or older. Of these, over 48% were men, and 51.9% were women.

Gratifications for Internet Use

Factor analysis was used to identify potential themes among the 45 descriptive terms. Principal components analysis was performed in SPSS 10.0, using the promax oblique rotation method in view of likely correlations between factors [5]. Eight factors emerged with eigenvalues greater than one, and a scree plot of eigenvalues demonstrated a leveling of explanatory power after the fourth factor, indicating a four-factor solution. In view of the oblique rotation method utilized, cross-loadings were expected. Hence, a variable was considered “salient” to a factor if it produced the strongest loading on that factor, despite cross-loadings [5]. In accordance with standards for “very significant” associations between variables and factors [6], loadings of 0.5 or greater were considered. Cross-loadings above 0.5 were subsequently examined as a counterpoint to the interpretation.

As an overview, sources of gratification for Internet use among AOL members range from searching and browsing activities, to communication and information retrieval, to using the Internet for socialization. People seem to like using the Web as a search tool; they also appear to appreciate the Internet as a source of information in support of learning and research. Users freely recognize the value of the Internet as a

Access	New
Answers	News
Browsing	News Groups
Chatting	People
Communication	Progressive
Current	Relaxing
Easy	Research
Education	Resources
Email	Search Engines
Entertainment	Searching
Freedom	Shopping
Friends	Software
Fun	Speed
Games	Sports
Government	Stocks
Homework	Surfing
Ideas	Technology
Information	Updates
Interaction	Variety
Interesting	Weather
Knowledge	Web Sites
Learning	Work
Money	

Table 1. Terms describing Internet use.

	Factor 1 Searching	Factor 2 Information	Factor 3 Communication	Factor 4 Socialization
VARIABLE	Eigenvalue 12.6	Eigenvalue 3.28	Eigenvalue 2.37	Eigenvalue 2.04
Access	.357	.392	.760	.197
Answers	.340	.451	.680	.147
Browsing	.452	.435	.498	.274
Chatting	.194	.132	.118	.721
Communication	.261	.396	.661	.478
Current	.292	.505	.604	.186
Email	.176	.284	.669	.314
Easy	.238	.316	.597	.193
Education	.274	.548	.455	.165
Entertainment	.269	.275	.210	.428
Freedom	.326	.372	.495	.292
Friends	.187	.231	.383	.682
Fun	.306	.334	.297	.507
Games	.112	.131	.096	.327
Government	.129	.295	.342	.099
Homework	.249	.283	.082	.319
Ideas	.455	.730	.270	.419
Information	.473	.764	.472	.175
Interaction	.383	.420	.181	.802
Interests	.506	.710	.326	.421
Knowledge	.498	.822	.428	.228
Learning	.450	.787	.363	.231
Money	.240	.402	.173	.268
News	.213	.587	.294	.204
Newsgroups	.302	.421	.082	.551
People	.290	.376	.176	.834
Progressive	.477	.683	.298	.453
Relaxing	.314	.425	.199	.533
Research	.456	.663	.374	.203
Resources	.711	.578	.278	.229
Search Engines	.735	.364	.265	.150
Searching	.752	.514	.336	.180
Shopping	.386	.184	.039	.302
Software	.617	.424	.176	.329
Speed	.651	.293	.261	.171
Sports	.198	.050	-.02	.187
Stocks	.125	.113	.025	.000
Surfing	.654	.402	.160	.331
Technology	.635	.460	.233	.309
Updates	.657	.529	.284	.355
Variety	.651	.532	.179	.413
Weather	.263	.260	.177	.294
Web Sites	.735	.468	.297	.291
Work	.516	.331	.110	.114

Table 2. Obliquely rotated factor loadings.

communications medium, and appear to derive personal gratification from using it as a socialization venue. A number of specific factors are involved in these results, including:

Searching, the strongest factor in the analysis, is characterized by terms that relate to using it to find things. The salient variables on this factor are suggestive of searching the Web for information related to computers and their use, given the emphasis on technology, software, resources, and Internet sites.

- Search engines
- Software
- Speed
- Surfing
- Technology
- Web sites
- Work

Factor 1 – 12.6 % of variance Searching					
Variable	F-test	Significance	Mean for Web Use		
			High	Low	
search engines	68.62	.000	6.28	5.46	
software	57.24	.000	5.65	4.77	
speed ¹	48.70	.000	6.50	5.89	
surfing	185.93	.000	6.00	4.39	
technology	34.85	.000	5.99	5.38	
web sites	123.00	.000	6.44	5.49	
work	21.74	.000	5.03	4.41	
Factor 2 – 7.3 % of variance Information					
Variable	F-test	Significance	Mean for Web Use		
			High	Low	
education	27.32	.000	6.04	5.65	
ideas	52.24	.000	5.77	5.05	
information	45.72	.000	6.44	5.89	
knowledge	62.19	.000	6.34	5.70	
learning	53.97	.000	6.19	5.54	
news	26.17	.000	5.56	5.00	
research	38.32	.000	6.20	5.61	
Factor 3 – 5.25 % of variance Communication					
Variable	F-test	Significance	Mean for Web Use		
			High	Low	
access	14.94	.000	6.46	6.15	
answers	13.00	.000	6.01	5.65	
communication	13.54	.000	6.23	5.88	
email ²	9.77	.002	6.47	6.21	
Factor 4 – 4.5 % of variance Socialization					
Variable	F-test	Significance	Mean for Web Use		
			High	Low	
chatting ³	26.68	.000	4.11	3.34	
friends	21.79	.000	5.90	5.35	
fun	50.87	.000	5.92	5.11	
interaction	60.41	.000	5.36	4.41	
newsgroups	31.58	.000	4.40	3.68	
people	39.18	.000	5.26	4.52	
relaxing	47.91	.000	5.67	4.88	
Special Item, single variable Shopping					
Variable	F-test	Significance	Mean for Web Use		
			High	Low	
shopping ⁴	50.51	.000	4.64	3.72	

¹ Highest mean score for high use group

² Highest mean score for low use group

³ Lowest mean scores across all variables and usage groups

⁴ This variable did not load on a factor, but is considered important, individually

Table 3. Selected variable means by factor.

The loading of “work” on this factor is interesting, given the ubiquity of computers in the modern workplace and their increasing work-related use at home. The fact that “Web sites” loads here seems intuitive, since most Internet searches end with a site, and many begin with one, as well (for instance, Google), but the loading of the “speed” variable is difficult to assess unless it relates to an appreciation for prompt search returns for search efforts.

Five variables cross-loaded at high levels with another factor, and these should be considered in the context of both the main variables of the searching factor, and the likely relationships between searching and the second factor, information:

- Interests
- Resources
- Searching
- Updates
- Variety

Information was the second strongest factor in the analysis, and aside from the eight salient variables that loaded on it, there are five cross-loadings from searching to consider, as well as one cross-loading with a third factor—communication. The information factor is primarily characterized by terms associated with the information content of the Internet, as evidenced by terms such as “education,” “learning,” “knowledge,” and “ideas.” This dimension of gratification seems to reflect user desires for informational content in the online experience:

- Education
- Ideas
- Information
- Knowledge
- Learning
- News
- Research

In addition to the five cross-loadings with the searching factor, the variable “current” cross-loads on the third factor, communication. There is also an anomalous variable loading on this factor: “progressive.” Perhaps using the Internet to satisfy one’s information needs is a progressive practice. User gratification from informational content online should be considered in the context of the relationships of information to other gratifications of Internet use, such as searching for information or communicating information with others.

Communication highlights terms that reference using the Internet as an interpersonal communications channel. There is a sense of “staying in touch,” or connecting interpersonally with others, here:

- Access
- Answers
- Communication
- Email

Keeping in mind that “current” cross-loads from the information factor, there is one other variable that influences the likely interpretation of this factor. “Easy” loads cleanly on the factor, but its meaning cannot be fully discerned. AOL respondents had been instructed to indicate in the survey how important “easy” was to them as a reason for using the Internet,

but in the response format provided, it was difficult to determine exactly how users perceived the term as related to their online experiences. We suspect ease of use to be an important aspect of AOL's appeal, but it's a speculative point.

Socialization, the fourth and final factor in the analysis, is associated with aspects of communication that further interpersonal relationships. With communication already identified as gratifying, it makes sense that people would also appreciate the social aspects of Internet use, since both characteristics are specific facets of gratification related to using the Internet for interpersonal communications [11, 12].

The socialization factor is similar in many ways to the communications factor, but what distinguishes it might be the more targeted reason for using the Internet as a communication channel. The variables that load on this factor are characteristic of friendly personal interactions:

- Chatting
- Friends
- Fun
- Interaction
- Newsgroups
- People
- Relaxing

It appears that using the Internet for social purposes is an enjoyable activity, in light of loadings from variables such as "relaxing" and "fun." "Newsgroups" is an interesting variable; it does not connote direct, live Internet interactions, although it does provide asynchronous connections between individuals sharing similar interests.

Heavy vs. Light Users

Internet companies like to know what separates the heavy users from the light users, since heavy users are potentially better targets for all sorts of online offerings. Thus, the sample was split to perform an analysis of variance between heavy and light users, based on respondent scores for an eight-point semantic differential questionnaire item that asked them to indicate how frequently or infrequently they used AOL online services. "Heavy users" were defined by usage frequency scores that fit into the top quartile of responses, and "light users" were defined as those who were in the bottom quartile for usage frequency. The quartile split of the sample identified 347 respondents as light users and 401 respondents as heavy users.

Analysis of variance was performed on the salient variables for each usage factor, and results show that

heavy users score higher than light users on each of these variables. However, mean values are generally high on *all* variables across *both* usage levels. Most Internet uses examined here are considered important in some degree by all users, but some uses are prized even more by the heavier users, while several are considered relatively less important by light users.

As summarized in Table 3, significant differences are found between heavy and light users for all salient variables, and, with several exceptions, both groups demonstrate mean scores on the variables above the mid-point for the scales that were used. In other words, given a seven-point scale (with 4 indicating a neutral point), means were generally above the neutral rating.

One exception was "chatting," which loaded on the socialization factor. "Chatting" scored lowest (3.34) for the light usage group, and also generated the lowest score for the high usage group (4.04). Another exception was "shopping," which did not load on any of the factors, but was analyzed as a standalone variable in light of the rising popularity of e-commerce. "Shopping" produced the second lowest mean for the heavy use group (4.64), and the next-to-lowest mean for the light use group (3.72).

The practical implication of means generally trending above the neutral point for all variables is that AOL customers are not indifferent about what they liked in the Internet experience. These users are rather inclined toward the online experience.

Discussion

The implications of low scores for "chatting" and "shopping" among AOL users are worth considering. Putting the low score for "chatting" into the context of the seven-point scale used, the heavy use mean of 4.11 indicates a neutral opinion, at the midpoint between "very important" and "very unimportant." The light use mean of 3.34 for "chatting" is actually on the "unimportant" side of the neutral point on the scale. This could mean that AOL's Instant Messenger utility does not appeal to users as much as other aspects of the online service.

Since the "chatting" variable loads on the socialization factor along with "friends," "interaction," and "people," we can assume that users perceive "chatting" is an aspect of socializing online. So, why would "chatting" rate so poorly, relative to other social or communication usage gratifications, such as "friends," "interaction," and "communication," which all have strong means? Although there can be no way of knowing without specifically probing the issue in another study, there has been some concern expressed at AOL about how easy Instant Messenger

is to set up and use, especially for newer users.

Perhaps some users just don't find AOL chat utilities as easy to set up and use as the AOL email service. This does not mean that Internet use is not socially motivated; far from it. There are important social aspects of the Internet [1]; if the low score for "chatting" leads us to question this assumption, one of the *highest* scoring variables reinforces the value of online social dynamics. In contrast to "chatting," "email" has the highest mean for the light users, and one of the highest for the heavy users.

It might be that Instant Messenger appeals more to the youth segment of the online marketplace. Research conducted by AOL [8] shows that a vast majority of teen AOL users utilize Instant Messenger, and since our survey was limited to adults of 18 or older (in view of AOL privacy policies) responses could be skewed toward uses that appeal to adults. Though we have no way to empirically assess the point for ages below 18, Instant Messenger does appear to have an attraction for the youth market.

As to shopping, the low importance score for this variable also requires some thought. Ask anyone; they'll tell you online shopping is an important part of Internet use. But conventional wisdom sometimes fails to provide clear guidance for business decisions, and neither light nor heavy AOL users appear to feel that shopping is an important part of their online experience, given the results here. Is it possible that AOL users are simply not serious shoppers? Not likely; a more realistic possibility might relate to do with usage characteristics of the AOL shopping interface, which guides shoppers through AOL-specific shopping areas, as compared to user-initiated navigation in standard Web browsers. Or perhaps the common AOL experience of pop-up sales ads that must be cleared during the log-on process has alienated users from the idea of online purchasing. Given the data on hand, we cannot explain with any degree of certainty why shopping is not more popular among the AOL users surveyed in this study. The fact simply remains that variables associated with searching, browsing, information, and communication ("chatting" aside) all display higher importance scores for online activity among a large sample of AOL users than shopping does.

Conclusion

Any Internet service provider is motivated to maximize enjoyment of the online experience for its heavy users, and to design its interfaces and experiences to entice more usage from light users in order to broaden the heavy usage base. This survey defined four broad dimensions of gratification related to the

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use of Internet services, and identified areas in which heavy users are different from light users. The strongest usage gratification, and the second strongest, both have much to do with personal enjoyment of Internet-provided utility and functionality, in view of the searching and information factors that were identified. The last two factors, accounting for about one quarter of the explained variance between them, involve the interactive qualities of the Internet in support of interpersonal goals related to communication.

In other words, the most powerful gratifications might be considered utilitarian, related to what the Internet provides in content and experience, while the more moderate gratifications are social. With the caution that our results are specific to the AOL market, a general prescription for increasing the base of heavy users at an ISP might lie in the seamless and trouble-free integration of browsing and information access capabilities into the user interface. To the extent that social dynamics are considered an important selling point for Internet service (and, of course, they are), their weight in promotion and planning should probably be balanced against the strength of the motivational factors related to the personal utility found in Internet content.

Are Internet users Lone Browsers or Social Animals? You decide; but, keep in mind that all the factors described here have value. The comparison between factors of gratification for Internet use is strictly relative, offered for purposes of suggesting optimization strategies for ISP operators. The dimensions of enjoyment for Internet use described here are broadly and generally descriptive of what users seek in the online experience. Any of the four dimensions could be used as a basis for designing, improving, or selling Internet access services. Of course, the obvious attractiveness of heavy users as a potentially profitable customer segment for products and services suggests that the motivational dimensions rated highly by heavy users should be particularly useful for improving online offerings so that they appeal to the more lucrative consumer segments.

Although "shopping" was not one of the highly ranked gratifications for Internet use among this group of AOL members, only the light users rate shopping as mildly unimportant; heavy users just don't rate it as very important, which is a subtle but important distinction. The general philosophy at AOL is that more time spent online inevitably means more opportunities to engage users with e-commerce offerings or fee-for-service promotions that generate revenue and profit for the ISP. The unspoken assumption is that shopping activity increases with Internet

use, and more time spent logged on eventually translates into more sales opportunities.

The practical implication is that increased time spent online results in the conversion of more light users to heavy users over time, and a success strategy for online shopping at AOL might well be tied to simply promoting increased use of the service. This study identifies the uses and gratifications of Internet use most prized by heavy AOL users; it is a simple manner to concentrate managerial attention on maximizing the customer experience related to these variables to ensure more extensive use of the Internet service, in the expectation that shopping profits will rise with online experience, and over time with satisfied and repeated use of the interface. ■

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