

---

<http://dx.doi.org/10.222.99/arpap/2018.44>

# The Public Image of Vietnamese Public Administration Services on Social Media – A Comparison Between Structured and Unstructured Data

**CHIEN TRUONG DINH, PHU VU XUAN, KHANH HOA LE PHAM**

---

## **ABSTRACT**

Received: 3 October 2018  
Accepted: 15 November 2018  
Published: 15 December 2018

Corresponding author:  
Chien Truong Dinh,  
Faculty of Marketing -  
National Economics  
University, Hanoi, Vietnam  
Email: chientd@neu.edu.vn

Phu Vu Xuan, Khanh Hoa Le  
Pham,  
Faculty of Marketing -  
National Economics  
University, Hanoi, Vietnam.

*Because of the nature of public administration services, people often provide irrelevant information on the fact of service experience for public agents to improve their services in surveys. However, Vietnamese Facebook users could give more insights to show their dissatisfaction via their posts, comments, status. We assumed that PAPI 2016 results (Vietnam Provincial Governance and Public Administration Performance Index – the joint collaboration between Vietnamese governmental agents and UNDP) showed the positive public image of Vietnamese public administration services with five dimensions: (1) Participation at Local levels, (2) Transparency, (3) Vertical Accountability, (4) Control of Corruption in the Public Sector and the unstructured information from Facebook big data mining in the same period could reveal the negative images. The combination then map a comprehensive image of five characteristics of Vietnamese public administration services. Our findings showed that there are many negative insights of Facebook users' posts which reflect a part of the other side public image of public service agencies.*

**Keywords:** text mining data, big data, Facebook, public image, public administration services.

## **INTRODUCTION**

Under the Doimoi process, Vietnam has faced with many difficulties varying from economic infrastructure to citizen knowledge and perception which have long lasting effect on the national development. In the past 10 years, Vietnamese Government has strived to improve the quality of public administration services to meet the more complicated demand of citizens. Public administration service quality has been one of emerging agenda of the Government and Government's branches or ministries. One of these efforts is studying the satisfaction of citizen throughout the nation. The Government has collaborated with many foreign and domestic organizations to conduct hundreds of research from the national to provincial area. SIPAS and PAPI are the two famous large-scale panel research. The reports has showed many positive aspects with optimistic landscape of public service agencies on mass media.

Many researchers raised a question for the results of these qualitative approach research. We all agreed that the public services quality has been improved whether these results could help increase the quality. Could the straight-forward examining to the problems or dissatisfaction of public services have a better impact? If structured data from survey could take a picture of object and give a landscape of public services image, we hope that unstructured data from social media could do with less expense but more insights.

### **The concept of image and public image**

Image is one of a fashionable term which has been used for many years in social sciences and marketing since the first article of Levy in 1969. The concept of image has been applied to a celebrity, a political candidate, a product, a brand, a country and a destination. Basically, image is perceived as the result of a transaction where company (as a sending unit) generated market signals (Stern, 2014). These cues then was perceived by a receptor (a consumer) who inactively organized them into a mental perception of/about the sending unit (company). Stern (2014) suggested that image referred to a real-world sending entity (a company, a product/brand, a store) or a psychological object such as a set of beliefs, feelings in a consumer's mind which is stimulated by associations with the real-world object. Image can refer to advertising or public relations messages. As a result, Image indicates three different meaning: (1) the external world, (2) the consumer's mind, and (3) the external intermediary between the two.

Dichter (1985) figured out the essence of an Image with 10 characteristics which have significantly practical and conceptual value:

- a) Linear and one-dimensional thought models, such as hierarchies, lists of appeals, and orders of importance will have to be abandoned. Human psychological response is based less on specific facts than on total impressions. The same nose in a different face produce a different psychological reaction although it is physically the same. By the same token, a message about a product is influenced by the "image" advertising that surrounds or precedes it
- b) Human motivation is complex, and we must be careful not to make over-simplified assumptions with regard to it. For example, during a depression we might assume that people will spend less but, in fact, for some people the reverse might be true. To overcome a feeling of deprivation, some people may actually buy more expensive merchandise during "hard times"
- c) Images are constantly in flux. "Made in Japan" used to arouse ridicule. The opposite is true today. Marlboro used to be a women's cigarette. Now the brand appeals to be the "macho" male. Such examples are commonplace.
- d) The concept of image opens up new ways of looking at the marketplace and may influence our way of thinking about the economy. "Protectionism," for example, has the image, for many, of a completely outdated economic approach – one that discourages competition, and therefore innovation and modernization, and encourages inflation
- e) The success of a new brand is often more dependent on the total cultural framework within which it is marketed than on the specific properties of the product. For example, in France, wine is thought of as a part of the family meal, rather than as a festive beverage, and it should be marketed as such.
- f) Technology can change an image. Each new technological innovation influences the reaction pattern to a whole group of products. The pocket-sized television that has recently been introduced into the market breaks down existing barriers, as did portable radios. New forms of television programs and possibly cordless videophone will blossom. In turn, new forms of advertising will be possible, and people's reaction patterns will be changed. A leap will have taken place from one organizational pattern to a completely different one. In today's marketplace we witness many such sudden changes.
- g) In ascertaining the image of a product or a country, it is important to think in terms of realignments and countermoves by competitive or cooperative parties. Image research will resemble simulated war games more than one side's still photographs of their own marketing success or failure.

- h) In describing an image, it is likely that by the time we have drawn its paradigms and parameters, our description of the image will have affected our perception of it.
- i) An image is comparable to a symphony. It is dynamic and complex. The composer, as well as the conductor, have control over the structure. Each instrument plays an important part, and the rendering of the composition is melodious only when all the players and instruments are properly integrated and tuned to each other.
- j) Human beings have a built-in capacity to comprehend images and spatial relations, and we often form psychological associations with respect to these concepts.

Dichter's study is more general and abstract than others which has shown that Image was originated from human motivation but described by perception. Image is a flexible structure made from separate associations which have equal power to control the total impressions.

**Public image** in its own nature, is not a kind of image. It is the final image, the net image, "a character or personality that may be more important for the over-all status (and sales) of the brand than many technical facts about the product. Conceiving of a brand in this way calls for a rethinking of brand advertising, and of the kinds of judgements that have to be made by an informed management about its communications to the public", (Levy, 1955). "Public" in "public image" is the living environment of an image. In psychology, self-concept and public image have similarity which is a measure of "social awareness" in programs of personality assessment (Walhood, 1971). In professional career, for example: nursing, public image of a profession often differs from professional worker's own image. It is predominantly based on misconceptions and stereotypes, which originated in distorted images of profession in the media. The media plays a part in perpetuating the stereotype of the profession as angels of mercy (Hoeve, 2013).

**Public Government agencies** have their own public image which is different from other kind of public images. Any public entity – product, person, institution has an image for the publics, audiences, or consumers who know of it. Levy (1963) said that an image was a dynamic relationship between a public and an object, one that takes on persisting qualities through time which determine how the participants in the relationship will behave toward each other. It is a relationship that may not readily change; in some cases it is remarkable stubborn and tenacious. Once people develop a set of ideas and impressions about a product, company, situation, it is part of their characteristic outlook; the more they feel it characteristic of themselves to

have the image they do, and the more basic an observation it seems to be, the more firmly they will stick to it. They do not yield easily, even, at times, in the face of new or contradictory evidence, because it conserves energy not to change their minds and because they are prone to believe themselves to be correct and right in the first place.

The public image of government agencies is compounded out of many sources. It is influenced by people's conception of the Government, by what they seek from it and expect to get from it; by concrete experiences with it and the personnel who represent it. People convey a sense of how government agencies loom in their minds, how they want to define and relate to them. The view that comes across is a selective one, with some agencies standing out more than others, with people differing in how strongly or clearly they perceive agencies as impinging on them.

**Contacts with Government agencies** do not stand out in people in people's minds. They are inclined to be matter-of-fact about those they have had. Any given contact may have been important or significant to the individual – they do not underestimate the potential or actual influence government actions or decisions can and do have on their lives. Nevertheless, there is a casual tone, as though government agencies are either a minor, integrated part of daily life, or they remain mostly in the background to be dealt with as occasional instances arise. The feeling is one of "of course" – it was natural to have dealt with the agency in the normal flow of events. For the typical citizen such contacts as they reminisce about usually came to them as requirements, so to speak, including particularly such matters as social security numbers, filling of income tax, immigration or customs contact, military experience. In such contacts as they felt themselves to be ordinary people, fulfilling the law whether they liked it or not, with no undue sense of aggravation. These are essentially *routine contacts*.

Other contacts have a more individual flavor. They are sought out by the individual to further his own goals. People mention such matters as insurance, counselling for education. They are essentially *voluntary contacts*.

The contacts that are apt to be most threatening are those which single people out. The implication of negative personal attention is potentially disrupting and alarming, arousing thoughts of punishment and coercive dealings.

**Reactions to Government agency contacts and personnel** In talking about specific dealings with government personnel about specific matters, people tend to express themselves positively. The personnel handling the situation are regarded as courteous and polite in manner, as showing consideration and reasonable interpersonal attitudes. The matter at hand is

described as handled helpfully and satisfactorily. Delays are not blamed as a problem; the contacts were said to take an appropriate amount of time.

Furthermore, not all incidents are favorable ones, as in any volume of human interactions, there are angry, complaining occasions. When such a negative experience has occurred, it stands out in the person's mind as a source of great indignation. However, the dominating imagery of other average citizens also derogates government agency personnel. When asked to say how dealing with a government agency differs from other kinds of business dealings, despite the favorable experiences described, people tend to see the government agency as rigid, complicated, demanding, unknowing, and unconcerned. Generally, it seems difficult for people to avoid the heavily stereotyped images of government agency people as motivated by laziness, security, and inadequacy, in a setting that is both careless and rigid. Various explanations might be offered for the tenacity of these views. Some realism may enter in; to the extent that government agencies offer easier havens to people discriminated against in private industry, some selection occurs in favor of those seeking this haven. The fact of civil service protections, benefits in "sick leave the government allows," retirement pension, imply an interest in rewards less certain or less distinctively perceived as part of the situation in non-government work. Further, despite the growth in fringe and security benefits in private industry, there are the general historic and cultural values placed on the willingness to compete, on the striving for distinctive individual advancement, on the energy and the daring to take a chance, on the autonomy and self-direction of the man in business for himself. These values, not regarded as generally part of government employment, make "havens" seem too nutrient.

**The purpose of Government agencies** literal minded individuals explain these purposes in instrumental terms. They perceive the agency's purpose as one of carrying out its concretely defined functions. Others step up the level of generalization, referring to the more formal regulatory mandate of the agency, where the function implies service to broader governmental goals, or to the impersonal implementation of general responsibilities. The largest reiterated refer to service to the public.

## **METHODOLOGY**

In the context of proliferation of social media, text mining is an emerging technology which can help to extract meaningful information from unstructured textual data from comments and posts. In Vietnam, unstructured text mining just has been developed for recent years in the approach of social listening which used for marketing and communication purposes. However,

unstructured textual data from Facebook social media will be valuable information for studying the public image of any entity in Vietnam, especially when Vietnamese people are now more engaging with this platform.

The procedure of analyzing unstructured data has the participation of Technology and People to validate and intensify the result. First, unstructured text data was rendered from the server including posts, comments, shares, likes, of public Facebook users with individual information. Secondly, data was applied text mining technique to count with some keyword and assigned appropriate tag relating to the sentiment analysis or concerned topics. Finally, data was saved into Excel Spreadsheet of Microsoft in the form of csv file for a manuscript to cross check after reporting. The text mining process includes multiple steps: (a) pre-processing to transform raw data into usable format, mostly by cleaning, assigning tag/attributes and integrating data; (b) processing: Natural language processing techniques built-in is applied to analyze data to gain insights by exploring and extracting key concepts, generate categories.

To make clear for the research questions and guide for the collecting data procedure, we take primary results from PAPI 2016 (an structured data analysis). PAPI (The Viet Nam Provincial Governance and Public Administration Performance Index), launched in 2009, is the largest national governance and public administration performance monitoring tool in Vietnam which based on citizens experiences annually ([papi.org.vn](http://papi.org.vn)). Vietnam PAPI Index includes 6 dimensions: Participation at local levels, Transparency, Vertical accountability, Control of corruption, Public Administrative procedures, Public service delivery and 22 sub-dimensions.

## FINDINGS

After collecting archived data from May, 1st to June, 30th 2016 these are some key findings

**Table 1:** Social media text mining results of PAPI Participation Index dimension

<b>PAPI Subdimension</b>	<b>Social media Text mining topics</b>
<b><i>Election</i></b> + Citizens' knowledge on election + Experience of citizens when electing + Election quality	Citizens' responses to 2016 national election (positive/negative judgement on: organization, nominators and electing behavior)
<b>The rate of Positive/Negative on Viet Nam national election (total)</b>	
<b><i>Positive</i></b>	6,9%
<b><i>Negative</i></b>	93,1%

<b>The rate of Positive/Negative on Viet Nam national election (detail)</b>		
<b><i>Election organization</i></b>	Positive: 7,1%	Negative: 92,9%
<b><i>Nominators</i></b>	Positive: 1,7%	Negative: 98,3%
<b><i>Electing behavior</i></b>	Positive: 7,1%	Negative: 92,9%

The proportion of responses on social media on national election was very imbalanced with the majority of Negative emotion. The number of posts which showed the positive aspect were less than 10 with such keywords that: transparency, providing enough information, show the sovereignty, citizen rights, spiritual duty of citizens, publicly elect, crowded citizens to elect. Meanwhile the number of negative posts ranged from 3 to 102. 143 posts considered the arranged results of election with waste of time to elect, 58 posts claimed the lack of information of nominators, 169 posts reported the tricky electing behaviors.

**Table 2:** Social media text mining results of PAPI Participation Index dimension

<b>PAPI subdimension</b>	<b>Social media Text mining topics</b>	
The degree of effective interactivity with local administration agencies	Citizens' responses to 2016 national election (positive/negative judgement on: interactions with local authorities and their thought on interactions)	
<b>The rate of Positive/Negative on Viet Nam national election (total)</b>		
<b><i>Positive</i></b>	14,25%	
<b><i>Negative</i></b>	85,75%	
<b>The rate of Positive/Negative on Viet Nam national election (detail)</b>		
<b><i>Election organization</i></b>	Positive: 2,78%	Negative: 97,22%
<b><i>Nominators</i></b>	Positive: 15,94%	Negative: 84,06%
<b><i>Effectiveness of problem solving</i></b>	Positive: 0%	Negative: 100%

The rate of Negative responses were much more higher than Positive ones. The topics of Nominators relating to some famous nominators on mass media had 55 posts. Ironically, one positive post was good publicity for the national election.

**Table 3:** Social media text mining results of PAPI Control of Corruption in the Public sector

<b>PAPI sub-dimension</b>	<b>Social media Text mining topics</b>	
Equity in State employment	Social/citizen's opinion on public servants employment	
<b>The number of posts/opinion relating to some keywords of public servants employment</b>		
<b>Keyword/opinion</b>	<b>The number of posts/comments</b>	<b>Percentage</b>
<i>Relatives of current public servants</i>	199	37,76%
<i>Corruption (using under the table money)</i>	193	36,62%
<i>Have relationships with authority's servants</i>	78	14,80%
<i>Have abilities</i>	32	6,07%
<b>Others</b>	25	4,74%

The total number of posts was read by researchers was 456 in which 527 times the keywords/topics appeared. The highest rate is "relative of current public servants" with 37,76%, "corruption" ranked second with a slightly decrease, 36,62%. The third is "have relationships with authority's servants", 14,8%. All these mentioned topics related to the Negative aspect of public servant employment process. The Positive aspect was represented by "Have abilities" accounting for 6,07%.

**Table 4:** Social media text mining results of PAPI Public service delivery

<b>PAPI subdimension</b>	<b>Social media Text mining topics</b>	
Public health + The quality of local hospital + The quality of health insurance	Citizen's opinion on health insurance service (Rating the citizen's satisfaction on health insurance)	
<b>The rate of Positive/Negative on PAPI Public Administrative procedures (total)</b>		
<b>Positive</b>	65,45%	
<b>Negative</b>	34,55%	
<b>The rate of Positive/Negative on PAPI Public Administrative procedures (detail)</b>		
<b>Economic benefits</b>	Positive: 10,95%	Negative: 89,05%
<b>Other benefits</b>	Positive: 62,96%	Negative: 37,04%
<b>General feelings</b>	Positive: 69,23%	Negative: 30,77%
<b>Health testing process</b>	Positive: 69,23%	Negative: 30,77%
<b>Health insurance procedure</b>	Positive: 89,56%	Negative: 10,34%
<b>Drugs</b>		Negative: 100%

In 323 posts extracted from total of 9,633 post, the topics/keywords appeared 330 times. In which the Positive aspect accounted for 65,45%, and the rest is Negative aspect. Five features of Health insurance mentioned in public opinion were: Economic benefits, General feelings, Health testing process, Health insurance procedure, Drugs and Other benefits. "Economic benefits" was the most frequently discussed by people on Facebook with 171 positive posts per 330 posts (approximately 51,8%). Other positive aspect of Public administrative procedure relating to health insurance were "benefits", "rights", "fast", "public health insurance equal to private hospital", "essential", "quickly", "easy to buy". There were no difference between other negative aspect which was claimed by people such as: "payment", "little support", "corruption", "quality", "low quality infrastructure", "complicated procedure", "obstacle to transfer", "lack of drugs."

## **DISCUSSION**

Contrasting the optimistic results from PAPI, the results of social media text mining have more percentage of Negative aspect than Positive aspect, for example Participation Index dimension. Under the context of National election 2016, social media unstructured data was totally contrasted to PAPI structured results. Only in Index of Public service delivery, the Positive doubled the Negative. Although the study used 4 per 6 dimensions of structured data, the results reflected other side of the results which has not been revealed in PAPI. Under the theory of image, it could be explained by some causes: (1) the stereotype of negative opinion of citizens to public service; (2) people felt more free to share their opinions with posts and comments on Facebook without any restrictions. Under the "Exit, Voice, Loyalty" perspective of Hirschman, people have specific limitations to voice their feelings.

## **Implications and Management**

Dichter (1985) suggested some method to change image in the perspective of motivational approach: (1) Finding the signal: in determining an image, often contradictions are inadvertently created. What people reacted to in our "image" test was not the verbal statement, but the symbol implied by the illustration; (2) Relating images to symbols. Symbolism and images are very closely related. Asking respondents to compare a brand with an animal, with a melody, with a mood, or a landscape in order to capture the holistic impression they have of a product is another method of ascertaining a product's image. In a way, we ask them to half close their eyes and suspend their intellectual judgement; (3) Developing an image. By giving respondents

the choice between extremes on a "semantic differential scale," while making sure that it is not only an intellectual one, we can develop a profile for a product. Some such poles might be: old/young, female/male, aggressive/timid. Symbols such as animals can also be used; (4) Crystallizing image descriptions. When we describe people or countries, we frequently talk in images: someone is a "slick" person, a "softy," a "sharp" guy, or "hard as steel." These words, of course, are symbols. But they help us determine how a country, person, or brand is perceived; (5) Psychodrama is a method we have been using more and more to get a better understanding of a person or a product's image. We ask people in a group session to act as if they were the product. To change the public image of Vietnamese public administration service, the Government should find the stereotype, symbols that citizens attaches with public administration service. The qualitative approach could be more effective than qualitative approach in finding citizen's insights.

---

## REFERENCES

- Barbara Stern, G. M. (n.d.). Marketing Images: Construct Definition, Measurement Issues, and Theory Development. *Marketing Theory*, 1(2), 201-224.
- Dales S. Walhood, W. G. (1971). Congruence between self-concept and public image. *Journal of Consulting and Clinical Psychology*(1), 148-150.
- Dichter, E. (1985). What's In an Image. *Journal of Consumer Marketing*, 2(1), 75-81.
- Howard Barich, P. K. (1991). A Framework for Marketing Image Management. *Sloan Management Review*.
- J. Levy, B. B. (1955). The Product and the Brand. *Havard business review*, 33-39.
- J. Levy, S. (n.d.). The Public Image of Government Agencies. *Public Administration Review*, 23(1), 25-29.
- O. Hirschman, A. (n.d.). The Millbank Memorial Fund Quaterly. *Health and Society*, 58(3).
- Wu He, S. Z. (2013). Social media competitive analysis and text mining: A case study in the pizza industry. (Elsevier, Ed.) *International Journal of Information Management*, 33, 464-472.
- Yvonne ten Hoeve, G. J. (2013). The nursing profession: public image, self-concept and professional identity. A discussion paper. *Journal of Advanced Nursing*.