How social are we in the NT? An Exploratory Study of the Use of Social Media in the Northern Territory

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Abstract

This paper provides an analysis of the use of social media in the Northern Territory of Australia. The data was collected through an on line Territory wide survey of 419 self-identified social media users and five focus groups. An analysis of the respondent's demographic characteristics and social media behaviour determined there were significant age and gender differences in social media usage. Statistically significant results were found for the frequency of applications accessed; the purpose of social media use; the manner of social media use and: attitudes and behavior towards social media use.¹

Keywords: Social media, Northern Territory, applications, attitude, behaviour

1.0 Introduction

There is compelling evidence that mainstream Australians are avid social media users. According to Cameron (2013), Australians are amongst the highest social media users worldwide. Cowling (2013) reports that approximately 39 per cent of the total Australian population log on to Facebook every day. In the month of September 2013, YouTube had over 11 million unique Australian viewers (UAV); the social media networking sites LinkedIn, Tumbler, Word press and BlogSpot each has over three million UAV and Twitter had over 2 million active Australian users (Cowling, 2013). Usage data indicates that for every hour an Australian spends online 14 minutes are spent on social sites, nine on entertainment and four minutes shopping online (Cameron, 2013). Social media is now a communications tool of choice for many individuals, commercial and not for profit organisations. In the Australian context the main reported use of social media is to communicate with family and friends, the sharing of photos or videos and coordinating social events (Sensis, 2013). However, an increasing number of Australians are now using social media for commercial purposes. Approximately one in four Australians are using social media to buy and sell online, to follow their favourite brands, to research purchases and to access offers and promotions. According to Sensis (2013:3) the take up of social media in the Australian context is a "...relentless march into the hearts, minds and wallets of consumers". In the Northern Territory (NT) social media also has considerable potential to facilitate community engagement, promote business opportunities and disseminate information. However, little is known of how the social media preferences and behaviour of NT residents. The lack of available data prompted the researchers to undertake an online survey and follow up focus groups to determine the use of social media in the NT.

The data collection phase of the project commenced in October 2013. Participants included over the individuals over the age of 15 who resided in the NT. Five follow up focus groups were conducted in May 2014. This paper examines the responses of the 419 individual non business users of social media that responded to the online survey. This paper commences with a review of the available literature. The methodology employed in the study is then explained. A discussion of the survey and focus results follows. The paper concludes with an overview of the use of social media in the NT.

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2.0 Literature Review

A review of the literature indicates there are numerous definitions for the term social media. Broadly defined social media refers to interaction among people in which they create, share, and or exchange information and ideas in virtual communities and networks (Ahlqvist, Bäck, Halonen, & Heinonen, 2008). According to Kaplan and Haenlein (2010 p.67) social media is "...a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content." Common to all definitions are the concepts of communication, networking, content generation and dissemination over computer mediated applications. The reach, frequency, usability and immediacy of social media distinguishes it from the more traditional forms of media (Agichtein, Castillo, Donato, Gionis, & Mishne, 2008). International research on the topic of social media has been integral to understanding the phenomenon. In an attempt to define social media users, research has encompassed topics as diverse as the personality characteristic of users (Correa, Hinsley, & Zuniga, 2010; Ozguven & Mucan, 2013); generational differences in user behavior (Bolton et al., 2013); gender differences in social media use (Ruana & Wallace, 2013); ethnicity and social media adoption (Chang, Rosenn, Backstrom, & Marlow, 2010); and the geographic distribution of social media contributors (Hurst, Siegler, & Glance, 2007). In the international context, the reported uses of social media have included mobilizing the online community for activities as diverse as political activism (Bruns, Highfield, & Burgess, 2013; Valenzuela, 2013); emergency response (Hjorth & Kim, 2011; Wiederhold, 2013); event promotion (Bradshaw, Hughes, & Day, 2013; O'Mara, 2013); and public and community policing (Trottier, 2012; Williams et al., 2013). The reported uses of social media are in fact, as diverse the constituents of the online community.

In the Australian context, social media usage is on the increase, both in the proportion of thepopulation that uses social media, and also in the intensity with which Australians are engaging with it (Sensis, 2013:4). Among Australian Internet users, a reported 65 per cent use social media tools such as Facebook, Twitter, MySpace or LinkedIn. Approximately 45 per cent use social media at least every day, with 17 per cent using it more than five times a day (Sensis, 2013:10). Women are more likely than men to use social media and are also more likely to be frequent users. According to Sensis (2013:10), the highest proportion of Australian social media users are under 40 years of age. A review of the literature indicates there is little information on the current use of social media in the Northern Territory. Little is known of the demographic profile of NT social media users. Whilst anecdotal evidence indicates that residents of the NT are avid social media users, there is limited research on their social media habits and behavior. Consequently, research on the social media consumption of NT residents is warranted.

3.0 Hypotheses

A review of the literature suggests that consumption and beliefs are generally influenced by two key demographic characteristics: age and gender. Women are reportedly to be significantly more likely than men to use social networking sites (Centre, 2013). In the period 2009 - 2013 the proportion of women who used social media was on average, eight per centage points higher than men(Centre, 2013). Similarly, age plays a significant role in shaping the activity of social media users. Evidence indicates that whilst approximately 50 per cent of active users of all major social media applications are in the 16 - 34 year age group, the 25 to 34 year old cohort form the largest share of users (Mander, 2014). This variation in social media use by age and gender, is also reflected in the Australian context (Sensis, 2013). Age and gender therefore form the basis of developing the following hypothesis that will be tested:

H 1(A) The frequency of accessing social media is related to age.

H1 (B) The frequency of accessing social media is related to gender.

H2 (A) The purpose of social media use related to age.

H2 (B) The purpose of social media use is related to gender.H3 (A) Attitudes and behavior towards social media use is related to age.

H3 (B) Attitudes and behavior towards social media use is related to gender.

H4 (A) The manner of social media use is related to age.

H4 (B) The manner of social media use is related to gender.

4.0 Methodology

The data collection phase of the project commenced in October 2013. It sought to obtain both qualitative and quantitative information on the social media use of Northern Territory residents. Participants in this research included residents over years of age 15 who were self-identified users of social media. Five follow up focus groups were conducted in 2014. The survey was uploaded onto a dedicated website for respondents to complete between October and December 2013. The survey consisted of 19 questions that explored the respondent's demographics, preferred social media applications, reasons of social media use and underlying beliefs towards social media. The use of a non-probability sampling technique through a self-selected survey and focus group methodology was deemed appropriate for this exploratory study(Raina, 2015). According to Duhamel, Langerak and Schillewaert (1998:3), non-probability sampling can be a valuable, cost efficient alternative to the random sampling methods when the research is aimed at making useful, exploratory inferences or interpretations about web users or their attitudes towards the web. In non-probability sampling, cases are sampled ...to simply extend and deepen existing knowledge about the sample itself(Raina, 2015). Given the large population that was to be surveyed, an online survey was considered to be the best methodology to use for the collection of quantitative data. Whilst the use of online survey research is considered to be '...young and still evolving' (Wright, 2005:1), the advantages and disadvantages of employing an online survey methodology are well documented (Andrews, Nonnecke, & Preece, 2003; Birnbaum, 2004; Couper, 2000; Kaye & Johnson, 1999; Wright, 2005).

The survey underwent a hard copy and an online trial before it was made available to prospective respondents. The hard copy trial assisted in identifying, typing and spelling errors, duplicated questions and tested the internal reliability and validity of the survey. An online pre-test of the survey enabled formatting errors to be corrected and ensured that the questions were presented in a logical and adaptive manner. Potential survey respondents were sourced from the entire NT population over the age of 15. . Self-screened NT residents were informed via email prior to the release of the survey. This initial contact was to alert potential respondents to the survey and to stimulate their interest. Subsequent contact occurred three times whilst the survey was live. This follow up contact was initiated in order to maximise the response rate. The survey authors, mindful of the privacy issues surrounding data collection methods took precautions to ensure that the survey respondents remained anonymous. In order to minimise any privacy issues that may have arisen, to preserve the integrity of the survey and to mitigate the concerns of respondents, personal data such as names and contact details were disaggregated from the survey data and stored separately. The statistical software package SPSS was used to analyse the survey data. Since most of the data collected through the survey was categorical in nature, a Pearson Chi-Square analysis was conducted on the sets of key variables. Specifically, "Age" and "Gender" were the dependent variables and "Frequency of Accessing Application"; "Purpose of SM Use"; "Attitudes and Behaviour"; and "Manner of SM Use" were the independent variables analysed.

5.0 Demographics

5.1 The Context

The Northern Territory is located in one of the most remote and isolated regions of Australia. It covers an area of 1 .3 million square kilometres (Geoscience Australia, 2013). The total population of the Territory is 234 800 which represents 0.1 per cent of the total Australian population (ABS, 2013). According to the Australian Bureau of Statistics (ABS, 2013) the population density of the Territory is 0.2 persons per square kilometre. Approximately 56 per cent of theTerritory population reside in Darwin (ABS, 2013)The demographic profile of the survey respondents differed significantly to that of the general population of the NT. As indicated by the ABS(2014)the NT is characterised by a relatively young population, a high proportion of males and a youthful Indigenous cohort. ABS (2014)data indicates that the sex ratio of the NT is 111.63 males to every 100 females, the median age of the population is 31.6 years and approximately 30 per cent of the population are of Indigenous descent. The survey responses were not representative of the general NT population. Respondents under the age of 15 were excluded from participating in the survey. Consequently, the response rate was skewed in favour of non-Indigenous participants over the age of 15.The survey respondents were characterised by a high proportion of female respondents. Approximately 62.6 per cent of respondents were female, 37.4 per cent were male and less than 3.5 per cent were of Aboriginal or Torres Strait Islander descent.

The average age of the respondents was 36.1 years. Approximately 0.7 per cent of respondents were less than 20 years of age; 22.3 per cent of respondents were between 20 and 30 years of age; 27 per cent were between 30 and 40 years of age ; 41 per cent were in the 40 – 60 age cohort and approximately 9 per cent are over the age of 60. The majority of respondents, 90.5 per cent, resided in the Darwin region. Approximately 6 per cent lived in Central Australia; 2.1 per cent were from the Katherine region; and 0.5 per cent was from the Top End Rural, the Barkley and the East Arnhem regions respectively. Approximately 96 per cent of respondents interacted online in English. Almost four per cent of respondents used a language other than English which included German, Bahasa, Chinese, Filipino, Portuguese, Hindi and Vietnamese. One respondent used Tiwi, a local Indigenous language, for the purpose of engaging with others via social media. Approximately 70 per cent of the respondents were full time employed; 7.9 per cent were part time employed; 19.1 per cent were students, and 1.4 per cent was either retired

6.0 Data Analysis

or unemployed.

6.1 Preferred Social Media Applications

As indicated in Table 1, Facebook, Youtube, and Skype are the most commonly used social media applications in the NT. Approximately 83 percent of the survey respondents used Facebook, 77 percent used Youtube and 65 percent accessed Skype. A cross-tabulation of the variables "Social Media Applications Used" and "Frequency of Use" also indicated that the intensity of use of these sites was also relatively high. Approximately 65 percent of Facebook users accessed the site at least once a day. Twenty nine per cent of Youtube and nine per cent of Skype users accessed these applications on a daily basis.

Application	Per centage	Used at least once a
	who use application	day or more
Facebook	83.10%	65%
Youtube	76.80%	29%
Skype	65.10%	9%
Professional networking sites	47%	10%
Twitter	26.60%	8%
Blogs	24%	13%
Wiki	23.20%	9.20%
Facetime	23.20%	13%
Others	14%	14.40%
Flicker	7%	4.10%

The focus group respondent's anecdotal comments also supported the survey findings of the extent and intensity of social media use in the NT. The self-identified 'high-end' users comments included, "Yes I am defiantly addicted [to "Facebook]" and "[Checking Facebook]... is the first thing I do of a morning and last thing I do at night]; "I spend on average more than seven hours a day on social media' and "I have more than 700 friends on Facebook". The self-identified high-end users were predominately female.

6.2 Frequency of Access Applications by Age and Gender

A Pearson Chi-square test was performed to examine the relationship between dependent variable "Age" and the independent variables "Frequency of Accessing Applications". The relationship between these two variables was found to be significant for the applications Facebook ($\chi^2(35, N = 412) = 91.54$, p < 0.01), Youtube ($\chi^2(35, N = 408) = 86.71$, p < 0.01)and Skype ($\chi^2(42, N = 420) = 66.28$, p < 0.05). No significant relationship was found for other applications. Respondents in the 20 – 30 year age cohort were the most frequent users of Facebook and Youtube. Skype was used most frequently by the 20 – 30 and the 36 – 40 age cohorts. The frequency of use was significant on a monthly and on a daily level. Therefore, H1 (A), the frequency of accessing social media is related to age is correct. A Pearson Chi-square test was also performed to examine the relationship between the dependent variable "Gender" and the independent variable "Frequency of Accessing Applications".

There was a strong positive and significant relationship between the two variable for the applications Youtube (χ^2 (5, N = 408) = 12.68, p < 0.05); Twitter (χ^2 (5, N = 372) = 12.34, p < 0.05); Professional Networking Sites (χ^2 (5, N = 383) = 12.64, p < 0.05); Discussion Boards (χ^2 (5, N = 373) = 13.5, p < 0.05); Wikis (χ^2 (5, N = 372) = 23.92, p < 0.01); Skype (χ^2 (5, N = 397) = 16.4, p < 0.05) and; Face time (χ^2 (5, N = 367) = 13.1, p < 0.05). Specifically, women accessed these applications more frequently than men. There was no significant gender difference in the frequency of Facebook access. The evidence indicates that H1(B) is correct. The frequency of accessing social media is related to gender. The focus group participants indicated that the social media applications used by their friends was a major determinate in the applications they accessed. The personal recommendations of family and friends also often influenced their choice of preferred social media platforms. Applications that had low barriers to access and use and were available at no cost such as Facebook, Skype and Youtube, were also major consideration which determined a platform of choice.

6.3 Purpose of Use by Age and Gender

A Chi -Square analysis of the variables "Age" and "Purpose of Use" found a significant positive relationship between these two variables. The analysis indicated that "Age" was related to the respondents using SM to be in touch with friends and family (χ^2 (7, N = 419) = 24.1, p < 0.05); to meet new people (χ^2 (7, N = 419) = 20.85 p < 0.05); and to share photos, videos etc (χ^2 (7, N = 419) = 40.43, p < 0.01). The data analysis indicated that as age increases the use of social media to connect with others decreased. Respondents in all age groups, other than those over 60 years of age, used social media frequently to keep in touch with family and friends. The use of social media to meet new people was significant for the 15 – to 25 year age group. The data also indicated that respondents in the 20 to 35 year age range shared photos and videos the most frequently. Consequently H2 (A), the purpose of social media use is related to age, is correct. A Pearson Chi-square test was also performed to examine the relationship between the variables "Gender" and "Purpose of Use". There was a significant positive relationship between women and the use of social media to keep in touch with family and friends (χ^2 (1, N = 419) = 7.4, p < 0.05); to meet new people (χ^2 (1, N = 419) = 19.6, p < 0.01); to network with others (χ^2 (1, N = 419) = 8.22, p < 0.05); to share photos (χ^2 (1, N = 419) = 4.36, p < 0.05) and for educational purposes (χ^2 (1, N = 419) = 5.38, p < 0.05). Therefore H2 (B), is correct. The purpose of social media use is related to gender. The focus group participants also commented that social media was a valuable tool for keeping in touch with family and friends. The majority of participants indicated they had either family, former colleagues or friends living interstate and overseas. The participants commented that social media was a "...cheap", "...convenient" and "...easy to use" means of maintaining contact with people who resided outside the Northern Territory.

6.4 Attitude and Behaviour by Age and Gender

A Chi -Square analysis of the variables "Gender " and "Attitude and behaviour of Social Media Use" found a significant positive relationship between these two variables. More women than men felt comfortable interacting online with strangers ($\chi^2(4, N = 417) = 20.41$, p < 0.01). More women than men also believed that the use of social media provides users an advantage over non users ($\chi^2(4, N = 417) = 16$, p < 0.05). There is no significant difference across ages for all determinants of attitude and behaviour. Therefore H3 (A), Attitudes and Behaviour towards social media use in the NT is related to age is incorrect and H3 (B), Attitudes and behaviour towards social behaviour. The incidences included identity theft, bullying and harassment. Female focus groups participants in particular, felt vulnerable to this type of conduct. There was however, a general consensus that experienced social media users can take action control inappropriate behavior. The participants remarks included "Often people do not know how to use privacy settings"; "[I] delete contacts who do not know how to interact appropriately" However, the cost advantage of using social media to communicate over distance ; the capacity to use SM to"...meet new people..."; "[to]..Remain connected to issues in my home country...'; for health advice, job seeking and volunteering purposes appeared to outweigh any perceived negative consequences of interacting online.

6.5 The Manner of Use by Age and Gender

A Chi -Square analysis of the variables "Gender" and "Manner of Use" found a significant positive relationship between these two variables (χ^2 (3, N = 414) = 11.1, p < 0.05). The analysis indicated that more women than men use social media to observe what others are posting online. However, more men than women use social media to post information. There was no significant difference in the "Manner of Use" by "Age".

Consequently H4 (A), the manner of social media use in the NT related to age is incorrect and H4 (B) is correct. The manner of social media use in the NT is related to gender. The majority of female focus group participants described themselves as an 'observer" of social media rather than an active 'participant'. With a few exceptions, the female focus group members indicated they used social media "...mostly to see what others are saying". However, the majority of male participants were actively engaged in contributing information online. They described their primary use as "...mostly to post information". The use of social media to "...create a public profile" was relatively common amongst the male focus group participants.

7.0 Discussion

The survey and focus group data indicates that NT residents are active and prolific users of social media. Respondents used multiple applications on a daily basis. However, Facebook, Youtube, and Skype are the most commonly and intensely used social media applications in the NT. These three applications were popular because of their ease of use, affordability and convenience. Facebook was the application of choice for the majority of respondents both in terms of the number of users and their intensity of use. Approximately 65 per cent of all Facebook users accessed the application more than once a day. Respondents in the 20 - 30 year age cohort were the most frequent users of Facebook and Youtube. Skype was used most frequently by the 20 - 30 and the 36 - 3040 age cohorts. The frequency of use was significant on a monthly and on a daily level. There were also distinct gender differences in the applications accessed, the manner in which social media is used, the attitudes and beliefs and the purpose of use. Women accessed Youtube, Twitter, Professional Networking Sites Discussion Boards, Wikis, Skype and Face time more frequently than men. Their frequency of access was significant and they used multiple applications more than once on a daily basis. Although many women described themselves and an "observer" rather than an active participant of social media, their primary use included keeping in touch with family and friends, meeting new people, networking with others, the sharing of photos and for educational purposes.

These findings appear to contradict the perception women had of them and indicate they were in fact, active participants. They used social media extensively to communicate with others and to build social networks. Anecdotal focus group comments also indicated that some women were at the high end of social media use. Facebook was the application of choice for these high end users and the intensity of use was extensive. Focus group participants indicated that online unwarranted and inappropriate behaviour was a fairly common occurrence. Although the female focus group participants felt they were vulnerable to this type of abuse, the survey results indicated that more women than men felt comfortable interacting online with strangers. Feedback from focus group participants indicated that experienced social media users limited the potential of abuse by controlling their privacy settings or deleting unwanted contacts. For the majority of focus group participants unwarranted and inappropriate behaviour was not a deterrent to the use of social media. More women than men also believed that the use of social media provides users an advantage over non-users. The reported advantages included the ability to remain informed of international events, shopping online, using Skype for medical consultations, for educational purposes and for volunteer and professional activities.

There was no statistically significant result to indicate men preferred one social media application over another. There was also no statistically significant results that indicated male users engaged in social media for specific purposes. However, the survey results indicated that men perceived themselves "active social media participants". A number of male focus group participants acknowledged using social media to create a public professional profile. They acknowledged using social media for job seeking purposes, to network and to build prospective contacts. Age was also related to the purpose of social media use. Statistically significant results were found for age as a factor in using social media to keep in touch with family and friends, to meet new people and to share photos and videos online. The results indicated thatas age increases respondents were less inclined to use social media application as a means of engaging in social activity. Respondents under the age of 35 used social media the most frequently to engage with others.

8.0 Conclusion

This paper provided an analysis of the use of social media in the NT. The data was collected through an on-line Territory wide survey of 419 self-identified social media users and five focus groups. An analysis of the respondent's demographic characteristics and social media behaviour determined there were significant age and gender differences in social media usage.

Statistically significant results were found for the frequency of applications accessed; the purpose of social media use; the manner of social media use and: attitudes and behavior towards social media use. The survey results indicate that the demographic profile of social media users in the NT is broadly comparable to the national profile. Facebook, Skype and Youtube are the applications of choice for social media users both in terms of the number of users and the intensity of use. Significantly more women than men use social media and age is a factor in frequency of application usage. Age is also a significant factor in using social media to engage with other. As age increases the willingness to engage socially with others online decreases. Consistent with national profile, Facebook is used more frequently in the NT by people in the 20 - 30 age range. Given the high Indigenous population of the Territory there was relatively few survey responses from this cohort. As anecdotal evidence indicates that Indigenous people are avid social media users, further research into their social media habits and behavior is warranted. This additional research would complement what we now know about mainstream social media use in the NT. Clearly, social media use in the NT has become a popular method of communication for people of different linguistic backgrounds, age groups and gender. It has enabled Territorian's to build and maintain contact with people and groups who reside outside the Territory; to build personal and professional networks and, to overcome the tyranny of distance often associated with living in a remote location. The one-way nature of the more traditional forms of communication has been replaced by an explosion of participatory engagement driven by Internet friendly tools such as Facebook, Skype and Youtube. Social media has certainly been embraced by a willing, enthusiastic, participatory and technology savvy audience in the NT.

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