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Understanding social network site consumer engagements

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Abstract

Interpreting social network site (SNS) consumer behavior engages motivation, consumption, and planned behavior theory. An expanded consumer attitude and engagement approach combines with consumer expectations and psychology to embed consumer value deliverance intermediaries, and to ultimately deliver SNS business outcomes through satisfaction, trust and loyalty. This SNS 'consumer engagement' model is conceptualized to operate across the business's SNS consumer engagement cycle, and with the SNS consumer measurement framework, adds understanding of pre-event, at-event and post-event consumer behavior when engaging in the business's SNS. Astutely interpreted, this approach allows business to further understand its SNS consumers (and even its sub-groups of consumers).

Keywords Consumption, motivation, marketing, social-media, technology.

INTRODUCTION

Since 2004, web 2.0 (deploying technologies beyond static web1.0 webpages), and now the web 3.0 (the current evolving web of intelligent, personalized, geospatial linked-data across the internet-of-things) (Berners-Lee, 2013) approach continues shifting consumers from passive recipients of marketing exchanges processes into active and co-creation engagements and interactions across the digital and communication media domain (Hanna et al., 2011). Deliotte recognizes such fast-changing, technology-driven communication channels as facilitators of new knowledge-sharing, enhanced intelligence gathering and greater networking options, but sees social networks as 'full of risks' but offering great rewards (Swiegers et al., 2012), with today's businesses actively-engaging across its communication and exchange channels (Venkatesh and Bala, 2008). Neilsen (Q3, 2011) see social media as '… connecting people with just about everything they watch or buy.' Social media empowers web consumers, and drives participant trust across social media software-harnessing network vehicles including Facebook, LinkedIn, YouTube, and Flickr. (Khong et al., 2013; Ross et al., 2009).

Across such online social network site (SNS) variants, consumers and membership-groups collaborate, and create innovations to their existing communications channels. SNS communication channels also market business offered transaction opportunities to consumers (Cheung et al., 2011), but the completion of each SNS exchange remains challenging (Hanna et al., 2011). Chan and Guillet (2011) suggest a five phase approach (attracting, engaging, retaining, learning and relating) improves SNS engagement, but they acknowledge limitations – such as completing a SNS transaction at the business website. Others show the SNS consumption can be sectioned under hedonic (emotional) or utilitarian (rational) grouping motivations (Mikalef et al., 2012).

Many SNSs utilize advertising as a prime revenue source, and pursue ways to maximize such revenue streams (Kim et al., 2007). These SNS consumers apply three customer value dimensions (functional, social and emotional) as their digital-purchase-intention determinants (Kim et al., 2011), but scant communication and interaction theory exists as to how consumers are actually drawn towards completing specific transactions. We explore such motivations and consumptions theoretically, and develop a SNS consumer engagement model (and framework) to capture a time-lined value deliverance sequences and to acquire processes that operate within the SNS.

SNS COMMUNICATION CHANNELS

SNSs connect networks of consumers with unstructured, ad hoc, consumer-generated-content (Doyle, 2007). SNS communication channels now include blogs, micro-blogs (Twitter), wikis, news/photo/video-sharing, co-

creation, social bookmarking, interactive game-scenarios, and RSS feeds, and these present new ways to connect consumers and business (Cox, 2008).

Within SNS environments each consumer controls their online experience, and their motivations to engage online (Hoffman and Fodor, 2010) across social media modes such as those of Table 1. Social communication draws on consumer trust, and the credibility of associating with 'persons-like-me' (Scanfield et al., 2010).

SNSs typically encompass shared social, human and intrinsic content features (Doreian and Conti, 2010), which may be restricted to selected homogeneous populations (Boyd and Ellison, 2007; Lee et al., 2010).

Consumer perspectives

SNSs move beyond spaces where consumers are solely preoccupied with communicating and forming networks around either themselves or activities (Beer, 2008). SNSs continually develop functional reasons for consumer involvement/engagement. SNSs, and they also gain: consumer identity (and disclosures); conversations; sharing; presence; relationships; reputation and group actioning (Keitzmann et al., 2011).

SNS consumers typically build common social behaviors, or identities (Dholakia et al., 2004), and this grouping motivates them to participate – especially when the SNS community impact (and its social identity) aligns with their social behaviors (Chaffey and Smith, 2013). Thus, gaming, social and information SNS segmentations arise (Heinonen, 2011), and as the need arises sub-segments of 'like' consumers also emerge (Hamilton, et al., 2013).

Previous consumer segmentation approaches include: quantifiable social toolkit selections (Anon, 2010), economic value, consumer perceived value assessments of performance, quality, servicing (Hamilton et al., 2013), and/or emotive and/or behavioral values linked to particular SNSs and their social media applications (Hoffman and Fodor, 2010; Sweeney and Soutar, 2001), and brand recognition links across a business's social media site.

SNSs also segment across chosen consumer behaviors and value perceptions (Doyle, 2007). These include: social networks (LinkedIn, Google+, Facebook); social searching (Bing, Google-text); social knowledge (Article-sites, Wikipedia); social blogging (RSS-feeds, Mobile-apps); social customer service (Commerce-reviews, Twitter); social publishing (Blogs, media-sites); and social bookmarking (Reddit, Stumbleupon) (Chaffey and Smith, 2013).

Within these SNSs segments shareable content is continually incorporated, and different consumer segments display different behavioral motivations to participate (Cheung et al., 2011). Thus, consumer motivation sets a pre-event influence and is included within this SNS study.

Business perspectives

The business seeks to reach potential SNS consumers by pursuing information about their attitude, usage, knowledge, affects, engagements, foresight, and fears (Akar and Topcu, 2011). Some businesses use variations to technology acceptance models (TAM) and seek consumer perspectives including: usability, value/brand, and intention-to-reparticipate (Choi and Chung, 2013; Venkatesh and Bala, 2008). These TAM variations sometimes include consumer retail value, and psychological motivation and consumption linkages (Hamilton et al., 2013).

Eighty five per cent of 2009 SNS participants prefer businesses to engage with them across SNSs applications (Nail, 2009). This requires business SNSs to engage pools of resources, and often involves the build of economically worthwhile, but unevenly distributed connections with back-links into their business websites (Gonzalez-Bailon, 2009). These competitive back-linkages also create scope for further business engagement (Chafey and Smith, 2013; Hoffman and Fodor, 2010).

Others see SNS consumer engagement with the business as simple wiki and blog communications (Lai and Turban, 2008) to raise expectations, win social connections and convince social consumers of the group's 'collective good'(Liben-Nowell and Kleinberg, 2007). In SNSs customer value analysis studies the business-side of the SNS encounter warrants inclusion. For example, Telstra a large Australian telecommunications corporate, requires staff to responsibly target and discuss its products, services, people, and competitors when engaging within SNS environments.

Harris and Rae (2009) see future business SNSs as being technology supported, consumer-collaborative, and aligned (from business and consumer social connectivity perspectives) (Klick and Parisi, 2008). In such collaborative environments the SNS consumer is a controlling entity that must be reached, and then sufficiently motivated to engage. Hence, we assess the consumer's SNS requirements from both the business provision and the consumer demand perspectives.

Psychology social engagement perspectives

In social-psychological approaches, consumer engagement in social groups is a rational weighting of costs and benefits around activities perceived as desirable (Klandermans, 1984). As SNS consumers also behave in line with resource (and social) expectancy theory (and with mate selection theory), SNS businesses should mobilize their consumer goals as a 'collective good', generating relief, overriding personal risk (Liao, 2011), targeting user social network added-value, and overriding other existing negative value perceptions (Wirtz et al., 2013).

Past social engagement approaches have used incentivization processes (Olson, 1977), such as: ideology (Carden, 1978), solidarity (Fireman and Gamson, 1979), responsibility (Fleishman, 1980), perceived contribution indispensability (Tolbert, 1981); action versus follow (Fireman and Gamson, 1979); production additives (Oberschall, 1980; Oliver et al., 1983); or market thresholds (Granovetter, 1978). However, these incentivizations may or may-not make a social network consumer engage.

Klandermans (1984) social-psychology approach to engagement argues consumers hold expectations about the behavior of others, and so formulate their own production functions, which in-turn, heavily influence individual willingness to participate/engage. At the wider group level, consumers also expect others to participate/engage even at a marginally positive level, and particularly where the 'collective good' is highly valued (Oberschall, 1980).

Social network consumers also display differential inter-social group mobility influenced by: contribution levels, group size and the level of contribution towards the production of the group's collective good (Oliver et al., 1983). This differential mobility builds from consumer perceived expectations of group relevance and links through past experiences into current value deliverables (as cost/benefits weightings) (Klandermans, 1984).

These differentially motivated consumers add to a social network's 'collective good' by sharing (or exchanging) content/ideas, and in sharing, they consume from their SNSs. Hence, we now investigate the consumer's SNS requirements from both motivational and consumption theoretical perspectives.

MOTIVATION THEORY

Consumer motivation to participate in SNSs depends on desired personal gratification levels (Cheung et al., 2011). Like Klandermans (1984), Urdan and Maehr (1995) consider SNS consumer social goals, social motives, and social influences motivate engagement attitudes and behaviors to align within the SNS norms.

SNS consumer attitudinal and behavioral motivation patterns also affect technologies usage, and in-turn influence contact-reach, connections-with-friends, and socialization levels (Brandtzaeg and Heim, 2009). Deci (1975) and Davis et al., (1992) divide consumer behavior into extrinsic motivation (usefulness, or an action of perceived usefulness committed in achieving a value dimension), and intrinsic motivation (enjoyment, or committing an action of interest because the action itself is of interest). Both motivations affect the consumer's intention-to-use, and then to consume information technologies (Lu and Su, 2009; Lin and Lu, 2011), and both contribute to consumer perceived benefits in the SNS (Lin and Lu, 2011).

Seventy five per cent of SNS consumers seek business-offerings, with over thirty per cent believing SNSs provide good *information*, and over forty six per cent of consumers *socially connecting* to discuss business-offerings (Anon, 2010; Neilsen, 2011). Another twenty seven per cent of SNS consumers see entertainment as a motivation to connect. Entertainment can include gaming and/or invitations to: events, sharing activities, special-offers, and promotions (Neilsen, 2011; Swiegers et al., 2012).

From psychology, Heinonen (2011) develops three similar pre-event motivations (*transaction information, social connectivity, and entertaining interactions*) for consumers to engage in SNSs, and Heinonen (2011) also links each pre-event motivation into its own set of at-event SNS consumptive activities – as shown in Table 2.

CONSUMPTION THEORY

Consumption occurs when a business first appropriates requisite services, engages appropriate enhancing tools, and dedicates suitable levels of attention towards the consumer differentiated transacting practices (Warde, 2005). Consumers participate if they know of the opportunity, can access the opportunity, and are motivated to engage (Heinonen, 2011).

If a business offering's 'collective good' (or intended expectations) and other additional features (or extensions to their intended expectations) (Feather, 1982) sufficiently capture a perceiving attractiveness of business offering, the consumer may progress into a consumption phase (Klandermans, 1984). Levels of consumer expectations also influence the willingness to check on a business item's value options (Kamaruddin et al., 2012.).

The pathway to consumption remains interactive, embedded across business-consumer interface, and forms a business-consumer value co-creation that can inform, greet, deliver, charge, and help in the value acquisition processes (Gronroos and Voima (2011). However, Kwan and Yuan (2011) recognize value co-creation may arise from a static pre-event recognition (such as an expectation), and so create a dynamic service-value-network by combining static value co-creations with economic imperatives.

Similarly, in SNS's the business can initiate consumer expectations and capture their choice pathways variations (Kamaruddin et al., 2012) against levels of customer motivation for the business offerings sought (Wei and Miao, 2013). In psychology such attitude, motivation, choice, and decisions fit expectancy-value models of rational-choice (Pinard, 1983). Numerous information systems consumer studies also support an expectations-value connection, and often engage expanded TAMs approaches.

DIMENSIONS OF VALUE

From above, consumer expectations (gauged as intentions and extensions) occur pre-event and are normally pre-promoted by the business.

Intentions represent the normative 'goodness-present' dimension (Parasuraman and Grewal, 2000), and house 'should-exist' components (Swan and Trawik, 1980) the consumer expects to find in an excellent the business offering (Hamer, 2006).

Extensions add further business-offered components beyond the consumer's normal intention expectations. These 'hope-exist' extension components, plus the above intentions, provided they are both relevant (Boulding et al., 1993), then jointly contribute towards a positive 'more-than-fulfilled' or a negative 'less-than-fulfilled' expectation state within the consumer (Lei et al., 2008). Where a strong positive expectations state exists, the consumer has motivations to consume (Heinonen, 2011) through an at-event values acquisition phase.

Hou and Tang (2008) present consumer value as a dual value set – combining business orientation and consumer perception, but in SNSs consumers are typically value seekers. Consumer value is also a multi-dimensional construct (Barnes and Mattsson, 2008; Roig et al. 2006; Sheth et al. 1999; Sweeney and Soutar 2001), and although researchers display variations in the value dimensions they adopt, their value dimensions can be grouped into five at-event dimensions (performance, quality, servicing, economic value and value satisfiers) (Hamilton et al., 2013; Roig et al., 2006; Sheth et al., 1999), which can then influence post-event measures such as consumer willingness to buy or seek information, or to compare/evaluate alternatives (Boksberger and Melsen, 2011). Where business offerings show alignment to SNS values, consumers are influenced towards post-event decisions – including satisfaction (Mitra and Fay, 2010), trust and loyalty (Khong et al., 2013).

LINKING MOTIVATION AND CONSUMPTION

With motivation and consumption related above through expectancies and values, but operating in different time positions, we adapt Heinonen's (2011) Table 2 grid of three SNS motivations (entertainment, social connection or information activities) against three SNS consumption areas (interactive, participatory, or production-related (Shao, 2009)), and show nine segments for SNS consumer targeting.

We also recognize a SNS consumer's value acquisition is an at-event consumptive process, and remap Table 2 into Table 3, showing five value consumption dimensions (servicing, performance, quality, economic-value, and instant-satisfiers) as a motivators-to-consumption map for SNSs.

Table 3 allows business to interpret differing consumer SNS motivations against its consumptive valuing measures. First, a substantive SNS business portal providing entertainment, social connection and information can promote its consumption by winning additional consumer connectivity in every cell of Table 3. Second, a gaming SNS community can place further emphasis across the three entertainment motivation-consumption cells of Table 3 (and a specific game may focus on just one cell). Third, an academic SNS site with information targets, can first focus on this row of three cells for motivation-consumption value deliverance enhancement, and fourth, targeted SNSs first focus on strongly delivering across this row of cells.

SNS CONSUMER ENGAGEMENT MODEL

IT usage models including TAM approaches are normative, predictive, and typically link intensions and behaviors (Ajzen, 2002), and unified acceptance and technology approaches continue expanding, with some assessing frequency-of-use and consumer behavioral intention (Venkatesh and Bala 2008). Wilson et al. (2012) links prior frequency-of-use and attitudinal-habit-strengths (engagement drivers) with expectations, and also includes a social influence driver. These pre-event consumer states conjointly create a consumer preconception (or belief), which then combines with a developing set of values recognitions, and finally results in reflective decisions to reuse the IT site.

As a SNS captures a group of consumers who 'like' similar things, the SNS constitutes a group norming construct. Hence, from Table 3 motivators, we select the motivator that best aligns with a chosen SNS. For example, a boating website and its linked SNS focuses on offering information and advertising of new products. Hence, 'information' is the norming motivator for its consumers, and consumption is best targeted through the information set of consumptive value dimensions.

Like others (Choi and Chung, 2013; Venkatesh and Bala, 2008; Wilson et al., 2012), we include the attitudinal elements of TAM and psychological approaches when including consumer behaviors as pre-event SNS attitudes, engagements, and expectations (or planned behaviors). As we move into the at-event values deliverance suite we add value analysis studies, and then move to the post-event reflective group outcome behaviors. We recognise many post-event outcomes studies show behavioral progressions – typically from satisfaction, to trust, and then to loyalty (ref), and when SNS loyalty leads to definite consumer re-visiting decision, then a new Figure 1 consumer re-engagement cycle begins – with previous consumer pre-event motivations and prior beliefs of the business offering undergo repositioning considerations.

To demonstrate the applicability of Figure 1 and Table 3, we adopt an *informative* SNS motivation-consumption business situation, and develop an *informative* SNS consumer measurement framework (Table 4). From Figure 1's constructs, and using the *informative* row of the at-event Table 3 motivation-consumption value dimensions, we build Table 4 to capture the pre-event and post-event *informative* constructs. This now provides a framework for quantitative and qualitative *informative* SNSs consumer engagement studies, and in quantitative studies the total effects of any SNS input driver can be gauged against its individual outcomes measures. The same approach can also be applied to the other Table 3 row motivators of social connection or entertainment. This SNS consumer engagement model is to be tested using two commercial websites with substantive activities within their SNSs - one is an industrial farm machinery portal the other is a key marine industry portal.

CONCLUSION

The growth in the online membership of a business SNS can be stimulated when improved channels for collaboration and communication emerge between the online business and its engaging SNS consumers.

Interpreting SNS consumer behavior within online business environments enlists psychology (motivation, consumption, and planned behavior), information systems (usefulness and ease-of-use attitudes, and include engagement competency to cater for consumer capabilities) and business expectations (intentions and extensions) as pre-event variables. These influence at-event business SNS value deliverance, and post-event reflective outcomes interpretations. The resultant SNS consumer engagement model (Figure 1) presents pathways to understand pre-event, at-event, and post-event consumer behavior across specific business SNSs.

The SNS consumer engagement model (Figure 1) in combination with Table 3's motivators-to-consumption values triggers establishes a SNS consumer measurements framework (Table 4) for an information normed SNS. Table 4's cell measures are developed from psychology, business and information systems literature, on-line survey-captured and analysed as values deliverance systems (or for selected total effect comparisons) across one (or more) SNS business. The SNS consumer engagement approach facilitates greater understanding of the business SNS value deliverance to its consumers, and it applies to information, or to social, or to entertainment SNS frameworks.
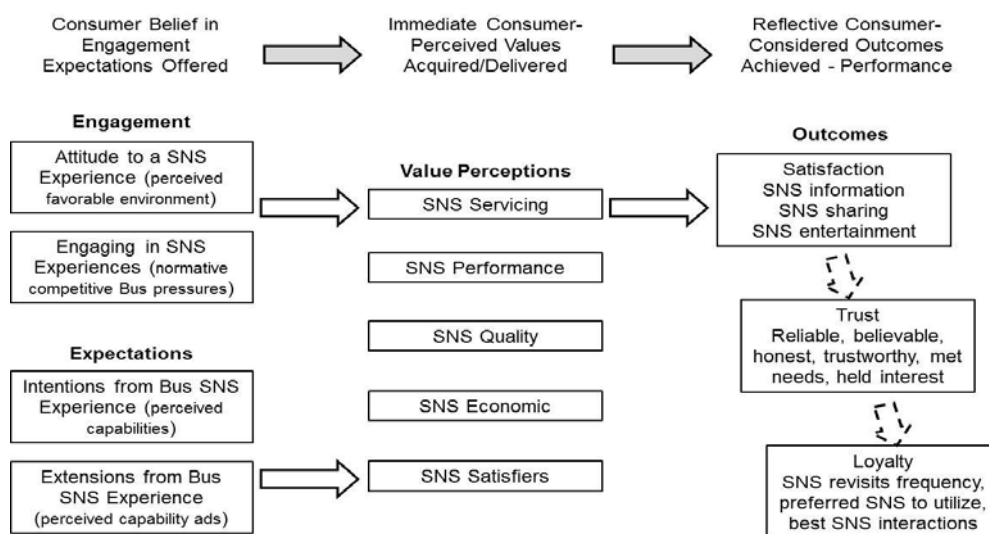

Figure 1: SNS consumer engagement model

Table 1. Social media marketing approaches (Stelzner, 2011)

On-line Consumer-Connection Approaches			
Email marketing	Press releases	Print display ads	Radio ads
SEO	On-line ads	Sponsorships	TV adds
Event marketing	Direct mail	Webinars/teleseminars	YouTube promotions

Table 2. SNS Consumer targeting matrix (adapted from Heinonen, 2011)

MOTIVATION	Interaction	Participation	Production
Entertainment	Create games, scenarios and/or on-line content.	Build creative tools for users' daily activities. Enable different user generated content sections for entertainment practices.	Connect users in real-time games, and/or serious scenario environments.
Social Connection	Enable interactions between users. Build Chat functions. Build on-line communities.	Support activities and interactions. Build business's image on-line.	Enable and facilitate interactive social connections. Create new solutions by learning from discussions.
Information	Provide product/service information and free downloads. Link business and offering to current activities that user	Create real-time reviews and product/service tests. Clarify relationships between user and business (and its offerings).	Provide tools that enable daily practices. Invite customers into the development of new offerings.

Table 3. Motivators-to consumption value triggers for SNSs

MOTIVATION	CONSUMPTION				
	Servicing	**Quality**	**Performance**	**Economic Value**	**Instant Satisfiers**
Entertainment	Create games, scenarios &/or on-line content.	Build quality/creative tools for users' daily activities. Different user-generated content sections into entertainment practices.	Connect users in real-time games, &/or serious scenario environments.	Offer game or creative transactions for users interacting in real-time.	Stimulating, exciting & real-time connectivity between interacting users. Real-time connectivity to pleasure environments.
Social Connection	Enable interactions between users. Build Chat/Blog functions. Build on-line visual or communication communities.	Develop quality activities/interactions. Link multi-mode communic.'s channels Enhance online business image.	Enable/facilitate interactive social connections. Develop new solutions from ideas learned from discussion channels.	Offer social promotions, bonus activities &/or transactions.	Excellent connectivity with other users. Fun activities that are easy, meet-needs, & are desirable.
Information	Provide product/service information &/or free downloads. Link business offerings to current activities advocated by the user.	Create real-time reviews & product/service tests. Clarify relationships between user and business & its offerings.	Enable daily practices with timely info. Tools. Invite customers into the development of new variations or offerings.	Offer discusion forums. Latest news & Info section. Fast & free downloads.	Easily understood, & interestingly-presented information.

Table 4. Informative SNS consumer measurement framework

Motivation to use a business's SNS	Preconceived market expectations of bus. offerings	Immediate consumer perceived values acquired/delivered			
	Information	Servicing	Quality	Performance	Economic Value
Attitude to SNS experience (perceived favorable environment)	This SNS should be useful and engage me with other like-interest consumers.	This SNS is useful when seeking product and/or service information.	This SNS provides top quality consumer experiences.	This SNS provides timely solutions to my requests.	This SNS offer: discusion forums, news, Information, entertainment.
Engaging in SNS experiences (normative competitive bus pressures)	Before choosing to engage on this SNS, I consider the usefulness of SNS communication modes offered by this bus against other bus sites.	SNS of business involves me in useful experiences.	This SNS allows consumer analysis of the business's products/services.	This SNS invites consumers to help develop new ideas.	This SNS engages with its consumers.
Intentions from SNS bus engagement (perceived capabilities)	On this bus's SNS, I expect to find engaging informative discussion about the Bus product/service I seek.	SNS of business always provides me with links to the useful business components I seek. This SNS is: fun, vibrant, dynamic, interactive, sharing (feedback from group).	This SNS always clarifies the products and services applications I seek from the business.	The SNSs I am using provides me: quick and interactive connections to my chosen social group, quick and reliable downloads, usable and engaging entertainment, personal inclusivity areas.	This SNS is providing me: effective new information, efficient downloads, suitable social connections, an acceptable ROI for my time allocated.
Extensions from Bus SM Experience (perceived added capabilities)	On this bus's SNS, I'd like to test competitive views regarding the product/service I seek (communications channels/platforms, ads, links, traffic approaches.	This SNS continues to develop unique consumer engaging activities. This SNS continues to improve activities advocated by its users.	This SNS allows discussion that further clarifies the quality of its offerings.	This SNS responds to daily practices by consumers. This SNS invites consumers to test imporvements in its offerings.	This SNS enters into transactions with its consumers.

Motivation to use a business's SNS (Table 4 continued)	Immediate consumer perceived values acquired/delivered	Reflective customer considered outcomes		
	Instant Satisfiers	Satisfaction	Trust	Loyalty
Attitude to SNS experience (perceived favorable environment)	This SNS is easily understood, & interestingly-presented.	I am satisfied with this bus's SNS I am satisfied with those who use this bus's SNS	I believe this SNS is secure I believe this SNS is trustworthy	I prefer to use this bus's SNS. This SNSs has convinced me of its reuse value
Engaging in SNS experiences (normative competitive bus pressures)	This SNS is interestingly-presented.	I enjoy the experiences I have shared with others on this bus SNS I enjoy the experiences I have shared with this bus through its SNS.	The experiences I gain from this SNS are rewarding to me.	Using this SNS is a rewarding experience.
Intentions from SNS bus engagement (perceived capabilities)	The SNSs I am using is meeting my: needs, wants, desires, delights. The SNSs I am using is: intersting, fun, engaging, competitive.	I consider this SNS is great for: social networking, group interactions, economic value, connecting with new consumers, finding information, finding media, entertainment, business solutions.	I consider this SNS is: reliable, believable, honest, trustworthy, met my needs, held my interest reaches likeminded consumers, swaps ideas/comments with others.	This SNSs has convinced me: it offers top SNS interactions, of its reuse value, to frequently reuse it, to use it as my preferred SNS, to be more involved in its interactive communities.
Extensions from Bus SNS Experience (perceived added capabilities)	This SNS: is easy to use, is up-to-date, contains latest ideas.	I consider the SNS's value adds are useful.	I consider the SNS's value ads to be correct.	The value ads in this SNS are a reason why I reuse it.

REFERENCES

Ajzen, I. 2002. "Residual effects of past on later behavior: Habituation and reasoned action perspectives," *Personality and Social Psychology Review* (6:2), pp107–122.

Akar, E. and Topcu, B. 2011. "An examination of the factors influencing consumers' attitudes toward social marketing," *Journal of Internet Commerce* (10:1), pp 35-67.

Anon, 2010. "Social networks overview: Current trends and research challenges," *European Commission: Information Society and Media*, Nov, pp 1-31.

Barnes, S. and Mattsson, J. 2008. "Brand value in virtual worlds: An axiological approach," *Journal of Electronic Commerce Research* (9:3), pp 195-206.

Beer, D. 2008. "Social network(ing) sites…revisiting the story so far: A response to Danah Boyd and Nicole Ellison," *Journal of Computer-Mediated Communication*, (13:5), pp 16-29.

Berners-Lee, T. 2013. "The next web," Retrieved 2 May, 2013, from http://www.ted.com/talks/tim_berners_lee_on_the_next_web.html

Boksberger, P.E. & Melsen, L. 2011. "Perceived value: A critical examination of definitions, concepts and measures for the service industry," *Journal of Services Marketing*, (25:3), pp 229-240.

Boulding, W., Kalra, A., Staelin, R. and Zeithmal, V. 1993. "A dynamic process model of service quality: From expectations to behavioral intentions," *Journal of Marketing Research* (30:1), pp 7-27.

Boyd, D.M. and Ellison, N.B. 2007. "Social Network Sites: Definition, History, and Scholarship," *Journal of Computer-Mediated Communication*, (13:1), pp 210-230.

Brandtzæg, P.B. and Heim, J. 2009. "Why People Use Social Networking Sites," *Online Communities and Social Computing* (5621), pp 143-152.

Carden, M.L. 1978. *The proliferation of a social movement, ideology and individual incentives in the contemporary feminist movement*. In Louis Kriesberg (Ed.), Research in Social Movements, Conflict and Change (pp. 179- 196), Volume 1. Greenwich, CT: JAI.

Chaffey, D. & Smith, P.R. 2013. *Emarketing excellence: Planning and optimizing your digital marketing*. New York, NY: Routledge.

Chan, N.L. and Guillet, B.D. 2011. "Investigation of Social Media Marketing: How Does the Hotel Industry in Hong Kong Perform in Marketing on Social Media Websites?" *Journal of Travel & Tourism Marketing* (28), pp 345-368.

Cheung, C.M.K., Chiu, P-Y. and Lee, M.K.O. 2011. "Online social networks: Why do students use facebook?" *Computers in Human Behavior* (27:4), pp 1337–1343.

Choi, G. & Chung, H. 2013. Applying the Technology Acceptance Model to social networking sites (SNS): Impact of subjective norm and social capital on the acceptance of SNS. International Journal of Human-Computer Interaction, Posted online: 28 Jan 2013 doi:10.1080/10447318.2012.756333.

Cox, A.M. 2008. "Flickr: A case study of Web2.0," Aslib Proceedings: New Information Perspectives, (60:5), pp 493-516.

Davis, F., Bagozzi, R. and Warshaw, P. 1992. "Extrinsic and intrinsic motivation to use computers in the workplace," *Journal of Applied Social Psychology* (22:14). pp 1111-1132.

Deci, E. 1975. *Intrinsic motivation*. New York, NY: Plenum Press.

Dholakia, U.M., Bagozzi, R.P. & Pearo, L.K. 2004. "A social influence model of consumer participation in network- and small-group-based virtual communities," *International Journal of Research in Marketing* (21:3), pp 241-263.

Doreian, P. and Conti, N. 2010. "Social context, spatial structure, and social network structure," *Social Networks* (34:1), pp 32-46.

Doyle, S. 2007. "The role of social networks in marketing," *Database Marketing & Customer Strategy Management* (15:1), pp 60-64.

Feather, N. 1982. *Expectations and Actions: Expectancy-Value Models in Psychology*. Hillsdale, NJ: Erlbaum.

Fireman, B. and Gamson, W.A. 1979. *Utilitarian logic in the resource mobilization perspective*. In Mayer N. Zald & John D. McCarthy (Eds.), The Dynamics of Social Movements (pp. 8-45), Cambridge, MA: Winthrop.

Fleishman, J.A. 1980. "Collective action as helping behavior: Effects of responsibility diffusion on contri-butions to a public good,. *Journal of Personality and Social Psychology* (38), pp 629-637.

Gamson, W.A., Fireman, B. and Rytina, S. 1982. *Encounters with Unjust Authorities*. Homewood, IL: Dorsey.

Gonzalez-Bailon, S. 2009. "Opening the black box of link formation: Social factors underlying the structure of the web," *Social Networks* (31:4), pp 271-280.

Granovetter, M. 1978. "Threshold models of collective behaviour," *American Journal of Sociology* (83), pp 1420-1443.

Gronroos, C. and Voima, P. 2011. "Making sense of value and value co-creation in service logic," *Hanken School of Economics, Finland, Working papers* No. 559, pp 1-32.

Hamer, L.O. 2006. "A confirmation perspective on perceived service quality," *Journal of Services Marketing* (20:4), pp 219-234.

Hamilton, J.R., Prideaux, M.C. and Tee, S. 2013. "Linking car racing attendee expectations and values with trust, satisfaction and loyalty outcomes," *12th International DSI and 18th Asia Pacific DSI conference*, July 9-13, Nusa Dua, Bali, Indonesia, pp 1-14.

Hanna, R., Rohm, A. and Crittenden, V.L. 2011. "We're all connected: The power of the social media ecosystem," *Business Horizons* (54:3), pp 265–273.

Harris, L. and Rae, A. 2009. "Social networks: the future of marketing for small business," *Journal of Business Strategy* (30:5), pp 24-31.

Heinonen, K. 2011. "Consumer activity in social media: Managerial approaches to consumers' social media behavior," *Journal of Consumer Behaviour* (10:6), pp 356-364.

Hoffman, D. and Fodor, M. 2010. "Can you measure the ROI of your social media marketing," *MIT Sloan Management Review* (52:1), pp 41-49.

Hou, L. and Tang, X. 2008. "Gap Model for Dual Customer Values," *Tsinghua Science and Technology* (13:3), pp 395-399.

Kamaruddin, R., Osman, I., Anizaliana, C. and Pei. C. 2012. "Public transport services in Klang Valley: Customer expectations and its relationship using SEM," *Procedia - Social & Behavioral Sciences* (36), pp 431-438.

Keitzmann, J., Hermkens, K., McCarthy, I. and Silvestre, B. 2011. "Social media? Get serious! Understanding the functional building blocks of social media," *Kelly School of Business* pp 1-11.

Khong, K.W., Onyemeh, C.N. and Chong, A.Y-L. 2013. "BSEM estimation of network effect and customer orientation empowerment on trust in social media and network environment," *Expert Systems with Applications, In Press*, Available online 7 March 2013, pp 1-13.

Kim, H-W, Gupta, S. and Koh, J. 2011. "Investigating the intention to purchase digital items in social networking communities: A customer value perspective," *Information & Management* (48), pp 228–234.

Kim, H-W., Chan, H. and Gupta, S. 2007. "Value-based adoption of mobile internet: An empirical investigation," *Decision Support Systems* (43:1), pp 111-126.

Klandermans, B. 1984. "Mobilization and participation: Social-psychological expansions of resource mobilization theory," *American Sociological Review* (49:5), pp 583-600.

Klick, J. & Parisi, F. 2008. "Social networks, self-denial, and media preferences: Conformity as an evolutionary strategy," *Journal of Socio-Economics* (37:4), pp 1319-1327.

Kwan S.K. and Yuan S-T, 2011. *Customer-driven value co-creation in service networks*. In Hallux Demirkan, James C. Spohrer & Vikas Krishna (Eds.), The science of service systems (pp. 189-206), New York, NY: Springer.

Lai, L.S.L. and Turban, E. 2008. "Groups Formation and Operations in the Web 2.0 Environment and Social Networks," *Group Decision and Negotiation* (17:5), pp 387-402.

Lee, C., Scherngell, T., & Barber, M. 2010. "Investigating an online social network using spatial interaction models," *Social Networks* (33:2), pp 129-133.

Lei, J., de Ruyter, K. and Wetzels, M. 2008." Consumer responses to vertical service line extensions," *Journal of Retailing* (84:3), pp 268-280.

Liben-Nowell, D., & Kleinberg, J. 2007. "The link-prediction problem for social networks," *Journal of American Society of Information Science and Technology* (58), pp 1019–1031.

Lin, K. and Lu, H. 2011. "Why people use social networking sites: An empirical study integrating network externalities and motivation theory," *Computers in Human Behaviour* (27:3), pp 1152-1161.

Liao C., Liu, C-C. and Chen, K. 2011. "Examining the impact of privacy, trust and risk perceptions beyond monetary transactions: An integrated model," *Electronicc Commerce Research & Applications* (10), pp 702–715.

Lu, H. & Su, Y. 2009. "Factors affecting purchase intention in mobile shopping web sites," *Internet Research* (19:4), pp 442-458.

Mikalef, P., Giannakos, M. and Patel, A. 2012. "Exploring the business potential of social media: An utilitarian and hedonic motivation approach," *25th Bled eConference on eDependability: Reliable and Trustworthy eStructures, eProcesses, eOperations and eServices for the Future*, June 17-20, Bled, Slovenia, pp 1-14.

Mitra, D. & Fay, S. 2010. Managing service expectations in online markets: A signaling theory of e-tailer pricing and empirical tests," *Journal of Retailing* (86:2), pp 184-199.

Nail, J. 2009. "Social media in 2009: A tale of two futures," *Public Relations Tactics* (16:1), pp 13.

Neilsen. 2011. "The State of the media: The social media report (Q3)," *Nielsen/McKinsey Incite* pp 1-13. Retrieved 2 May 2013 from http://www.nielsen.com/us/en.html.

Oberschall, A. 1980. *Loosely structured collective conflict: a theory and an application*. In Louis Kriesberg (Ed.), Research in Social Movements, Conflict and Change, (pp. 45-68), Volume 3. Greenwich, CT: JAI,

Oliver, P., Marwell, G. and Teixeira, R. 1983. *Group heterogeneity, interdependence and the production of collective goods: a theory of the critical mass*. Madison, WI: Dept. of Sociology, University of Wisconsin.

Olson, M. 1977. *The Logic of Collective Action. Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.

Parasuraman, A. & Grewal, D. 2000. "The impact of technology on the quality-value-loyalty chain: a research agenda," *Journal of Academy of Marketing Science* (28:1), pp 168-174.

Pinard, M. 1983. From deprivation to mobilization. *Annual Meetings of the American Sociological Association*, Sept, Detroit.

Roig, J.C., Sánchez, J. and Moliner, M.A. 2006. "Customer perceived value in banking services," *International Journal of Bank Marketing* (24:5), pp 266-283.

Ross, C.O., Sisic, M., Arseneault, J., Simmering, M.G. & Orr, R.R. 2009. "Personality and motivations associated with Facebook use," *Computers in Human Behavior* (25), pp 578-586.

Scanfield, M., Scanfield, V. & Larson, E. 2010. "Dissemination of health information through social networks: Twitter and antibiotics," *American Journal of Infection Control* (38:3), pp 182-188.

Shao, G. 2009. "Understanding the appeal of user- generated media: A users and gratification perspective," *Internet Research* (19:1), pp 17-25.

Sheth, J.N., Mittal, B. and Newman, B.I. 1999. *Customer behavior: Consumer behavior and beyond*. London, UK: Dryden Press.

Swan, J.E. & Trawik, F.I. 1980. *Satisfaction related to predictive vs desired expectations*. In Keith H. Hunt and Ralph L. Days, (Eds.), Refining concepts and measurements of Consumer satisfaction and complaining behavior (pp. 7-12), Bloomington, IN: School of Business, Indiana University.

Sweeney, J.C. & Soutar, G.N. 2001. "Consumer perceived value: The development of a multiple item scale," *Journal of Retailing* (77:2), pp 203-220.

Swiegers, G., et al., 2012. Social media report – Australia, *Deloitte (Sydney)*, pp 1-40.

Tolbert, P.S. 1981. Determinants of social movement participation. *Annual Meetings of the American Sociological Association*, Toronto, Ontario, CA.

Urdan T.C. & Maehr, M.L. 1995. "Beyond a two-goal theory of motivation and achievement: A case for social goals," *Review of Educational Research* (65:3), pp 213-243.

Venkatesh, V. and Bala, H. 2008. (Technology Acceptance Model 3 and a research agenda on interventions," *Decision Sciences* (39:2), pp 273-315.

Warde, A. 2005. "Consumption and Theories of Practice," *Journal of Consumer Culture* (5:2), pp 131-153.

Wei, W. and Miao, L. 2013. "Consumers' pro-environmental behavior and the underlying motivations: A comparison between household and hotel settings," *International Journal of Hospitality Management* (32:1), pp 102-112.

Wilson, E.V., Mao, E. & Lankton, N.K. 2012. "The distinct roles of prior IT use and habit strength in predicting continued sporadic use of IT," *Communications Association for Information Systems* (27:1), pp 185-206.

Wirtz, B.W., Piehler, R. and Ullrich, S. 2013. "Determinants of social media website attractiveness," *Journal of Electronic Commerce Research* (14:1), pp 12-33.

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