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The Rochester Institute of Technology

Department of Communication

College of Liberal Arts

Use, But Pay? Factors Affecting the Adoption of News Websites among Young Adults

by

Julian Koegel

*A Thesis* submitted

in partial fulfillment of the Master of Science degree

in Communication & Media Technologies

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August 2, 2013

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USE, BUT PAY? FACTORS AFFECTING THE ADOPTION OF  
NEWS WEBSITES AMONG YOUNG ADULTS

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**Abstract**

This study explored young people's consumption of and willingness to pay for traditional news websites with both uses and gratifications and diffusion of innovation theory as theoretical frames. Based on a survey sample of U.S. college students, it revealed similarities and differences among certain groups of adopters. Regression analyses found when aiming for new young readers and potential payers, news producers should focus on addressing needs for surveillance, understanding, and entertainment, give as many people the opportunity to try out the website, and target particularly e-book readers, but avoid those playing a lot of online games. Social media features, expressed through the observability characteristic, were found to still underperform and currently work best for those already engaged with the sites.

*Keywords:* online news, adoption, willingness to pay, diffusion of innovation, uses & gratifications

### **Use, But Pay? Factors Affecting the Adoption of News Websites among Young Adults**

When The New York Times introduced a paywall in March 2011, the “Old Gray Lady” became another major newspaper preventing internet users from accessing their webpage content without a paid subscription (Beller, 2012; Radoff, 2009). Paywalls have been one of the strategies the newspaper industry applies in order to compensate for the decline in advertising revenue, which decreased by 37% from 2001 to 2011 (Newspaper Association of America, 2012). Attracting a large audience and converting news website visitors into paying subscribers before running dry on financial resources is for many companies a matter of survival.

The consumption of online news has steadily grown in the last years. According to the Pew Research Center (2012), 39% reported that they got the news yesterday via a digital platform, however, particularly those young adults between 18 and 29 years have proven to be difficult to attract to traditional news websites. Traditional news websites are being run by newspapers, magazines, television networks, or radio broadcasters. In contrast to web natives like Yahoo News or Google News, production of original news content has been their primary business. One may expect that the “Digital Natives” are particularly engaged with these sorts of news, however, they were found to consume only slightly more than those older than 50 years. They also spent less and less time with the news regardless of the medium. While in 1994 young people spent on an average day 56 minutes with the news, this number has decreased to 45 minutes in 2012 (Pew Research Center, 2012). This trend is particularly alarming as studies have shown that if people are not news consumers by the time they become adults, they are not likely to develop much of a news habit later (Peiser,

2000). Holding up the readership of young people is a priority for news producers whose digital dollar gains are still outnumbered by paper losses by a factor of 7-to-1 (Rosenstiel, Jurkowitz, & Ji, 2012) as well as for society as democracy requires informed citizenries to function properly (Putnam & Feldstein, 2004; Putnam, 2001).

Communication scholars have traditionally looked at people's needs and motivations for explaining why they adopt or do not adopt a certain medium. In accordance with the uses and gratification perspective (Blumler & Katz, 1974) people turn to media because its content offers a certain value, such as information, surveillance of the environment, entertainment, and passing time when it comes to news consumption (Elliott & Quattlebaum, 1979; Lichtenstein & Rosenfeld, 1983; A. M. Rubin & Perse, 1987; Weaver, 1980). This study, however, introduces innovation diffusion theory (Rogers, 2003) to the research on online news, seeing news websites' critical value for adoption not only in their content offerings but in their technological sophistication. From this perspective, characteristics of a technology that make its adoption "easier," such as being compatible to existing ideas or to be effortlessly tried out, may help explain what makes young people read the news on traditional news websites, if not even pay for it. Furthermore, given the recent changes in the news site marketplace, this research is an update on young people's willingness to pay for online news. As more and more news websites adopt paywalls, switching costs for readers rise, making it harder to substitute one news resource for another, which consequently may have an effect on their paying intent.

### **Review of Literature**

For adoption researchers, there have been three primary areas of interest when investigating why a particular group of individuals has adopted or has not adopted a

particular idea. First, as the adoption population can be divided into at least two distinctive groups, adopters and non-adopters, researchers seek to answer which attributes make one group different from another. Apart from Rogers' (2003) well-known adopter categories, there can be many ways of differentiating the adoption population, for example, Continuers and Discontinuers or Potentials and Resistors (T. Lin, Chiu, & Lim, 2011). However, for this research, the degree of readership and payers and non-payers are the obvious discriminators. Second, drawing from theoretical frames, adoption research seeks to identify the significant predictors of adoption, the factors that "made" people adopt. Finally, researchers have been interested in the reported reasons for adoption or non-adoption as the qualitative data provide valuable information about the individual adoption decision. These areas of interest should also guide the research presented here. Accordingly, the following research questions structure the investigation of the topic.

*RQ1: What are the differences among young adults between light readers, medium readers, and heavy readers of traditional news websites?*

*RQ2: What are the differences among young adults between those who are willing to pay and those unwilling to pay?*

*RQ3: What factors affect the adoption of traditional news websites by young adults?*

*RQ 4: What are the reasons young adults decided to pay a specific price?*

For predicting new media adoption, previous literature has used mainly two theoretical approaches: uses and gratification (U&G) and innovation diffusion theory (IDT). The U&G perspective stresses the importance of needs that individuals attempt to fulfill by using media and media content (Blumler & Katz, 1974). Contrary to the question of "What do the



media do to the people?," U&G asks what people do with the media – what function mass communication serves for the audience members. Consequently, it sees one's motivation as the crucial driving force that leads a user to choose a specific medium or content (Palmgreen, Wenner, & Rayburn II, 1980). Meanwhile, Rogers' theory of diffusion of innovations (2003) seeks to explain how an idea, particularly new technology, is adopted by a population. Among other diffusion factors such as the role of personal innovativeness and social influences, IDT research asks what characteristics of innovations affect the rate at which they are adopted. In several studies, such as the adoption of computer innovations among suburban municipalities (Kearns, 1992) or new educational ideas diffused among high school principals (Holloway, 1977), researchers have found that an innovation's performance among certain characteristics can predict people's reaction to it. Or in other words, if an idea underperforms in one or several of these characteristics it does not exhaust its full potential. As used in studies on the adoption of new media (T. Lin et al., 2011; Papies & Clement, 2008; Zhu & He, 2002), these perceived characteristics are:

- Relative Advantage: the degree to which an innovation is perceived as being better than its precursor, such as economic profitability or just convenience.
- Compatibility: the degree to which an innovation is perceived as being consistent with the existing values, needs, and past experiences of potential adopters.
- Complexity: the degree to which an innovation is perceived as relatively difficult to understand and use.
- Observability: the degree to which the results of an innovation are visible to users and others.

- Trialability: the degree to which an innovation may be experimented with on a limited basis.

In addition, past research has also investigated an individual's use or ownership of other similar technologies for predicting the adoption of a new medium and, often as a starting point, a person's demographic profile.

### **Perceived Needs for News**

Audience needs have been widely used for predicting one's adoption to a medium (Neuendorf, Atkin, & Jeffres, 1998). Related to media technology, it was found, for example, that audience needs were significantly more powerful than the demographic profile in explaining the adoption of cable television (Atkin & LaRose, 1994; Jacobs, 1995), computers (Perse & Courtright, 1993), and the internet (James, Wotring, & Forrest, 1995). Also, Papacharissi and Rubin (2000) identified companionship, action, substitution for friendship, passing time, and solitude as reasons for predicting the use of the internet.

One of the first applications of U&G to digital news looked at the differences in audience motives and uses between online and printed news. Lin, Salwen, and Abdulla (2003) conducted telephone interviews with a sample of 387 respondents who read their news both online and printed. Their set of gratification dimensions was based on past U&G studies and included information needs (E. Katz, Haas, & Gurevitch, 1973), surveillance of the environment (Elliott & Quattlebaum, 1979), entertainment (Lichtenstein & Rosenfeld, 1983), interpersonal utility (Weaver, 1980), and passing time (A. M. Rubin & Perse, 1987). Findings indicated no differences between offline and online evaluations in the entertainment and interpersonal communication gratification dimensions. However,

respondents exhibited greater scanning for online news use and greater skimming for newspaper use.

Focusing on young people and their news consumption in a new media environment, Diddi and LaRose (2006) took the U&G paradigm and applied it to emerging patterns of news consumption among 303 college students. Surveillance, the search for in-depth information and local news, and escapism gratifications emerged as the most consistent predictors of news consumption. However, habit strength was the most powerful predictor of news consumption overall. This finding is consistent with Peiser's (2000) analysis of cohort replacement in the downward trend in newspaper readership. Readers who had not been exposed to newspapers in their parental home were unlikely to read newspapers when they grew older.

Chung & Yoo (2006) also investigated motivations for consuming an online newspaper, but focused on interactive features. In an online survey of 542 respondents, three factors (information seeking/surveillance, socialization, and entertainment) explained a majority of the variance in users' motivation for visiting the online newspaper. Socialization and entertainment emerged as predictors for interactive features, however, information seeking/surveillance was not a significant predictor.

In conclusion, for media technologies in general and for online news in specific, past research found understanding, surveillance, entertainment, interpersonal utility, and passing time as major motivations. However, whereas some studies indicated that young people have a general interest in news, they might not necessarily turn to the news websites of traditional media, but to social-networking sites (Lewis, 2008) or blogs (Marchi,

2012) instead. Still, the need for news is a prerequisite for using traditional news websites and eventually paying for them.

### **Perceived Characteristics of News Websites**

Past diffusion studies showed that people were more likely to adopt an innovation when it offered relative advantages, appeared simple to use and compatible with adopters' existing values and experiences, allowed trial use and experimentation, and demonstrated evident benefits to adopters (Rogers, 2003). After extensively testing these proposed characteristics (that is relative advantage, compatibility, complexity, trialability, and observability) Moore and Benbasat (1991) suggested refinements in the framework for information technology innovations. Observability might be split up into result demonstrability and actual visibility. Furthermore, they suggested image as an important influence in the decision to adopt.

Most applications of this framework to new media have taken additional attributes into account, reflecting that media is not just information technology but also delivers content that has its own value. For example, Li and Zeng (2009) examined, in addition to perceived characteristics of podcasts, its technology efficacy, perceived value of information, perceived quality of information, and perceived social utility. They concluded that perceived value of information and perceived quality of information had a stronger influence on the likelihood of podcast use than any of the perceived characteristics and technology efficacy. Social utility of podcast use was not found to have a significant effect.

Chang, Lee, and Kim (2006) applied the framework to online games in order to find factors affecting the adoption and continuance among college students in South Korea. In addition to perceived characteristics, they took perceived needs from U&G research,

personal innovativeness measured by new media ownership and use, and perceived popularity into account. Again, not all perceived characteristics were significant predictors of adoption. Only relative advantage proved predictive together with the variables of video game use, internet use, and perceived need for passing time. However, the predictive power of the survey can be questioned as the perceived characteristics were loaded only with one item each in the online questionnaire. The sample of 148 students was relatively small, too.

Lin, Chiu, and Lim (2011) adapted Chang et al.'s (2006) approach to the adoption of social network sites among Singapore's working adults. Knowing about the weakness of the previous research, they measured each variable with at least two items, thereby improving their study's reliability. Their variables included perceived characteristics and perceived popularity as well as adopters' demographics and innovativeness. In addition, they used technology cluster, which suggests that adopting an innovation may trigger an individual's adoption of other similar technologies. According to their findings, derived from an online survey among 222 internet users, compatibility, image, and perceived popularity were the greatest predictors of adoption of social network sites.

As the effect of perceived characteristics of an idea has not been taken into account for either news products in general or traditional news websites in specific, it is this research's particular focus to investigate their effect on adoption. The following section lays out some background information about Roger's characteristics in relationship to online news along with a hypothesis providing a potential outcome.

**Relative advantage.** Traditional news websites, run by newspapers, magazines, and television or radio networks, are not the only sources of news today. In recent years,

weblogs and social media have also captured new audiences, with a quarter of U.S. adults saying they read blogs (Smith, 2008), 15% of internet users aged 18-29 saying they write blogs, and 72% claiming they maintain a profile on an online social network site (Lenhart, Purcell, Smith, & Zickuhr, 2010). While social network sites only act as an aggregator linking to news stories across the web, blogs appear as a new independent news source. However, although blogs are usually free of charge and advertising, research found that they are not a major source of news yet. In 2012, only 12% of the respondents to a Pew Research (2012) survey reported they had regularly obtained news from a blog. Therefore, it is predicted that traditional news websites still have advantages over new emerging news sources such as blogs.

*H1: Relative advantage is a significant predictor for adoption and works to the advantage of traditional news websites.*

**Compatibility.** The way young people like to consume news may not match how current traditional news websites present and deliver the news. For example, Vahlberg et al. (2008) found that news websites struggled helping young people to become informed. Respondents stated that they sometimes felt dumb for not knowing certain terms and that tough language made it difficult to understand explanations. Distribution channels may also not meet young readers' preferences. According to Nielsen (2012), young adults are leading the growth in smartphone ownership in the US, with 74% of 25-34 year olds now owning smartphones. In addition, 43% of male and 30% of female smartphone owners reported that they consume news daily on their device (Pew Research, 2012). However, industry experts and usability researchers argued that many mobile news sites lack

usability and accessibility (Jeong & Han, 2012; Thornton, 2011; Webcredible, 2011) and show too many advertisements (Filloux, 2011). Given these findings, *H2* predicts that traditional news websites do not match with the way that young people like to consume news.

*H2: Compatibility is a significant predictor for adoption but works to the disadvantage of traditional news websites.*

**Complexity.** According to Vahlberg et al. (2008), young people tuned out on news sites because they offered “too much information, too many details, too many choices coming at them all at once without enough guidance as to which are most important; too much unrelieved text; stories that go on and on” (p. 29). They also found that young people liked graphics that make the complicated simple. However, a large portion of the 89 young people (aged 17-22) observed and interviewed reported that they frequently miss these features on news websites. If young adults perceive high complexity on news websites, the current structure on these sites is more a constraint than an ease for the adoption. As a result, *H3* predicts that traditional news websites are perceived as too complex.

*H3: Complexity is a significant predictor for adoption but works to the disadvantage of traditional news websites.*

**Observability.** While social media appears to be a common way to distribute news articles on the web and thereby promote news websites, Olmstead, Mitchell, and Rosenstiel (2011), studying web traffic towards news websites, have found that it played only a surprisingly minor role. Similarly, only 15-20% of U.S. digital news consumers reported that they use social media to access news, whereas 43% turned to established news (Pew

Research Center, 2012; Sonderman, 2012). If the perceived observability in social networks does not relate to the adoption of traditional news websites, it would confirm previous findings and question the role of digital inter-personal communication of news and current facilitation of social media features. Given the minor role of social media, it is predicted that a majority of young people have not yet observed articles of traditional news websites on their social networks in a great manner.

*H4: Observability is a significant predictor for adoption but works to the disadvantage of traditional news websites.*

**Trialability.** Given the wide diffusion of internet access among U.S. young adults and that most news websites offer free access or at least a trial period (The Economist, 2011), it appears that news websites can easily be experimented with prior to adoption. Thus:

*H5: Trialability is a significant predictor for adoption and works to the advantage of traditional news websites.*

### **Media Technology Use**

According to Rogers (2003) innovations often are not viewed singularly by individuals. Instead, they may be perceived as being interrelated. As a result, adopting an innovation may trigger an individual's adoption of other similar technologies. For example, LaRose and Atkin (1992) investigated the use of 18 communication technologies and found that people were likely to use those that function in similar ways or draw on similar behavioral. IDT also suggests the use of mass media positively affects the adoption of a new medium because mass media use leads to the obtaining of information regarding the new medium (Rogers, 2003). However, it is obvious that an individual's time to consume media content



is limited. In their study on young people's perceptions of news websites during the 2008 election campaign, Vahlberg et al. (2008) found that they felt like being "always bombarded with options, always having to prioritize how to spend their time because they don't have enough time to do everything they want (p. 9)." Therefore, it is not surprising that empirical research offers conflicting results. While an early study found that computer adopters use other technology items, such as pocket calculators and video games, more frequently than non-adopters (Dickerson & Gentry, 1983), another finding suggested that computer adopters view less television (Vitalari, Venkatesh, & Gronhaug, 1985).

In three surveys with 2,953 respondents, Leung (1998) investigated how lifestyle and the use of media affect the adoption of information technology in urban China. He concluded that among the three types of media consumption (newspaper reading, magazine reading, and primetime TV watching), only newspaper reading is significantly related to new media technologies adoption.

Kang (2002) explored factors associated with the early adoption of digital cable in the US. With respect to media use, early digital cable subscribers were found to spend significantly more time watching television than non-subscribers. However, other media use variables, such as radio listening, newspaper reading, and movie-going did not prove as predictors. For the ownership of technical devices, such as personal computers, video cameras, video game systems, CD players, and VCRs, there was no difference found between subscribers and non-subscribers. For data collection, they conducted 333 telephone interviews in a single Michigan cable market.

Jung, Chan-Olmsted, Park, and Kim (2012) conducted a study on factors affecting e-book reader awareness, interest, and intention to use. According to their findings, among four

types of media use (newspaper, radio, television, and internet) only internet usage was found to relate positively to the dependent constructs. They also reported that respondents who owned more digital devices showed a higher level of e-book reader awareness, interest, and intention to use. Their study was based on 500 personal interviews among South Korean adults.

In conclusion, the use of media technologies has not always been found to be a reliable predictor of adoption. For e-book readers, the ownership of other devices made a difference. For digital cable, VCR and video game systems had no impact. When it comes to media consumption, only the closest related type of media (television to digital cable, internet to e-book) showed significant correlation. For adopters of traditional news websites, the closest related type of media might be other content products that are available both free and with subscription such as audio streaming (such as Spotify, Pandora), video streaming (such as Hulu, Netflix), online games (such as World of Warcraft), and e-books. For example, if measures media technology use and traditional news website adoption are related, the rise of subscription-based streaming services (Griffith, 2012) could imply positive effects on the willingness to pay for online news.

### **Adoption**

An individual's adoption to traditional news websites serves as the dependent variable in the theoretical construct of measuring perceived need for news, characteristics of news websites, and media technology use. The use of traditional news websites can be divided into two aspects, which account for the mechanics of paywalls: the level of article consumption and the willingness to pay. The setup of the most common "metered paywalls" suggests that willingness to pay is high when a reader exceeds a certain number

of articles consumed. Therefore, metered paywalls do not ask for a subscription before a threshold of free articles is reached. Consequently, there might be adopters of news websites who report a consumption of articles, but do not have the intention to pay. Finding factors that make readers pay, however, have been rarely investigated yet, although this question received increasing attention from the news industry.

Willingness to pay (WTP) is an important concept in microeconomics, and this study takes WTP as one dependent variable indicating one's intention to use news websites. In the content market, media products are offered either for free (such as broadcast TV and radio) or for a fee (such as books, newspapers, and cable channels). In the former case, there is usually no need to assess WTP; in the latter case, WTP is often taken for granted. Websites of newspapers have been initially offered as a free supplemental service cross-funded by paper revenues. It soon seemed to become the newspaper industry's consensus that "content must be free unless it is very specialized" (Carlson, 2003, p. 54). At the theoretical level, this "no one would pay for it" phenomenon is related to two economic concepts: a horizontal demand curve and cross-price elasticity of demand. A horizontal demand curve indicates that consumers would consume as much content as they can at the current price, but if the price goes even a cent up, the quantity demanded drops to zero (M. Katz, 1997). As most online news had been free, they showed a horizontal demand curve at the price of zero. In addition, as most users believe that free alternatives for general-interest online news are available, cross-price elasticity is high. Consequently, these low switching costs make readers simply substitute one news resource for another. Several studies have investigated which variables may influence the willingness to pay for media goods.

Hammervold and Solberg (2006) looked at sports interests influencing the willingness of TV viewers to pay for watching sports programs. Their representative sample included 1,000 Norwegians older than 15 years, which were interviewed by telephone. Their findings confirmed that willingness to pay partly relates to certain interests. Winter sports and soccer showed great popularity, however, only soccer fans were significantly motivated to pay. This finding is similar to a consumer survey on news consumption by Middelweerd and van der Donk (2009) in which respondents expressed on average no willingness to pay for general news and background information, but were willing to pay for sports and financial content.

Looking specifically at demographics and media use, Chyi (2005) investigated the intent to pay for online news among 853 Hong Kong residents participating in a random-sample telephone survey. A hierarchical regression analysis showed that age and newspaper use was related to paying intent, whereas income was not. WTP was measured by a 4-point Likert-scale (very unlikely to very likely) followed by an open-ended question probing the reason behind the answer.

Sindik and Graybeal (2011) took a brand loyalty perspective to assess college students' willingness to pay for online news. Indeed, when asked to select one paper they were most willing to pay for, the 464 participants of the online survey selected newspapers with strong brands, such as the *New York Times* or *The Wall Street Journal*. Thirty-six percent of the readers of the *NYT* paper indicated that they would pay a nominal fee to read it online, whereas 19% of the *WSJ* readers would pay for their paper online. However, also 46% of the respondents stated that they would never pay for online news content. WTP was measured by a scale of price ranges.

As paywalls are now being widely introduced among news websites, it is not clear how predictive these previous studies remain. The more websites erect paywalls, the higher the switching costs for readers. In addition, metered paywalls now start charging at a certain article threshold, which changes the horizontal demand curve, too.

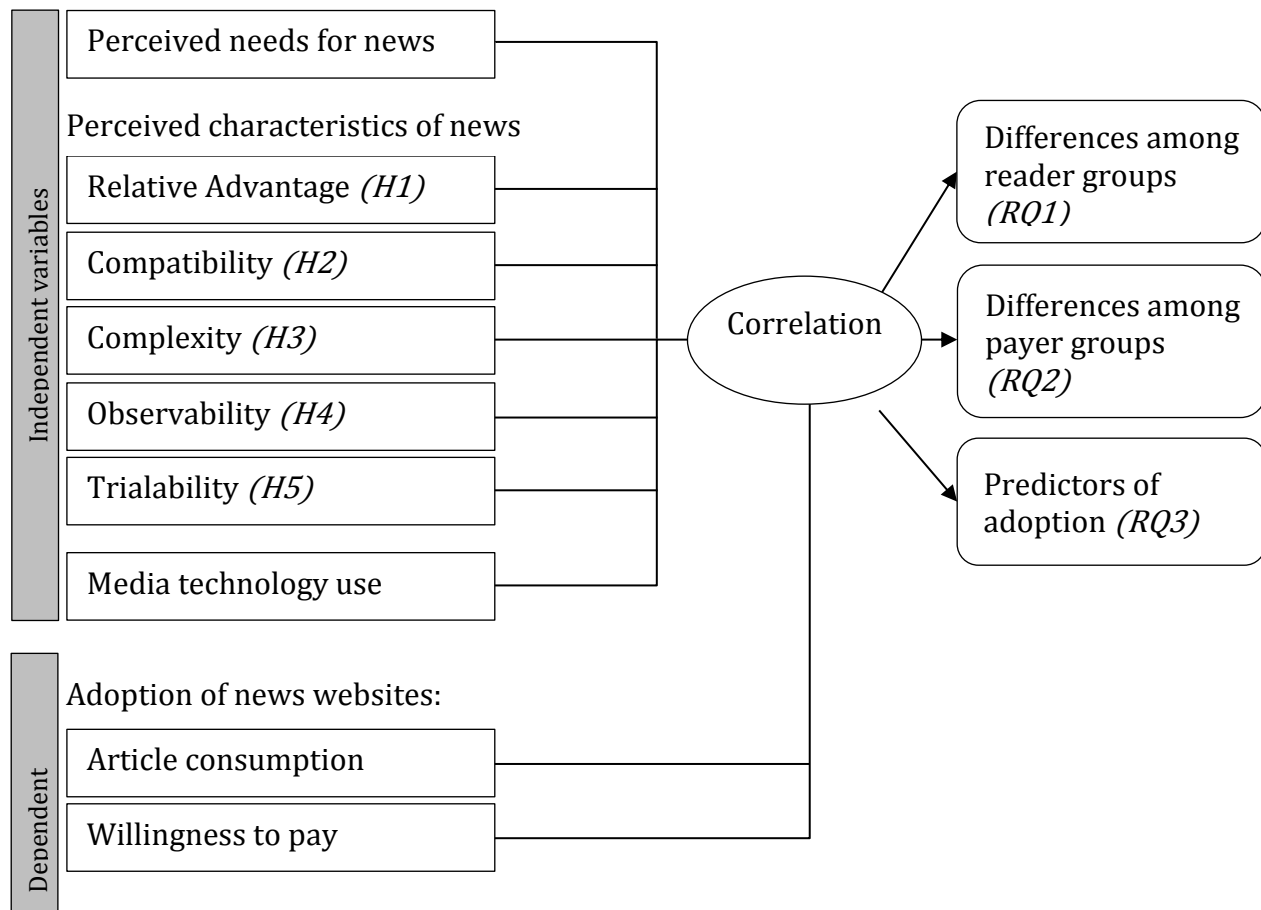


Figure 1. Research Construct.

## Method

### Sample

A survey of college students between the ages of 18 and 29 years was conducted at the Rochester Institute of Technology in Rochester, New York. Surveys intend to “find out ‘how many’ feel, think or behave in a particular way,” (Hammervold & Solberg, 2006, p. 138) and are efficient means of gathering data from large numbers of people (Rubin, 1999). The author favored a pen-and-paper survey over an online survey because it allowed better control over the sample and was more likely to achieve higher response rates (Nulty, 2008). The data was collected in April and May 2013 at the beginning of 12 undergraduate and four graduate classes with students filling out the questionnaire after a short introduction by the author. All classes, chosen because of the instructors’ familiarity with the author’s research, took place at the colleges of business, liberal arts, or computer science.

Among the 303 respondents, there were 178 (58.7%) male students and 148 (41.3%) female students; 239 (78.9%) undergraduate students and 64 (21.1%) graduate students. The average age of all respondents was 21.75. Two questionnaires were excluded prior to the analysis as their age did not fall in the defined range.

In the case of the reader categories, a one-way ANOVA was conducted in order to divide the sample into three groups (see Table 5).

The analysis determined the highest degree of significant disparity between the groups at the consumption levels of 10 and 65 articles per month. Consequently, participants that reported reading 10 or less articles a month were assigned to the adoption category of light readers ( $n = 115$ , 38%). Those with consumption greater than 10 and less than 65 articles per month were seen as medium readers ( $n = 135$ , 45%). Finally, as heavy readers ( $n = 42$ ,

14%) accounted for those who said they read more than 65 articles per month. Eleven participants (4%) had not reported any number on their monthly article consumption and were consequently excluded from further analysis.

For the payer categories, the research discriminated between four groups: (1) those reading more than 10 articles a month and willing to pay, (2) those reading more than 10 articles a month but unwilling to pay, (3) those reading less than 10 articles a month and willing to pay, and (4) those reading less than 10 articles and unwilling to pay. Figure 1 shows the frequencies of these groups. For simplicity, these groups will be called (1) Readers & Payers, (2) Readers & Non-Payers, (3) Non-Readers & Payers, and (4) Non-Readers & Non-Payers.

Table 1

*Frequencies of Payer Categories (Missing values:  $n = 10$ )*

Willingness to pay	Yes	(3) Non-Readers & Payers $n = 14$ 5%	(1) Readers & Payers $n = 48$ 16%
	No	(4) Non-Readers & Non-Payers $n = 101$ 35%	(2) Readers & Non-Payers $n = 129$ 44%
		$\leq 10$	$> 10$
		Article consumption/month	

### **Measures of Key Variables**

**Perceived needs for news.** As seen in the review of literature, U&G research has identified various motivations for consuming news and newspapers in digital media. For traditional news websites, this study adopted items from earlier research (Blood, Keir, & Namjun, 1983; Palmgreen, Wenner, & Rayburn II, 1980; A. M. Rubin, 1981) and grouped them into the five motivation categories of understanding, surveillance, entertainment, interpersonal utility, and passing time. A majority of similar studies have measured the items (such as “I use news websites to find information I need.”) with a five-point Likert scale as opposed to asking how frequently the need was experienced. Consequently, in this research, respondents were asked to indicate to which extent they agree on the statement in the question items (strongly agree, agree, neutral, disagree or strongly disagreed). Each motivation category was loaded with two question items which added up to 10 statements in total ranked in random order on the questionnaire.

**Perceived characteristics.** The independent variables of perceived characteristics of traditional news websites (relative advantage, compatibility, complexity, observability, trialability) were measured, again, on a five-point Likert scale ranging from ‘strongly agree’ to ‘strongly disagree’. Each variable was loaded with one to three statement items (such as “I believe that it is easy to identify important news on traditional news websites.”), which had been developed based on past research (Davis, 1989; T. Lin et al., 2011; Moore & Benbasat, 1991) and current aspects (such as relative advantage was asked in comparison to blogs). The 12 statement items were ranked in random order on the questionnaire.

**Media technology use.** The questionnaire asked respondents in a multiple-response question to indicate which media technologies and web services they usually use at least



once a month. The options included content products that are, similarly to traditional news websites, available both free and with subscription namely audio streaming (such as Spotify, Pandora), video streaming (such as Hulu, Netflix), online games (such as World of Warcraft), and e-books. In addition, respondents were asked how much money they spend monthly on each media technology. In case they do not spend money on it at all, respondents were supposed to leave the field blank. The author decided to allow an open-ended response because price scales differ greatly among the media technologies.

**Adoption.** This study divided the adoption construct into two variables, assuming that users would consider consuming and paying differently in evaluating the adoption of news websites. For consuming, the respondents were asked to indicate the number of news articles they consumed during an average month on any traditional news website. Right after, for paying, the questionnaire asked how much the student is willing to pay for these news articles per month. Again, the author decided to allow an open-ended response for two reasons. First, because there is no reliable data on student's weekly article consumption and related spending from which an appropriate scale of consumption and price points could be created. Second, to prevent respondents from being biased by the applied scale. Finally, as the second item for willingness to pay, the questionnaire asked for providing reasons that led the respondent to the price point decision in order to give additional meaning to the provided answers.

Table 2

*Questionnaire Items for Dependent and Independent Variables*

Construct	Variable	Item(s)
<b>Independent variables</b>		
Perceived needs (Blood, Keir, & Namjun, 1983; Palmgreen et al., 1980; A. M. Rubin, 1981)	Understanding	I consume news websites because it helps me to understand important issues. (A8) I consume news websites to find information I need. (A5)
	Surveillance	I consume news websites to know what happens in the world and in my community. (A6) I consume news websites to keep with current issues and events. (A7)
	Entertainment	I consume news websites because it entertains me. (A3) I consume news websites because it is enjoyable. (A9)
	Interpersonal utility	I consume news websites to give me interesting things to talk about. (A4) I consume news websites to support my own viewpoints to other people. (A2)
	Passing time	I consume news websites because it gives me a way to relax and pass the time. (A10) I consume news websites because it gives me something to do to occupy my time. (A1)
Perceived characteristics (Davis, 1989; Lin et al., 2011; Moore & Benbasat, 1991)	Relative advantage	Using traditional news websites enables me to get useful news more quickly than from blogs. (B4) Using traditional news websites enables me to get news of higher quality than from blogs. (B5) Using traditional news websites enables me to get news easier than from blogs. (B6)
	Compatibility	I think that using traditional news websites fits well with the way I like consume news. (B2) Most traditional news websites meet my expectations of a good news website. (B11)
	Complexity	I believe that it is easy to identify important news on traditional news websites. (B9) Using traditional news websites is an easy way for me to get informed. (B7) Using traditional news websites is often frustrating for me. (B12)
	Observability	I frequently see on social networks when friends read articles from traditional news websites. (B10) Traditional news websites are not very visible on social networks I belong to. (B8) How many people have shared an article to social networking sites is a feature that I frequently recognize on traditional news websites. (B1)
	Trialability	I've had a great deal of opportunity to try various traditional news websites. (B3)
Media technology use	Audio streaming	I use audio streaming services such as Spotify or Pandora at least once a month. Amount of money I spend on it monthly.
	Video streaming	I use video and movie streaming services such as Netflix and Hulu at least once a month. Amount of money I spend on it monthly.
	Online games	I play online games or videogames with online-multiplayer such as World of Warcraft at least once a month Amount of money I spend on it monthly, including fees.
	E-Book	I read digital books/e-books at least once a month. Amount of money I spend on it monthly.
<b>Dependent variables</b>		
Adoption	Consumption	Number of news articles consumed on any traditional news website yesterday
	Willingness to pay	Amount of money, which I'm willing to pay for these news per month I decided for this price because...

**Scale Reliability**

Cronbach's alpha was used to measure the reliability of the variables in the research framework (see Table 3). All variables achieved a reliability coefficient of 0.70 or higher, except the variables interpersonal utility and compatibility. To investigate the usability of their scales, the items were examined further. It was found that the item-to-total correlations exceeded 0.50 (Hair, Anderson, Tatham, & Black, 2010). The decision was made to retain the items in the analysis, but that they would be used with caution.

Table 3

*Construct Measurement and Scale Reliability*

Construct/Variable	No. of items	Mean ( <i>SD</i> )	Cronbach's alpha
Perceived needs			
Understanding	2	4.06 <sup>a</sup> (0.759)	0.710
Surveillance	2	4.25 <sup>a</sup> (0.751)	0.871
Entertainment	2	3.55 <sup>a</sup> (0.844)	0.787
Interpersonal Utility	2	3.37 <sup>a</sup> (0.792)	0.563*
Passing Time	2	3.24 <sup>a</sup> (0.894)	0.702
Perceived characteristics			
Relative Advantage	3	3.53 <sup>a</sup> (0.905)	0.828
Compatibility	2	3.45 <sup>a</sup> (0.733)	0.683*
Complexity	3	3.75 <sup>a</sup> (0.666)	0.714
Observability	3	3.21 <sup>a</sup> (0.838)	0.762
Trialability	1	3.67 <sup>a</sup> (0.942)	n/a
Media technology use			
Audio streaming	1	0.71 <sup>b</sup> (0.456)	n/a
Audio streaming (\$)	1	0.94 <sup>c</sup> (3.206)	n/a
Video streaming	1	0.79 <sup>b</sup> (0.928)	n/a
Video streaming (\$)	1	5.07 <sup>c</sup> (6.350)	n/a
Online Games	1	0.26 <sup>b</sup> (0.442)	n/a
Online Games (\$)	1	11.68 <sup>c</sup> (28.075)	n/a
E-Books	1	0.36 <sup>b</sup> (0.480)	n/a
E-Books (\$)	1	17.12 <sup>c</sup> (36.028)	n/a
Adoption			
Consumption	1	35.14 (53.460)	n/a
Willingness to pay (\$)	1	2.25 (6.556)	n/a

\*  $p < 0.7$ .<sup>a</sup> 5-point Likert scale (from 1: strongly disagree to 5: strongly agree).<sup>b</sup> Mean of adopters (1 = have) and non-adopters (0 = have-not).<sup>c</sup> Mean among adopters only.

**Data Analysis Method**

For analyzing the data, a variety of methods were used. A one-way analysis of variance (ANOVA), a generalization of an independent-samples  $t$ -test (Colman & Pulford, 2008), was applied for determining the significance of differences between the three adopter categories. For finding out the differences between payers and non-payers, two independent-samples  $t$ -tests were conducted. Furthermore, hierarchical linear regression was used to investigate the predictive strength and direction of the independent variables on the dependent variables as well as the individual contribution of the blocks (needs, characteristics, media technology use) to the model. In the effort to reduce drawbacks of the predictive power due to high variances of the dependent variables, the odds of being in one of three adopter groups (Readers & Payers, Readers & Non-Payers, Non-Readers & Non-Payers) were calculated with the use of multinomial logistic regression.

The open-ended responses on the reasons why participants decided for a certain price point were coded by the author into seven categories. Table 4 provides exemplary answers for each of the categories. Finally, for investigating the relationship between certain response categories and adopter categories, the author conducted a chi-square test.

Table 4

*Coding Examples for Reasons for Willingness to Pay*

Response category*	Exemplary answers
It's fair	I think it's fair. It seems fair considering the large volume of subscriptions.
I can get news for free elsewhere	Why pay when I can get info for free? If one site charges another will be free.
I believe news/ information should be free	I do not believe we should pay for news. Content should empower people.
I don't read them often	I don't use it. I'm not fully dependent on these sites.
I don't have the money	I'm too poor to pay for news. I'm a college student without a job.
Other	Most news is very biased or incorrect anyway. I've never paid for it in the past.

\* The 7<sup>th</sup> category was "No comment".

## Results

### Light Readers versus Medium Readers versus Heavy Readers (RQ1)

*RQ1* asks whether three categories of consumption are different in terms of the suggested independent and dependent constructs such as perceived needs, perceived characteristics, media technology use, and willingness to pay for articles as well as basic demographics. The results of the one-way ANOVA showed some significant differences between light readers ( $\leq 10$  articles/month), medium readers (11- 64), and heavy readers ( $\geq 65$ ). First, the categories were found to be significantly different in terms of their needs for news in general. Except for understanding, which was reported equally important across all categories, medium and heavy readers perceived it is more important to keep up with current issues (surveillance), to be entertained, to get interesting things to talk about (interpersonal utility), and to pass time with news. Second, except for the chance to try out various traditional news websites (trialability), none of the perceived characteristics of traditional news websites were found to be significantly different among the categories – although relative advantage, compatibility, and observability came very close to significance. Third, the use of similar media technologies did not differ greatly across the categories; however, e-books were significantly more often adopted in categories with higher article consumption. Similarly, the willingness to pay for these media technologies was equally steady, except for audio streaming, in which frequent readers reported to spend more money. Fourth, when participants were reading more articles, they were also willing to pay more money for them. Whereas light readers, reading on average only five articles per month, were willing to pay 86 cents averagely, medium readers intended to pay \$3.19 on the 31 articles that they consumed on average. Heavy readers, reading an

excessive number of 140 articles per month, suggested a monthly payment of \$3.24 for these articles. Finally, frequent readers tended to be older and gender was not found to be a significant difference among the adoption categories.



Table 5

*Analysis of Variance: Light Readers vs. Medium Readers vs. Heavy Readers*

Construct/Variable	Light Readers		Medium Readers		Heavy Readers		ANOVA	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Perceived needs								
Understanding	3.96	0.79	4.09	0.75	4.14	0.72	1.75	0.156
Surveillance	3.99	0.78	4.36	0.73	4.60	0.52	9.33	0.000***
Entertainment	3.27	0.91	3.66	0.75	3.95	0.67	8.91	0.000***
Interpersonal Utility	3.17	0.83	3.42	0.75	3.65	0.68	5.27	0.001**
Passing Time	2.94	0.89	3.38	0.80	3.68	0.86	9.58	0.000***
Perceived characteristics								
Relative Advantage	3.36	0.92	3.65	0.86	3.58	0.95	2.31	0.076
Compatibility	3.30	0.79	3.51	0.68	3.58	0.72	2.50	0.060
Complexity	3.67	0.69	3.78	0.64	3.87	0.72	1.14	0.334
Observability	3.06	0.84	3.33	0.80	3.27	0.83	2.32	0.076
Trialability	3.43	0.93	3.80	0.87	4.00	1.04	5.44	0.001**
Media technology use								
Audio streaming	0.72	0.45	0.72	0.45	0.62	0.49	0.81	0.491
Audio streaming (\$)	\$0.50	\$2.18	\$0.39	\$1.87	\$1.38	\$4.54	4.59	0.004**
Video streaming	0.90	1.39	0.71	0.45	0.76	0.43	0.84	0.474
Video streaming (\$)	\$3.17	\$5.58	\$4.05	\$6.29	\$4.29	\$5.87	0.65	0.585
Online Games	0.21	0.41	0.31	0.46	0.29	0.46	1.28	0.282
Online Games (\$)	\$3.90	\$20.19	\$2.37	\$9.98	\$3.45	\$15.56	0.24	0.868
E-Books	0.36	0.48	0.31	0.46	0.55	0.50	2.77	0.042*
E-Books (\$)	\$6.36	\$23.41	\$4.63	\$18.95	\$11.67	\$34.17	1.13	0.337
Adoption								
Consumption	4.97	3.80	30.93	14.16	186.62	139.56	183.00	-
WTP (\$)	\$0.86	\$2.64	\$3.19	\$7.92	\$3.24	\$ 8.81	3.10	0.027*
Age	21.49	2.20	21.85	2.97	22.17	3.18	0.77	0.513
Sex	0.52	0.50	0.58	0.50	0.86	0.35	5.92	0.001**

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

It has to be noted though that medium and heavy readers were not significantly different in terms of most of the constructs. A *t*-test found that heavy readers used more audio streaming ( $p = 0.038$ ) and e-books ( $p = 0.016$ ) and spend significantly more on both of them. Heavy readers were also more frequently male than medium readers ( $p = 0.001$ ).

### **Payers versus Non-payers (RQ2)**

RQ2 is concerned with whether those willing to pay are different in terms of the suggested independent constructs from those not willing to pay. The review of literature suggested that there might be people who frequently turn to traditional news websites but do not intend to pay for it. The attitudes of this group can be expected to be significantly different to those who are also unwilling to pay but consume traditional news websites far less frequently. Consequently, the sample was divided into the groups of Readers & Payers, Readers & Non-Payers, Non-Readers & Payers, and Non-Readers & Non-Payers (see Method section for frequencies). *T*-tests found some significant differences between the group Readers & Payers and the two groups unwilling to pay, Readers & Non-Payers and Non-Readers & Non-Payers. The group Non-Readers & Payers was not investigated due to its small sample size.

Among those who read more than 10 articles per month, payers and non-payers were found to differ in their need for surveillance, their perception of observability, and expenses for online games. Also, relative advantage and trialability came close to significance. In addition, payers were on average almost one year older than non-payers (22.52 to 21.71). Surprisingly, with a significance of 0.079, payers read on average less articles a month than non-payers (72 to 56).

Between Readers & Payers and Non-Readers & Non-Payers, the first reported a higher need for entertainment, higher observability and trialability, and the less frequent use of online games. Furthermore, payers were again found to be older (22.52 to 21.59) and, with a significance of 0.082, more often males.

Table 6

*Analysis of Variance: Readers & Payers against Readers & Non-Payers, Reader & Payers against Non-Readers & Non-Payers*

Construct/Variable	Readers & Payers		Readers & N-Payers		<i>t</i> -test		N-Readers & N-Payers		<i>t</i> -test	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Perceived needs:										
Understanding	4.38	0.63	4.00	0.75	0.29	0.590	3.93	0.81	1.09	0.298
Surveillance	4.58	0.52	4.35	0.74	4.03	0.046*	4.00	0.81	1.23	0.269
Entertainment	3.83	0.66	3.69	0.76	1.22	0.270	3.25	0.93	6.03	0.015*
Interpersonal Utility	3.60	0.66	3.43	0.77	1.16	0.283	3.18	0.82	2.07	0.153
Passing Time	3.46	0.75	3.45	0.85	0.65	0.421	2.95	0.90	2.09	0.150
Perceived characteristics:										
Relative Advantage	3.78	0.73	3.57	0.92	3.27	0.072	3.35	0.93	1.20	0.275
Compatibility	3.60	0.67	3.50	0.69	0.13	0.719	3.25	0.80	1.22	0.272
Complexity	3.95	0.66	3.74	0.65	0.02	0.884	3.64	0.70	0.00	0.997
Observability	3.46	0.66	3.26	0.85	7.00	0.009*	3.05	0.86	6.88	0.010*
Triability	3.98	0.82	3.80	0.95	3.68	0.057	3.42	0.94	9.39	0.003*
Media technology use:										
Audio streaming	0.69	0.47	0.70	0.46	0.07	0.798	0.72	0.45	0.73	0.393
Audio streaming (\$)	\$0.73	\$2.52	\$0.59	\$2.85	0.25	0.614	\$0.57	\$2.32	0.54	0.464
Video streaming	0.71	0.46	0.73	0.45	0.27	0.601	0.93	1.47	0.02	0.899
Video streaming (\$)	\$3.94	\$5.47	\$4.17	\$6.45	0.67	0.414	\$3.39	\$5.81	0.20	0.652
Online Games	0.29	0.46	0.31	0.46	0.23	0.632	0.20	0.40	5.77	0.018*
Online Games (\$)	\$1.04	\$3.74	\$3.22	\$13.26	4.23	0.041*	\$4.25	\$21.49	3.64	0.059
E-Books	0.33	0.48	0.38	0.49	1.48	0.225	0.34	0.47	0.01	0.937
E-Books (\$)	\$4.48	\$15.92	\$6.98	\$25.84	1.14	0.288	\$5.01	\$21.78	0.03	0.867
Adoption Consumption	56.35	75.31	72.16	101.80	3.13	0.079	5.11	3.88	32.08	0.000
Age	22.52	3.89	21.71	2.61	5.90	0.016*	21.59	2.27	6.88	0.010*
Sex	0.63	0.49	0.65	0.48	0.38	0.539	0.55	0.50	3.07	0.082

**Predictors for Adoption (RQ3)**

*RQ3* aimed at finding factors that directly affect the consumption and willingness to pay for news articles on traditional news websites. Hierarchical multiple regressions were performed to examine the research question, and four variable blocks were entered at different steps. Age and sex were entered as a first block, followed by perceived needs (i.e. understanding, surveillance, entertainment, interpersonal utility, passing time), perceived characteristics (relative advantage, compatibility, complexity, observability, trialability), and media technology use and expenses. The models resulting from the hierarchical multiple regressions showed good overall fit for the prediction of article consumption, comparable to similar studies (Chang et al., 2006; Jung et al., 2012; T. Lin et al., 2011). However, the model for predicting the willingness to pay failed to explain more than 8.1% of the total variance. Table 7 summarizes the models.

Table 7

*Model Summary Hierarchical Regression Analyses for Predicting Adoption*

Variable	Article consumption				Willingness to pay			
	$R^2$	$\Delta R^2$	Ad. $R^2$	$F$	$R^2$	$\Delta R^2$	Ad. $R^2$	$F$
<i>Block 1:</i> Demographics	0.017	0.017	0.010	2.449	0.007	0.007	0.000	0.967
<i>Block 2:</i> Perceived needs	0.113	0.095	0.090	4.902*	0.050	0.043	0.025	2.021
<i>Block 3:</i> Perceived characteristics	0.133	0.021	0.094	3.396*	0.069	0.019	0.026	1.625
<i>Block 4:</i> Media technology use	0.169	0.036	0.105	2.618*	0.081	0.013	0.010	1.135

\* $p < 0.05$ .

In the first hierarchical regression equation for predicting article consumption, the model yielded an *R*-squared value of 16.9%. The most significant predictor variable block was perceived needs which explained 9.5% of the total variance. In this block, surveillance was the most significant and strongest ( $\beta = 0.217$ ) factor. The need for understanding ( $\beta = -0.116$ ) and entertainment ( $\beta = 0.148$ ) were close to significance. The block of media technology use was able to explain 3.6% of the total variance, however, only expenses on audio streaming ( $\beta = 0.147$ ) emerged as a significant predictor. Among the demographics, explaining 1.7% of the total variance, gender was found to be a significant factor ( $\beta = 0.123$ ). In the block of perceived characteristics, explaining 2.1% of the total variance, none of the variables yielded a significant predictive value, however, trialability came close ( $\beta = 0.108$ ).

In the second hierarchical regression for predicting willingness to pay, only one variable, understanding with  $\beta = 0.166$ , emerged as significantly predictive. Age ( $\beta = 0.078$ ) and observability ( $\beta = 0.092$ ) were close to significance.

Table 8

*Hierarchical Regression Analyses for Predicting Adoption*

Construct/Variable	Article Consumption		Willingness to pay	
	Stand. Beta	<i>p</i>	Stand. Beta	<i>p</i>
Age	0.037	0.536	0.078	0.195
Sex	0.123	0.042*	-0.038	0.526
Perceived needs:				
Understanding	-0.116	0.109	0.166	0.027*
Surveillance	0.217	0.003*	0.045	0.545
Entertainment	0.148	0.061	0.003	0.975
Interpersonal Utility	0.068	0.327	-0.004	0.959
Passing Time	0.036	0.623	0.046	0.543
Perceived characteristics:				
Relative Advantage	0.060	0.419	0.038	0.625
Compatibility	-0.100	0.210	0.065	0.431
Complexity	0.050	0.538	0.025	0.762
Observability	0.038	0.553	0.092	0.167
Triability	0.108	0.092	0.034	0.605
Media technology use:				
Audio streaming	-0.061	0.308	0.071	0.261
Audio streaming (\$)	0.147	0.016*	-0.036	0.575
Video streaming	-0.033	0.574	-0.055	0.377
Video streaming (\$)	0.077	0.205	0.006	0.929
Online Games	-0.038	0.580	-0.030	0.678
Online Games (\$)	0.074	0.341	-0.070	0.388
E-Books	0.096	0.137	0.008	0.908
E-Books (\$)	-0.090	0.246	0.040	0.623

\* $p < 0.05$ .



A high variance for the measures of the dependent variables, which had allowed an open-ended response, depressed the predictive powers of the models. For example, article consumption ranged from as low as zero to as high as 500 articles, with a mean of 43 articles and a standard deviation of 80. Willingness to pay ranged from zero to \$50, with a mean of \$2.25 and a standard deviation of 6.56. In order to minimize this effect, a multinomial logistic regression was conducted using the group Non-Readers & Non-Payers as reference for predicting Readers & Payers and Readers & Non-Payers. The model yielded a pseudo  $R^2$  of 0.334 (Cox and Snell), 0.37 (Nagelkerke), and 0.174 (McFadden).

For being a Reader & Non-Payer, the needs for understanding ( $\beta = -0.496$ ), surveillance ( $\beta = 0.630$ ), and passing time ( $\beta = 0.469$ ) were identified as significant predictors. For example, if a reader was to increase his perception measure of surveillance by one point, the multinomial log-odds of being a Reader & Non-Payer over being a Non-Reader & Non-Payer would be expected to increase by 0.630 units while holding all other variables in the model constant. On the contrary, a higher need understanding was found to make it more likely to be a Non-Reader & Non-Payer. Furthermore, trialability ( $\beta = 0.505$ ), which is the perception that traditional news websites can be easily tried out, emerged as a highly significant factor predicting Readers & Non-Payers. The characteristic complexity ( $\beta = -0.610$ ) and the use of online games ( $\beta = -0.837$ ) were close to significance. In contrast to the hierarchical regression analysis, gender was not found to be a significant predictor of article consumption.

For being a Reader & Payer, trialability ( $\beta = -0.549$ ) emerged again as a significant factor. At the same time, if someone reported to consume online games it decreased the odds of being a Reader & Payer by 1.135 units while holding all other variables in the model

constant. The need for surveillance ( $\beta = 0.712$ ) came close to be a significant predictor of willingness to pay for those who reported low article consumption.

Table 9

*Multinomial Logistic Regression for Predicting Being a Reader & Non-Payer and Reader & Payer*

Construct/Variable	Reader & Non-Payer			Reader & Payer		
	Beta	<i>p</i>	Exp (B)	Beta	<i>p</i>	Exp (B)
Age	-0.014	0.830	0.986	0.090	0.255	1.094
Sex <sup>1</sup>	-0.233	0.483	0.792	-0.322	0.465	0.724
Perceived needs:						
Understanding	-0.496	0.044*	0.609	0.182	0.626	1.200
Surveillance	0.630	0.013*	1.878	0.712	0.052	2.039
Entertainment	0.360	0.151	1.433	0.231	0.488	1.260
Interpersonal Utility	0.015	0.947	1.015	0.247	0.411	1.280
Passing Time	0.469	0.035*	1.599	0.351	0.215	1.421
Perceived characteristics:						
Relative Advantage	0.235	0.291	1.265	0.246	0.376	1.279
Compatibility	0.320	0.255	1.377	0.352	0.339	1.422
Complexity	-0.610	0.055	0.543	-0.350	0.400	0.704
Observability	0.138	0.484	1.148	0.270	0.312	1.310
Trialability	0.505	0.005*	1.657	0.549	0.031*	1.731
Media technology use:						
Audio streaming <sup>2</sup>	0.043	0.903	1.044	-0.082	0.862	0.921
Audio streaming (\$) <sup>3</sup>	-	-	-	-	-	-
Video streaming <sup>2</sup>	0.626	0.113	1.870	0.733	0.151	2.081
Video streaming (\$)	0.060	0.065	1.062	0.040	0.358	1.041
Online Games <sup>2</sup>	-0.837	0.051	0.433	-1.135	0.043*	0.321
Online Games (\$)	-0.008	0.556	0.993	-0.048	0.281	0.953
E-Books <sup>2</sup>	0.038	0.916	1.039	0.580	0.248	1.786
E-Books (\$)	.006	0.581	1.006	0.009	0.530	1.010

<sup>1</sup> Binary scale. Male was the reference category

<sup>2</sup> Binary scale. To own/use the technology was the reference category

<sup>3</sup> Variable was excluded because it resulted in a complete or quasicomplete separation (Hosmer & Lemeshow, 2013).

Five hypotheses aimed specifically at the role of perceived characteristics, which have not been investigated yet in regard to online news. *H1* was partly supported. The perception of a traditional news website's relative advantage over blogs was found to be a differentiator between light readers on the side, and medium and heavy readers on the other side. In general, the factor worked to the benefit of news websites (mean: 3.24) making article consumption ( $\beta = 0.060$ ), paying intent ( $\beta = 0.038$ ), being a Reader & Non-Payer ( $\beta = 0.235$ ), and being a Reader & Payer ( $\beta = 0.246$ ) more likely. However, in none of the cases was relative advantage found to be a significant predictor.

*H2* was not supported. Except for the prediction of article consumption ( $\beta = 0.246$ ), a perception that traditional news websites are compatible with the way readers like to consume news increased the odds for willingness to pay ( $\beta = 0.246$ ), for being a Reader & Non-Payer ( $\beta = 0.246$ ), and Reader & Payer ( $\beta = 0.246$ ). With a mean of 3.45 respondents had a slightly positive, not negative, impression about the compatibility of new traditional news websites. The factor was not significant enough for being a predictor of adoption.

*H3* was not supported, too. Contrary to the expectation that existing traditional news websites are too complex, most respondents reported that they are an easy way for them to become informed. In fact, non-complexity (the scale was reversed) achieved the highest mean, 3.75, of all perceived characteristics. Interestingly, whereas a low complexity was found to slightly increase the odds for article consumption ( $\beta = 0.050$ ) and willingness to pay ( $\beta = 0.025$ ), it decreased the chances of being a Reader & Non-Payer ( $\beta = -0.610$ ,  $p = 0.055$ ) as well as being a Reader & Payer ( $\beta = -0.350$ ). Although sometimes close to it, the factor has not been found significant enough.

*H4* was not supported. Although more respondents agreed than disagreed that articles from traditional news websites are frequently visible on social networks, particularly Readers & Payers, the factor achieved with 3.21 the lowest mean of all characteristics. In general, a high observability increased the odds for adoption, but never in a significant manner.

*H5* was fully supported. The perception that traditional news websites can be easily tried out, hence, respondents had a great deal of opportunity to try various sites, was found to be a strong predictor of reading, making article consumption ( $\beta = 0.108$ ) and being a Reader & Non-Payer ( $\beta = 0.505$ ) more likely. It was not significant enough to predicts willingness to pay, however, it increased the odds of being a Payer & Reader as opposed to being a Non-Reader and Non-Payer ( $\beta = 0.549$ ). With a mean of 3.67, more people agreed than disagreed that traditional news websites can be easily tried out.

Table 10

*Overview of Significant Independent Factors*


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Level of consumption	Payers vs. Non-Payers
– Surveillance	– Surveillance
– Entertainment	– Entertainment
– Interpersonal Utility	– Observability
– Passing Time	– Trialability
– Trialability	– Online Games
– Audio streaming (\$)	– Online Games (\$)
– E-books	– Age
– Sex	
Predictors for article consumption	Predictors for Reader & Payers
– Sex	– Understanding
– Surveillance	– Surveillance
– Audio Streaming (\$)	– Passing time
	– Trialability
Predictors for willingness to pay	Predictors for Reader & Non-Payers
– Understanding	– Trialability
	– Online Games

**Reasons for Willingness to Pay (RQ4)**

*RQ4* aimed at the reasons why respondents decided for the price they were willing to pay for the articles they consume during an average month. Overall, the argument that news can be found elsewhere for free was the most frequent reason, provided by more than a quarter of the respondents. Also, a surprisingly large number of respondents (13.2%) said that they believe news and information should be free at all. About 8% just found their price a reasonable and fair amount and an equal number justified their price with their low consumption. Furthermore, about 5% decided for their prices due to their limited financial means and 36.6% provided either other reasons or no comment.

Table 11

*Frequencies for Reasons for Willingness to Pay*

Answers	Total		Readers & Payers		Readers & Non-Payers		Non-Readers & Non-Payers	
	%	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
It's fair	8.3	25	37.5	18	0.0	0	0.0	0
I can get news for free elsewhere	28.4	86	8.3	4	42.6	55	24.8	25
I believe news/information should be free	13.2	40	6.3	3	17.8	23	13.9	14
I don't read them often	8.3	25	2.1	1	1.6	2	20.8	21
I don't have the money	5.3	16	8.3	4	6.2	8	2.0	2
Other	12.2	37	16.7	8	14.7	19	7.9	8
No comment	24.4	74	20.8	10	17.1	22	30.7	31

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Non-Readers & Payers not displayed.



A chi-square test of independence revealed that there was a significant relationship between the kind of answer a respondent gave and the adopter group that he or she fell in ( $\chi^2 = 142.752$ ,  $df = 12$ ,  $p < 0.001$ ). With a comparison of the standardized residuals, indicating how many standard deviations above or below the expected count of an answer was, the significant relations were identified. With little surprise, there was a strong relationship between being a Reader & Payer and justifying a price as “fair”. At the same time, free alternatives and were the significant reasons for frequent readers that were unwilling to pay. Finally, the major price point reason for Non-Readers & Non-Payers was their limited consumption. The belief that news should be free and limited financial mean did not prove to have a significant relationship with any of the adopter groups. They were justifications no matter how many articles young people read or how much they were willing to pay.

Table 12

*Chi-Square Test for Reasons for Willingness to Pay*

Answers <sup>a</sup>	Readers & Payers	Readers & Non-Payers	Non-Readers & Non-Payers <sup>b</sup>
It's fair			
Observed Count	18.0	0.0	0.0
Expected Count	3.1	8.4	6.5
Std. residual	8.4*	-2.9*	-2.6*
I can get news for free elsewhere			
Observed Count	4.0	55.0	25.0
Expected Count	14.5	39.0	30.5
Std. residual	-2.8*	2.6*	-1.0
I believe news/ information should be free			
Observed Count	3.0	23.0	14.0
Expected Count	6.9	18.6	14.5
Std. residual	-1.5	1.0	-0.1
I don't read them often			
Observed Count	1.0	2.0	21.0
Expected Count	4.1	11.1	8.7
Std. residual	-1.5	-2.7*	4.2*
I don't have the money			
Observed Count	4.0	8.0	2.0
Expected Count	2.4	6.5	5.1
Std. residual	1.0	0.6	-1.4

<sup>a</sup> Answers "Other" and "No comment" not displayed.

<sup>b</sup> Non-Readers & Payers not included in the analysis.

\* > 1.96 or < -1.96 indicating significance (Sheskin, 2003).

### **Discussion**

Amid advancing web technologies, the growing number of devices for mobile content consumption, and new ways of digital journalism, online news is an established form of media. However, little is known about the decision-making process pertaining to the adoption of traditional news websites, particularly by the youngest generation of readers and with regard to the growing number of paywalls that put a price tag on what has been free before. Based on the frameworks of IDT and U&G theory, the author conducted a survey among over 300 college students to identify the predictors of online news reading diffusion with regard to consumption level and willingness to pay.

#### **Frequent News Readers Show Higher Needs, Read More E-Books**

In a first step, the research identified factors that differentiate certain groups of adopters. When looking at the level of article consumption during an average month, medium and heavy readers reported higher needs for news than light readers. For those reading more than 10 articles a month, it was important to keep up with current issues and to get interesting things to talk about. They even wanted to be entertained by news or simply pass the time. This finding is consistent with previous research. That young readers attempt to fulfill certain needs when turning to online news, confirms U&G theory and underlines the high value of media content. It also adds evidence to the claim that needs do not differ greatly whether news is on paper or online (C. Lin et al., 2003). As much as U&G has been popular in newspaper research in the past (Elliott & Quattlebaum, 1979; Lichtenstein & Rosenfeld, 1983; Weaver, 1980) and in the present (Chung & Yoo, 2006; Diddi & LaRose, 2006), the theory may offer little to effectively explain the differences between “old” and “new” mediums. Furthermore, the differences in e-book consumption may indicate that

those who like to consume news online, may also be used to consume other forms of textual content in a digital format – an overlapping that has been overlooked so far (Antón, Camarero, & Rodríguez, 2013; Jung et al., 2012). While there were differences in the perceived factors between light readers on the one hand and medium and heavy readers on the other hand, medium and heavy readers reported similar perceptions. Apart from a higher consumption of audio streaming and e-books, a news website's power users do not have higher levels of needs for news or perceive characteristics of the site differently. When news websites introduce journalism innovations that aim at "news junkies," such as data journalism, citizen journalism, or high frequency news tickers, they may appeal equally more or less to everybody reading more than 10 articles a month.

### **High Number of Payers, Entertainment and Observability Makes the Difference**

In a second step, differences among those young adults who are willing to pay and those unwilling to pay were identified. First of all, the portion of payers, 16%, was surprisingly high and is good news for the industry. Reports about the performance of the recently introduced paywalls indicate that only a site's biggest fans can be monetized; that is about 5-10% of the monthly unique users of the website (Marek, 2013; Shanahan, 2012a, 2012b). For example, to this date, about 4% of Nytimes.com's readers are digital subscribers, *The Boston Globe* is at 7%, and the *Chicago Sun-Times* at 5%. The indicated price points, \$10.81 on average for the group Readers & Payers, fit well with current price policies. A monthly digital subscription to website and apps at *The New York Times* is priced at \$7.50 a month for students, at the Gannett papers it is \$13 a month for "all access." On the contrary, it has to be noted that previous research on willingness to pay had its difficulties with finding actual price points as people tend to report higher prices than they are actually willing to

pay (Chyi, 2005; Schwer & Daneshvary, 1995). Obviously, the same limitation applies to the research presented here.

Readers & Payers reported the highest perception values among all groups and across perceived needs and characteristics. When comparing this group to its opposite extreme, the Non-Readers & Non-Payers, the latter reported a significant lower need for being entertained by news. As the most entertaining content is often satire, sports, and people, this finding adds evidence to the claim of Middelweerd and van der Donk (2009) that there is no willingness to pay for general news and background information. However, people may pay for special content such as sports or financial information. It also appears that Readers & Payers observe news stories significantly more frequently on their social media networks. Members of this group might be connected with people similarly interested in news or they may “follow” news outlets more frequently. Finally, it was not surprising that those willing to pay tended to be older and male, underlining the previously found differences in demographics when investigating news reading adoption (Chyi, 2005; Sotirovic, 2008; Thorson, Meyer, Denton, & Smith, 2008).

### **Need for Surveillance and Understanding Drove Adoption**

Beyond differences among certain adopter groups, perceived needs for news were found to be the strongest and most significant predictors of both consumption and willingness to pay. Again, this is consistent with previous research utilizing U&G for explaining why people turn to certain media (Blumler & Katz, 1974). Contrary to Chung and Yoo’s (2006) investigation of online newspapers, the need to know what happens in the world and in people’s communities was found to be an important predictor among perceived needs. Not only did the need for surveillance greatly influence article consumption, but it was also the

only variable found to increase both the odds of being a Reader & Payer and a Reader & Non-Payer. News producers may serve those willing to pay as well as those unwilling to pay significantly better if they focus on fulfilling this need as well as they can. In fact, the importance of surveillance may also offer an explanation why even small community papers have successfully implemented a paywall and find readers willing to subscribe (Edmonds, 2013; Tornoe, 2013). They may not produce world-class journalism but offer unique information on things people care about. Again in conflict with Chung and Yoo's research, social utility and entertainment were not found to be significant predictors of consumption. As measurement of the variables were similar between the studies, one possible explanation for the disparity might be the demographics of the samples. Adults of aged 30 or older may assess the social and entertaining value of online news differently than college students aged 18 to 29.

In addition, the need for understanding – consuming news websites because it helps to understand important issues – was a frequently significant predictor across the dependent constructs. Interestingly, it had a negative influence on article consumption and the odds for being a Reader & Non-Payer, but a significant positive effect for willingness to pay. One explanation might be that those who read frequently but are unwilling to pay do not value understanding as much as other groups. They may already feel informed as they possibly turn to several free news sources. Those willing to pay, however, may see significant value in the informative articles of the one news source they are willing to pay for.

### **Reasons Innovation Diffusion Theory Fell Short of Sufficient Predictive Power**

As past diffusion studies showed that people were more likely to adopt an innovation when it offered relative advantages, appeared simple to use and compatible with existing

values and experiences, and allowed trial use and experimentation (Rogers, 2003), this research was particularly concerned with the influence of the perceived characteristics of traditional news websites. The presumption was that news websites' critical value for adoption lies not only in their content offerings but in their technological sophistication. People may have great needs for news in general but do not turn to traditional news websites because the sites do not match the way young people like to consume news. In this research, however, perceived characteristics were able to explain only a fraction of the prediction of consumption and paying intent. Also, only two factors, observability and trialability, emerged as significant predictors in certain cases (discussed further below). Why did these factors from innovation diffusion theory fall short of sufficient predictive power? There are three possible reasons. First, the research failed to measure the perception of these characteristics correctly. Measuring potential adopters' perceptions of innovations has been termed a "classic issue" (Tornatzky & Klein, 1982, p. 28) and "troublesome" (Hurt & Hubbard, 1987, p. 2) in the innovation literature. While some diffusion researchers want to utilize existing scale items, Rogers (2003) advises to create new scale items for each set of innovations to be adopted by a particular set of individuals. This research chose an approach somewhere in between. While the scale items were based on those used in similar studies in the field of media (Davis, 1989; T. Lin et al., 2011; Moore & Benbasat, 1991), they were still worded in accordance with the issue under investigation. For the factor relative advantage, for example, the scale items specifically ask for the advantage against blogs. This solution could have been the wrong. Furthermore, the scale items may have been significantly more difficult to answer compared to the items of perceived needs. While the statement "I consume news websites to find information I need"

was quite straight forward, “Most traditional news websites meet my expectations of a good news website” may involve more consideration and self-reflection frequently leading to a “neutral” assessment of the statement. Particularly, young people may have difficulties with a demanding task like this.

Second, other important characteristics were not included. As discussed in the review of literature, some of the previous studies have used different or additional perceived characteristics than those investigated in this research. In particular, Moore and Benbasat (1991) suggested to include (1) voluntariness, the degree to which use of an innovation is perceived as being an optional innovation-decision; (2) image, the degree to which use of an innovation enhanced an individual’s status within a system; and (3) result demonstrability, the degree to which use of an innovation is easy to communicate to others. Future research on perceived characteristics of online news may incorporate particularly the factor of image in order to increase the models predictive power. Brands of traditional news producers were found to be distinctive and highly trustful (Middelweerd & van der Donk, 2009; Sindik & Graybeal, 2011).

Third, the theory may not be fully applicable to online news. Although applications of the concept of perceived characteristics range from hybrid seed corn (Rogers, 2003) to new consumer goods (Ostlund, 1974) and from computers (Kearns, 1992) to educational ideas (Holloway, 1977), it has been most frequently used to investigate the adoption of information technology. Especially Moore and Benbasat’s (1991) recognized work on instrument development targeted innovations in this field. Maybe traditional websites are first and foremost seen as content platforms as opposed to serious technology. The technology of traditional websites might be generally sophisticated enough to enable



readers to fulfil their primary needs, therefore, a technology adoption process becomes secondary. Still, as the general concept has been proven in various fields, more research on perceived characteristics of online news is required in order to make a sound conclusion on this matter.

### **Social Media May Reach Only Those Already Engaged**

Although the predictive power of the perceived characteristics of traditional news websites was limited, the model yielded some insights into the sites' performances regarding these characteristics. While a relative advantage against blogs was confirmed, compatibility and complexity performed better than indicated in the review of literature. A narrow majority of the young readers agreed that traditional news websites fit the way they like to consume news and that the sites are not overly complex. Respondents also felt that traditional news websites can be easily tried out. In fact, trialability emerged as a significant predictor for article consumption and the odds of being a Reader & Payers. This reveals a major advantage that traditional news websites have over other media products. They can be tried out by simply clicking on a link or typing an address in the web browser. Still, in the attention economy, directing readers to these sites might be challenge for news site operators.

Furthermore, observability, the degree to which articles of traditional news websites are visible within a participant's social network, shed light on the social media presence of online news. While observability was significantly higher among Readers & Payer, the factor did not emerge as a significant predictor of consumption or willingness to pay. This finding confirms Olmstead, Mitchell, and Rosenstiel's (2011) study on web traffic and suggests that the importance of social media for traditional news website is twofold. For

those highly interested in news and potentially willing to pay, social media might be an important source of news, however, article distribution via Facebook and others may not “make” significantly more new readers. In other words, the current social media activities may reach only those young readers that are already engaged. As observability achieved the lowest mean of all perceived characteristics, it is also worth noting that there might be still a lot of room to improve in this field.

### **Look for Audio Streamers, but Evade Online Gamers**

Regarding the influence of the use of similar technologies on the adoption, the review of literature had revealed conflicting results. Here, while e-book consumption was found to be significantly different between reader groups, the factor did not emerge as a significant predictor. Instead, those who paid for audio streaming were also likely to show a high level of article consumption. Also, if someone played online games, he or she was highly unlikely to be a Reader & Payer. For promoting digital subscriptions, these might be valuable directions to select promising target groups. From a scholarly perspective, it shows that a specific selection of “close” media technologies and services can produce more meaningful results than a selection of general media technologies (such as internet, smartphone, tablets).

### **With Fewer Free Alternatives, Paywalls Target a Major Reason Not to Pay**

Finally, the research revealed some of the reasons why respondents were willing or unwilling to pay for online news. The answers confirmed that low switching costs might be the primary reason why many people see no point in paying (Chyi, 2005). As long as one news source is perceived as good as another people can easily evade paywalls by switching to free alternatives. However, with more and more news websites introducing paywalls,

the effort of finding substitutes of equal quality will increase. Furthermore, while some of the respondents showed understanding for a fair price, a surprisingly large number of respondents – across all adopter groups – believed that news and information should be free in general. In their opinion, “content empowers people” and “information is a public good.” The lack of discrimination between qualified and unqualified information, between a White House press release and a commentary in *The New York Times*, may be worrisome for the news industry, but the finding corresponds with the growing open source and open information movement (Sullivan, 2011; Zeitlyn, 2003). In conclusion, traditional news websites are advised to produce unique and enriched content while closing loopholes of unlimited access to these articles.

### **Limitations**

The current study affirmed some of the innovation adoption notions established by previous studies and extended their applications to online news with regard to consumption and willingness to pay. However, since this is an exploratory study, the following limitations have to be taken into account (in addition to those mentioned above). First, missing some crucial independent factors could be a logical explanation for the study’s sufficient but unsatisfying predictive power. Future studies may include aspects that have been regarded unimportant here, such as personal innovativeness (Jung et al., 2012), perceived popularity (Chang et al., 2006), image (Moore & Benbasat, 1991), and greater attention to demographics. In addition, there might be also cultural aspects or market-development factors that influence the adoption process, for example, general newspaper penetration, broadband access, and politicization of the media landscape. Second, an analysis of the answering paths revealed that many respondents provided answers that run

counter to all expectations, which increased the variance of the measures. For example, respondents provided high measures for perceived needs and perceived characteristics, but unexpectedly a very low measure for adoption. This may have two reasons. First, respondents struggled with estimating the dependent measures. Future studies are advised to extensively test open-responses versus closed-responses for consumption and willingness to pay prior to the data collection. Second, Rogers' definitions were based on perceptions of the innovation itself, and not on perceptions of actually using the innovation. As argued by Ajzen and Fishbein (1980, p. 8), attitudes towards an object can frequently differ from attitudes toward a particular behavior concerning that object. For example, an employer may dislike an individual but may nevertheless believe that hiring him will bring positive results. In the case of this study, young readers may find traditional news websites great, but may nevertheless never use these sites frequently. Future research may incorporate more qualitative measures to explore the reasons for deviations between expectations and behavior. Finally, this study is limited in its explanatory power through its sample selection. As the participants were highly educated college students from a private Northeastern university, this obvious bias will not allow a generalization of the findings to all young people in the United States. It is also worth noting that adoption processes can vary across national and cultural borders (Rogers, 2003). Since other parts of the world may bear certain differences that facilitate or impinge upon the adoption of traditional news websites in the United States, adoption studies must closely examine the environment in which they take place.

### Conclusion

This study addresses the investigation of factors affecting the adoption of news websites among young adults from a perspective of integrating both U&G and IDT approaches. While those consuming news were generally found to have higher needs for surveillance and entertainment than those with lower interest in news, any reader of more than 10 articles a month did not differ greatly from the other medium or heavy readers except for e-book consumption. Those willing to pay reported also a higher need for surveillance and entertainment and were found to be older than those unwilling to pay. Although several factors differentiated adopter groups, only being male, the need for surveillance, and expenses for audio streaming were found to be significant predictors of consumption. Willingness to pay had only one significant predictor, the need for understanding. When calculating the odds of being a Reader & Non-Payer, the needs for understanding, surveillance, and passing time as well as trialability were found to be significant predictors. Furthermore, a high perception of trialability and low use of online games made it more likely to be a Reader & Payer. In conclusion, when news producers aim for new readers and potential payers, they may focus on unique highly-informative and entertaining content, give as many people the opportunity to try out the website, target especially e-book readers, but avoid those playing a lot of online games. In addition, they should keep in mind that observability enabled through social media features works best for those already engaged with the site, however, “social reading” has still a lot of room to improve.

From a scholarly standpoint, this study expanded IDT, namely perceived characteristics as predictors of adoption, to the field of online news. Although perceived characteristics led to some valuable conclusions, the framework’s predictive power did not live up to the

expectations. Future studies were advised to extensively test the scale items beforehand making them as easy to understand as possible. The high variances in the measures of the dependent variables suggested that young people may have difficulties providing a realistic estimation of how much they read and would pay. However, while this study was not free from the general limitations on measuring willingness to pay, it showed that additional qualitative measures and grouping (e.g. Readers & Payers, Readers & Non-Payers, Non-Readers & Non-Payers) can help to interpret the multi-dimensional construct of consumption and willingness to pay.

Finally, this study holds good news for the news industry. With 16% of the study's participants willing to pay for news and 44% reading more than 10 articles a month, metered paywall could be a sufficient strategy to monetize readers who are most engaged with a site. Also, the price points provided by these readers corresponded with current price policies. However, news producers need to bear in mind that paywalls are not a self-fulfilling prophecy. Traditional news websites must provide good reasons for adoption as well as making it easy for visitors to adopt. In other words, they should offer content that aims at people's needs enabled by a technology that makes a great news experience happen.

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## Appendix

## YOUR OPINION ABOUT ONLINE NEWS

We'd like to investigate which factors make young people tune in or tune out on news websites. News websites are any websites on which you can find news stories.

### A MOTIVATION

First, we'd like to learn why you read the news online. Please indicate by checking the boxes to which extent you agree on the following statements.

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
A1	I consume online news because it gives me something to do to occupy my time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A2	I consume online news to support my own viewpoints to other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A3	I consume online news because it entertains me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A4	I consume online news to give me interesting things to talk about.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A5	I consume online news to find information I need.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A6	I consume online news to know what happens in the world and in my community.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A7	I consume online news to keep up with current issues and events.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A8	I consume online news because it helps me to understand important issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A9	I consume online news because it is enjoyable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A10	I consume online news because it gives me a way to relax and pass the time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### B CHARACTERISTICS

Next, we'd like to learn how you perceive certain aspects of traditional news websites. Traditional news websites are being run by newspapers, magazines, television networks, or radio broadcasters. For example, nytimes.com, time.com, cnn.com.

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
B1	How many people have shared an article to social networks is a feature that I frequently recognize on traditional news websites.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B2	I think that using traditional news websites fits well with the way I like consume news.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B3	I've had a great deal of opportunity to try various traditional news websites.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B4	Using traditional news websites enables me to get news of <i>higher quality</i> than from blogs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B5	Using traditional news websites enables me to get useful news <i>more quickly</i> than from blogs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B6	Using traditional news websites enables me to get news <i>easier</i> than from blogs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please flip!

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
B7	Using traditional news websites is an easy way for me to get informed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B8	Traditional news websites are not very visible on social networks I belong to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B9	I believe that it is easy to identify important news on traditional news websites.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B10	I frequently see on social networks when friends have read articles from traditional news websites.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B11	Most traditional news websites meet my expectations of a good news website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B12	Using traditional news websites is often frustrating for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### C MEDIA TECHNOLOGIES

Now we'd like to ask about which other media technologies or web services you use and what you spend on them.

	Please indicate which of the following media technologies or web services you use <u>at least once a month</u> .	How much money do you spend <u>monthly</u> on them? If none, leave blank.
C1/ C2	Audio streaming services such as Spotify or Pandora <input type="checkbox"/>	\$ <input type="text"/>
C3/ C4	Video and movie streaming services such as Netflix and Hulu <input type="checkbox"/>	\$ <input type="text"/>
C5/ C6	Online games or videogames with online-multiplayer such as World of Warcraft, incl. fees <input type="checkbox"/>	\$ <input type="text"/>
C7/ C8	Digital books/e-books <input type="checkbox"/>	\$ <input type="text"/>

### D CONSUMPTION & PAYMENT

Please let us know how many news article consumption on traditional news websites you consume and what you are willing to pay for it.

D1	Total number of news articles, which I consume during an <u>average month</u> on any traditional news website	<input type="text"/>
D2	Amount of money, which I'm willing to pay for these news articles <u>per month</u>	\$ <input type="text"/>
D3	I decided for this price because .....	

### E PERSONAL

Finally, the last two questions ask about your personal characteristics. Your responses will be used only for statistical purposes.

E1	Please provide your age.	<input type="text"/>
E2	Please indicate your sex.	<input type="checkbox"/> Female <input type="checkbox"/> Male

That's it! Thank you very much!