From “information” to “knowing”: Exploring the role of social media in contemporary news consumption

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Using the conceptual lenses of information overload and sense making, this paper investigates the process of contemporary news consumption based on the qualitative content analysis of 112 interview transcripts from a diverse cross-section of US news consumers. We offer theoretical clarification of factors influencing news consumption and the role of social media in devising strategies for addressing information overload in order to facilitate news sense-making and the resulting civic knowledge formation. We provide news organizations with suggestions for appropriately designing offerings to compete in the era of new media and offer directions for future research in the domains of news, product, and brand information consumption.

1. Introduction

The rise of the Internet as an influential communication medium has substantially changed the existing models of information and news consumption. The growing number of available information channels and sources, as well as greater possibilities for interaction and co-creation among consumers of information, has fundamentally affected consumption of news. We observe a number of important trends in this context. First, adverse effects on well-established print and broadcast mass media have transpired from loss of advertising revenue and the consequent decline in the quality of their journalistic offerings (Bruns & Highfield, 2012). Second, new Internet-based media, incorporating voluntary contributions by broad networks of self-selected participants that report, share and distribute news (e.g. blogs, political forums, and social networks), have acquired legitimacy. In addition to co-creating news, consumers curate news for their social networks, selecting and sharing those most worthy of attention, and filtering out irrelevant (or not conforming to their views) stories and items. These forms of bottom-up news “produsage” (Bruns, 2008), where consumers collaboratively create and curate news stories, offer a novel socially negotiated informational product that heavily relies on opinions, and substitutes the journalistic ideal of objectivity with that of balance (or “multi-perspectivality”) (Gans, 1980). Third, and as a result, an avalanche of information from the soaring number of (frequently unverified) sources floods individual media spaces, potentially causing such negative consequences as information overload, suboptimal knowledge formation, and biased worldview. In connection with these developments, some writers caution against the so-called “filter bubble” (Pariser, 2011), when those attempting to overcome news information overload and to make better sense of the contemporary events, increasingly rely on information curated by like-minded others populating their virtual social networks. According to this view, an unintended consequence of such social filtering may ultimately undermine civic discourse by confirming our pre-existing views and limiting our exposure to challenging beliefs.

The above trends have the potential to powerfully and significantly affect political knowledge formation, civic discourse, social and civic awareness and the individual’s world-view (Pew Research Center, 2012). Understanding the prevailing processes of news consumption and media choices is therefore of particular significance for news organizations and their marketing strategists, as well as policy makers. The extant academic research on information curation online is concentrated in the communication literature and is limited to studies of curated content’s interactivity (Chung, Nam, & Stefanone, 2012) and engagement (O’Brien, 2011), and their impact on information credibility. Other research includes case studies on the role of individual social media sites (e.g. Twitter) in promoting citizen journalism (Greene, Reid, Sheridan, & Cunningham, 2011). To the authors’ knowledge, only
one study to date has addressed the role of the news delivery platform in impacting information overload (Holton & Chyi, 2012). However, no studies so far have attempted to explore or explain the mechanism of news consumption processes in the context of socially connected interactive participants, and their consequences in terms of information/news acquisition and societal or civic knowledge formation.

The current study addresses this gap and reports on a qualitative investigation of news consumption practices. We apply the information overload and sense-making perspectives to help indentify key aspects of contemporary online news consumption and the role of social media in facilitating news sense-making and overcoming information overload. Based on the reported findings, implications for policy-makers and practitioners in the domains of news production and marketing communications are also provided.

2. Paradoxical role of social media in news consumption

Possibly the most prominent characteristic of news consumption today is the sheer amount of information that consumers are exposed to. A single Sunday edition of The New York Times today contains more information than typical 19th-century citizens faced in their entire lifetime and more new information has been produced in the last 30 years than in the last 5000 (Pollak, 2003). A second characteristic is the soaring number of sources that provide news via print, broadcast, and interactive modes, spewing text, pictures and video at any time and in any place. As a result, we must cope with a surfeit of extra information, often unrelated to our interests and needs, including spam and scams (Denning, 2006). Third, the individual receives news and information from different sources simultaneously, while multi-tasking on multiple screens, and from various media (Kelly & Bostrom, 1995). There is thus a situation of too much news arriving in too many different formats, creating a potential for information overload, which in turn leads to news-related suboptimal information processing and decision-making. Trade literature suggests that social media (SM) play an important role in perpetrating news-related information overload. The amount of time spent by the world population in using SM continues to grow, with 20% of our PC time and 30% of our mobile time now spent on SM (Nielsen, 2012). In addition to sharing personal information, SM users increasingly post links to external content and express their opinions about the world, national and local news. In fact, in the past two years, the traffic to news sites from various SM grew 57% (Olmstead, Sassen, Mitchell, & Rosenstiel, 2012).

Traditionally, in the workplace and in organizational contexts, information overload has been addressed with the help of computerized tools. These include email prioritizing software that sorts email based on sender identity, message urgency and recipient receptiveness to an interruption (Hemp, 2009); decision support and modeling tools that can manage and analyze data (Carver & Turoff, 2007); and knowledge management tools through which an individual can organize, express, capture, and retrieve the personal knowledge he or she has acquired. These tools help to organize and aggregate information from various sources, and store and retrieve the acquired knowledge (Davies, 2011). Increasingly however, and especially in the domain of non-work related information processing such as news consumption, social media applications are being developed to address information overload. Social media applications have a number of distinctive technical characteristics (Lee & Ma, 2012). They allow individuals to create, share, and search content, communicate with each other, identify and choose to communicate with specific people, and “pull” the relevant information. Social media also enable specific types of interactions between individuals. They can connect people based on similar needs, tastes and backgrounds, and facilitate the building of information networks where information publishers can deliver content to a set of information consumers, addressing current concerns or interests (Denning, 2006). Such human-mediated information processing helps individuals to identify which information is of value and to whom. Social media can thus gather, select, and value information for individuals. They can expose individuals to selective sources of news while delivering greater cognitive variety and diversity. They can also enable the individual to engage in social interactions, directly with members of the immediate network, and indirectly with members of related or connected networks. These tools can potentially address the problems of information overload by enabling the consumer to make sense of it — with the help of social filtering and collectively negotiated sense-making.

We are thus faced with a paradox in contemporary news consumption, one that is expected to persist. On the one hand, use of SM fuels information overload by exposing the individual to an ever-increasing barrage of news content. On the other, it has the potential to help the news consumer deal with information overload through socially-mediated information selection and organization. A number of questions regarding the role of SM in democratic societies thus acquire prominence. For instance, there is a concern that because of social filtering, exposure to alternative and challenging views can be limited. In his recent book “The Filter Bubble” (Pariser, 2011) argues that the increasing customization of search and personalization of social media experiences may undermine civic discourse by providing more information that confirms our preexisting views and limits our exposure to challenging beliefs. His opponents disagree, saying that “information bubbles” have always been imposed on news consumers by commercial TV networks and local newspapers that demonstrated narrow consensus. They argue that current reality, such as the role of Twitter in the Arab Spring events, in fact, confirms the enriching function of SM (Weisberg, 2011). From the current and, primarily, trade literature in this area, we thus note that the role of SM in information and news consumption is a complex and potentially far reaching one. Additionally, the phenomenon of “social filtering” may have major implications not only for news consumption, but also for consumption of other product and brand information. Better understanding the role of SM in contemporary information consumption can thus inform not only the competitive strategies of news organizations and offer guidelines for internet policy makers, but can also assist businesses with their content marketing efforts and brand development strategies.

From our discussion thus far, we note that research on online news consumption is emerging and limited. Studies show that higher levels of Internet use are associated with higher levels of interpersonal trust and lower levels of information overload (Beaudoin & Thorson, 2004). Based on uses and gratifications theory, we also know that higher levels of socializing, information seeking and prior social media experience are associated with higher levels of intention to share news online through social media (Lee & Ma, 2012). On the other hand, it is reported that consumers with frequent exposure to news on their computers, e-readers and on Facebook perceive greater information overload than those exposed to news via TV and iPhones (Holton & Chyi, 2012). These somewhat contradictory findings suggest that new media may play a more nuanced role in news consumption.

Traditionally, newsgathering was mainly considered a purposeful, directed activity (Tewksbury, Weaver, & Madden, 2001), and assumed some level of intention behind most news exposure. The Internet and social media, with their limitless possibilities of content integration, co-creation and sharing, have intensified more incidental news exposure, whereby individuals “stumble upon”
news as a byproduct of their other online activities. In fact, current multi-functional digital media provide hitherto unparalleled access and exposure to both specific and precise sought-after information and to unsolicited content (including news and advertising). Therefore, the distinction between purposive (active) and incidental (passive) news information acquisition in the digital space may explain diverse findings of the role of social media in affecting information overload, news sense-making, or the resulting civic knowledge. Based on the above, understanding the role of social media in addressing (or perpetrating) information overload and problems of sense-making that so compellingly characterize the context of news consumption in contemporary times, presents an interesting and important research topic. Given that academic research in the area is almost non-existent, this study initiates an academic discussion of the role of social media in news consumption. Noting that key characteristics of current online news consumption are information/source overload and socially-mediated sense-making, we utilize the theoretical lenses of information overload and sense-making from the information processing literature as the explanatory background for our study. Specifically, we integrate these concepts to analyze qualitative data collected from a diverse cross-section of 112 news consumers in the US. Our analysis identifies several categories of coping strategies that contemporary news information consumers use to overcome information overload while making sense of news. We discuss these categories and specifically show how news consumers use new media to implement these strategies. Based on our findings, we conclude with practical implications for news producers and marketers, and directions for future research.

3. Theoretical development

News information contributes to the creation of a unique form of knowledge that differs from both the more superficial “acquaintance with” and the more systematic “knowing about” knowledge types (Park, 1940). The transient and “perishable” nature of news, which mainly exists in the present, characterizes it as a short communication that, once transmitted to the consumer, becomes a fact stored in (or deleted from) the preexisting perceptual schema of the individual’s environment. Another important feature of a news item is its social character: news items are typically shared and discussed within the individual’s network, resulting in a socially-negotiated meaning attached to it and, possibly, the resulting political action and civic engagement (Park, 1940). Thus, the important elements of the news-related knowledge formation are the transmission and reception of the news information, its processing, and the social negotiation of its meaning. In the present time, these elements have acquired novel characteristics that need to be taken into account by news organizations, policy makers and marketers/advertisers. They include the ever-increasing amount of news leading to information overload, the co-creative character of news “produsage”, and the growing role of social networks in news sense-making and meaning negotiation. Below, we discuss how the existing information-processing theories can be applied to contemporary news knowledge formation process.

3.1. Information overload

Information overload conveys the notion of receiving too much information. It occurs when information-processing demands on the individual exceed their capacity to process the information, rendering them unable to process all informational inputs (Klausesser et al., 2007; Rogers & Agarwala-Rogers, 1975; Schick, Gordon, & Haka, 1990). It arises from two parameters, one pertaining to the information-processing capacity of the individual and the other related to the information-processing requirements of the task (Eppler & Mengis, 2004). There are a number of aspects to information overload. First, the amount of information required to be processed can be too large compared to the amount of time available to process it (Grisé & Gallupe, 1999; Schick et al., 1990). Second, the information may not be of high quality or relevance to the individual (Ackoff, 1967; Ho & Tang, 2001; Pollar, 2003). Third, the information has high entropy (Hiltz & Turoff, 1978), that is, it is not organized or formatted to be recognized as a significant or important part of the information processing context (Ho & Tang, 2001; Jones, Ravid, & Rafaeli, 2004). Fourth, the information may pertain to many different and diverse domains and ideas (Grisé & Gallupe, 1999).

The concept of information overload suggests that individuals have limited capacity for information processing (Thorson, Reeves, & Schlenker, 1985) and when the above conditions exist, people are subject to cognitive constraints that lead to information overload. Related terms include information flood/surplus (van de Ven & van Vliet, 1995), information avalanche (Lee, 1998), data trash, data smog (Shenk, 1997), information burden (Harrison & Rosenthal, 1988), and data explosion (Marcusohn, 1995; Wilhelm, 2000). Key consequences of information overload include information fatigue, where the individual is simply tired of receiving and processing information (Oppenheim, 1997), cognitive strain characterized by excessive and ineffective attempts to analyze all of the information (Malhotra, Jain, & Lagakos, 1982; Stanley & Clipsham, 1997), terminated or incomplete information processing (Rogers & Agarwala-Rogers, 1975), and decreased accuracy in decision making (O’Reilly, 1980).

3.1.1. Strategies for handling information overload

Information processing theory (Galbraith, 1974) suggests that approaches to handle information overload can be categorized into load adjustment strategies and complexity handling strategies (Grisé & Gallupe, 1999). The first category consists of activities that reduce the amount of information needed to be processed by the individual. It includes information pruning, where the number of sources through which information is let through are reduced (Pollar, 2003) and the number of ideas that the individual deals with are restricted (Grisé & Gallupe, 1999; Carver & Turoff, 2007). It also includes filtering, where individuals choose to receive only the information that they perceive as relevant or important (Kiesler & Sproull, 1982; Lehtonen, 1988; O’Reilly, 1980; Schultz & Vandenbosch, 1998) or that reduces dissonance with existing information (Pennington & Tuttle, 2007; Waller, Huber, & Glick, 1995), and ignore the rest. Load adjustment strategies seek to minimize the effort required to process information and can lead to lower quality of information processed or to relevant information being ignored (Liang, Lai, & Ku, 2007; Pennington & Tuttle, 2007). The second category has three types of activities that help the individual to more effectively process information. The first relates to organizing information by tagging, sorting, and indexing (Carver & Turoff, 2007), and thus making it searchable. The second pertains to prioritizing information and determining the order in which it should be processed (Carver & Turoff, 2007). The third deals with accelerated information processing whereby information is simply processed faster (Pennington & Tuttle, 2007), possibly through new information management techniques (Jones et al., 2004).

Applied to the context of online news consumption, the prevalence of information overload can be attributed to the sheer number and variety of news sources, the limited time available to process them, and the increasingly un-organized and non-verified content that is available from peer-produced and peer-curated sources such as blogs and social networks (Pollar, 2003). Since information processing has been known to mediate the relationship between media use and its outcomes (Eveland & Dunwoody, 2004).
2002), the linkage between online news media usage and, e.g., political knowledge is thus influenced by how the individual attempts to address information overload (Beaudoin, 2008). The current technological capabilities offer content personalization (by news providers) and customization (by consumers themselves) tools as additional strategies to cope with information overload online, which help reduce the amount of information (Davenport & Beck, 2000). Additionally, the use of social media appears to address both the reduction of information stream via human-mediated filtering and curation, and the effectiveness of its processing via opinions and discussions offered by network members.

3.2. Sense making

Sense making can be defined as a process of transforming the acquired news information into new knowledge by incorporating it into the preexisting cognitive framework of an individual. It involves understanding a situation or circumstance such that this understanding can form the basis of an action or knowledge (Weick, Sutcliffe, & Obstfeld, 2005). "Sense making is about the question: What does an event mean? In the context of everyday life, when people confront something unintelligible they ask “what's the story here?”" (Weick et al., 2005 page 412). By interacting with their environments over time and through experience and by communication with others (for learning and teaching) (Fiske & Taylor, 1991), individuals build cognitive frameworks that are a basis for future interactions. The development of these frameworks is thus path dependent. Individuals' preexisting cognitive frameworks affect each component of a sense-making process (Daft & Weick, 1984). They influence what is noticed by making some stimuli more salient than others, they provide rules and logic that influence the interpretation of what is noticed, and they suggest what actions should be taken by individuals (Galambos, Black, & Abelson, 1986).

Two key factors aid in this process. First, increased cognitive diversity, defined as the number of concepts in a cognitive framework and the number of relationships between concepts, is required for more effective sense-making in environments that have high turbulence. This is because greater complexity of preexisting associations allows more stimuli to be noticed and responded to, leading to greater adaptability (Bogner & Barr, 2000; Weick, 1995). At the same time, some overlap in individual frameworks is necessary for a group of people to generate a collectively coherent framework of understanding about a set of events or circumstances (Fiol, 1994; Nonaka, 1994). Second, individuals create meaning out of different situations by situating that meaning in a "structure of meaning" (Berger & Luckmann, 1966; Schütz, 1970; Weick et al., 2005). Because lone individuals find it difficult to obtain sufficient knowledge to understand everything that takes place, the "structure of meaning" provides the individual with simplifications of reality. The structure of meaning is influenced by social construction and is informed by patterns of thought that the individual adopts through various socialization processes (Schütz, 1945). These socialization processes can take place through the individual's immediate and direct social relationships or, more indirectly, through shared norms at the societal level (Schütz, 1970).

Applied to the context of online news consumption, sense making would entail the individual identifying the news source to be focused on, constructing meaning from the information provided by that source, and informing and refining one's view of civic society based on that interpretation. The socially-mediated news consumption process can both facilitate and hamper sense-making. In terms of facilitation, the possibility of exposure to unlimited and diverse sources of news can potentially promote cognitive diversity and facilitate sense-making. On the other hand, however, the path-dependent nature of sense-making requires forming associations to a certain preexisting structure, as well as to the socially constructed cognitive frames. This may limit the amount of informational stimuli being noticed, depending on the context, thus hampering sense-making. Research (e.g., Aldoory & Van Dyke, 2006) shows that consumers often experience information overload due to excessive media coverage during news consumption. This results in cognitive strain and information fatigue, such that they might stop further information seeking, instead relying on their social networks for further information, or even denying or purposely remaining ignorant of the existence of specific news. This obstructs sense-making.

Thus, we observe that exposure to diverse sources of news can both hamper and enable sense-making, and thus has the potential to influence sense-making for online news consumption in nuanced and complex ways. While some studies do point to concepts such as the filter bubble, implying a possible deficiency of sense making introduced by social media, research has not adequately articulated its role in online news consumption.

4. Methods and analysis

The current study employed a qualitative research design, deemed appropriate for generating new insights and research evidence about complex and new phenomena that are relatively under-researched (Miles & Huberman, 1994), as is the case with the subject of the current study. We used the information-overload and sense-making perspectives as the sensitizing theoretical lenses to understand how social media affects online news consumption. Our approach follows the interpretive tradition of qualitative enquiry, wherein phenomenon are interpreted through theories that can potentially provide insight about them. We followed a combination of inductive and deductive approaches. The former helped maintain open-ness and understand the data in an emergent fashion, while the latter helped us to fruitfully inform the data with relevant existing theoretical perspectives (Walsham, 2006).

The data and interpretations were derived from 112 interviews with a cross-section of news consumers in the US Midwestern regions. The respondents were identified in two ways. One, trained graduate students of the business management program from a large metropolitan university interviewed their associates and acquaintances for extra points in an online marketing course. 79 interview transcripts were submitted through this process. Two, 33 attendees of an annual Internet Marketing conference in a large Midwestern city, who were internet marketing professionals, were interviewed by the authors and trained graduate students of the same program.

Convenience sampling was used because at this exploratory qualitative stage we sought an understanding of the phenomenon, not its generalization to a population (McCracken, 1988). The respondents ranged in age from 20 to 57 years old and equally represented both genders. Over 90% had at least a bachelor's degree and two-thirds reported a household income over $60 K. The following questions were asked: "How do you receive your personal, local, national and world news? Please describe the role of newspapers, magazines, radio, TV, the Internet, mobile apps, and other communication media in your news consumption; Please describe the role of Facebook, Twitter and other social media that you use in getting your news and information. Compare the importance of the social media to other modes of your news consumption." Each interview lasted for 15–20 min, and was subsequently transcribed by the interviewer. Member checks were done by summarizing a respondents' answer at the end of each interview to confirm its accuracy with the respondent. Each author carefully evaluated the obtained data for possible inconsistencies in the length and
pattern of responses, since they were obtained by different individuals and under different conditions. No inconsistencies were identified in the length of the text or the number of paragraphs. Additionally, it was noted that virtually all responses contained an introductory part that explained the respondent’s degree of interest in the news information in general and their motivations for reading, listening to, or watching news. Although not specifically included in the questions, this information was also analyzed.

The technique of content analysis (Kassarjian, 1977; Kolbe & Burnett, 1991) was used to analyze the data. All transcripts were coded by each author individually, with new code categories added as they emerged from the text. The textual data was organized into units of analysis at the sentence level, since each sentence contained exhaustive information that informed various coding categories. As a result, responses to different questions were coded simultaneously, using the same set of codes (Kassarjian, 1977). Data analysis consisted of identifying emerging themes by noticing instances and patterns of responses (LeCompte & Schensul, 1999). A combination of open and axial coding was employed to identify and arrange emerging themes (Miles & Huberman, 1994). Open coding was employed to identify text associated with new themes and to arrive at categories in an inductive and grounded fashion. Based on these categories, a code book was created by the authors that was subsequently used for axial coding. Axial coding was applied toward two ends. One, it was used to deductively situate the identified categories in the context of the study, interpreted through the theories of sense-making and information overload. Two, it was used to relate emerging codes to existing codes. The analysis process iterated between axial and open coding (Strauss & Corbin, 1998, pp. 101, 123), which allowed the authors to understand the concepts and relationships as they emerged and relate them to the literature elements that informed the study. The inter-coder reliability, measured by Perrault and Leigh’s (1989) $I_c$, was 92%, which corresponds to the acceptable range of >80%. Differences were resolved through discussion.

As the coding progressed, particular themes depicted by codes based on the information overload perspective repeatedly occurred with those based on the sense-making perspective. This prompted the authors to consider relating sense-making aspects with information overload strategies. Accordingly, the identified categories of sense-making and information overload strategies were placed into corresponding cells in a table.

5. Findings and discussion

The results of our investigation reveal that sense-making of contemporary news and its subsequent transformation into civic knowledge (and/or action) is reliant on the information overload coping strategies that increasingly employ new technology and new media capabilities. For each aspect of news sense-making by contemporary consumers, a separate set of information overload strategies is effective, as described below and illustrated with examples from the data in Table 1. We find that contemporary news consumption is characterized by two distinct aspects of sense making. The first, Screening News Stimuli, involves determination by the news consumer of channels, sources, and content of the news that he or she would consider attending to. Paucity of time and busy lifestyle, as well as general attitude towards the news are the contextual factors affecting the choice of information overload strategies (e.g. news avoidance, information load adjustment, information complexity handling, etc.) employed by news consumers in the process of screening news stimuli. Social media enable these strategies by providing timely and relevant information that is socially curated by like-minded network participants. However, social media also complicate the news stimuli screening process by contributing to information overload due to their exposure to unverified, anonymous and overwhelmingly subjective sources of news.

The second sense-making aspect, Processing and Interpreting News Information, involves path-dependent and socially-mediated negotiation of meaning of the acquired news and its conversion into knowledge. It is characterized by a separate set of strategies to overcome information overload. In particular, evaluating reliability and trustworthiness of the news sources and content acquires prominence, with social media again playing an ambiguous role. On the one hand offering views and opinions that are independent of the mainstream news media, social media present subjective opinions and comments, as well as unverified facts. However, social media have a strong advantage over other types of news media in providing social legitimacy to the news-related opinions and aiding in incorporating the incoming information into preexisting mindsets. Thus, by helping situate the new events in the context of preexisting political preferences and positions of familiar individuals, social media assist in reducing information overload and facilitating sense making. Social media also play an important role in providing the diversity of opinions a news consumer is exposed to, thereby expanding the mental associations and facilitating the news information greater assimilation.

Below, we detail the information overload coping strategies pertinent to each sense making aspect and highlight the role of social media in these processes. These results and summarized and illustrated with examples in Table 1.

5.1. Screening news stimuli

To determine, which channel, source, and what specific content of the ubiquitous news stream facing each person today to focus upon, our respondents use the path-dependent heuristics determined by their prior experiences and cognitions about news consumption. Thus, the salience of the news stimuli to pay attention to is affected by the processes of source and content filtering (including outright news avoidance), as well as categorizing and sorting the available sources and content. The filtering and avoidance strategies mainly concern the respondent-side processing constraints, while sorting, prioritizing and categorizing news refer to the complexities of analyzing or understanding the available content. Other strategies employed by news consumers to cope with information overload in identifying the news stimuli for further processing include personalization/customization, selecting “pull” over “push” news acquisition mode, and relying on socially-curated news content.

Numerous respondents mention paucity of time, busy professional and family life, lack of interest towards events and developments outside immediate environment, and resentment towards biased reporting and political spinning. As a result, the adopted coping strategies focus on load adjustment and seek to reduce the amount of news consumed. These range from reducing the number of sources, media, and volume to be exposed to (with the extreme cases of avoiding news altogether) to filtering the information to be processed. Frequently, discussions of the news avoidance strategy are accompanied by negatively valenced emotional and affective statements, explaining reasons for deliberate behavioral intentions to avoid exposure to “sad” and/or “too political” news. Other explanations include perceived irrelevance of the majority of news to a person’s life and interests and “not making a difference” in his/her life. Finally, some respondents admit to not having developed a “habit of checking the news”, being at the stage in their lives when they are more interested in socializing with friends and enjoying their free time. For them, news are “not entertaining” and those friends who post “serious information” on their Facebook feeds are “annoying”. Another coping strategy,
Table 1: Examples of information overload (IO) coping strategies for news sense-making.

<table>
<thead>
<tr>
<th>Sense-making aspect</th>
<th>Information overload coping strategies</th>
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| News avoidance      | – Most “news” is just full of garbage propaganda that I don’t want or need to be influenced by. And at this point in my life, I have neither time nor brain space to take it all in and sort it all out. (Female, 25, medical student)  
– My busy life does not usually leave time for the news. I really just feel overwhelmed at times and I think that the news stations and papers telling me what I need to know are just too much. (Male, 28, account manager)  
– I do not have a lot of free time and I do not want to waste it on watching some boring news broadcasts. (Female, 21, full time student)  |
| Reducing the number of information sources | – I don’t remember the last time I picked up a newspaper; I do enjoy watching morning news shows but I no longer have time for these, either. (Male, 36, financial planner)  
– I get the news from the local newspapers. I don’t look other places for the news because all that really affects me is the local news. (Male, 48, sales agent)  
– I am not interested in most things that the news has to talk about, so unless the first thing to pop up on my homepage is an interesting story I care about, I do not bother. (Female, 22, service professional)  |
| Reducing information volume | – I really just feel overwhelmed at times and I think that the news stations and papers telling me what I need to know are just too much. (Male, 28, account manager)  
– I do not have a lot of free time and I do not want to waste it on watching some boring news broadcasts. (Female, 21, full time student)  
– I don’t remember the last time I picked up a newspaper; I do enjoy watching morning news shows but I no longer have time for these, either. (Male, 36, financial planner)  
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– I am not interested in most things that the news has to talk about, so unless the first thing to pop up on my homepage is an interesting story I care about, I do not bother. (Female, 22, service professional)  |
| Filtering news information based on relevance | – I get the news from news sources I follow on Facebook and from my friends that post news stories they follow. I feel the news is more targeted to my interests and views. It is targeted more to me than a newspaper or half-an-hour news program. (Male, 28, graduate student)  
– I look at headlines, but I don’t ever read further into a Facebook link, because of privacy concerns. I don’t want people to see what I am reading, as well, but that doesn’t mean it’s not a useful tool. (Female, 24, housewife)  
– Many of the people I follow on Twitter are politically active citizens, politicians, or pundits, so Twitter can be a source of news for me. However, due to the word limit on tweets, I have rarely gained much insight on world news by scrolling my Twitter feed, and for some reason I am disinclined to click on an article link posted on Twitter. (Male, 47, real estate agent)  |
| Source and content personalization and customization | – I get the news from news sources I follow on Facebook and from my friends that post news stories they follow. I feel the news is more targeted to my interests and views. It is targeted more to me than a newspaper or half-an-hour news program. (Male, 28, graduate student)  
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| Selecting “pull” over “push” media and topics | – I do not watch the news on TV. It can be extremely boring and I have to listen to everything, even the things that I do not want to hear. The newspaper gives me the option to pick out what I want to know and what I do not. (Female, 23, high school teacher)  
– I do not subscribe to any online sites to receive information or news. Not all news is important to me, so that is why I choose to do my own search for news rather than getting bombarded by online news websites. (Female, 43, salesperson)  
– With television, I don’t get a choice of what news I want to see, and the big stories are repeated over and over again. Also, television news only airs a few times a day. With the Internet, I can get breaking news any time I check. (Female, 39, accountant)  
– The Internet is my most important source of news. I check a number of news sites daily or semi-daily, ranging from Yahoo News to ABC to Breitbart. My absorption is highly active, because I must devote my full attention to reading articles and watching online videos. It is also very selective because I must deliberately identify which sites and articles I read. (Male, 25, graduate student)  
– I do a lot of independent searches on the Internet, that way I can research both sides and try to come up with a conclusion on my own. I do not want to be another mindless zombie who believes every word I hear or read as truth. (Female, 25, housewife)  |
| Relying on socially curated information | – In all honesty, the place I hear about most of my news is on Facebook. For example, the way I first found out about the Batman shooting was through Facebook the morning after it happened. Whenever I see something newsworthy written on Facebook, I am always curious if it is in fact true, so I usually go to CNN.com or another news webpage to double-check the story. (Male, 22, student, part-time employed)  
– I guess, my main news source is what I hear second-hand through my co-workers, my family and my friends. Obviously most of this is in person, but a lot of it also comes through Facebook. I don’t always have time to scroll through Facebook’s news feed... but there are usually comments made that bring something to my attention. (Female, 23, factory worker)  |
Categorizing and sorting news topics, sources, and channels

– My apps are all located within two folders on the first page of my phone. The social media folder contains my Facebook, Twitter, and LinkedIn apps which I check throughout the day. I also have the other social media apps located in the folder, such as Google+, Instagram, Pinterest, and Wordpress, but these apps are used much less. My news folder was maxed out at one point, but I had to make some tough decision when going through my phone and not all of the news apps made it through the clean-up. The most popular news app that I use is Huffington Post app. Followed by CNN and USA Today. (Male, 34, software developer)

– When I want to get more in-depth, editorial content I listen to radio programs like Glenn Beck, Rush Limbaugh, and occasionally NPR. (Male, 29, engineer)

– I get my news from different places depending on if it is local, national, or world news. I use the local news channel, WTOL’s website to keep up on local events. About the national and global news, it is easy to get them from TV and internet. (Male, 22, student)

– When I look for sources to get local news, I definitely use the local newspaper called The Blade, for when it comes to looking up information about local sports highlights, community issues, and new business ventures. (Female, 26, business owner)

– When it comes to national and world news, I definitely rely on network television, and channels such as MSNBC and CNN. I feel these channels are not as biased as some conservative channels that really rub me the wrong way. (Female, 30, HR professional)

– Other shows that I avidly watch to get news are from the Daily Show and the Colbert Report on Comedy Central. Yes, these shows are satire in a sense about real news, they still deliver reports thoroughly and entertaining that keeps my attention and breaks it down for me so that I really understand it well. (Female, 28, graduate student)

Evaluating source and content reliability

– I believe that there are both credible and non-credible or biased news posts on Facebook, Twitter and other social media sites, but the same can be said for the traditional news entities. It is up to the person reading the news posts, watching the news on TV, or reading the paper, to be objective and to conduct their own research to find out all of the information. (Male, 32, IT professional)

– There are certainly many flaws in technology and people have to be very cautious with reading false information. However, if you are following a “verified” account on Twitter, it is expected to be a real account which tweets quality information. (Female, 22, student)

Resisting news source bias

– The political news right now is poisoning the news and I have no need to read a newspaper or watch news on TV. Both are either backed by one side or the other and do their best to push their own opinions onto the people who watch and trust them. (Female, 25, account manager)

– I tend to view mainstream news sources as biased (somebody is contributing dough for Fox News to be on television, thus they are able to select which stories they want, slant those stories however they so choose, and completely avoid other facts/viewpoints altogether … propaganda, I tell ya!). But the Internet is, for the most part, free game! And I think that’s what everyone should do; educate yourself by pulling form different sources, reflect, then form your own opinion on what you believe to be the truth. (Female, 29, accountant)

Assessing news information trustworthiness

– I use Google quite a bit, actually. When I read about certain topics on the Yahoo front page, I will Google them to learn more. My main source of news comes from the Yahoo.com front page. It includes daily for me news from around the nation, around the world, science, health, and local news. I like to make my own conclusions from news and do my own research on topics that I find interesting. You can't always trust what you hear, that is why I look up information on my own. (Female, 33, buyer)

Seeking news timeliness

– I feel that social media sources help with having access to the news quicker and with having more information in which to make a decision about the news easier. (Male, 33, small business owner)

– Some days Facebook will be my only connection with the Internet, so I won’t see any of the news if it’s not on Facebook. So I like having the “trending articles” to keep me informed. Facebook is the most convenient way for me to gather information. It is just natural for me to open my laptop and open up Facebook immediately. (Female, 24, financial planner)

Acknowledging subjectivity of socially-curated content

– In my opinion, I get more current news from social media than the actual news channels. (Male, 37, social media manager)

– The big reason I don’t see social media as a great place for news is you are getting someone’s opinion, as opposed to an unbiased account of the events. Now, I understand that major media outlets are not completely unbiased, either. However, I will take my chances with journalists as opposed to my neighbor’s cousin’s friend on Facebook. (Male, 40, graduate student)

– Social media are more like the opinions of news from traditional media, such as newspapers, magazines, radio, TV, and online news. Social media can’t be considered as the credible sources, unlike other media. (Female, 23, secretary)

Seeking Social Legitimacy

– I enjoy the fact that Facebook posts articles that people read. It catches my attention and, although I don’t like the fact that people can see what I am reading, I feel more connected with the news of the world. (Female, 38, college advisor)

– On the news feed Facebook will post a catchy headline that at times does catch my attention. A neat thing is that on that article page there will be images of your “friends” and if you scroll over their picture it will show you the articles that they read. Therefore I will continuously click on interesting articles that I would like to read. (Female, 28, city government employee)

Seeking social support

– Facebook seems to be a way to mobilize groups of people, useful for nurturing a base of people via social connections and emotions. (Female, 44, freelance writer)

– I think Facebook does play an important role – though maybe not the most accurate role – in getting the news out. It’s an online extension of the social atmospheres at work and in our personal lives. It’s how we share information. (Female, 23, factory worker)

– I would say that I do get a lot of information from Facebook, I like to hear and see the opinions of my family and friends and see how they feel about the news going on around them. I also get the chance to give people my opinion on the topics that I find interesting. (Female, 53, nurse)

– I think that Facebook is a preferred site to share news stories because people are free to voice their opinions, concerns, suggestions, etc. and more than likely to strike discussions with other Facebook users about these topics. People love to voice their opinions no matter what channel of communication is used, and computers and phones just happen to be the most popular right now. (Male, 42, teacher)

Expanding cognitive diversity

– Facebook has “trending articles” for my public interest topics that I read, and I see people’s political stances and values by what they post on their wall. It gives me the opportunity to view a wide variety of different views and news because my Facebook friends mostly all have different opinions from one another. (Female, 22, cashier)

– I feel Facebook is important compared to other forms of media because so many people use it. It gives an insight to many different cohorts and allows people to see what their friends think. (Female, 39, professor)

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Information overload coping strategies

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- Social media allows us access to all kinds of news and differing opinions. This isn’t just news processed through a news organization, but rather it comes from a normal person, who finds this or that topic interesting enough to share it with his or her friends. It’s an amazing new dissemination method not inherently controlled by the media, but rather through a person’s acquaintances. (Female, 65, dog breeder)

- The primary social media site I use is Facebook. I am a fan of a few politicians and pundits and friends with some politically active people, so I often happen to see news-oriented statuses or links to articles. If these pique my interest, I will investigate further. While I do not usually get much info in this fashion, I have on occasion benefited greatly from scanning the newsfeed. I recall that I first learned about the death of Osama bin Laden in 2011 from someone’s Facebook status. More recently, I gained much information about the Muhammad video controversy by reading the statuses of Facebook friends who are scholars of religion. (Male, 27, employed part-time)

- News co-creation phenomena. Those who assertively advocate the formation. This strategy for news stimuli screening often leads to more informed decision-making and more systematic knowledge attention being paid to the materials selected, and may facilitateconsult several sources to form unbiased opinion of the situation.

-WISE news consumers utilize online search for the keywords of interest and being instantly aware of breaking news and developments. Usually, they expend no effort and do not expect any cost to be associated with acquiring news (in fact, they admit abandoning various content websites as soon as they introduce access fees). This strategy involves pursuing in more depth topics or events deemed relevant (e.g. by clicking on links or searching for them online) after being serendipitously exposed to them. Respondents also filter channels and sources based on privacy concerns, choosing not to click on news-related links in social media spaces to avoid exposing their interests and views to broad audiences.

Utilizing technology-enabled source and content personalization is another strategy employed by news consumers to cope with information overload while screening news channels, sources and content. Deliberate news seekers in our sample want to be “in the know” of the events developing in the world, evaluate different opinions, and make informed decisions. These motivations shape their behaviors of actively seeking out specific sources and personalities, from which they receive regular news updates (personalized “push” strategy). Almost universally, this attitude inspires subscribing to several newsfeeds from national and international organizations via mobile apps, following prominent politicians and experts via social media, sharing and participating in discussions regarding political events and news issues in blogs. Their news consumption is more goal-directed and less serendipitous.

Selecting a more active “pull” approach to news consumption characterizes those who prefer to control their exposure to news information and not to be indoctrinated by politically biased mainstream news. They may not necessarily be interested in being instantly aware of breaking news and developments. Usually, they utilize online search for the keywords of interest and consult several sources to form unbiased opinion of the situation. This strategy for news stimuli screening often leads to more attention being paid to the materials selected, and may facilitate informed decision-making and more systematic knowledge formation.

Personalized consumption of “push” news information is also relying on social media sites and their mobile apps for major news information, taking advantage of the social curation and bottom-up news co-creation phenomena. Those who assertively advocate the role of social media as the major news channel cite Twitter’s paramount role in delivering breaking news, and the fast and targeted way of news delivery via social media. Other advantages mentioned include possibilities of customizing and personalizing newsfeeds, along with the relevance of the posted news, which are “filtered” by friends with similar interests.

Relative lack of strategies among the obtained responses dealing with information complexity-handling can be attributed to the specifics of news information that is delivered in short, comprehensible chunks and becomes obsolete before it can be organized for in-depth systematic processing. Still, certain organizing strategies are employed by consumers and include determining the order of priority of topics (and sources) in personalized apps and RSS feeds, as well as on free email portals (such as Yahoo or MSN) and categorizing and sorting news (and sources) into different folders and bookmarks. Finally, virtually every respondent utilizes accelerated information processing technique by scanning headlines (or flipping channels) and selecting and prioritizing (“pulling”) the topics and sources to attend to, based on interest, relevance, and convenience (Pennington & Tuttle, 2007).
5.2. Processing and interpreting news information

For effective incorporation of the obtained news information into their cognitive frameworks, news consumers compare the new information to the preexisting mental schemas, shared meanings and social norms before adopting and assimilating it as part of their knowledge reserve. An important issue identified in this process is evaluating news trustworthiness and reliability. Virtually every respondent, regardless of political views, interests and motivations towards news consumption, or personal characteristics, considers reliability and trustworthiness of the news an important issue. To ensure the credibility of the news information received, news seekers carefully filter their sources based on reputation (brand), and intentionally include international independent news providers (such as BBC and Aljazeera) into the pool. Due to the freedom of information on the Internet, and especially the potential of anonymous content creation in social media, reliability and trust were mentioned as particularly critical for these channels. A lot of respondents avoid clicking on links within their Facebook wall, for example, due to low trust in social media sources, and instead prefer to type key phrases into search engine fields in a new browser tab. Resisting political bias, seeking independence from institutional media, and acknowledging the subjective nature of socially curated and co-created news represent additional strategies for reducing information overload and making sense of information during its processing and interpreting. One manifestation of these strategies is the verification process via online searches (e.g. on Google) for the news items that attracted the news consumer attention. Acquiring different perspectives on news events not only facilitates verification of the sources and content, but also exposes individuals to multiple points of view, contributing to the enrichment of preexisting mental associations. Thus, although the topics one is exposed to may indeed be limited due to purposeful (or organic, for social networks) filtering during the screening stage, attempts to ensure reliability and truthfulness of information can provide certain exposure to a diversity of opinions by its active verification in other channels during the processing and interpreting stage.

An important element of the news interpretation aspect of sense making is news and opinion sharing and discussing, as well as sending one's resultant knowledge in socially-negotiated structure of meaning. The strategies of securing social support and seeking social legitimacy of one's views assist with information overload by helping categorize the amorphous stream of news based on curated content offered by social media participants and shared and co-produced opinions and comments on the issues. Another information overload coping strategy, seeking timely information, helps to focus on breaking news and developments and involves using mobile apps, including feeds from social media.

5.3. Role of news consumption motivations

Although we did not intentionally address the differences between active news seeking and incidental “stumbling upon the news” behaviors in the initial interview questions, the analysis of responses revealed different motivations for news exposure and the resulting differences in strategies utilized by consumers to overcome information overload. Specifically, in the sense-making aspect Screening News Stimuli, those who were less motivated to actively seek news exhibited more frequent news consumption, or personal characteristics, which were more relevant to socially-curated news than were deliberate news seekers. On the other hand, deliberate news seekers used the Relevance-Based Filtering, Personalization, Customization, Categorizing, and Sorting information overload coping strategies more often than did incidental news consumers.

No difference between the use of Pull and Push information overload coping strategies were observed between incidental and deliberate news consumers in the Screening News Stimuli sense-making aspect.

With regard to the Processing and Interpreting sense-making aspects, the only differences observed between incidental and deliberate news consumers manifested in the frequency of Using Social Legitimacy strategy to reduce information overload, which was more dominant for the former. The similarity in the majority of behaviors to reduce information overload while processing and interpreting the news information is expected, since the willingness for news exposure can be presumed to minimally affect the management of information that has already received one's cognitive attention. The finding that those who are less willingly exposed to news rely on social legitimation to cope with information overload while processing it is interesting. It may be explained by the fact that they give low priority to this information and thus attempt to reduce the processing effort by relying on others in forming their opinion and knowledge. However, this suggestion needs to be tested and further qualified in future research.

5.4. Role of social media

Our analysis did not reveal any differences in news consumption behaviors based on the available demographic or socio-economic characteristics of the respondents. While the majority of respondents did not identify social media as their main news source, widely varied opinions about its role in news consumption were expressed by almost all study participants. A broad base of diverse respondents commented on the role of social media in news consumption, ranging from negligible to very important, and underscoring its potential effect both on increase and reduction of information-overload. Specifically, respondents noted that social media perpetrate information overload in the following ways:

- Increasing the sheer amount of the news information (“As of late, there has been a lot of political news being shared on Facebook. The main issue that I have with that is the range of information given. Everything from far left to far right, a lot of misinformation and a lot of conspiracies.” (Female, 41, newspaper advertising))

- Making it impossible to avoid exposure to news (“Even if I try to avoid getting news, people post about them anyway, making it almost impossible to avoid” (Female, 28, financial advisor))

- Causing concerns about news reliability (“...there can be problems with Facebook trends, as rumors can pile up just as fast as breaking news. A few weeks ago, a couple of my friends posted a status about the presumed death of Bill Nye (the science guy). Astonished, I searched Google for the news article, only to find that Twitter had started this false rumor” (Male, 24, sales rep))

- Causing concerns about news objectivity (“I do not see how Facebook is being considered a news source. It seems like a hive for gossip” (Female, 65, nurse))

- Offering irrelevant content (“Social media does have great sources of information, but often is random and irrelevant to what I want to read about” (Male, 21, undergraduate student))

At the same time, social media could mitigate information overload and assist in sense-making in the following ways:

- Present an initially reduced volume of information (“Twitter allows me to read a short excerpt of what the news stories are to get a general idea and if I am more interested, they give links to click into for more information” (Female, 21, student))

- Filtering information based on its relevance (“Looking at Facebook helps by showing me what others feel is relevant. I hear a
lot more from Facebook than any other media. There are stories that my friends post that I probably wouldn’t have read on my own… It is an effortless way for me to find out what is going on and it is almost always information that I actually want to hear about because my friends have similar tastes to mine” (Female, 23, service professional).

- Customizing and narrowing down source and content of information (“I think that is ultimately the appeal of social media for news: it will “ping” you when news happens as opposed to you going out to look for it. In today’s society the convenience of getting a “ping” when big news happens is something that could be very attractive given our busy pace of life.” (Male, 28, sales professional).

- Providing socially-curated information (“In all honesty, the place I hear about most of my news is on Facebook… For example, the way I first found out about the Batman shooting was through Facebook the morning after it happened… Whenever I see something newsworthy written on Facebook, I am always curious if it is in fact true, so I usually go to CNN.com or another news webpage to double-check the story”. (Male, 22, student, part-time employed).

- Strengthening source reliability (“There are certainly many flaws in technology and people have to be very cautious with reading false information. However, if you are following a “verified” account on Twitter, it is expected to be a real account which tweets quality information”. (Female, 22, student).

- Ensuring news timeliness (“I feel that social media sources help with having access to the news quicker and with having more information in which to make a decision about the news easier”. (Male, 33, small business owner).

- Offering social legitimacy and support (“On the news feed Facebook will post a catchy headline that at times does catch my attention. A neat thing is that on that page article there will be images of your “friends” and if you scroll over their picture it will show you the articles that they read. Therefore I will continuously click on interesting articles that I would like to read”. (Female, 28, city government employee).

- Expanding cognitive diversity (“I feel Facebook is important compared to other forms of media because so many people use it. It gives an insight to many different cohorts and allows people to see what their friends think”. (Female, 39, professor).

Contrary to popular assertions that social media are becoming a news gateway (Pew Research Center, 2010), the majority of our respondents deny its defining role in their news consumption. While enthusiasts of using SM for news consumption emphasize their role in reducing information overload by providing social filtering, timeliness, and better situating the news within the pre-existing cognitive schemas, opponents underscore overwhelming information breadth, lack of depth and focus, privacy concerns, and subjectivity. Although news seekers utilize Twitter updates as one of their news sources, they limit the updates they get to certain news providers (mainly prominent reporters and organizations), and get them regularly: they do not rely on incidental and serendipitous “stumbling upon” information as it is usually presented in other social media. All respondents believe that Facebook functionality predisposes it to be more of a discussion and opinion forum than an objective news reporting vehicle. Therefore, its use combines news consumption with social networking to arrive at “social news consumption” experience whereas one can see what their friends read, talk about, and are interested in (i.e. their newsfeed is mediated by friends’ actions in relation to the news). Respondents also emphasize social media’s broader scope and opportunity to access “fringe”, and not only mainstream news and details. In terms of reconciling the incoming news information with the pre-existing civic knowledge framework and the socially accepted views, social media play an important role in legitimizing new content via links posted by friends with similar views and tastes. Thus, in addition to granting legitimacy through social approval, filtering and curation, other advantages of using social media for news include convenience and timeliness, as well as diversity and breadth of the news information available.

In terms of the role of social filtering in creating information bubble, the opposite views expressed by our respondents suggest that the type of social ties dominant in one’s social network may provide different experiences. Those with smaller networks, dominated by strong family and close friends’ ties may experience the news “information bubble”, whereas they are exposed to very similar news from the same narrow list of sources. Alternatively, those social media participants who have broad networks of friends characterized by weak ties and representing diverse and divergent views and beliefs, benefit from being exposed to new and unexpected news insights and sources.

6. Conclusion, contributions to theory and future research

Surrounded by 24 × 7 news feeds, individuals appear remarkably uninformed about current events (Denning, 2006), primarily because they cannot make sense of the news-related information they receive. Research (e.g. Klausegger, Sinkovics, & Zou, 2007) has shown that the natural limit to mental processing in the short-term memory is between five and nine “chunks” of information before information overload sets in. When the total amount of information exceeds this saturation point, the individual engages in “muddling” through irrelevant, marginally useful, or contradictory information and can no longer engage in sense making processes to derive meaning (Denning & Raj, 2011). When information is present, people strive to organize it and set it in order (Thorson et al., 1985; Zillmann & Bryant, 1985). Based on these ideas, the paper uses the information overload and sense-making lenses to examine how individuals go beyond just imbibing news information, to understanding the contextual implications and informing their knowledge or view of the world. Specifically, we make the following contributions to theory.

First, we draw from diverse literatures and use the concepts of information overload and sense-making to explain news consumption variability. We show that while information is abundant, converting it to knowledge requires the consumer to be able to engage in sense-making by dealing with information overload. This leads the user to make choices with respect to how much information they are willing to process and what strategies they use to make sense of it. The IT literature has examined the technical aspects of addressing information overload (e.g. Carver & Turoff, 2007; Grisé & Gallup, 1999) and the nature of information processing in online communities (Jones et al., 2004). The marketing literature has examined use of social media for social shopping, when feedback from one’s network’s participants facilitates product-related information processing and decision-making (e.g. Olbrich & Holsing, 2011). Neither of these literatures has looked at the role of social media in news consumption. The rise of the Internet, particularly social media, has fostered complex patterns of information creation, distribution and consumption. We suggest that integrating theoretical lenses from relevant streams of literature is perhaps an effective route to understanding this complexity and identifying similarities in multiple domains. This paper integrated the conceptual frameworks of information overload and sense making to reveal how individuals consume news, driven by the need to address information overload and engage in sense-making.

Consumer research is ambivalent regarding product-related information overload in choice, satisfaction and purchase intent. While some studies suggest that online information overload
results in less satisfied, less confident, and more confused consumers (Lee & Lee, 2004), others propose that information breadth leads to more satisfied consumers by increasing available choices (Scheibehenne, Greifeneder, & Todd, 2010). The results of our study can further inform the research stream on processing product- and brand-related information via new media, to account for consumers’ needs to make sense of the ever-growing volume of socially co-created product reviews, comments and opinions, as well as curation and legitimization of fashion-related information.

Second, we clarify the role of social media in online news consumption. Current observations disagree on the effectiveness of social media in informing the individual about civic society, some pointing to its constructive role in enhancing civic knowledge and enabling citizen journalism (Greene et al., 2011; Weisberg, 2011), and others – to its constraining role in socially filtering news information (Parisè, 2011). This paper demonstrates that social media plays a nuanced role in online news consumption and identifies both its benefits and its “dark side”. In particular, we clarify two aspects of the role of social media. One, we highlight the positive aspect of social media-enabled news consumption by ensuring socially negotiated sense making. We note that when the individual draws upon his or her social network for online news consumption, he or she is able to expand a structure of meaning through the socialization process that provides a framework for sense making about civic life. Two, we reveal a non-beneficial aspect of social media-enabled news consumption, namely, the potential for a “filter bubble”. We note that when individuals rely on their strong-tie social networks for news, the information tends to be filtered through the attitudinal preferences of this network and may not provide an encompassing, balanced or diverse knowledge about civic society. Therefore, while social curation can be an effective strategy for handling information overload and providing socially-supported cognitive framework, it may not necessarily facilitate the cognitive diversity aspect of sense-making. Our results suggest that the strength of ties within informational social networks may moderate the role of social curation in civic (and potentially other domains of) knowledge formation, implying a potentially fruitful research direction of the role of tie strengths in socially-mediated information processing and knowledge formation.

While this study mainly focused on the consumption aspect of news information, future research should consider more ‘active’ aspects of news consumer behavior as news sharing, augmenting and curating, as well as their relationships with news consumption. It is possible that consumers who utilize specific strategies for coping with information overload in various aspects of news sense-making may also exhibit diverse behaviors while sharing news information with others. Identifying possible parallels and patterns may help news organizations better segment their target audience.

Given the fact that the world population is increasing the amount of time spent with social media, future research should also address behavioral patterns and attitudes of this news consumption segment to identify tendencies that may be spreading to other news consumers, especially with the growing penetration of mobile connectivity. It might be expected that different types of news consumption would involve the predominance of a particular sense-making aspect. For instance, sports news consumption might predominantly involve the sense-making aspect of socialization, while financial news consumption – that of increasing cognitive diversity. Future research that reveals such potential associations could guide news marketers to tailor their offerings to facilitate specific and corresponding information overload handling strategies that they may wish to encourage different segments of consumers to engage in.

Our findings can inform the nascent social shopping stream of marketing research (MSI, 2014). For example, given the potential moderating role of strength of ties in expanding vs constraining one’s exposure to diversity, it would be interesting to investigate whether consumer exposure to wider social networks would facilitate the expansion of shopping venues and brands in their initial consideration set. Further, given the importance of product information in online consumer decision making, an interesting question to ask would be whether the availability of shopping-related information in one’s social networks would facilitate/ expedite decision-making by providing social legitimization of brands and helping situate them in the socially-negotiated mental structures. Another potentially important question is whether by providing more relevant product information (based on shared tastes, preferences and loyalties), strong-tie social networks can affect one’s purchase decisions stronger than weak-tie social networks offering broader perspectives of diverse views.

7. Implications for practice

Our findings suggest that contemporary news consumers utilize new media tools to cope with information overload in their process of making sense of the ever-increasing content from the growing number of sources in order to form their civic and political knowledge and opinions. These coping strategies may negatively affect news providers by filtering them out of the consideration set of information sources. In order to avoid being marginalized by news consumers seeking to reduce their information load, news providers should consider offering both complexity-reducing and load-adjustment tools (Crisé & Galupe, 1999) on their websites. For instance, they should enhance capabilities for categorizing, sorting, and searching information, as well as offer content personalization by collecting customer preferences and creating interest-based stimuli that would draw their customers’ attention. Further, news consumers employ source personalization strategy to ensure their exposure to trusted and verified news providers. This implies that developing brand value by offering high quality journalistic offerings will provide a competitive advantage to news organizations and may potentially strengthen subscription-based revenue, as consumers would be willing to pay for premium-quality trusted content in the ever-growing stream of unverified news information.

By offering contextual and in-depth coverage of the news items, news organizations will be able to facilitate the formation of stronger associations between new news events and preexisting cognitive frameworks, thus aiding in sense-making. News organizations should also take advantage of features such as social tagging and linking among information sources such as blogs to provide greater opportunity for social curation. By introducing discussion forums on their websites, news providers will create a basis for construction of social meaning, thus facilitating news information legitimacy and civic knowledge formation. It is also recommended that news organizations actively participate in social media by establishing their own accounts to offer their readers more diverse exposure to various sources offering relevant information, and to minimize possible “filter bubbles”. While a number of news websites provide opportunity for social networking through links with Twitter and Facebook, relatively few websites encourage or alert the user to increase the topical conceptual diversity of their news consumption. Most of the linking strategies adopted by content websites provide links to similar topics. Our findings suggest that new consumers should be encouraged to explore cognitively diverse topics for better sense making of news and hence a more informed view of civic society.

In our sample, the majority of news consumers represented passive attitudes towards news consumption, as evidenced by a stronger presence of load adjustment (rather than complexity handling) information overload handling strategies such as news...
avoidance. Their assumption of news ubiquity and reluctance to expend resources to obtain news may present a potential problem for news providers who are relying on subscriptions and "freemium" models. Given that advertising revenues are being diverted towards more targeted media channels, such broadcast-reliant news organizations as network TV, local radio stations and newspapers (including their online versions) may have to limit their content to topics of more narrow focus that may interest incidental news consumers. However, pursuing this niche strategy may further contribute to the "filter bubble" phenomenon and negatively affect civic participation in communities, necessitating the creation of publicly funded news organizations.

Our findings can also be interpreted in other domains of information consumption. For instance, in the area of product and brand-related information, peer pressure and biased product reviews may intensify consumer information asymmetry, limiting exposure to new product and price information. Indeed, social shopping (sharing and curating product information for one’s online social network) is increasingly affecting buying choices via the process of social legitimization (or subjective norm) (Tuten & Solomon, 2013). Additionally, the influence of other customers’ reviews on buyer’s behavior now tops that of all other product information sources (The E-tailing Group, 2011). Given that 90% of consumers spend more than 75% of their online shopping time doing information search (The E-tailing Group, 2011), offering tools for coping with information overload may positively differentiate online retailers and increase traffic to their sites. Finally, introducing customer or product reviews possibilities within their social networks may offer online vendors opportunities to expand their customers’ consideration sets, introduce new products and brands, and can potentially affect product evaluations via socially negotiated meaning creation.

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