Du cyber à l'espace : une nouvelle méthode pour la construction d'indicateurs de dynamisme local par le biais d'Internet

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RÉSUMÉ/ABSTRACT

Cet article présente une nouvelle technique automatisée permettant d'effectuer la collecte de données quant à l'utilisation des sites de réseautage social enligne au sein des villes canadiennes. Cette approche permet de mesurer le degré d'utilisation des sites de réseautage social enligne pour l'ensemble des 144 région métropolitaines de recensement (RMR) et agglomérations de recensement (AR) de 2006 pour enfin tenter de répondre à la question : *« Pourquoi certaines villes canadiennes sont-elles davantage représentées que d'autres auprès des sites de réseautage social enligne? »*

Mots-clés : Réseautage social enligne; Villes canadiennes; Économie du savoir.

This article presents a new automated technique for gathering data on social networking websites usage across Canadian cities. This approach allows measuring of the degree of social networking website usage amongst the 144 Census Metropolitan Areas (CMA) and Census Agglomerations in 2006 with the aim of answering the question: "*Why do certain Canadian cities have a greater presence on social networking websites than others*?"

Keywords: Social networking websites; Canadian cities; Knowledge economy

INTRODUCTION

Information and communication technologies (ICT) advancements over the past century have persistently cut communication costs across distance. More recently, the Internet and its wide array of applications, has allowed users to "virtually" come into contact with people from across the globe and travel through space from the comfort of their computer chair or handheld device (Zook *et al*., 2004). However, for geographers and researchers alike, conceptualizing these connections or putting the Internet on a map remains a difficult task (Townsend, 2001). At the international level, the density of Internet connections across the globe can be used to illustrate the digital divide between northern and southern countries (Harrison, 2007). At the national or sub-national level, Internet accessibility can be spatialized across regions using the number of internet service providers (ISPs) or the number of active IP addresses registered to a geographical area (Grubesic, 2002). At the city level, it is possible to determine how many domain names (i.e. yourbusiness.com) are registered within a city's defined physical boundaries (Townsend, 2001).

However, such widespread Internet related indicators do not directly inform us of the distribution of actual Internet usage across space. In fact, most researchers who have attempted to geocode Internet usage have relied heavily on survey data. For instance, one Canadian study analyzes Internet usage through the Canadian Internet Use Survey (HIUS) and determines that residential location is a determining factor in Internet usage. McKeown *et al*. (2007) report that "in 2005, only 58% of residents living in rural and small town areas accessed the Internet, well below the national average". Furthermore, a recent interest has also emerged for content specific Internet usage across space; for example, a recent survey from NETendances conducted in 2007 reports that in the case of Quebec "17% of adults had joined social networks such as Facebook or LinkedIn, which represents 1 million Québécois" (CEFRIO, 2008). Some viewers have also noted that the use of social networking websites tends to be linked to nationality (ValleyMag, 2007). For instance, Valleymag (2007) reports that in South America, and most particularly in Brazil, Internet users spent 156 million hours per month on Orkut.com, while Asian and Pacific countries have a greater presence on Friendster.com (90 million hours per month), and another website, Bebo.com, is mainly used in Scotland (65 million hours per month). According to the same source (ValleyMag, 2007), the most popular social networking websites amongst North Americans (Canada and USA) are MySpace.com (223 millions hours per month) and Facebook.com (173 million hours per month). Nevertheless, this type of data does not provide an indication of social networking websites usage across regions within a single country.

Furthermore, while surveys are often costly methods of data collection, the emerging online activity spurred by social networking websites such as MySpace, Facebook, Bebo, Orkut, etc., are now offering new and cheaper alternatives for geo-coding content specific Internet usage across geography. Given that users are generally required to provide geographical information upon registration to such websites (i.e. postal code, etc.), the number of social networking users in each Canadian city could potentially be known from their internal registry. Fortunately, many social networking websites offer the possibility of searching for individual profiles or users on the basis of geographical criteria such as “postal codes” or “cities” and distance (i.e. number of users in a range of 20km around H2G 3B5 or in Montreal, QC). For example, using the postal code representing the centroid of Montreal, QC, for example, it is technically possible to approximate the number of users who registered on My Space using a greater Montreal area postal code at any given time.

RESEARCH QUESTIONS

This possibility raises a first general research question: "Which Canadian cities have a greater presence on social networking websites?" This subsequently gives rise to another set of questions such as "Why do certain cities have a greater presence on social networking websites than others?" and "Does this differentiation reflect a city's differentiating level of integration in the information society or knowledge economy?" This paper will thus serve to explore these preliminary questions and pave the road for a series of potential research papers using the proposed methodology.

Methodology

The above research questions are addressed in this paper using different collection techniques and methods. Consequently, the methodology section is divided into two major subsections: "Social networking website users per city" and "Agglomeration characteristics from the 2006 Census of Population".

SOCIAL NETWORKING WEBSITE USERS PER CITY

Cities and Postal Codes

For the purpose of this exercise, the 2006 *Census Metropolitan Areas* (CMA) and *Census Agglomerations* (CA), as defined by Statistics Canada[1], serve as the geographical units of study, totaling 144 units (33 CMA and 111 CA). Furthermore, the *postal codes* representing the gravity center of the core urban centre (Census Subdivision - CSD) of each agglomeration are used and were found using GeoCoder.ca's free search engine. The CSD representing the centre of the Ottawa-Gatineau CMA is "Ottawa, ON" and all other cross-border census agglomerations are represented by the original core urban centre "within the

1 A census metropolitan area (CMA) or a census agglomeration (CA) is formed by one or more adjacent municipalities centred on a large urban area (known as the urban core). A CMA must have a total population of at least 100,000 of which 50,000 or more must live in the urban core. A CA must have an urban core population of at least 10,000. To be included in the CMA or CA, other adjacent municipalities must have a high degree of integration with the central urban area, as measured by commuting flows derived from census place of work data. http://www12.statcan.ca/english/census06/reference/dictionary/geo009.cfm.

province of the provincial part that contributes the majority of the population to the area" (i.e. "Campbellton, NB" and not QC)[2].

Social Networking Websites

Potential social networking websites are subsequently identified and potential data sources are found directly on their public interface. In this study, Facebook.com, MySpace.com, Hi5.com and Meetup.com are retained for further analysis (see Appendix A for more details). These websites (with the exception of Facebook and Meetup) offer an advanced search option which allow users or the general public to find users based on gender, age, postal codes and distance queries (i.e. number of female users between the age of 18 and 35 who registered with a postal code located within a 20km radius of H2G 3B5). In the case of Facebook, "the location of a user [is] based on IP (Internet Protocol) addresses, which can help identify the country or city where a user is physically located. The location of a user is not based on the city or hometown they may have listed and is also separate from any geographic networks that they may have joined"[3]. The website Meetup does not offer the option of searching for individual users but instead reports on the number of different "interests" located within a number of miles around a postal code or city. MySpace limits the search results to 3,000 users, rendering it difficult to estimate the number of male users aged 18 years in Toronto, for example, which exceed 3,000 in this case. Consequently, MySpace user searches are conducted individually for each age group (18 to 35 inclusively), gender (male and female independently) and these results are aggregated for each postal code. Hi5 is the only social networking website included in this study which offers gender, age, postal code and distance search options as well as unlimited, although approximated, number of returned results. Nevertheless, preliminary searches are conducted for available cities with all four websites.

2 There is one census metropolitan area (Ottawa - Gatineau) and three census agglomerations (Campbellton, Hawkesbury and Lloydminster) that cross provincial boundaries. The data for their respective provincial parts are included with the appropriate census metropolitan area or census agglomeration, with data for the census metropolitan area or census agglomeration within the province of the provincial part that contributes the majority of the population to the area. For example, Ottawa - Gatineau can be found in Ontario, Campbellton in New Brunswick, Hawkesbury in Ontario and Lloydminster in Alberta.

http://www12.statcan.ca/english/census06/data/topics/RetrieveProductTable.cfm?ALEVEL=3&APATH=3&CATNO=97-561-XCB2006006&DETAIL=0&DIM=&DS=99&FL=0&FREE=0&GAL=0&GC=99&GK=NA&GRP=1&IPS=97-561-XCB2006006&METH=0&ORDER=1&PID=90651&PTYPE=88971&RL=0&S=1&ShowAll=No&StartRow=1&SUB=0&Temporal=2006&Theme=76&VID=0&VNAMEE=&VNAMEF=.

3 www.facebook.com

Webbot

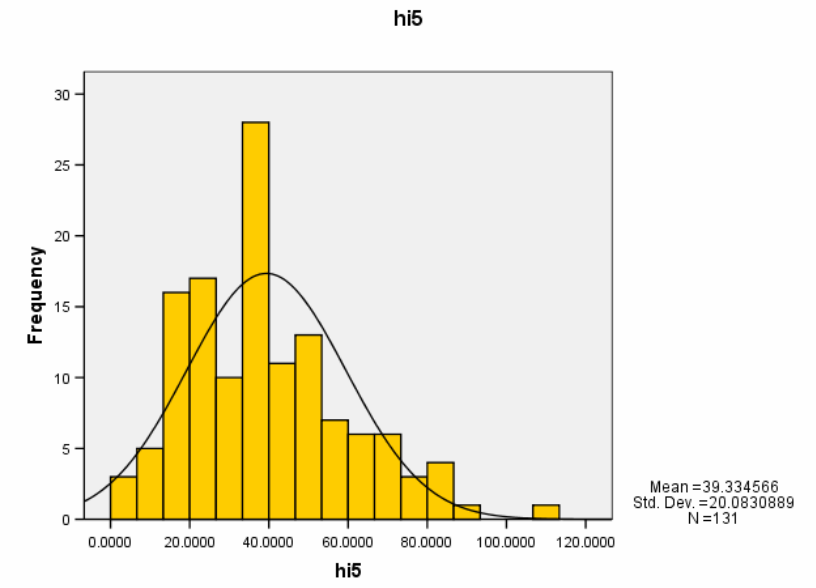
A small web application called a webbot is used to perform searches and retrieve various information from the social networking websites for all 144 agglomerations and the postal codes representing their geographic centroid. The software iMacros Browser Professional Edition by iOpus is used to conduct such automated tasks. The data extraction module used in this case is programmed to retrieve data from a predefined .csv (comma separated values) source file (i.e. list of agglomerations and respective postal codes), follow a specific sequence of steps on the target website, insert the appropriate data in the advanced search engine of the website and finally extract data (i.e. number of users) into a destination comma separated values (csv) results file. The length of operation for the entire procedure is generally under an hour for each website, thus reducing the probability that dramatic changes in the user accounts can occur between the first and last search query.

The use of the webbot was consequently twofold. In a first step, it was used to retrieve postal codes using the CMA or CA names and provinces in GeoCoder.ca. In a second step, it was used to retrieve information for all social networking websites using postal codes with the exception of Facebook (which used agglomeration “Names”).

Data

As a result of the described procedure, the number of users per agglomerations can be compiled using a customized webbot for each social networking website (i.e. 27,000 Facebook users and 6,600 Hi5 users in Guelph, ON). The number of users is then correlated with population size of the agglomerations in 2006 and social networking websites users by city is found to have a strong positive correlation with population size. As a result, the number of users per agglomeration is calculated per 1,000 habitants for each social networking website (see *Figure 1*). The indicators are therefore comparable for all Canadians cities used in this study. These indicators can then be standardized, using a z-score, and can also be compared amongst websites.

Figure 1
Distribution of Hi5 users per 1,000 habitants across major Canadian cities



Source: Author's computation based on Hi5.com users data.

Principal Component Analysis and Composite index

A principal component analysis is then used to identify whether or not these websites are measuring a single concept (i.e. social networking usage per city). Using a threshold Eigenvalue of 1 and a Varimax rotation, two dimensions are identified (explaining 36.46% and 34.61% of the variance respectively) which together add up to a cumulative percentage of 71.07% (See *Table 1*). Furthermore, the websites MySpace and Meetup are resumed by the first component (0.840 and 0.808 respectively) while Facebook and Hi5 are distinctively represented by component 2 (0.874 and 0.756 respectively) (see *Table 1*).

Tableau 1
Principal Component Analysis Results

Components	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of the variance	% cumulative	Total	% of the variance	% cumulative
1	1.839	45.986	45.986	1.458	36.460	36.460
2	1.003	25.084	71.070	1.384	34.610	71.070
3	0.662	16.558	87.628			
4	0.495	12.372	100.000			

	Components	
	1	**2**
Facebook	-0.023	0.874
MySpace	0.840	0.025
Hi5	0.315	0.756
Meetup	0.808	0.219

A composite index for each set of correlated website indicators can then be calculated using the standard formula proposed by Mayunga (2007):

$$y_i = \sum (X_1 w_1 + X_2 w_2 + ... X_n w_n) \qquad [1]$$

- where
- y_i = Composite index of websites
- X = Website indicator (per 1,000)
- w = Weighting variable
- n = Number of websites considered
- i = Websites type

In this case, no weighting is attributed to the website indicator as the values are standardized. Facebook and Hi5 standardized values are thus combined into the new "FaceHi" Index while MySpace and Meetup standardized values form the "MyMeet" Index.

$$MM = \sum (MySpace_z + Meetup_z) \qquad FH = \sum (Facebook_z + Hi5_z) \qquad [2]$$

Cities Ranking

Canadian cities included in the study can also be ranked according to the newly computed FaceHi and MyMeet Indices (See *Appendix B*). Admittedly, this ranking scheme is incomplete and not readily comparable given that the 144 agglomerations are not evenly represented on each of the four websites (107 cities included in the FaceHi Index and 131 cities in the MyMeet Index). Nevertheless, the general ranking trend suggests that Quebec cities are amongst be the most poorly represented in both cases while Western Canadian cities and "University Towns" tend to be most highly represented on websites such as MySpace and Meetup.

Limitations

Several limitations arise when developing such an automated data gathering technique. For instance, all searches, with the exception of Facebook, rely on the postal code each user provides when registering on each website. Some accounts are undoubtedly left inactive while other users have certainly changed addresses without updating their personal information. Furthermore, some users may have created several erroneous profiles which are also counted in the construction of the indicators. However, it is believed that this type of error is randomly distributed throughout the sample and consequently, should not affect the use of inferential statistics in subsequent analysis. Finally, as demonstrated in *Appendix A*, not all 144 agglomerations are represented on MyMeet (131) and FaceHi (107) Indices. In the case of MySpace, this is due to the fact that several postal codes report zero users for agglomerations where there are admittedly users (i.e. Edmonton, AB). As a result, Hi5 remains the only social networking website which provides a good indication of the number of users per 1,000 for all Canadian cities (144).

Agglomeration characteristics from the 2006 Census of Population

The previous section served to identify "*Canadian cities which have a greater presence on social networking websites"*. In this section, the follow-up questions which were raised earlier can now be addressed: "*Why do certain cities have a greater presence on social networking websites than others*?" and "*Does this differentiation reflect a city's differentiating level of integration in the information society or knowledge economy*?"

2006 Census of Population variables

In order to answer the above questions, select variables measured at the CMA/CA level from Statistics Canada's 2006 Census of Population are used to explore the variance of FaceHi and MyMeet Indices in greater details. A preliminary examination of the cities ranking suggests that population size and migratory flows; as well as language and human capital factors influence the collective social networking activities of an agglomeration. Given the high level of ICT knowledge required to take part in online social networking activities, a higher ranking may also reflect a city's integration in the information society. Polèse and Tremblay (2005) have ranked Canadian and US cities based on indicators of high educational attainment and knowledge-intensive service employment (i.e. Information and Cultural Industries; Professional, Scientific and Technical Services). Incidentally, geocoded indicators reflecting such concepts can be found and computed using Statistics Canada's E-Stat database.

Select 2006 Census of Population variables are used in this study to explain an agglomeration's level of social networking website representation which include: *logarithm of the population (2006), population variation between 2001-2006 in percentage, population density, percentage of Canadian citizens (%), percentage of population who speak English at home (%), percentage of the population between 15 and 34 years (%), percentage of the population with a doctorate degree (%), percentage of the population (%) employed in the 51 sector (Information and Cultural Industries) and percentage of the population (%) employed in the 54 sector (%) (Professional, Scientific and Technical Services).*

These variables and their descriptive statistics are presented in *Table 3* for MySpace and Meetup agglomerations (131) and in *Table 4* for Facebook and Hi5 agglomerations (107). While the number of cities in each table differs slightly (131 vs. 107), the descriptive statistics in each case do not seem to diverge significantly; thus, it is judged that results from both models can be compared with caution.

Tableau 2
Descriptive statistics of 2006 Census of Population variables for available CMA/CA (MySpace and Meetup Agglomerations)

	N	Minimum	Maximum	Mean	Std. Deviation
***Log* of population 2006**	131	3.95	6.71	4.74	0.56
Population variation between 2001-2006 (%)	131	-12.60	23.60	3.56	5.63
Population density	131	0.60	1205.10	155.67	236.28
Canadian citizens (%)	131	87.34	99.86	97.59	2.11
Population who speak English at home (%)	131	0.14	99.76	72.73	38.69
Population between 15 and 34 years (%)	131	18.49	44.19	31.58	4.21
Population with a doctorate degree (%)	131	0.00	2.43	0.49	0.45
Population employed in the 51 sector (%)	131	0.58	6.12	1.77	0.86
Population employed in the 54 sector (%)	131	1.32	11.51	4.27	1.79
Valid N (listwise)	131				

Source: Statistics Canada, Census of Population 2006 data.

Tableau 3
Descriptive statistics of 2006 Census of Population variables for available CMA/CA (Facebook and Hi5 Agglomerations)

	N	Minimum	Maximum	Mean	Std. Deviation
***Log* of population 2006**	107	3.95	6.71	4.78	0.59
Population variation between 2001-2006 (%)	107	-12.60	22.30	3.75	5.61
Population density	107	0.60	1205.10	165.01	251.17
Canadian citizens (%)	107	87.34	99.86	97.33	2.19
Population who speak English at home (%)	107	0.15	99.38	75.20	36.86
Population between 15 and 34 years (%)	107	18.49	41.95	31.60	4.10
Population with a doctorate degree (%)	107	0.00	2.43	0.53	0.47
Population employed in the 51 sector (%)	107	0.58	6.12	1.84	0.87
Population employed in the 54 sector (%)	107	1.32	11.51	4.37	1.86
Valid N (listwise)	107				

Source: Statistics Canada, Census of Population 2006 data.

Multiple Regression Model

Given the nature of the social networking websites indices and the Census of Population data, two multiple regression models are used to explain the level of social networking website representation using the MyMeet Index and FaceHi Index as dependant variables and the Census of Population data as independent variables.

$$y_i = \alpha + f(ind.)_i + \varepsilon_i \qquad [3]$$

- where y_t = Composite index of websites
-
- $ind.$ = Series of independent variables computed from the 2006 Census of
- Population

RESULTS

The results from both models are summarized in *Table 4*.

Tableau 4
Results of "MyMeet" and "FaceHi
"Multiple Regression models

	MyMeet	**FaceHi**
F	17.797	10.176
$\mathbf{r^2}$	0.570	0.486
n	131	107
Independent variables	***t***	***t***
***Log* of population 2006**	**-6.491****	-0.353
Pop. variation (%) 2001-2006	**3.171****	-0.219
Pop. density	1.762	1.087
Canadian citizens (%)	-0.231	**3.603****
English speaking (%)	**7.735****	**7.113****
Pop. 15 – 34 years (%)	-1.686	**2.983****
Doctorate degree (%)	**2.325***	0.997
Employed in 51 sectors (%)	0.171	**3.447****
Employed in 54 sectors (%)	**2.708****	-0.398

* Significant at the p<0.05 level

** Significant at the p<0.01 level

The observed R-squared (r^2) for the "MyMeet" model is 0.570 (n=131), suggesting that the selected independent variables explain 57% of the variance in terms of an agglomeration's per 1,000 habitants representation on MySpace and Meetup social networking websites. The strong negative relationship with the logarithm of the population in 2006 (r=6.491, p<0.01) corroborates the fact that many of the cities found in the Top 20 rankings for the MyMeet Index were small and medium sized agglomerations (i.e. Centre Wellington, ON; Moose Jaw, SK; Cranbrook, BC). Furthermore, cities that have experienced a large population increase between 2001 and 2006 (i.e. Canmore, AB; Wood Buffalo, AB; Yellowknife, N.W.T.) are also more likely to display a greater representation on MySpace

and Meetup, as expressed by the positive correlation with population variation in percentage ($r=3.171$, $p<0.01$). Not surprisingly, the percentage of the population who speaks English at home is the largest determinant of MySpace and Meetup representation ($r=7.735$, $p<0.01$), as suggested by the overrepresentation of Quebec cities in the bottom ranking. The percentage of the population who holds a doctorate degree, which suggests the presence of a university or highly knowledge intensive labour market activities, is also positively correlated with presence on MySpace and Meetup ($r=2.325$, $p<0.05$). Finally, a greater share of the labour force employed in the "Professional, Scientific and Technical Services" (sector 54) significantly increases a city's presence on MySpace and Meetup ($r=2.708$, $p<0.01$).

The observed R-squared (r^2) for the "FaceHi" model is 0.486 (n=107), suggesting that the selected independent variables explain 48.6% of the variance in terms of an agglomeration's per 1,000 habitants representation on Facebook and Hi5 social networking websites. The slightly weaker R-squared may be due to the smaller sample size although the representation on Facebook and Hi5 does not seem to be determined wholly by the same factors as representation on MySpace and Meetup. In this case, the percentage of Canadian citizens in a city has a positive effect on Facebook and Hi5 usage rates ($r=3.603$, $p<0.01$). Once again, language plays an important role on social networking websites representation and the same holds true for Facebook and Hi5 as English speaking population is strongly correlated with the FaceHi Index ($r=7.113$, $p<0.01$). The age composition also has an effect on Facebook and Hi5 representation as the percentage of population between 15 and 34 years of age in a city is positively correlated with usage ($r=2.983$, $p<0.01$). Finally, in this case, a greater share of the labour force employed in the "Information and Cultural Industries" (sector 51) significantly increases a city's presence on Facebook and Hi5 ($r=3.447$, $p<0.01$).

DISCUSSION

The results emanating from this particular study raise more questions than was initially addressed; questions for which the author cannot possibly hope to find answers at this stage of the research. However, it should be said that the main objectives of the study have been met with some degree of success. For instance, it was shown that it is possible to extract and analyze geographical data from social networking websites using a systematic and automated approach. Furthermore, the webbot used in this study could be programmed to perform any numbers of data collection tasks and offers many possibilities for further exploring geocoded indicators of Internet related activities. Given the nature of the Internet and the automated data collection process, increasing the sample size by including all cities across North America would not constitute a great leap from a programming standpoint and would allow for a comparative analysis across regions as well as across countries.

Needless to say, a thorough understanding of the differences between the different social networking websites and their users is required before going any further in the interpretation of the ranking scheme and regression models results. At first glance, it appears that several agglomeration level factors influence the use of social networking websites within a city (i.e. age, language, education, population size, citizenship, sector of employment) but that the relationship of these factors with usage rates varies between the different types of social networking websites. These results were unexpected in the sense that all four websites were initially thought to serve a common purpose, and thus should have been measuring the same concept. This was clearly not the case and we can only postulate, for instance, that a greater share of youth population is positively correlated with Facebook and Hi5 usage because the former website has experienced a significant popularity growth amongst Canadian youth in recent years. It was unexpected however to find that the percentage of doctorate degree holders or Canadian “university towns” were positively correlated with MySpace and Meetup when in fact, Facebook was initially launched on campuses of American colleges. Furthermore, a greater understanding of the information society and the knowledge economy is also needed to explain why a greater share of employment in certain knowledge intensive industries influences usage in certain types of social networking websites (i.e. sector 51 vs. 54). Finally, the negative relationship between population size and usage of certain social networking websites could lead one to hypothesize that such online activities serve as substitutes to agglomeration economies in smaller cities as their inhabitants do not have access to the greater physical networking potential of bigger cities. Alas, it would be premature to suggest that social networking websites are drastically shortening the distance between economic agents and that such technologies could one day replace the need for face-to-face contact as business deals still

require a warm handshake in closing and after-work events, used as “real” social networking platforms, are simply not the same without the sound of clinking glasses.

In sum, this very inductive and intuitive approach to data collection leaves the author as well as the reader with many unanswered questions for the moment. However, it is hoped that this particular research project will inspire future research in the fields of Internet geography and the knowledge economy.

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APPENDIX A – SOCIAL NETWORKING WEBSITE DESCRIPTIONS

Facebook

"**Facebook** (branded as "**facebook**") is a social networking website launched on February 4, 2004. The free-access website is privately owned and operated by Facebook, Inc. Users can join networks organized by city, workplace, school, and region to connect and interact with other people. People can also add friends and send them messages, and update their personal profile to notify friends about themselves. The website's name refers to the paper facebooks depicting members of a campus community that some American colleges and preparatory schools give to incoming students, faculty, and staff as a way to get to know other people on campus.

Features include a Wall for posting messages and Photos for uploading digital photos. The website has more than 80 million active users worldwide."

http://en.wikipedia.org/wiki/Facebook

MySpace

"**MySpace** is a popular social networking website offering an interactive, user-submitted network of friends, personal profiles, blogs, groups, photos, music and videos for teenagers and adults internationally. Its headquarters are in Beverly Hills, California, USA, where it shares an office building with its immediate owner, Fox Interactive Media; which is owned by News Corporation, which has its headquarters in New York City.

The company employs 300 staff and does not disclose revenues or profits separately from News Corporation.

The 100 millionth account was created on August 6, 2006 in the Netherlands and a news story claimed 106 million accounts on September 8, 2006, and the site reportedly attracts 230,000 new registrations per day."

http://en.wikipedia.org/wiki/Myspace

Hi5

"**hi5** is a social networking website, which, throughout 2007, was one of the 25 most visited sites on the web. The company was founded in 2003 by Ramu Yalamanchi who is also the current CEO.

As of April 2008, hi5 claimed to have over 1 million registered members."

http://en.wikipedia.org/wiki/Hi5_%28website%29

Meetup

> "**Meetup.com** (also called **Meetup**) is an online social networking portal that facilitates offline group meetings in various localities around the world. Meetup allows members to find and join groups unified by a common interest, such as politics, books, games, movies, health, pets, careers or hobbies. Users enter their ZIP code (or their city outside the United States) and the topic they want to meet about, and the website helps them arrange a place and time to meet.
>
> On July 22, 2005, Meetup reported 1,643,497 members, 5,486 topics, and 58,878 local groups, while "Democracy for America" remained the most popular topic. On November 11, 2006, Meetup reported 18,368 groups and 3,540 topics."

http://en.wikipedia.org/wiki/Meetup

APPENDIX B – LIST OF URBAN AGGLOMERATION, INDEX SCORES AND RANKING

"**MySpace and Meetup" (MyMeet Index)**

RMR/AR	Score	Rank
Port Hope (Ont.)	8.04	**1**
Centre Wellington (Ont.)	7.59	**2**
Guelph (Ont.)	3.92	**3**
Cold Lake (Alta.)	3.12	**4**
Yellowknife (N.W.T.)	2.84	**5**
Canmore (Alta.)	2.75	**6**
Tillsonburg (Ont.)	2.72	**7**
S-J sur-Richelieu (Que.)	2.7	**8**
Wetaskiwin (Alta.)	2.56	**9**
Petawawa (Ont.)	2.49	**10**
Penticton (B.C.)	2.05	**11**
Moose Jaw (Sask.)	1.97	**12**
Whitehorse (Y.T.)	1.91	**13**
Powell River (B.C.)	1.9	**14**
Cranbrook (B.C.)	1.89	**15**
Stratford (Ont.)	1.8	**16**
Collingwood (Ont.)	1.78	**17**
Vernon (B.C.)	1.54	**18**
Wood Buffalo (Alta.)	1.52	**19**
Campbell River (B.C.)	1.48	**20**

RMR/AR	Score	Rank
Trois-Rivières (Que.)	-1.9	**112**
Saint-Hyacinthe (Que.)	-1.91	**113**
Sorel-Tracy (Que.)	-1.93	**114**
Thetford Mines (Que.)	-1.96	**115**
Shawinigan (Que.)	-2.06	**116**
Drummondville (Que.)	-2.12	**117**
Rimouski (Que.)	-2.13	**118**
Saint-Georges (Que.)	-2.14	**119**
Val-d'Or (Que.)	-2.2	**120**
Victoriaville (Que.)	-2.2	**121**
Saguenay (Que.)	-2.21	**122**
Rivière-du-Loup (Que.)	-2.25	**123**
Rouyn-Noranda (Que.)	-2.26	**124**
Dolbeau-Mistassini (Que.)	-2.29	**125**
Sept-Îles (Que.)	-2.29	**126**
La Tuque (Que.)	-2.31	**127**
Matane (Que.)	-2.31	**128**
Alma (Que.)	-2.34	**129**
Amos (Que.)	-2.36	**130**
Baie-Comeau (Que.)	-2.39	**131**

“Facebook and Hi5” (FaceHi Index)

RMR/AR	Score	Rang
North Battleford (Sask.)	5.33	**1**
Regina (Sask.)	4.03	**2**
Brandon (Man.)	3.59	**3**
Fredericton (N.B.)	3.34	**4**
Yorkton (Sask.)	3.34	**5**
Red Deer (Alta.)	3.15	**6**
Collingwood (Ont.)	3.06	**7**
Prince George (B.C.)	3.03	**8**
Moncton (N.B.)	2.95	**9**
Saskatoon (Sask.)	2.87	**10**
Estevan (Sask.)	2.52	**11**
Woodstock (Ont.)	2.39	**12**
Charlottetown (P.E.I.)	2.35	**13**
Whitehorse (Y.T.)	2.32	**14**
Halifax (N.S.)	2.32	**15**
Moose Jaw (Sask.)	2.28	**16**
Grande Prairie (Alta.)	1.9	**17**
Prince Albert (Sask.)	1.86	**18**
Kamloops (B.C.)	1.77	**19**
Barrie (Ont.)	1.64	**20**

RMR/AR	Score	Rang
Drummondville (Que.)	-1.42	**88**
Hamilton (Ont.)	-1.43	**89**
Trois-Rivières (Que.)	-1.43	**90**
Toronto (Ont.)	-1.48	**91**
Sept-Îles (Que.)	-1.49	**92**
Amos (Que.)	-1.65	**93**
Joliette (Que.)	-1.79	**94**
Granby (Que.)	-1.8	**95**
Shawinigan (Que.)	-1.9	**96**
Québec (Que.)	-1.93	**97**
Alma (Que.)	-1.97	**98**
Timmins (Ont.)	-2.03	**99**
Sorel-Tracy (Que.)	-2.03	**100**
Rivière-du-Loup (Que.)	-2.12	**101**
Matane (Que.)	-2.14	**102**
Leamington (Ont.)	-2.15	**103**
Victoriaville (Que.)	-2.15	**104**
St. Catharines-Niagara (Ont.)	-2.16	**105**
Brooks (Alta.)	-2.24	**106**
Baie-Comeau (Que.)	-2.48	**107**