

Project Report **TUMradio**

Team

Benedict Biebl
Andreas Heimfarth
Dominik Lisowski
Daniel Michalovics
Andreas Noll

Tutor

Christian Keimel
Adrian Vogelsgesang

Mentor

Dr. Hannemor Keidel
Stefanie Reiffert



Why radio?

There was one question at the beginning of the project that struck us more than just a few times. And since then it has continued to arise frequently. Whenever one of us told their colleagues or friends about our project “TUMradio” the first question always emerged: “Why exactly do you want to establish a radio station? Why not video clips for Youtube? After all, the Internet is the medium of our generation. Radio on the other hand... radio is dead! We’ve got Spotify and music on demand now!”

Certainly, parts of our minds instantly agreed! Yet we were still convinced that radio is the medium that fits our goals best. We decided deliberately against video clips and preferred the old-school radio with a plain audio track and without visual aids.

Radio, television and the Internet are means of enjoyment, information and most importantly communication. There is no social interaction without communication, both verbal and non-verbal. And therefore communication dictates every part of our life, whether it be our career, our friendships, our relationships or our family. Very early in life we acquire skills to develop our communication and apply them to reach our goals.

<< [Communication – the human connection – is the key to personal and career success](#) >>

Paul J. Meyer

What hinders communication? Before mass media, you could reach as many people as your voice allowed. Therefore, the biggest obstacle was distance. With the advent of the letterpress, radio and television, a single person could suddenly reach vast numbers of people. The telephone allowed people to talk to each other over great distances and the Internet allowed people to talk to the whole world.

Now, with all the possibilities we have, one might think that distance does not hinder communication any more – write a quick WhatsApp-Message, make a quick call and everything’s clear ... Sadly, this is not true. You get a great deal of information just by being present. If you meet up with someone in person you exchange more experiences than you could ever do through text messages.

The Technical University of Munich is a very big institution. There are three main campuses: Garching, Weihenstephan and Munich. But there is more: the sports faculty in the “Olympiadorf”, two medical clinics and a campus in Singapore (TUM Asia). Overall there are 411 buildings, six Central Research Institutes and three Integrative Research Centers. About 38,000 students, 9,900 employees, 45,000 alumni and 511 professors take part in academic life at TUM.

With that number of people, spread over more than 400 buildings, it is impossible to inform everyone about everything of interest happening at TUM. But it is important to exploit all means of communication we have.

TUM uses two main channels to keep its members informed: print media and the Internet. There are a variety of journals and magazines, written both by students and TUM officials – Reißwolf, Trafo, Klopapier, Chemist, TUMcampus, Faszination Forschung, Technologist... and many more. More print media is used in the form of flyers and brochures, as well as posts on the bulletin board.

On the Internet there is a website for TUM itself, for every faculty, department, student initiative... in short, for every part of TUM. Additionally, social media and newsletters are used to spread news.

Beyond print media in all forms, TUM produces video clips on certain topics, e.g. some courses of study. These videos are pos-

ted on Youtube and on the website, mostly to advertise externally. Also, MOOCs (massive open online courses) are being introduced. This means that lectures are recorded and made accessible for students. They are also uploaded to the Internet.

What about television or radio? From time to time public-service radio and television companies present reports about TUM. Most often these involve professors presenting their most recent research or talking about their initiatives. The everyday life of students is not represented when television only talks about a great new project in which only a few students are involved or when the newspapers only write about prizes professors receive.

We at TUMradio think that the voice of students in television and radio is not strong enough. We focused on radio because in comparison to television it costs less, in terms of both money and time, and you can listen to radio without being too distracted. This means that without too much effort you can inform yourself about what is happening at TUM while you take the bus or the subway to university, or while you are driving home or standing in the laboratory.

We wanted to establish a broadcast service from students for students. So not only is our target audience the student body of the Technical University of Munich, but also we and our production team are students from that same body.

We are all members of a single university spread across a variety of different locations. Our goal is to unite students of all campuses here, in and around Munich, and even in Singapore, and to establish a true corporate feeling, a single identity for our university.

<< [TUMradio. Your radio, your voice, your university](#) >>



Abstract

Radio has always been a simple communication tool and our survey showed the demand for a radio station at our university. So our goal was to create a true TUMradio – from students for students.

1. Background

History and recent developments

Radio has a long tradition in Germany: The country's first public broadcast – of a Christmas concert – took place on December 22, 1920. From then on the spread of broadcasting began in Germany. The audience grew particularly strongly when radio receivers became cheaper and more manageable. From 1949 onward radio was broadcasted via USW, which has survived to this day in almost unchanged form and has only been supplemented by additional features like digital technology. Hence radio is still the most used communication channel in Germany: With the largest audience ever achieved for a single broadcast standing at 93.5% of capacity and an average daily reach of 79.7%, radio is by far the most widespread channel and more commonly used than television or the Internet.[1]

Surprisingly, for many young people, radio is the main source of news. According to a survey made by the magazine Neon, 27% of the interviewed young adults between 18 and 35 use radio as the main source for news; 19% use television, followed by 18% who use news websites as their primary medium of information.[2] Although young adults and teenagers tend to listen to radio less than older people, the amount of time which a person between 10 and 29 years spends listening to radio each day is still remarkable: 141 minutes on average.[3]

These statistics clearly show that radio is still an important source for news even for younger generations. In times when the Internet is accessible nearly everywhere and 6 out of 10 Germans use a smartphone,[4] radio has still maintained a crucial role in the transmission of information. This is due to its easy access and handling.

Moreover, information is obtained passively via radio, i.e. the auditor does not have to search actively for information as is necessary in the case of Internet websites or television.

Since the cost for mobile Internet has rapidly decreased in the last few years and new technologies like LTE enable people to download larger amounts of data, many people have started listening to webradio on their mobile devices. This model has established itself next to the traditional radio frequencies. In 2013 there were 2851 webradios in Germany and every fourth download was made through a mobile device. Ninety-seven percent of these webradios are Online-Only Provider, i.e. 97% of the webradios offer their programs just on the internet and don't broadcast their programs via radio frequencies. [5] Consequently, webradios are highly popular among university radio stations in Germany because of their easy installation and access via the Internet.

1. "ma 2014 Radio II." 2014. A. Media-Analyse. Frankfurt.
2. "Generationenumfrage." 2014. Neon.
3. "ma 2014 Radio II." 2013. A. Media-Analyse. Frankfurt.
4. "44 Millionen Deutsche nutzen ein Smartphone." 2015. Bitkom. Berlin.
5. "Webradiomonitor 2013." 2013. Goldmedia, B. a. Berlin, Munich.

Different types of radio

Private radio stations or the radio stations of public-service broadcasters are so-called standard-format radios, i.e. they have a strictly planned program. The amount of music, word posts or advertisement is determined in advance following a specific ratio. The format is mostly based on a pre-defined target group. In order to reach young people up to 28, for instance, the stations play mainly the current chart list, reducing the word share to a minimum and employing entertaining presenters in front of the microphone. Standard-format radio has the great advantage that it is cheap to produce because it follows standard patterns and presenters use similar techniques. Furthermore time-consuming and costly word posts or articles take up a small proportion of time in standard-format radios.

Cultural radio stations are characterized by a high proportion of talks. They address an audience which does not only want to be entertained, but also to be informed. Instead of charts, cultural radios play world music, jazz and classical music, often in their own journalistic music magazines. There are also formatted broadcasts, e.g. current-affairs magazines, and other specialist genres such as radio drama or documentaries. The disadvantages of cultural radios are their high running expenses which make the programs highly unprofitable for private operators. The high costs are due to a large network of correspondents and competent professional editors. Radio drama productions and own-orchestra recordings, especially, increase running costs greatly. Therefore, it is almost exclusively public-service broadcasters who operate cultural radio stations in Germany.

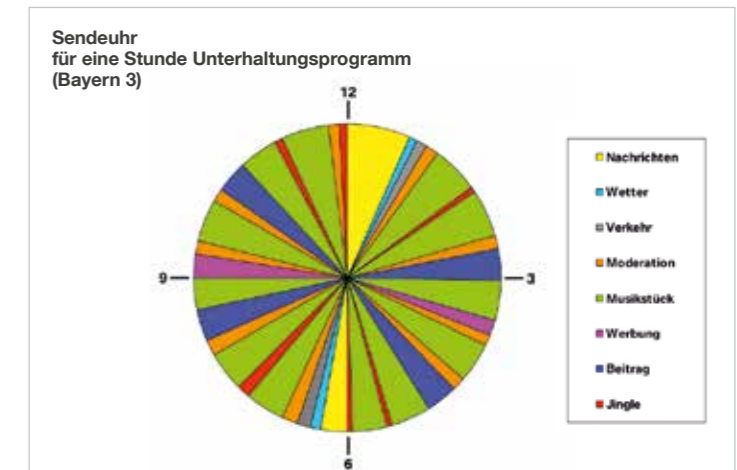
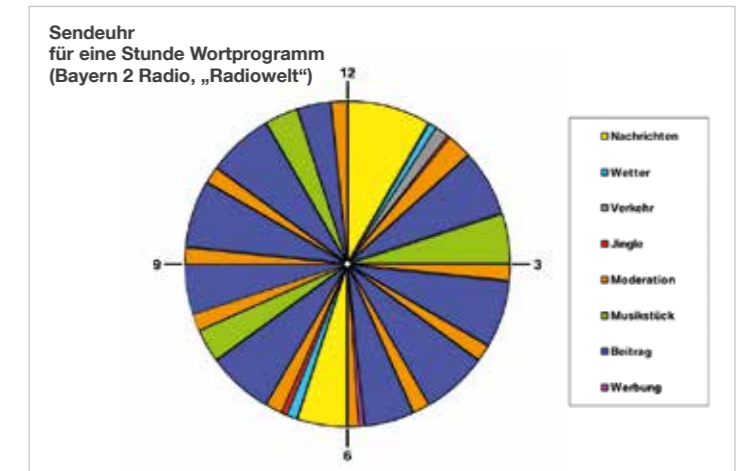
The difference between the two types of radio is clearly visible in the two transmission clocks shown here. These represent the contents of an hour-long program in graphic form.

2. Goals

Communication and networks

The main goal of TUMradio is to inform students and to be a platform which establishes networks. Students at the TUM can choose from a variety of different sources to inform themselves about campus life, e.g. news, events, programs. A radio program can provide an additional source of information for the students and workers of TUM. Hence, TUMradio improves communications within the university, particularly between different faculties and campuses. The program does not aim to reach every student at the university, but rather to be an alternative to websites and roadshows. TUMradio is not designed to compete for students' attention with other sources of information. It is more a supplementary tool for students as well as workers at TUM to obtain information and news.

Furthermore, TUMradio is intended to facilitate publicity for student groups. Articles broadcasted by TUMradio can also be used to inform people about the work of student groups. Therefore our



program can be used to advertise students' projects with the aim of connecting people with same interests. TUMradio will be serving as a new method at TUM to reach students and to inform them. As it has the capability to introduce student groups in different ways than printed media, it might be of specific interest to groups which deal with music or sound in general. They could present their work via TUMradio more vividly and authentically. Established alongside the numerous magazines and newsletters, TUMradio will henceforth be a part of the communications network of TUM.

Another goal of our project is to offer students the possibility of becoming familiar with radio production. By providing the equipment and specialist knowledge, TUMradio should be an open student group which encourages students to participate and make their own features. To help them produce their own work, students will be taught by older members how to use the recorder and the audio software. Furthermore active members should assist and motivate new students to report on projects they are interested in. TUMradio is open for all students and it's one of our main goals to recruit new members from different faculties. That will diversify the contents of our radio programs and thereby hopefully increase the group of listeners. By acquiring new members, TUMradio will not be a one-year project, but a sustainable education program of TUM.

Audience and actors

TUMradio should be established primarily to address and inform students. Initially, we want to consider students as the main audience for our radio programs. Under the motto "a radio by students for students" our main goal is to attract as many students as possible to listen to our programs. Nevertheless, we hope to be able to reach a significant number of non-students with TUMradio as well, e.g. staff, lecturers and alumni. Hence the program is scientifically oriented but puts its main focus on the lives and needs of students. The articles and interviews broadcasted by TUMradio should aim to answer students' questions first and foremost and to display the TUM community from the standpoint of a student.

However, all the articles which are part of our program should also to some extent consist of information and questions which are broader and not specifically related to students. With a good mixture of general and student-specific information we hope to be able to cover each topic from a wide perspective and to make it interesting for students as well as for non-students. We are aware, though, that bridging the gap might be a difficult task sometimes and that even a balanced and well investigated article won't be able to address all members of TUM equally.

3. Methods and Results

Since the main goal of TUMradio is to provide a suitable radio program for students, a survey was conducted among students to ask them what they would expect from a radio program of the university, what should be its focus and range of accessibility.

The idea of establishing a radio program for TUM arose when we thought about a new medium for informing students about campus life in general. In a first survey, 71% of students from TUM said that they listen to radio frequently, and more than half of that number listen to webradio. This is higher than in the general population in Germany where only 39% of all respondents listen to webradio daily. Therefore we have chosen the special audience of webradio-listeners as our main target group.

A large majority of the students at TUM listen to radio stations on a regular basis, most of them in the morning (71.4%) and in the evening (58.1%). In the afternoon there are fewer listeners (37.8%). Most of them listen in the car (78.3%) and at breakfast (49.8%) or generally at home (46.5%).

Since only 2% daily listen to cultural radio on the internet, it is important to find a compromise between standard-format radio and purely cultural radio. The requirements of our respondents reflect the compromise which is necessary. The most desired option is good music (85%) along with an up-to-date and informative pro-



gram (65%). In addition, emphasis is placed on humor. In terms of specific content, respondents would particularly like the station to include events and deadlines of the university, announcements of parties and research events, satire, university politics and other topical subjects.

In the light of the survey's findings, we have created a transmission clock which we believe will meet most of the requirements of the students. We have planned programs with a duration of 30 minutes, each consisting of components of similar length: an interview, news, an introduction of a new band, satire and articles, e.g. reports of events.

To produce these programs, we need partners. These include many institutions of TUM such as the Corporate Communications Center. For contents and information, there are a number of sources, ranging from the student councils and Asta, as well as journals of TUM, to student groups and clubs such as TUfast or tu-film. We have conducted interviews with many personalities in September, especially the heads of institutions which are important for students, such as the Students' Union, the International Center and the less well-known Institute for Advanced Studies.

For those interviews, professional recording equipment and headsets were bought to ensure a sufficiently high standard of recording. Thus we now have mobile recording equipment which makes it possible to conduct interviews anywhere. In addition, we have been offered the opportunity to use a professional studio at the Weihenstephan campus to produce articles.

It was particularly gratifying to see such strong interest for a radio program among students of TUM. Indeed, we received several emails from students offering assistance. Our survey has already revealed that there are a large number of students at TUM who would like to implement their own ideas at TUMradio. To demonstrate the potential of TUMradio, we plan to produce at least one pilot program on the website of the TUM: Junge Akademie.

5. Summary and Future Goals

Our project demonstrates that students happily continue to use the radio and value it highly. The pilot episodes have served to test and quantify this view. Our project has established a solid foundation over the last year and we would now like to investigate how to make a radio program within the TUM community a sustainable option for the long term.