The repurposing of archive content: PokuMOn project
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General idea:
Long time, archives were perceived as a final resting-place for content until the inevitable process of deterioration set in. Fortunately, nowadays, archived content is being considered as a valuable asset, which should deserve a second life. Broadcasters all over the world are looking for ways to conquer new markets with this type of material (by means of different distribution platforms such as internet and mobile) or to discover new appealing uses for the public or a specific community. Furthermore, studies are being conducted that assess which kind of platforms are the most attractive for a specific type of user, often in combination with a particular content genre.

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Introduction
Many experts consider Flanders, the northern region of Belgium, as a Walhalla of culture, reflected by a large number of cultural organisations. The broad array of performing art institutions produces on a yearly basis quite a large amount of valuable cultural material. Consequently, various authors have stressed the need for an adequate archiving and preservation policy of this type of material, given its historical, juridical, cultural, social and economic value.
The Flemish culture halls have archived both their own productions and guest shows; in the past in an analogue format and now more and more in a digital format. The recordings were generally realised by a third party according to several standards and formats. Unfortunately, this material does not always receive the attention it deserves. For some organisations a structured archiving policy for the recorded or taped performances is part of their daily operation, whereas others lack the required resources to do so. Within the sector a strong need arose to disclose the archived material to several categories of end-users according to a standardised metadata exchange model. As such, keywords nowadays in the whole process of safeguarding and preserving this audio-visual material are digitisation, metadata, rights management and disclosure. A thorough knowledge of these four aspects can considerably prolong the lifetime of these sources, even granting them a second life in a different setting.

Short description of the PokuMOn project
Within this project the cooperation between a number of important performing arts centres is an absolute necessity. The partners were carefully selected and can be classified into two groups:
institutions which produce themselves (e.g. Flemish Opera, Ballet of Flanders, DeFilharmonie) and receptive institutions such as deSingel and the Bijloke. The Flemish Theatre Institute (VTi) was prepared to play an active role in this project, next to several other organizations. The PokuMOn partnership of cultural institutions thus represents all vital junctions for the distribution of multimedia in the cultural sector.

The PokuMOn project aims both at video, audio, photograph assets and textual information. The united project partners aspire to the development of an efficient disclosure tool, both for economic and social reasons. The economic value of such a project consists of their content to be more promoted and to be offered via new channels. This way one drills a new well of income to all kinds of target groups. Socially the disclosure of performing arts assets equals larger accessibility, which opens up the public debate in this sector. Moreover, these assets play an important educational role. Furthermore the exchange of assets between cultural partners inland and abroad is one of the objectives.

So, in general, the PokuMOn project ambitions to open up new opportunities and means for these productions to a broad spectrum of both professional and residential users, with a focus on the:

- Evaluation of user requirements
- Optimalisation/adaptation of multimedia datastreams
- Definition of a generic metadata exchange model
- Specification of the complex rights issues
- Multimedia recordings dissemination tool (audio, video, images, text)
- Economic valorisation

Core of the paper

This paper especially addresses the current state-of-the-art of (digital) archives in the performing art institutions and assesses the economic valorisation of this kind of material by means of a pilot study via digital television (video-on-demand).

The first question will be answered by means of qualitative interviews with people entrusted with archiving in the performing arts institutions (including dance, music, theatre and ballet organisations). This way, the current situation in this sector when it comes to archiving, digitisation, metadata, rights management and disclosure will be scrutinised and an environmental scan will offer some guidelines for a more systematic archiving policy.

The second question looks at the opportunities and audiences for the performing arts in digital television (video-on-demand), or to put it more briefly: do archives get a second life? This paper
reports on a pilot study based on the existing video-on-demand platform of Flanders’ main digital television (cable) operator (i.e. Telenet), aiming for a wide-scale delivery of performing arts videos and investigating the economic potential of this venture. The valorisation potential is actually twofold: economically one drills a new well of income for the cultural producers, and socially the disclosure of performing arts assets equals larger accessibility. In addition, we have drawn up a profile of the so-called innovators of this pilot study. Since little is known about the actual demand side of audio-visual cultural heritage over video-on-demand and its users, this paper endeavours to fill this gap.

Current state-of-the-art of (digital) archives in the performing art institutions

**From amateur takes to professional shootings**

The performing art institutions in our study make some recordings of their own performances, suited for different purposes, or store the material they collected or received from others. Most of the organisations capture the rehearsals or the performances as some kind of *documents de mémoire*, which are a perfect registration of the history of the organisation, as working document for the dancers, actors, directors, … or as promotional material. In this case, the shooting happens primarily straightforward, with one camera positions and little effort, mainly used for internal goals.

To reach a broader public, the performing art institutions cooperate with professional external production companies to capture the performances. Once the performances have been professionally captured, many paths to disclosure are possible: television, online, DVD… One institution mentions how they did some kind of *big screen actions*, whereby an opera production was captured and projected on a big screen for a large public on squares or in picture houses. These actions proved to be successful but were however too cost-intensive. One other option for more professional shootings is the use of automated cameras which can be controlled at a distance. This way, the cameras are not that visible during the performance and there is no disturbance for the performers and the public. Lastly, we should not neglect the role of VRT and Klara for the broadcasting of performing arts, because they have made a lot of deals with several cultural houses.

To conclude, we must acknowledge that many of the performing art institutions recently made some investments for the recording or shooting of their artistic performances. Negotiations with more external partners take place or more sophisticated equipment is being bought, starting from the idea to reach much more audience with the cultural material they produce.
Too little priority for a structured archiving policy

As mentioned in the previous paragraph, many performing art institutions create audio or video recordings of their performances, in an analogue or digital format, for different purposes. In an ideal scenario, these recordings should be stored in deep archives, as to ensure a good preservation of this cultural valuable material. Also photographs, posters or other promotional objects could be safeguarded. Nonetheless, the reality somehow differs. Only a few performing art institutions spend a lot of time at the development of a well-functioning archive, mainly intended for the management and organisation of their audio-visual productions, the iconographic assets and a diverse set of promotional material.

The size of the archives differs greatly, dependent on different aspects: the start date of the organisation, the amount of recorded items, the awareness of preserving cultural assets... In general, we noticed that the audio-visual collections are not that extensive and mainly consist of rehearsals of plays. Many of the interviewees even had to admit that a lot of material has not been safeguarded properly in the past and that some cultural items probably got lost.

The character of the archive is determined by the type of material and again we observed a lot of variety: (analogue) pictures, brochures, newspaper articles, clothing, posters, scenic artefacts, video shootings, audio recordings of introduction speeches or the concerto itself, and other materials.

Normally, archive material should be stored in acclimatised rooms or at least in good environmental circumstances. However, given the cost-intensive character, this is not the case. In most of the organisations the archive collections are kept in the closet or piled up in boxes. Nonetheless, some organisations do make an effort for carefully handling the material they possess, especially when it comes to video, audio or pictures. The collection is being kept under lock and key, and copies are preserved outside the house, as a protection against fire or theft.

The analogue and digital jungle

Most of the archives in the performing art institutions possess a jumble of material, which hampers an efficient preservation and disclosure. As many archives tend to store both old (analogue) and new (digital (born)) material, there is often a lack of playback infrastructure for certain carriers such as old celluloids, magnetic tapes or optic disks. Moreover, the transformation of this old analogue material (which might be seriously endangered) into new standards demands a continuous effort at various levels. At this moment, in most of the organisations the oldest material is given priority for digitisation, together with the material that can be used for a special occasion.

Current difficulties such as the decay of existing carriers of information, the lack of storage room, and insufficient access towards archive material have led to a focus on the digitisation of audio-visual
material. Nowadays, many performing art institutions are convinced that this digitisation of material or the careful storage of (digital born) content is essential. The question however arises how to realise this...

The digitisation of audio-visual material creates an environment without tapes: the desired audio-visual material is saved on a server or tape robot as a file. This digital archiving offers a lot of advantages: there is no (or very little) quality loss when copying the file and the material is usable for computers and robot systems. Furthermore, digital archiving reduces the need of quality control, enables an easy association with metadata and creates possibilities for exchanging the essence in a network environment. One must also be aware of a superficial and technological-deterministic thinking when considering this matter. After all, the current evolution towards digitisation demands a lot of financial effort and has its clear implications at the organisational level (infrastructure, workflow, personnel...). Many interviewees explain that a small to medium-sized server to store digital data is available in the organisation, but that the update and maintenance still demands a lot of investment. Furthermore, different issues need to be addressed. Is the preservation of original carriers appropriate? What are the costs? Which technology is the most suitable? ... One also has to bear in mind that digitisation will unfortunately not be the ultimate solution, since it is assumed that even the digital carriers have at their turn a restricted life span. In this respect, there is no such thing as the luxury of permanent or eternal carriers.

Who has access to the archive material?

An audio-visual archive should not only guarantee a permanent preservation of the audio-visual data. It also has to ensure that this material becomes easily accessible, for different kinds of users. In this context, any archive has to go through different steps, which include the processing of the material, making the necessary selections, ensuring good environmental circumstances, disclosing the material in a reliable way and opening up the material to a wide array of potential users.

As already described, most of the archive material in the performing art institutions remains in-house, used as an object of (self-)study or prospection. After rehearsals or an opening performance the video material can be watched and slight imperfections can be corrected. Once in a while, foreign performing art institutions wish to consult the material and viewing is allowed under certain conditions: sometimes for free, sometimes on payment, on tape or DVD. Another important target group is the educational sector and the libraries, which address themselves more and more to the performing art institutions for the study of cultural history or certain cultural documents/performances.

Nevertheless, as noticed before, the awareness grows that the material might also have a more explicit commercial value, via distribution on television, DVD or online. Therefore, recordings or
shootings with professional equipment are necessary in order to reach a broader public. In this perspective, negotiations concerning the intellectual property rights are of extreme importance. The disclosure of cultural performances via the internet is quite a popular way to disclose this content to a wider audience. Many interviewees stress the relevance of this kind of distribution and foresee this in the (near) future or are already experimenting with this new form of cultural experience.

**Content is King, Metadata is Queen**

When reflecting on the use of websites or archiving and distribution in general, one should pay carefully attention to the accessibility of the material. Indeed, in view of the accessibility of the audio-visual performance material, it should be carefully described in terms of metadata. These metadata need to be univocal and precise in order to guarantee a correct identification of the material (e.g. archive number, title, producer, origin or synopsis). Good metadata are a replacement of the living memory, as to ensure that the information about the cultural item does not disappear when this memory can no longer be addressed.

Unfortunately, the interviews revealed that some organisations possess little or no information about their recordings or shootings, which equals a clear lack or absence of metadata. Three organisations denote how there exists a fierce shortage of metadata because of the brief description that is being applied, ranging from labels on boxes to some descriptive terms on a tape label. The other institutions employ their own custom-made system for obtaining as much consistency as possible in the description of the audio-visual asset. In this respect, respondents from various sectors refer to “a Google-alike search and archiving system”, “a ‘customised’ software application that was developed at the beginning”, or even just ‘some description data filed on paper’... A comparison of these metadata sets reveals a big difference between institutions, tuned to the needs of each company. These custom-made (software) systems indeed have their own metadata system and there exists a strong variation in the amount of metadata (ranging from approximately five to more than fifteen fields) and in the search extra’s (specific search or full-text search). Nevertheless the ambition to apply certain metadata as consequent as possible within the own institution, many interviewees notice that they are often confronted with a large problem of inconsistency, due to several factors: the lack of time for filling in all these metadata, different opinions among persons within the organisation, changing needs of users... Only organisation uses an international metadata standard, which is extremely valuable for cooperation or exchange with other institutions that apply the same standard.
**Bringing culture online**

After studying all the organisations’ websites, we mostly observed website applications such as information seeking and online ticketing. Indeed, studies show that, in general, the presence of cultural organisations is far from interactive. They provide practical information, but in terms of community building, interactivity and multimedia, they only use a fraction of the range of possibilities to be explored with current information technologies.

The websites mainly had two target groups: cultural visitors (the audience) and journalists. In most cases, users are able to navigate the website rather goal-oriented, such as making a query on the program of a certain performance. At some institutions, journalists receive a separate password for the website for getting access to specific documentation. This press corner gives information about important dates, investments, the actors, dancers or musicians... and lots of audio-visual material such as photographs or small media fragments. In some cases these media fragments (pictures, recordings or shootings) are downloadable in low res or high res quality, dependent on the intellectual property arrangements. Nevertheless, one organisation mentioned that many journalists still prefer receiving these media fragments on CD or DVD because technical vehicles (such as a small broadband capacity at the press organisation) hinder an easy delivery of these large content data packages. Performing art institutions that do not offer audio-visual material on their website to the press blame it on the shortage of time to arrange this.

The opportunities for an organisation to bring culture online largely depends on the way the material has been described in the past or – for new material – will be described in the future. Thorough and clear metadata are a prerequisite to make audio-visual information on a website searchable for the audience. The interviews confirm these ideas. The three aforementioned organisations that describe their cultural assets by means of consistent metadata are the organisations that offer lots of opportunities on their website to consult different kinds of content for different types of people (students, journalists, artists...). Each of the three organisations also considers cross-media opportunities by referring for example to Amazon, iTunes or YouTube. And lastly, Web 2.0 challenges – which refer amongst others to a shift from passive users towards more interactive participants – are being considered. Website visitors are – or should be able – to comment, tag or rate the performances, possibly leading to a community of engaged public.

**One performance, many right owners**

The initiative of bringing audio-visual material about the performances to a larger public (online, television, DVD...) should be loudly applauded. After all, the disclosure of the performances via different channels also has a societal role, as new forms of accessibility and a greater amount of
available digitised cultural heritage content can result in greater benefits to the public. A virtual or other introduction to such content not only leads to a stronger interest on the part of users, but also to improved accessibility for persons who are, for one reason or another, physically unable to consult the diverse array of art and cultural collections which are stored or performed in scattered institutions.

However, cultural performances can only be disclosed when those participants who possess any kind of rights give permission. And that is where the shoe pinches. Rights clearance is a slow and difficult process. Nowadays, when performing art institutions make an appeal to external production companies to record or shoot a performance, the rights are defined in advance. Who has which task and rights? When should the cultural asset be broadcast? Is a distribution on DVD possible? Who negotiates with the right owners? In brief, all the aspects of commercialisation are clearly stipulated. An organisation must consider all the possible outcomes, as to ensure that a diversity of aspects is written down in clauses. Unfortunately, when looking at the contracts for the internal operation and management of the performing art institutions, we observed that many of those aspects are not mentioned. For example, one clause describes the disclosure by means of internet, but does not take into account video-on-demand or digital television. Or in the contracts of the employees nothing is mentioned about their legal rights and no arrangements have been made in advance... In other words, rights clearance is a tricky business and this is reflected in the need for legal experts in the performing art organisations. This way, contracts can be drawn up to the needs of a specific person, including specialised clauses for further distribution. For these experts the negotiation with different parties for rights clearance is high on the agenda.

Moreover, since a large number of recordings or shootings date from the pre-Internet era, most contracts leave no opportunities for online (re-)use and distribution. As a result, further valorisation of these recordings or shootings is hampered despite their cultural value. For the cultural material stored in the archives, the question thus arises how this matter can be solved retrospectively.

Opportunities and audiences for performing arts in digital television

Culture and television: a difficult match

In Western Europe, the transmission of cultural programmes was traditionally seen as a major argument to legitimate the establishment of public service broadcasting (PSB). Indeed, within its cultural-educational mission, PSB has contributed to the creation and development of national identities by supplying highbrow culture in order to enlighten citizens. However, this enthusiastic spirit surrounding the medium was soon replaced by a more industrial-economic approach. Commercial networks, aiming to catch the greatest number of viewers for advertisers, began to limit
arts programming for its unprofitable small audiences. This illustrates that profit-making and audience rating concerns seriously complicate televised arts programming.

As a result of the increasing competition from commercial channels due to liberalisation of audio-visual markets since the 80’s, the cultural mission of PSB in Europe has resulted in highbrow culture such as theatre, opera and dance being increasingly superseded by popular culture. This evolution towards more competition for viewers is likely to cause less programme diversity with television contents among broadcasters becoming almost alike. However, according to the European Commission, new information and communication technologies (ICT) might be a strong driver “for reinforcing Europe’s cultural diversity by making our heritage and our cultural creations available to a wider number of citizens”. By benefiting from digital television services, which transform distribution scarcity into an abundance of choice, the power of the ‘long tail’ enhances greater media pluralism and cultural diversity. By embracing all kinds of niche content, the so-called long tail is assumed to aggregate dispersed audiences and maximise their share. This is certainly the case for niche content genres that are banned from the traditional screen because of their small and therefore unprofitable audience sizes.

As the share of culture in total television programming has diminished over the last two decades, this decreasing spiral is hard to transcend in the analogue linear broadcast world. However, new emerging technologies such as digital television could prove to be alternative gateways to deliver culture to a wider audience and to revive televised arts. As culture evolves to become digitally consumed, these technologies present opportunities for the cheap and easy delivery of cultural content. Nevertheless, television is still seen as the most appropriate medium for the wide-scale distribution of cultural experiences. Experts claim that digital television services currently start from pole position to distribute high-quality and full-length heritage videos with mass appeal. This section reports on a market pilot using the existing video-on-demand (VOD) platform of Flanders’ main digital television (cable) operator (i.e. Telenet) for the wide-scale delivery of performing arts videos and investigates the economic potential of this venture. Moreover, a profile of the so-called innovators in this pilot study was drawn up.

**Research methodology**

Based on the established VOD platform of digital television operator Telenet, a pilot study was set up for the large-scale delivery of performing arts videos. A pilot study often involves testing by end-users to gather marketing data before planning the entry into the commercial market. Owing to tough copyright negotiations, the pilot only ran from May until August 2008 and started with 10 items including musical, dance, and classical and jazz music recordings; in August 2008, the PokuMOn library was updated with five additional videos. These items were democratically priced, ranging
from EUR 0.5 to EUR 2, except for one short teaser that was offered free of charge. Due to the pilot’s experimental and short term character, no specific promotion campaign was established except for a single press release.

Prior to the pilot, we conducted an electronic survey amongst all digital cable television viewers in Flanders, i.e. almost 30% of all television households. By gauging their expectations concerning this kind of archival material, we were able to investigate the economic potential of this material in the VOD platform and to accurately profile these users and non-users. In the end, we obtained representative sample data from 678 households on which statistical analyses were performed. By using the Product Specific Adoption Potential (PSAP) methodology, we were able to avoid the traditional overestimations of an innovation’s potential that arise when using one-question-intention questions. This PSAP methodology has been applied successfully to a diversity of ICT innovations such as digital TV, 3G, mobile TV and mobile Internet.

As the PSAP methodology relies heavily on forecasting techniques, we combined these results with more in-depth findings resulting from the pilot itself. By means of exclusive data provided by Telenet, the telecom operator involved in this research project, we revealed some basic but nevertheless interesting customer facts and figures concerning the use of the performing arts VOD service. Finally, in order to draw up a profile of the users and to gauge their satisfaction, we addressed all households with digital television who had ordered videos from the PokuMOn library. In the end, 121 customers filled out the internet questionnaire. This allowed us to provide a general snapshot of the socio-demographics and cultural consumption patterns of the pilot users. By combining the market adoption forecast with more in-depth usage analysis, we aim to provide a more holistic view on both the sustainability of interactive digital television services for the supply of cultural programming and the actual take-up of such services among households with digital television.

**Market adoption forecast**

By applying the PSAP segmentation forecast method to the stated intentions of 678 respondents, we obtained a reliable view on the size and nature of the various adopter segments for this interactive service (PAD). Whereas the blue curve indicates the predicted market demand for cultural niche content (see Figure 1), the purple line represents the theoretically assumed distribution pattern of Rogers’ diffusion of innovations, according to which the diffusion of an innovation in a social system always follows a bell-shaped distribution, with the successive distinction between innovators (2.5%), early adopters (12.5%), early majority (34%), late majority (34%) and laggards (16%). This segmentation forecast governs the potential market for such a pay-per-view supply and indicates a realistic partial market potential among one third of the digital cable television households in Flanders in 2008. Not only were 3.7% of the respondents revealed as innovators, or as a segment
that would immediately subscribe to such a service as soon as it became available, but another 30% was detected as an early adopter, a large segment that would probably not be among the very first to adopt, but with a need, an interest and a willingness to pay that is significant enough to expect them to adopt shortly after the innovators.

![Figure 1: Segmentation forecast (general)](image)

However, these figures need to be put into perspective since the sample only represents the more innovative part of Flanders that has already adopted digital television. The survey was conducted in the first part of 2008, a time when digital television was in the transition stage between early adopters and early majority, with approximately 800,000 households having access to digital TV services, of which about 500,000 over cable at the date of the pilot. In other words, these figures are only representative for the more innovative part of the Flemish television households that had already adopted digital TV. As digital television continues to move into households with more technology-averse people going digital in the future, this short term potential of innovators and early adopters is likely to drop. Nevertheless, this potential estimation reveals a substantial short-term partial market potential for on-demand cultural content and feeds hopes of a cultural programming revival as a result of digital television’s affordances. Indeed, we identified a very interested and quite innovative front part of the market for cultural content in terms of two segments that are likely to take up the service rapidly because of practical, social, economic or other reasons.

As we discovered, there is a possibility of an even bigger market potential, although it would be risky to build a sustainable business model on this. In the social process of diffusion of new technologies, innovators and early adopters are seen as trendsetters whose behaviour is copied by less innovative segments as early and late majority in ideal situations. In order to reach the mass market, a crucial moment in the adoption process is considered to be the transition or copy behaviour from early adopters towards critical mass, starting with the early majority, which is a vital segment for applying a full market approach. Therefore, it is necessary to keep the majority’s expectations in mind from the early introduction of the innovation, and to propose the technology in such a way that it can
leverage added value for all the proposed segments. When a technology does not proceed to convince less innovative segments or does not succeed in crossing the chasm between early adopters and early majority, the market remains limited to the innovative segments as was the case with a lot of innovations such as WAP (Wireless Application Protocol, an open standard for wireless internet via mobile devices) and the Nokia N-Gage (a mobile gaming device). If these segments in front of the chasm are quite small-sized, innovations end up failing, which may have serious commercial and financial implications. When these segments are of a substantial size, a business model can be developed to reach full market.

In this case, we notice a certain decrease in potential when comparing early adopters (30%) with early majority (26.6%) and a substantial lower interest and willingness to pay among the early majority. Therefore, some kind of chasm can be expected when launching the service. Assuming the totality of digital cable television households is the potential target market for this supply; this implies that full market acceptance may not be that self-evident. Because of the rather innovative forefront of the market, transition from these segments towards the majority of the market is doubtful. Clearly, we must imagine difficulties in order to persuade culture-averse people to try new technologies. Other people may have financial or even technological reasons for not using new technologies. As we have concluded from our research, 20.3% of the respondents indicated that they were unaware of digital TV’s interactive VOD features while almost 45% of the respondents never use VOD services. However, the actual size of the market will depend on the applied introduction strategy and the future competition by other providers (via digital television but also via alternative distribution channels such as the Internet). As the name of the method suggests, the product specific adoption potential only forecasts adoption potential of a new technology and not its future sales. The extent to what providers can realise this forecasted potential will thus heavily depend on marketing decisions such as price, content and communication efforts.
Without going into too much detail about the particular profiles of the various (non-)user segments, we closely analysed to what extent cultural participation plays a decisive role for consumers to try and enjoy this cultural content-on-demand service. By cultural participation, we mean the overall degree to which people inform themselves about cultural products or events, purchase cultural goods (e.g. books, discs, concert tickets...), watch audio-visual cultural content (on television or the Internet) and participate in cultural events. Based on these four variables, we computed a new variable classifying all respondents into a limited set of cultural consumption profiles. We eventually drew up three distinctive categories clustering people with similar cultural consumption patterns. Depending upon the frequency people enjoyed cultural expressions during the last six months, three types of cultural participants were identified:

1. non-participants with almost no participation at all;
2. sporadic participants with participation limited to maximal two expressions, and
3. frequent participants having enjoyed culture at least on a bi-monthly basis

As Figure 2 shows, adoption potential for this interactive cultural content is undoubtedly the highest among frequent participants, which can be considered culture-lovers. While considering the early adopter segment in particular, and given the largest proportion within the innovator segment, frequent participants are most likely to take up the innovation or at least try it immediately. The opposite is certainly true for non-participants, the so-called culture-averse persons, which seem barely attracted by the culture-on-demand supply. This is exemplified by the fact that only one
quarter of this category belongs to the most innovative segments. Last but not least, sporadic participants, which make up some 80% of our survey sample, remain rather inconclusive about the content although the proportion of its early adopters is still considerably high (nearly 30%).

**Pilot lessons learnt**

Research data provided by Telenet enabled us to gain insight in the actual market demand during the pilot. Due to privacy concerns, no information about the socio-demographic profile of these users could be tracked so that only data on a macro level were obtained. Figure 3 provides an overview of the actual purchase of each library item. As said, the pilot started with ten performances with the seven-minute ‘Body, body on the wall’ offered for free. Despite the lack of publicity, this short teaser was requested nearly 900 times during the first month while the other productions performed by Ultima Vez also drew attention. In August, the library was extended with some other performances from the Ultima Vez trademark.

It thus seems that well-known performers are somehow necessary to drive the consultation of content services. This is especially crucial when targeting a wider public than just culturally-minded, well-educated and high-earning people, who are often associated with participation in culture. For this reason, we also included the popular musical ‘Cyrano de Bergerac’, which was one of the most popular items in the video library. Beside this, we cannot ignore the fact that few users were willing to pay since the majority of ordered items were retrieved free of charge. Another major conclusion we can draw from these results is the declining interest in the items during the trial. While there were more than thousand consultations in the first months, this amount had nearly halved in August. Nevertheless, the increasing demand in August compared to July demonstrates that more content possibly leads to more demand. Therefore, providers have to manage their portfolio in such a way that the supply is gradually extended in order to keep on leveraging added value for returning customers. Above all, this demonstrates that continuity acts as one of the key factors in the success of VOD platforms in Flanders.
Although at first sight these results could be seen as disappointing, we believe they support our rather optimistic market forecast. We should mention that only a limited, specific and even avant-garde trial supply was involved in this pilot, which nevertheless proves that there is a wide and diverse public interested in watching and even paying for performing arts on television under certain conditions. Out of a total of about 500,000 households with digital cable in Flanders, a considerable proportion of the forecasted innovators were reached, although we cannot expect the market potential to be realised within only four months. This is especially the case when running the pilot study during summer months when audience viewing figures have been proved to be considerably lower compared to the other months. We also need to consider the potential competition from the Olympic Games that may have lured away attention from the VOD platforms. In other words, timing of product launch is essential for reaching a high market penetration.

Furthermore, neither the telecom operator nor the cultural institutions involved significantly promoted the cultural content service because of its temporary character. After all, the impact of
marketing, advertising and promotional strategies should not be underestimated when launching new consumer goods wherein both content aggregators and cultural institutions have to fulfil an important role. As well as close cooperation, content aggregators and cultural institutions can raise product awareness among their target audience (subscribers, customers...) through efficient and attractive communication about the supply. Therefore, the extensive profiling of users through segmentation forecasting provides communication experts with valuable input to set up (micro)segment targeting and marketing campaigns to reach target audience(s) more efficiently.

Despite the large amount of cultural institutions in Flanders, only a limited amount of 15 recordings were collected. Furthermore, the supply was not that representative due to the absence of theatre and the dominance of dance performances. The major conclusion is that very little arts performance footage is ready for multimedia distribution. This has much but not exclusively to do with copyrights issues. Indeed, uncertainty exists about the copyright status of recorded performances. In the past, some of these rights were not or insufficiently registered, which has reduced opportunities to (re)distribute this content. Therefore, cultural institutions have become risk-averse and prefer to avoid prosecution by not distributing this content.

Technical factors are undoubtedly another explanation for this clear lack of distribution-ready content. It seems hard for these institutions to stay up-to-date on fast-changing technological developments, especially in the field of data transcoding and video formatting. After all, interviews have revealed that the creative sector is rather sceptical about transforming potential content into distribution-ready footage and exploiting limited resources (time, people, money, etc.) to lower these legal and technological thresholds, especially when widespread success is not guaranteed. Perhaps this is due to the fact that the cost structure of subsidised cultural institutions is suffering from these overheads and that there is little optimism about new exploitations practices for audio-visual footage (DVD, internet, iDTV...) in an economic sense.

A final lesson is that such a service implies high initial costs. Within the scope of this pilot, only existing productions and recordings were applied. In other words, no new exclusive content was produced for this purpose only, which has of course drastically reduced production costs. In our opinion, such a platform should provide added value and therefore exclusive content. This is especially true given the tight competition from other entertainment resources. However, we have strong doubts about the economic viability of a platform providing exclusive cultural content. When catering the niches in the long tail, costs should be kept to a minimum. Secondly, as tough negotiations for content clearly illustrate, the time needed to bring all the content together onto the platform increases management costs. In particular, the lack of knowledge about copyright issues has increased these costs, which are likely to inflate if service providers have to clear rights. Lastly, profit
margins are limited by storage and transaction costs, which are inherent to VOD. This may eventually affect (split) revenues of both service providers and cultural institutions.

Profiling users
In order to become acquainted with the customers of this cultural content service, we contacted all households that had ordered at least one video during the market pilot. In the end, 121 digital TV households filled out our questionnaire. This enabled us to draw up a socio-demographic profile of the users. Since research has revealed that cultural consumption is characterised by a rigid participation divide, it begs the question whether new forms of virtual consumption (e.g. via digital TV) can overcome these barriers in terms of age, sex, education or income level. Our data below enabled us to shed some new light on this issue and should qualify this technological optimism.

As Figure 4 clearly shows, men in particular tried out this interactive content. This supports earlier findings that men would be more likely to use and purchase new technological services than women. However, these figures should be set in a wider context. As they are often responsible for the purchase of ICT within households, it was especially men who filled out the questionnaire. This does not automatically imply that only men have watched the videos they ordered; it is very likely that their partner also enjoyed the performing arts videos. The traditional assumptions on cultural participation are further confirmed as the content was relatively more consulted by a somewhat older segment of the population. Almost 80% of all viewers were older than 35, the half of the audience was at least 45. This leads to the rapid conclusion that televised performing arts simply fail to attract youngsters and young families. Third, we found that users were more likely to be highly educated. Undertaking further studies should thus be considered an important driver for cultural consumption. This is also the case for income level: higher income levels tend to stimulate cultural participation. Our data suggest that the traditional participation divide is just extended in the virtual world although digital culture is often assumed to be more accessible and to democratise access.
Surprisingly, sporadic participants in particular watched this content the most frequently, while we expected frequent participants to be overrepresented within our pilot study. This suggests that the cultural content supply was perceived as less elitist than was originally feared. This inspires hope that digital television services have made culture more accessible to sporadic and even non-participants. This increased exposure can stimulate these segments to go to cultural venues more often. Within this context, the pilot study and even a future commercial deployment can also be considered as an educational experiment to push interested people softly towards theatres and cultural venues. Although this hope could be somewhat naive, we believe that this kind of service undoubtedly presents an opportunity to deepen, widen and renew the concept of cultural consumption. As the cultural sector is characterised by deep participation divides whereby non-participating strata of the population are hard to target, the recent digitisation of media and cultural industries enable new consumption practices, which go beyond traditional and physical access to cultural content. Thanks to the fact that the adoption of digital TV goes at a much faster pace than broadband Internet penetration and that most people are much more familiar with their television set, we believe that television holds much greater opportunities for the distribution of culture in our society. Within this context, we make a strong plea to take TV more serious when debating about the democratisation of culture, which has mainly focused on the use of the World Wide Web up until now.

**Figure 4: User socio-demographics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>93</td>
<td>80.9</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>22</td>
<td>19.1</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;34</td>
<td>22</td>
<td>19.1</td>
</tr>
<tr>
<td></td>
<td>35-54</td>
<td>66</td>
<td>57.4</td>
</tr>
<tr>
<td></td>
<td>&gt;54</td>
<td>27</td>
<td>23.5</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>20</td>
<td>17.4</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>28</td>
<td>24.3</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>40</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>27</td>
<td>23.5</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;1000 €</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>1000-1500 €</td>
<td>26</td>
<td>32.9</td>
</tr>
<tr>
<td></td>
<td>1500-2000 €</td>
<td>30</td>
<td>38.0</td>
</tr>
<tr>
<td></td>
<td>&gt;2000 €</td>
<td>22</td>
<td>27.8</td>
</tr>
</tbody>
</table>
Main conclusions

With the exception of some performing art institutions this analysis demonstrates that the archiving policy in these culture houses is very rudimental and scarcely out of the egg. Moreover, the opening up of the archive still demands a lot of investment, from different kinds of parties. This is also the case in other countries, where a lot of projects have been (or are being) conducted to stimulate the digitisation and disclosure of performing arts.

As a consequence, digitisation is high on the agenda. It offers a structural solution for the decay of existing carriers (to a certain extent), the lack of storage room and the poor access to archive material. It forces institutions to make choices given that the digitisation of the total collection is not advisable and financially not feasible. They will be obliged to formulate well-considered selection criteria, based on their business models for each of their target groups (cultural, academic, educational, press...). And in this new reasoning, the organisations face a lot of challenges.

In today's network environment, archives are no longer separate entities but in an intelligent way connected to each other. The digital collections of different organisations are combined and cooperation beyond the classical boundaries is encouraged. Moreover, this cross-border and multidisciplinary cooperation will foster the e-culture evolution intensively. For this reason, the digital collection must be complemented with rich metadata. Again, this fosters a greater visibility of the valuable collections leading to a better representation within the educational and socio-cultural field. And a prerequisite for the disclosure of the archive is a fair treatment of the intellectual property rights.

Related to this is the growing awareness in performing art institutions that professional recordings or shootings (in-house or via external production companies) from performing arts also might have a commercial value, next to its educational and cultural one. The proliferation of innovative and alternative distribution platforms (online, video-on-demand) offers the opportunity to reach a new public, and the successful distribution of DVD's and video’s proved that performing arts can generate some extra revenue.

However, as culture is assumed to cater a niche taste, the commercial value of avant-garde culture in particular should not be overestimated. Our pilot study on the video-on-demand platform revealed that few people were willing to pay for this kind of video. Although the relative wide take-up of video material during the test period, doubts about the profitability of such a service offering performing arts content have arisen. In order to win tough competition from other multimedia platforms (such as ArtBabble, Vimeo or even YouTube), platforms should provide exclusive content and therefore invest in video production and acquisition. Because of the insufficient demand for these videos, it is doubtful whether production, acquisition and clearing costs can be recouped in small markets as Flanders.
More information on the PokuMOn project needed?

To bundle all relevant findings, the project consortium has published the free booklet ‘Access to Archives of Performing Arts Multimedia’ that can be downloaded on http://www.vti.be/files/Pokumon_web.pdf. As the work is licensed under the Creative Commons Attribution Non-commercial No derivates works 2.0 Belgium License, the authors invite you to spread the word and share the booklet with your friends and colleagues.

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