The Influence of Social Media on Information Flow

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“Have you ever stopped to think about the importance of social media on your business/Research? Just a few short years ago, social media didn’t even exist and yet today we could not see ourselves without it. Today social media is so much more than a website our children use to talk to their friends. Everybody from big business to independent business owners are using some form of social media marketing plan in their day to day lives. So therefore the importance of social media should never be overlooked as part of your social media branding. If you are one of the doubters then by the end of this paper you will understand how social media can be used in your business/research to achieve even great success just through information flow”.
1.0 Introduction

Across the globe, the growing use of mobile phones has opened up many doors in personal learning, networking and communication, media production, activism and economic development. In recent years, the emergence of Internet access on these devices has fostered new opportunities to bridge the digital divide and to close the Internet participation gap between and within countries.

Social media includes web-based and mobile technologies used to turn communication into interactive dialogue. Andreas Kaplan and Michael Haenlein define social media as "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. Social media is media for social interaction as a super-set beyond social communication. Enabled by ubiquitously accessible and scalable communication techniques, social media has substantially changed the way organizations, communities, and individuals communicate.

Social media technologies take on many different forms including magazines, Internet forums, weblogs, social blogs, social blogs, wikis, podcasts, rating and social bookmarking. By applying a set of theories in the field of media research (social presence, media richness) and social processes (self-presentation, self-disclosure) Kaplan and Haenlein created a classification scheme for different social media types in their Business Horizons article published in 2010.

The honeycomb framework defines how social media services focus on some or all of seven functional building blocks (identity, conversations, sharing, presence, relationships, reputation, and groups). These building blocks help understand the engagement needs of the social media audience. For instance, LinkedIn users care mostly about identity, reputation and relationships; whereas YouTube's primary building blocks are sharing,
conversations, groups and reputation. Many companies build their own social containers that attempt to link the seven functional building blocks around their brands. These are private communities that engage people around a narrower theme, as in around a particular brand, vocation or hobby, than social media containers such as Facebook or Google+.

1.1 Why social media?

Research Firms and Businesses may refer to social media as consumer-generated media (CGM). A common thread running through all definitions of social media is a blending of technology and social interaction for the co-creation of value.

One characteristic shared by both social media and traditional industrial media is the capability to reach small or large audiences; for example, either a blog post or a television show may reach no people or millions of people. This has been clearly demonstrated in Egypt, Libya and Kenya (Somalia war). Some of the properties that help describe the differences between social media and industrial media are:

1. Reach - both industrial and social media technologies provide scale and are capable of reaching a global audience. Industrial media, however, typically use a centralized framework for organization, production, and dissemination, whereas social media are by their very nature more decentralized, less hierarchical, and distinguished by multiple points of production and utility.

2. Accessibility - the means of production for industrial media are typically government and/or privately owned; social media tools are generally available to the public at little or no cost.

3. Usability - industrial media production typically requires specialized skills and training. Conversely, most social media production does not require specialized skills and training, or requires only modest reinterpretation of existing skills; in theory, anyone with access can operate the means of social media production.
4. Immediacy - the time lag between communications produced by industrial media can be long (days, weeks, or even months) compared to social media (which can be capable of virtually instantaneous responses; only the participants determine any delay in response). However, as industrial media begins adopting aspects of production normally associated with social media tools, this feature may not prove distinctive over time.

5. Permanence - industrial media, once created, cannot be altered (once a magazine article is printed and distributed changes cannot be made to that same article) whereas social media can be altered almost instantaneously by comments or editing.

Social media has also been recognized for the way in which it has changed how public relations professionals conduct their jobs. It has provided an open arena where people are free to exchange ideas on companies, brands and products. As stated by Doc Searls and David Wagner, two authorities on the effects of Internet on marketing, advertising, and PR, "the best of the people in PR are not PR Types at all. They understand that there aren’t censors, they’re the company’s best conversationalists." Social media provides an environment where uses and PR professionals can engage in conversation, where PR professionals can promote their brand and improve their company’s image, be listening and responding to what the public is saying about their product.

Social change is important to young persons around the world, and they are taking action through social media which is going through tremendous advancement. A case in example is the revolutionary episodes that have taken place in Africa. While the level of engagement and importance vary with age, most adults agree that they should be involved in positive social change by the youth in future using all social media platforms. Globally, 80% of the young adults have turned onto social media as a platform to bring about positive change and as means of relaying information. According to Harris interactive, 2011, most adults in countries around the world agree that technology can
turn a cause into a movement faster than anything else can. Young adults around the globe are leveraging digital technology to get involved in positive social change.
2.0 Background

In the mid-1990s, as the use of mobile phones started its rapid spread in much of the developed world, few thought of Africa as a potential market. Now, with more than 400 million subscribers (CCK, 2010), its market is larger than North America’s. Africa took the lead in the global shift from fixed to mobile telephones (UN International Telecommunications Union Report, 2010).

The Information and Communications Technology (ICT) sector has proven to be a strong growth factor toward the GDP of nations across the world; from developing countries such as India and the Philippines, to developed nations such as the US and Ireland, the ICT sector has contributed to the success of each of these nation’s economies, the advancement of its people’s skills and capabilities and positioning the nation as place for global firms to more efficiently do business. The ICT sector has been the major economic driver in Sub-Saharan Africa over the past decade, witnessing an annual compounded growth rate of 40%\(^1\); and, although mobile and Internet penetration remains relatively low in Africa, never before in the history of the continent has the population been as connected as it is today, thereby poising itself to continue its ICT growth trajectory.

What is the actual opportunity that exists in Africa? Provided the ICT market continues its impressive double-digit growth, the expenditures in ICT could be well north of USD 150 billion by 2016. The marketplace for ICT products and services was USD 66 billion in 2009 for a subset of 10 countries representing approximately 65% of African GDP, according to the World Bank African Development Indicators; estimating a similar share (of 6-7% of GDP) for the remainder of the continent results in a GDP of 95-100 billion.

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\(^1\) ICT competitiveness in Africa, 2011 (etransformation.org)
Assuming that continental GDP continues on its estimated growth path (as estimated by the IMF) and the ICT share remains at 6-7% of GDP, the ICT marketplace could be anywhere from USD 155-180 billion in 4-5 years.

A similar story now seems again to be unfolding. Africans are coupling their already extensive use of cell phones with a more recent and massive interest in social media — Internet-based tools and platforms that allow people to interact with each other much more than in the past. In the process, Africans are leading what may be the next global trend: a major shift to mobile Internet use, with social media as its main drivers. According to Mary Meeker, an influential Internet analyst, mobile Internet and social media are the fastest-growing areas of the technology industry worldwide, and she predicts that mobile Internet use will soon overtake fixed Internet use.

The explosive growth of Social Media has provided millions of people the opportunity to create and share content on a scale barely imaginable a few years ago. Massive participation in these social networks is reflected in the countless number of opinions, news and product reviews that are constantly posted and discussed in social sites such as Facebook, Badoo and Twitter, to name a few.

The youth occupies the highest percentage in the use of social media in communication and social networking. Given this widespread generation and consumption of content, it is natural to target one’s messages to highly networked youth who will propagate them further in the social network. Various research findings can be easily be disseminated through this channel.
The crowds in Tahrir Square probably weren’t thinking about the role of social media in their revolution by the time Mubarak stepped down, but speculation elsewhere went off in both directions (Douglas, 2011).

Twitter is one of the fastest growing social networks on the Internet, and thus the focus of advertising companies and celebrities eager to exploit this vast new medium. As a result, ideas, opinions, and products compete with all other content for the scarce attention of the user community. In spite of the seemingly chaotic fashion with which all these interactions take place, certain topics manage to get an inordinate amount of attention, thus bubbling to the top in terms of popularity and contributing to new trends and to the public agenda of the community. How this happens in a world where crowd sourcing dominates is still an unresolved problem, but there is considerable consensus on the fact that two aspects of information transmission seem to be important in determining which content receives attention.

One aspect is the popularity and status of given members of these social networks, which is measured by the level of attention they receive. The followers create links to their accounts to automatically receive the content they generate and comment on the status posted. The other aspect is the influence that these individuals wield. This is determined by the actual propagation of their content through the network. The influence is also determined by many factors, such as the novelty and resonance of their messages with those of their followers and the quality and frequency of the content they generate and how it affects their moral understanding of the social life. Equally important is the passivity of members of the network which provides a barrier to propagation that is often hard to overcome. In this regard, gaining knowledge of the identity of influential and least passive people in a network can be extremely useful from the perspectives of viral
marketing, propagating one’s point of view, as well as setting which topics dominate the public agenda.

Social media has achieved various perceived benefits from its users in the research field. According to CIBER, University College London, this perceived benefits include faster dissemination of information; connection with people outside the companies; ability to

2.1 Mobile phone tackle poverty in Africa

Forever and a day, there has been much hype about the potential for ICTs to change peoples’ lives. While I have never doubted that, it has been something rather obscure to prove. Here is a rather succinct infographic that says so much in just a few pics. It’s a big heading: Mobile phones tackle poverty, but here you can see the impact of using mobiles on GDP, feelings of safety, income generation, health, education, transparency, corruption, access to markets, citizen information and banking. While there are not too many statistics in this infographic, it’s a nice overview of some “potential” and some reality.
MOBILE PHONES EMPOWER THE POOR

MOBILES CAN MEAN SAFETY.
A USAID-supported program allows Kenyans to text incidences of ethnic violence, which is generated on a map so people know the dangerous areas to avoid. The system also works in Gaza and the Democratic Republic of the Congo.

MOBILE PHONES IMPROVE TRANSPARENCY & ROOT OUT CORRUPTION.
When USAID helped the Afghan Government pay government employees and police officers through mobile phones, it cut out so much graft that some employees thought they were actually getting a 30% raise.

MOBILE PHONES STRENGTHEN DEMOCRACY.
In Haiti and Tunisia, USAID used mobile phones to provide citizens with important information on polling locations and voting procedures via SMS.

MOBILES MEAN BANKING.
Mobile phones accelerate financial inclusion for the 1.8 billion people with access to a phone but not a bank. Roughly 30 percent more Haitians have access to financial services as a result of USAID’s mobile money partnership with the Bill & Melinda Gates Foundation.

MOBILE PHONES DELIVER EDUCATION.
In Tanzania, teachers provide locally-developed educational content to remote schools by downloading videos through mobile phones in their classrooms.

SMS HELPS KEEP PEOPLE HEALTHY.
The Mobile Alliance for Maternal Action (MAMA) uses mobile phones to provide mothers without access to clinics vital health information about pregnancy, childbirth and the first year of life.

MOBILES PROVIDE ACCESS TO MARKETS.
The m-Farmer Initiative Fund launched in 2011 will help more than 2 million farmers in developing countries by providing farmers access via their mobile phones to agricultural information services such as daily market prices, weather reports, and mapping to potential buyers for their crops.
3.0 Information flow on social media via mobile phones

Global

5 ways mobile devices have changed the way people consume media

1 | Mobile share of time ahead of TV, catching up with online

The average mobile web user consumes 7.2 hours of media daily. Mobile devices represent 27% of this time.

2 | Mobile devices are used throughout the day

3 | Mobile content consumed varies by gender

4 | Comfort with mobile advertising is already greater than TV or online advertising

Which forms of media most impact your purchasing decisions?

66% are more or equally comfortable with mobile advertising vs. TV or online ads

5 | Mobile impacts consumer behaviors throughout the purchase path

Diagram 1 Changes in the consumption of media due to mobile phones

Source: InMobi, Decision Fuel & On Device Research, Mobile Media Consumption Research, Feb 2012

www.inmobi.com / research@inmobi.com / @InMobi
3.1 Rural Kenyan Chief Finds Notoriety on Twitter

@Chiefkariuki is Africa’s new novelty, thanks to Associated Press. A chief in Kenya, Francis Kariuki, says he uses twitter to communicate with his villagers. His village is called Lanet Umoja and is 160 kilometres west of the capital, Nairobi. One presumes that if he is tweeting about issues important to his villagers, then they too must be on twitter, following him, along with quite a few Americans (including a hedge fund manager). He says that in addition to the now over 1,300 people following him, others access tweets through a third-party mobile phone application or tweets forwarded via text message. Mashable and AP say that “Mr. Kariuki regularly sends out tweets about missing children and farm animals” ... and raising the alarm about thefts, which has helped to reduce crime in the area.

Kariuki said that when he was first appointed the administrative chief of Lanet Umoja he asked himself how he could tackle the region’s problems. First was solving the region’s poor communication infrastructure. I’ve got to be honest; I’d love to know the backstory on this one. How many people in the village follow the Chief, respond to his calls, engage with him and find the tweets useful? A brief look at his twitter account shows that he pushes out information but there’s not much conversation going on – yet.

Figure 1 Chief Francis Kariuki reading a tweet on his cell phone during a meeting in his office
4.0 Snap shots of ICT competitiveness in Africa

Provided the ICT market continues its impressive double digit growth in Africa, the expenditures in ICT could be well north of USD 150 billion by 2016. The marketplace for ICT products and services was USD 66 billion in 2009 for a subset of 10 countries representing approximately 65% of African GDP, according to the World Bank African Development Indicators; estimating a similar share (of 6-7% of GDP) for the remainder of the continent results in a GDP of 95-100 billion.

4.1 East Africa study - Kenya

Kenya is a cornerstone community in Africa’s ICT landscape. It has become East Africa’s technology gateway due to a mixture of innovative thinking and investment in the SEACOM, TEAMS, and EASSY submarine cables. Kenya’s ICT infrastructure has improved dramatically. The cost of a monthly broadband subscription had fallen from USD 159 in 2008 to USD 39 by the end of 2009 due largely to the successful completion of the TEAMS and SEACOM undersea cable projects. Furthermore, with the launch of the Kenya Internet Exchange Point (KIXP), latency has declined dramatically. The Communications Commission of Kenya reports that as of 4Q 2010, mobile penetration stands at 61% and Internet penetration is at 22% both well above the continental average.

4.2 North Africa study - Morocco

Morocco has long been a pioneer in ICT development on the continent as well as a hub for ICT dissemination across the Middle East and North Africa (MENA). In addition to being the first country in North Africa to install 3G networks, Morocco has invested heavily in ICT expenditure compared to its counterparts. In 2008, it spent 12.5% of its GDP on ICT capital expenditure versus a MENA average of 5.8% and its mobile
penetration rose by over 20 percentage points to 101% in 2010, according to telecommunications regulator ANRT.

The country offers a range of ICT services including infrastructure solutions, mobile computing, and location based services, integrated management solutions/BPO, and ICT democratization services. Furthermore Morocco is a significant exporter of ICT services on the continent and boasts inexpensive broadband at USD16 per month as of 2009.

4.3 West Africa Study – Nigeria

Africa’s most populous country, Nigeria is expected to experience explosive growth in the near term despite being consistently ranked in the lower half of the ICT Development Index in the past five years. MTN, Africa’s biggest mobile phone operator, recently said that it would invest USD 1 billion over the next year to expand its network in Nigeria. Other mobile phone operators are boosting capacity to defend market share as a result of MTN’s move. The investment from all operators is expected to result in an improved fiber network, better transmission capacity, more base stations and substantially greater network capacity. Nigeria’s broadband cost ranked among the world’s highest at USD 675 per month in 2008. It dropped to $106 by the end of 2009 but is still the highest of the countries examined in this report. It is however, expected to fall further with the addition of incoming capacity this year.
5.0 Measuring the use of social media through Household survey by Research ICT Africa: Namibian Case

According to research ICT Africa, 31.1% of the Namibian population that was interviewed use internet for social networking or video sharing. The finding gives a highlight that if social media is explored extensively to disseminate research information then it will capture audience at a wider scope. This will be explained by the viral effect of the internet information.
When this population were asked if they have signed up for any online social network the results were amazing since 81% of the Namibian population said yes as compared to the 19%. This is a clear indicator of how often people spent their time on the internet and for what purpose?
6.0 Conclusion

Researchers are using social media tools to support every phase of the research lifecycle: from identifying research opportunities to disseminating findings at the end. They may not be the same tools, and they are certainly not the same researchers, but social media are most definitely making an impact on scholarly workflow.

The most popular tools used in a professional research context tend to be mainstream anchor technologies or ‘household brands’, like Skype, Google Docs, Twitter and YouTube. Researchers seem to be largely appropriating generic tools rather than using specialist or custom-built solutions and both publishers and librarians need to adapt to this reality. Is this a sign, perhaps, that there may be a gap in the market for simple bespoke tools?

The key driver for the take up of social media is pressure exerted by peers outside of the researcher’s own institution. Social media are helping to fulfill the demand for cheap, instant communication between researchers fuelled by the growth of collaborative and interdisciplinary research.

Use of social media is usually down to personal initiative, so a clear understanding of the capabilities and benefits of these tools is essential. Time-poor researchers are still unclear about the benefits of social media and this represents a major barrier to their take up. They also have serious concerns about the authenticity of crowd sourced information.