

6.2. Knowledge Acquisition and Knowledge Transfer

Another field of application is knowledge acquisition and knowledge transfer. Media contributions for this field of application are of a short product life cycle, they must be up to date and therefore easily adaptable. They are segmented in short steps/chapters. The chapters are thematically structured and base on global company information. The media contributions have to be organize in a very flexible way, taking into account the user's background knowledge, available time and expertise. Complex technically system presentations require many views and many pieces of audio and cross-linked information. Due to internationalization multilingualism in writing, pictures and audio is necessary. All these requirements can be complied with by using MultiView and multi audio applications. For this field of application, the non-interactive fallback version for single users is only of minor relevance.

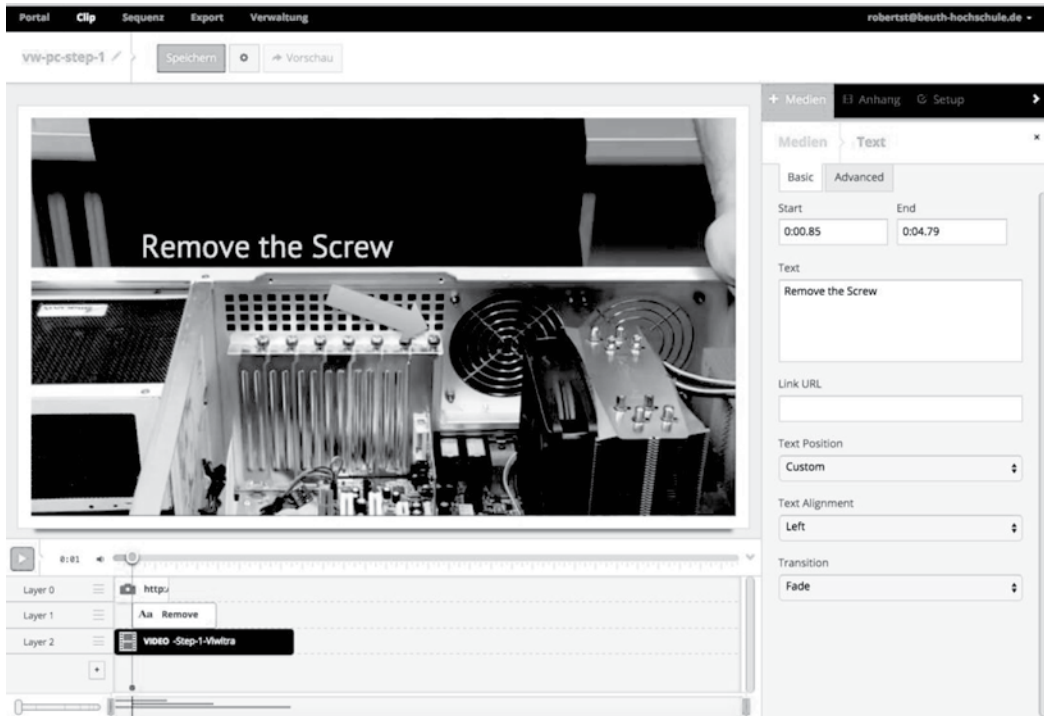
Currently we have been working with the St. Hedwig Hospital in Berlin (in cooperation with the Alexianer Krankenhaus GmbH) on a second case example: "Multichannel recording of a real time urological operation and its distribution in a web portal" together with head physician Prof. Dr. med. Helmut H. Knispel and his team as well as with a patient. In addition to this project it is planned to offer a "multichannel live transmission and live distribution in a web portal" with a further physician acting as moderator as well as with multichannel views in order to enrich and condense the information for business clients, i.e. medical specialists. In January 2016 multichannel applications were added to a private channel of the BeuthBOX portal offering four views (MC4): 1. general view of the operation theatre, 2. the head physician's profile as lecturer, 3. sterile endoscope and exoscope camera for a view that is very close to the surgical area, and 4. direct surgical area from the head physician's view (actor). The following audio tracks were recorded: 1. the lecturing head physician, 2. the assistant doctor (recipient of knowledge), 3. the room acoustics, and 4. the total mixture as well as eight video sources (Fig. 14). For the recording and encoding in real time the fallback solution was produced as single view program and as multiview split screen process. A problem is the connection of the endoscope camera that requires galvanic separations and DVI SDI conversion.

In the scope of the recently finished Level 1 of the project 'ViWiTra' (abbreviation in German for 'Video-based Knowledge Transfer' – current name for the level 2 development is 'ViSuARe TASK' – Video-supported Augmented Reality Task Assistance and Knowledge Transfer) and the current further development there has been developed a special editing system for short multimedia-based clips as well as for creating sequences based on those clips for assembling and service tasks in the industry. This system allows the easy creation of very accurate multimedia tutorials or video-based documentations for manual oriented tasks (Fig. 14).

Fig. 14: Field of Application Knowledge Acquisition and Knowledge Transfer



Fig. 15: Screenshot from the 'ViWiTra' Multimedia Platform for Tutorials and Tacit Knowledge Preservation



6.3. Entertainment

A further and in the near future promising field of application is entertainment. In particular the MultiView and the Hypermedia approaches can provide new interesting ways of consumption and interaction with entertainment media. The media contributions of this field of application have a longer product life cycle, they must be easily adaptable in order to follow trends and the duration of these contributions is rather short. According to a user's interest, style and requirements, they need to be cross-linked to media contributions with similar content. They are sophisticated in a way that their images are required to show many views, much audio information (language, music, atmosphere, effect sounds) and linked communication. International media contributions need to be multilingual. These requirements can be complied with by means of MultiView and multi audio applications. Here, the non-interactive fallback version is of a high relevance for large groups of private viewers.

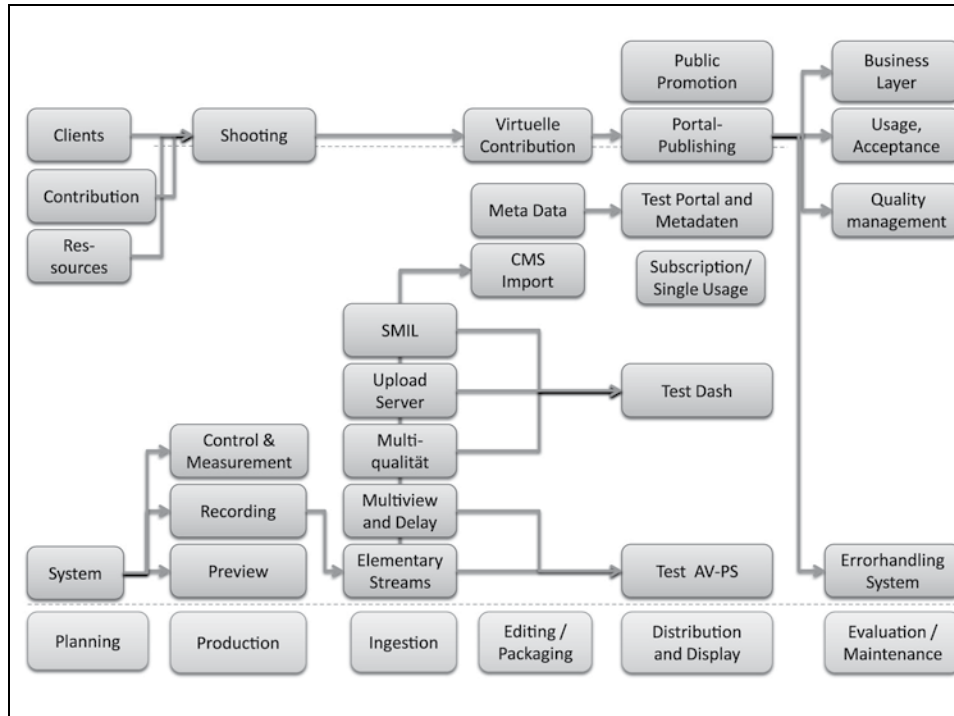
In the winter term 2015/16 a third case example „Multichannel recording of a concert and distribution in a web portal“ was produced with the organizers of “Rock am Platz on 7 November 2015” (in cooperation with the Johannes Church in Berlin Frohnau). Here a concert of ten rock bands was recorded in a large church hall (Fig. 7). Before and during this event, a number of professionals for event management introduced adolescents to different disciplines, such as light technology or acoustic irradiation. Since January 2016 a public channel of the BeuthBOX portal has displayed two versions of the multichannel application of “Rock am Platz” offering four views (MC4): version 1 – long shot: 1. fallback MultiView split screen, 2. long shot, 3. chase camera (actor) and 4. audience. Version 2 – details: 1: fallback single view program, 2. scene left hand side, 3. scene right hand side, and 4: drums from above. The audio track was recorded as follows: 1. left hand side track of audio sum mixer, 2. right hand side track of audio sum mixer, 3. room acoustics left hand side, and 4. room acoustics right hand side together with seven video sources (Fig. 11). The recording and encoding in real time was produced as fallback solution with a single view program. A problem were the long connections

of the camera via SDI and the sound of the audio mix at the main mixer, since the microphones were placed at different audio channels for each band.

7. OPERATION AND DISTRIBUTION

An integration of multi channel technologies for a flexible media management in companies requires the development, automatization and optimization of the companies' technical infrastructure, so that multichannel communication and media transfer are facilitated.

Fig. 16: Basic and Partial Processes for A Flexible Media Management



Therefore, processes need to be determined and their dependency optimized. The basic processes are as follows: planning, production, provision (injection and editing / packaging), distribution / display and evaluation / maintenance (Fig. 16). For a flexible display of multimedia and multichannel contributions and for an international communication an encoder with a standard interface to a content management system for data storage, a transcoding streaming server, and a DASH webcasting application are required.

7.1. Provision of Virtual Contributions

Virtual contributions can be managed by the content management system. By means of transmitted time markers the client's media player can request individual segments of the raw material from the server. These segments can, as in a playlist, be comprised one after the other in a media contribution. From the operational point of view thus a virtual cutting is realized. Therefore, management and editing of the media contributions are facilitated. This process also provides a high flexibility for individual contributions customized to a user's profile. Therefore, it is no longer necessary to create individual files for the different audio and video versions in multi channel format. Virtual channel allocations and virtual time segments also provide a high flexibility.

8. OUTLOOK

For the BeuthBOX platform a future extension is intended, so that media contributions that were recorded via multichannel processes or even webcasted in real time, can be provided fully automatically and with all media channels on demand. In the future, media objects such as inserts, logos, languages, subtitles, graphics, videos and presentations shall be fully automatically comprised to one contribution. Cultural events can be adapted to individual requirements by a selection of scenes and audio tracks and thus will reach a wider audience. Audio and video manuals will be available in different languages and with different films in order to respond to the particular requests of different cultures.

Extended functions, such as video and text chat would constitute a possibility for direct communication. By means of time based chat contributions comments within the time line of an audio or video would be possible. This way, users' comments and assessments would become visible at a certain point of time of the media contribution. This function would be interesting for editors in the business domain as well as for viewers in the entertainment sector. Users' comments and further information could be displayed by means of chat time markers at other users' terminal devices at a fixed point in time.

SUMMARY

Communication and media transfer have become a necessity for companies. Particular in the circles of our society that require more and more knowledge, where many cultures come together and where multilingualism is advancing, media for international users are required. Hence, a solution for media contributions with a plurality of perspective and multilingualism needs to be found.

The MPEG-TS technology offers the possibility to webcast media contributions with any number of audio and video channels as well as meta data and to individualize them. By means of this development various media contributions can be provided for various users on basis of the same raw material in a simple automatized operation.

The application of the MPEG DASH technology and the fallback solution make audio visual media available on all kinds of terminal devices (mobile and stationary). Virtual contributions simplify the operation and its automatization, since otherwise the amount of data and the file resources for multichannel contributions would increase heavily. Multichannel contributions constitute a big progress for individualized, interactive communication and the media transfer in internationally acting companies.

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AUTOPSY OF NEW MEDIA FROM ASPECT OF SOCIAL MEDIA

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ABSTRACT

The government of a country, and main opposition party include others, Religious leader, social organization, NGO etc. campaign via social media now a days because of its getting popularity, where they can reach to general people easily with a minimal cost or in most of the cases with no cost. This new phenomenon is using as an effective platform for publicity, where celebrity, politician, writer and others are active in order to getting update of their daily activities, plan and dream. The large number of audience now are active in these sites also, which is recognized as a tools of mass communication as a strong wing of new media.

Still now Social media are being used as a platform of gossip or get together mainly, where come people, especially young's to communicate with each other after complete daily duty to be updated or refreshed. It has many uses and effect of people's daily life, where we see various active groups in various issues, some of these attract an attention of real life. Social media have an importance role to create awareness among people about various issue, like as, bad effect of smocking, drug, create a consciousness about human right, primary education, woman basic right etc.

We see social media to be used as a business tools. Corporate company are operating the various social media pages for getting publicity. Have many e-commerce company now, which business are online based only. Have many small business men, who depend on social media to sell their products. Have some small business company they take order by social media and network, like Facebook, Whatsapp, Viber etc.

At last we see social media to be used as an alternative media or as a news source of general people and traditional media in many cases! In social media people writing about various issues, where they are differing with mainstream media, which media published. Sometimes they deny the published or telecasted news and unfold the truth. Have many Facebook pages and group of various political organizations, who are using it as a publicity tools. Have many online news portal, which are only Facebook based, with no website, or office. So we are seeing that social media is getting popularity for various reasons and one of the key reasons is 'source of news' and they are playing a role about culture also. The life style of men are changing for social media, where people are busy as a Netizen in virtual world.

However this qualitative case study conducted a content analysis of the actual reality of present time about new media, which is getting more visible in day by day, where we see in-depth discussion about this issue also in our daily life. I divided this study in total 10 chapters, which have some sub chapters with brief description.

In the first chapter I defined media at first then defined new media and social media as well as and discussed about new media from aspect of social media briefly. In the end I tried to differentiate social media from the conventional media. In second chapter draw an image of past of social media, when it started his journey for first time, how and from where exactly and what was the purpose at that time. Here I mentioned some period, which is important in social media history, where I discussed about birth of present phenomenon Facebook and twitter and the period after 2010 when social media became a giant in various sector of human life. Third chapter is about the present situation of social media and how it is considering as a popular platform to people. In chapter four I discussed about the future of social media, where I introduced it as a spreadable media, which has a bright