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**THE IMPACT OF SOCIAL MEDIA AND INSTANT MESSAGING ON NEWS REPORTS:  
A PRELIMINARY ANALYSIS ON TAIWANESE MEDIA**

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**The impact of social media and instant messaging on news reports:  
A preliminary analysis on Taiwanese media<sup>1</sup>**

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## Introduction

On 26<sup>th</sup> March 2016, the *Independent*, a British newspaper established in 1986 with a daily circulation of around 400,000 in late 1980s, ended printed edition and became a digital only media. The “death” of print edition of a once mainstream newspaper is a tragic testimony to the decline of traditional news media in the changing digital environment. Dramatic development of digital technologies not only has altered the landscape of media but also been resulting in the transformation of journalistic work. In 2015, the Washington Post announced to launch an online platform called the “Talent Network” for freelancing reporters and editors to “exchange information.” According to the FAQ on the Washington Post’s website, the Talent Network “open(s) up the newsroom to more ideas for news coverage from across the country and the world, and more easily locate the best freelance talent when breaking news occurs outside of Washington.” (Washington Post, n.d.) For employed reporters, the digital technologies have brought challenges as more and more job opportunities are probably replaced by freelancing journalists from every corner all of the world.

Mainly based on the preliminary findings of a research project I have been conducting since August 2015 (funded by the Ministry of Technology and Science, 104-2410-H-004-182-MY2) and a pilot research partly presented in a conference last year (Liu, 2015), this paper is aim to analyze how recent development of digital technologies, especially the rapid growth of use of social media and smartphones, has transformed journalism and journalistic work in Taiwan. In following sections, first, I will provided a brief review of recent development of digital technologies in Taiwan. Second, through a qualitative content analysis of several Taiwanese mainstream media (including newspapers, television news, and online news organizations), the differences in news topics, types of headlines, and primary sources of news reports on various digital platforms (including websites, Facebook fanpages, and instant messaging App LINE) will be examined.

## **Background: The use of social media and IM apps in Taiwan**

The feature of news media has changed in the digital world. In the UK, about 30% Britain Internet users read newspaper online in 2007, and increased double in two years to nearly 60% in 2009. However, online news consumption had been slow down later—the proportion of online newspaper usage was 55% in 2011. Nevertheless, the use of social media developed relatively fast from 17% to 60% between 2007 and 2011. In 2009, more than half Internet users access social networks regularly, and the most prevailing social media is the Facebook. Many main stream news organization websites, such as the BBC, the Guardian, and the Financial Times, mainly rely on the referral from the Facebook and Twitter (Newman, 2009; 2011). Not only the development of social networks, but also the spread of mobile devices has fostered the change of news media. In the US, estimated half of adults have mobile Internet devices, including smartphones and pad PC in 2012. Among these mobile devices users, about one third obtain news information by smartphones or tablets. However, these mobile news users read news stories rather than updates the headlines on App. In addition, most mobile news consumers are young adults, which attracted more and more advertisers (Rosenstiel & Mitchel, 2011; 2012). Therefore, news media organizations began to notice the expansion of news market on mobile devices and attempted to create various types of news service Apps.

Currently, social media dominate the online news consumption in the US. More than 60% Internet users flock onto the Facebook, and half of them said that they obtain the news information from this social network. About 50% social media users, including the Facebook, Youtube, and Twitter, shared and commented news stories or videos from news media (Anderson & Caumont, 2014). In Canada, a survey shows that two of every five social networks users get information of news events and share with their friends (Hermida et al, 2012).

In Taiwan, the penetration rates of traditional media—including television, newspaper, and magazine—have been in stagnation, while the Internet has become more and more important and popular. The penetration rate of the Internet has almost doubled in ten years, from 35.5% in 2005 to 68.5% in 2015, and become the second popular “mass” media in Taiwan (see table 1). . The rapid development of social media, especially the Facebook, has increased the amount of time Taiwanese users spent on the Internet. According to a governmental survey in 2011, 63.7% Taiwanese, estimated 10.64 million people, use social media regularly. The penetration rate of social media in 2009 was only 35.4%--that is, the use of social media in Taiwan has expanded nearly 80% during two years. Most social media users are young (more than 80% are 15 to 29 year-old) and educated (more than 70% have college degree or above). In 2013, social media use had become the 2<sup>nd</sup> important reason for Taiwanese to use the Internet, which was only second to the use of email (MAA, 2013; 2014).

The widespread of mobile devices, such as smartphones and tablets, which allow users access online services theoretically anytime and anywhere, has furthered the influences of the Internet on news media. In 2014 nearly 60% Taiwanese above 12-year-old have smartphones; meanwhile, one of every four Taiwanese uses tablet computers, which has increased 37% within one year (Institute for Information Industry, 2013; 2014). As the result, the number of mobile Internet users has increased more than quadruple (421%) within ten years from 14.2% in 2006 to 74.0% in 2015 (see table 2) (TWNIC, 2015, p.62). As traditional media declined for decades, the development of social media and mobile devices has aroused attentions from news organizations. For example, the App service on smartphones and tablets has become an emerging platform for media and business. In 2014, the most downloaded and regular using App is the LINE, a transnational instant communication appliance—more than 65% Taiwanese mobile Internet devices users accessed the LINE very often. The 2<sup>nd</sup> popular App in Taiwan is the Facebook; and surprisingly the 3<sup>rd</sup> popular App is the Apple Daily, a tabloid newspaper in Taiwan (see table 3).

**Table 1: Penetration rate (PR) of media in Taiwan, 2005-2014 (unit: %)**

	TV		Newspaper		Magazine		Internet	
	PR	Growth	PR	Growth	PR	Growth	PR	Growth
2005	95.5	--	50.5	--	35.2	--	35.5	--
2006	94.5	-1.05	45.8	-9.30	31.8	-9.66	39.1	10.14
2007	94.5	0	45.1	-1.53	32.2	1.26	45.5	16.37
2008	95.5	1.06	43.9	-2.66	31.7	-1.55	48.1	5.71
2009	94.4	-1.15	42.2	-3.87	28.5	-10.09	49.2	2.29
2010	93.4	-1.06	43.0	1.90	30.1	5.61	51.8	5.28
2011	91.1	-2.46	40.6	-5.58	30.5	1.33	52.7	1.74
2012	91.1	0	39.6	-2.46	30.5	0	57.1	8.35
2013	89.4	-1.87	35.4	-10.6	28.4	-6.89	61.6	7.88
2014	88.3	-1.23	33.1	-6.50	26.1	-8.10	68.5	11.20

\*Source: MAA, 2013; 2014; 2015

**Table 2: Mobile use among Internet Users (%)**

Year	2006	2007	2008	2009	2010
Penetration rate	14.2	13.7	7.9	11.4	16.2
Growth rate	--	-3.5	-42.3	44.3	42.1
Year	2011	2012	2013	2014	2015
Penetration rate	18.8	31.0	44.6	61.8	74.0
Growth rate	16.0	64.9	43.9	38.6	19.7

\*Source: TWNIC, 2015, p.62

**Table 3: App use rate on mobile devices in Taiwan, 2014**

Rank	APP	Type	All	IOS	Android
1	LINE	Instant message	66.6%	64.1%	77.0%
2	Facebook	Social network	48.5%	47.5%	58.7%
3	Apple Daily	News media	35.6%	45.1%	58.5%

\*Source: Institute for Information Industry, 2014

### **A brief review of relevant literature**

Digitalization of communication has shifted the pattern of news consumption and thus influenced journalism. For Facebook users, they intend to read less and spent less time on news stories, as compared to traditional media audience and news organization website users. Social media users are more inclined to read entertainment, sports, and local events, rather than international news or business news (Anderson & Caumont, 2014).

The widespread of digital technologies and the new model of disperse communication, especially the use of social media, have reshaped media organizations and journalistic production process. On the one hand, new technologies like social media could become a channel for journalists to interact with audiences. A study interviewing 40 reporters of two Britain newspapers and conducting content analysis on their social media profiles found that informal, personal, and reciprocal interacting with readers through Facebook or Twitter has become an important part of their daily routines. The role of journalists in the reader-media relationship has also changed from traditionally “authoritarian gatekeeper” to newly “ordinary, fallible individual” (Canter, 2013). This new form of communication between journalists and readers transformed journalism practices. As reporters of mainstream media embrace social media to post comments on news event, they also conflict with the traditional

journalistic norm that insists agents of news field should be impartial, objective, and non-partisan (Lasorsa et al, 2012).

On the other hand, abundant information and enormous “user-generated content” (UGC) have become important sources for journalistic work. For example, a study analyzing the content form seven mainstream news media in the US shows that Twitter has become a “sole” or a primary source, mainly because of the relatively low cost of news gathering (Moon & Hadley, 2014). As more and more materials on social media have been exploited “opportunistically” by mainstream media, several journalism scholars advocate to converge the use of UGC into the “new journalism,” such as the “fifth estate” which emphasizes the voice of Internet users (Newman, 2011; Newman *et al*, 2012), the concept of “journalism as process” instead of the traditional concept of “journalism as product” (Robinson, 2011), or the importance of “share” and the construction of “ethics of participation (Lewis, 2012). However, the use of UGC by news media usually has been treated as free materials and the contributions of Internet users have been regarded as “free labor” instead.

## **Methods**

### **Sampling: Media contents for analyzing**

We chose sampling media from three groups of daily news providers: newspapers, TV stations, and online news organizations. According to the popularity (including newspaper circulation, TV viewing rates, website hit rats) and the management of various platforms (including websites, social media—Facebook fanpages, and official account on instant communication APP—LINE), two newspapers (the Apple Daily [蘋果日報] and the United Daily News [聯合報]), three TV channels (the Public Broadcast Station [公共電視], the TVBS, and the Eastern Broadcasting Co. [EBC, 東森新聞台]) and two online news websites (ETtoday[東森新聞網] and NOWnews [今日新聞]).



Sampling days of content data collecting was decided through a set of steps. First, there are two groups divided by the Presidential Election held on 16<sup>th</sup> January 2016, because the number of political news reports close to the election was supposed to be more than usual. The first group of days ranged from 1<sup>st</sup> October to 15<sup>th</sup> November 2015, ending at two months before the election, while the second group of days ranged from 15<sup>th</sup> February to 1<sup>st</sup> April 2016, starting at one month after the election. As the result, there were forty-six days respectively in each group. Taking into account of the differences in number or topics of reports between weekdays and weekends, we employed the “Constructed Week” sampling (Riffe, Aust & Lacy, 1993) to pick one day randomly from the same week-date within each group of sampling days (for example, picked a Monday from six Mondays during the sampling period). The result of sampling days illustrated in table4.

News reports on the real-time section (即時新聞) of these seven organizations’ websites, posts on six media Facebook fanpages (except the PTS which did not have fanpage), and links of recommending news reports on four media’s LINE accounts (the Apple Daily, the UDN, ETtoday, and NOWnews, while the else did not manage LINE accounts) in sampling days were media contents for this project to gather and analyze. For real-time section of news media websites and posts on Facebook fanpages, we collected all reports during “online news peak-time” (from 10 am to 4 pm) in each sampling day. For recommending news links on LINE, in average two messages each day and two news links in each message were collected. Overall, there were 14,500 news reports on websites, 2106 posts on Facebook fanpages, and 224 news links in LINE as sampling data to be analyzed (see table5).

**Table4: Sampling days**

	#	First group (2015)	Second group (2016)
Mon	6	Oct 26 <sup>th</sup>	Feb 22 <sup>nd</sup>
Tue	6	Nov 10 <sup>th</sup>	Mar 15 <sup>th</sup>
Wed	6	Nov 7 <sup>th</sup>	Feb 17 <sup>th</sup>
Thu	7	Oct 22 <sup>nd</sup>	Feb 25 <sup>th</sup>
Fri	7	Nov 6 <sup>th</sup>	Apr 1 <sup>st</sup>
Sat	7	Oct 17 <sup>th</sup>	Feb 27 <sup>th</sup>
Sun	7	Nov 15 <sup>th</sup>	Mar 6 <sup>th</sup>

**Table 5: Number of sampling data in various news media and platforms**

	Newspaper	TV	Online news	Total
Website	7948(54.8%)	1809(12.5%)	4743(32.7%)	14500
Facebook	877(41.6%)	639(30.3%)	590(28.0%)	2106
LINE	112 (50%)	--	112 (50%)	224

**Coding: Types of topics, headlines, and main sources**

Besides the basic information—including date, medium, headline, section—the project coded sampling content through different processes among three digital platforms. News stories on websites were coded into “type of topic”, “type of headline”, and “type of main source.” Posts on Facebook fanpages were coded by “topic” and “type of editor’s introducing paragraph.” News links in LINE messages were coded by “type of topic” and “type of headline.”

First, the “topic of a news story on website” was determined by the category that the news organization indicated or marked, and the “topic of a post on Facebook fanpage” and the “topic of a news link in LINE message” were both decided by which news story they connected. There are different classifications of news events by

different news websites, and we re-grouped various topics into three major types: (1) Traditional Hard News, such as “Politics” (政治), “International” (國際), “Commentaries” (論壇), “Business” (財經), etc. (2) Traditional Soft News, such as “Entertainment” (娛樂), “Sport” (運動), “Life” (生活), “Crime” (社會), “Fashion” (時尚), etc. (3) Others, such as “Real Estate” (地產), “Hot Chicks”(正妹), etc.

Second, the research categorized three types of headline of news story/introducing paragraph of fanpage post/headline of news link: (1) Traditional/Informative type, that is, headlines basically summarizing or providing key concepts of an event. (2) Interactive/emotional type, that is, headlines or introducing paragraph basically attempting to arouse readers’ curiosity or emotive reactions to an event without providing substantive concepts or information. This new type of headlines includes numerous patterns of expression, such as “interrogative sentence,” “expletive/sensational words,” “misleading information,” “arousing interests or curiosity,” “expressing editor’s own opinion,” “interacting with readers by other issues,” etc. (3) Other types, which could not be categorized into the two types above.

Third, main source of a news story on websites was coded into three types: (1) Original news gathering, including interviewing, stories from news agencies, etc. (2) Online contents gathering, including other news websites, celebrities Facebook posts, individuals Facebook posts or conversations, public clubs on Facebook, Twitter, PTT (a popular online forum at the Bulletin Board System), Youtube, etc. (3) Others, which could not be categorized into the two types above.

## **Preliminary Findings**

### **Types of Topics**

The result of three main topics of news stories on news websites, posts on Facebook fanpages, and news links in LINE messages is demonstrated in table6. For

websites, there were 6630 hard news stories which represented 45.7% within a total of 14500 news stories. Meanwhile, there were 6811 (47.0%) soft news stories, which slightly prevailed the number of hard news. Regarding Facebook fanpages, more than a half (52.2%) of 2106 posts were soft news, while the proportion of hard news was less than 30% (27.5%). Similar to posts on Facebook fanpages, there were about six out of ten news link (66.5%) were soft news, while less than three out of ten (27.2%) were hard news.

The results demonstrated two important trends in Taiwanese news media. Firstly, Taiwanese news media, no matter through which digital platform, offered audiences more “soft news” than “hard news.” Secondly, news organizations provided more soft news or sensational reports, such as entertainment, crime, celebrities’ gossips, etc., on Facebook fanpages and LINE. The differences in topics of news/posts among three platforms were statistically significant ( $\chi^2=533.097$ ,  $df=4$ ,  $p<.001$ ).

**Table 6: Topics of news/posts on various platforms**

	Hard News	Soft News	Other	Total
Website (real-time news)	6630 (45.7%)	6811 (47.0%)	1059 (7.3%)	14500
Facebook Fanpage	579 (27.5%)	1099 (52.2%)	428 (20.3%)	2106
LINE	61 (27.2%)	149 (66.5%)	14 (6.3%)	224
N=16830, $\chi^2=533.097$ , $df=4$ , $p<.001$				16830

### **Types of headlines**

The results about the types of headlines implied a significant shift in the news value or how news media appeal their audience. For traditional role of news media, the function of headline is basically offering or summarizing information of news

events. On the news media websites, traditional role of news headline which provides substantive information remained dominant among sampling news reports (93.4%). However, the function of headline for posts on Facebook fanpages and news links in LINE message has changed dramatically. “Interactive/emotional” headlines mainly function to arouse curiosity among social media followers or App users have become widespread on new digital platforms. On Facebook fanpage, more than three out of four posts headlines (77.4%) were non-traditional, while only about 20% posts headlines remained informative style (table 7). Several patterns of this new type of headline on the Facebook could be found, including “unfinished sentence” (such as “Doctor says not to eat \_\_\_\_”), “exclamatory sentence” (such as “We are astonished”; “That’s too much”; etc), and “expressing opinions” (such as “This bad guy go to hell” etc.). The proportion of “interactive/emotional” headlines in LINE was 37.5%, which was higher than that of website but lower than that of Facebook. The differences in types of headline were also statistically significant ( $\chi^2=7091.175$ ,  $df=4$ ,  $p<.001$ ).

**Table 7: Types of headlines/posts on various platforms**

	Informative	Interactive/Emotional	Other	Total
Website	13529 (93.4%)	946 (6.5%)	25 (0.1%)	14500
Facebook	458 (21.7%)	1630 (77.4%)	18 (0.9%)	2106
LINE	139 (62.1%)	84 (37.5%)	1 (0.4%)	224
N=16830, $\chi^2=7091.175$ , $df=4$ , $p<.001$				16830

## Types of sources

The result of main sources of news stories on websites illustrated the change of news media in gathering material for reporting. Among 14500 news stories, there were 3098 (21.4%) mainly based on Internet's source, consisting of 1806 (12.5%) from other websites (such as rewriting and translating from various news coverages of foreign news websites, blogs, etc.) and 1292 (8.9%) from social media (such as celebrities' Facebook posts, twitters, etc.) (see Table 8).

**Table 8: Primary Sources on news websites**

Traditional news gathering		From the Internet		Other	Total
Interviewing	News agencies or freelancers/letters	Websites	Social media		
8091 (55.8%)	2995 (20.7%)	1806 (12.5%)	1292 (8.9%)	316 (2.2%)	
11086 (76.5%)		3098 (21.4%)		316 2.2%	14500

## Discussions

Through analyzing Taiwanese media contents, a total of 16830 news reports/Facebook posts/LINE messages, this paper finds that (1) the amount of soft news on all three platforms is significantly more than that of hard news, and the tendency is even more obvious in two new platforms (Facebook and LINE); (2) the narrative mode of posts on Facebook fanpages and headlines in LINE messages has inclined to be interactive or emotional, while that of headlines on news websites remain traditional or informative; (3) directly using materials on the Internet including UGC has become a customary practice for Taiwanese journalistic work.

In a nutshell, the journalism practices and the role of news media in Taiwan have been shifted from traditionally “informative and objective providers of hard news” to “interactive, emotional and prejudiced disseminator of soft news,” and the increasing reliance on UGC also has reduced the importance of journalists in news media. While Taiwanese news media have flocked onto new digital platforms in order to approach young audiences, the continuing influences of digitalization on production and labor process of journalists will become a significant issue for further researches.

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