Effects of Digital Footprint on Career Management: Evidence from Social Media in Business Education

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Abstract. As online social media gain immense popularity among Internet
users, we would like to explore the implication of social networking on career
management. This paper links social capital theories and the impact of online
social networks on ties between individuals in social and business uses. Social
media contributes to building up individual digital footprint, or Internet content
linked to individual names. We then propose a typology of the digital footprint
based on the evidence from a survey of business students. Discussion of the
implications of the study and arising research questions conclude the article.

1 Introduction

Online social media has become one of the most popular Internet applications of the
decade. Social networks have been linked with creation and exploitation of social
capital in recent literature. However, the effect that individual digital footprint has on
the career prospects of students has remained underestimated in the social networks
literature. This paper will construct a typology of the digital footprint left behind from
different social networking activities undertaken by business students of different
levels. It will start by defining the two dimensions of the digital footprint and then
associate the dimensions with specific characteristics of the footprint. Finally the
study will provide a typology of effects that digital footprint may have on career
management of younger generation of business graduates.

2 Social Capital Theories and Career Success

Social capital theory and career success have been linked by Seibert, Kraimer and
Liden (2001) who connected three competing theories of social capital: weak tie
theory (Granovetter, 1973), structural hole theory (Burt, 1992) and social resource
theory (Lin, 1999). Connections or ties between individuals in a network help provide
the basis for analysis of social networks. Both the weak tie theory and the structural
holes theory deal with the structure of social networks and the advantages that
network topology offers. The weak tie theory considers the strengths of ties between
individuals and proves that weak ties are indispensible to individuals' opportunities.
In particular (Granovetter, 1973) shows that ties between members of a given network
can be intense or weak. For instance, in a network with intense/strong ties information

dissipates quickly and loses its value to members, e.g. friends, co-workers, members of local community, whereas infrequent and emotionally uninvolved relationships or weak ties commonly link networks with networks with unique information and resources. Granovetter (1973) argues that weak ties were more useful than strong ties as a source of information about job openings helping individuals with connections to external networks to gain access to better job opportunities. Another view on social capital is provided by the structural hole theory Burt (1992, 1997) the structural hole argument is that "social capital is created by a network in which people can broker connections between otherwise disconnected segments" (Burt, 2001, p. 202). Social networks rich in structural holes provide an individual with better access to information, bargaining power and therefore exercising greater control over resources and opening career opportunities throughout the social system. Finally, the social resource theory focuses on the content rather than the structure or strength of ties in a network. According to Lin (1999) social capital is formed via the capability to use ties between individuals in a network to reach a particular resource embedded in it to fulfil individual's instrumental objectives.

The diversely expressed but converging perspectives cited above concur that social capital is a metaphor in which social network is a type of asset which can create certain competitive advantage to some individuals or groups in pursuing their goals. With the general agreement that " better connected people enjoy higher returns" (Burt, 2001, p. 203) we proceed to the discussion of the digital footprint generated as a the result of networking on social media.

3 Digital Footprint

A growing number of publications (e.g. Barnes & Barnes, 2009, Lange 2007, Livingstone 2008, Lewis & West 2009) continuously draw attention to issues of privacy of individual information available as a result of social networking use. Some researchers (e.g. Weintraub & Kumar, 1997) argue that technology may be significantly changing boundaries between 'publicity' and 'privacy'. SNS increase the amount of private information shared online and possibly present a hazard to those users who overlook adjusting their SNS privacy settings. The old saying 'Choose your friends wisely' cannot be more relevant as in the context of online social networking. Increasingly, there are warnings that individuals should be careful of their use of networks generally as employers are more and more using information gleaned from social networks to assess future employees (Peluchette & Karl, 2010). However, there is also an increasing level of concern from the businesses themselves, regarding legal challenges and the risks involved in using social networks for building business, leading to policy developments (Wilson, 2009).

4 Typology

For the purposes of our study, one can classify the key characteristics of a digital footprint using two dimensions. The first one is related to the nature of the activity undertaken by the student. This can range from a pure social one to a strictly business activity. The goals of each activity differ substantially as we would expect students to

make different use of their time, language and networking for social or business activities.

The second dimension is related to the level of studies and how far or close this is to the labour market. We would expect students that attend a foundation degree or early stages of an undergraduate degree not to be too much work oriented. Alternatively one could argue that the timing between joining the workplace and the impact of a digital footprint might be different between a full time undergraduate and a part-time postgraduate student.
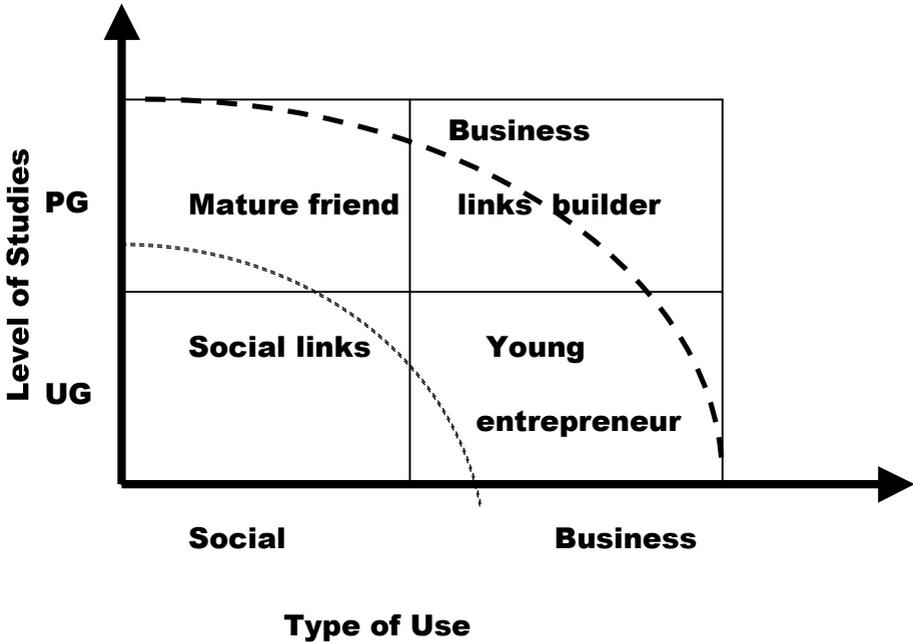
Fig. 1. Typology of Digital Footprint

5   Method

As a part of a wider study of online social networking in HE, a two phase approach to data collection was adopted, with two focus groups informing the development of a survey. The sample for the focus group was drawn ad-hoc from the student population at a post-92 University in the UK. Each focus group discussion was structured around nine open ended questions and lasted for approximately an hour. The discussions were digitally recorded and transcribed. The analysis of the focus group transcripts provided the starting point for developing a range of questions covering various aspects and concerns of social networking use. In the second stage of data collection a draft survey was piloted on twenty individual students at the research site. Based on the feedback from the pilot the questionnaire was amended and formatted into its final version. The questionnaire in paper format was distributed to a random sample of undergraduate and postgraduate students including UK and European universities.

The sample was drawn entirely from students studying on business courses. The total number of respondents comprised of 272 individuals, which gives a representative sample. The demographic data collected included information on age, nationality, number of years of work experience, first language, year and type of degree. Further questions covered a range of expectations and motivation for persistent use of various networks. The questions worded ('Why did you join this social network ' with answer options including ' Find a job', 'Make business contacts' as well as 'To find contacts at the University' and 'To be generally sociable', etc.) were provided for each network type. A Likert scale was used (1- Strongly Agree to 5- Strongly Disagree). Average age of respondents for Masters was 29 years, for Undergraduates – 22 years. By gender the sample comprised of 48% female respondents and 47% of males, 5% did not provide their answers. Dominant nationalities were as follows: British – 33%, Cypriot – 7%, Russian – 6,5%, Indian – 6%.

6   Empirical Evidence

The purpose of this section is to provide empirical evidence regarding the use of social networks from undergraduate and postgraduate students. We decided to use two key dimensions that demonstrate the difference between the two groups on the use of SNS. The first dimension is related to the use of social networks for socializing since the original opening of the account. Students answered using four discrete answers, i.e. not at all, less, about the same, more. We have assigned a numerical value on each dimension from 1 to 4 with 1 being not at all and 4 being more. The oneway ANOVA results for the social and business use are presented in tables 1 and 2 below. Results show a clear difference between the undergraduate and postgraduate students regarding the use of SNS for social purposes. The undergraduate students use more now, than when they originally opened their account, the SNS. There is a clear difference in the way they approach the SNS use by logging in more than the postgraduate students. This difference between the two groups is not evident though in the Business use of the SNS. Although postgraduate students log on more, there is no clear statistically different relationship between the two groups and the use of SNS for business use.

Table 1. Oneway Anova between Type of Degree and Use of network for Social Purposes

Type of degree	Mean	Std. Dev.	Freq.		
Undergraduate	1.99	1.61	132		
Postgraduate	1.60	1.55	99		
Total	1.82	1.59	231		
Source	SS	Df	MS	F	Prob > F
Between groups	8.44	1	8.44	3.34	0.0688
Within groups	578.62	229	2.52		
Total	587.07	230	2.55		

Table 2. Oneway Anova between Type of Degree and Use of network for Business Purposes

Type of degree	Mean	Std. Dev.	Freq.		
Undergraduate	1.21	1.27	132		
Postgraduate	1.34	1.47	99		
Total	1.26	1.36	231		
Source	SS	Df	MS	F	Prob > F
Between groups	0.97	1	0.97	0.52	0.4699
Within groups	426.38	229	1.86		
Total	427.35	230	1.85		

This result although not totally surprising, contradicts our key argument that postgraduate users would be more orientated towards the use of SNS for business purposes. We decided therefore to explore another dimension of our sample which is related to the amount of time the different groups of users spend online in the two activities, i.e. social purposes and business purposes. Tables 3 and 4 present the oneway ANOVA results between the type of user and the amount of time they spend on a weekly average basis. From table 3 one can see a difference between the undergraduate and the postgraduate students but this difference is not statistically significant. On the other hand table 4 gives a very different picture around the amount of time spent on business related use. The postgraduates spend more than twice the time than the undergraduate students using SNS from a business perspective. This difference is statistically significant and demonstrates that there are other more qualitative characteristics that might explain the use of SNS between the two groups.

Table 3. Oneway Anova Type of Degree and Use of network for Social Purposes (Time)

Type of degree	Mean	Std. Dev.	Freq.		
Undergraduate	4.52	4.87	89		
Postgraduate	4.02	5.76	60		
Total	4.32	5.23	149		
Source	SS	Df	MS	F	Prob > F
Between groups	9.21	1	9.21	0.33	0.5641
Within groups	4051.94	147	27.56		
Total	4061.15	148	27.44		

Table 4. Oneway Anova Type of Degree and Use of network for Business Purposes (Time)

Type of degree	Mean	Std. Dev.	Freq.		
Undergraduate	1.14	1.94	49		
Postgraduate	2.46	5.03	37		
Total	1.71	3.65	86		
Source	SS	df	MS	F	Prob > F
Between groups	37.07	1	37.07	2.84	0.0956
Within groups	1096.02	84	13.04		
Total	1133.09	85	13.33		

7   Conclusions

As a result of online social networking individuals tend to generate content associated with their name linking them to other individuals into a formal or informal network. Online networking has been positively linked to building and reinforcing social capital. In turn "better connected people" (Burt, 2001) are thought to enjoy an advantage in career management. Thus besides simple socialising, online social networks have an impact on business relations. The purpose of this study was to build a typology for the digital footprint. Analysis of data on the use of SNS from Business and Management Undergraduate and Postgraduate students provided an empirical lens on the online behaviour. The study concluded that there are four types of digital footprint with the key motivations for the use of SNS. These are: social links reinforcement, mature friend, young entrepreneur and business link builder. Undergraduate students primarily use SNS for social purposes whilst postgraduates focus primarily on the business use of SNS. It has become evident that social networking awareness is missing in HE curriculum. More research attention is needed to identify contribution of the digital footprint towards career management and business opportunities. Issues of privacy and security are likely to intensify with the growth of user generated content on the Internet. It is important to address these issues through further research studies into social media and its business applications.

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