Digital clip gift shops as scenarios for collaborative architectures for monetising broadcast archive content: an evaluation from a technical and business viewpoint

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Abstract: Within the scope of this paper we focus on the investigation of potential scenarios for providing clips via common broadcasting platform for sharing these across social media. We develop the idea of a digital clip gift shop and present a technical solution as well as a discussion about its business potential. The digital clip gift shop is discussed on the basis of four scenarios, where we identified the technical architectural components. In addition we give an overview of the commercial potential of a digital clip gift shop that is providing video clips for consumers that enables these to exchange them on social networks. We conclude with a discussion of the opportunities for broadcaster and content provider to provide a digital clip shop online to enable consumers to exchange digital content via social networks.

Keywords: broadcasting multimedia; CSCW; computer supported cooperative work; interactive television; multimedia archives; broadcasting content; digital items; business models; human factors; broadcasting.

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1   Introduction

Within the scope of this paper, we present a solution for architectures suited for monetising broadcast archiving content. Nowadays, broadcast archives are going digital, and the content simply remains in broadcasting archives, rather than turned to business. Another trend is the emergence of social media as a principle platform for exchange of content, digital goods and gifts. Within the scope of this paper, we develop scenarios for bridging the gap between broadcasting archives, consumers and social networks.

The developed scenarios describe various stages of the life-cycle of digital goods. The developed scenarios relate to activities around the broadcasters' clip archive during live-broadcasts, and not directly related to live broadcasts. Activities for the monetise archive clips as digital goods relate to the promotion/marketing of the possibilities in

social networks, distribution of these digital clips during live-broadcast content, analysis of the audience to allow targeted advertising of clips and audience measurements to provide insights for gaining knowledge for the target reach.

Figure 1 gives an overview of the scenario. The main component of the scenario is social media platforms that act as main exchange for digital clips. Third parties are responsible to access and distribute clips coming from broadcast archives to the consumer. Third parties have access to the broadcasters' archive or to the production companies for creating content for the gift shop.

Figure 1   Collaborative platform for exchanging digital goods (see online version for colours)
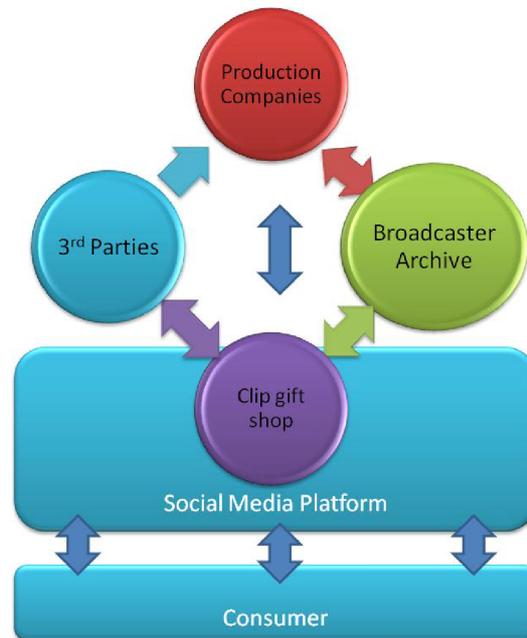
The research questions are:

- What is the current status of social media in general and in broadcasting context?
- Which market and business potential does a clip gift shop have?
- Which implication would a clip gift shop have on businesses?
- Which technical platforms would be required to realise a clip gift shop?

This journal paper represents an extended version of an original submission contributed to the Academic MindTrek Conference in 2011 (Bachmayer et al., 2011) and has been published by the ACM online library. The original contribution has been extended and included within this paper without further references.

1.1   Research method

The business part of this paper is based on a qualitative analysis, in particular a literature review, a Porter 5 Forces analysis and a evaluation of potential business models. Current

trends and forecasts in social media are analysed by examination of market trend analysis. The Porter 5 Forces method shall enrich the paper to present a market analysis to identify the business potential of the clip gift shop. The business part of this paper concludes with a discussion of potential business models, and analyses the strengths and weaknesses of this idea. The business model analysis is based on the models and mechanics described in chapter 13 of Tassel and Peo-Howfield (2010), which is one of the less works addressing several key-issues in managing digital media. The technical part of this paper is based on the development of system architecture, and its functional components. It focuses on the technical realisation, broadcasting standards and the required technologies to realise a clip gift shop. The architecture of four different scenarios is described on functional level. The paper concludes in discussing the scenarios in relation to market and business value.

2   Related work

There is sufficient literature around the topic digital interactive TV, however, we would like to refer to http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/ as one of the basic works describing advanced application scenarios and their realisation. On standardisation level, we refer to DVB (Vukanovic, 2012), ETSI (Warmbrodt et al., 2009), SMPTE (Lunden, 2012) and MPEG (Bachmayer et al., 2011) as they laid the basics for interactive platforms with their wide sets of standards. The World Economic Forum released a report in 2011 on how collaborative and personal data ecosystems (Lee, 2012) will evolve in the future and has impact on business eco-systems. Another interesting report is devoted to the role of the empowered consumer and the business opportunities that are emerging (Chorianopoulos and Cesar, 2009).

There are currently many business reports researching the impact of social media on broadcasting and television. An overview of the business and consumer trends of social media can be found in Nielsen (2012) or in Vukanovic (2012). More broadcasting-related discussions concerning converging social media and television can be found in Chorianopoulos and Cesar (2009). Warmbrodt et al. (2009) discusses the video blogging community and their social networks, which might have special implication on exchanging broadcast clips on the internet. More general statistics can be found on EUROSTAT (http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/). Finally, this paper has been extended and is based on Bachmayer et al. (2011). And, we would like to mention (Tassel and Peo-Howfield, 2010), which is one of the main works dealing with the management of digital media.

3   Social media for exchanging broadcast clips as new value-added service in broadcasting

Through the emergence of social media, the exchange of digital goods decrease, i.e., consumer exchange clips and other digital content on their favourite social media platforms. One of the main concerns is the development of an eco-system consisting of broadcasters, production companies and third parties that enable the monetisation of digital content in form of digital gifts. The main questions are:

- Which platforms enable the automated exchange of digital clips between broadcaster, production companies and third parties?

- Is the consumer ready to pay for a new form of digital content via online shops?

- Which business models exist to turn broadcast archives into a business complying to legal, royalty and regulatory frameworks?

- Which new types of consumer services might emerge on the basis of such a platform?

- Which consumption pattern can be expected, and how will broadcast clips enrich the broadcast experience in general?

To discuss the business viability of exchanging social media clips via social media requires a discussion from a social media perspective, as well as from a broadcast industry viewpoint, and in addition from a consumer behavioural view. From a social media perspective, social media are a large business, and reached up to $17 billion in 2012 (Lunden, 2012). According to Nielsen (2012), on average each consumer spends around 122 min per month in social media, either from a PC platform (61%), in apps (34%) or from mobile phones (5%). The same report also emphasises the increasing amount of consumers who are interacting with social media while watching TV (worldwide between 38 and 63%) (Nielsen, 2012). This implicates two conclusions: first, consumers spend an increasing time in social media; and second, it is inevitable that TV and social media will be converging in one or another form.

Such tremendous amounts reflect the changing consumer behaviour, and it is not a surprising fact that consumers increasingly use social media and service offerings on the internet in recent years. Statistics published by EUROSTAT (http://epp.eurostat.ec. europa.eu/portal/page/portal/eurostat/home/) for 2012 show that 38% of the Euro27 countries participate in social networks of any kind. Statistics also show that 24% upload self-created content and 34% play games, download images, films or music. And 11% buy online content and 32% listen to web-radios or watch web-TV. (http://epp.eurostat. ec.europa.eu/portal/page/portal/eurostat/home/) These numbers allow us to conclude that the consumer is ready to buy digital goods online and shows increasing activities within social networks. Especially the consumption of entertainment content in digital form is increasing.

The worldwide advertising spending in media industries is to increase in a mid-single digit number between 2012 and 2015 following consultancy agency reports, where approximately 60% will be accounted for digital products in 2015, up from 25% today (Fixmer, 2011). Thus, digital goods and items are increasingly demanded, and the business is increasing. This will also affect the daily business environment of broadcasters. From the broadcaster's business perspective, the media industry segment broadcasting is currently in a good shape, despite many opinions, that television is vanishing more and more. Latest numbers show increasing revenue incomes, as well as increasing advertisement incomes for broadcasters. Public service broadcasters are currently still struggling, but with the change of the license fee model towards a media fee (or media tax) as, e.g., currently taking place in many European countries as, e.g., Finland, also this scuffle seems to be part of the public service broadcasters' past. For example, News Corp. showed a growth of 8% in advertising revenues for cable networks in 2012 (Lee, 2012). In contrast to other media segments as, e.g., newspapers which

showed a decline of approximately 7% in 2012 (Lee, 2012; http://www.naa.org/), this is a large step forward in competing with online media. Similarly, consumer electronic sales show an increasing business potential, with current revenues in the range of approximately $ 51 billion worldwide for retail sales of TV displays, VCRs, DVD and Blu-ray player, camcorders, video cameras, STBs and project devices. TV sets account for about 80% of revenue (MarketLine, 2012).

Thus, in conclusion we can foresee the following mega trends while discussing social media in the context of television. These mega-trends support the argumentation that a technical solution for exchanging broadcast clips via social media will provide a viable business model:

- long-tail content, thus content that is re-persuaded via various distribution channels requires new ways of packaging

- social media-driven advertising and viral marketing campaigns are a viable business model

- an increasing amount of consumers use a wide variety of platforms for content access and to watch TV

- it is inevitable to provide mobile access to either social media, and broadcasting content in any form

- the convergence of social media and broadcasting services still requires a suitable business model and application

- consumers are prepared and ready to exchange and buy digital content online.

4 Scenarios and technical implementation

4.1 Promotion and propagation of clips via social media platforms and digital gift shops

4.1.1 Scenario description

Clips of broadcasts shall be distributed via clip gift shops to the consumer from broadcast archives or from a third party provider. Consumers can buy these clips and re-distribute these via social media platforms in a collaborative way. Rights of these clips need to be cleared.

4.1.2 Architectural components

The core of this scenario is the clip gift shop which is included into any social media platform as shown in Figure 1. The shop acts as a link between the broadcaster's and third parties' archives and the social media platform to distribute the clips collaboratively. In a first step, the clip gift shop can be a conventional web shop integrated into any social media platforms (as, for example Facebook[1]). In a second step, the offer of the clip shop can adapt and vary depending on the activity and collaboration that is going on at the social media platform, as described with the scenarios 4.2–4.4.

4.2   (Live-) Content push collaboration

4.2.1   Scenario description

The consumer shall be motivated to buy clips from the digital gift shop through triggers embedded into (live) content. For example, a clip of the broadcaster's in-house produced soap opera shows a preview to the next episode. Or an in-house produced live talk show provides backstage clips to their guests. The consumer's attention to these clips is firstly drawn by the moderator of the talk show (which is triggered via the content) and secondly by embedding triggers into the medium (which mostly will be MPEG) when two guests are discussing.

4.2.2   Scenario components

The motivation should not happen only via conventional commercials in the content but also via triggers that are embedded into the medium of (live) content.

1   Embedding a software trigger into the broadcasted MPEG medium during the production phase or live broadcast. The medium is analysed by the consumer's player and notifies them about a temporary available clip.

2   Animate the audience via the content. For instance, the TV host informs the audience about a temporary available clip.

3   Combine (1) and (2).

For instance a clip to a guest in a talk show is temporarily available in the clip gift shop. The audience takes notice of this clip firstly by a notification which pops up at their TV platforms providing a direct access to the clip in the clip shop. And secondly by the TV host or the talk guest itself.

4.2.3   Scenario implementation

For the scenario of (live-) content push collaboration, two parts namely the producer and the consumer part need to be implemented (Figure 2).

4.2.3.1   Producer

The producer part refers to embedding triggers into the medium. Therefore, it is necessary to provide access to the medium to

- design and create the trigger

- embed it into the medium (whether the content is live broadcasted or not)

- link it to the desired clip.

How to embed the triggers into the medium depends on which media standard is used. MPEG-4 for instance allows fine grained access to i.e. objects and scenes, whereas MPEG-2 allows high-level access to frames, packets and maybe timestamps. In the following we proceed from MPEG-2 since it is standard of DVB in Europe.

Figure 2 Process of (live-) content push collaboration (see online version for colours)
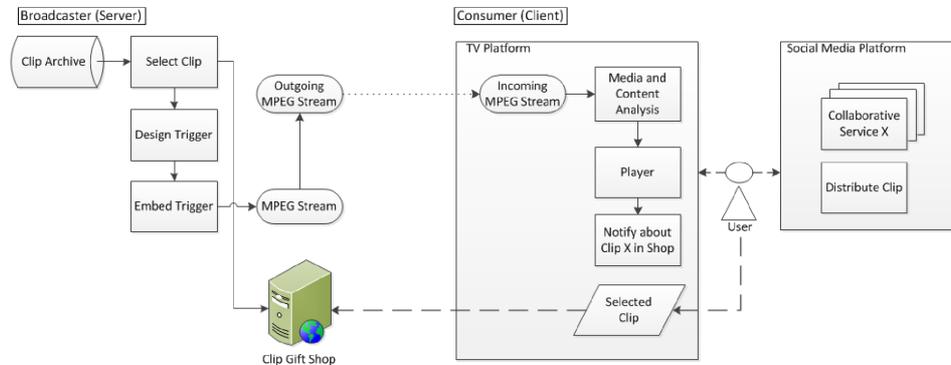
Design trigger

The trigger in its simplest form exists in XML metadata with a predefined DTD. The DTD defines the structure of the trigger including mandatory fields (e.g., unique identifier, its position in the medium such as frame number or timestamp, id of the clip to which it refers, etc) and optional fields (e.g., additional information to the clip). Mandatory fields are required by the player to detect and process the trigger.

Embed trigger to the medium

The producer must be able to embed the trigger to the medium easily. Therefore, provide a tool which allows attaching the trigger in case of MPEG-2 to a certain frame, timestamp or the DVB event mechanism into the medium (ISO/IEC 13818-1, 1995, 2000). In case of live-content, the attachment of the trigger should be possible via an editing tool that allows embedding trigger into live-content in the form of events, application-related triggers or other mechanisms provided by DVB.

Link to desired clip

The linkage is done very easily by providing XML fields to define the required clip and a web link to the shop that is executed by the player.

4.2.3.2 Consumer

The consumer part refers to the TV player which

- Analyses the incoming content for embedded triggers.

- Provides access to the gift shop as well as to social media platforms via web browsers on the digital TV player.

- The TV platform receives the DVB stream, encodes it into an MPEG-TS stream which in turn is decoded or redirected directly to the player for displaying the content (DVB, 1999). After decoding, the player analyses the MPEG-2 media's elements (frames, timestamps, etc) for embedded metadata.

- A special graphical user interface of the gift shop is integrated to the TV platform and displays when a trigger occurs in case the consumer wants to.

4.3   Automated provision of clips through audience analysis of non-live content

4.3.1   Scenario description

Based on the analysis of the collaborative activity of the consumers, additional clips coming from third parties or the broadcast provider shall be provided to the digital gift shop. For example the collaborative activity of a community to a TV series is observed and analysed during its broadcast. Depending on the outcome of this analysis, the offer of the clip shop varies. For instance clips are added/removed to the clip gift shop, prices may change, special offers can be made, clips are selected automatically and broadcasted in the social media platforms, etc.

4.3.2   Scenario components

To provide this implicit and collaborative influence to the assortment of the clip gift shop, it is necessary to

- measure

- analyse

- quantify the collaboration (or collaborative activity) within the social media platform.

Measure the collaboration

As a first step it is necessary to detect whether collaboration is going on (e.g., any activity going on), in which formation (e.g., one big group, several parallel groups, subgroups, etc), which form (e.g., discussion, file exchange, games, etc) and which intensity (e.g., number of group members, of collaborating users, etc).

Analyse the collaboration

If any collaboration was detected, the ongoing collaboration concerning its topic, content and goal is analysed. For example, is there a prevailing topic in an ongoing discussion? Is there a common goal the collaborators try to reach in a mini game?

Quantify the collaboration

To process the outcome of the collaboration, it is necessary to somehow quantify or simplify it to make it able to be processed within the broadcaster archive and the gift shop. For example, reduce the analysis of a discussion within a social media platform to one term or code which can be processed within the broadcasters archive.

4.3.2.1 Scenario implementation

This service is split into the broadcaster and consumer part (Figure 3).

Figure 3 Process of automated provision of clips through audience analysis of live content (see online version for colours)
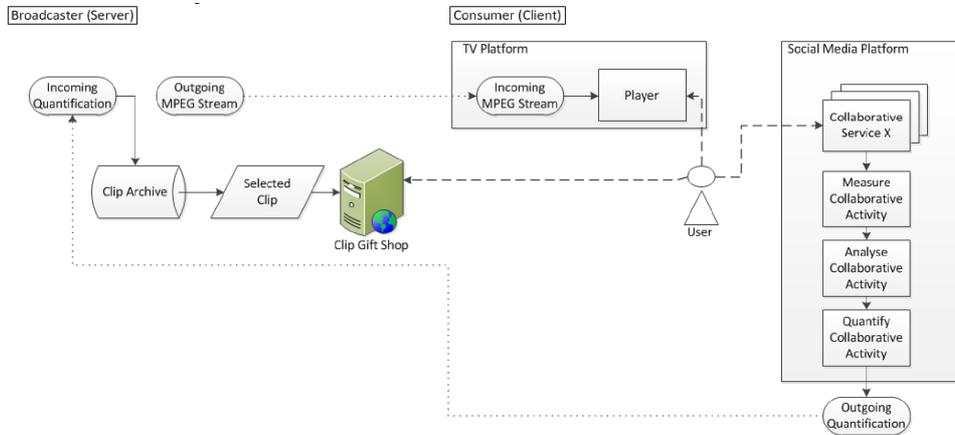
4.3.2.2 Broadcaster

To know what the collaboration is about, a collaboration observation framework needs to be provided. Of course the users must agree to this observation.

1 To get any chance of analysing the collaboration, it is necessary to provide a common context between TV and social media platform which in most cases will be TV programmes or in general current broadcasted TV content. For example, a TV show XY provides a community, group or room in one or several social media platform/s. Within this predefined frame, the collaborative activity is measured in a first step. This is realised by using the social media platform's Software Development Kit (SDK) if provided. Detecting collaboration might be easy since it is enough to detect the number of active users and their activity within the provided collaborative services (chats, games, blogs, etc).

2 For analysing the collaborative activity, each provided collaborative service must be analysed separately by, for example catching the outcome or scores of collaborative mini games provided in the community or using text analysis tools to recognise the topic or keywords of an ongoing discussion.

3 Simplify and quantify the outcome of step 2 to use it as further input to the archive and gift shop. For example, use the analysed keywords of a discussion as a search phrase in the database of the clip archive to automatically select a video clip that is provided in the gift shop and/or played on the social media platform.

4.3.2.3 Consumer

For consumers a common context (like the community of a certain TV show) is most important to direct and canalise their collaborative activity. Otherwise it will be almost impossible to get any useful outcome of the collaboration. Secondly, reliable collaborative services must be provided to them. Thirdly, get the agree of each single user for the analysis.

4.4   Automated provision of clips through audience analysis of live content

4.4.1   Scenario description

Based on the analysis of the collaborative activity of the consumer, additional clips coming from third parties or the broadcast provider shall be provided to the digital gift shop. This scenario focuses especially on live content, where consumers are motivated in deployed collaborative services to exchange digital goods. For example, several prominent actors are guests in a talk show. The talk show also founded a group on any social media platform. The activity within this group is observed and analysed. Depending on the outcome of this analysis, clips are added/removed to the clip gift shop.

4.4.2   Scenario components

Scenario components and implementation are similar to the previous scenario 4.3.

5   Commercialisation possibilities and potential business models

Within the context of this section we discuss the commercialisation possibilities of the digital clip gift shop. First we discuss the general market, by applying Porter's 5 Forces analysis. Particular business models are discussed based on the compilation of business models in Tassel and Peo-Howfield (2010) in the second part of this section.

5.1   Porter 5 Forces analysis

Porter's 5 Forces analysis is well described in QuickMBA(). The analysis technique is based on the idea that five factors influence the success or failure of a business. The technique shall help to understand which market forces our proposed social media-based clip sharing application is exposed to. In principle, we can distinguish between supplier bargaining power (implications from content supplier side on our business), customer bargaining power (consumer influence our business), threats of new entrants (influence of new competitors), substitution threats (how our service can be substituted with another one) and competitive rivalry (existing competition and possible threats) (Porter, 1980). Figure 4 illustrates several of these forces.

- *Supplier bargaining power (medium-high)*: Supplier's industry bargaining power is rather huge, as a few broadcast service providers (either public or private) influence the business. This is also valid for content coming from other content providers as broadcasters. Nevertheless, the supplier bargaining power reduces, as the exchange of clips is only a side-product for existing broadcasters, and does not belong to the core business. But as the supplier in form of content producers or broadcasters is the main contributor to the product, it is a threat to the social media platform for exchanging clips via social media. Nevertheless, digital gift shop customers would only contribute to a marginal level to the broadcasters' revenue. The high dependency on producers and broadcasters as suppliers shall not be underestimated. Another huge issue is the clearance of Intellectual Property Rights (IPRs) and copyright issues between parties acting as content owners, which increase the suppliers' bargaining power if the service should be deployed successfully.
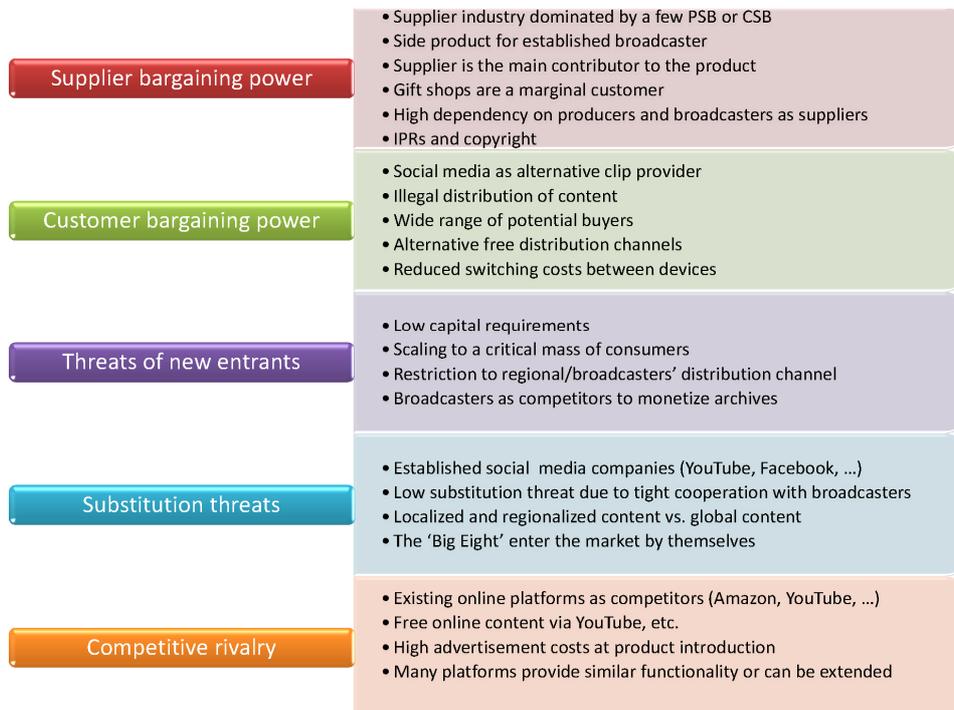
- *Customer bargaining power (high)*: Customers have a wide range of social media platforms as alternatives, and might turn to free service offerings on the internet rather than using a paid service. Illegal distribution of content and the possibility to create clips from illegally contributed content are a serious threat to the core business. On the other hand, customers are willing to pay for digital content, and the global scale of such services addresses a wide range of potential buyers. It provides the customer with an alternative distribution channel. The costs to switch between devices are rather limited, and will not alter the business as such.

- *Threat of new entrants (medium)*: The service development of an online platform for exchanging broadcasting clips has relatively low capital requirements. Scaling of the technical core platform to an increasing amount of consumers is in today's world of cloud computation a minor problem. Due to IPR and copyright issues, a regionalisation of the business might be required, which would be an advantage for a small scale deployment on regional level. Broadcasters might be direct competitors, as they are intending to monetise their broadcast archives. This would implicate a direct competition of content right-holder.

- *Substitution threats (low)*: The threat of substation, thus through products improving our online clip-store, can be considered as low, as a tight cooperation with right owners of the content is required. The value of the core business is tight to the tight cooperation with producers and broadcasters. Substitution through a similar kind of products can be considered as a low threat. Nevertheless, currently existing social media companies, such as, e.g., Facebook or YouTube, are and could provide a substituted product. The strength of the broadcast clip exchanged services is the possibility to localise and regionalise content to the needs of local broadcasters, which would decrease substitution threats.

- *Competitive rivalry (medium)*: Currently the main competition exists through the social media platform such as Amazon, Facebook or YouTube. Implementations of applications part of their social media environments could prevent competition. Existing free available content through advertisement clips as, e.g., provided via YouTube, is already as of today a direct competitor to the online video clip store. In conclusion, competitive rivalry can be seen as medium, despite many existing platforms could provide a similar functionality that could be extended.

5.2 Business model analysis

An excellent overview of business models in the domain of digital media can be found in Tassel and Peo-Howfield (2010), and requires four components: *content model*, *distribution model*, *marketing model* and a *revenue model*. The content model defines how consumers are attracted to content, and in which form, product or service the content is offered; the distribution model allows insights into which vehicles are used to give the consumer access to digital content; the marketing model gives insights into how to attract customers to the digital content and buy it and the revenue model provides how the business transaction is conducted, and which payment mechanisms exist. All these models are excellently described in Tassel and Peo-Howfield (2010), which was the basis for defining the business models for the digital clip gift shop within this section. We

especially would like to pinpoint to chapter 13 of Tassel and Peo-Howfield (2010), upon which we based the discussion within the scope of this section.

Figure 4   Porter's 5 Forces in the context of video clip exchange via social media (see online version for colours)

Supplier bargaining power
- Supplier industry dominated by a few PSB or CSB
- Side product for established broadcaster
- Supplier is the main contributor to the product
- Gift shops are a marginal customer
- High dependency on producers and broadcasters as suppliers
- IPRs and copyright

Customer bargaining power
- Social media as alternative clip provider
- Illegal distribution of content
- Wide range of potential buyers
- Alternative free distribution channels
- Reduced switching costs between devices

Threats of new entrants
- Low capital requirements
- Scaling to a critical mass of consumers
- Restriction to regional/broadcasters' distribution channel
- Broadcasters as competitors to monetize archives

Substitution threats
- Established social media companies (YouTube, Facebook, …)
- Low substitution threat due to tight cooperation with broadcasters
- Localized and regionalized content vs. global content
- The 'Big Eight' enter the market by themselves

Competitive rivalry
- Existing online platforms as competitors (Amazon, YouTube, …)
- Free online content via YouTube, etc.
- High advertisement costs at product introduction
- Many platforms provide similar functionality or can be extended

Source: Extended by our scenarios based on QuickMBA
(http://www.quickmba.com/strategy/porter.shtml) and Porter (1980)

5.2.1   *Particular business models between the digital clip gift shop and content creators or broadcasters*

The most significant business model between the digital clip gift shop and the creators and/or broadcasters relates to the ownership of content to provide a legal basis for re-distributing the content. In the following this and another case for providing digital gifts as part of services provided by broadcasters and/or content creators are discussed.

- *Content syndication and licensing revenue model*: The revenue model between the digital clip gift shops firstly has to consider the business mechanism between the digital clip gift shop and the content owner to provide the content legally to its customers. The revenue model should be well selected, and fit to the content creator needs, as well as be suitable to provide the digital clip gift shop a suitable income basis. The most obvious models are licensing fees or revenue sharing models between the digital clip gift shop and the content producer. In the first case, the digital clip shop would license the copyright to provide digital clips to consumers. In the second case, royalties, thus a certain revenue percentage, would need to be paid to the right owner. Both models would provide a typical arrangement in

media industries in terms of adding an additional revenue stream for content creators for their long-tail content; and secondly providing a content syndication and licensing content model by distributing clips via an additional distribution channel.

- *Service provision as part of content and distribution models*: Another potential business model between the digital clip gift shop and content creators and/or broadcasters is to act as one additional content distributor for content creators and/or broadcasters. This means that the digital clip gift shop is part of an enhanced TV model, where multiple devices and screens are used as content model. Thus the consumer reacts with devices such as tables or laptops on triggers in TV content and can access additional content that he can exchange throughout his social networks. This model would fit well to the broadcasting industries, as TV is the most prominent example for an audience aggregation model, and provide additional services, especially for niche audiences (Tassel and Peo-Howfield, 2010). In this particular scenario, the digital clip gift shop acts as a certain kind of service provider for content providers and/or broadcasters to market, distribute or provide additional content to increase consumer experience or enrich existing content portals.

5.2.2 Consumer-oriented business models

The development of business models suitable for gaining revenues through sales of the digital clip gifts is tricky, especially with the amount of free content that exists on the internet. Nevertheless, the following business models have potential:

- *Freemium model combined with advertising and aggregation of large audiences*: The digital clip gift shop requires a sustainable revenue stream from its customers, which is a trickier component in times where the internet provides 'free' content. The most obvious model would be to combine a freemium content model with an ad-supported revenue model. To apply this model and guarantee its sustainability, a large audience needs to be aggregated to provide advertisers with the critical mass of customers to generate sufficient advertisement income. This would be a shift towards a content aggregation model, where a sufficient amount of content in form of video clips has to be collected to attract a critical mass of customers. Thus the revenue would be generated through advertisements embedded into video clips, or through the web portal of the digital gift shop based on the number of impressions (website-visits) or the number of click-throughs.

- *Payment-based business models*: Other possible revenue models are based on pay-per-gift models, where customers pay for the digital gifts they want to buy through micropayments a marginal sum for each gift they purchase. This model might be problematic due to the large amount of 'free' content available on the internet. A subscription model seems to be an alternative model to the pay-per-gift model, and consumers are required to pay a monthly subscription free to gain access to digital gifts.

- *Combined tier-based business model*: Several of these models can be combined to a tier model. The digital gift shop provides various service tiers for their customers. To attract the critical mass of audience, the first tier provides free content associated with advertisement revenue models. To gain access to premium and more specialised content, the digital gift shop provides subscription models for audiences with particular interests. The pay-per-gift models are another service tier, where the customer has access to free advertisement and premium digital gifts.

Several marketing models (which are listed in Tassel and Peo-Howfield (2010)) for advertising products of the digital clip gift shop are possible, such as spiral models, where traditional models are used for marketing the digital online store. Traditional ways of marketing can be combined with spiral marketing, where people are drawn from one media, such as TV to the online gift store. As the digital clip gift shop is intended to be in association with TV broadcasts, this seems to be an attractive way to promote the digital goods through triggers in the broadcast stream in live content or the analysis of the needs of the audience. As the clip gift shop is based on social media and consumer interaction, viral marketing will be a major component for the success of the online gift store.

5.2.3 Business models between the digital clip gift shop and other businesses

There is a wide variety of potential business models between the digital clip gift shop and other business partners. The most obvious relationships in the value-chain are between the broadcaster, content producer and other service providers. These can be categorised as follows:

- *Affiliate models for revenue sharing in combination with affinity marketing models*: Independent of which revenue model is selected, additional revenue models support the revenue stream of the digital clip gift shop through, e.g., affiliate models with non-competitive service provider. Thus, various partners would advertise each other, and create a value-network based on commissions for forwarding customers between each other. The prime affiliate partners in promoting digital clip gifts are broadcasters, since the digital clip gift shop requires a close cooperation with them. Nevertheless, among others, also other partners, such as content producers, commercial web-sites, merchandising portals, etc., are potential affiliate partners through embedding advertisements into digital gifts.

- *Sales and mining of consumer data*: Another potential business model is the sales of consumer data (more exactly data about the consumer behaviour and exchange networks) to other parties. This is a similar model as currently applied by social media and other platforms, and can be considered as an additional revenue stream for the digital clip shop. This model can be combined with data mining marketing model, where consumer behaviour is mined, and affiliate partners pay a certain amount for potential new customers for their services and products. This model would also work between the digital clip gift shop and content providers, as content providers or broadcasters gain more valuable consumer information about consumer experience and behaviour.

- *Digital clip gifts as part of content models or a marketing mix*: The digital clip gift shop can also act as service provider for advertising and marketing campaigns, by providing clips on the freemium model and letting consumers exchange and share the content. Also for this business model, the digital clip shop would act as a kind of advertising service provider to other business partners.

6 Conclusions

This paper presents a simple introduction to the potentials of social media regarding monetising the digital archives of broadcasters. It reviews broadcast typical scenarios and possibilities and gives a first glimpse on their potential implementation. It is understood that there exist many similar efforts; however, the main issue is the understanding of the problematic and the potential such a system can offer for live and non-live content. It can be seen as an attempt from the broadcaster's side to get one additional revenue stream, which seems to be rather attractive. The same is valid for content producers, who gain access to another distribution/revenue channel for their content. Nevertheless, broadcasting is a fascinating environment, and is currently undergoing many changes. In this paper we presented possibilities for new services and the related business models. As the broadcast and internet world changes rapidly, these services provide one possibility for an additional revenue stream for content producers and/or broadcasters as the following business models may indicate:

- Video clip exchange services based on a consumer experience model, thus the service is packaged in a way consumers enjoy the acquisition, and sharing between peers (see Tassel and Peo-Howfield (2010)) allows an additional feature for long-tail content or enrichment of the marketing mix for advertisers and broadcasters.

- Affiliate marketing and affiliate revenue models are promising, and allow an integration into existing portals and monetising content.

- A well thought through licensing and content syndication model needs to be established to clear copyright and seamlessly enable the clip exchange via social media platforms.

- The digital clip gift shop enables to gather additional consumer data via data mining, and gain new insights into consumer behaviour for marketing and advertising purposes.

- B2C business models range from advertisement models, affiliate models and tier models, either freemium content tagged with advertisements or premium content on a pay-per-item or subscription basis.

- The marketing model, describing the notification of consumers about the potential content, is based on traditional, viral, or new ways of marketing. Especially triggered marketing mechanisms enable to move the consumer from broadcast content to content offered by the digital clip gift shop.

The paper also presented the technical solution from a broadcasters' view to enable the automated exchange of digital clips between the involved parties. Nevertheless, the main problematic issue of providing this kind of service remains in discussing this business

opportunity from a legal point of view. Especially the discussion around copyright issues and licensing issues remains still to be discussed. In conclusion, we believe that the service enriches the broadcast environment, and is fitting to current consumer trends, as well as to the intention of broadcasters to monetise their broadcast archives.

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Note

[1] www.facebook.com

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