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Innovations for the future

Digital technology and culture: case studies

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Introduction

This short paper presents a range of experimental and innovative examples of digital technology being harnessed by the cultural sector, as well as exploring how cultural organisations and their commercial partners can benefit from embracing these advancements.

Whether we like it or not, digital technology is changing artistic practices and the partnerships we form. In difficult economic times the cultural sector has to be more entrepreneurial and in this paper we illustrate that digital technology can be used as a platform/ medium or even a beacon of light in our relationships, rather than an annoying interference to how we've traditionally operated.

The cultural and commercial sectors are facing the same disruptive forces to their operations and business models. Through collaborations based around digital technology, the featured organisations are embracing change, innovation and using others' assets to mitigate their risk in experimenting for the future. Other organisations and partnerships have fully integrated digital technology into their products and concepts. These latter models may well signal the future for the cultural sector and the commercial sector's relationship with culture.

These case studies will feature implications for all arts-business partnerships in terms of audience and consumer engagement, as well as meeting market expectations and developing new business models and revenue sources.

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New Territory for Art

From the iPhone to the Brooklyn Museum

Introduction

The iPhone is a media enabled smart phone first released in 2007 by Apple. One of the device's primary features, which has attracted widespread attention and strong popular culture status, is that of the 'app'. These interactive digital applications can be downloaded and purchased from the online Apple store and range in content from cheerful games to useful media and environmental tools (such as live weather reports and GPS navigation). The fact that apps can be created by a third party - not the developer Apple, but by consumers themselves - has opened up a myriad of potential for businesses who can engage customers with interactive advertising through creative practices. As well as directing people to bars and amusing them on the bus, the advent of the iPhone app has the potential to be exploited by the cultural sector as well as by businesses.

Brooklyn Museum

One of the primary cultural organisations to utilise this technology is the Brooklyn Museum. The official Brooklyn Museum app can be downloaded from Apple, free of charge, and was developed by Adam Shackelford. Currently available is version 1.3, which essentially functions as a mobile collection of the museum's exhibits. It allows users to search for images by keyword, just browse, or simply view general information about the museum. This gives users free reign to access and play with the museum's collection as they wish.

The road to the latest version began with the construction of the Brooklyn Museum API (Applications Programming Interface), which in layman's terms means a way that outside programmers and technology-savvy consumers can create their own digital applications using the museum's collections data. For example, they could include them in their blog postings or reinvent them and thus create a new cultural item. The creation of the Brooklyn Museum app is part of a much larger API project, which could have huge implications on the way cultural organisations engage with their current and potential visitors. This is not just letting people see the exhibits or use the images in their own online postings, but to re-create and re-invent them to form new art from an old item.

It is worth noting that the Brooklyn Museum app is an open source community project, inviting collaboration from anyone who wishes to contribute. Also on the Brooklyn Museum website, a forum has been opened in the comments section to a post about the release of the app. Here, the museum's bloggers have interacted with users to help improve the app's functionality and features. Although the

first version received a degree of criticism, this has allowed subsequent versions to benefit from the feedback. This constructs a dialogue of collaboration on several levels.

Co-creation

The use of digital technology has therefore fulfilled several functions, such as a customer service which is provided through responding to feedback. More importantly though is that this is also an example of co-creation. The comments and feedback informed the product development, so those who contributed to it then have a vested interest in the app itself, thus creating product and brand loyalty. It is precisely this type of co-creation and product loyalty that commercial business brands are wishing to generate in order to respond to changing consumer behaviours. Cultural audiences seem to be increasingly demanding the same type of co-creation and are willing to engage and contribute content. This is not only vital for the cultural organisation in its own right but it is also of great value to any potential business partner.

One of the biggest challenges for brands in terms of co-creation is firstly making a resonating call for action and secondly ensuring the contributions are of 'value'. What a cultural organisation such as the Brooklyn Museum has demonstrated, is that the cultural sector can make these calls for actions and they have engaging content in abundance which audiences and users respond to. This is an asset not only for the cultural organisation itself but also for potential partners.

Although the Brooklyn Museum App is still in its infancy, this could be the beginning of a future trend whereby every cultural organisation has a similar tool to engage users on digital mobile devices.

This attitude and approach to sharing and allowing content to be played with is sure to nurture commitment and loyalty from audiences, which in turn helps to ensure audience contributions are useful and of value. By experimenting in this way, the Brooklyn Museum is establishing how best to tap into the power of its audiences and stay ahead of the curve.

Of course there are legitimate concerns over copyright and licensing of some content, but what organisations are increasingly finding by using co-creation is that by giving a way a little valuable content, greater audience commitment, engagement and potentially longer-term revenue can be generated. The next thing for the Brooklyn Museum to consider is how to generate income through this particular type of audience engagement, whether that be earned income or through donations.

iPhone art

Creativity and innovation are core to Apple's brand and these dimensions are inextricably linked to the cultural sector. Among consumers, Apple's products project an image of creativity, and the development of this new technology has directly inspired the creation of art.

Perhaps the prime example of this is the recent advent of 'iPhone Art'. One of the initial apps released was a tool which allowed users to create images using their iPhone screen. The 'Brushes' app is not a mere distraction from answering emails though, many well known artists have begun to use it as an entirely new medium. For example, Jorge Colombo recently designed a front cover for The New

Yorker using this app.[1] As this becomes an art form in its own right, websites and flickr streams have been created showcasing these works. Another artist, Xoan Baltar, has managed to craft some quite exquisite works on his phone which are very popular online.

Perhaps the most notable champion of this ever-growing culture though is British artist David Hockney. Considering Hockney's contribution to the Pop Art movement, his involvement and enthusiasm for his iPhone holds a larger symbolism. Although you may have to contain your mirth when he states how he likes to proudly store his iPhone on an easel, his comments in the London Evening Standard states: *'This is all new territory for art.'*[2]

There is much debate about the extent to which digital and online versions of cultural content are authentic, because the technology arguably does make the audience one step removed from the original. The vital question is what if the original is the digital version? This artform plays to the strengths of original authenticity: to use the words of Pine & Gilmore – the marketing and consumer culture gurus- because it is new and the first stage of this new type of art.[3] Indeed, the significance here is not only about the economic and marketing potential of cultural dabbling in digital technology, but also about the unexpected artistic authenticity that has arisen from these artificial devices.

The links to culture, creativity and innovation as well as design quality are all fundamental reasons why the iPhone is the coolest brand today and Apple the third.[4] These creative apps developed by a 'cultural brand' has encouraged some cultural institutions, like the Brooklyn Museum, to explore the artistic and audience engagement potential of Apple's devices. But this experimentation is still very much in its infancy.

Conclusions

The nature of mobile communications devices has created an opportunity for a new type of partnership between businesses and arts organisations. By creating their own content in this format, arts organisations can enter into a relationship with the technology itself, as well as with a community of users. This is enabled and supplemented by the growing affection between contemporary artists and mobile technology in an organic and creative manner, which has even created a new artform to engage with.

The Brooklyn Museum is engaging with apps in a fresh and dynamic way that exemplifies the huge benefits a cultural organisation can receive by working towards product development based on co-creation. Although we can only speculate as to the future of these projects, this case serves as a suitable introduction to technology becoming an integral part of contemporary art, and the potential benefits for organisations willing to embrace the digital age, especially around audience engagement and consequently the consumer engagement potential culture offers to brands.

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[1] www.iphonepaintings.com
[2] London Evening Standard, *David Hockney: ipriest of art*, 30 April 2009
http://www.thisislondon.co.uk/standard/article-23683409-david-hockney-ipriest-of-art.do
[3] For more on the role of art in rendering authentic see *Beyond Experience: culture, consumers and brands* , by Arts & Business, Joseph Pine and James Gilmore, 2009
[4] *Cool Brands 2009* /10 by the Centre for Brand Analysis, July 2009

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Striving For Truth
The Ars Electronica Model

Introduction

Located in Linz, Austria, Ars Electronica is an internationally unique centre for digital media, technology and culture. The innovative model consists of four divisions: an avant-garde festival, a competition to showcase artistic excellence, a museum dedicated to imparting knowledge of digital media and culture and a media art lab. Since 1979, Ars Electronica is defined by its quest for innovation, focusing on the nexus of art, society and technology – how they change and their relationships. Ars Electronica has been a catalyst for regeneration in the city of Linz, showcasing it to the world as a hub of progress and innovation. This unique model has paved the way for an entirely new model of collaboration to take place between culture, business and academia that most UK organisations could certainly learn from.

The exhibition

The Ars Electronica Center is a unique structure, both architecturally and functionally; the building itself is of a unique design with no parallel edges, while the content inside is culturally unparalleled. The building is the museum aspect of the Ars Electronica model, and contains 3,000m2 of space for exhibits, 400m2 for seminars and conferences, a 1,000m2 plaza for open air events, as well as catering facilities. At the core is a 1,000m2 gallery with interactive exhibitions designed to stimulate scientists, artists and school children alike. The exhibition showcases new technological developments and digital art installations/pieces and aims to educate visitors on the relevance of these artistic and technological developments to their own lives.

For example, an exhibit entitled 'Funky Pixels' is a response to the way digital technology creates an alternative view of humankind as we construct doppelgangers of ourselves through digital communications. An exhibition entitled 'Artists, Creators, Engineers' features a new form of art which bridges design, technology, science and entertainment to illustrate how our media-based society is shaped. One of the artworks, named '100 Erikas', consists of one hundred portraits designing different identities for pop idol Erika Sawajiri, symbolising the different identities we can also create online.

Another exhibit, 'Deep Space', focuses on CAVE technology (a visual computerised environment), allowing visitors to interact with their artistic environment in ways only possible through new technology. 'Extreme Resolution Images' gives a new perspective on some of the masterpieces of art history such as Leonardo da Vinci's 'Last Supper', as a few square millimetres of the image can be enlarged up to 16x9 metres. As the original in Milan can only be visited by small groups for a very short time and from a distance, the digital replication invites a free study of the intricacies that would

previously not be visible. Other images available include an aerial photograph of Barack Obama's inauguration ceremony taken through the clouds above. The GeoEye-1technology is capable of discerning objects on the ground as small as 0.41 metres. Both of these show the potential of how digital technology can affect cultural memory and perception.

The festival

The second component of the Ars Electronica model is the annual Festival, which first took place on September 18 1979 spotlighting the beginning of the digital revolution. By staying ahead of the curve, it has since grown into one of the world's foremost media art festivals, growing from 20 artists and technologists in 1979 to 484 speakers and artists from 25 countries in 2008. This is one of the reasons why the Festival is so important – its international appeal and audience. The most recent Festival was entitled 'Human Nature', symbolising the fact that technology not only allows us to change our environment, but also the fundamentals of life itself. The Festival exists with the support of partnerships from many organisations, such as the European Commission, IKEA and Sony DADC.

The competition

The third part is the Prix Ars Electronica, a competition organised by Ars Electronica Linz GmbH and ORF's Upper Austria Regional Studio in collaboration with the OK Center for Contemporary Art and the Bruckenerhaus Linz. This competition offers the largest cash prize for cyberarts worldwide and each year six Golden Nicas, twelve Awards of Distinction and approximately 70 Honorary Mentions are presented. There are seven categories: Computer Animation/Film/FX, Interactive Art, Digital Musics, Hybrid Art, Digital Communities, u19- Freestyle Computing and [the next idea] grant. Prominent artists and scholars make up the jury.

One recent winner of the Golden Nica for Digital Communities is Piratbyrån (Pirate Bureau), a Swedish organisation that supports the individual in the fight against copyright and intellectual property through the sharing of information and cultural artefacts. These are issues we will encounter later in these studies concerning digital content and part of Ars Electronica's successful business model is undoubtedly linked to their recognition and forward looking approach to the issues and opportunities presented by digital technologies.

Although these are art prizes they are frequently pushing technology's capabilities and have commercial application, which the Ars Electronica network helps facilitate. Ars Electronica is a vital stage in the process of this technology coming to market – which is really pushed by the FutureLab.

The FutureLab

The final component of Ars Electronica is the 'FutureLab', which aims to formulate and implement the future manifestations of the interaction between art, technology and society. Bringing together concepts of artistry and scientific research, it is a workspace for researchers, artists, technologists and academics to work together on commercial research & development commissions. This is decidedly different to most other working models that exist today to tackle the collision between science and art.

Here, the emphasis is on 'Shared Creativity', the only other close example is that of the Pervasive Media Studio at Watershed which is explored later on in this paper.

FutureLab is the commercial component to Ars Electronica as the projects they work on are funded and commissioned by the commercial sector. For example the Vodafone group research & development department commissioned them to develop an e-newspaper which combines traditional media with new consumer behaviours. The product allows readers to browse through the newspaper's sections, pages and articles by rotating the open double-page screen. All it takes to swap newspaper content is to stack the sending and receiving devices on top of one another.

Their expertise are in virtual and augmented reality and FutureLab has completed work for SAP (featured later in this paper), Siemens, Mobilkom Austria, the University of Linz, MIT Media Lab and the Brucknerhaus Linz.

Conclusions

Ars Electronica is not just about partnerships between culture and technology, but about the full application of the potential of this technology for sustainable business. In our discussion of collaboration between arts organisations and businesses, we should keep in mind the philosophy at the heart of Ars Electronica:

"That what human beings have always found most fascinating has been themselves—a fascination that has also exerted a spellbinding attraction on art and science, two varieties of one and the same striving for the truth about our world and ourselves.[5]

It does have a unique business model – a physical space, events and festivals for animation and focus, research & development facilities – all of which cross-fertilise one another in terms of ideas, products and staff. Cross-disciplinary ways of working and knowledge transfers are at the heart of the concept and key to its growing success. Maybe this is a model for digital art organisations of the future – combining the true artistic and commercial potential of its capabilities.

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[5] www.aec.at

Decode: Digital Design Sensations

The Victoria and Albert Museum's partnership with SAP

Introduction

The Victoria and Albert Museum (V&A) is the world's greatest museum of art and design, considered to be unrivalled in diversity as well as scope. SAP is one of the world's leading providers of business software, offering services that assist companies in 25 industries across 120 countries. Together they have formed a partnership around an exhibition entitled 'Decode: Digital Design Sensations' at the V&A between 8 December 09 and 11 April 2010. The exhibition has been curatedby the V&A in collaboration with onedotzero, a London-based digital arts organisation which promotes innovation across all forms of moving image and motion-based arts. The exhibition also marks the beginning of an interactive learning programme at the V&A. This case study, therefore, considers how digital technology is not only changing art practices but also the convergence in approaches across sectors as a result of the new capabilities of digital technology.

Image © V&A. Projection - Daniel Brown, On Growth and From, 2009

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The Partnership

Decode will be the V&A's first exhibition dedicated to digital and interactive arts. It is therefore an example of innovation in the cultural sector as digital technology is fully embraced by one of the UK's national cultural institutions. For SAP, however, there are also several symbolic layers to their involvement. SAP was looking for a new and creative platform from which to tell its new "clear" brand strategy (see www.sapclear.com). The exhibition and the hospitality opportunities at the V&A provide a unique way to communicate this story to SAP customers, as a result of the partnership.

Part of SAP's goal as a software company is to help organisations achieve greater operational efficiency so they can better understand every aspect of their own business. The ability to analyse data and interpret it to engage the user is a process mirrored in the art world and consequently the ethos of the designs featured in the Decode exhibition.

This is perhaps best exemplified through the work 'bit.code' by Julius Popp, who was commissioned for the exhibition by the V&A in partnership with SAP. This piece comprises of a large screen with moving black and white tracks representing the 1s and 0s of binary code. During the day at specific times, they align and display the most popular words taken from recent web feeds. SAP made their consultants and software available to Popp for the production of his artwork. SAP's 'Business Objects' software mines online data, which is then 'fed' into the artpiece and displayed in the physical installation. Therefore, just as SAP's solutions provide clarity of information in the business world, many of thw works on display in Decode bring clarity to digital information in a visual way. The exhibition reflects the company's business objectives as well as providing a symbolic analysis of the digital world that cultural organisations have to respond to.

Image © V&A. bit.code, Juilius Popp, 2009. Courtesy Julius Popp, Leipzig. Commissioned by the V&A in partnership with SAP.

This is an interesting partnership as not only has it resulted in a fascinating exhibition, but because it has embodied the ethos of the business partner by enabling their ideas to be experienced by everyone through the art, allowing for brand and content alignment for both partners.

The exhibition

The exhibition itself is split into three categories, each of which finds a unique way to engage the user. **Code** proposes that computer code can be utilised in a similar way to how a craftsman might use wood or clay. As well as carrying the core data required to run simple tasks on a computer, code is becoming an increasingly prevalent design tool. Therefore, it is both a material and an inspiration for artists, with practitioners exploring the beauty of algorithms and the artistic potential of computer systems.

This part of the exhibition also analyses the potential of open source code. If designers publish their codes on the internet it creates libraries of creativity for others to borrow, develop or pass on. An example of an existing open source community project might be the web browser Firefox. The 'no secrets' approach actually improves the authenticity and collaboration of the development and is as close to 'organic' software as we're likely to get at the moment.

This ethos is important to SAP, as it should be to all business brands. The marketing campaign for Decode features an open source piece of artwork by Karsten Schmidt which invites users to 'Recode' the artwork themselves and manipulate it. A media partnership with CBS outdoor advertising allows this to be spread across communication platforms such as digital projections on the London Underground.

Interactivity is focused on designs where the user directly influences the work produced. This grasps the possibility of the relationships that can be created through digital technology. Many of these works respond to gesture, tracing the presence of the viewer and translating it back into the work. For example, Weave Mirror by Daniel Rozin is a responsive sculpture that recreates the image of the viewer on motorized planes which rotate to create a mirror image as the viewer comes into focus. One of the changes we are experiencing with the advent of digital technology is the importance of user-generated content. These pieces intentionally blur the lines between design, interaction, play and performance.

Network focuses on a crucial element of digital information, the fact that we are now all linked through systems and networks. The internet and social media is arguably the most important technological development since the industrial revolution and, with mobile technologies becoming more widespread, we can share information and be connected to each other constantly. The artworks here examine the electronic traces we leave behind from our communications. The art then visualises these digital tracks therefore evoking issues around control and security in the digital world as well as digital memory. For example, majestic visualisations of real-time flight patterns, designed by Aaron Koblin. Or perhaps 'We Feel Fine' by Jonathan Harris and Sep Kamvar, which extracts comments by bloggers from all over the world on how they are feeling and represents the information as colourful, floating spheres. Users can filter the information by selecting an emotion as well as bloggers' gender, age, location and weather conditions to reveal anonymous but personal statements about modern life.

Outcome

Decode has only been open for a short time, but it is already apparent that both the exhibition and the partnership has been a success as a landmark exhibition for the V&A and the partnership that made it

possible is an excellent example of a brand taking full advantage of digital trends by communicating the ethos of its products and its business strategy in a way that people from all walks of life can engage with. There has already been a very positive response from visitors and the media.

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Ignite

The Royal Opera House and Deloitte

Introduction

The A&B Cultural Branding Award for 2009 went to Deloitte and the Royal Opera House for their Deloitte Ignite Festival. Through clever use of social media, the Ignite Festival helped build brand visibility as well as create something outstanding that attracted younger people to the communities of both organisations. This case study highlights how digital technology (the online) can be a common ground for collaboration between arts and businesses as well as actual live activities.

Aims and objectives

This began with an unlikely, but mutually beneficial attraction. Deloitte are a major professional services firm providing audit, tax, consulting and corporate finance who employ 11,000 people. The majority of this workforce are in the age range 26-35. The Royal Opera House is known worldwide for the integrity and quality of its artistic programme and maintains significant support from government, peers and business leaders. However, despite these attributes, research had shown that the Royal Opera House was under represented among a young audience, as is a common challenge for the artform. Hence, the partnership was born out of a desire on both sides to illustrate their respective commitments to innovation and dominance in their field, as well as to share resources; in order for the Royal Opera House to reach a younger audience and for Deloitte to contact the clients of tomorrow through a demonstration of cultural authenticity. Deloitte have committed to funding this Festival for the next five years and are an enabling partner; without their support the Festival would not happen.

Deloitte Ignite Festival

The partnership resulted in Deloitte Ignite 09, a three-day arts festival held at the Royal Opera House. There were thirteen pieces exhibited, including contributions from artists such as Julian Opie and Jane and Louise Wilson. User-generated content was part of the focus, with a public photographic competition run with flickr as well as an opera performance which took its inspiration from Twitter. These ideas were supplemented by a free ticketing policy which encouraged easy access to all this content.

In terms of marketing, the event was heavily promoted online through the Royal Opera House website as well as a dedicated Deloitte Ignite microsite. There was also strong promotion on MySpace,

Facebook, YouTube and dedicated blog posts. Although the marketing strategy took full advantage of social media trends, print still had a fair share of coverage with a twenty page pull out in Time Out, the Festival's media partner.

Outcome

The Festival attracted 8,758 attendees, exceeding the target of 7,000. The typical Royal Opera House audience is usually only 16% 26-35 years old, but 42% of attendees at the Festival fitted this age bracket, a massive increase, also 48% were first-time attendees. The response to media coverage was equally impressive.

The Festival met both partners' aims and objectives. Firstly, it allowed Deloitte to go beyond the traditional and the expected, which helped achieve their ultimate goal of being recognised as one step ahead.

The Royal Opera House, on the other hand, wanted to widen its audience base, so the Festival created initiatives specifically to appeal to a younger crowd. The dynamics that made this possible were heavily influenced by growing social media trends: instead of expecting the target group to come to them and respond to a presentation, the Royal Opera House adapted their offer into a conversation which their audience could engage with. One aspect of this was to make the prospect of opera appealing to an audience who do not usually engage with it. Therefore, something bold was needed: user-generated content.

This came in the form of the much publicized Twitter Opera, which consisted of user-submitted tweets set to music by Helen Porter. The procedure leading up to its fruition was intentionally experimental functioned as a digital version of a game of 'consequences' or a 'choose your own adventure story' except on a much larger level. This meant that a non-linear narrative was created by the public; definitely a first for the world of opera and an excellent example of innovation. The only part of the story given was the opening:

'One morning, very early, a man and a woman were standing, arm-in-arm, in London's Covent Garden. The man turned to the woman and he sang…'

Through text submitted by users, a farfetched tale was dreamt and then performed. The goal was that it would demystify opera and place it in the hands of the audience. Although the entire event won numerous amounts of praise, critics were not wholly impressed with what they saw as the art world merely jumping blindly onto a new fad. Had the Twitter Opera been implemented as an isolated experiment then the accusation may have an element of truth in it, however, it should be viewed within the wider Festival context.

We are beginning to learn through these case studies that collaboration with digital technology only works if the digital aspect is integral to the creation of the art itself, rather than using existing artforms to reference a new digital idea. Using Twitter did not add any explicit value to the form of opera, but it was a successful experiment in pushing boundaries and engaging audiences in an innovative way by embracing a new dynamic of conversation, rather than presentation. In the spirit of the partnership and the experimental nature of the Festival in general, it can definitely be seen as a success.

If there is one thing in particular to learn from the outcome of this partnership, it is the benefits of participating in co-creation. The arts have the content and engagement techniques to make a call to action from both existing and potential audiences that brands may not possess. Partnering in this fashion illustrates that cultural content is a valuable asset for building communities for both partners, but it has to be used under the correct guidance.

The future

This partnership and the resulting Festival have been a resounding success with much to teach others about the nature of successful partnerships between art and business. One of the benefits for Deloitte has been the involvement of its employees in something stimulating as well as rewarding with the option to volunteer at the Festival and attend other exclusive events. It has, therefore, unearthed creative potential in its own workforce, encouraging artistic inspiration at the very core of its operations. This has been enhanced through conversations across social media. Added to the association with innovation and cultural credibility that the partnership brought, this has been very successful for Deloitte and helped them achieve their objectives.

The future holds further employee engagement for Deloitte and further integration of technology into the Festival.

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Digital Theatre

Introduction

Launched only recently on the 25 October 2009, Digital Theatre is a project where users can download high-quality theatre productions from some of Britain's leading theatre companies. These are available from www.digitaltheatre.com to download and keep for £8.99. Not only is this a ground breaking idea in theory, but also in execution, as theatre partners involved in the process currently include: the Almeida theatre, English Touring Theatre, The Royal Court, The Royal Shakespeare Company and the Young Vic.

There are currently five productions online: The Almeida's 'Parlour Song', English Touring Theatre's 'Far From the Madding Crowd,' the Young Vic's 'The Container' and 'Kafka's Monkey' and The Royal Court's 'Over There.' The content is played through the dedicated DT player, which also acts as a library for all downloaded content. The website also functions as a source for news and information about the available downloads, providing cast lists, details of creative teams, reviews and specially created trailers for each production.

If we were to be flippant, we could compare Digital Theatre to the BBC's iplayer. The Digital Theatre website is optimised and secure and the player is built with the similar technology and DRM file protection as iplayer. It has equal functionality and high design values, with the added option of a shopping cart function to purchase downloads.

This could be one of the most important projects currently being undertaken concerning digital technology in the cultural sector.

Aims and objectives

The primary aim of Digital Theatre is quite simple: to film great theatre using the latest technology in order to produce films of high quality that come as close to capturing the experience of live theatre as is possible. Although the recording of live theatre has been commonplace for quite some time, the standard has varied as the productions are often from archives rather than intentionally created to push the boundaries of a new medium. Digital Theatre recognised that emerging technology made the successful capture a real possibility, especially if combined with a keen sensibility for the processes and vocabulary of creating live theatre.

For the theatres involved, this was an opportunity to increase and/or widen their audience. For example, many wonderful productions have only a short theatrical run, with the majority running for only 6-8 weeks. The theatres wanted to give these productions longevity, but it wasn't always practical to provide it through a live arena. Such constraints meant that many potential theatre-goers were not able to attend, either for reasons of time or even geography. Digital Theatre is a way to combat this and reach more people. This new audience may also include those who did attend the productions and merely wanted a souvenir.

Of course, creating a single website to carry all the recorded content from British theatre and even abroad was a daunting task, especially as the entire venture was broaching new territory. However, through partnerships across the industry they have been able to establish effective distribution and increase the variety and quality of the content produced. Thereby, through these partnerships, Digital Theatre has essentially created a 'new language' of filmed theatre.

Partnerships

Considering the legal parameters around intellectual property do not actually reflect the current state of technological developments, there were some considerably daunting and delicate issues to face. Therefore, perhaps a key example of the partnership method involved in the project's genesis was how the British Actors Union Equity quickly reached an enabling agreement with Digital Theatre. These deals, backed by ongoing engagement with industry bodies such as The Musician's Union, is establishing an industry wide confidence in the viability and professionalism of Digital Theatre.

This industry enthusiasm was presumably a product of Digital Theatre's unique approach to creative partnerships. The initial 'pilot project' involved working closely with the aforementioned theatres. One of the most important elements in the partnerships was the spirit of artistic collaboration. Creative Director of Digital Theatre, Robert Delamere, is an acclaimed theatre director and as such the partners know that the process is being handled by someone with experience and empathy with the theatre. Each theatre was closely involved with each production and a fair deal was ensured for all.

Outcome

Although still in its infancy, Digital Theatre is already achieving above its means.

- Over 23,500 distinct visits to the site since it launched;
- 15,000 unique visitors, who we are converting to regular repeat users;
- On-line visitors from 105 countries in 6 continents;
- A database of thousands of subscribers registered for news and updates.

It has been featured in The New York Times, The Sunday Times and The Daily Telegraph. Broadcast interest has also been high with appearances on BBC Breakfast, and London tonight.

The future

The future for Digital Theatre includes building and growing from its exceptionally strong base by reaching wider and including more theatre partners. There are also plans to allow users to stream content as well as download it.

In conclusion, to play devil's advocate for a bit: despite the technical and logistical wizardry that has allowed Digital Theatre to come to fruition, surely it is missing one crucial aspect: that nothing can replicate being present during a live performance? This is true, but Digital Theatre does not aim to replace the aura of live theatre, but rather complement it and expound upon the dynamic. Many critics have actually noted how the Digital Theatre performance captures aspects that cannot always be absorbed from the back row of a small theatre. Then of course add the previously discussed issues of geography and time constraints to potential audiences.

The NT Live offer, where the National Theatre is showing its performances 'live' in cinemas across the UK and overseas as they are being performed in the theatre, goes some way to resolving the geographical barrier to access but obviously does not have the longevity and intimacy of Digital Theatre's downloads. It will be very interesting to see the research results from the NT Live study being undertaken by Nesta as to the audience experience and the cultural value of NT Live.

If theatre is about being in the right place at the right time, then that is exactly the position Digital Theatre is occupying in the cultural sector: the perfect time to embark on this endeavour and truly create something spectacular with new digital technology.

The willingness to embrace such an entrepreneurial and cutting-edge spirit has the potential to secure Digital Theatre as one of the most important and potentially far-reaching projects in the cultural sector. This will undoubtedly yield rewards with both artistic and financial merit for partners who recognised the changing dynamic and supported such an exciting and revolutionary endeavour.

Watershed

Background

A well known media centre in Bristol, digital technology is at the heart of Watershed's activities and major projects. As we shall see, Watershed has used digital technology to showcase their own work, in research and development projects to develop artistic practice, support the creative industries, as well as to push forward new types of physical and virtual experiences. At the centre of their work is the use of digital technology to tell new stories and to give a voice to those who have not previously had the one. Watershed is unique in that it has been pioneering digital technology in the cultural sector since the organisation was established in 1999.

Watershed's Managing Director, Dick Penny, was approached by Professor David May, Head of Computer Sciences at Bristol University, who was at the time launching a project to experiment with ways the media industry could harness the potential of new broadband technology. Watershed's plan was to find a way to use this technology to engage with more people and share the knowledge. One of the initial outcomes was an interactive digital advent calendar, featuring submissions from across Bristol; from household names like Aardman, to community groups and schools. Although it crashed quite a few computers, the potential and spirit of collaborative innovation in the context of the internet was solid and Electric December has been growing in popularity every year since.

It was apparent that as the technology developed and users began to create their own content with greater ease and precision, that a dedicated home would be needed for Watershed's contribution to this. And so out of this original experiment, DShed was born.

Arts &Business

Giving a voice

DShed invites people to explore the digital realm on their own. One of DShed's pioneering projects was DepicT, a short film competition. Another was 'Electric Pavilion', a virtual architectural structure with different rooms showcasing different perspectives from Bristol. Part of this was a project entitled Bristol Stories, which has been ongoing since 2005. This is a series of short user-generated media presentations describing the life of one of the City's inhabitants, based upon the idea that everyone has a unique story to tell.
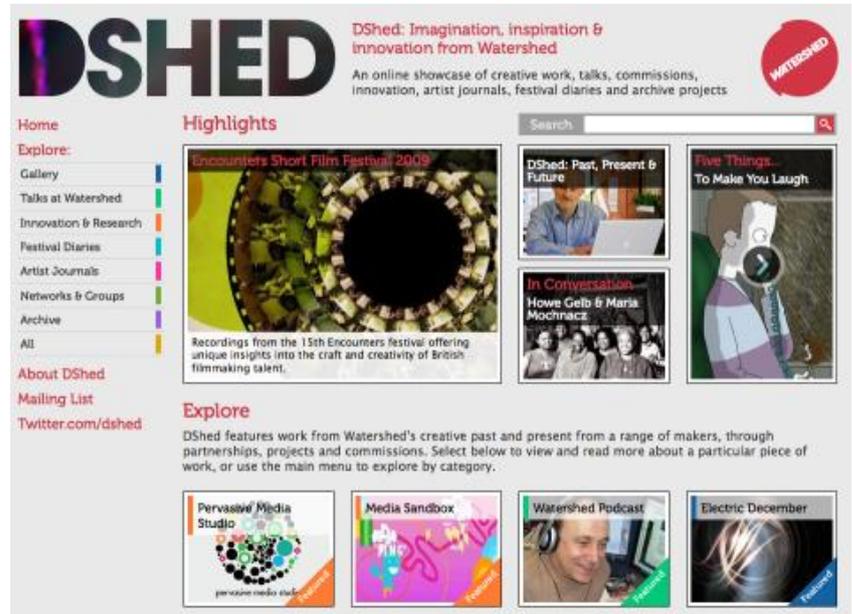

Image provided by Watershed

For example, one story is told from the perspective of Damos Santanos, a young graffiti artist. In his own words he tells us of his motivations and passions for the art form. Not only does this artistically feed back into a larger artistic dynamic, but it engages communities by reflecting their own tales back at them. Damos' story might remind viewers of Banksy's influence on contemporary culture, creating an engaging dynamic which will appeal to younger generations without appearing at all contrived or controlled. Other stories include personal accounts of unlikely friendship, historical allegories and an unintentionally hilarious tale from a recent graduate trying his best to describe his new job at the city council handling the exciting world of vehicle management in car parks. Despite this former student's morbid glaze, each story adds to the larger symbol.

Watershed's Director, Dick Penny comments:

"What's so exciting about the Internet is the way it has disrupted historic power structures. Too many people in our communities have been either under-represented or simply misrepresented by traditional media, because they don't have the means to make themselves heard. But if you can give those people the means of production and publishing, if you can say to them, 'here are the tools, here's the know-how, make a film and say what you want to say about your life and we'll publish it': well, that has so many advantages. People feel more engaged and valued, which makes them more aspirational; and, critically, their input adds to the general pool of ideas and experiences, helping us all to come up with something fresh. That's what being human is about – sharing and learning cultural references and behaviours."

Pervasive Media Studio

This technological potential has also been harnessed by Watershed through relationships with businesses. These partnerships use technology as the platform/medium for collaboration which changes the dynamic of the relationship.

Through a partnership between Hewlett Packard Labs and the University of the West of England's Digital Cultures Research Centre, the Pervasive Media Studio was created. Opened in 2008 the Studio brings together IT, communications and the creative industries to produce content, applications and experiences of the future from gaming, performances through to communication. HP Lab's involvement comes through the corporate research arm of the business and through the partnership they explore theory and practice to the benefit of one another.

Considering our previous case study on Digital Theatre, perhaps the best example to focus on would be The Extended Theatre Experience. In spring 2009, technologists from HP Labs, digital media experts from Watershed and theatre practitioners from Bristol Old Vic worked together to create a piece of short theatre. Funded by the Technology Strategy Board, this project then experimented with new and innovative ways to capture the performance.

Miniature cameras were embedded within the production, hidden in the set, among props, as well as on the heads of the actors in order to make the audience feel part of the action. Contrary to the awkwardly comic images this inspires (of actors with large novelty devices strapped to their heads), the cameras were not at all intrusive due to the highly advanced equipment used. The highlight however was that these cameras were able to capture insights and details that could not be obtained from a live production. For example, the cameras were able to capture private viewpoints that would never have been available before, such as when an actor's presence or expression is hidden from the audience. This opened up an entirely new discussion about the nature of when an actor actually stops performing, as well as adding an element to the entertainment and emotional responses theatre can evoke.

A similar experiment was undertaken in a project entitled 'as if it were the last time.' Watershed studio resident Duncan Speakman invited the public to take part in what was essentially a walkthrough cinema performance, or a 'Subtlemob'. A Subtlemob functions much like a Flashmob, but instead of singing pop songs in unison or spraying one another with water pistols, participants were involved in something a bit more subtle: the cinema of everyday life; trying to be invisible rather than drawing attention. This is in itself quite provocative considering some of the enjoyable yet artificial uses of social media. After downloading the soundtrack and visiting the location at a specific time, people could take part in their own cinema, sometimes enacting scenes and following instructions, other times watching others. According to online feedback this was a huge success and managed to achieve a rare form of defamiliarisation with the city among its participants. Duncan Speakman is also a member of the Vauxhall Collective, an initiative of the car company to provide a platform for innovators in film, craft, design, photography, fine art and theatre, thus ensuring a corporate understanding was brought to the table.

Outcome

Watershed is a really fascinating model and a pioneer in seizing the opportunities that arise across so many aspects of digital technology and digital artistry. There are two key aspects for others to learn from the example of Watershed. The first is about the possibility of digital technology and how it can contribute to new developments in art and artistic practice. Watershed's innovative perspectives place them at the forefront of digital and cultural activity, with each of the projects discussed demonstrating a different aspect of a potential digital future.

From future developments in theatre, inter-disciplinary collaboration and (a thankfully non-spurious) interaction with youth; Watershed embodies the future of audiovisual literacy, exploiting the shift towards conversation and participation (rather than mere didactic presentation) that digital technologies enable.

The second aspect is to recognise the entrepreneurial and innovative possibilities that digital technologies afford around a closer working relationship between the cultural and commercial sectors.

The combination of digital disruption and the UK's global advantage in high-quality arts and broadcast provision provides huge opportunity and the work of Watershed. In particular, the Pervasive Media Studio, highlights advantages of a close relationship between content, application and experience: to engage more widely, to explore the pervasive power of 'prosumer' creative energy and to pioneer new forms of economic, cultural and social value.

Arts & Business

Clicks and Mortar
The Tyneside Cinema

Introduction

Digital technology is at the heart of the Tyneside Cinema's activities. The building recently reopened in 2008 following a £7million restoration and extension and with the latest digital equipment the new cinema has already met with great acclaim and success. As the oldest surviving newsreel cinema in the country and one of the UK's leading cultural film venues, the cinema is now helping to investigate how we can keep cultural spaces as relevant in the 21st century as we did in the 20th. The building is now being utilised to a degree that was unimaginable before, as it is now a cultural cinema, education and training provider, heritage attraction, archive film exhibitor, live music venue and a social hub with three cafes.

As with most cultural organisations, Tyneside Cinema is exploring what digital technology means for them and where to look for support and expertise going forward and this is not just about digital films and distribution, but the whole experience of cinema.

After the restoration, it aimed to explore the future of similar spaces in terms of digital collaboration. The result was a nine-month programme of experimentation, debate and action research about what else could be done with the building and the potential of moving forward with digital technology. In terms of statistics, targets for audience attendance at the Tyneside Cinema have been exceeded with more than a 33% increase and footfall in the building is almost 100,000 greater than expected.

The Pixel Palace Project

The Pixel Palace was a project designed to embrace new partners from a range of artforms and creative industries, to look at the future of cinema. It began with Northern Film and Media (NFM) creating its Inspire Programme and awarding the Tyneside Cinema funds to enable its staff and trustees to travel and explore new ideas in the UK moving image sector and to bring intellectual and challenging thinkers to the North East. The Pixel Palace Programme enabled the Tyneside Cinema to bring in a series of prominent speakers and extend invitations to film exhibitors and regularly-funded organisations across the North East to meet with them. Partners in support of the project included: NFM, forma.org.uk and Arts Council England.

The name for the project comes from the notion that in the future cinemas may be transformed from 'picture palaces' into 'pixel palaces', extending their usefulness into spaces that support every sort of screen-based creative work. We know already the advent of digital technology is affecting all cultural arenas and as we have learnt the shift is away from mere presentation and exhibition towards interactivity. Therefore, cinemas are already welcoming opera and theatre fans and could soon be

incorporating games players, interactive performance artists and moving image makers, supporting new forms of film storytelling and, most significantly, engaging audiences who may well be turning from passive consumers of culture into active participants in its creation.

Clicks or Mortar?

The culmination of the project was 'Clicks or Mortar?: Designing a future for cultural venues in the digital age' which explored the tension and issues around the digital or the online and the live i.e. the physical – hence clicks or mortar. On the 6th March 2009, Clicks or Mortar filled the Tyneside Cinema with three days of exploration, exposition, conversation and critical thinking with screenings, installations, screen-based art and performances complementing a high-level debate around the role of buildings in tomorrow's artistic practice. For the Tyneside Cinema this was an opportunity to do something unexpected and push the boundaries of their cultural programme, as well as initiate a solid debate in the cultural sector about digital technology.

Images provided by Tyneside Cinema

Clicks or Mortar? received a 90% approval rating from its audience while the entire Pixel Palace programme generated significant (15%) new audiences into the cinema. The conference had attenders online across the globe – with more people watching online in London than were present in the venue itself.

Outcome

The first lesson learned is that an entrepreneurial spirit in cultural endeavours is not only becoming useful during this economic climate, but with the disruptions and developments caused by digital technology it is becoming absolutely essential. Both an individual as well as collective resilience is

needed by cultural organisations to not only profit from the digital age, but also survive in it. Perhaps the main point to take away from the symposium however is that this is not in fact a debate between clicks or mortar - online and offline, or between digital and architecture. For arts organisations and businesses to embrace the digital age fully, it is about exploring and exploiting the exciting opportunities created by clicks AND mortar together.

The work of the Tyneside Cinema has proven that with the increasing focus on the digital, it actually creates more demand for live events, spaces and interactions. The cinema now sees it as a priority to give audiences real ownership of the content they engage with on and offline. As we have discussed in terms of co-creation and open source projects, perhaps the future for spaces like the Tyneside Cinema actually lies in co-curating art. This is certainly a new idea in itself, as collaboration penetrates all aspects of the artistic process; from creation to presentation. As such, the benefits of collaboration between culture and business become reinforced.

Throughout these case studies we have seen an implicit debate over whether digital technology attracts new audiences or whether it merely further engages those already interested. In the spirit of the idea of 'co-curation', evidence from Clicks or Mortar? seems to be pointing towards the fact that digital technology manages both; attracting new audiences as well as further engaging existing ones.

Conclusions

Digital as integral to art

Digital technology's appearance in art only successfully engages the user if the digital aspect is vital to the artwork itself, not merely referencing a consumer trend. When the aura of a piece or exhibition is complemented by digital developments, the audience is invariably successfully engaged. For example, the Decode exhibition and SAP's symbolic explanation of their business aims, as well as the work of Digital Theatre both exemplify that this is possible. Instead of applying digital developments to existing models, new models can be created to exploit the enormous potential for collaboration between culture and commerce.

Co-creation

The successful engagement of an audience in an innovative manner yields the best results for commercial partners. This follows a shift from presentation to conversation with the user and can involve technical product feedback as well as user-generated content. The idea of co-creation is key here and embracing this can bring commercial results with genuine artistic merit. Indeed, out of the artificiality of digital technology, co-creation actually creates the authenticity that is invaluable for any commercial or cultural activity. Creating brand loyalty and commitment to a product is essential for competitive advantage in today's consumer world and the cultural sector has the content to make that call to action to engage consumers.

Digital versus the live

The future lies in the fact that digital technology is not actually hostile to the cultural sector, but rather that digital developments evoke a desire for authenticity of experience among audiences i.e. to the live. As such, even though the digital world and electronic methods will undoubtedly be utilised in the work of individual artists, social media and digital advancements in the way we communicate they actually promote the benefits of the live experience. It is possible that user-generated content and a direct relationship between live space and the online/technology is the future of nurturing the possibilities of the digital age.

Medium for partnership

When seen as a method to allow audiences to engage further with an artwork or a brand rather than constructing a mysterious barrier between them, digital technology is actually an incredible partner in the relationships between arts and businesses - the platform on which partnerships can take place for mutual benefit. Evidence suggests that it can even attract entirely new audiences as well as grow

existing ones for brands and cultural organisations. A certain entrepreneurial spirit might be needed to traverse this new ground though.

The cultural sector has engaging content, the commercial sector has the infrastructure and applications; by bringing them together, partners can offer a transformative experience to audiences and consumers. Digital technologies and technology businesses which have relationships with the cultural sector, are opening up new possibilities and ways of working, as well as living.