

Can TV-CM be quantified?:

considering qualitative data as a set of quantitative

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Seal
or Signature

1. Goal and Background

[Goal]

TV-CM is quantified by a system.

- Image of a quantified TV-CM -



$$= \begin{pmatrix} 8 \\ 10 \end{pmatrix}$$

[Background]

- Viewers must gain any information from TV-CM more or less. However now that has not been quantified generally.
- If information of any TV-CMs can be quantified, then everyone can summarize any TV-CMs objectively.
- Assuming that a TV-CM consists by some meta-information which are independent and quantifiable.
Example: target age, target gender, and interests.
- My focus is:
Assuming that TV-CM is a collection of meta-information, then TV-CM can be quantified by quantifying its constituent meta-information.

2. Approach

- Using of the system which can quantify meta-information of TV-CM, trying the quantification.

- The system is implemented as a model of machine learning.
- The models has the ability which classify video using meta-information.

- Image of a quantified TV-CM -

Feature value (meta-information)	x_1	x_2	\dots	x_n
Expected value in each output probability distribution	$E(x_1)$	$E(x_2)$	\dots	$E(x_n)$
The result of considering the expected value	y_1	y_2	\dots	y_n

3. Preliminary Study

- Nowadays, video classification technology seems to be still in development stage.
- CNN(convolutional neural network) seems to be the most major of some methods which classify video[1].

4. Gantt Chart

	Month	10	11	12	1	2
TODO						
Collect data						
Create a system						
Experiment						
Verify						
Write Thesis						

References

[1]https://www.jstage.jst.go.jp/article/vision/31/1/31_1/_pdf/-char/ja