What type of content does get the most positive response on Instagram? A content analysis of Italian celebrity chef profiles.

Marcello Sansone[1] - Annarita Colamatteo[2]- Maria Anna Pagnanelli[3]

Abstract

The paper analyses the content of the Instagram communication of the Italian celebrity chefs with most followers and the effect of communication strategies on the level of fan engagement and positive sentiment. To understand the type of messages posted (RQ1) and the effect on fan engagement and sentiment (RQ2), we use a deductive content analysis methodology, involving the last 50 Instagram posts for each chef, clustering the messages in 4 categories (career, personal, fan and celebrity interaction) and analysing the text of all follower comments of the posts.

The results show that in the analysed profiles, communication messages related to the subject's career (anything related to cooking, food and product endorsements) prevail; however, the type of content does not significantly affect the level of engagement and sentiment of the followers.

The results of research provide considerations about the role of online communication in marketing strategies, with particular focus on celebrities (physical persons) and on the achievement of goals in terms of personal success and fan engagement.

[1]Associate Professor of Marketing - University of Cassino and Southern Lazio, m.sansone@unicas.it

[2]PhD Student - University of Cassino and Southern Lazio, a.colamatteo@unicas.it

[3]Independent Researcher - University of Cassino and Southern Lazio, mariaanna.pagnanelli@gmail.com

Introduction
This research originates from emerging market trends about Social Network Sites and consumption trends.
On one hand the increasing relevance of Instagram: it is one of the most popular image-based social media, with over 700 million active monthly members in the World (14 million in Italy), 40 billion shared photos, 4.2 billion likes daily and 95 million average photos uploaded a day. This level of users with a constantly growing public in Italy is an important opportunity for companies and people.
On the other hand, the increasing role of celebrity chefs and cooking television program (Masterchef – Four Restaurant - Kitchen Nightmares) in the emerging of "food" as media phenomenon. Nowadays Haute cuisine has become one of the most seductive television entertainment forms. Chefs with greater reputation are influencing the consumers because they can change their costumes and represent for them models to follow and imitate.
Therefore, considering the growing importance of Instagram (Instagram users +55% June 2017/June 2016 in Italy) and the relevance of celebrity chefs and their tv programs on consumer trends, this research aims at analyse the communication strategies of Instagram of three Italian Chefs e their effects on fan engagement.
With these goals, the paper begins with literature review about content analysis followed by the methodology. Next, the results are presented before concluding with a discussion and managerial implications.

Literature review
One of the most relevant definition of content analysis is that by Neurendorf (2002) as the process of *"summarizing, quantitative analysis of messages that relies on the scientific method (including attention to objectivity, intersubjectivity, a priori design, reliability, validity, generalizability, replicability, and hypothesis testing) and is not limited as to the types of variables that may be measured or the context in which the messages are created or presented"*.
The set of techniques named content analysis emerges in the United States, around the 1920s, in mass communication sociology and political propaganda studies, in particular, on the persuasive and politico-ideological aspect of the political communication, both on the national and international side (Lasswell, 1927, 1949).
Berelson (1952) describes the content analysis as a research technique suitable for providing explicit, systematic and quantitative description of the explicit content of communication. Instead, Berger and Luckman (1967) emphasize that scientific research methods cannot produce entirely objective results. More recently, Weber (1990) argues that content analysis is a research method that uses a number of procedures to validate the deductions that are formed from the text. Content analysis is *"any technique for making inferences by objectively and systematically identifying specified characteristics of messages"* (Holsti, 1969).
Because of the traditional content analysis includes a human subjective interpretation, it is important to use a reliable procedure to ensure consistency between the coders over time; so the efficiency of different procedures has been the subject of many researches (Krippendorff, 2004). Content analysis, according to Krippendorff,

analyses and quantifies the existence or absence of elements, based on a predetermined set of categories.

In the content analysis, the analysed data consist of texts, expressions and images created to be read, interpreted and viewed for their meanings that vary according to the context of use. Content analysis can be subdivided into deductive coding, which identifies the coding categories from theoretical ideas brought by researchers to the data, and in inductive coding where the thematic analysis derives from raw information (Joffe, Yardley, 2004). To compare categories at different times, a deductive analysis is useful. In case there are no previous studies dealing with the phenomenon or when there are disjointed studies, inductive analysis is used (Elo, Kyngas, 2008). Both techniques are usable also for the study of social media; in fact, the rapid growth of social media information and consumer opinions on a product or services, both positive and negative, has a major impact on people, organizations, and companies' views.

Within content analysis, media content analysis consists of a set of methods to test a series of hypotheses formulated in relation to specific media that, for this purpose, use analytic and statistical sorting procedures of statistical type, of texts, images and other symbolic sets (Macnamara, 2005).

Methodology

This research aims at analysing the content of Instagram communication of Italian celebrity chefs and its effect on the engagement of their fans, through a deductive content analysis.

The study asked two research questions:

RQ1: *What types of messages do Italian celebrity chefs post on Instagram?*

RQ2: *What type of content gets the most positive response by fans?*

For this study, the top three Italian chef Instagram profiles were coded and analysed for their comments: Antonio Cannavacciuolo (969k followers), Carlo Cracco (502k followers) and Alessandro Borghese (335k followers).

For each profile were analysed the last 50 Instagram posts (until 31 July 2017), clustering the posts in 4 categories (career, personal, fan and celebrity interaction). The career posts involved anything related to cooking, food, promotion and product endorsements. Personal content included likes, familiar events, and events/gatherings the general public would not otherwise know about. Fan posts were anything directed at the fans as a whole and typically included "you" in the caption, indicating communication with the celebrity's audience. Celebrity interaction included content where other celebrities/media were tagged in an acknowledgement of interaction between them (Ward, 2016).

Content analysis is generally used for *"sorting messages into different categories according to some set of classification criteria"* (Rosenberry, Vicker, 2009). The classification is useful for the RQ1, to understand what type of content the three chefs post on Instagram and the differences between the profiles.

For RQ2, we analysed the content of the comments for each post of each profile (n. 21465 comments in total) to understand: a) the level of engagement (number of likes and comments), b) the fan sentiment (positive, negative or neutral). So, we analysed

the correlation between the post category (type of content) and the positive sentiment in the comments.

Results

Through the content analysis of the three chef profiles, a total of 150 Instagram posts were divided into four different categories: career (73), personal (22), fan (33), celebrity interaction (22).

In term of type of message posted by Chefs on Instagram *(RQ1)* we can see in *Figure 1* that the Chefs' careers are the most common topic.

Figure 1
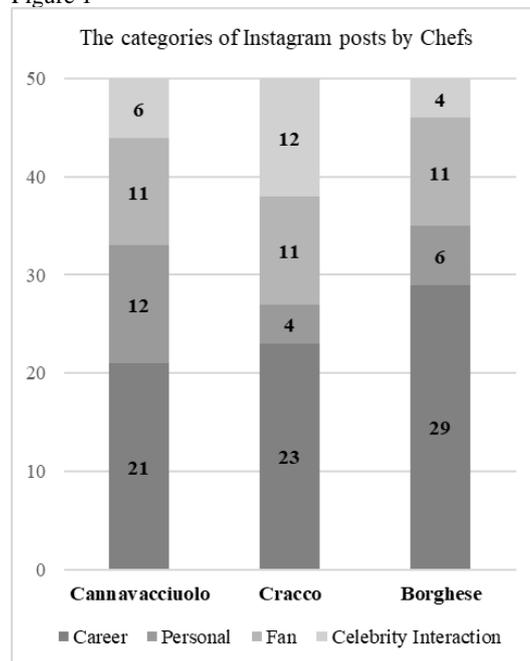
Source: Author's elaboration.

Looking at each chef individually, the category of personal were posted mainly by Cannavacciuolo than other chef (12), while Cracco posted mainly Celebrities Interaction (12). The Fan category is posted by all the Chefs in the same measure (11).

To understand which is the type of content (category) that gets the most positive response by fans *(RQ2)* we proceed with a double analysis:

a) *Measuring the level of fan engagement through the number of likes (Figure 2) and the number of comments (Figure 3) for each post.*

Figure 2

Level of follower engagment: number of likes.
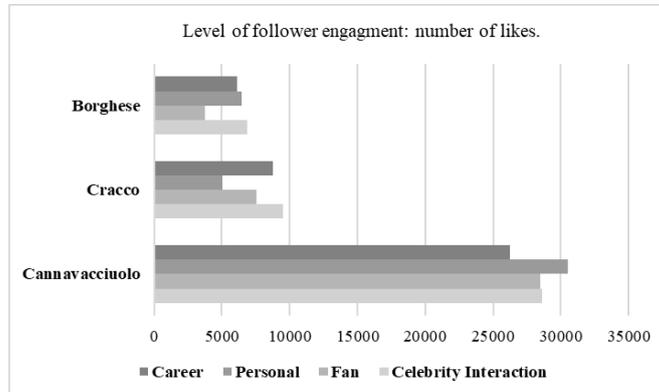
Source: Author's elaboration.

In terms of likes per category, Cannavacciuolo's personal posts received the most likes (30550), followed by Celebrity interaction (28619), fan (28492), career (26286). Cracco has the highest level of likes in Celebrity interaction (9535), followed by career (8797), fan (7546) and personal (5058)

On the other hand, Borghese's likes came most from the category of celebrity interaction (6887), but they are followed by personal life (6476), career (6131) and fan-related (3751).

Figure 3

Level of follower engagment: number of comments.
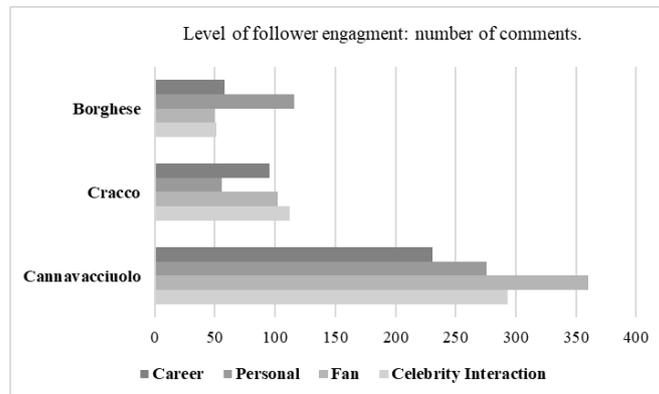
Source: Author's elaboration.

Figure 3 represents the average of comments on each category; it shows that Cannavacciuolo got most comments from fan, followed by Celebrity interaction and personal; Cracco garnered the most comments from the category of Celebrity interaction, followed by fan and career, while Borghese got most comments from personal, then from career and Celebrity interaction.

The data show that *the type of content (category) posted by the chefs does not significantly affect the level of fan engagement.*

In fact, for each chefs' profile, the number of like and the number of comments is around the same average. We can understand that not considering the simple difference between the number of likes or number of comments per post - because that is affected by the total number of followers - but considering the ratio between the average gap and the number of followers of each profile, that is close to zero (Tab. 1).

Tab.1

Category	Antonio Cannavacciuolo			
	Career	Personal	Fan	Celebrity Interaction
% Average gap of n. likes / number of followers	0,226741%	0,212525%	0,000515%	0,013598%
% Average gap of n. comments / number of followers	0,006078%	0,001442%	0,007211%	0,000309%
	Carlo Cracco			
% Average gap of n. likes / number of followers	0,211463%	0,532338%	0,037399%	0,358274%
% Average gap of n. comments / number of followers	0,000796%	0,006963%	0,002188%	0,004178%
	Alessandro Borghese			
% Average gap of n. likes / number of followers	0,095213%	0,197864%	0,612931%	0,320152%
% Average gap of n. comments / number of followers	0,003273%	0,013984%	0,005653%	0,005356%

Source: Author's elaboration.

b) *Measuring what type of category gets the most positive response by fan (Figure 4).*

Figure 4
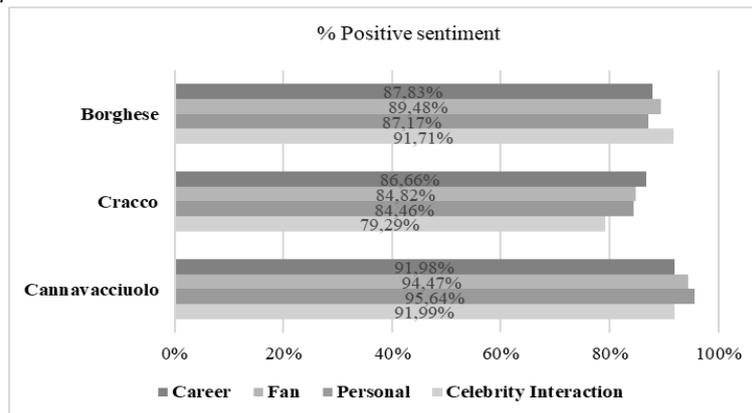
Cannavacciuolo got the most positive response in personal posts (95,64%), Cracco in career posts (86,66%) and Borghese in Celebrity interaction post (91,71%), but also in this case the difference between the % of positive comments is minimum respect to the total number of followers.

Therefore, *the type of content (category) posted by the chefs does not significantly affect the level of positive fan sentiment*.

Conclusions and implications

This research analysed the content of Instagram profiles of three Italian celebrity chefs and the effect on fan' engagement and sentiment, through a deductive content analysis.

The results show that the analysed chefs prefer communication messages related to the career (anything related to cooking, food and product endorsements); the percentage of content directed to fans is the same for the three profiles; personal and celebrity interaction categories are differently distributed but residual. By results, it's evident that the three analysed subjects tend to communicate a positioning mainly related to their professional skills and knowledge, giving priority to everything that is related to the "food" concept.

Research provides also results in terms of fan response. The level of engagement (measured with the number of like and number of comments) and the positive sentiment for each profile - *proportional to the number of followers of each profile -* does not seem to be influenced by the type of content (category) that the subject posts. The implication of this result emphasizes that the users positively active (the one who likes or comments) is "*involved*" by the "*person*" regardless of the posted content.

The originality of the research is linked to the application of a content analysis (consolidated and internationally applied) to a social network (Instagram +55% June 2017/June 2016 in Italy) and to a person category (celebrity chefs) with an increasing importance.

Further research could deep the level of analysis of celebrity chef category - *increasing the number of analysed posts, analysing other chef profiles, analysing the content of other SNSs of same chefs -* or replicate the analysis on other person categories (showbusiness, sport, singer, etc.) to understand if the results about the independence of the level of involvement from post content are generalizable.

Appendix

	Antonio Cannavacciuolo			
Category	**Career**	**Personal**	**Fan**	**Celebrity Interaction**
Number of posts	21	12	11	6
Average of number of likes per post	26286	30550	28492	28619
Average gap of n. likes	2201	2063	5	132
% Average gap of n. likes / number of followers	0,226741%	0,212525%	0,000515%	0,013598%
Average of number of comments per post	231	276	360	293
Average gap of n. comments	59	14	70	3
% Average gap of n. comments / number of followers	0,006078%	0,001442%	0,007211%	0,000309%
% Average positive sentiment / total comments	91,98%	95,64%	94,47%	91,99%
	Carlo Cracco			
Category	**Career**	**Personal**	**Fan**	**Celebrity Interaction**
Number of posts	23	4	11	12
Average of number of likes per post	8797	5058	7546	9535
Average gap of n. likes	1063	2676	188	1801
% Average gap of n. likes / number of followers	0,211463%	0,532338%	0,037399%	0,358274%
Average of number of comments per post	95	56	102	112
Average gap of n. comments	4	35	11	21
% Average gap of n. comments / number of followers	0,000796%	0,006963%	0,002188%	0,004178%
% Average positive sentiment / total comments	86,66%	84,46%	84,82%	79,29%
	Alessandro Borghese			
Category	**Career**	**Personal**	**Fan**	**Celebrity Interaction**
Number of posts	29	6	11	4
Average of number of likes per post	6131	6476	3751	6887
Average gap of n. likes	320	665	2060	1076
% Average gap of n. likes / number of followers	0,095213%	0,197864%	0,612931%	0,320152%
Average of number of comments per post	58	116	50	51
Average gap of n. comments	11	47	19	18
% Average gap of n. comments / number of followers	0,003273%	0,013984%	0,005653%	0,005356%
% Average positive sentiment / total comments	87,83%	87,17%	89,48%	91,71%

References

Berelson, B. (1952). Content analysis in communications research. *Edited by Paul f. Lazarfeld & Bernard Berelson*

Berger, P., & Luckmann, T. (1967). La construcción social. *Xa Realidad. Buenos Aires*.

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of advanced nursing*, *62*(1), 107-115.

Holsti, O. R. (1969) Content analysis for the social sciences and humanities. *Reading, Mass., Addison-Wesley Pub. Co.*

Joffe, H., & Yardley, L. (2004). Content and thematic analysis. *Research methods for clinical and health psychology, 56, 68.*

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology*. Sage.

Lasswell, H. (1927). The Results of Propaganda: From Propaganda technique in the World War (1927). *Mass communication and American social thought*, 47-50.

Lasswell, H. D. (1949). Why be quantitative. *Language of Politics*, 40-52.

Macnamara, J. R. (2005). Media content analysis: Its uses, benefits and best practice methodology. *Asia-Pacific Public Relations Journal*, *6*(1), 1.

Neuendorf, K. A. (2002). The Content Analysis Guidebook. Sage, Thousand Oaks CA.

Rosenberry, J. & Vicker, L. A. (2009). Applied mass communication theory: A guide for media practitioners. Boston: Pearson Education, Inc.

Ward, J. (2016). A Content Analysis of Celebrity Instagram Posts and Parasocial Interaction. *Elon Journal of Undergraduate Research in Communications*, *7*(1).

Weber, R. P. (1990). *Basic content analysis* (No. 49). Sage.