

COMPUTER SCIENCE

PROBLEMS OF RADIO AND SOLUTIONS

Dadenova Gulxan
Uzbekistan, Tashkent ,
Tashkent University of Informational Technologies, Assistant

Maxammadjonov Maxammadjon Alisher o'g'li
Uzbekistan, Tashkent ,
Tashkent University of Informational Technologies, student

Abstract. *From what has gone before, it is clear that the radio industry is complex. No one is completely satisfied with the way it produces programs or with its relations to the government. Its difficulties grow out of the fact that it has more than one function. It renders a definite public service by communicating, recording, and reporting news, ideas, and events for the public. But also, as an advertising medium for some dozens of industries, it operates to make profits for those industries and for itself.*

Radio stations resemble newspapers in that both report . news and both serve as platforms for the spreading of views and the debate of public issues. The similarity naturally brings up the question of freedom of the press as it applies-or should apply-to radio. The traditional mistrust of government control of or influence over the press is the foremost problem.

Can the radio string together quarter-hours of music, comedy, commentary, and advertising gems without violating listener sensibilities and tastes? Can the station owner and the network say to the advertisers who foot their bills: "This kind of plug, yes, and that kind, no. So much time for ads and no more"? Now we can answer this. In this article we will say about radio problems and solutions.

Keywords: *radio, problem, solution, interference, network, FM, AM.*

Can they say to the person or the group who would attack their own or their principal advertiser's interest, "Yes, you may have time and your fair share of time on our schedule"? Will radio, with television and facsimile added, forego the technical advantage of unified control and centralized management? Should it conscientiously do so for the sake of avoiding monopoly control by keeping ownership in many hands?

Does radio give anything like the skill, talent, and time to educational purposes that it does to amusement? Should it do so if radio is potentially equal, let us say, to books, magazines, and lecture halls as a serious educational instrument?

Out of the dual nature of radio as a profit-making business and a public service, numerous conflicts arise. Should radio be essentially a medium for selling goods? Should it fill more and more hours at higher rates with profitable advertisements-accompanied by entertainment devices for attracting listeners to the ads? If it does that, how can it, as a sound, profit-making business venture, stop short of crowding out the other, nonprofit function entirely? At the least will it not be tempted to put profits ahead of public service?

If such a trend sets in, would another radio system eventually appear, supported in some other way, to meet the public's need for undiluted news, commentaries, forums, public announcements, and educational activities? If so, would the present highly organized, skillfully led broadcasting industry find that the goose that lays the golden egg had quietly died?

On the other hand, should broadcasters consciously and responsibly assume a double role? Can radio be at once a public-service medium and a private advertising medium? Can broadcasters design a radio menu which balances in proper proportions and separates in proper compartments two items of diet so different? Accurate reporting of news, truthful comment on public events, and unbiased presentation of political, economic, and social views call for one set of principles. Plugs for hair tonic or claims for vitamin pills, both exaggerated beyond the bounds of accuracy, call for another set.

These are the kinds of problems that radio, as an industry serving both a public and a commercial function, will be facing in the years ahead. The problems do not, however, have to be met and solved within the present framework of the four networks and 900 stations now occupying the 550-1600 kilocycle range on the dial. Frequency modulation broadcasting (FM), occupying a group of

channels higher up in the spectrum, is ready for extensive commercial development. FCC can, if it desires, grant FM licenses to 2,700 stations without their broadcasts interfering with one another. One of the major networks has itself declared that FM opens the way for six or more new networks as well. The technical characteristics of this newer method of broadcasting may make it possible, therefore, for a large number of stations to serve a single community.

Table 1. The biggest problems facing radio

<u>Problem</u>	<u>%</u>
Lack of innovation	41
High cost compared to other media	8
Slowness in adopting new technologies	27
Control of the industry in the hands of a few giants	51
Inadequate measurement	33
Decline of local radio with its deep communities ties	49
Ad clutter	45
Lack of creative ad programs	27
Declining audience	29
Lack of credible research supporting the effectiveness of radio	27
Inexperienced or incompetent sales reps	25
Lack of compelling content. Same old music and talk.	35
Competition from digital players like Pandora	47

FM also offers other opportunities for variety. With FCC approval, a new set of noncommercial networks is being planned. These would link together the endowed and public educational institutions engaged in broadcasting. Their educational and other public-service and cultural programs, thus, would all be under public educational authority and be supported by taxation or endowment rather than advertising.

This plan would place alongside commercial radio an entirely public-service radio on a state-wide network basis. And the request is for full morning-to-night service.

The most common problems with radio reception are weak signals or interference. Interference can be caused by anything with an electrical or magnetic current. Changing weather patterns can also cause problems with radio reception.

The radio antenna is the most important factor in achieving good reception. Many radio reception difficulties are caused by deficiencies in the radio or antenna installation.

Good radio - AM or FM - reception is dependent on signal strength and the type of radio receiver and antenna used by the listener. Reception quality changes significantly between small portable radios and high fidelity tuner and speaker systems and good quality antenna systems.

Signal strength can vary greatly with the distance from the radio transmitter and in different environments such as built up, wooded or hilly areas. The further away from a transmitter you are, the weaker the signal you will get. Weak signals are more susceptible to interference. In some areas an external antenna may be required for good radio reception.

Interference or obstruction of a radio signal to the antenna should be kept to a minimum. The receiver and antenna should be placed away from electrical devices such as computers, refrigerators, power tools or wiring. The antenna should point in the direction of the transmitter and be positioned to minimise the effect of obstructions such as trees and buildings.

What to do when you have reception problems

- Check the radio is tuned to the best frequency for your location and check other frequencies.

- Move the radio and adjust the antenna to see if the problem continues.

- Try another radio - if more than one radio is affected, the problem may be electrical interference caused by a nearby appliance.

- If possible use a portable radio instead of a mains powered one, or substitute the affected radio with a battery operated one. If the battery operated radio reception is good, check the power cord on the mains operated radio is well insulated.

- With the portable radio - walk around the house or outside to see if the problem still occurs.

- If the problem stops when you are outside, you have weak signal or an interference problem in your house.
- Weak Signal: you may need an additional (internal or external) antenna to improve your reception.
- Interference: try switching off all electrical appliances one by one to identify what is causing the problem. If this is unsuccessful, try turning off your mains circuits one at a time, to see if the problem is on a particular circuit.

If the interference is caused by something in your house, you may want to contact a local electrician or technician who may be able to resolve the problem.

REFERENCES

1. Erik Larson "Paperbak" 2007
2. Beyond Powerful Radio. Valerie Geller 2011