Teen internet mavens: influence in family decision making

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Abstract

The Internet is changing the nature of the family decision-making process. With its ability to provide easily accessible information and purchase options, the Internet has potentially altered the decision-making roles of family members based on their interest in and expertise with the Internet. Similar in conceptualization to the market maven, the authors hypothesize the existence of an Internet maven—an individual who is relied upon more for providing information from the virtual marketplace. These teen Internet mavens are hypothesized to enjoy net surfing and to have greater relative influence in the family decision-making process than their nonmaven counterparts. Survey data from a National Family Opinion (NFO) sample of matched pairs of parents and teens supported these hypotheses.

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1. Introduction

The growth of e-commerce has been well documented. Internet sales are expected to account for \% of all retail sales by 2007 (Greenspan, 2003). Furthermore, sales figures represent only part of the picture, as the most frequently mentioned use of the Internet in relation to shopping has been found to be gathering information about products and services (“One Hundred Twenty,” CyberAtlas, 2000). Although on-line consumers have been found to vary in terms of hours spent on-line, amount of search behavior, and likelihood to purchase (Forsyth et al., 2000), the general rate of adoption of the Internet has exceeded that of virtually any other medium (Belch and Belch, 2004). The adoption of the Internet is perhaps most evident among children and teens, with over \% of all teens using the Internet regularly (Greenspan, 2002) and \% of on-line teens using the Internet more than once a day (“Young Adults,” CyberAtlas, 2001). Households with teens are also more likely to have Internet access compared to all U.S. households (“Kids and Teens,” CyberAtlas, 1999). Research indicates that teens have more rapidly adopted the Internet and have embraced it to a greater degree than have their parents. Both generations agree that teens know more about the Internet than their parents do (Lenhart et al., 2001).

Whereas these studies suggest support for the notion that teens have greater interest in the Internet and greater access to market information, it has yet to be investigated what impact this might have on the teen’s influence in family decision making. John Geraci, Vice President of youth research at Harris Interactive, states “the interesting thing about the Internet is that it’s not so unusual for a parent to ask his kid to research an adult purchase, such as a car or a vacation. Suddenly, you see why this technology gives kids so much influence” (Holton, 2000, p. 35). The issue explored in this research is whether the rapid adoption and extensive use of the Internet by teens has affected the nature of their influence in the family decision-making process. This research builds on the existing concept of the market maven (Feick and Price, 1987) by proposing the existence of an Internet maven. The study will hypothesize the existence of teenage “Internet mavens,” as the domain-specific, on-line parallel to the broader concept of market mavens, and will investigate the impact of teen Internet mavens in a “within family” decision-making context.
1.1. The market maven construct

In 1987, Feick and Price introduced the concept of the market maven. Market mavens are:

individuals who have information about many kinds of products, places to shop, and other facets of markets, and initiate discussions with consumers and respond to requests from consumers for market information. (p. 85).

In contrast to opinion leaders and early adopters, market mavens’ influence is not tied to specific product categories. Rather, the market maven evidences broad influence across consumer decision making that is rooted in general marketplace knowledge and expertise. Feick and Price (1987) found that market mavens exist, recognize themselves as such, and are so recognized by others. Feick and Price characterized market mavens as having more knowledge about the marketplace, greater interest and enjoyment in shopping, higher levels of awareness and attention to the marketplace, and higher levels of information provision to other consumers. Research since the construct was introduced has found further support for the role of the market maven. Price et al. (1987) found market mavens to have information about various kinds of products, places to shop, and other market facts. Mavens were also found to possess more general marketplace information than opinion leaders (Slama and Williams, 1990).

1.2. The Internet maven construct

As the adoption of the Internet has dramatically increased, it is conceivable that the unique characteristics of this new information environment may produce individuals who enjoy using the Internet more and who, as a consequence, are more knowledgeable about the medium than most others. This group could be termed Internet mavens, a virtual version of the market maven. Internet mavens would be expected to possess more generalized knowledge regarding the Web marketplace. An Internet maven would be savvy regarding how to search for and find information and would respond to requests to provide information to others. Others would be expected to turn to them to receive information due to the mavens’ in-depth and advanced Internet skills.

1.3. Teens as Internet mavens

Several studies indicate that teens have adopted the Internet more quickly than their parents (Hedberg and Bedwell, 2000; “Forty Percent,” CyberAtlas, 2000), have developed a deeper understanding of the Internet than their elders (Curtis, 2000), and prefer the Internet over other media for data collection for transactions (“Forty Percent,” CyberAtlas, 2000). Studies show that teens use the Internet for a variety of purposes, including e-mail, searches for information, and purchases (Lenhart et al., 2001). Compared to other user groups, teens are more likely to be users, with 73% of all teens indicating daily usage and 38% connecting more than once per day (Lenhart et al., 2001). Just as the market maven has more knowledge of and interest in the overall marketplace, it is logical that some teenagers, relative to others on-line, may have developed similar characteristics in the virtual world and as a result are likely to be perceived as Internet mavens. As such, they would be expected to exhibit greater knowledge of the virtual marketplace, greater interest in and enjoyment of using the Internet for a variety of purposes, have higher levels of usage of the Internet, and have acquired more information on products/services from this medium. This leads to our first hypothesis:

H1: The more the teen (a) uses the Internet, (b) enjoys using the Internet, and (c) uses the Internet for a broad range of purposes, the more the teen will be perceived as an Internet maven.

1.4. Internet mavens’ role in family decision making

Evidence suggests that the Internet has become an important source of information for family decision making. A study conducted by the Round Group and Opinion Research Corp. International (“Forty Percent,” CyberAtlas, 2000) indicated that it is not unusual for parents to ask their children to research information that will be used for adult or family purchases (Holton, 2000, p. 34). In a study performed by NFO WorldGroup, 74% of U.S. parents who purchased on-line stated that they allowed their children to participate in the process. Furthermore, 42% of U.S. parents purchasing on-line followed advice from their children who suggested the web sites from which their parents should purchase (Nua Internet Surveys, 2001). These studies would seem to indicate that the teen, given his or her relative expertise, would be increasingly relied upon for product information, particularly at early stages (i.e., problem recognition/information search) of the family decision-making process.

Previous studies have found that teens exert varying degrees of influence on family decision processes that varies by product context and by the individual resources of the teen. Over a variety of products, results indicate that teens exert the most influence during problem recognition and search stages and the least influence in final product choice and how much to spend (Nelson, 1978; Belch et al., 1985). Research further suggests that teens are more influential in product categories to which they attributed great importance, which were heavily used, or about which they were highly knowledgeable (Beatty and Talpade, 1994). Additionally, teens’ knowledge was found to be a significant determinant of teens’ influence. Moschis and Mitchell (1986) found that the more teens discuss their product...
experiences, the more influence they have in initiation, search, and alternative evaluation. Teens were accorded influence in choice, however, only when they earned their own resources (Moschis and Mitchell, 1986).

Existing research therefore suggests that experienced teen Internet users (i.e., Internet mavens) should be more influential in the family decision-making process than non-users (i.e., nonmavens), particularly for products in which the teens are involved and interested users. Furthermore, consistent with research findings in the off-line world, this influence of Internet mavens should be greater in the initiation and search stages of the family decision-making process than in the alternative evaluation and final decision stages. Therefore,

**H2**: The more the teen is considered an Internet maven, the more relative influence the teen will have in the family decision-making process.

**H3**: Teen Internet mavens will have greater relative influence at the initiation and information search stage rather than at the alternative evaluation and final decision stage.

### 2. Research method

#### 2.1. Research design

The research design was a cross-sectional survey with random sampling. The context of the study was a vacation decision-making process. Each parent and teen was given a log-in number and password and asked to complete a survey. In families with more than one teen, parents were instructed to have only one complete the survey. (Note: The above are commonly used procedures with NFO samples.)

One hundred sixty-seven parent–teen pairs were analyzed for this study (n = 334). NFO’s analysis of the data revealed a less than 10% nonresponse rate. Teen respondents were almost evenly divided between males and females, with both sexes well represented in the adult sample (48% fathers, 52% mothers). The mean age of teen respondents was 14.94 years, while the adult mean was 44.36 years. The teens in the study spent more time on the Internet for entertainment purposes than did their parents, with 25.7% of the teens and 22.2% of the adults spending 10 or more hours per week on-line for this purpose.

#### 2.3. Measurement

To be consistent with previous research regarding market mavenism and family decision making, only slight modifications were made to scales from previously published research.

##### 2.3.1. Internet usage

Teens’ internet usage was measured via several items. Teens were asked to indicate how many hours per week they spent on the Internet for entertainment (i.e., 0, 1–3, 4–6, 7–9 or 10 h or more), how much time they spent on the Internet relative to other family members (i.e., “much more time than other family members,” “more time than other family members,” “about the same amount of time as other family members,” etc.), how enjoyable they found the Internet (i.e., “very enjoyable,” “somewhat enjoyable,” “neither enjoyable nor unenjoyable,” etc.), and the purposes for which they used the Internet (i.e., work, school, and entertainment).

##### 2.3.2. Internet maven

An adaptation of Feick and Price’s (1987) six-item, market maven scale was used to measure the teens’ perception of their Internet maven traits and the parent’s perception of the teen as an Internet maven (see Appendix A). Coefficient alphas were .92 and .92, respectively, indicating a high degree of reliability. Teens were classified as mavens/nonmavens if they were one standard deviation above/below the mean on the maven scale [adult’s perception of child as maven, x = 2.87 (1.11); teen’s perception, x = 3.09 (1.15)]. Of the 167 teens in the sample, 43 were classified as Internet mavens (25.7%) and 43 were classified as non-Internet mavens (25.7%). (A demographic analysis of mavens versus nonmavens indicated very little demographic difference, although males were slightly more likely to be perceived as mavens than were females (58% vs. 42%). No other demographic differences were evident.)

##### 2.3.3. Adolescents’ relative influence

Adaptations of Beatty and Talpade’s (1994) relative influence scales were used to measure the teen’s perception
of his/her influence in a vacation purchase and the parent’s perception of the teen as influential in a family vacation purchase. As in the Beatty and Talpade study, both teens and their parents responded to two scales representing dimensions of relative influence: the adolescent’s influence in initiation and search (e.g., introducing the idea of going on a family vacation, collecting information on different vacation packages) and the adolescent’s influence in the alternative evaluation and final decision stages (e.g., considering different vacation packages, deciding which vacation to purchase). All items were measured using a 6-point relative contribution scale (i.e., “entire contribution was mine/my son or daughter’s,” “I/My son/daughter contributed more than other family members,” “All family members contributed equally,” “I/my son or daughter contributed less than other family members,” “I/my son or daughter did not contribute at all,” “Does not apply to my family”). Coefficient alphas for the initiation and search scale were .81 for teens and .82 for adults and for the alternative evaluation and final decision scale were .75 for teens and .74 for adults.

3. Results

3.1. Teens as Internet mavens

Initial analyses were conducted to examine the degree of teens’ Internet mavenism, as perceived by the teens themselves and, separately, by their parents. Analyses of several indicators of Internet usage yielded the following results.

Analysis of variance was conducted using the number of hours spent by the teen on the Internet for entertainment as a predictor of the teen’s Internet mavenism. Results suggest that teens who spent more hours on the Internet relative to other family members (teens’ self perceptions: $F = 42.751, P < .001, R^2 = .206, b = .45$; parental perceptions: $F = 19.442, P < .001, R^2 = .105, b = .33$) and who enjoyed the Internet (teens’ self perceptions: $F = 23.847, P < .001, R^2 = .126, b = .36$; parental perceptions: $F = 21.352, P < .001, R^2 = .115, b = .34$) were more likely to perceive themselves to be Internet mavens. Finally, analysis of variance was conducted using the teen’s self-reported purpose of usage of the Internet as a predictor of the teen’s Internet mavenism. Results suggest that teens using the Internet frequently for entertainment, rather than only for work or school (teens’ self perceptions: $F = 3.614, P < .01$; parental perceptions: $F = 4.662, P < .001$) were more likely to be perceived as Internet mavens (see Table 2). Thus, H1 is supported.

The Internet maven’s use of the Internet was further examined to determine the relationship between the number of hours spent on-line for entertainment and the teen’s perception of his/her mavenism. As noted in Table 3, teen Internet mavens spend significantly more time on the Internet for entertainment than do their nonmaven counterparts (Pearson $\chi^2 = 29.158, P < .001$). Sixty percent of Internet mavens use the Internet 7 h or more per week for entertainment, as compared to only 20% of nonmavens. In addition, 67% of non-Internet mavens use the Internet 3 h or less per week for entertainment, compared to only 11.6% of mavens.

3.2. Impact of Internet maven teens on family decision making

Simple regression analyses were conducted to examine the relative influence of Internet mavens on the family decision-making process. In the first analyses, teens’ perceptions of themselves as Internet mavens were used to examine perceptions of their relative influence in the initiation and search stages, and alternative evaluation and final decision stages of family decision making. The second two analyses examined parents’ perceptions of the same.

Results indicate that teens who perceive themselves to be Internet mavens believe themselves to be more influential in family decision making at both initiation and information search, and alternative evaluation and final decision stages (initiation/search: $F = 20.296, P < .001, R^2 = .111, b = .33$; alternative evaluation/final decision: $F = 9.927, P < .005, R^2 = .059, b = .24$). Similarly, results for parents also suggest that teen Internet mavens are perceived to have greater influence in the family decision-making process at both stages (initiation/search: $F = 19.467, P < .001, R^2 = .107, b = .33$; alternative evaluation/final decision: $F = 13.952, P < .001, R^2 = .084, b = .29$). For further illustration, an analysis of variance was computed to examine the decision-making influence of teen mavens and nonmavens (see Table
Mean comparisons support the hypothesis that teen Internet mavens are more influential in both initiation/information search and alternative evaluation/final decision stages of the family decision-making process than are non-mavens. Thus, H2 is supported.

Consistent with previous studies in family decision making, it was hypothesized that teen Internet mavens would have more input in the initiation and information search stage of the decision process than at the alternative evaluation and final decision stage. Paired sample t-tests indicated that teen Internet mavens were more influential in initiation and information search than at alternative evaluation and final decision stages from their own, as well as their parents’ perspectives (teens’ self-perceptions: \( t = 7.665, P < .01 \); Parental perceptions: \( t = 6.86, P < .01 \)). Thus, H3 is supported.

Finally, although not specifically hypothesized, it was expected that parents who were nonusers or light users of the Internet might be more likely to perceive their teens as Internet mavens than were parents who were light Internet users (1–6 h per week). Parental non-Internet users were deleted from the analysis for Table 5 due to the group’s small size (\( n = 11 \)). Parents who were heavy Internet users also considered their teens to be more influential in the alternative evaluation/final decision stage than did parents who were light Internet users. Furthermore, teens whose parents were heavy Internet users considered themselves more influential in problem recogni-

### Table 2
Mean Internet maven score by teens’ purpose of Internet usage

<table>
<thead>
<tr>
<th>Teens’ type of internet usage</th>
<th>n</th>
<th>Teen perception of self as maven(^a)</th>
<th>Parent perception of teen as maven(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only for school or work</td>
<td>6</td>
<td>1.42</td>
<td>1.58</td>
</tr>
<tr>
<td>More for school or work than for entertainment</td>
<td>17</td>
<td>2.65</td>
<td>2.49</td>
</tr>
<tr>
<td>Equally for school and work and entertainment</td>
<td>55</td>
<td>3.24</td>
<td>3.01</td>
</tr>
<tr>
<td>More for entertainment than for school or work</td>
<td>63</td>
<td>3.23</td>
<td>3.06</td>
</tr>
<tr>
<td>Mainly for entertainment</td>
<td>26</td>
<td>3.12</td>
<td>2.68</td>
</tr>
<tr>
<td>( P ) value</td>
<td>4.66(^1)</td>
<td>3.61**</td>
<td>2 standard deviation from the mean.</td>
</tr>
</tbody>
</table>

\(^a\) \( 1–5 \) point scale.  
\(^1\) \( P < .001 \).  
\(^*\) \( P < .01 \).  
\(^**\) \( P < .005 \).

Table 3
Teens’ self-perceptions of Internet mavenism by teens’ hours of Internet usage

<table>
<thead>
<tr>
<th>Teens’ hours spent on the Internet for entertainment</th>
<th>n</th>
<th>Teen mavens (%)(^a)</th>
<th>Teen nonmavens (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonusers (0 h/week)</td>
<td>5</td>
<td>0.0</td>
<td>11.1</td>
</tr>
<tr>
<td>Low users (1–3 h/week)</td>
<td>28</td>
<td>11.6</td>
<td>55.6</td>
</tr>
<tr>
<td>Medium users (4–6 h/week)</td>
<td>18</td>
<td>27.9</td>
<td>13.3</td>
</tr>
<tr>
<td>Heavy users (7–9 h/week)</td>
<td>12</td>
<td>23.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Very heavy users (10 h or more/week)</td>
<td>23</td>
<td>37.2</td>
<td>15.6</td>
</tr>
</tbody>
</table>

\( \chi^2 = 29.158, P < .001 \).  
\(^a\) Mavenism determined by \( \pm 1 \) standard deviation from the mean.

### Table 4
Teen Internet mavens’ in family decision making

<table>
<thead>
<tr>
<th>Parents’ perception of teens’</th>
<th>Teens’ self-perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation/Alternative search influence</td>
<td>Initiation/Alternative search influence</td>
</tr>
<tr>
<td>Final influence</td>
<td>Final influence</td>
</tr>
<tr>
<td>Internet mavens(^b)</td>
<td>2.84</td>
</tr>
<tr>
<td>Nonmavens</td>
<td>2.26</td>
</tr>
<tr>
<td>( F ) value</td>
<td>12.96***</td>
</tr>
</tbody>
</table>

\(^a\) \( 1–6 \) point scale.  
\(^b\) Mavenism determined by \( \pm 1 \) standard deviation from the mean.  
\(^*\) \( P < .05 \).  
\(^**\) \( P < .005 \).  
\(^***\) \( P < .001 \).

### Table 5
Teens’ Internet mavenism and family decision-making influence by parental Internet usage

<table>
<thead>
<tr>
<th>Parents’ perception of teens’</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>Initiation/Alternative search influence</td>
</tr>
<tr>
<td>Final influence</td>
</tr>
<tr>
<td>Parental usage of the Internet</td>
</tr>
<tr>
<td>Heavy users (7 or more hours/week)</td>
</tr>
<tr>
<td>Light users (1–6 h/week)</td>
</tr>
<tr>
<td>( F ) value</td>
</tr>
</tbody>
</table>

\(^a\) \( 1–5 \) point scale.  
\(^b\) \( 1–6 \) point scale.  
\(^*\) \( P < .05 \).  
\(^**\) \( P < .005 \).
tion and information search than did teens of light Internet-user parents. Thus, in contrast to the expected finding, results suggest that in families where parents are heavy Internet users, both the teens and their parents recognize the teens’ Internet expertise and value their contribution in the family decision-making process.

3.3. Teen and parental perceptual congruence

By definition, the role of the Internet maven should be recognized by others. Therefore, it is expected that a teen’s role as an Internet maven should be recognized by both the teen and the parent. Results supported this notion, as the correlation between teens’ and parents’ perceptions of the teens’ maven score was .81, \( P < .001 \), demonstrating an extremely high degree of agreement. Thus, if the teens recognize themselves as mavens, they are also envisioned so by their parents.

Correlations were also run to determine the level of agreement in perceptions between parents and teens regarding the latter group’s relative influence in family decision making. Comparisons were made at both the initiation and information search and the alternative evaluation and final decision phases. Correlations between adults’ and teens’ perceptions were \( r = .588, P < .001 \), at the initiation and information search stage and \( r = .546, P < .001 \), at the alternative evaluation and final decision stage, indicating strong agreement in perceptions of level of influence at both stages.

4. Discussion

This research introduces and establishes support for the existence of teen Internet mavens within the household. These teen Internet mavens receive great personal enjoyment from surfing the Internet and use their virtual market knowledge to contribute significantly to family decision making. Consistent with the characteristics of the market maven, the teen Internet mavens are considered by themselves and other family members as having more involvement with and interest in the Internet than other family members, as reflected by the time spent using the medium, as well as the variety of purposes for which it is used.

Results of this study suggest that the advent of the Internet has had an influence on family decision making. Similar to previous research that has shown that both relative involvement and relative expertise increase a person’s level of influence in family decisions, it appears that teens’ involvement and expertise with the Internet has led to their having greater input into the family decision-making process. Results indicate that the more the teens are perceived to be Internet mavens, the more influence they will have in the family decision-making process. Furthermore, as hypothesized and consistent with prior research, this influence is higher in the early stages of the process, the search and information provision stages, than in the final decision stage.

As technology continues to evolve and dual working families become the norm, the decision-making process within the family is also likely to change. By virtue of the greater time pressures felt by parents and teens’ virtual market expertise, teen Internet mavens are likely to be integral participants in family decision making. Further support for this eventuality is evidenced by the finding that parents who are heavy Internet users are more likely to recognize and accept teens as mavens than are parents who are light Internet users. Hence, teen Internet mavens are not simply the panacea for net-impoverished parents. Rather, the teen Internet maven supplements the contributions of Internet savvy parents.

4.1. Value to managers

The interest of marketers in targeting innovators and opinion leaders and the problems associated with this strategy have been well documented, as has the value of identifying market mavens (Feick and Price, 1987). As the role of the Internet increases as an important resource for information in family decision making, the establishment of the existence of Internet mavens provides marketers with the understanding that (1) teenagers may now constitute a target audience for products/services consumed by the family and (2) the teenager’s importance (particularly in search and information provision in the decision process) must now be considered even more. These results also demonstrate that on-line teens recognize these new roles and responsibilities, as do their parents. Thus, marketing managers must recognize the role of the teenager in this process, developing communication strategies designed to integrate this information. Essentially, the target markets for marketing communications may now require broadening to include this group, requiring changes in message and media strategies.

4.2. Future research

For purposes of this study, only one product context (vacations) was examined. Future research should explore what products and services Internet mavens are more or less likely to influence and whether Internet mavens have medium specific or broader based knowledge of market information (akin to market mavens). Recent Internet trends supported the selection of teens as likely Internet mavens in this initial consideration of the construct. As the Internet continues to become more widely accepted into households, however, future research should investigate other groups as potential Internet mavens, and examine changing roles.

Numerous industry reports have demonstrated teens’ rapid adoption of the Internet as an information source. In this paper we build upon these findings, and propose and find support for the existence of a new role that teen net surfers are assuming—the role of the Internet maven. This research indicates that the Internet maven is evolving into an important role in the household, and—given the fact that the maven is
likely to be a teenager—this demographic group will increase its importance in the family decision-making process.

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Appendix A. Internet maven scale items

Scale:

1. Strongly agree
2. Somewhat agree
3. Neither agree nor disagree
4. Somewhat disagree
5. Strongly disagree

1. I like using information collected from the Internet to introduce new brands and products to my family and friends.
2. I like helping my family and friends by using the Internet to provide them with information about various kinds of products and services.
3. My family and friends often ask me to search the Internet to provide them with information about products, places and sites to shop, sales, etc.
4. If someone wanted to know which Internet sites had the best bargains on various types of products and services, I could tell him or her.
5. My family and friends think of me as a good source of information from the Internet when it comes to new products, sites to visit, sales, etc.
6. Think about a person who gets information from the Internet about a variety of products, and likes to share this information with others. This person knows about how to use the Internet, how to find information on the Internet, what the best sites are, and so on, but does not necessarily feel he or she is an expert on the products he/she gathers information on. How well does this description fit you?

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