

# The Structures of Hashtags Used by Instagram-Based Online Shops

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Abstract: Hashtags are widely used in social networking sites such as Twitter, Instagram, and Tumblr and is simply a way for people to search for posts that have a common topic or area. This paper aims at examining the different structures of hashtags used in local online business shops that are particularly used in the Instagram application. Particularly, it aims at: 1) identifying the different structures of hashtags (e.g. noun, pronoun, adjective, etc.) commonly used in hashtags by local online business shops in Instagram, 2) distinguishing the pattern of parts of speech mostly used in the hashtags, and 3) recognizing the part of speech that is mostly used in the different patterns of hashtags used. The participants of this paper were 81 local online business accounts on Instagram and from these chosen accounts, 368 hashtags were collected and classified into the different patterns of the parts of speech. After being classified into different patterns or structures of hashtags, the data collated had a total of 38 different structures of hashtags. Only 31 local online business accounts used hashtags in their posts. The part of speech that was often used in the hashtags collected and classified right after is a noun; and this part of speech is mostly used in the beginning of the hashtags. The researchers therefore concluded that there are different parts of speech used in creating hashtags that are in business marketing and advertising strategies—of which these parts of speech can be used together to be able to construct a specific pattern or structure of parts of speech.

Keywords: hashtags; Instagram; parts of speech; structure; business accounts

### 1. Introduction

## 1.1 Background of the Study

Hashtags, also known as the pound sign, have long been serving its purpose for the different social media sites (e.g. Twitter, Facebook, Instagram, Tumblr, etc.) that are commonly and often used by people around the world for a variety of reasons, namely: advertising purposes, daily news updates, or even for entertainment. The use

of hashtags has been more popularized by Twitter, the 2<sup>nd</sup> most popular and mostly used social networking site having approximately 271 million active users (Twitter, 2014), which uses the hashtags to show the most popular topics for the day—or even for the entire week. It is through its existence that with just a click, people from around the world are able to connect their own thoughts and ideas with another.

Moreover, hashtags do not only serve its primary purpose in Twitter, which is used to be



able to connect and find ideas of another from around the world, but also in Instagram— a mobile application that shares photos and videos of people from around the world which works almost the same way as the Twitter application despite the difference in the modes of sharing. In the local perspective, the hashtags that are present in Instagram posts are often by online retail shops used for advertising purposes.

In addition to its purpose, hashtags aren't only presented with just one word (e.g #Manila, #Stress, etc.), but are also provided with a combination of words or even phrases in order to be narrow in scope and for a certain topic to be more unique and distinct from another.

#### 1.2 Review of Related Literature

Hashtags play an important role in different social media sites especially on Twitter—where it originally started. People and other companies use hashtags for a simple reason yet complex at the same time and it may be used in sports, company advertising purposes, and many more reasons for a word or a phrase may be popularly known.

Businesses and consumers alike use them to identify, organize, and emphasize their social messages. However, no one owns a tag, there is no formal process to creating one, anyone can make their own, and preexisting tags can be hijacked or re-purposed. (Rego, 2014) Hashtags are considered to be the pulse of the social media world, and we need them to properly market yourself, your brand, or your business. Using relevant hashtags is one of the most effective ways to get retweeted more often and reach a wider audience. (Smarty, 2014)

# 1.3 Statement of the problem

This research seeks to answer the following:

- What are the different patterns of parts of speech (noun, pronoun, adjective, etc.) commonly used in hashtags by local online business shops, specifically in Instagram?
- 2. What pattern of parts of speech is mostly used in posts by local online business shops?
- 3. What part of speech is mostly used in a certain pattern of the hashtags used by different local online business shops?
- 4. What pattern of speech is mostly used at the beginning of the different patterns of hashtags?

# 2. Methodology

# 2.1 Participants

The participants were 81 local online business accounts on Instagram—all of which were chosen through the type of business, specifically retail. The researchers made sure that a certain business account is reliable through its number of followers, which should be at least more than a thousand, and through the feedback posts from the buyers.

## 2.2 Corpus of the Study

The corpus of the study includes 81 Instagram accounts. The researchers went through each post of the accounts in order to get the hashtags used. The number of hashtags that the researchers collected was approximately 400 in number, depending on how many hashtags were used in each post of an account. (e.g. a post consisting of a maximum of 10 hashtags) Posts from January 2014 to September 2014 were used for the research. Any post before and beyond the assigned time interval was discarded, along with the posts not related with the business.

#### 2.3 Procedure

First, both researchers made Instagram accounts. Then, they searched for local online business accounts and followed the 81 most reliable ones. Next, the researchers went through each post of the business accounts and recorded the hashtags used in posts related to the business. The hashtags in posts that are not related to the business were not recorded so as to not destroy the purpose of the topic.

After the hashtags were completely recorded from the 81 local business online accounts, the researchers identified the patterns of the parts of speech used in each hashtag. (e.g. #HaveABreak has the pattern of Verb-Article-Noun) The hashtags that have the same pattern as the others are collated in one group.

Lastly, after the patterns of the parts of speech in each hashtag were completely collected, the researchers identified which pattern is commonly used by the different local online business accounts.



## 3. Results and Discussions

3.1 The Local Online Business Accounts in Instagram and the Different Patterns of Parts of Speech Commonly Used in Hashtags by Local Online Business Shops

Since the researchers focused on knowing the different patterns of the parts of speech used in hashtags of local online business shops in Instagram, they collated data from 81 different local online business Instagram accounts.

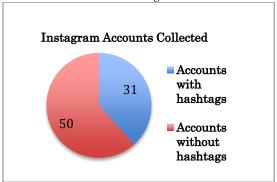


Figure 3.1.1: The number of local online business Instagram accounts with posts using hashtags and without hashtags

From the 81 local online business accounts in Instagram, only 31 accounts used hashtags in their posts for advertising or marketing purposes. On the other hand, the 50 accounts didn't use hashtags as a way of advertising their products.

Out of the 368 hashtags collected from the accounts, results showed that the most used pattern of the hashtag used in local online business accounts is the Noun, having a total of 65 hashtags. Coming in second is the Proper Noun, having a total of 63 hashtags. Third most used would be the Adjective-Noun pattern with 44 hashtags. Next would be the Adjective with 27 hashtags; Noun-Abbreviation with a total of 23 hashtags; Adjective-Noun-Abbreviation with 22 hashtags; Acronym-ProperNoun with 19 hashtags; ProperNoun-Noun with 15 hashtags; Acronym-Noun with 10 hashtags; Noun-Noun with 7 hashtags; Acronym and Verb, both with a total of 6 hashtags each; Proper Noun-Preposition-Noun, Adjective-Abbreviation, and Gender Noun-Noun, with 5 hashtags each; Verb-Noun and Acronym-Abbreviation with 3 hashtags Noun-Adjective-Noun each; Proper

ProperNoun-ProperNoun, both with 2 hashtags each; and Proper Noun-Preposition-Proper Noun, Noun-Preposition-Noun, Proper Noun-Acronym, Gender Noun-Noun-Abbreviation, Gender Noun-Acronym, Adjective-Adjective, Verb-Verb, Verb-Adjective, Pronoun-Acronym, Acronym-Noun-Abbreviation, Acronym-Adjective-Noun, Pronoun-Adjective-Noun, and Adverb-Adjective having only 1 hashtag each.

Table 3.1.2: Examples of Each Pattern of Hashtag

	Table 3.1.2: Examples of Each Pattern of Hashtag		
NOUN	#Prices		
	#Beauty		
	#Celebrity		
	#MakeUp		
	#Bags		
PROPER NOUN	#SoleAcademy		
	#Dextor		
	#Tahoma		
	#RicherPoorer		
	#KicksManila		
ACRONYM	#VS		
	#BBW		
	#TGIF		
	#OOTD		
	#TSPHL		
NOUN-VERB-	#FahionIsMyPassion		
PRONOUN-			
NOUN			
VERB	#Follow		
	#Guaranteed		
	#Shopping		
	#Restock		
	#Swaddle		
PROPERNOUN-	#SolefulByCez		
PREPOSITION-			
PROPERNOUN			
PROPERNOUN-	#FitflopOnSale		
PREPOSITION-	#LacosteOnSale		
NOUN	#LongChampOnSale		
	#MichaelKorsOnSale		
	#ToryBurchOnSale		
PROPERNOUN-	#KateSpadePH		
ABBREVIATIO	#KiplingPH		
N	#LacostePH		
	#LongChampPH		
	#TonyBurchPH		
ACRONYM-	#VBCMotoPlumberry		
PROPERNOUN	#VBCMotoLimeHaze		
	#VBCMotoPurpleHaze		
	#VBCWanderLust		
	#VBCMotoVintage		



NOUN-	#BlackOnBlack
PREPOSITION-	"Black Olibiack
NOUN	
PROPERNOUN-	#PilipinasOOTD
ACRONYM	"Timpinas o o TD
VERB-NOUN	#SlimmingProducts
, 11,12 1,001,	#FightsPimple
	#EliminatesPimples
ADJECTIVE-	#GreatDeals
NOUN	#BagAddict
	#HappyCustomers
	#TrendyClothes
	#CottonPullOver
NOUN-	#BargainPH
ABBREVIATIO	#PromoPH
N	#SalePH
	#DenimPH
	#JumperShortsPH
ADJECTIVE	#Feminine
	#Fun
	#Floral
	#Pinoy
	#Organic
ADJECTIVE-	#NewUploadPH
NOUN-	#NewCollectionPH
ABBREVIATIO	#OnlineShopePH
N	#GothicShopPH
	#CheapFindsPH
ADJECTIVE-	#KnittedPH
ABBREVIATIO	#KnitPH
N	#AffordablePH
	#EmbroideredPH
GENERANGIA	#LegitPH
GENDERNOUN	#MensNecktiePH
-NOUN-	
ABBREVIATIO	
N	#M 00/FD
GENDERNOUN	#MensOOTD
-ACRONYM	#ManaClathing
GENDERNOUN	#MensClothing
-NOUN	#MensFashion
	#GirlsDresses #GirlsClothes
	#GirisClotnes #BoyOnesie
PREPOSITION-	#ForSale
NOUN	mr ordate
PROPERNOUN-	#CoachBags
NOUN	#GuessBags
	#KedsFootwear
	#EmCosmetics
	#EOSLipBalms
PROPERNOUN-	#FitflopPH

T-	
ABBREVIATIO	#BurberryPH
N	#ZaloraMarketPlacePH
	#ZaloraPH
ADJECTIVE-	#SameSame
ADJECTIVE	
VERB-VERB	#StopSettling
VERB-	#LiveBig
ADJECTIVE	
VERB-	#SpreadingPositiveVibrations
ADJECTIVE-	
NOUN	
ACRONYM-	#IGSeller
NOUN	#CBMHaul
	#ETCStyle
	#VBCTops
	#VBCToteBag
PROPERNOUN-	#ShortcutsPocketTee
ADJECTIVE-	#ShortcutsPocketFriendlyPrint
NOUN	s
PRONOUN-	#MyOPT
ACRONYM	, and the second
PROPERNOUN-	#KedsKateSpade
PROPERNOUN	#CasioGShock
ACRONYM-	#BFJeansPH
NOUN-	
ABBREVIATIO	
N	
ACRONYM-	#SCBlueBag
ADJECTIVE-	
NOUN	
NOUN-NOUN	#LifePalette
	#FragranceFriday
	#StressRelief
	#BeautyReview
	#WeightLoss
PRONOUN-	#MyLifeGuide
ADJECTIVE-	
NOUN	
ADVERB-	#NotBad
ADJECTIVE	
ACRONYM-	#VBCPH
ABBREVIATIO	#WWPH
N	#LVPH

# 3.2 The Frequency of Using the Different Parts of Speech in a Hashtag



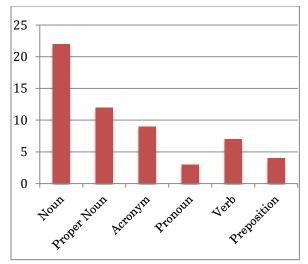


Figure 3.2.1: The total number of times the part of speech is used in the different patterns of hashtags (Noun, Proper Noun, Acronym, Pronoun, Verb, and Preposition)

From Figure 3.2.1, the part of speech that is mostly used in the different patterns of speech is the Noun, which was used 22 times from the total of 37 patterns of hashtags collected. While the part of speech that was least used from the figure is the Pronoun, only being used 3 times in total.

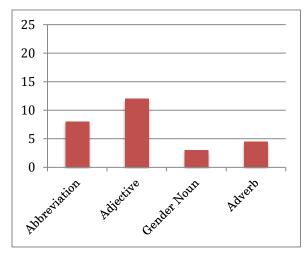


Figure 3.2.2: The total number of times the part of speech is used in the different patterns of hashtags (Abbreviation, Adjective, Gender Noun, and Adverb)

In Figure 3.2.2, the part of speech that is mostly used is the Adjective, being used 12 times in the different patterns of hashtags. While the least used from the figure is the Gender Noun, only being used 3 times in total.

From Figures 3.2.1 and 3.2.2 combined, the part of speech that is used the most in the different patterns is the Noun, which was used 22 times, while the least used parts of speech are the Pronoun and the Gender Noun, both being used only 3 times each.

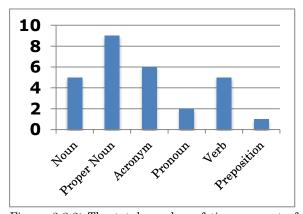


Figure 3.2.3: The total number of times a part of speech is used at the beginning of a hashtag (Noun, Proper Noun, Acronym, Pronoun, Verb, and Preposition)

From the Figure 3.2.3, the part of speech that is mostly used in the beginning of a hashtag is a Proper Noun with it being used 9 times as start of the hashtag out of the 37 different patterns of hashtags used by 31 different local online business accounts. While the least used from this figure is a Preposition, only being used once.



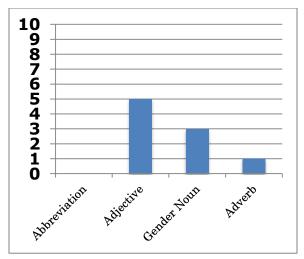


Figure 3.2.4: The total number of times a part of speech is used at the beginning of a hashtag (Abbreviation, Adjective, Gender Noun, and Adverb)

From Figure 3.2.4, the part of speech that is mostly used at the beginning of a hashtag is the Adjective, with it being used 5 times as start of the hashtag out of the 37 different patterns of hashtags used by 31 different local online business accounts. While the part of speech least used in this figure is the Abbreviation, which was never used at the beginning of a hashtag.

From Figures 3.2.3 and 3.2.4 combined, the part of speech that is mostly used at the beginning of a hashtag is the Proper Noun with it being used 9 times out of the 37 different patterns, while Abbreviation is the part speech that was never used at the beginning of the hashtag.

From the different patterns of hashtags collected, the researchers decided to classify the patterns into the number of parts of speech available in the 37 patterns of hashtags.

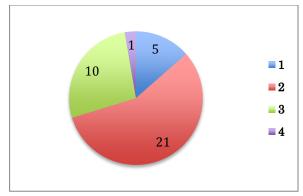


Figure 3.2.5: The number of parts of speech used in a hashtag

From Figure 3.2.5, it showed that the most used pattern for hashtags consists of 2 parts of speech, having a total of 21 patterns. Second to this would be having 3 parts of speech available in a hashtag, having a total of 10 patterns. Third would be the pattern consisting of only 1 part of speech used in a hashtag, having a total of 5 patterns. While the last would be having a total of 4 parts of speech, having a total of only 1 pattern.

## 4. CONCLUSION

After collecting a total of 368 hashtags from the 31 local online business Instagram accounts and gathering data from their accounts such as their number of posts, how long they have been using Instagram, and the average number of hashtags per post, the researchers have concluded that the parts of speech used by the chosen local online business Instagram accounts in a hashtag are classified into 37 different patterns, all of which are used as aid for advertising or marketing purposes.

The 37 different patterns of hashtags are Noun, Proper Noun, Acronym, Noun-Verb-Pronoun-Noun, Verb, Proper Noun-Preposition-Proper Noun, Proper Noun-Proper Noun, Proper Noun-Abbreviation, Acronym-Proper Noun, Noun-Preposition-Noun, Proper Noun-Acronym, Verb-Noun, Adjective-Noun, Noun-Abbreviation, Adjective-Noun-Abbreviation, Adjective-Abbreviation, Gender Noun-Noun-Abbreviation, Gender Noun-Noun, Proper Noun-Noun, Proper



Noun-Abbreviation, Adjective-Adjective, Verb-Verb, Verb-Adjective, Verb-Adjective-Noun, Acronym-Noun, Proper Noun-Adjective-Noun, Pronoun-Acronym, Proper Noun-Proper Noun, Acronym-Noun-Abbreviation, Acronym-Adjective-Noun, Noun-Noun, Pronoun-Adjective-Noun, Adverb-Adjective, and lastly, Acronym-Abbreviation.

Out of the 37 different patterns used by the local online business accounts, the pattern of the parts of speech mostly used in hashtags is the Noun, being used 67 times out of the 368 hashtags collected. It is so because online buyers often type in only 1-worded hashtags in order to look for a product they would want to purchase. The Noun is also the part of speech that is mostly used in the total of 37 different patterns of hashtags, which was used 22 times—it was used once or twice in selected patterns.

The part of speech that was mostly used at the beginning of a hashtag is the Proper Noun, which was used as the start in 9 patterns of the parts of speech.

The research was limited only to a small number of instagram accounts. A larger number of instagram accounts would have developed better results for the research. Another recommendation would be not only limiting the scope on Instagram but also to different social media sites like Facebook or Twitter.

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#### 6. REFERENCES

Chang, H.-C. (2010). A new perspective on Twitter hashtag use: Diffusion of

innovation theory . Proceedings of the  $American\ Society\ for$ 

Information Science and Technology, 1-4.

Cunha, E., Almeida, V., Magno, G., Goncalves, M. A., Comarela, G., &

Benevenuto, F. (2011, June 23). Analyzing the Dynamic Evolution of Hashtags on Twitter: A Language-Based Approach. *Proceedings of the Workshop on Language in Social Media*, 55-65.

Davis, B. (2013). Hashtag Politics: The Polyphonic Revolution of #Twitter.

Pepperdine Journal of Communication Research , 16-22.

Findlay, M. S. (1998). Language and Communication: A cross-cultural encyclopedia. ABC-CLIO, Inc.

Harris, I. B. (2014). CULTURAL CUES

EMBEDDED WITHIN HASHTAGS:

EFFECTS ON IDENTIFICATION, AND

ADVERTISING OUTCOMES. Ohio:

The Ohio State University.

Rego, K. (2014, July 14). *North Bay Business Journal*. Retrieved from

http://www.northbaybusinessjournal.com/9 5027/readthis-how-to-use-the-hashtag-effectively/

Smarty, A. (2014, March 6). Search Engine Journal. Retrieved from

http://www.searchenginejournal.com/5-free-awesome-tools-use-hashtags-wisely/88595/

Twitter. (2014).