



What Matters For Assuring Radio Program Quality

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Abstract

Radio broadcasting is one of the most widespread electronic mass media. The competition among incumbent radio stations grows drastically due to the market change and environmental evolution. Managing program quality becomes a critical issue to a radio station to sharpen its competitive advantages. Quality management of radio programs is intertwined with complicated factors. In order to identify the primary factors affecting radio program quality as well as explore the impact level these factors bring, this study adopts modified Delphi method, which is based on total quality management theory to develop the questionnaire.

According to the outcomes of the pilot test, the factors can be categorized into four dimensions: operation, coordination, structure and improvement. The coordination dimension comprises four sub-dimensions while the rest respectively comprise two sub-dimensions. Each sub-dimension includes six to nineteen indicators for measuring radio program quality. In total, there are 71 indicators. The quantitative data of the pilot test, which mean 5.0, mode 5.0, standard deviation 0 and quartile deviation 0, indicates that the questionnaire just suits this study based on three pilot experts' input. However, four indicators should be phraseological modified according to the qualitative responses of the pilot experts.

Introduction

Radio broadcasting is one of the most widespread electronic mass media. Its service, which comprises numerous program providers, transmitters and receivers, is so available and timely comparing to other information communication technology (Hoeg & Lauterbach, 2004). Nowadays, strict challenges occur in the market for incumbent radio stations due to technological, economic, regulatory, global, and social change (Albarran, 1997). Managers of radio stations, like the other media managers, face intensive competition. Management for this industry should be more resourceful and advanced. To be successful in managing a radio station does not just appear spontaneously. It needs to put innumerable factors into consideration, rather than overnight sensation only, to attain long-term success. Radio managers have to develop extensive plans for ultimate achievements. In order to make sure the validity of the plans, managers cannot ignore any of influential factors which importance are varied (Leblebici, Salancik, Copay, & King, 1991.;Keith, 1987). It is a complicated process to materialize and implement the plans. Development, production, distribution and exhibition are the primary tasks that a radio station should do during the process. Assuring each task well becomes a critical issue for a radio manager (Albarran, 1997). In terms of media management, total quality management (TQM) is one of the modern approaches. It is prevailing and well applied to the media industry in regard to producing products and serving customers. This approach aims to combine strategies to deliver the best products and services by continuously improving every part of an operation (Albarran, 1997). Unlike the quality of general goods, service quality is difficult to measure in precise manufacturing specifications. It is revealed that service quality is highly dependent on the performance of practitioners, organizational resource, and interaction between administrators and employees (Zeithaml, Berry, & Parasuraman, 1988). In the radio industry, the quality of radio programs is associated

with individual level and organizational level. Radio managers can adopt various approaches based on TQM to encourage and demand high quality in the products as well as in the process. A radio program is involved with various factors in the production process. Each factor with its importance can differently influence a radio station due to its market, position, programming and so on. In order to help the managers of this industry, this study aims to develop a framework to systematically integrate the factors. In addition, all the factors can be specifically illustrated for practical operation.

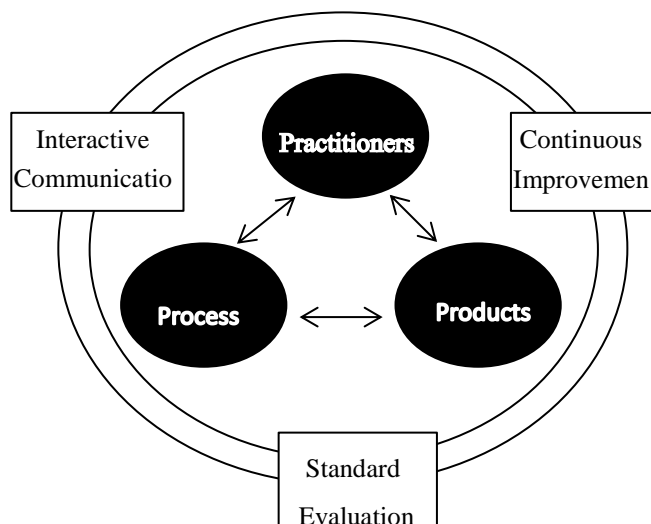
Literature Review

Defining quality is difficult due to its multiple dimensions. In addition, quality cannot only refer to objects and goods, but also to tangible/ intangible performance and service. According to International Standard Organization, quality is considered to be the competence which satisfies specific needs by its features or characteristics from goods or service. The definition of quality can be identified by five approaches (Garvin,1984):

1. The transcendent approach of philosophy;
2. The product-based approach of economics;
3. The user-based approach of economics, marketing and operations management;
4. The manufacturing-based approach;
5. The value-based approaches of operations management.

These approaches reveal four major coverages of quality issues. Philosophy focuses on its definitional issues, while economics pursues profit maximization and market dynamics. Marketing emphasizes the determinants of purchase behavior and customer satisfaction, but operations management focuses on practical operation and manufacturing control. It results in various perspectives of quality management based on the terminology. Total quality management is a prevailing management approach in many fields, including business,

engineering, health care, education and administration (Dean, & Bowen, 1994). The meanings of total quality management have been discussed by various scholars. Crosby (1979) focused on controlling cost through quality improvement and stressed that both high- and low-end products can have high quality. Deming's (1986) emphasizes the systemic nature of organizations, the importance of leadership and the need to reduce variation in organizational processes. Juran's (1989) framework indicates three sets of activities-quality: planning, control, and improvement, which also emphasizes the use of statistical tools to eliminate defects. Sallis (1993) considered it a kind of philosophy which focuses on continuous improvement. It is also a series of practical tools to satisfy and surpass needs and expectation from current and future customers. According to the definitions or explanation above, total quality management is involved with all stakeholders. Everyone is responsible for quality. From inputting to outcomes, it takes appropriate strategy and methods to meet specific standards or customers' needs. In a word, the concept of total quality management is associated with practitioners, process and product. In the media industry, these three aspects also work for product quality. In a radio station, the control process of program production has to be established and developed. Radio practitioners are supposed to be well trained in techniques of program production as well as appropriate mindsets for excellence. Programs are the products of a radio station, which have to meet audience's needs or interests. Graphic 1 below illustrates the application of total quality management theory to radio program production.



Graphic 1: Total quality management for radio programs

Methods and Procedures

Methods

Modified Delphi method is the method used for data collection in this study. Delphi method is a group decision-making technique, which was developed by Rand Company, USA, in 1950. By structurally communicating in an expert group, the specialists involved can participate and express their voices, and reach final agreements without face-to-face interaction (Wang, Gao & Guo, 2012). This method is applied to various fields of social science, such as management, industrial design, education, politics and marketing (Keeney, Hasson, & McKenna, 2006; Uhl, 1990). Its qualitative nature can allow diverse viewpoints of experts for comparing, exchanging and integration, which is expected to result in some consensus for complicated issues (Wang, Gao & Guo, 2012; Skulmoski, Hartman, & Krahn, 2007). Even though there is no big sample explored in the process, this method can bring up effective decisions or solutions based on recurring expert discussions, in which the experiences, insights and judgements of the experts are interacted and exchanged (Hsu & Sandford, 2007).

Delphi method owns some advantages, such as free input from experts, free dialogues without time-space limits, and no complicated calculation, but its shortcomings should be also noticed: time consuming, control difficulty and contradictions over time. In 1995, Murry and Hammons developed modified Delphi method. Unlike the old method using open-structure questionnaires to create conversations among experts, the new approach develops its questionnaire by organizing relevant literature in the very beginning. This difference can not

only save time, but also help experts focusing on the issues (Scarcella, Stewart, & Custer, 1999, Delbecq, Van de Ven & Gustafson, 1975).

This study aims to explore the factors which influence radio program quality in Taiwan. The factors are associated with various aspects other than a single process or simple ideas. In order to identify these valid factors, this study needs to recruit experts to analyze and cope with the internal and external environments of a radio station. At last, the experts can collaborate to recognize all critical factors as indicators. In order to achieve the research objectives in time, this study adopts modified Delphi method. The questionnaire is developed based on total quality management theory. Then nine experts, who are media scholars and radio practitioners, will be recruited in recurring discussion based on this.

Procedures

Modified Delphi method starts from developing a questionnaire based on literature, and, then, is followed by conveying the questionnaires to experts involved. The experts provide their opinions and insights without personal interaction by rounds. Each round, the researchers collect the responses from the experts and pass the responses back to them after reorganization. Group discussion among the experts should continue going on until they reach consensus in opinions (Scarcella, Stewart, & Custer, 1999; Delbecq, Van de Ven, & Gustafson, 1975). The following is the steps for implementing Modified Delphi method (Skulmoski, Hartman, & Krahn, 2007), which is also the procedure this study adopts for research design:

(1) Verify research questions and methods: a study can start from literature review, practical observation or realistic phenomena for materializing research questions and objectives. Then, research design is followed, such as developing tools for data collection, scheduling research timeline, arranging resource and so on.

- (2) Recruit appropriate participants: in order to recruit appropriate participants, researchers need to make sure their will of participation as well as understanding of issues. Also, participants should agree the method used by researchers and make time for involvement. Then, contacting and communicating with these potential participants for official recruitment. It is advised that five to nine participants are ideal for forming an expert group.
- (3) Developing questionnaire based on literature: researchers can conduct questionnaires by reviewing relevant literature. This questionnaire is used for collecting opinions from the participants involved.
- (4) Start recurring survey among experts: when officially starting data collection, researchers deliver questionnaires to participants by rounds. Each time, participants are required to provide their input. The responses from participants, afterwards, are organized as feedback for revising questionnaires. Those questions that participants all agree will be sent back to all of them for confirmation, while the contradictory questions need more discussion based on diverse voices from participants.
- (5) Form consensus among participants: participants keep inputting their opinions until all responses are consistent. The process sometimes takes more rounds for group discussion among participants because participant cannot reach agreement. Researchers should revise carefully questionnaire and have participants answer or provide more details.

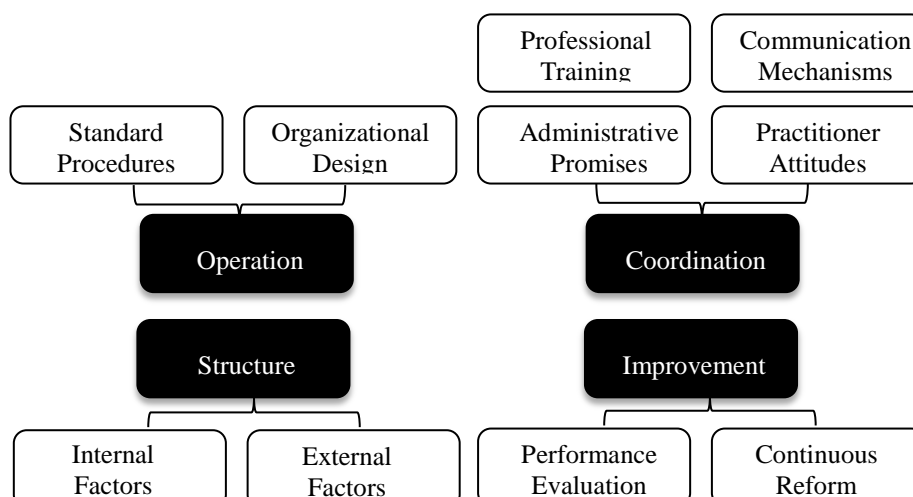
Results

So far this study is in the pilot stage. The researchers have complete two tasks: the development of the questionnaire and the pilot test. The questionnaire is developed based on TQM literature, in which a three-layer structure framework is created. Four dimensions, 10 sub-dimensions and 71 indicators were categorized in the framework. Also, three experts, two are media scholars and the other is a radio practitioner, were invited to join the pilot test. After

evaluation, they provided quantitative data as well as qualitative data for revision. The findings of the pilot test were presented in two sessions:

Framework of Indicators

According to literature, the potential factors which influence radio program quality are categorized into 4 dimensions: operation, coordination, structure and improvement. The operation dimension refers to formal procedures and documents of quality control in a radio station. The coordination dimension defines believes of program quality plus communication among radio practitioners. The structure dimension is relevant to internal and external factors which are put into consideration for managing radio program quality. The improvement dimension focuses on evaluation mechanisms and progress strategies for quality control. The coordination dimension comprises four sub-dimensions while the rest respectively comprise two sub-dimensions. In the operation dimension, the two sub-dimensions are standard procedures and organizational design. The coordination dimension includes administrative promises, practitioner attitudes, professional training and communication mechanisms. The structure dimension is dealing with external and internal factors. Two sub-dimensions in the improvement dimension are performance evaluation and continuous reform. Graphic 2 shows the framework of the questionnaire. Each sub-dimension includes six to nineteen indicators for measuring radio program quality. In total, there are 71 indicators within this framework.



Graphic 2: Dimensions and sub-dimensions of the questionnaire

Pilot Results

Three experts were recruited in March, 2015 to join the pilot test of this study. They went through the questionnaire for phraseological revision. Meanwhile, they also checked the weights for each indicator. In general, the quantitative data of the pilot test indicates that the questionnaire just work feasibly for this study. However, some indicators should be phraseological modified according to the qualitative responses of the pilot experts. In terms of dimensions, the experts reached agreement on these four categories. There is no suggestion for structural modification. The quantitative data, which mean 5.0, mode 5.0, standard deviation 0 and quartile deviation 0, also argued that the experts have no contradictory opinions on sub-dimensions. According to the qualitative response, there is only one suggestion for modifying the definition of the sub-dimension, standard procedure, which should include tracking long-term improvement for quality management. Due to only 3 experts involved in the pilot test, the researchers evaluated the application level of 71 indicators by the mean of three experts' input. The indicators with the mean over 4 are retained, while the rest were selected for modification in wording or operational definition. Only four indicators are advised for revision, which means are between 3.33 and 3.67. The qualitative responses from the experts also indicate that the four indicators should be rephrased. Furthermore, one expert recommended adding an indicator to the last sub-dimension, which is relevant to practitioners' continuous input for quality management of radio programs. Therefore, the researchers just modified wording of these indicators and sent them back to the experts for confirmation.

Conclusions

According to the findings above, this study has finished preparation for survey. The completed tasks and future development are concluded as the following:

1. The framework of radio program quality management has established. This study has organized the critical factors from literature and form a framework for the factors. Four dimensions and 10 sub-dimensions have obtained agreement from the pilot experts. In the aspect of indicators, 90% of them are all verified well by the experts. The systematic framework is valid in a level.
2. The problematic indicators will be modified after evaluation. According to the qualitative response from the experts, only one sub-dimension needs to be modified in its definition. In addition, four indicators are selected to be revised. The researcher decided to rephrase operational definition of these 4 indicators after analyzing the qualitative responses. Plus, the recommended indicator, which is attached to the last sub-dimension, is added.
3. Continue to have more input to increase the validity of these indicators. Building up the framework for the quality management indicators of radio stations is just the start. In the future, the researchers will enhance this system by involving more experts in this study. Hopefully the results can benefit radio stations in Taiwan as well as worldwide for program quality management.



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